Ballard Power Systems Europe A/S
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Denmark

Revision history		
Rev.	**Date.**	**Description**
001	05/06/2024	First Issue
002	28/03/2025	Update with RM safety relay

Document Title:	**BLPH Project - Panel Cabinet Layout: UC20 40ft Control Cabinet**
Document Number:	K559-2254-CWIWP4202202-E03-002
Revision:	Rev002
Sequence Number:	002
File Name:	K559-2254-CWIWP4202202-E03-002Rev002
Purchaser Job:	K559-2254
Purchase Order:	CWIWP4202202
Code:	E03
Requsition Number:	n/a
Customer:	CrossWind C.V., Rotterdam, The Netherlands

BALLARD™

+UC20

Ballard Power Systems Europe - Technology Solutions

Cabinet: 40ft Container Control
Location: 40ft Container, Middle

Vin = 400VAC, 3ph

Ikmax = 6kA - AC Supply

IP20

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& A01

REVISION INFORMATION
DESCRIPTION
DATE
13-Jun-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Front Page		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 1 / 18

Ballard Power Systems Europe - Technology Solutions, Cabinet Wiring Colors

Standard Basis: EN 61439

Required wire standard compliance:

Required: IEC Wire
Required: UL Recognized
Required: CSA/UL

Wire Numbering:

- Wires inside panels are to be numbered
- Wire number system is perferably "potential oriented with subnumber"
- All wires of the same potential (e.g. DC Common) have the same main number, with sequential subnumber.
- Potential numbers with fewer digits may be leading zero padded (e.g. 19 -> 019)
- Separator between main and subnumber is "."

Example: 019.1 BUWH 0.75mm²

- 019 — Wire potential number
- .1 — Wire sequential subnumber with separator
- BUWH — Wire color code (Dark Blue with White stripe)
- 0.75mm² — Wire dimension

AC Wiring Colors

AC Power Circuit (Generic)	Black (BK)
AC Phase L1	Brown (BN)
AC Phase L2	Black (BK)
AC Phase L3	Grey (GY)
AC Neutral	Light Blue (BU)
Externally supplied circuit	Orange (OG)

DC Wiring Colors

DC Power Circuit	Black (BK)
DC Control Voltage (24V)	Dark Blue (BU)
DC Control Voltage Refence (0V)	Dark Blue with White Stripe (BUWH)
Signal Wire (DI, DO)	White (WH)
Signal Wire (AI, AO)	Violet (VT)
Externally supplied circuit	Orange (OG)

PE Wiring Colors

Protective Earth (PE)	Green/Yellow (GNYE)

Conductor Colour Identification

IEC 60757:1983 Designation	Description
BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Gray
WH	White
PK	Pink
GD	Gold
TQ	Turquoise
SR	Silver
GNYE	Green/Yellow
SH	Shield

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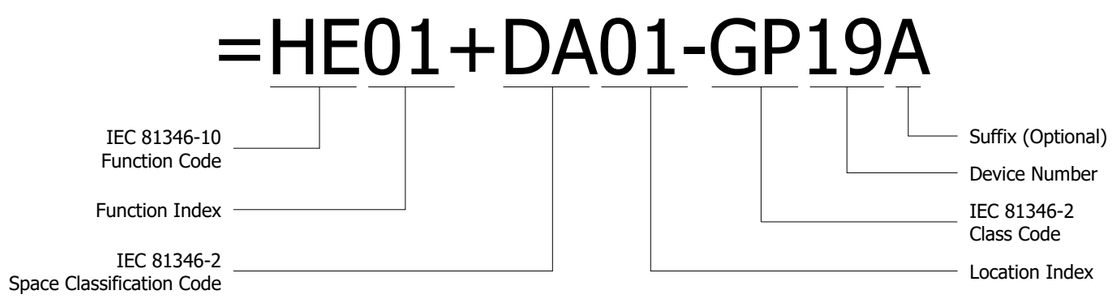
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Standard Wire Colors		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 2 / 18

Ballard Power Systems Europe - Technology Solutions Device Tag Process

A Ballard Device Tagname consists of three parts:
- A function designation (=)
  - According to IEC81346-10, Table B.1 and B2.
  - Always two letters followed by two digits
- A location designation (+)
  - According to IEC81346-2, Table 4
  - Always two letters followed by two digits
- A class code (-)
  - According to IEC81346-2, Table 2
  - Always two letters followed by two or three digits plus optional suffix

Sample fully qualified Device Tag (DT) for a Coolant Pump



IEC81346-10 Function Examples

IEC 81346-10 Table B.1 and B.2 provide a class definition system, which provides a two letter code for the functional description
Table B.1 is used for power supply systems and table B.2 for other systems

IEC 81346-10 Table B.1 / B.2	Function Codes (Example)
=AA	Structural System, Load support (Frame)
=BA	Transporting Electrical Energy (Power Converters)
=HA	Supply System, Gaseous Matter (Gas Piping)
=HE	Supply System, Heating/Cooling (Radiator)
=JA	Distribution System, Gaseous Matter (Gas Handling Unit)
=JB	Distribution System, Liquid Matter (Fluid Drain)
=LA	Control System, Process (PLC, SCADA)
=LB	Control System, Safety (Safety PLC)
=QA	Storage System, Gaseous Matter (Gas Storage)
=RE	Energy Conversion System, Chemical to Electricity (Fuel cells, Batteries)

IEC81346-2 Space Classification

IEC 81346-2 Table 4 provide a classification scheme for spaces, which provides a two and three letter code for the space (location) classification.
Class code "1" and "1" is used for the location scheme

IEC 81346-2 Table 4	Location Codes (Example)
+GB	Space for power generation, Chemical (Fuel Cells)
+DA	Space for active technical equipment
+UC	Space for electrical equipment (Electrical Cabinet)

IEC81346-2 Class Code

IEC 81346-2 Class Codes is a scheme for defined objects for reference designations according to their inherent function

IEC 81346-2 Table 2	Class Codes (Example)
-BA	Sensing, electrical potential (Voltage Transducer)
-BC	Sensing, electrical current (Current Transducer)
-BP	Sensing, pressure (Pressure Transducer)
-BT	Sensing, temperature (Temperature Transducer)
-EA	Emitting, light (Light Fixture)
-FC	Protecting, overcurrent (Fuse, MCCB)
-GB	Generating, Chemical Reaction (Fuel Cell)
-GP	Generating, Liquid Flow (Pump)
-GQ	Generating, Gas Flow (Van, Ventilator)
-KE	Processing, Electrical signals (PLC)
-KF	Processing, Information (Network Switch)
-MA	Driving, Torque (AC Motor)
-QA	Controlling, Electric Current (Contactor, Motor Starter)
-QB	Controlling, Electric Separation (Disconnector)
-QM	Controlling, Fluid On/Off (Valve)
-QN	Controlling, Fluid Regulation (Damper, Gas Control Valve)
-WD	Guiding, Low Voltage Electric Energy (AC or DC power Cable)
-WE	Guiding, Reference Potential (Grounding Wire/Cable)
-WG	Guiding, Electric Signals (Control, Network Cable)

Reference Item Number	Ballard Part # TBD
EPLAN Project Name	601456B - Shell Baseload Power Hub
EPLAN Revision	06
EPLAN Project Pages	628
= ++	+ UC20 & A01

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Tagging Standard		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 3 / 18

0	1	2	3	4	5	6	7	8

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Ballard Power Systems Europe - Technology Solutions

Controller IO Overview Documentation

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Controller IO Overview Introduction		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 1 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE01
DEIF AMC300
Fuel Cell Genset Controller
Container Control Cabinet

-Slot1
DEIF PSM3.1
Power Supply Module 3.1

PSM3.1

	PE PE		Frame Ground	
	1 12-24V		Supply +	
	2 0V		Supply COM	
	3 R1 COM		Status OK Relay COM	
A1.0	4 DO1	DO1	Status OK Relay	
	5 R2 COM		Relay 2 COM	
A1.1	6 DO2	DO2	Relay 1 Out	
	7 R3 COM		Relay 3 COM	
A1.2	8 DO3	DO3	Relay 3 Out	

EtherCAT Master Ring Topology — EtherCAT +&C01/8.4:C X03 — Ethernet-1 IN

EtherCAT Master Ring Topology — EtherCAT +&C01/8.4:C X03 — Ethernet-2 OUT

Bus Master
Multi-line 300

-Slot2
ACM3.1
Alternating Current Module 3.1

ACM3.1

1 L1	BA20_BA01_L1	AUX Customer Supply - L1 Voltage	
2 L2	BA20_BA01_L2	AUX Customer Supply - L2 Voltage	
3 L3	BA20_BA01_L3	AUX Customer Supply - L3 Voltage	
4 N	BA20_BA01_N	AUX Customer Supply - N Voltage	
5 L1	BA20_BA02_L1	Nanogrid Internal - L1 Voltage	
6 L2	BA20_BA02_L2	Nanogrid Internal - L2 Voltage	
7 L3	BA20_BA02_L3	Nanogrid Internal - L3 Voltage	
8 N	BA20_BA02_N	AUX Customer Supply - N Voltage	
9 L1-S1	BA20_BC01_L1	AUX Customer Supply - L1 Current	
10 L1-S2	CH1-S2	Channel 1 - S2	
11 L2-S1	BA20_BC01_L2	AUX Customer Supply - L2 Current	
12 L2-S2	CH2-S2	Channel 2 - S2	
13 L3-S1	BA20_BC01_L3	AUX Customer Supply - L3 Current	
14 L3-S2	CH3-S2	Channel 3 - S2	
15 4-S1	CH4-S1	Channel 4 - S1	
16 4-S2	CH4-S2	Channel 4 - S2	

-Slot3
&C03/96.3
&C03/77.5
&C03/34.3
&C03/97.8
&C03/24.6
&C03/19.7
&C03/19.7
&C03/19.7
&C03/19.7
IOM3.1
Alternating Current Module 3.1

IOM3.1

3 1 2	1 DO1.1		JS_EA01	Container light 1/3
	2 R1 COM			Relay 1 Common
	3 DO1.2			Relay 1 NC
6 4 5	4 DO2.1		JS_EA02	Container lighting, 40ft 2/2
	5 R2 COM			Relay 2 Common
	6 DO2.2			Relay 2 NC
9 7 8	7 DO3.1	&C03/96.3	JS_EA03	Container light 3/3 UPS Supply
	8 R3 COM	&C03/96.3		Relay 3 Com
	9 DO3.2			Relay 3 NC
12 10 11	10 DO4.1	&C03/77.5	JB01_QB18_EB01	Heatracing drain
	11 R4 COM	&C03/77.5		Relay 4 Com
	12 DO4.2			Relay 4 NC
	13 DIO3	&C03/34.3	UC20_FCXX	400/230VAC Fuse Trip
	14 DIO6	&C03/34.5	UC20_FC101	24VDC Fuse Trip
	15 DIO8	&C03/97.8	DA01_SG100	Light Switch Container
	16 DIO4		UC50_QA01_FB	Container Nanogrid Supply Feedback
	17 DIO5		UC50_QA02_FB	Container AUX Supply Feedback
	18 DIO1	&C03/24.6	UC20_FC210	24VDC light Fuse Trip
	19 DIO7			Spare
	20 DIO9	&C03/19.7	UC20_RB30_RDY	PLC UPS Battery Ready
	21 DIO2	&C03/19.7	UC20_RB30_BAT	PLC UPS Battery Operation
	22 DIO0	&C03/19.7	UC20_RB30_SOH	PLC UPS Battery Low SOH
	23 COM	&C03/19.7		Supply COM

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C02

REVISION INFORMATION
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05-Jul-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Main Rack 1/3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 2 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE01
DEIF AMC300
Fuel Cell Genset Controller

-Slot4
&C03/56.1
&C03/56.2
&C03/56.3
&C03/56.4
&C03/84.1
&C03/37.4
&C03/37.5
&C03/37.5
&C03/77.2
IOM3.2
IO Module 3.2

IOM3.2

1	R1 COM	&C03/56.1		Relay 1 In	
2	DO1	&C03/56.2	FC1_RESET	FC1 Safety PLC Circuit Reset	
3	R2 COM	&C03/56.3		Relay 2 COM	
4	DO2	&C03/56.3	FC2_RESET	FC2 Safety PLC Circuit Reset	
5	R3 COM	&C03/56.4		Relay 3 In	
6	DO3	&C03/56.4	FC3_RESET	FC3 Safety PLC Circuit Reset	
7	R4 COM			Relay 4 In	
8	DO4			Relay 4 Out	
9	AO1	&C03/84.1	JA01_QM01_SP	Ventilation Intake 1 Damper Postion SP	
10	AO1 COM	&C03/84.2		AO1 COM	
11	AO2	&C03/84.4	JA01_QM02_SP	Ventilation Intake 2 Damper Postion SP	
12	AO2 COM	&C03/84.4		AO2 COM	
13	AO3		LT_QN01_SP	LT Mixing Valve Setpoint	
14	AO3 COM			AO3 COM	
15	AO4			Spare	
16	AO4 COM			AO4 COM	
17	DI1	&C03/37.4	VT_GB03	FC3 24V Supply Feedback	
18	DI2	&C03/37.5	VT_GB04	FC4 24V Supply Feedback	
19	DI3			Spare	
20	DI4			Spare	
21	DI1-4 COM	&C03/37.5		DI1-4 COM	
22	AI1	&C03/84.3	JA01_QM01_FB	Ventilation Intake 1 Damper Postion FB	
23	AI1 COM	&C03/84.3		AI1 COM	
24	AI2	&C03/84.5	JA01_QM02_FB	Ventilation Intake 2 Damper Postion FB	
25	AI2 COM	&C03/84.5		AI2 COM	
26	AI3		LT_QN01_FB	LT Mixing Valve Feedback	
27	AI3 COM			AI3 COM	
28	AI4	&C03/77.2	JB01_BL02_LSH	Condensate Drain Tank High Level	
29	AI4 COM			AI4 COM	

-Slot5
&C03/88.1
&C03/88.4
&C03/87.7
&C03/87.2
&C03/93.2
&C03/83.7
IOM3.3
IO Module 3.3

IOM3.3

1	AI1	&C03/88.1	JA01_BT01_TT	Ventilation Intake Temperature	
2	AI1			Spare	
3	AI1			Spare	
4	AI2	&C03/88.4	JA01_BT02_TT	Container Temperature	
5	AI2	&C03/88.4		Spare	
6	AI2	&C03/88.4		Spare	
7	AI3	&C03/88.6	JA01_BT03_TT	Container Temperature	
8	AI3	&C03/88.7		Spare	
9	AI3	&C03/88.7		Spare	
10	AI4		JA01_BP05_TT	Vent. Duct Air Temperature	
11	AI4			Spare	
12	AI4			Spare	
13	AI5			Spare	
14	AI5	&C03/87.7	JA01_BP01_PDT	Ventilation Intake Filter Differential-pressure	
15	AI5	&C03/87.7		Spare	
16	AI6			Spare	
17	AI6	&C03/87.2	JA01_BP02_PDT	Container Indoor/Outdoor Diffential Pressure	
18	AI6	&C03/87.2		COM	
19	AI7			Spare	
20	AI7	&C03/93.2	HE03_DA01_BP01	LT Circuit Differential-pressure	
21	AI7	&C03/93.2		COM	
22	AI8	&C03/83.7	JA01_EB01_TT	Container Heater Internal Temperature	
23	AI8			Spare	
24	AI8			Spare	
25	AI9			Spare	
26	AI9			Spare	
27	AI9			Spare	
28	AI10			Spare	
29	AI10			Spare	
30	AI10			Spare	

-Slot6
&C03/91.3
&C03/92.3
IOM3.3
IO Module 3.3

IOM3.3

1	AI1			Spare
2	AI1		LT_BF01_FT	LT Coolant Flow
3	AI1			-
4	AI2			Spare
5	AI2	&C03/91.3	HE03_DA01_BP02	LT feed pressure FC1
6	AI2	&C03/91.3		-
7	AI3			Spare
8	AI3	&C03/91.4	HE03_DA01_BP03	LT feed pressure FC2
9	AI3	&C03/91.4		-
10	AI4			Spare
11	AI4	&C03/91.6	HE03_DA01_BP04	LT feed pressure FC3
12	AI4	&C03/91.6		-
13	AI5			Spare
14	AI5	&C03/92.3	HE03_DA01_BP05	LT feed pressure FC4
15	AI5	&C03/92.3		-
16	AI6			Spare
17	AI6	&C03/92.4	HE03_DA01_BP06	LT feed pressure FC5
18	AI6	&C03/92.4		-
19	AI7			Spare
20	AI7	&C03/92.6	HE03_DA01_BP07	LT feed pressure FC6
21	AI7			-
22	AI8		LT_BT04_TT	LT Return Temperature
23	AI8			Spare
24	AI8			Spare
25	AI9		LT_BT05_TT	LT Radiator Return Temperature
26	AI9			Spare
27	AI9			Spare
28	AI10		LT_BT06_TT	LT Forward Temperature
29	AI10			Spare
30	AI10			Spare

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EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Main Rack 2/3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 3 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE01
DEIF AMC300
Fuel Cell Genset Controller

-Slot7
DEIF PCM3.1
Processor and
Communication
Module 3.1

PCM3.1

CAN-A H
1
Other bus systems X01
CAN-A SH
2
Other bus systems X01
CAN-A L
3
Other bus systems X01
CAN-B H
4
Other bus systems X01
CAN-B SH
5
Other bus systems X01
CAN-B L
6
Other bus systems X01

SD Card

Ethernet-3
1
ETH1 Other bus systems X02

Ethernet-4
1
AGI Screen Connection Other bus systems X03

Ethernet-5
1
ETH04 Other bus systems X04

CPU
Multi-line 300

Reference Item Number	Ballard Part # TBD		
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DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Main Rack 3/3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 4 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE02
DEIF AMC300
Fuel Cell Genset Controller - Extension Rack

-Slot1
DEIF PSM3.2
Power Supply Module 3.2

PSM3.2

	PE PE			Frame Ground
	1 12-24V			Supply +
	2 0V			Supply COM
	3 R1 COM			Status OK Relay COM
A52.4	4 DO1	DO1		Status OK Relay
	5 R2 COM			Relay 2 COM
A52.5	6 DO2	DO2		Relay 1 Out
	7 R3 COM			Relay 3 COM
A52.6	8 DO3	DO3		Relay 3 Out

Ethernet-1 IN
EtherCAT Follower Ring Topology — EtherCAT +&C01/8.6:C X03

Ethernet-2 OUT
EtherCAT Follower Ring Topology — EtherCAT +&C01/8.7:C X03

Bus Follower
Multi-line 300

-Slot02
IOM3.3
IO Module 3.3

IOM3.3

1 AI1		Spare
2 AI2		Spare
3 AI3		Spare
4 AI4		Spare
5 AI5		Spare
6 AI6		Spare
7 AI7		Spare
8 AI3		Spare
9 AI9		Spare
10 AI10		Spare
11 AI11		Spare
12 AI12		Spare
13 AI13		Spare
14 AI14		Spare
15 AI15		Spare
16 AI16		Spare
17 AI17		Spare
18 AI18		Spare
19 AI19		Spare
20 AI20		Spare
21 AI21		Spare
22 AI22		Spare
23 AI23		Spare
24 AI24		Spare
25 AI25		Spare
26 AI26		Spare
27 AI27		Spare
28 AI28		Spare
29 AI29		Spare
30 AI30		Spare

-Slot03
&C03/83.2
&C03/35.2
&C03/35.1
&C03/25.7
&C03/25.7
&C03/25.7
&C03/25.7
&C03/28.7
&C03/25.7
&C03/28.7
&C03/28.7
&C03/28.7
&C03/31.7
&C03/31.7
&C03/31.7
&C03/31.7
&C03/31.7
IOM3.4
IO Module 3.4

IOM3.4

	1 12-24V		Supply +
	2 DO &C03/83.2	JA01_EB01_1	Heating element 1 ON
	3 DO &C03/83.4	JA01_EB01_2	Heating element 2 ON
	4 DO &C03/83.5	JA01_EB01_3	Heating element 3 ON
A3.1	5 DO04	DO04	Digital Out 04
	6 DO &C03/35.2	UC20_KF20.2	FC1 24V Toggle
	7 DO &C03/35.3	UC20_KF20.4	FC2 24V Toggle
	8 DO &C03/35.4	UC20_KF21.2	FC3 24V Toggle
	9 DO &C03/35.5	UC20_KF21.4	FC4 24V Toggle
	10 DO &C03/35.6	UC20_KF22.2	FC5 24V Toggle
	11 DO &C03/35.7	UC20_KF22.4	FC6 24V Toggle
A4.0	12 DO11	DO11	Digital Out 11
A4.1	13 DO12	DO12	Digital Out 12
	14 COM &C03/35.1		Supply COM
E6.5	15 DI01	DI01	Digital In 01
E6.6	16 DI02	DI02	Digital In 02
E6.7	17 DI03	DI03	Digital In 03
	18 DI &C03/25.7	UC20_RB01_RDY	FC1+2 UPS Battery Ready
	19 DI &C03/25.7	UC20_RB01_BAT	FC1+2 UPS Battery Operation
	20 DI &C03/25.7	UC20_RB01_SOH	FC1+2 UPS Battery Low SOH
	21 DI &C03/25.7	UC20_RB01_DIS	FC1+2 UPS Battery Discharged
	22 DI &C03/28.7	UC20_RB02_RDY	FC3+4 UPS Battery Ready
	23 COM &C03/25.7		Supply COM
	24 DI &C03/28.7	UC20_RB02_BAT	FC3+4 UPS Battery Operation
	25 DI &C03/28.7	UC20_RB02_SOH	FC3+4 UPS Battery Low SOH
	26 DI &C03/28.7	UC20_RB02_DIS	FC3+4 UPS Battery Discharged
	27 DI &C03/31.7	UC20_RB03_RDY	FC5+6 UPS Battery Ready
	28 DI &C03/31.7	UC20_RB03_BAT	FC5+6 UPS Battery Operation
	29 DI &C03/31.7	UC20_RB03_SOH	FC5+6 UPS Battery Low SOH
	30 DI &C03/31.7	UC20_RB03_DIS	FC5+6 UPS Battery Discharged
E8.4	31 DI16	DI16	Digital In 16
	32 COM &C03/31.7		Supply COM

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C02

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DESCRIPTION	
DATE	
13-Jun-24	

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Extension Rack 1/3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 5 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE02
DEIF AMC300
Fuel Cell Genset Controller - Extension Rack

-Slot04

&C03/58.5
&C03/61.5
&C03/59.1
IOM3.4
IO Module 3.4

IOM3.4

1	12-24V			Supply +
2	DO01	&C03/58.5	GB01_MD_ENABLE	MD_Enable Signal
3	DO02	&C03/61.5	GB02_MD_ENABLE	MD_Enable Signal
4	DO03			SPARE
5	DO04			SPARE
6	DO05			SPARE
7	DO06			SPARE
8	DO07			SPARE
9	DO08			SPARE
10	DO09			SPARE
11	DO10			SPARE
12	DO11			SPARE
13	DO12			SPARE
14	COM			Supply COM
15	DI1	&C03/59.1	GB01_SAFE_FIRE	SAFE_FIRE Safety Signal
16	DI2	&C03/59.2	GB01_SAFE_H2CONC	SAFE_H2CONC Safety Signal
17	DI3	&C03/59.3	GB01_SAFE_VENT	SAFE_VENT Safety Signal
18	DI4	&C03/59.4	GB01_SAFE_WD	SAFE_WD Safety Signal
19	DI7	&C03/59.7	GB01_SAFE_FIREMALF	SAFE_FIREMALF Safety Signal
20	DI8	&C03/59.8	GB01_SAFE_EXTERN	SAFE_EXTERN Safety Signal
21	DI13	&C03/58.3	GB01_FCM_OK	Fuel Cell Module OK
22	DI14	&C03/62.1	GB02_SAFE_FIRE	SAFE_FIRE Safety Signal
23	COM			Supply COM
24	DI5	&C03/62.2	GB02_SAFE_H2CONC	SAFE_H2CONC Safety Signal
25	DI6	&C03/62.3	GB02_SAFE_VENT	SAFE_VENT Safety Signal
26	DI9	&C03/62.4	GB02_SAFE_WD	SAFE_WD Safety Signal
27	DI10	&C03/62.7	GB02_SAFE_FIREMALF	SAFE_FIREMALF Safety Signal
28	DI11	&C03/62.8	GB02_SAFE_EXTERN	SAFE_EXTERN Safety Signal
29	DI12	&C03/61.3	GB02_FCM_OK	Fuel Cell Module OK
30	DI15			SPARE
31	DI16			SPARE
32	COM			Supply COM

=RE01+GB01-KE02-Slot04:

-Slot05

&C03/65.1
&C03/65.7
&C03/65.8
&C03/64.3
&C03/68.1
&C03/68.7
&C03/68.8
&C03/67.3
IOM3.4
IO Module 3.4

IOM3.4

1	12-24V			Supply +
2	DO01	&C03/64.5	GB03_MD_ENABLE	MD_Enable Signal
3	DO02	&C03/67.5	GB04_MD_ENABLE	MD_Enable Signal
4	DO03			SPARE
5	DO04			SPARE
6	DO05			SPARE
7	DO06			SPARE
8	DO07			SPARE
9	DO08			SPARE
10	DO09			SPARE
11	DO10			SPARE
12	DO11			SPARE
13	DO12			SPARE
14	COM			Supply COM
15	DI1	&C03/65.1	GB03_SAFE_FIRE	SAFE_FIRE Safety Signal
16	DI2	&C03/65.2	GB03_SAFE_H2CONC	SAFE_H2CONC Safety Signal
17	DI3	&C03/65.3	GB03_SAFE_VENT	SAFE_VENT Safety Signal
18	DI4	&C03/65.4	GB03_SAFE_WD	SAFE_WD Safety Signal
19	DI7	&C03/65.7	GB03_SAFE_FIREMALF	SAFE_FIREMALF Safety Signal
20	DI8	&C03/65.8	GB03_SAFE_EXTERN	SAFE_EXTERN Safety Signal
21	DI13	&C03/64.3	GB03_FCM_OK	Fuel Cell Module OK
22	DI14	&C03/68.1	GB04_SAFE_FIRE	SAFE_FIRE Safety Signal
23	COM			Supply COM
24	DI5	&C03/68.2	GB04_SAFE_H2CONC	SAFE_H2CONC Safety Signal
25	DI6	&C03/68.3	GB04_SAFE_VENT	SAFE_VENT Safety Signal
26	DI9	&C03/68.4	GB04_SAFE_WD	SAFE_WD Safety Signal
27	DI10	&C03/68.7	GB04_SAFE_FIREMALF	SAFE_FIREMALF Safety Signal
28	DI11	&C03/68.8	GB04_SAFE_EXTERN	SAFE_EXTERN Safety Signal
29	DI12	&C03/67.3	GB04_FCM_OK	Fuel Cell Module OK
30	DI15			SPARE
31	DI16			SPARE
32	COM			Supply COM

-Slot06

&C03/71.1
&C03/71.7
&C03/71.8
&C03/70.3
&C03/74.1
&C03/74.7
&C03/74.8
&C03/73.3
IOM3.4
IO Module 3.4

IOM3.4

1	12-24V			Supply +
2	DO01	&C03/70.5	GB05_MD_ENABLE	MD_Enable Signal
3	DO02	&C03/73.5	GB06_MD_ENABLE	MD_Enable Signal
4	DO03			SPARE
5	DO04			SPARE
6	DO05			SPARE
7	DO06			SPARE
8	DO07			SPARE
9	DO08			SPARE
10	DO09			SPARE
11	DO10			SPARE
12	DO11			SPARE
13	DO12			SPARE
14	COM			Supply COM
15	DI1	&C03/71.1	GB05_SAFE_FIRE	SAFE_FIRE Safety Signal
16	DI2	&C03/71.2	GB05_SAFE_H2CONC	SAFE_H2CONC Safety Signal
17	DI3	&C03/71.3	GB05_SAFE_VENT	SAFE_VENT Safety Signal
18	DI4	&C03/71.4	GB05_SAFE_WD	SAFE_WD Safety Signal
19	DI7	&C03/71.7	GB05_SAFE_FIREMALF	SAFE_FIREMALF Safety Signal
20	DI8	&C03/71.8	GB05_SAFE_EXTERN	SAFE_EXTERN Safety Signal
21	DI13	&C03/70.3	GB05_FCM_OK	Fuel Cell Module OK
22	DI14	&C03/74.1	GB06_SAFE_FIRE	SAFE_FIRE Safety Signal
23	COM			Supply COM
24	DI5	&C03/74.2	GB06_SAFE_H2CONC	SAFE_H2CONC Safety Signal
25	DI6	&C03/74.3	GB06_SAFE_VENT	SAFE_VENT Safety Signal
26	DI9	&C03/74.4	GB06_SAFE_WD	SAFE_WD Safety Signal
27	DI10	&C03/74.7	GB06_SAFE_FIREMALF	SAFE_FIREMALF Safety Signal
28	DI11	&C03/74.8	GB06_SAFE_EXTERN	SAFE_EXTERN Safety Signal
29	DI12	&C03/73.3	GB06_FCM_OK	Fuel Cell Module OK
30	DI15	DI15	DI15	Digital In 15
31	DI16	DI16	DI16	Digital In 16
32	COM			Supply COM

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Extension Rack 2/3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 6 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE02
DEIF AMC300
Fuel Cell Genset Controller - Extension Rack

-Slot07
&C03/56.5
&C03/56.5
&C03/56.6
&C03/85.1
&C03/86.1
&C03/37.6
&C03/37.8
&C03/85.2
&C03/86.2
IOM3.2
IO Module 3.2

IOM3.2

1	R1 COM	&C03/56.5		Relay 1 In
2	DO1	&C03/56.5	FC4_RESET	FC4 Safety PLC Circuit Reset
3	R2 COM	&C03/56.6		Relay 2 COM
4	DO2	&C03/56.6	FC5_RESET	FC5 Safety PLC Circuit Reset
5	R3 COM			Relay 3 In
6	DO3		FC6_RESET	FC6 Safety PLC Circuit Reset
7	R4 COM			Relay 4 In
8	DO4			Relay 4 Out
9	AO1	&C03/85.1 &C03/86.1	JA01_QM03_SP	Ventilation Outlet A Damper Postion SP
10	AO1 COM	&C03/85.2 &C03/86.2		AO1 COM
11	AO2	&C03/85.6 &C03/86.6	JA01_QM04_SP	Ventilation Outlet B Damper Postion SP
12	AO2 COM	&C03/85.6 &C03/86.6		AO2 COM
13	AO3			Ventilation Outlet C Damper Postion SP
14	AO3 COM			AO3 COM
15	AO4			Ventilation Intake D Damper Postion SP
16	AO4 COM			AO4 COM
17	DI1			FC4 24V Supply Feedback
18	DI2	&C03/37.6	VT_GB05	FC5 24V Supply Feedback
19	DI3	&C03/37.7	VT_GB06	FC6 24V Supply Feedback
20	DI4			Spare
21	DI1-4 COM	&C03/37.8		DI1-4 COM
22	AI1	&C03/85.2 &C03/86.2	JA01_QM03_FB	Ventilation Outlet A Damper Postion FB
23	AI1 COM	&C03/85.3 &C03/86.3		AI1 COM
24	AI2	&C03/85.5 &C03/86.5	JA01_QM04_FB	Ventilation Outlet B Damper Postion FB
25	AI2 COM	&C03/85.5 &C03/86.5		AI2 COM
26	AI3			Ventilation Outlet C Damper Postion FB
27	AI3 COM			AI3 COM
28	AI4			Ventilation Intake D Damper Postion FB
29	AI4 COM			AI4 COM

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Extension Rack 3/3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 7 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE03
DEIF AMC300
Fuel Cell Genset Controller - Extension Rack 2

-Slot1
&C03/36.6
&C03/36.7
PSM3.2
Power Supply
Module 3.2

PSM3.2

1	12-24V		Frame Ground
2	0V		Supply +
PE	PE		Supply COM
7	R1 COM	&C03/36.6	Status OK Relay COM
8	DO1	&C03/36.7 FC5_24VON	FC5 24V Supply On Signal
3	R2 COM		Relay 2 COM
4	DO1	DO2	<Reserved>
5	R3 COM		Relay 3 COM
6	DO2	DO3	Relay 3 Out

Ethernet-1 IN
Rack Connection IN EtherCAT +&C01/8.8:C X03

Ethernet-2 OUT
Rack Connection OUT EtherCAT +&C01/8.9:C X03

Bus Slave
Multi-line 300

-Slot2
&C03/36.1
&C03/36.1
&C03/36.2
&C03/36.2
&C03/36.4
&C03/36.4
&C03/36.5
&C03/36.5
&C03/37.1
&C03/37.3
IOM3.2
IO Module 3.2

IOM3.2

1	R1 COM	&C03/36.1	Relay 1 In
2	DO1	&C03/36.1 FC1_24VON	FC1 24V Supply On Signal
3	R2 COM	&C03/36.2	Relay 2 COM
4	DO1	&C03/36.2 FC2_24VON	FC2 24V Supply On Signal
5	R3 COM	&C03/36.4	Relay 3 In
6	DO2	&C03/36.4 FC3_24VON	FC3 24V Supply On Signal
7	R4 COM	&C03/36.5	Relay 4 In
8	DO2	&C03/36.5 FC4_24VON	FC4 24V Supply On Signal
9	AO1		Spare
10	AO1 COM		AO1 COM
11	AO2		Spare
12	AO2 COM		AO2 COM
13	AO3		Spare
14	AO3 COM		AO3 COM
15	AO4		Spare
16	AO4 COM		AO4 COM
17	DI1	&C03/37.1 VT_GB01	FC1 24V Supply Feedback
18	DI2	&C03/37.2 VT_GB02	FC2 24V Supply Feedback
19	DI3		FC3 24V Supply Feedback
20	DI4		Spare
21	DI COM	&C03/37.3	DI1-4 COM
22	AI1		Spare
23	AI1 COM		AI1 COM
24	AI2		Spare
25	AI2 COM		AI2 COM
26	AI3		Spare
27	AI3 COM		AI3 COM
28	AI4		Spare
29	AI4 COM		AI4 COM

-Slot3
&C03/94.1
&C03/94.3
IOM3.3
IO Module 3.3

IOM3.3

1	AI1		H2_BT01_TT	FC1 Hydrogen Supply Pipe Temperature
2	AI2			Spare
3	AI3			Spare
4	AI4		H2_BT02_TT	FC2 Hydrogen Supply Pipe Temperature
5	AI5			Spare
6	AI6			Spare
7	AI7		H2_BT03_TT	FC3 Hydrogen Supply Pipe Temperature
8	AI3			Spare
9	AI9			Spare
10	AI10		H2_BT04_TT	FC4 Hydrogen Supply Pipe Temperature
11	AI11			Spare
12	AI12			Spare
13	AI13		H2_BT05_TT	FC5 Hydrogen Supply Pipe Temperature
14	AI14			Spare
15	AI15			Spare
16	AI16			FC6 Hydrogen Supply Pipe Temperature
17	AI17			Spare
18	AI18			Spare
19	AI	&C03/94.1	HE03_DA01_BT01	FC1 HT Coolant Outlet Temperature
20	AI	&C03/94.1		Spare
21	AI	&C03/94.1		Spare
22	AI	&C03/94.3	HE03_DA01_BT02	FC2 HT Coolant Outlet Temperature
23	AI	&C03/94.3		Spare
24	AI	&C03/94.3		Spare
25	AI	&C03/94.4	HE03_DA01_BT03	FC3 HT Coolant Outlet Temperature
26	AI	&C03/94.4		Spare
27	AI	&C03/94.5		Spare
28	AI28			Spare
29	AI29			Spare
30	AI30			Spare

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Extension Rack 2 1/2		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 8 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20-KE03
DEIF AMC300
Fuel Cell Genset Controller - Extension Rack 2

Slot4
&C03/78.1
&C03/78.4
&C03/79.1
&C03/95.1
IOM3.3
IO Module 3.3

IOM3.3

1	AI &C03/78.1	UC01_BT01_TT	Cabinet temperature UC01
2	AI &C03/78.1		Spare
3	AI &C03/78.1		Spare
4	AI &C03/78.4	UC02_BT01_TT	Cabinet temperature UC02
5	AI &C03/78.4		Spare
6	AI &C03/78.4		Spare
7	AI &C03/78.7	UC03_BT01_TT	Cabinet temperature UC03
8	AI &C03/78.7		Spare
9	AI &C03/78.7		Spare
10	AI &C03/79.1	UC04_BT01_TT	Cabinet temperature UC04
11	AI &C03/79.1		Spare
12	AI &C03/79.1		Spare
13	AI &C03/79.4	UC05_BT01_TT	Cabinet temperature UC05
14	AI &C03/79.4		Spare
15	AI &C03/79.4		Spare
16	AI &C03/79.7	UC06_BT01_TT	Cabinet temperature UC06
17	AI &C03/79.7		Spare
18	AI &C03/79.7		Spare
19	AI &C03/95.1	HE03_DA01_BT04	FC4 HT Coolant Outlet Temperature
20	AI &C03/95.1		Spare
21	AI &C03/95.1		Spare
22	AI &C03/95.3	HE03_DA01_BT05	FC5 HT Coolant Outlet Temperature
23	AI &C03/95.3		Spare
24	AI &C03/95.3		Spare
25	AI &C03/95.4	2HE03_DA01_BT06	FC6 HT Coolant Outlet Temperature
26	AI26		Spare
27	AI27		Spare
28	AI28		Spare
29	AI29		Spare
30	AI30		Spare

-Slot5
&C03/89.3
IOM3.3
IO Module 3.3

IOM3.3

1	AI1		Spare
2	AI &C03/89.3	JA01_BU01_TT	Container Ambient Temperature - Center
3	AI &C03/89.4		Spare
4	AI4		Spare
5	AI &C03/89.4	JA01_BU01_RH	Container Relative Humidity
6	AI &C03/89.4		Spare
7	AI7		Spare
8	AI &C03/89.5	JA01_BU01_CO2	Container CO2 Concentration
9	AI &C03/89.5		Spare
10	AI10		Spare
11	AI &C03/89.6	JA01_BU01_VOC	Container Ambient VOC Concentration
12	AI &C03/89.6		Spare
13	AI13		Spare
14	AI14		Spare
15	AI15		Spare
16	AI16		Spare
17	AI17		Spare
18	AI18		Spare
19	AI19		Spare
20	AI20		Spare
21	AI21		Spare
22	AI22		Spare
23	AI23		Spare
24	AI24		Spare
25	AI25		Spare
26	AI26		Spare
27	AI27		Spare
28	AI28		Spare
29	AI29		Spare
30	AI30		Spare

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Container Controller, Extension Rack 2 2/2		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 9 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet

-KE10
24 VDC
Safety PLC, PLC

+ A1
- A2
X03 BUS
<CANbus>
BUS
EFI1_A &C03/38.1
BUS
EFI1_B &C03/38.1
BUS
EFI2_A &C03/38.1

EFI bus Master

-KE11
24 VDC
Safety PLC, Modbus Gateway

PORT 1
1
-X1
Other bus systems
Safety PLC

Other bus systems
-X2
2
PORT 2

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C02

REVISION INFORMATION
DESCRIPTION
DATE
13-Jun-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Safety Controller, 40ft Container 1/5		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 16 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet

-KE12
&C03/38.2
&C03/39.1
&C03/39.2
&C03/39.5
&C03/51.5
&C03/51.3
&C03/39.6
&C03/49.2
&C03/51.4
&C03/17.1
8DI, 4DO
Safe Digital Input/Output Module

Flexi Soft, expansion module, I/O module, FX3-XTIO

X1		&C03/17.1	KE12PULSE01	KE12 Test pulse output CH1
X2		&C03/17.2	KE12PULSE02	KE12 Test pulse output CH2
+	A1			
-	A2			
I1		&C03/39.1	UC20_SG10_CH1	E-stop UC20 CH01
I2		&C03/39.2	UC20_SG10_CH2	E-stop UC20 CH02
I3		&C03/39.5	UC20_SG11.S	Reset Button E-Stop
I4			UC20_KF17_FB	KF17 Feedback safety relay
I5		&C03/51.5	UC30_SG20-1	Coolant Skid ESTOP CH1
I6		&C03/51.6	UC30_SG20-2	Coolant Skid ESTOP CH2
I7		&C03/51.3	UC30_KF10_FB	Coolant Skid Safety Relay FB
I8			UC21_KF108	Feedback safety relay UC21
Q1		&C03/39.6	UC20_SG11.P	Reset Button E-Stop Light
Q2		&C03/49.2	UC20_KF17	KF17 Safety Relay Coil
Q3		&C03/51.4	UC30_KF10_Q	Coolant Skid Safety Relay Coil
Q4				Spare

SICK.1044125

-KE13
&C03/38.3
&C03/56.2
&C03/40.3
&C03/41.3
&C03/17.2
8DI, 4DO
Safe Digital Input/Output Module

Flexi Soft, expansion module, I/O module, FX3-XTIO

X1		&C03/17.2	KE13PULSE01	KE13 Test pulse output CH1
X2		&C03/17.3	KE13PULSE02	KE13 Test pulse output CH2
+	A1			
-	A2			
I1		&C03/40.4	UC20_KF100	Feedback Safety Relay GB01 & UC01
I2			GB01	SAFE_Main GB01
I3		&C03/41.4	UC20_KF101	Feedback Safety Relay GB02 & UC02
I4			GB02	SAFE_Main GB02
I5		&C03/56.2	FC1_RESET_IN	FC1 Safety PLC Circuit Reset
I6				SPARE
I7		&C03/56.3	FC2_RESET_IN	FC2 Safety PLC Circuit Reset
I8				SPARE
Q1		&C03/40.3	UC20_KF100	Coil Safety relay GB01 & UC01
Q2			GB01	SAFE_In GB01
Q3		&C03/41.3	UC20_KF101	Coil Safety relay GB02 & UC02
Q4			GB02	SAFE_In GB02

SICK.1044125

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C02

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Safety Controller, 40ft Container 2/5		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 17 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet

-KE14
&C03/38.5
&C03/56.4
&C03/42.3
&C03/43.3
&C03/17.4
8DI, 4DO
Safe Digital Input/Output Module

Flexi Soft, expansion module, I/O module, FX3-XTIO

X1	&C03/17.4	KE14PULSE01	KE14 Test pulse output CH1	
X2	&C03/17.5	KE14PULSE02	KE14 Test pulse output CH2	
+ A1				
- A2				
I1	&C03/42.4	UC20_KF102	Feedback Safety Relay GB03 & UC03	
I2		GB03	SAFE_Main GB03	
I3	&C03/43.4	UC20_KF103	Feedback Safety Relay GB04 & UC04	
I4		GB04	SAFE_Main GB04	
I5	&C03/56.4	FC3_RESET_IN	FC3 Safety PLC Circuit Reset	
I6				
I7	&C03/56.5	FC4_RESET_IN	FC4 Safety PLC Circuit Reset	
I8				
Q1	&C03/42.3	UC20_KF102	Coil Safety relay GB03 & UC03	
Q2		GB03	SAFE_In GB03	
Q3	&C03/43.3	UC20_KF103	Coil Safety relay GB04 & UC04	
Q4		GB04	SAFE_In GB04	

SICK.1044125

-KE15
8DI, 4DO
FC6 Safety PLC Circuit Reset

Flexi Soft, expansion module, I/O module, FX3-XTIO

X1	&C03/17.6	KE15PULSE01	KE15 Test pulse output CH1
X2	&C03/17.7	KE15PULSE02	KE15 Test pulse output CH2
+ A1			
- A2			
I1	&C03/44.4	UC20_KF104	Feedback Safety Relay GB05 & UC05
I2		GB05	SAFE_Main GB05
I3	&C03/45.4	UC20_KF105	Feedback Safety Relay GB06 & UC06
I4		GB06	SAFE_Main GB06
I5	&C03/56.6	FC5_RESET_IN	FC5 Safety PLC Circuit Reset
I6			
I7	&C03/56.8	FC6_RESET_IN	FC6 Safety PLC Circuit Reset
I8			
Q1	&C03/44.3	UC20_KF104	Coil Safety relay GB05 & UC05
Q2		GB05	SAFE_In GB05
Q3	&C03/45.3	UC20_KF105	Coil Safety relay GB06 & UC06
Q4		GB06	SAFE_In GB06

SICK.1044125

Reference Item Number	Ballard Part # TBD
EPLAN Project Name	601456B - Shell Baseload Power Hub
EPLAN Revision	06
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Safety Controller, 40ft Container 3/5		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3 | LANGUAGE EN	SHEET/TOTAL	18 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet

-KE16
&C03/38.7
&C03/54.4
&C03/55.5
&C03/55.6
&C03/49.3
&C03/48.2
&C03/18.1
Safety Digital
Input/Output Module

Flexi Soft, expansion module, I/O module, FX3-XTIO

X1		&C03/18.1	KE16PULSE01	KE16 Test pulse output CH1
X2		&C03/18.2	KE16PULSE02	KE16 Test pulse output CH2
+	A1			
-	A2			
I1		&C03/49.3	+UC20-KF16	Coil Safety Relay Nanogrid DC/AC
I2			JA01_BQ04_ASZ	Smoke Detector Ventilation Inlet
I3			JA01_BQ05_ASZ	Smoke Detector Ventilation Outlet A
I4			JA01_BQ06_ASZ	Smoke Detector Ventilation Outlet B
I5				ESTOP - 40ft Container Door CH1
I6				ESTOP - 40ft Container Door CH2
I7		&C03/54.4	SG23_CH1	ESTOP - 40ft Container Door CH1
I8		&C03/54.5	SG23_CH2	ESTOP - 40ft Container Door CH2
Q1		&C03/48.2 &C03/48.3	+UC20-KF16	Coil Safety Relay Nanogrid DC/AC
Q2		&C03/55.7	UC20_KF53	Customer Gas Status
Q3		&C03/55.5	UC20_KF50	Customer Safety Status
Q4		&C03/55.6	UC20_KF51	Customer Fire Status

SICK.1044125

-KE17
1 AI
Safe Analog Input Module

Flexi Soft Analog input module, FX3-ANA0

AI+	AI1+	JA01_BQ01_AZT	H2 Sensor Ventilation Inlet
AI1-	AI1-		
AI+	AI2+		
AI2-	AI2-		

SICK.1051134

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C02

REVISION INFORMATION
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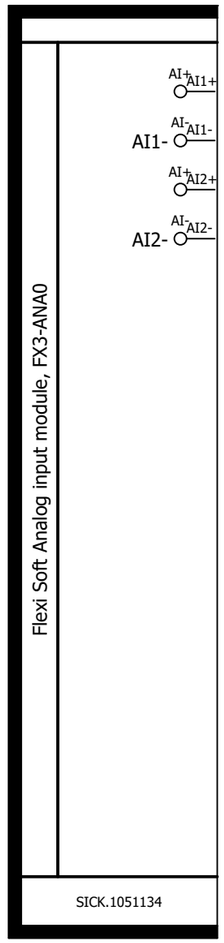
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Safety Controller, 40ft Container 4/5		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 19 / 18

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet

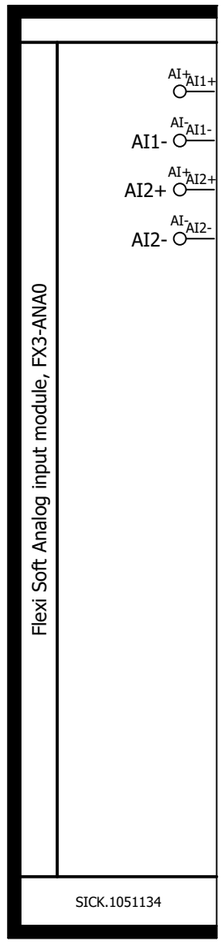
-KE18
1 AI
Safe Analog Input Module



JA01_BQ02_AZT

H2 Sensor Ventilation Outlet A

-KE19
1 AI
Safe Analog Input Module



JA01_BQ03_AZT

H2 Sensor Ventilation Outlet B

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C02

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DRAWING	601456B UC20 40ft Control Cabinet			REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet				
SHEET TYPE/DESC	Safety Controller, 40ft Container 5/5				
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	20 / 18	

0	1	2	3	4	5	6	7	8

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Ballard Power Systems Europe - Technology Solutions

Multiline Documentation

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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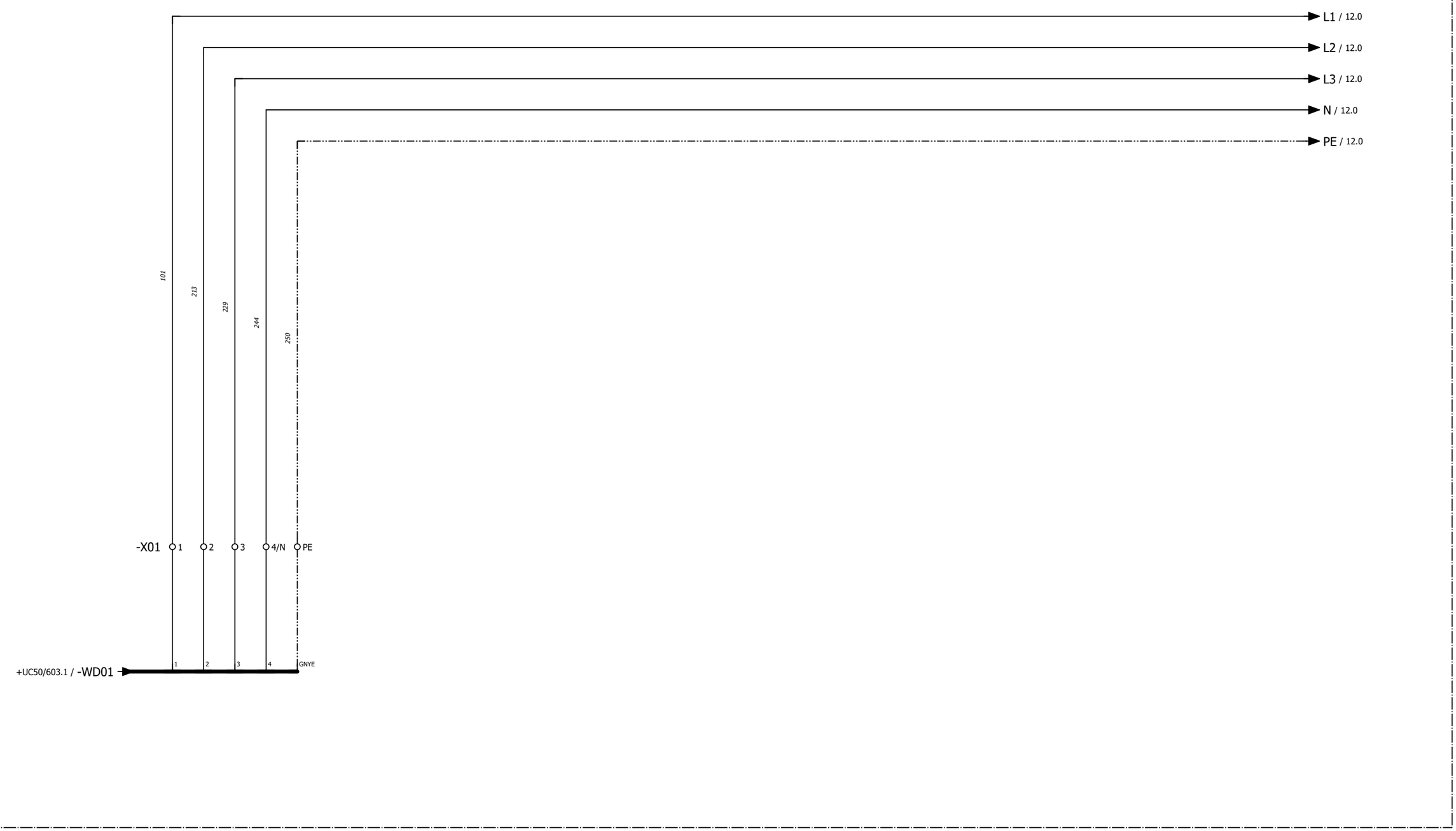
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Multiline Documentation Intro		

ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 10 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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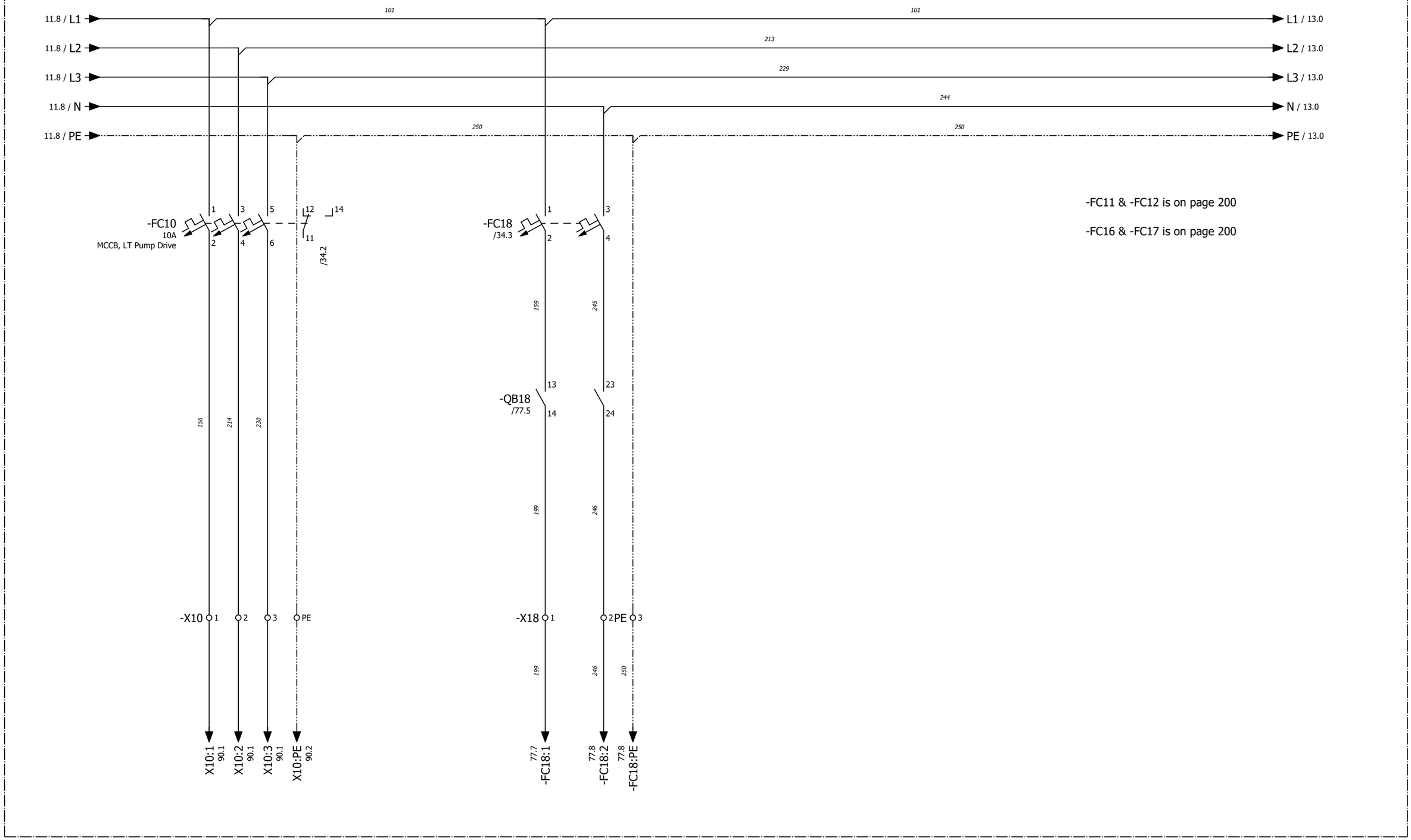
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container MCU Power supply		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 11 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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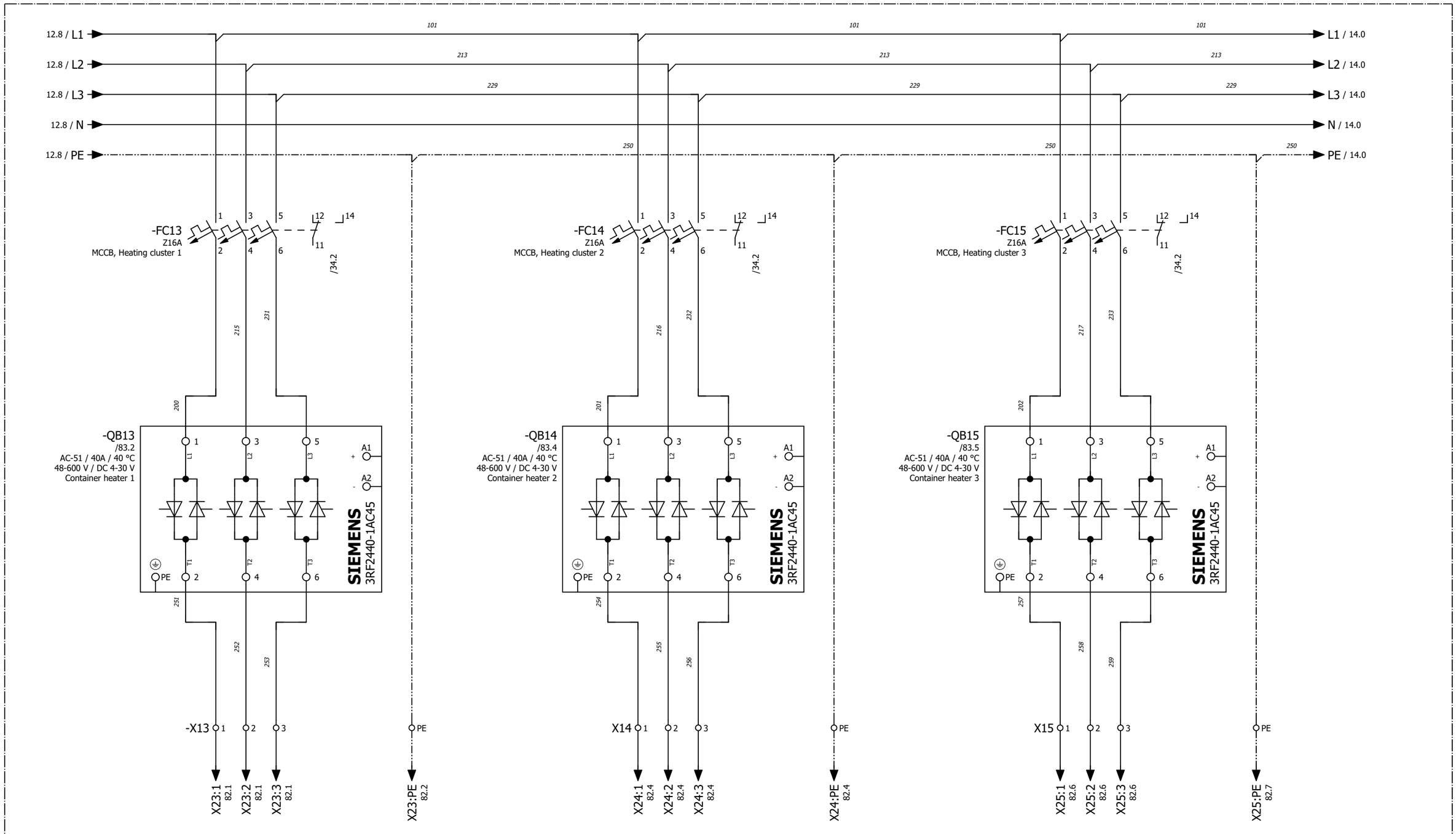
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container MCU Power supply		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 12 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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EPLAN Project Pages	628		
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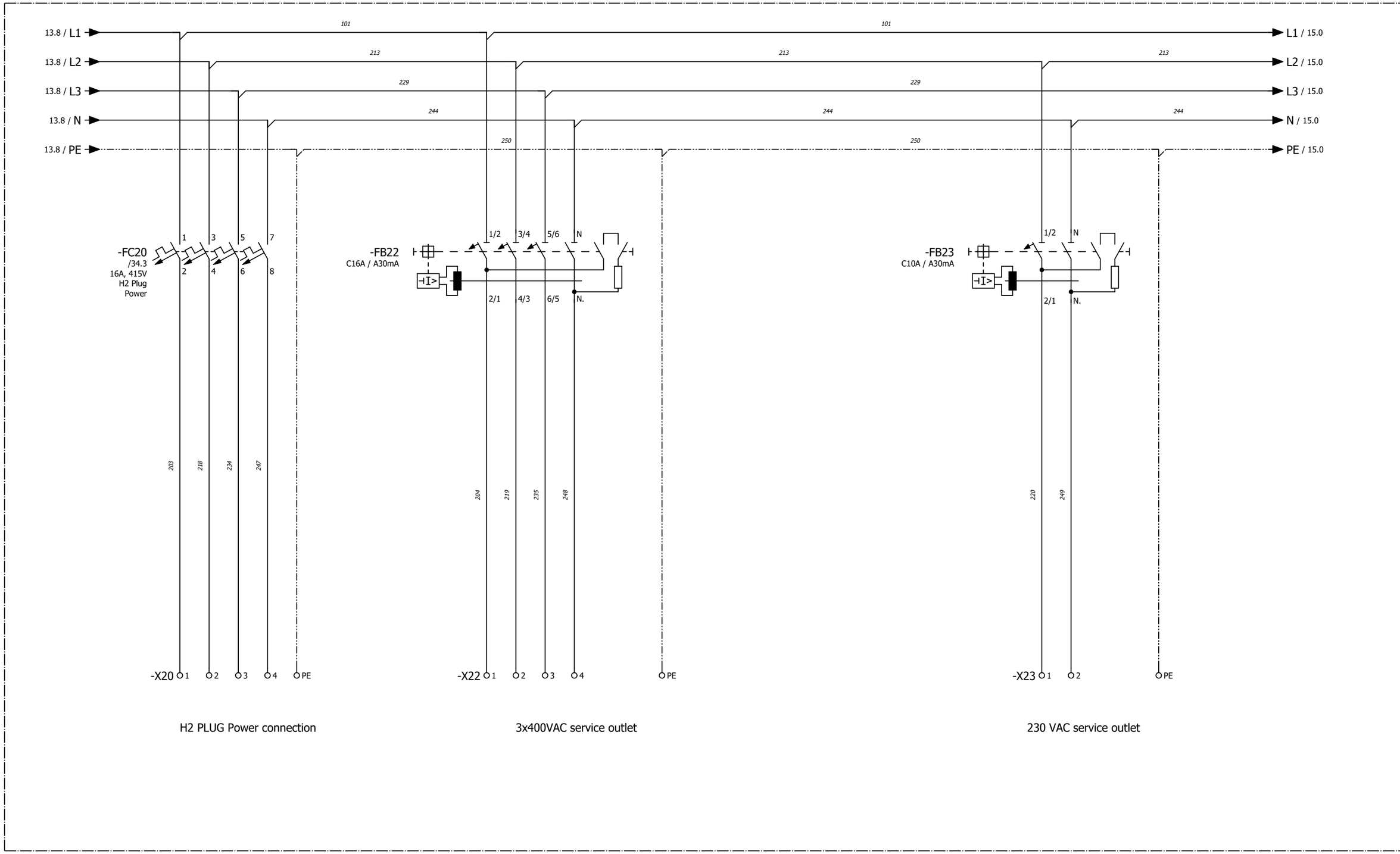
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container Heater control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 13 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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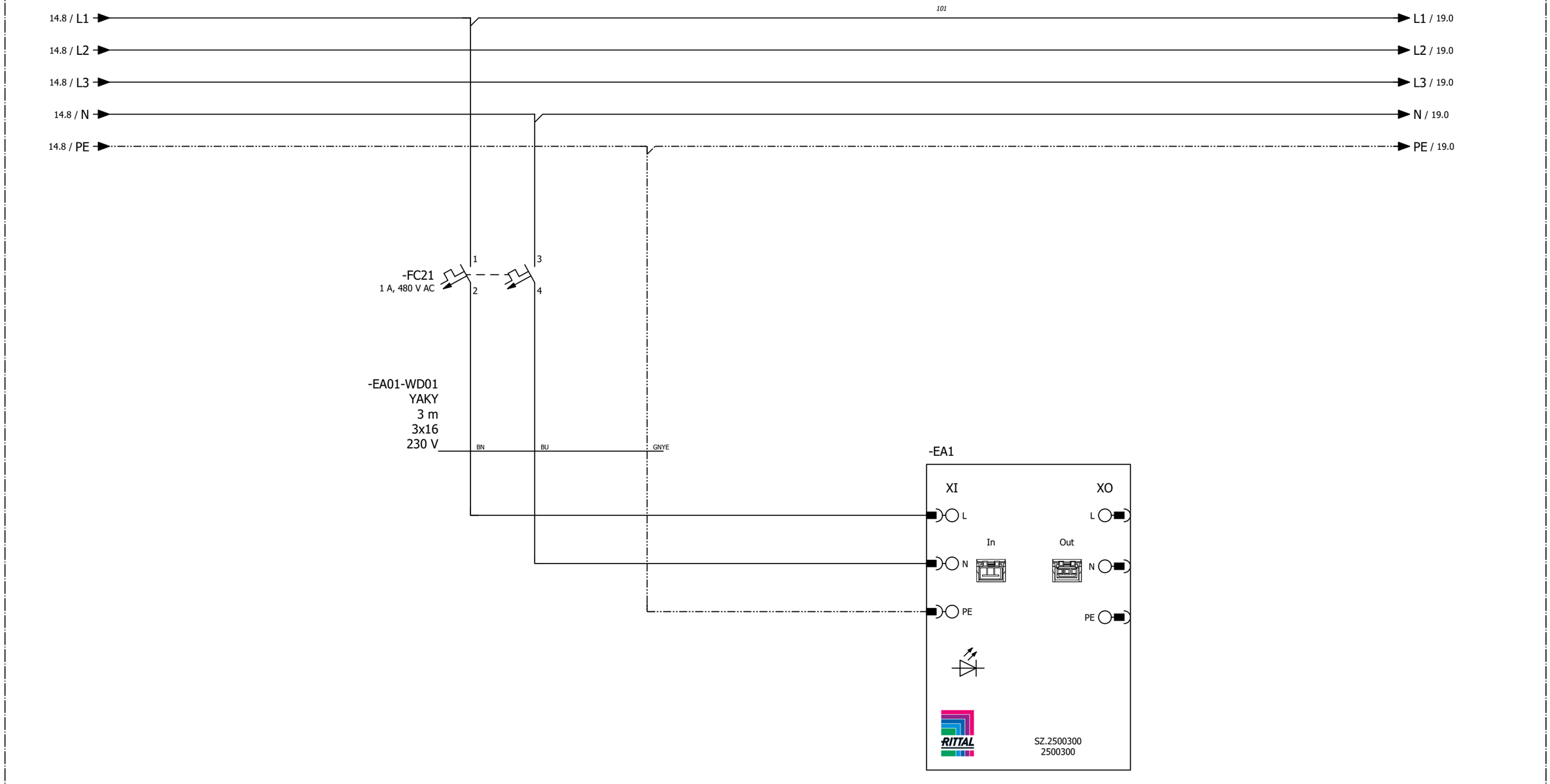
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container Service outlets		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 14 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
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EPLAN Revision	06		
EPLAN Project Pages	628		
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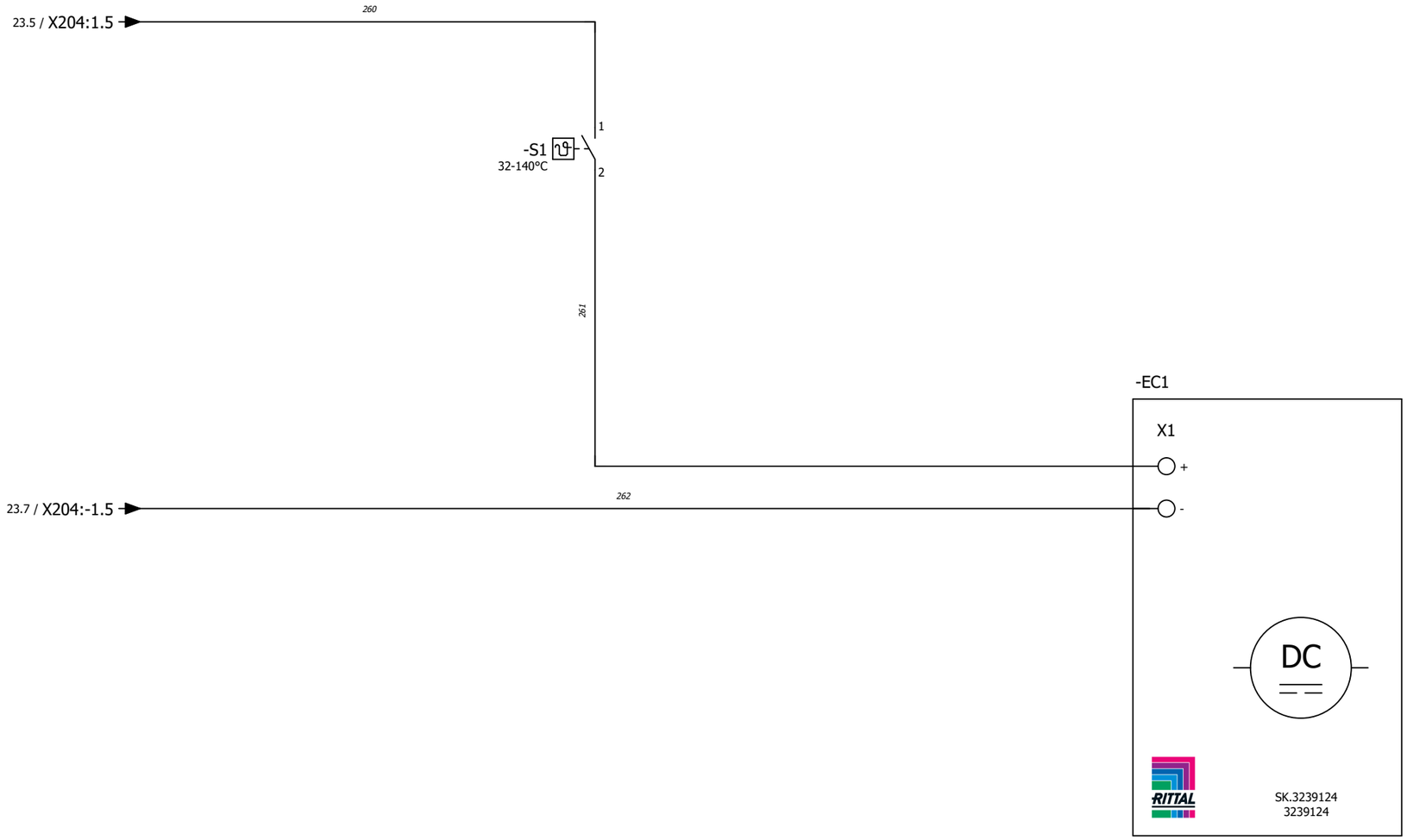
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DRAWING	601456B UC20 40ft Control Cabinet		REVISION	06	
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet				
SHEET TYPE/DESC	40ft container Cabinet light				
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	15 / 2	

=LA01+UC20
Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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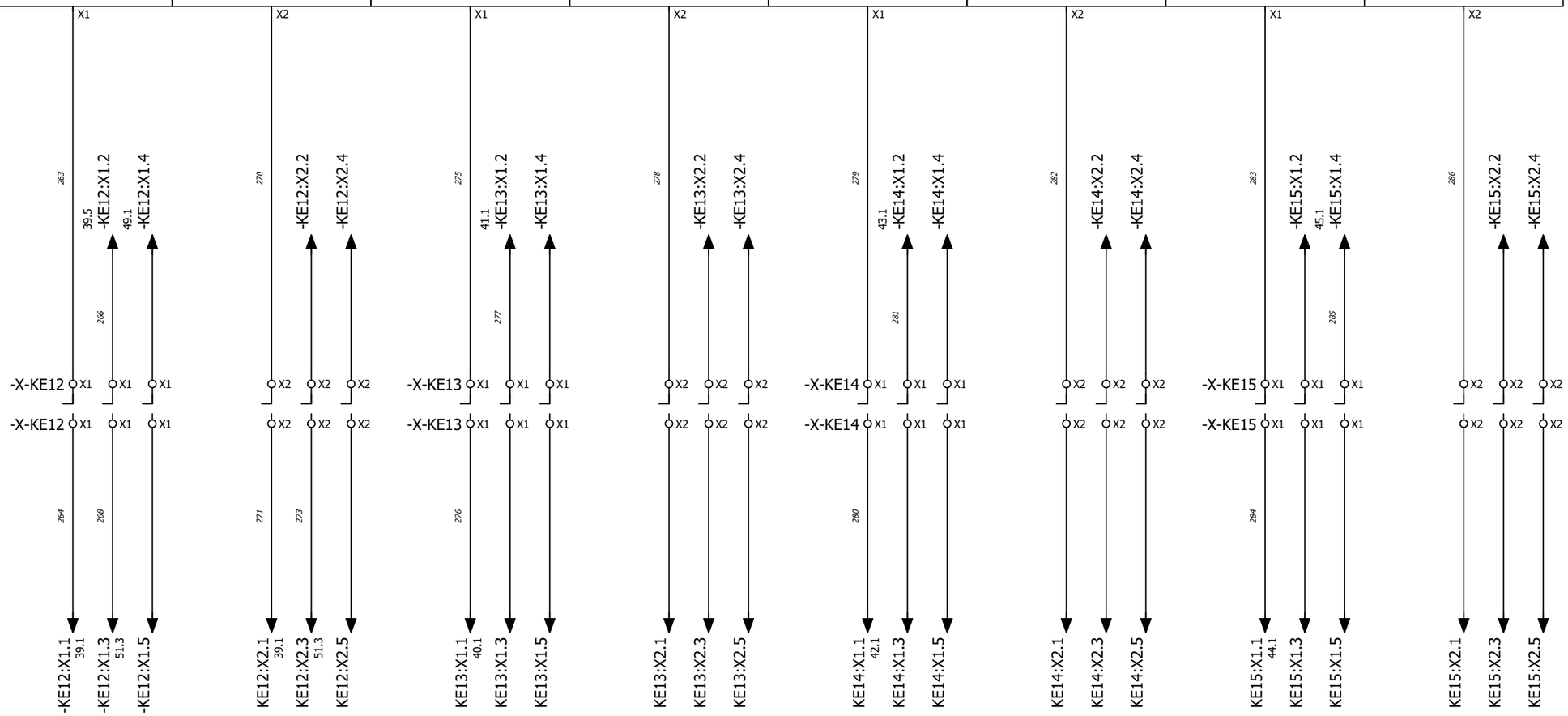
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container Cabinet fan		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 16 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet 40 ft

KE12 Test pulse output CH1	KE12 Test pulse output CH2	KE13 Test pulse output CH1	KE13 Test pulse output CH2	KE14 Test pulse output CH1	KE14 Test pulse output CH2	KE15 Test pulse output CH1	KE15 Test pulse output CH2
KE12PULSE01	KE12PULSE02	KE13PULSE01	KE13PULSE02	KE14PULSE01	KE14PULSE02	KE15PULSE01	KE15PULSE02
&C02/17.1	&C02/17.1	&C02/17.5	&C02/17.5	&C02/18.1	&C02/18.1	&C02/18.4	&C02/18.4
-KE12		KE13		KE14		-KE15	



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DESCRIPTION
DATE
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Pulse generator		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 17 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Pulse generator		

ALL SHEETS ARE THE SAME REVISION STATUS | SIZE A3 | LANGUAGE EN | SHEET/TOTAL 18 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

15.8 / L1 → L1 / 25.0 (101)
15.8 / L2 → L2 / 25.0 (213)
15.8 / L3 → L3 / 25.0 (229)
15.8 / N → N / 25.0
15.8 / PE → PE / 25.0 (250)

-FC30
6 A
1 3 5
2 4 6

205 221 236

-TB30
/34.5
L1 L2 L3 PE
3AC 380-480V

PULS
Power Supply
QT20.241
24-28V
DC-OK
Overload

DC 24V, 20A, 480W/720W
Out + Out +' Out - Out -' 13 14
DC-OK

292 293 294 295

24.2 -TB30:24V+
24.1 -TB30:24V-

-RB30
In + In - In -'
DC 24V

PULS
DC-UPS Control Unit, 24V, 20A
UB20.241

PE
RB30_Pos / 20.2
RB30_Neg / 20.2
RB30_11 / 20.3
RB30_12 / 20.3
Bat. + Bat. -
11 12 13
PT100 Temp. Sensor
PT100 Temp. Sensor
Battery Center Tap

DC 24V 20A
Out + Out -
296 297
-RB30+ 21.1
-RB30- 21.1

Ready 1 Ready 2 Buffering 3 Buffering 4 Repl. Bat. 5 Repl. Bat. 6 Inhibit + 7 Inhibit - 8
298 299 298 300 298 301

22.4 / -X202:1.1

X02 22 DIO10
>=LA01-KE01-Slot3
&C02/2.6
UC20_RB30_SOH
PLC UPS Battery Low SOH

X02 21 DIO9
>=LA01-KE01-Slot3
&C02/2.6
UC20_RB30_BAT
PLC UPS Battery Operation

X02 20 DIO8
>=LA01-KE01-Slot3
&C02/2.6
UC20_RB30_RDY
PLC UPS Battery Ready

COM 23
>=LA01-KE01-Slot3: &C02/2.6 Supply COM
302
22.6 / -X202:-1.1

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - 24V Supply and UPS		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 19 / 2

0	1	2	3	4	5	6	7	8

=LA01+DA01

-CA30

PULS

Battery Module, 24V, 12Ah
UZK24.121

DC 24V
Out + Out -

PT100 Temp. Sensor 11
PT100 Temp. Sensor 12
Battery Center Tap 13

-CA30-WD01
ÖLFLEX CLASSIC 100 H
3G2,5
450 V
Battery supply RB30 1 2

-CA30-WG01
ÖLFLEX® CLASSIC 130 H
3G1
300/500 V
1 2 Temp sensor CA30

19.4 / >+UC20-RB30_Pos
19.4 / >+UC20-RB30_Neg
19.5 / >+UC20-RB30_11
19.5 / >+UC20-RB30_12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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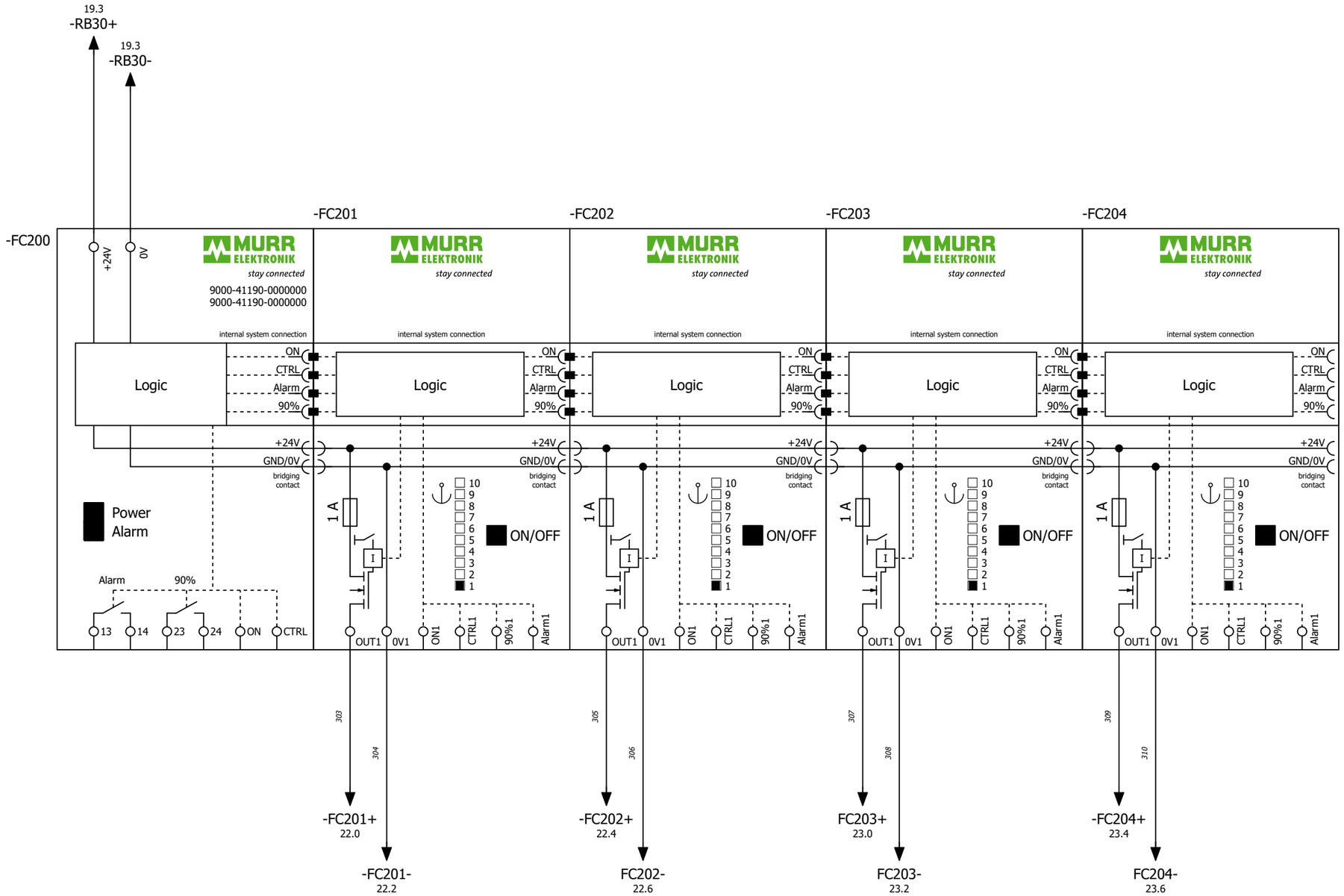
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - 24V Backup Battery		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 20 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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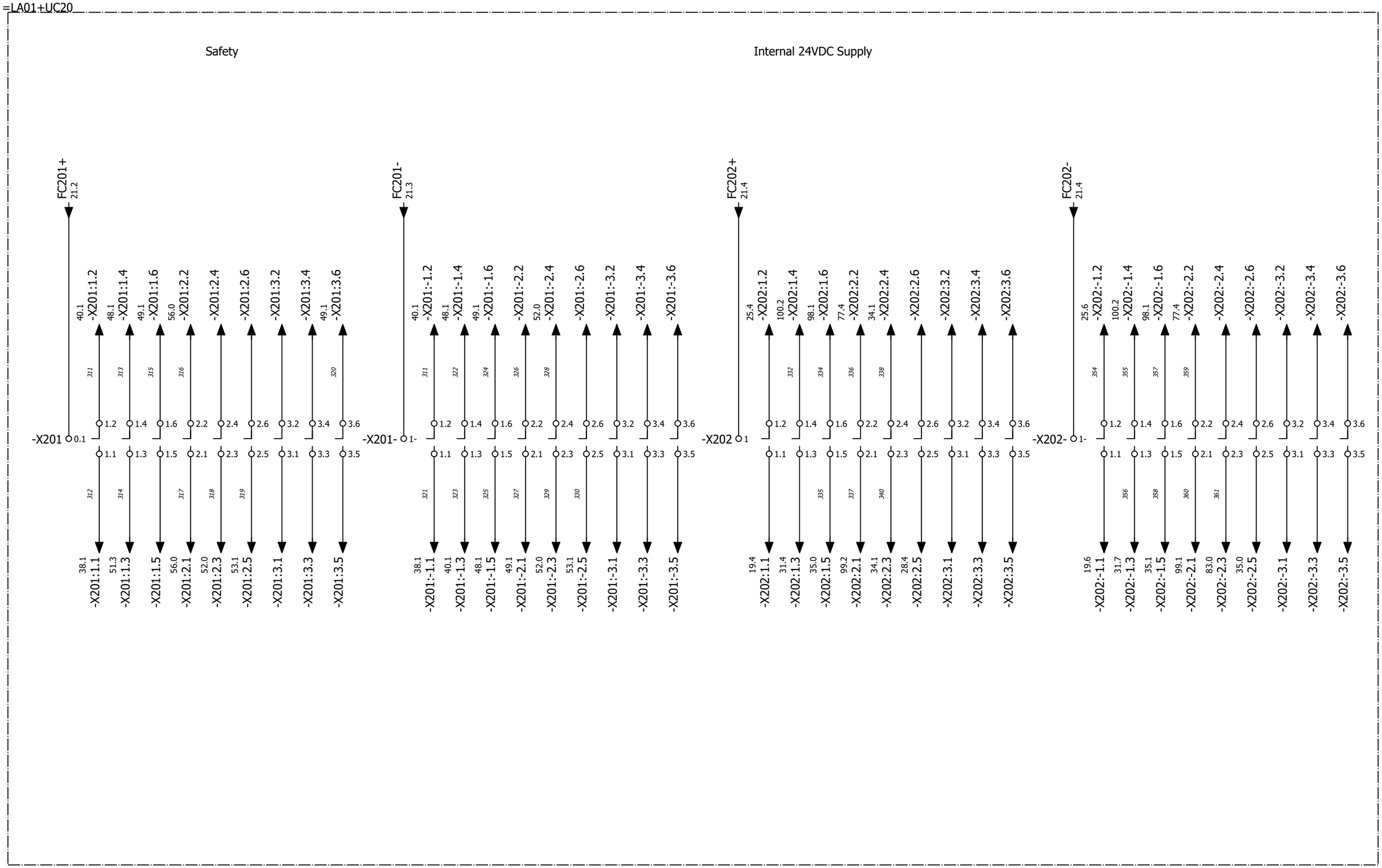
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - 24 VDC Supply Fuses		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 21 / 2

=LA01+UC20

Safety

Internal 24VDC Supply



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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=	++	+ UC20	& C03

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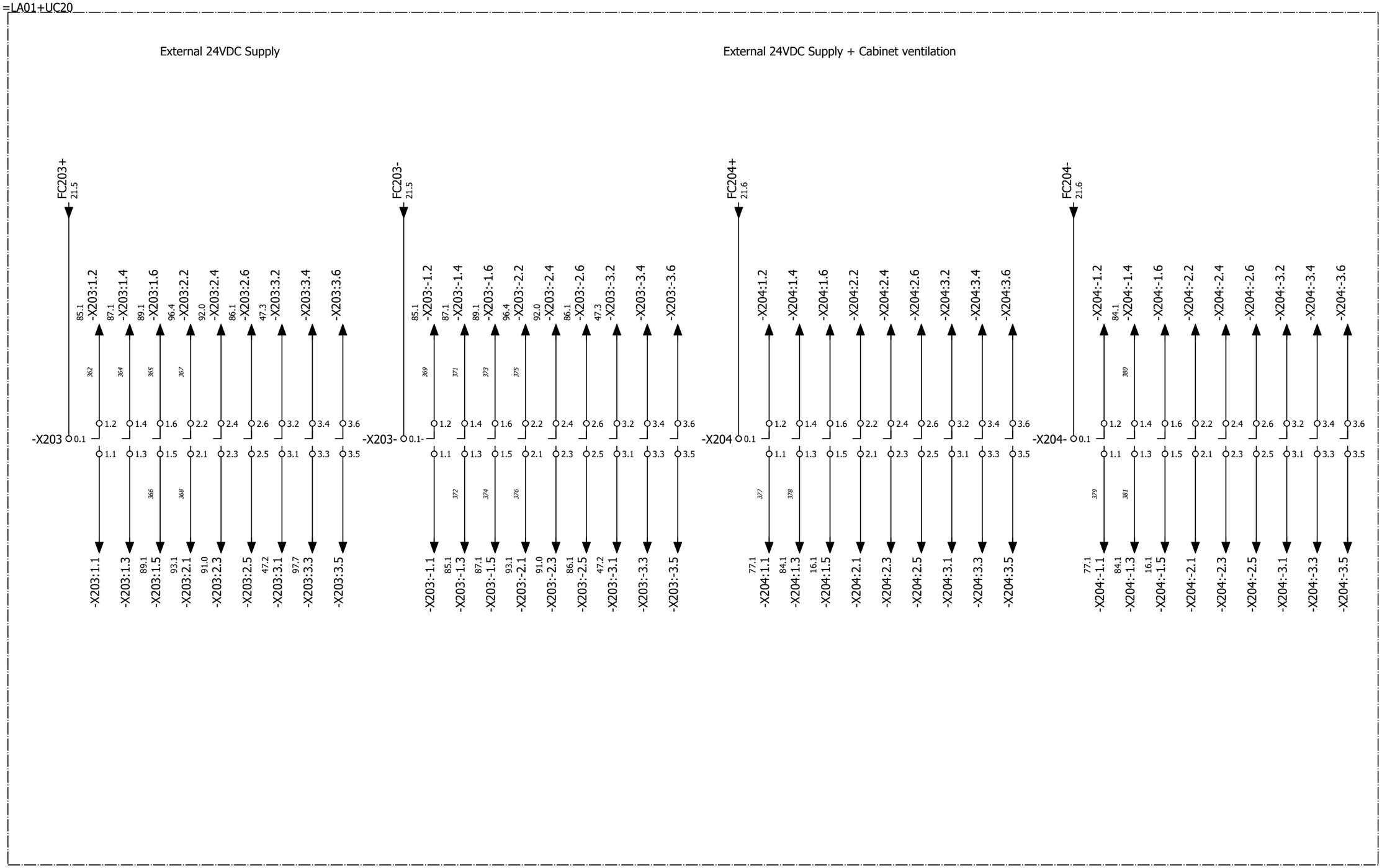
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - 24 VDC Supply		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 22 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

External 24VDC Supply

External 24VDC Supply + Cabinet ventilation



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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=	++	+ UC20	& C03

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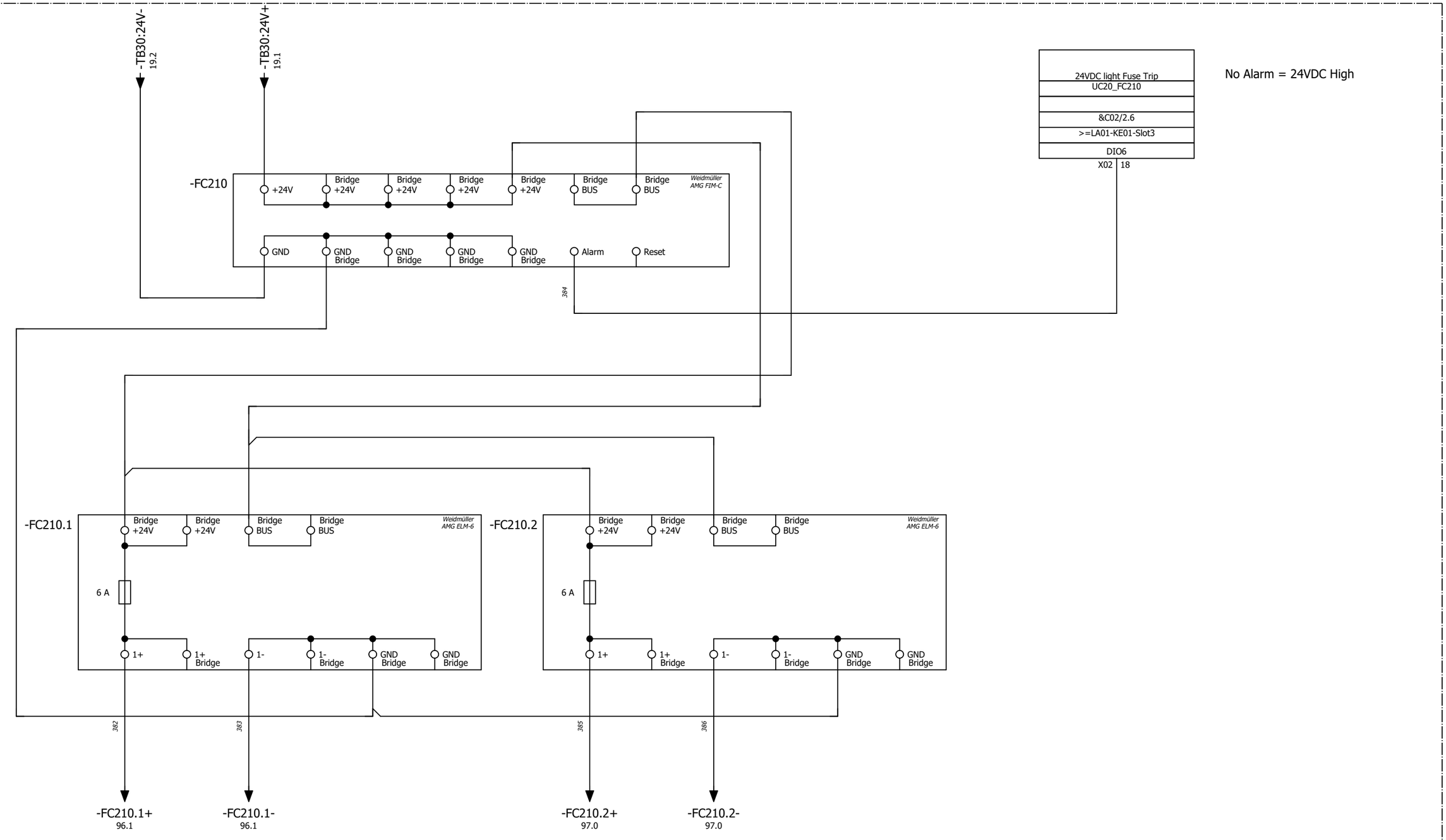
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - 24 VDC Supply		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 23 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - 24 VDC Supply Container light		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 24 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

19.7 / L1 → L1 / 28.0 (101)
19.7 / L2 → L2 / 28.0 (213)
19.7 / L3 → L3 / 28.0 (229)
19.7 / N → N / 28.0
19.7 / PE → PE / 28.0 (250)

-FC31
6 A
1 3 5
2 4 6

206 222 237

-TB01
L1 L2 L3 PE
3AC 380-480V

PULS
Power Supply
QT40.241
24-28V
DC-OK
Overload
Single/Parallel Mode
DC 24V, 40A, 960W/1440W
Out + Out +' Out - Out -' 13 14 15 16
DC-OK Shut-Down

387 388

PE

>=LA01+DA01-RB01-WG01
UNITRONIC®-FD CP (TP) PLUS
4x0,5
500 V
Temp Sensor CA01 WH BN

RB01_11 / 26.2
RB01_12 / 26.3

>=LA01+DA01-RB01-WD01
ÖLFLEX® CLASSIC 110 CH
3x2,5
300/500 V
Battery Supply RB01 1 2

RB01_Pos / 26.1
RB01_Neg / 26.2

-RB01
FC1+2 24V UPS Module
IN + - BAT_MON 11 12 BAT + 13 -

PULS
UB40.241
DC-UPS CONTROL UNIT

Inhibit + Inhibit - Rdy Rdy Buffer Buffer BAT. Replace BAT. Replace Low BAT. Low BAT.

OUT + - 7 8 1 2 3 4 5 6 14 15 PE

331 331 331 331

389 390 391 392 393 394

-RB01+
27.0
-RB01-
27.0

22.4 / -X202:1.2

X02 18 DI04
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB01_RDY
FC1+2 UPS Battery Ready

X02 19 DI05
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB01_BAT
FC1+2 UPS Battery Operation

X02 20 DI06
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB01_SOH
FC1+2 UPS Battery Low SOH

X02 21 DI07
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB01_DIS
FC1+2 UPS Battery Discharged

COM 23
>=LA01-KE02-Slot03: &C02/5.6 Supply COM

22.6
-X202:-1.2

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1+2 24V Supply and UPS		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 25 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+DA01

-CA01

PULS

Battery Module, 24V, 12Ah
UZK24.121

DC 24V
Out + Out -

PT100 Temp. Sensor 11
PT100 Temp. Sensor 12
Battery Center Tap 13

25.4 / >+UC20-RB01_Pos
25.4 / >+UC20-RB01_Neg
25.4 / >+UC20-RB01_11
25.4 / >+UC20-RB01_12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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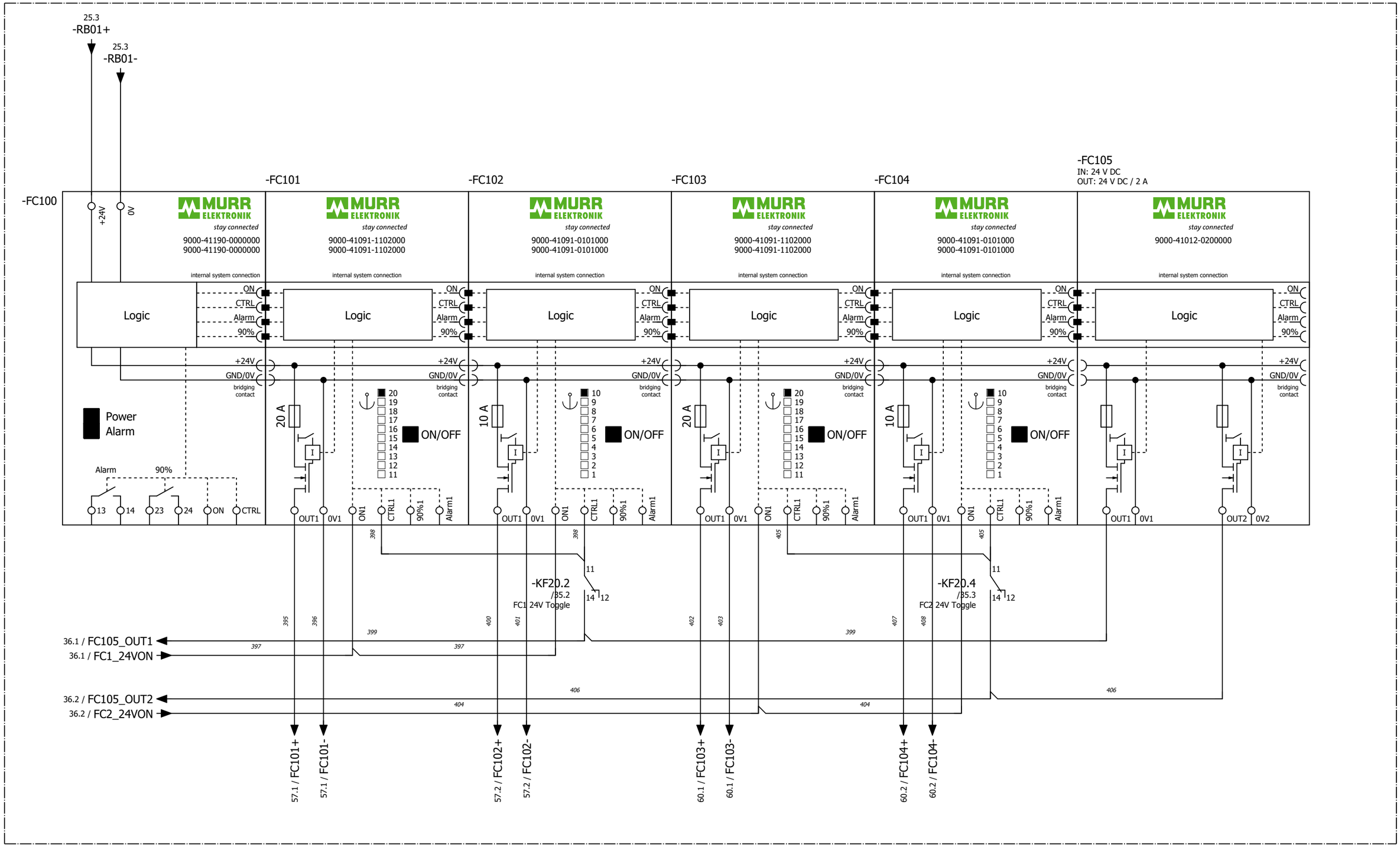
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1+2 24V Backup Battery		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 26 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1+2 24V Fuses		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 27 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

25.7 / L1 → 101 → L1 / 31.0
25.7 / L2 → 213 → L2 / 31.0
25.7 / L3 → 229 → L3 / 31.0
25.7 / N → N / 31.0
25.7 / PE → 250 → PE / 31.0

-FC32
6 A
1 3 5
2 4 6

207 223 238

-TB02
L1 L2 L3 PE
3AC 380-480V

PULS
Power Supply
QT40.241
24-28V
DC-OK
Overload
Single/Parallel Mode

DC 24V, 40A, 960W/1440W
Out + Out +' Out - Out -' 13 14 15 16
DC-OK Shut-Down

409 410

PE

>=LA01+DA01-RB02-WG01
UNITRONIC®-FD CP (TP) PLUS
4x0,5
500 V
Temp Sensor CA02
WH BN

RB02_11 / 29.3
RB02_12 / 29.3

>=LA01+DA01-RB02-WD01
ÖLFLEX® CLASSIC 110 CH
3x2,5
300/500 V
Battery Supply RB02
1 2

RB02_Pos / 29.2
RB02_Neg / 29.2

-RB02
IN + - BAT_MON 11 12 BAT + 13 -

PULS
UB40.241
DC-UPS CONTROL UNIT

Inhibit + Inhibit - Rdy Rdy Buffer Buffer BAT. Replace BAT. Replace Low BAT. Low BAT.

OUT + - 7 8 1 2 3 4 5 6 14 15 PE

358
353 353 353
411 412 413 414 415 416

-RB02+
30.0
-RB02-
30.0

-X202:2.5
22.5

X02 22 → DI08
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB02_RDY
FC3+4 UPS Battery Ready

X03 24 → DI09
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB02_BAT
FC3+4 UPS Battery Operation

X03 25 → DI10
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB02_SOH
FC3+4 UPS Battery Low SOH

X03 26 → DI11
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB02_DIS
FC3+4 UPS Battery Discharged

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC3+4 Supply and UPS		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 28 / 2

0	1	2	3	4	5	6	7	8

=LA01+DA01

-CA02

PULS

Battery Module, 24V, 12Ah
UZK24.121

DC 24V
Out + Out -

PT100 Temp. Sensor 11
PT100 Temp. Sensor 12
Battery Center Tap 13

28.4 / >+UC20-RB02_Pos
28.4 / >+UC20-RB02_Neg
28.4 / >+UC20-RB02_11
28.4 / >+UC20-RB02_12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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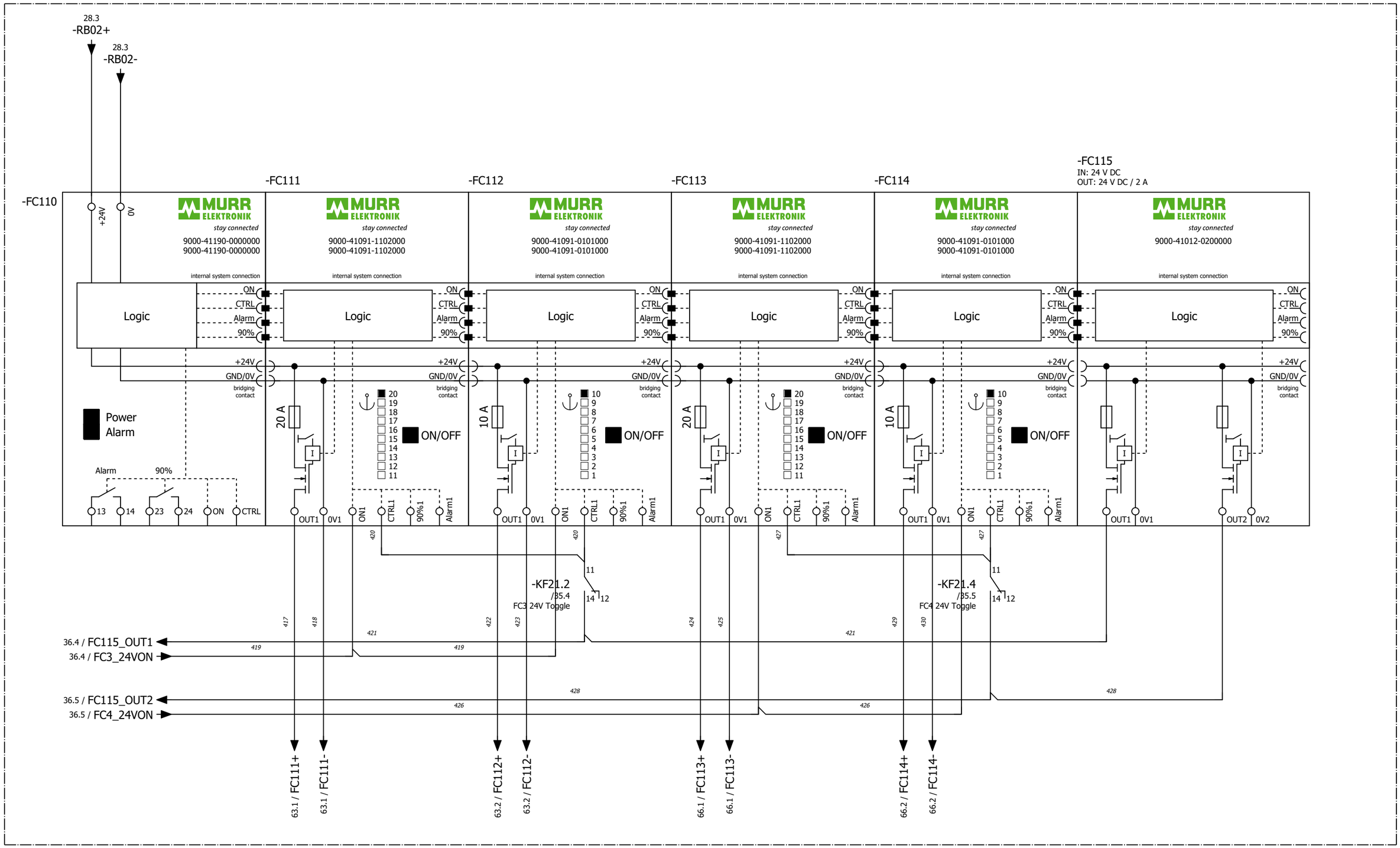
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC3+4 24V Backup Battery		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 29 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

REVISION INFORMATION
DESCRIPTION
DATE
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC3+4 24V Fuses		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 30 / 2

=LA01+UC20

28.7 / L1 → 101 → L1 / 80.0
28.7 / L2 → 213 → L2 / 80.0
28.7 / L3 → 229 → L3 / 80.0
28.7 / N → N /
28.7 / PE → 250 → PE / 80.0

-FC33
6 A
1 3 5
2 4 6

208 224 239

-TB03
L1 L2 L3 PE
3AC 380-480V

PULS
Power Supply
QT40.241
24-28V
DC-OK
Overload
Single/Parallel Mode

DC 24V, 40A, 960W/1440W
Out + Out +' Out - Out -' 13 14 15 16
DC-OK Shut-Down

431 432

PE

>=LA01+DA01-RB03-WG01
UNITRONIC®-FD CP (TP) PLUS
4x0,5
500 V
Temp Sensor CA03
WH BN

RB03_11 / 32.3
RB03_12 / 32.3
RB03_Pos / 32.2
RB03_Neg / 32.2

>=LA01+DA01-RB03-WD01
ÖLFLEX® CLASSIC 110 CH
3x2,5
300/500 V
Battery Supply RB03
1 2

-RB03
IN + - BAT_MON 11 12 BAT + 13 -

PULS
UB40.241
DC-UPS CONTROL UNIT

Inhibit + Inhibit - Rdy Rdy Buffer Buffer BAT. Replace BAT. Replace Low BAT. Low BAT.

OUT + - 7 8 1 2 3 4 5 6 14 15 PE

333 333 333

433 434 435 436 437 438

-RB03+
33.0

-RB03-
33.0

-X202:1.3
22.5

X03 27 — DI12
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB03_RDY
FC5+6 UPS Battery Ready

X03 28 — DI13
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB03_BAT
FC5+6 UPS Battery Operation

X03 29 — DI14
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB03_SOH
FC5+6 UPS Battery Low SOH

X03 30 — DI15
>=LA01-KE02-Slot03
&C02/5.6
UC20_RB03_DIS
FC5+6 UPS Battery Discharged

COM 32
>=LA01-KE02-Slot03: &C02/5.6 Supply COM

-X202:-1.3
22.7

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC5+6 24V Supply and UPS		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 31 / 2

0	1	2	3	4	5	6	7	8

=LA01+DA01

-CA03

PULS

Battery Module, 24V, 12Ah
UZK24.121

DC 24V
Out + Out -

PT100 Temp. Sensor 11
PT100 Temp. Sensor 12
Battery Center Tap 13

31.4 / >=LA01+UC20-RB03_Pos
31.4 / >=LA01+UC20-RB03_Neg
31.4 / >=LA01+UC20-RB03_11
31.4 / >=LA01+UC20-RB03_12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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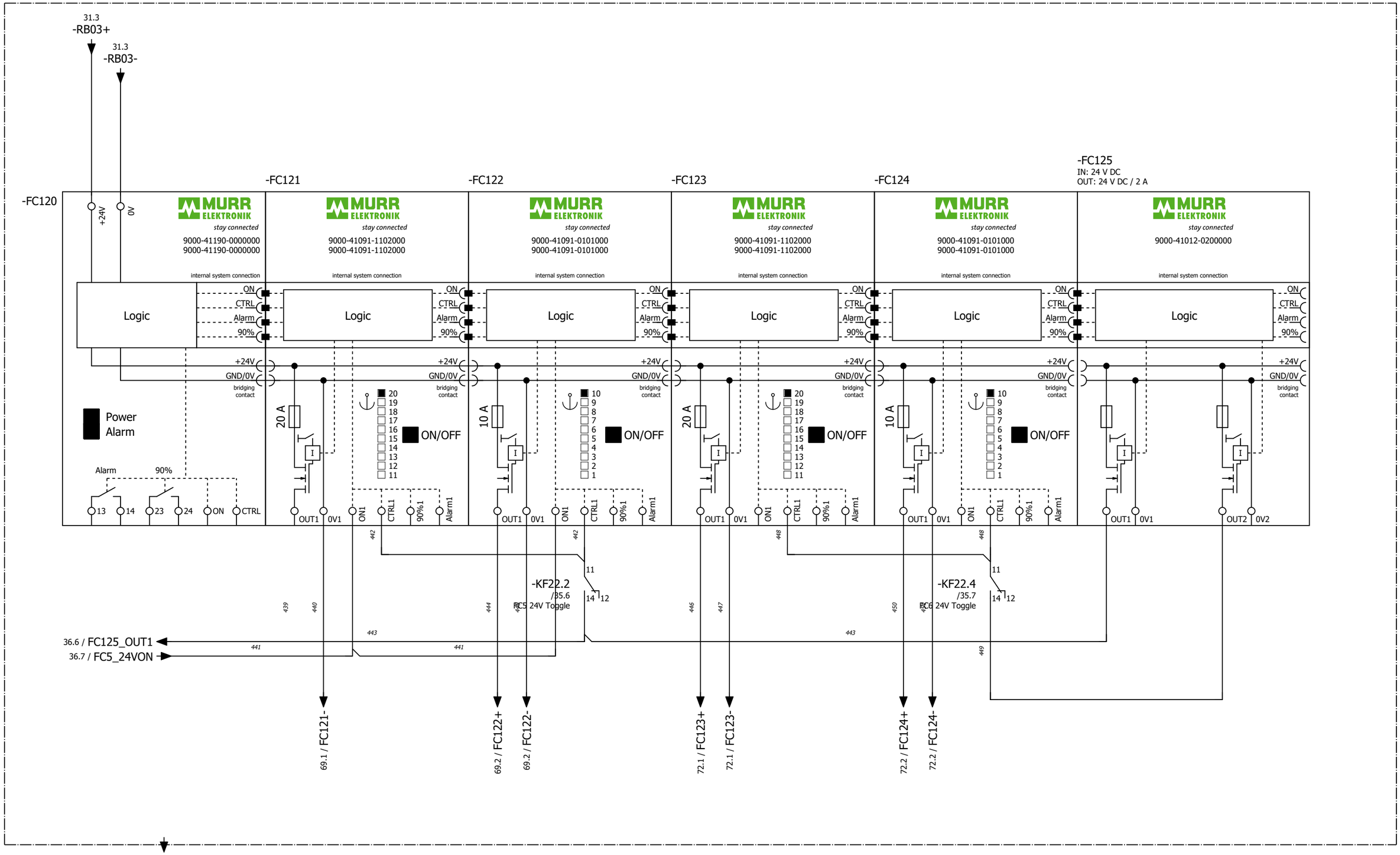
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC5+6 Backup Battery		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 32 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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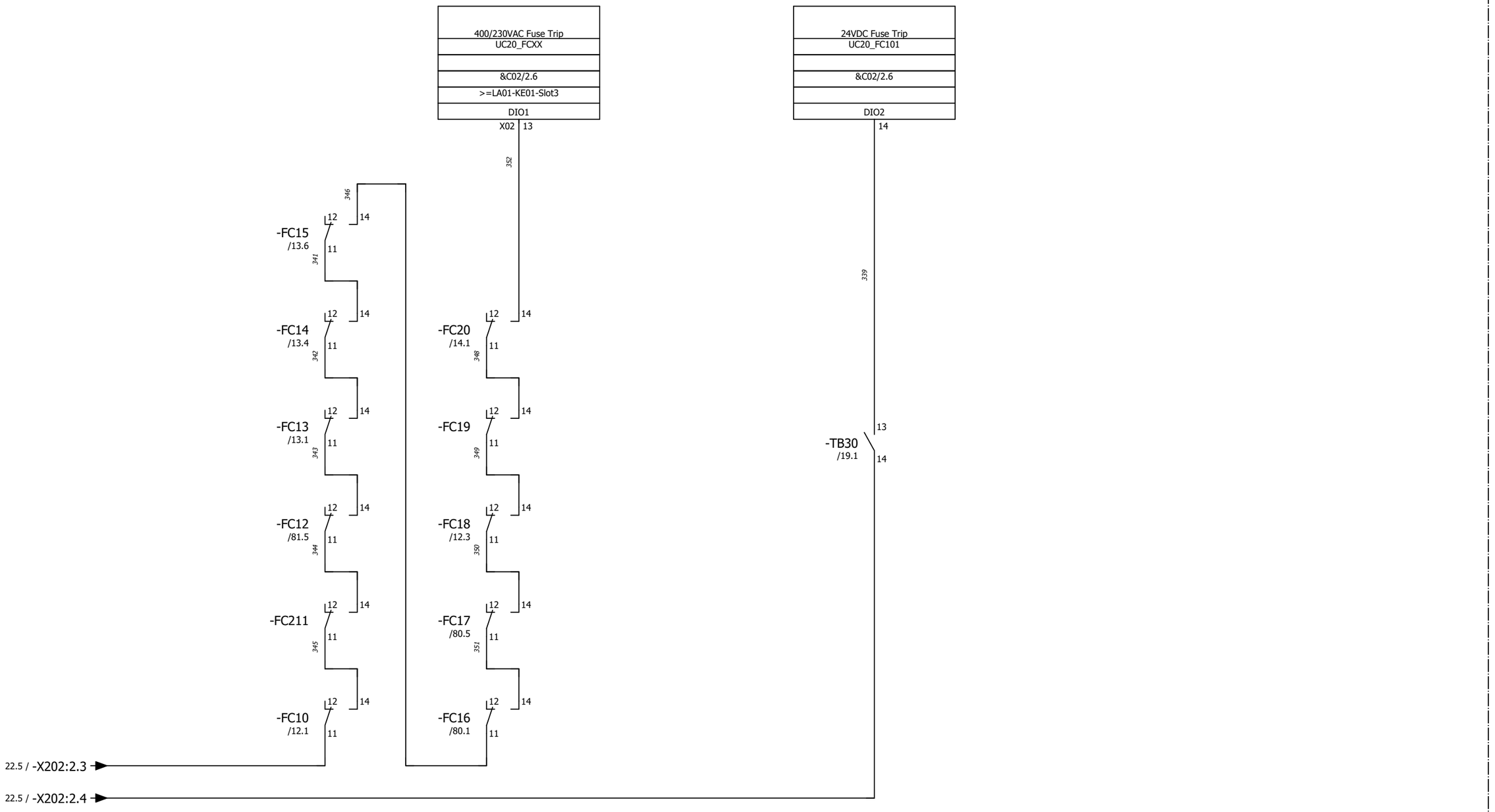
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC5+6 24V Fuses		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 33 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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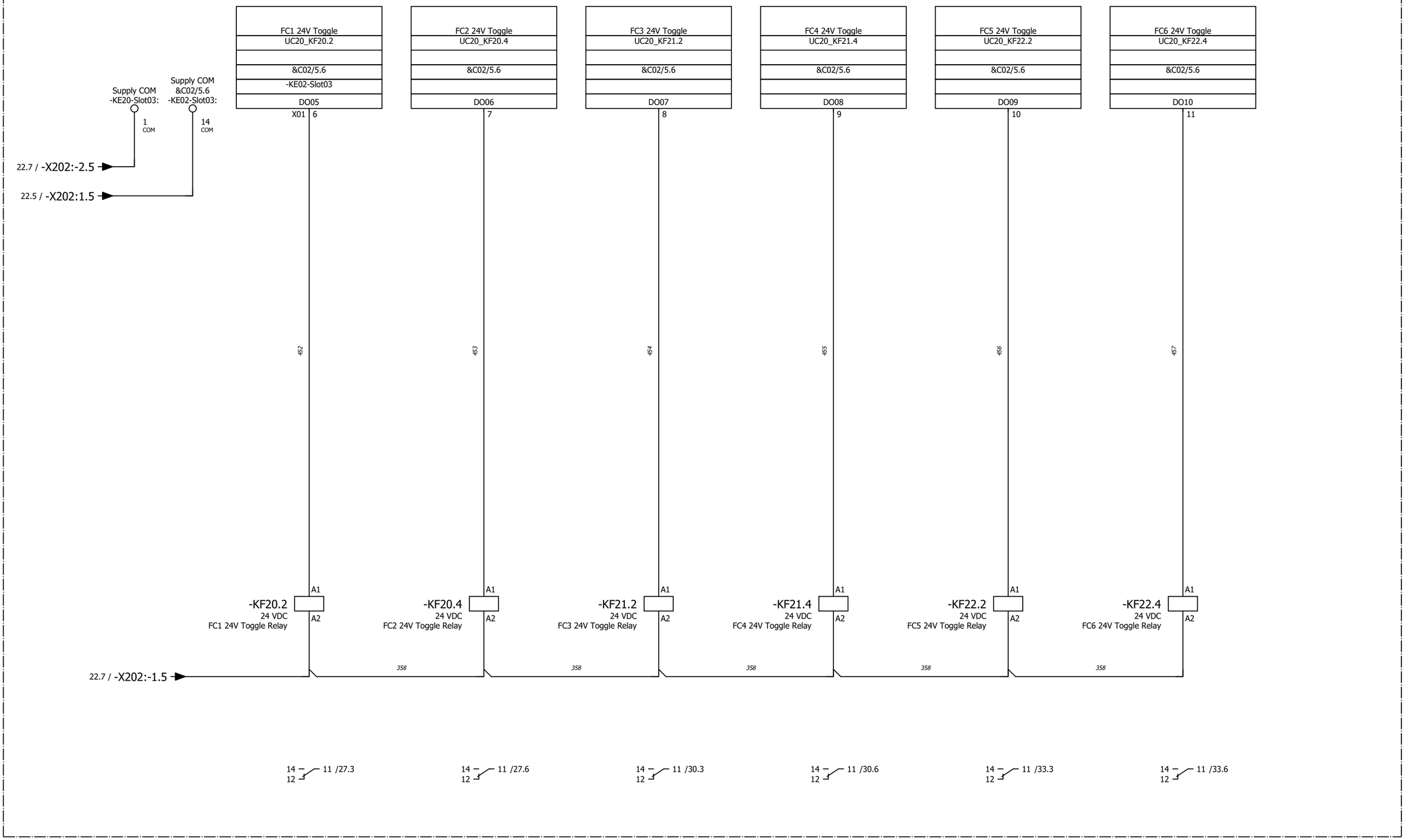
DRAWING	601456B UC20 40ft Control Cabinet		REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet			
SHEET TYPE/DESC	40ft container MCU Fuse trip feed back			
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	34 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Control System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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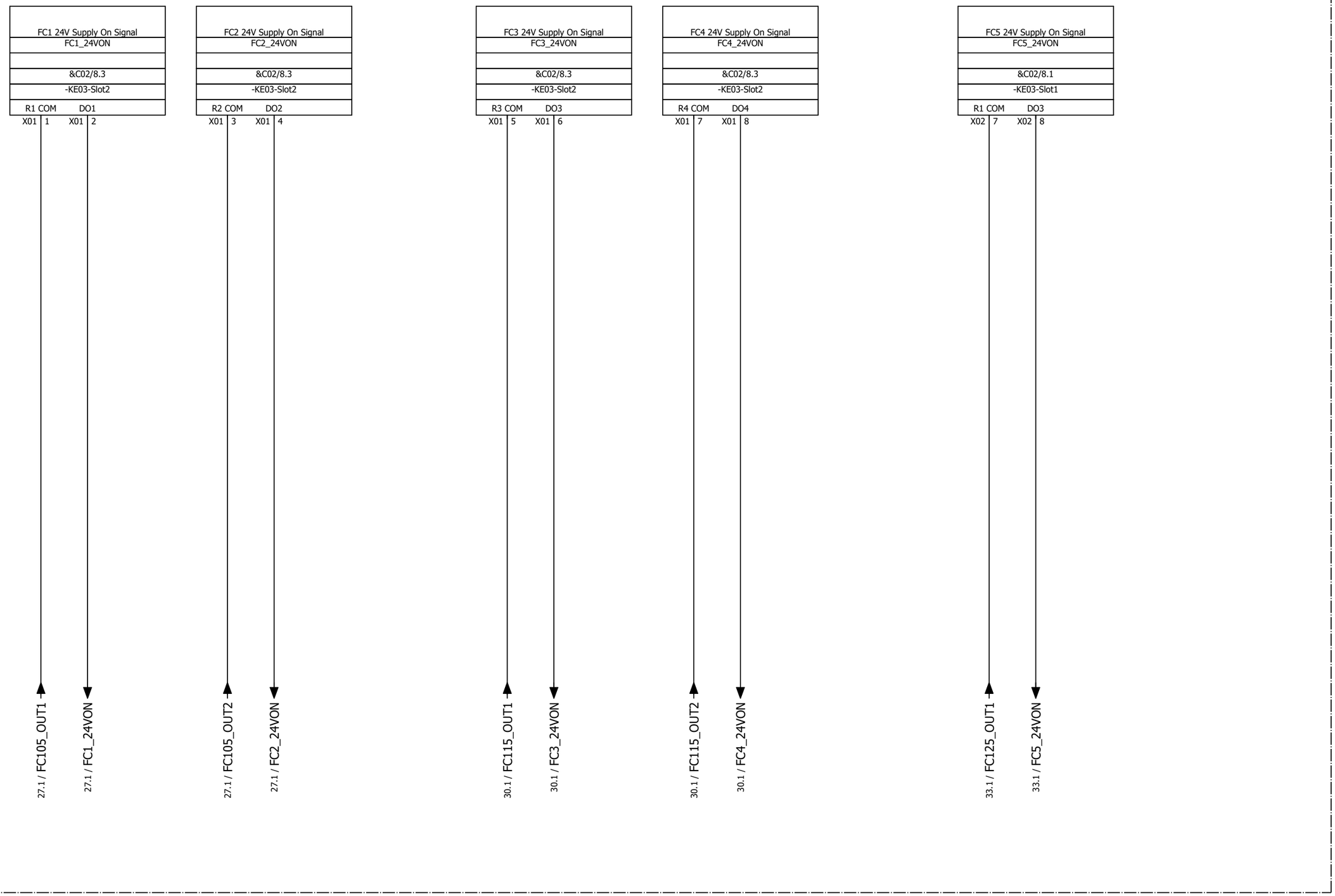
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1-6 24V Toggle		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 35 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Control System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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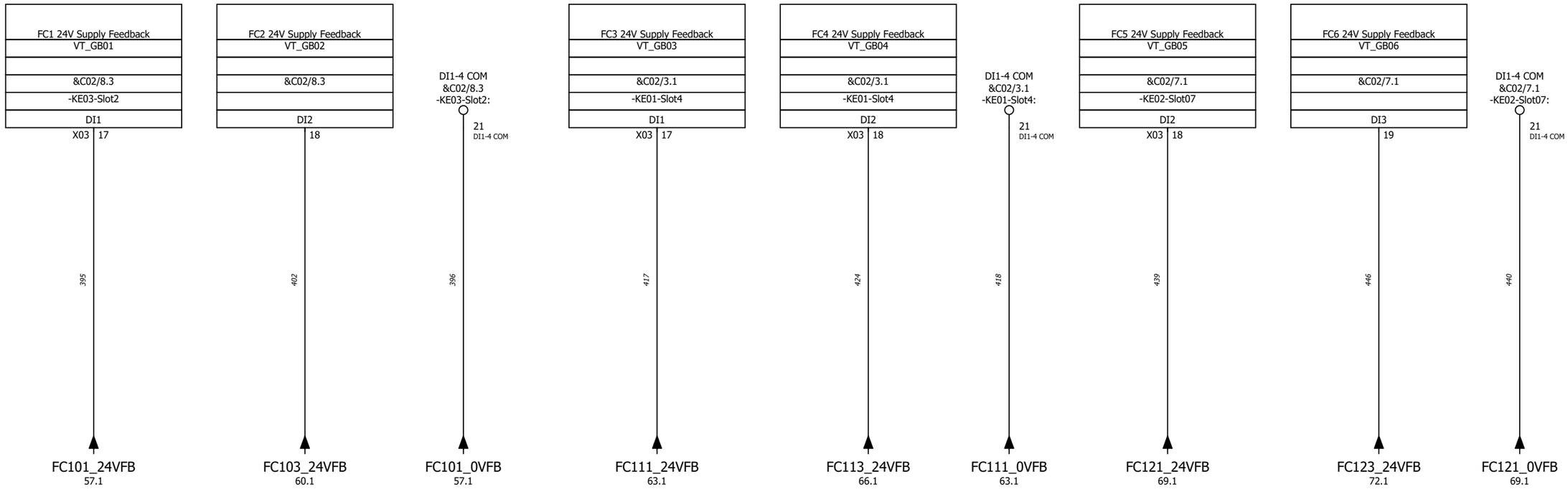
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1-6 24V Toggle On		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 36 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container Control System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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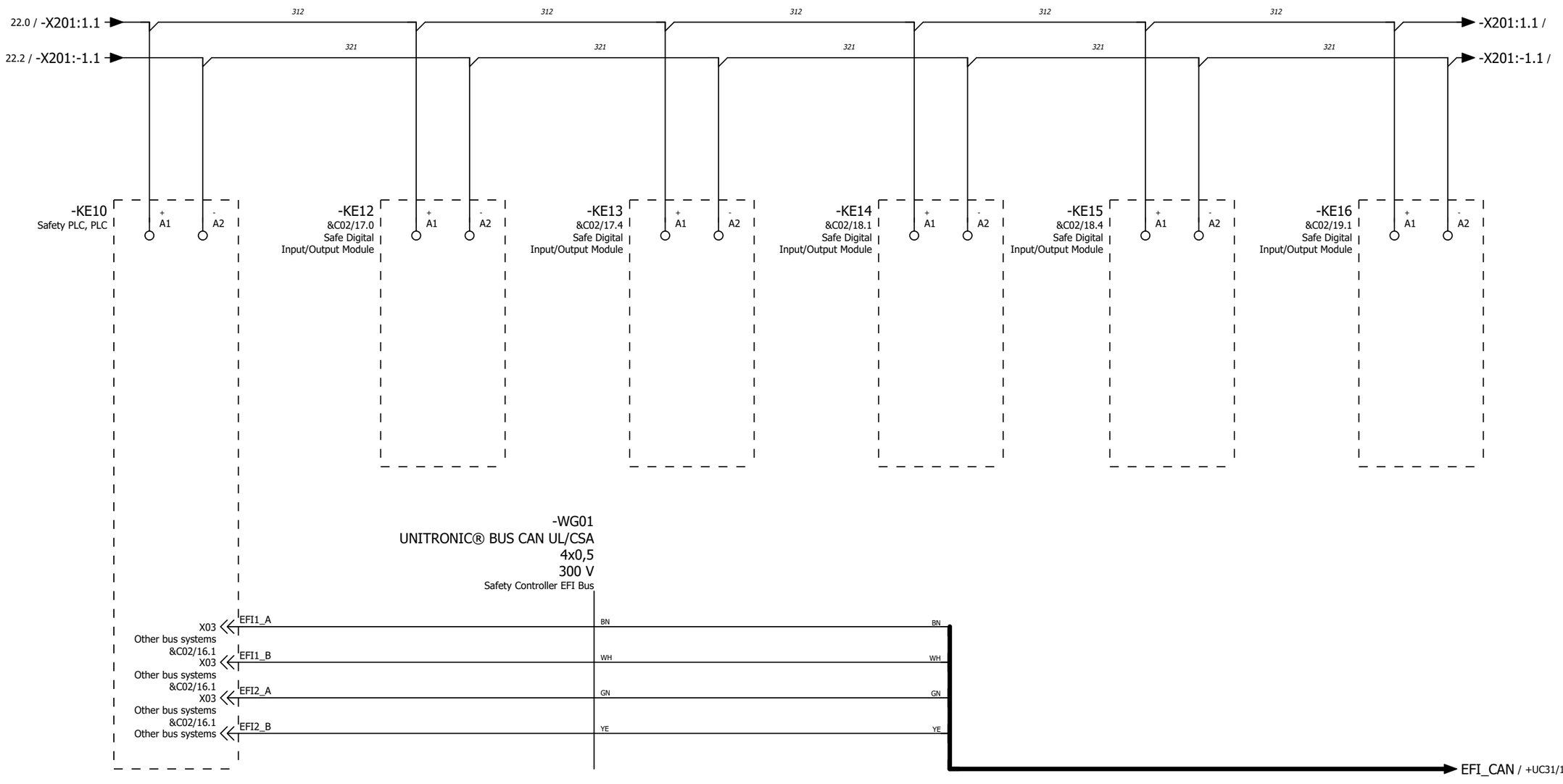
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1-6 24V Feedback		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 37 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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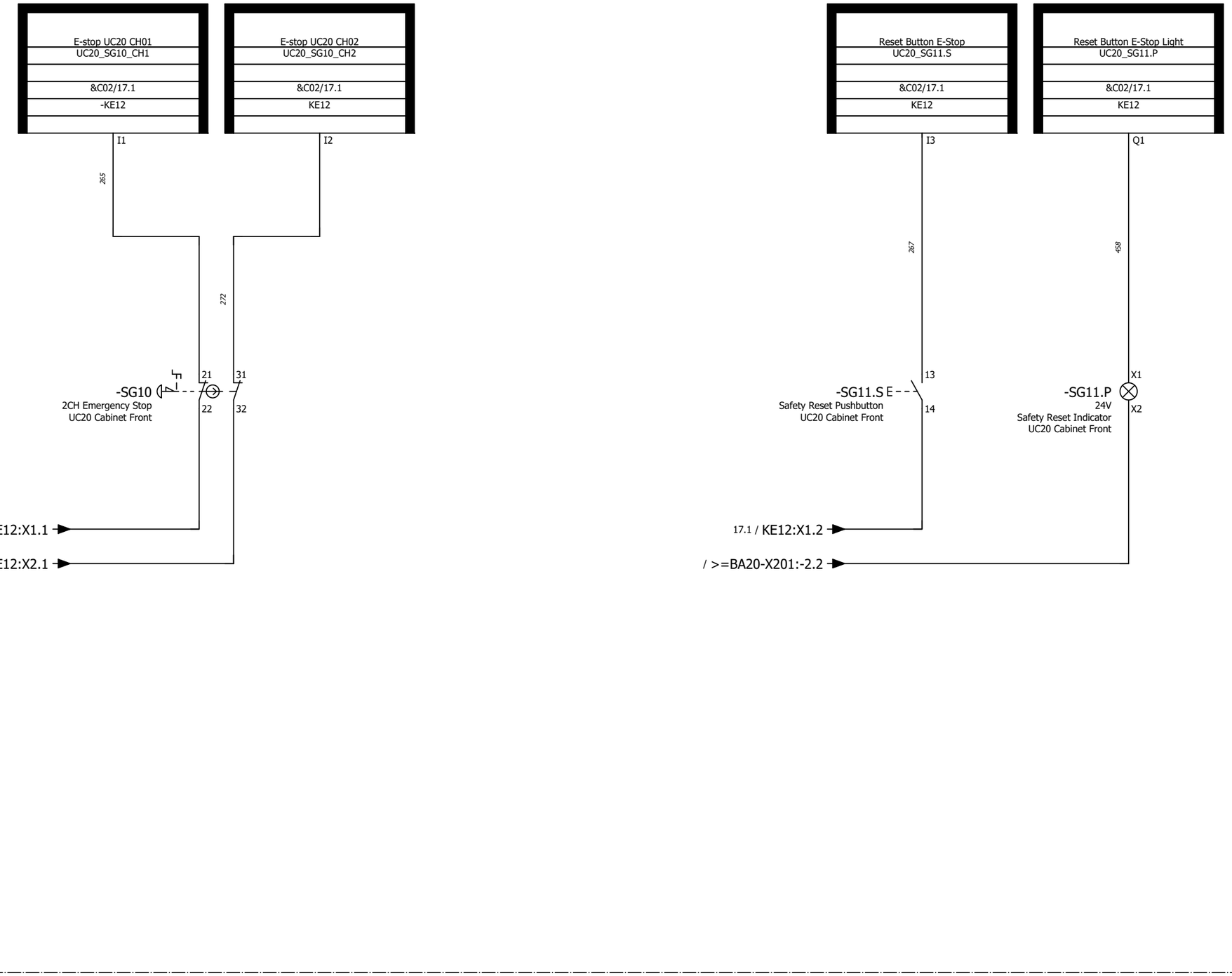
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet - Safety PLC 24V Supply		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 38 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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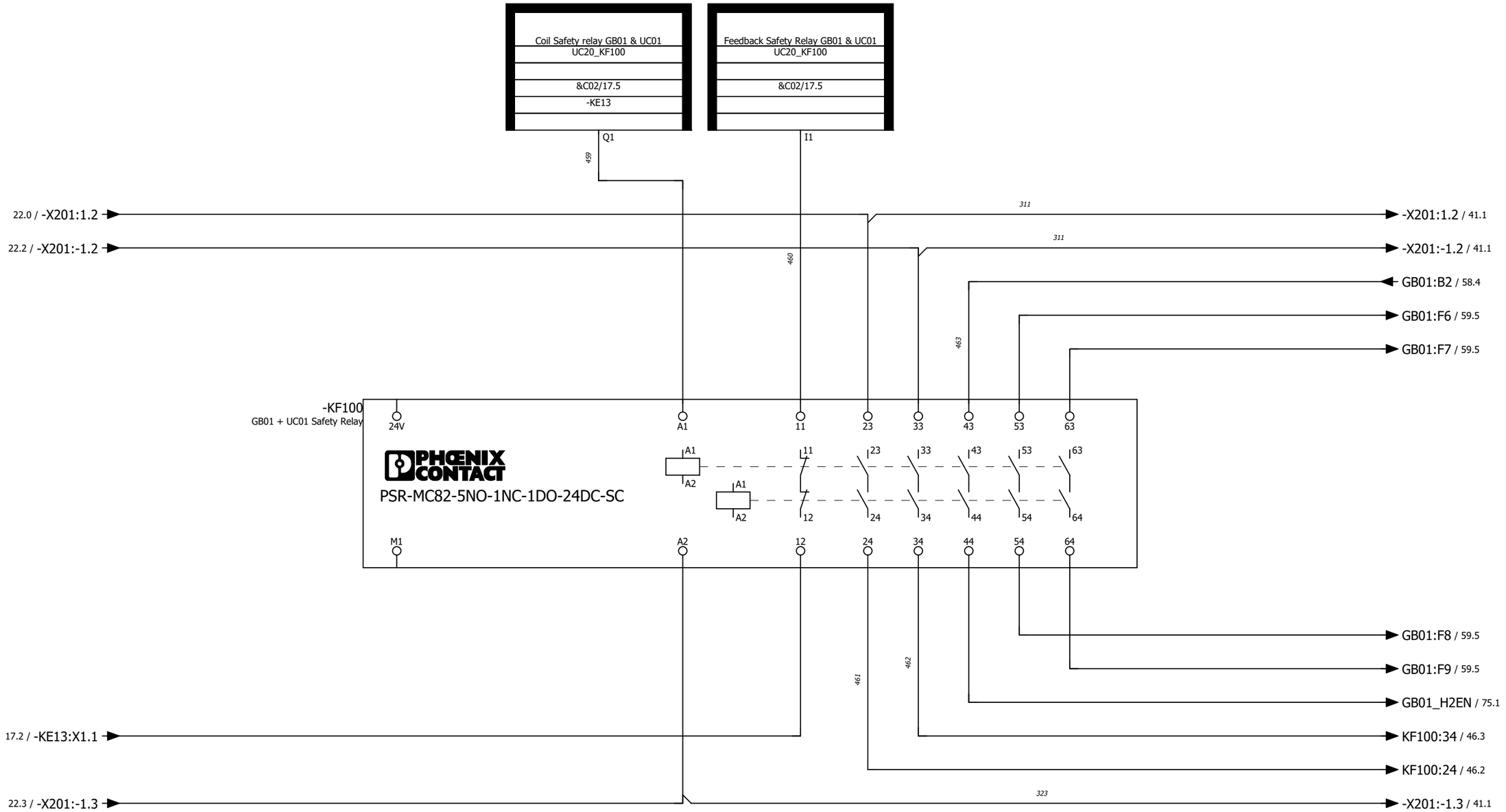
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet - Emergency stop button		

ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	39 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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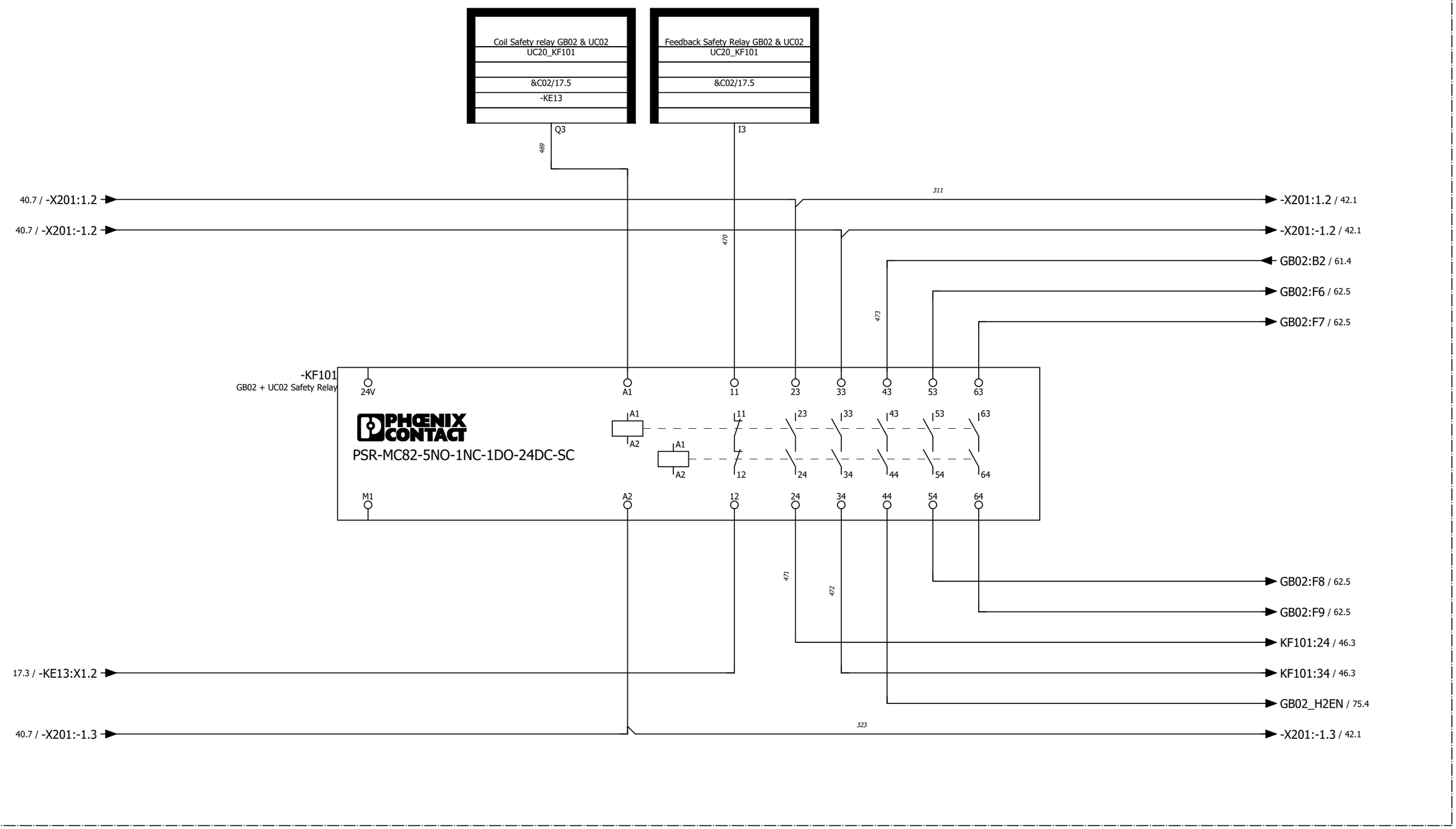
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, GB01 + UC01 Safety Relay		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 40 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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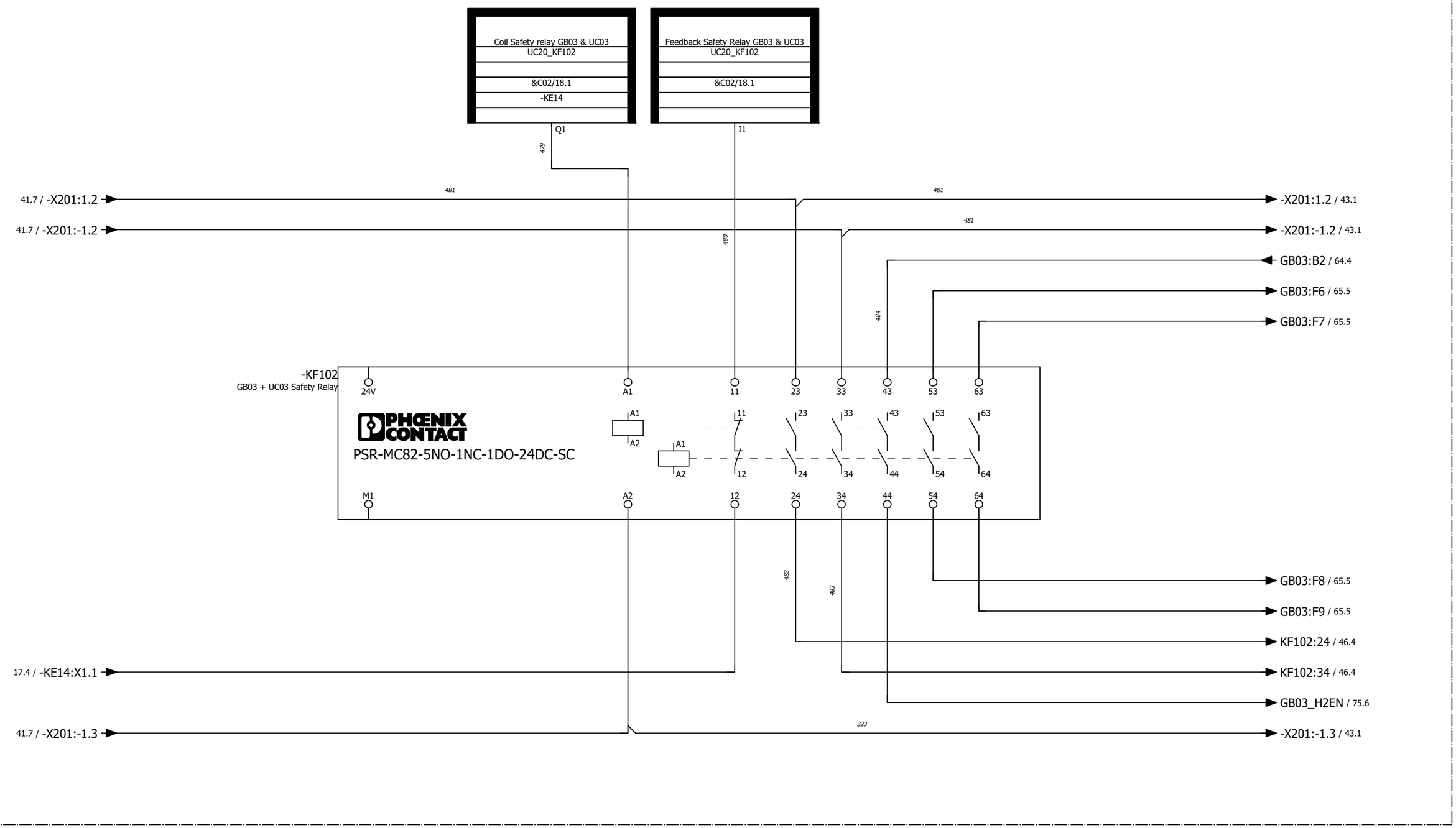
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, GB02 + UC02 Safety Relay		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 41 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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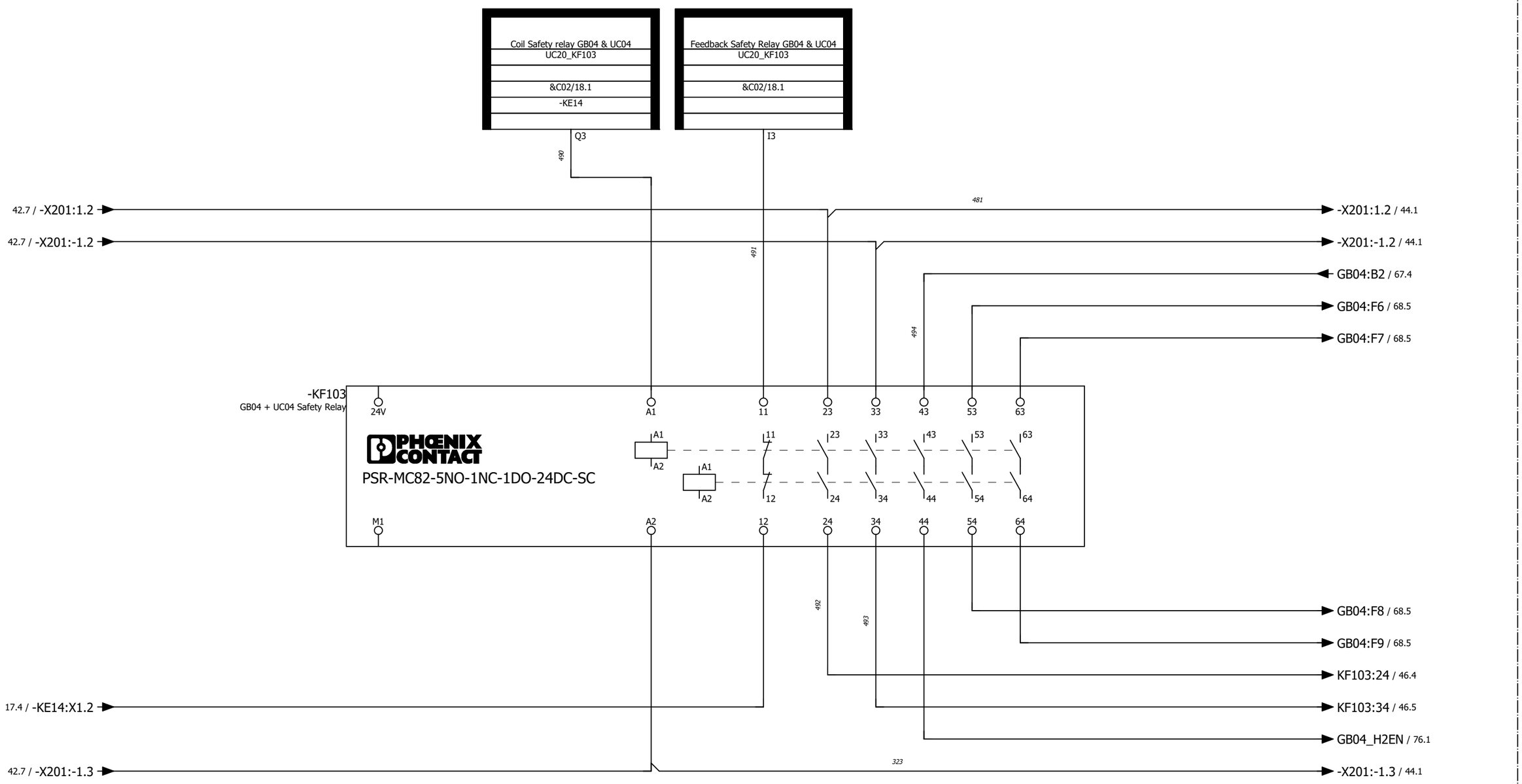
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, GB03 + UC03 Safety Relay		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 42 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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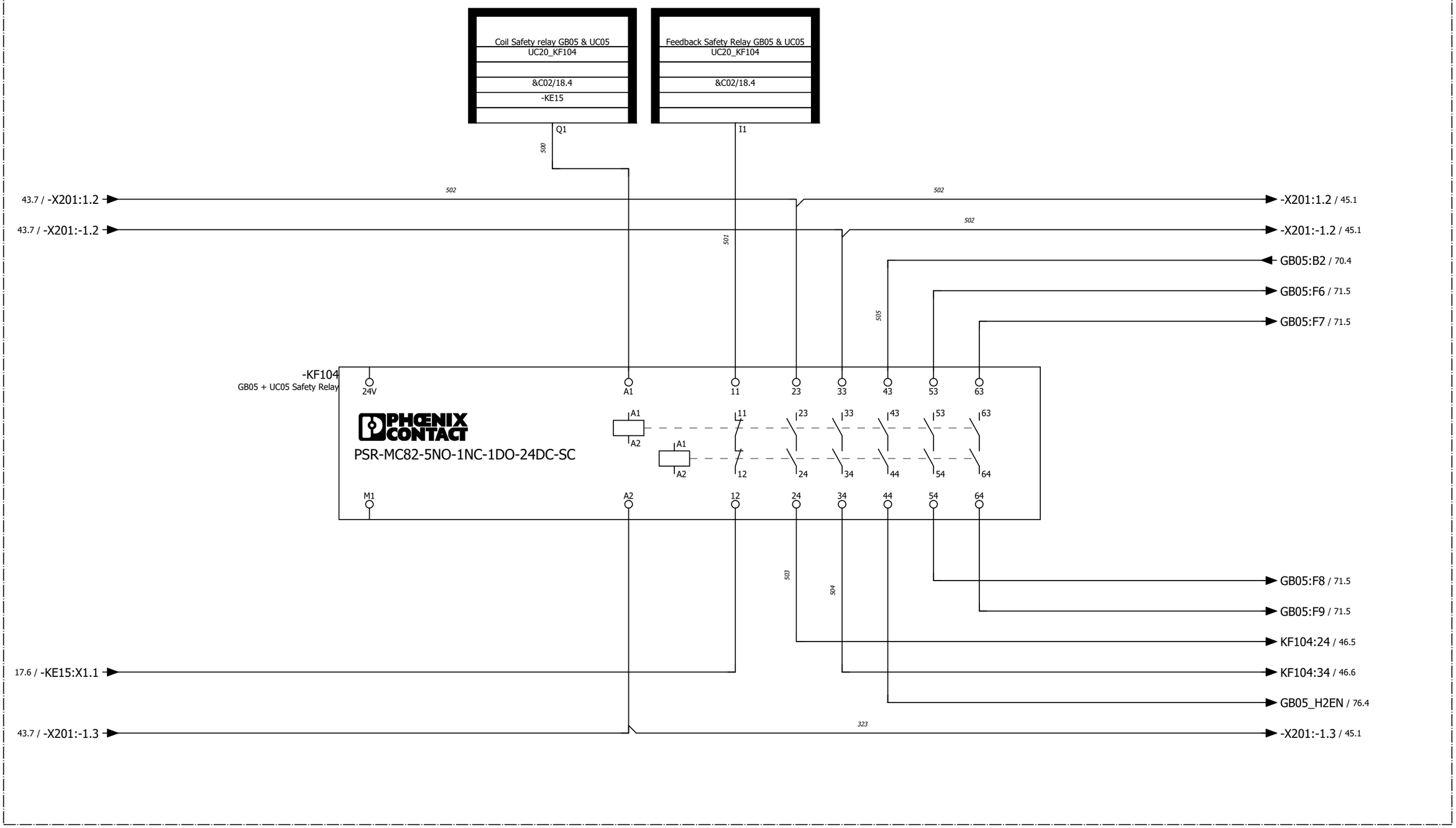
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, GB04 + UC04 Safety Relay		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 43 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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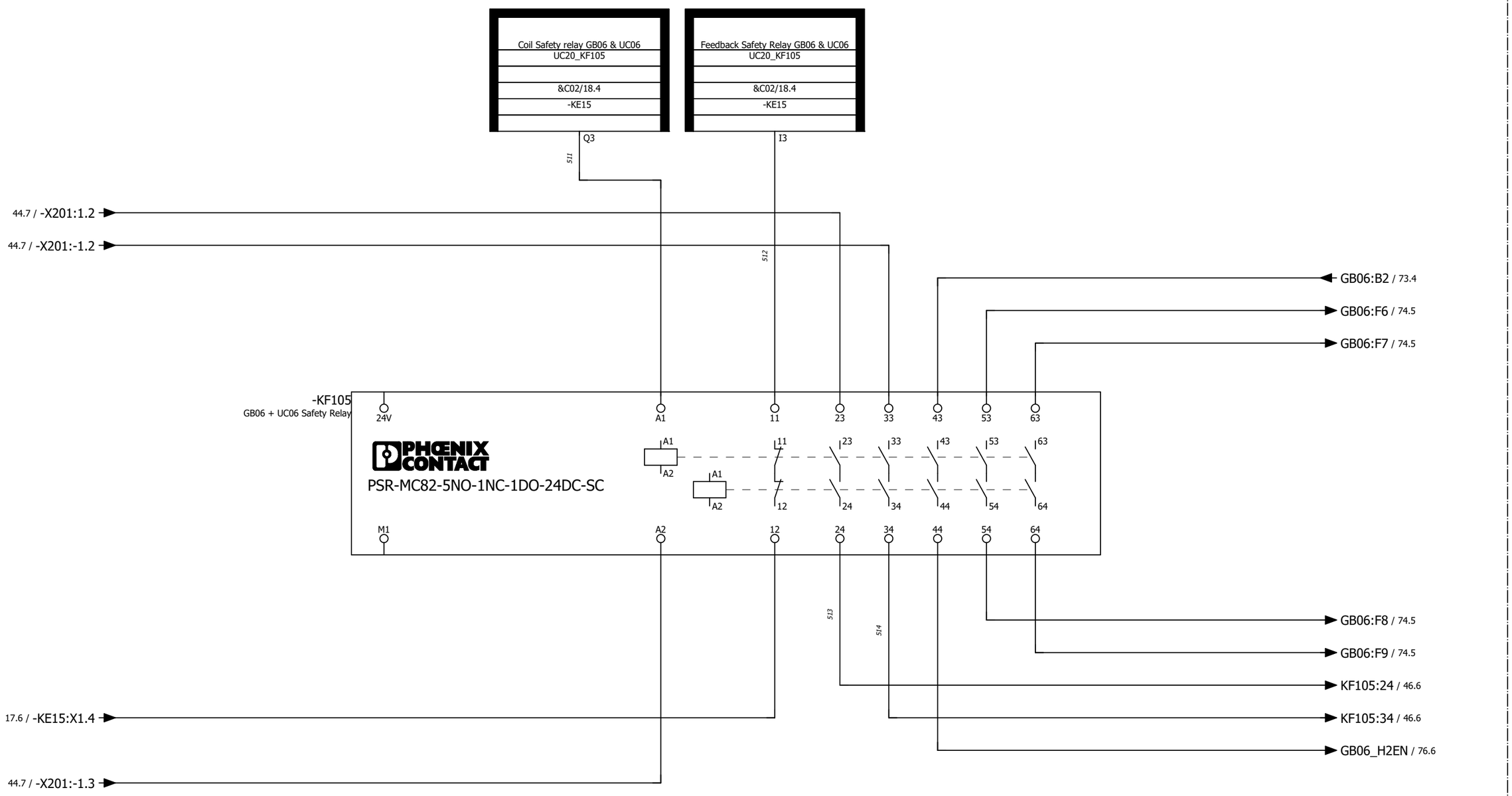
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, GB05 + UC05 Safety Relay		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 44 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

REVISION INFORMATION
DESCRIPTION
DATE
26-Mar-25

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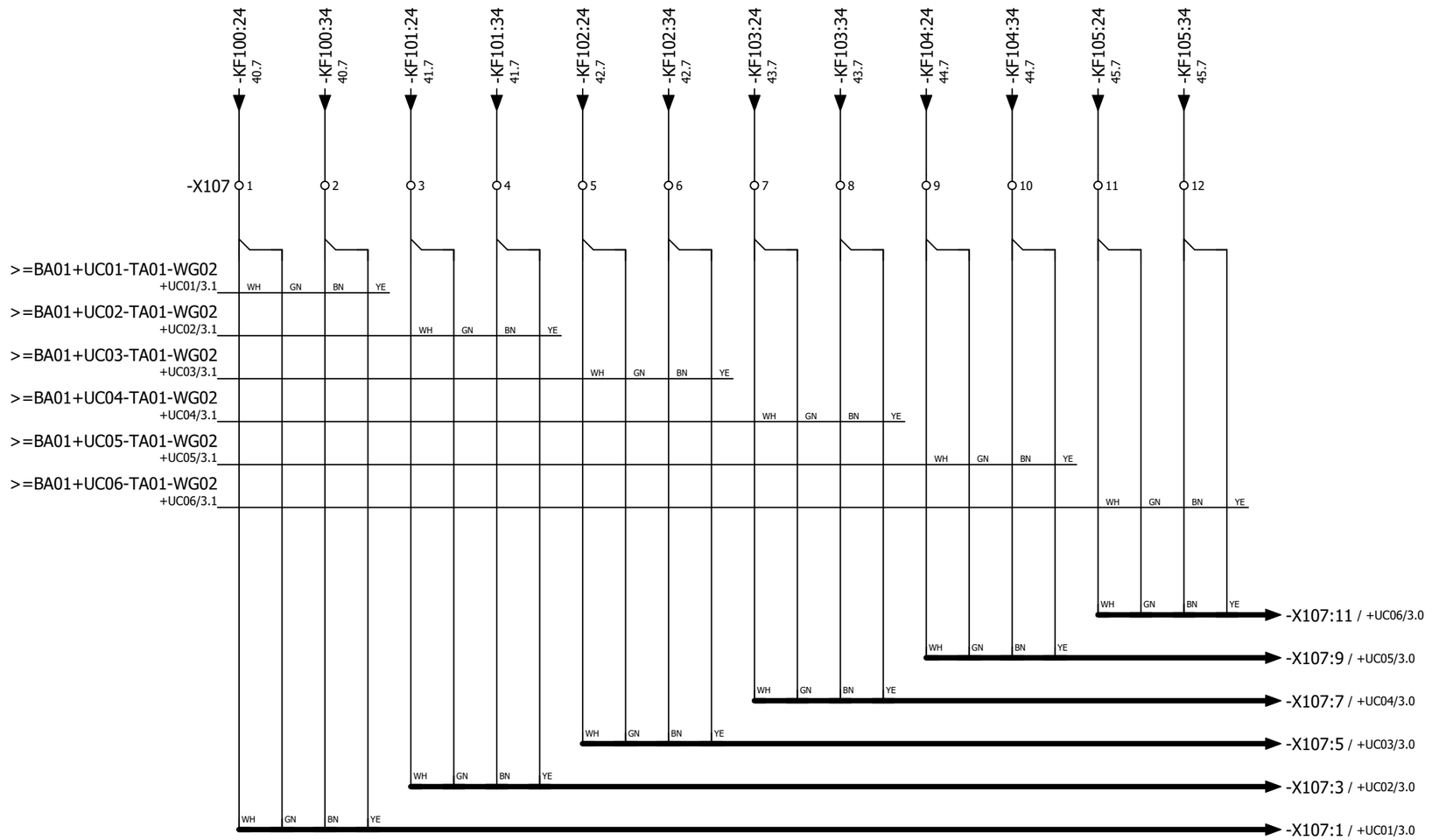
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, GB06 + UC06 Safety Relay		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 45 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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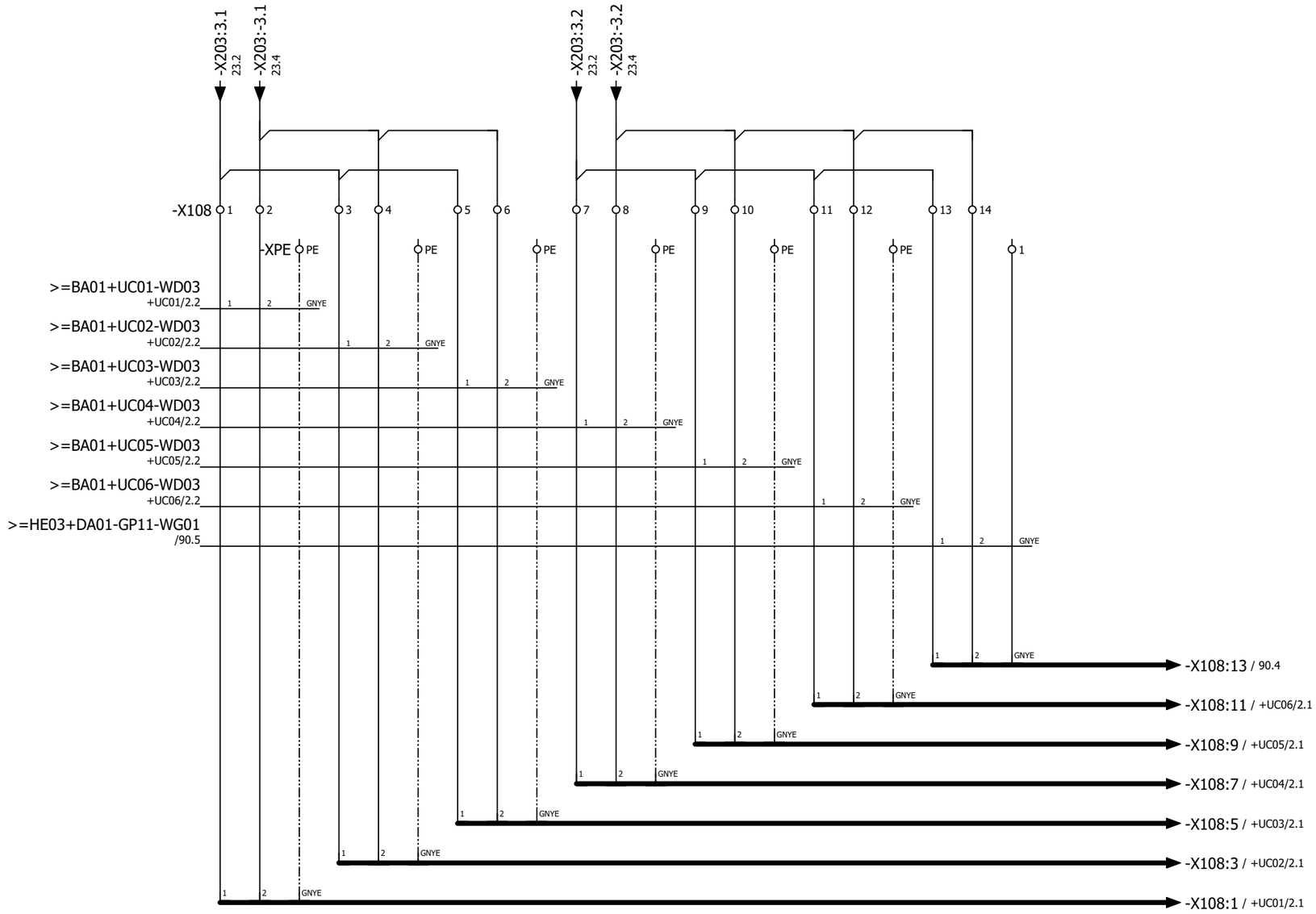
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, -X107 STO Connections UC01 - UC06		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 46 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control System



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, -X108 24VDC Connections UC01 - UC06		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 47 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

=LA01+UC20

Coil Safety Relay Nanogrid DC/AC
&C02/19.1
-KE16
Q1

Coil Safety Relay Nanogrid DC/AC
+UC20-KF16
&C02/19.1
Q1

520
521
522
523
524
525

-X101 1 2 3 4

-KF106
Safety Relay, Nanogrid

PHOENIX CONTACT
PSR-MC82-5NO-1NC-1DO-24DC-SC

24V A1 11 23 33 43 53 63
A1 A2 11 12 23 24 33 34 43 44 53 54 63 64
M1 A2 12 24 34 44 54 64

18.1 / KE16:X1.1
22.3 / -X201:-1.5
22.1 / -X201:1.4
22.3 / -X201:-1.4

313
322

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, Safety Relay Nanogrid		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 48 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

KF17 Safety Relay Coil
UC20_KF17
&C02/17.1
-KE12

Coil Safety Relay Nanogrid DC/AC
+UC20-KF16
&C02/19.1
-KE16

Q2
I1

527
528
531
532
533
534

-KF107
Safety Relay, +UC20

24V A1 11 23 33 43 53 63

PHOENIX CONTACT
PSR-MC82-5NO-1NC-1DO-24DC-SC

A1 11 23 33 43 53 63
A2 12 24 34 44 54 64

M1 A2 12 24 34 44 54 64

-X102 1 2 3 4

-KF107:23 50.1
-KF107:33 50.1
-KF107:43 50.1
-KF107:53 50.1

17.1 / KE12:X1.4
22.3 / -X201:-2.1
22.1 / -X201:1.6
22.3 / -X201:-1.6
22.2 / -X201:3.6

529
315
324

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, LT Pump		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 49 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=HE03+DA01
Control System

49.6 / >=LA01+UC20-KF107:23
49.6 / >=LA01+UC20-KF107:33
49.6 / >=LA01+UC20-KF107:43
49.7 / >=LA01+UC20-KF107:53

-GP11.WG02
ÖLFLEX® CLASSIC 110 CH
4x1
300/500 V
STO LT Pump

-TA11
/90.1
/90.4
/90.4

535

1	2	3	4	21	22	23	25	26	28	29
SD1+	SD1-	SD2+	SD2-	RO1 NC	RO1 CO	RO1 NO	RO2 CO	RO2 NO	TI1+	TI1-

VACON

VACON NX

STO board

OPT-AF

X10 OFF

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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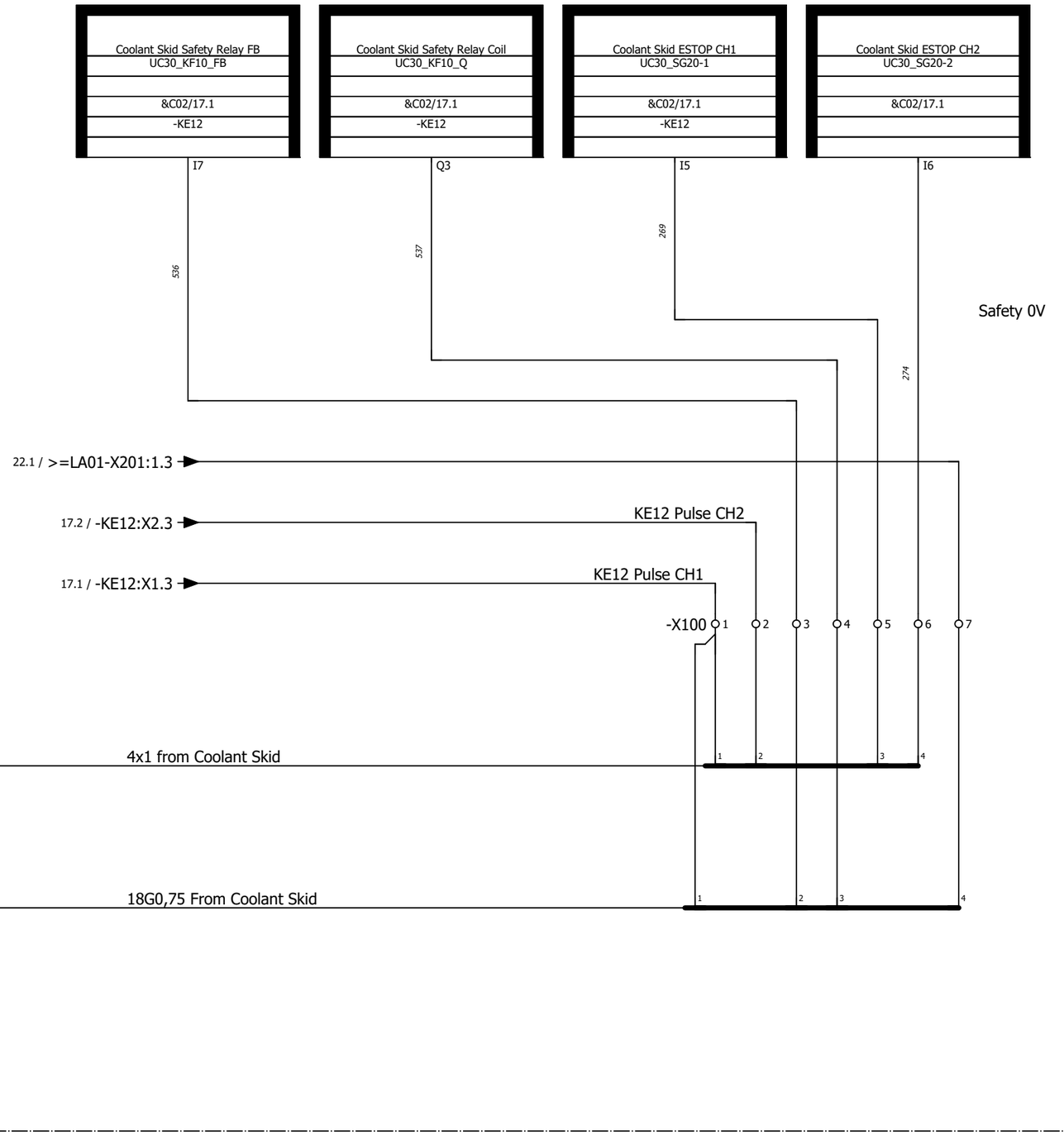
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, STO LT pump		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 50 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC30
Control Cabinet, Coolant Skid

=HA01+DA02
Exterior location, hydrogen supply

=LA01+UC20
Control Cabinet, 40ft Container



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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=	++	+ UC20	& C03

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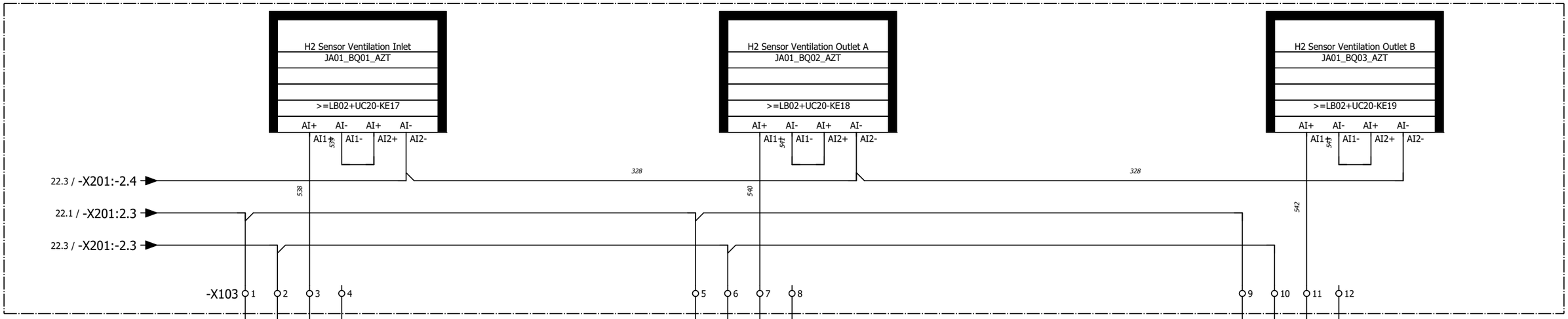
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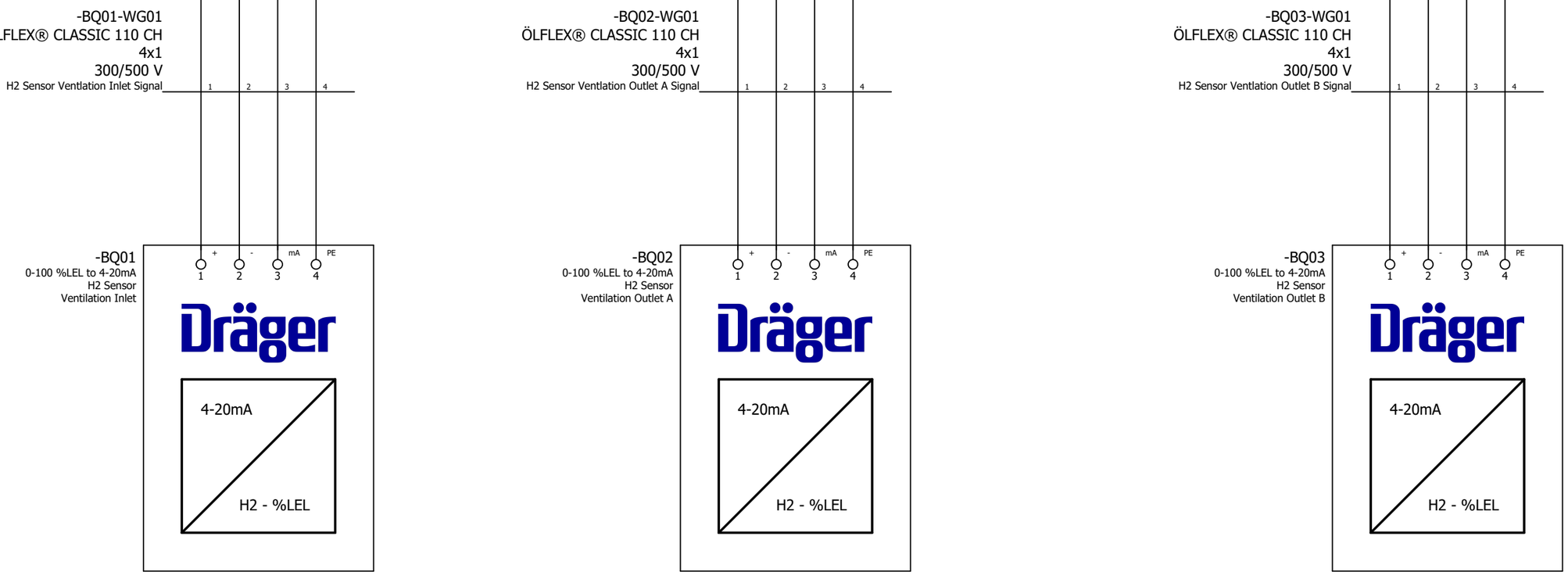
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet, Safety Coolant Skid		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 51 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



=JA01+DA01



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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=	++	+ UC20	& C03

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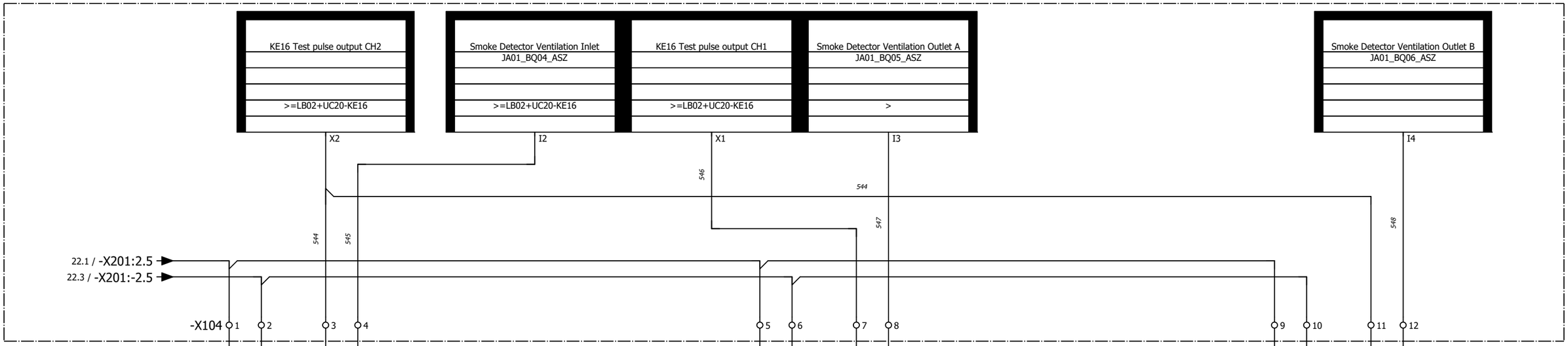
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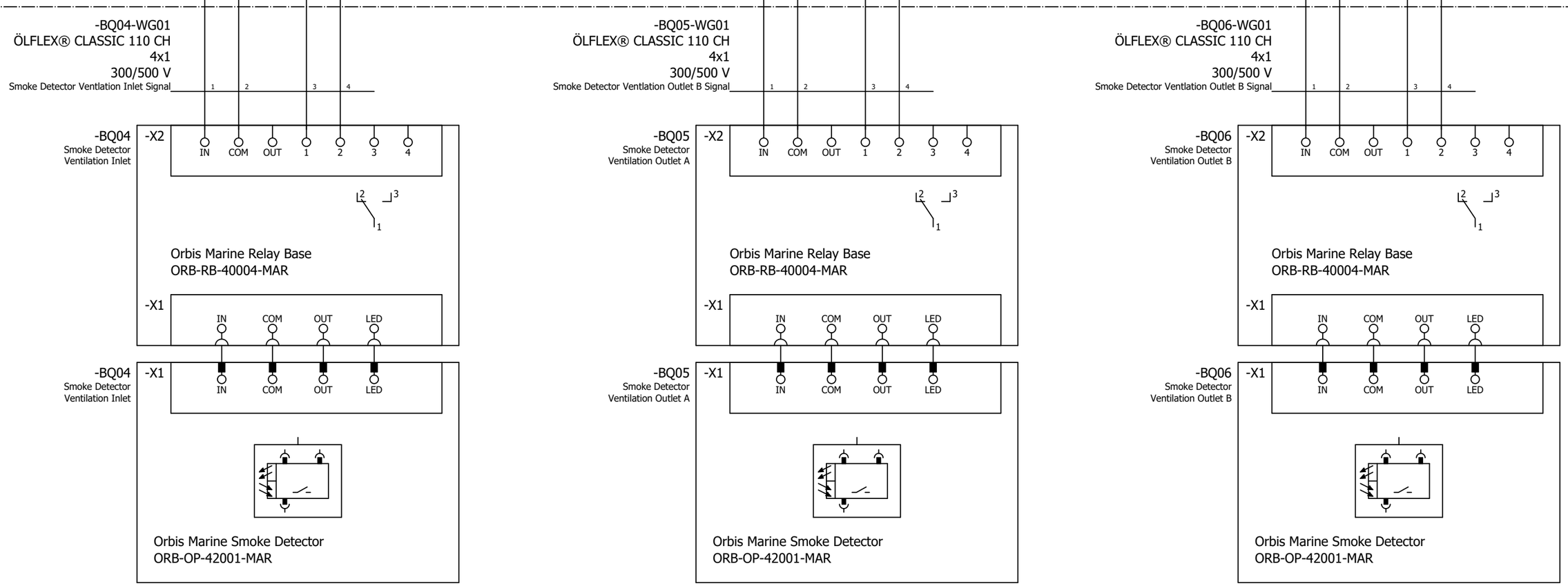
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Safety, Hydrogen Sensors		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 52 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



=JA01+DA01



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Safety, Smoke Detectors		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 53 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01
Control Cabinet, 40ft Container Inside

ESTOP - 40ft Container Door CH1
SG23_CH1
&C02/19.1
-KE16

ESTOP - 40ft Container Door CH2
SG23_CH2
&C02/19.1

I7
I8
KE16:X1.1
18.2
KE16:X2.1
530
291
-X105 1 2 3 4

=LB02+DA01
40ft Container Inside

-SG23-WG01
ÖLFLEX® CLASSIC 110 CH
4x1
300/500 V
ESTOP Container Door
1 2 3 4

-SG23 11 21 12 22
ESTOP
40ft Container Door

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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=	++	+ UC20	& C03

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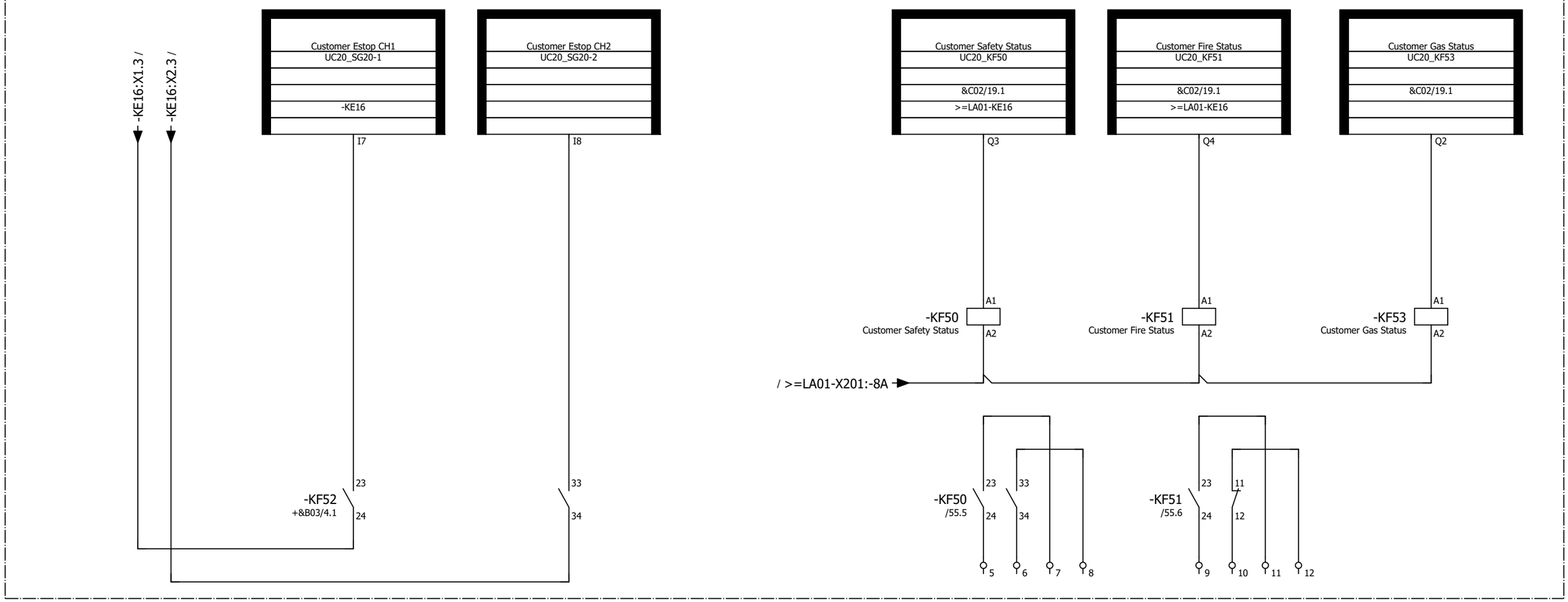
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Safety, ESTOP Container Door		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 54 / 2

0	1	2	3	4	5	6	7	8

=LB02
Control Cabinet, 40ft Container Inside



>=EXT+
Customer Scope

23 — 24 /55.5
23 — 24 +&B03/4.6
33 — 34 /55.5
33 — 34 +&B03/4.6

11 — 12 /55.6
23 — 24 /55.6
23 — 24 +&B03/4.3

23 — 24 +&B03/4.4

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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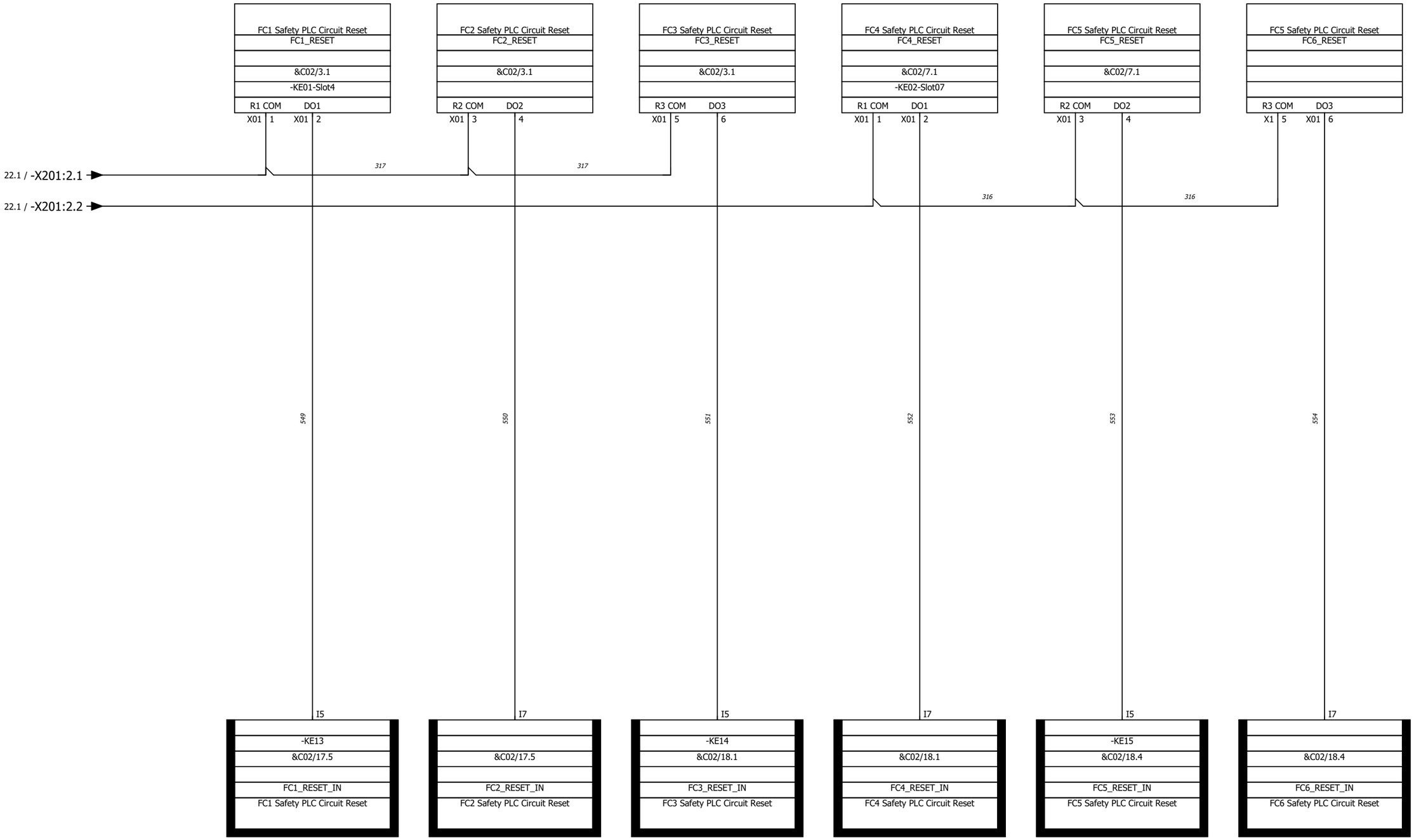
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DRAWING	5500232B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Customer Interface Diagram, ???		
SHEET TYPE/DESC	40ft Container - Safety, Customer Interface		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 55 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



Reference Item Number	Ballard Part # TBD		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet - FC1-6 Safety Circuit Reset		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 56 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

-KF201
16 port
100/10 Ethernet Switch

Ethernet
2
Port 2

FC101_24VFB / 37.1
-FC101+ / 27.2
FC101- / 27.2
FC101_0VFB / 37.3
FC102+ / 27.3
FC102- / 27.3
-X50:4 / 75.1

>=RE01+GB01-GB01-XG01
/72.3
Cat 6A
FC1 Ethernet

-X_PE 1
-X50 1 2 3 4

=RE01+GB01
FCwave #1

-GB01-WD05
CLASSIC 110 CH
5x6
300/500 V
FCwave #1 24V Supply
GNYE 1 2 3 4

-GB01-WG01
Cat.6A PUR
8x24
300 V
FCwave #1 Ethernet

-XZ01
/58.0
/59.0
FCwave #2 Control
Connector
-PE
PE
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD
Not Connected

GB01-X_E01
/58.0
/59.0
FCwave #1
Control Connector
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD

Reference Item Number	Ballard Part # TBD		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1: 24V and Ethernet		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 57 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

Fuel Cell Module OK
GB01_FCM_OK
&C02/6.1
>=RE01+GB01-KE02-Slot04
DI07
X02 21

MD_Enable Signal
GB01_MD_ENABLE
&C02/6.1
-KE02-Slot04
DO01
X01 2

40.7
GB01:B2

555 VT 0,5 mm²

556 VT 0,5 mm²

-X60 13 14 15

=RE01+GB01
FCwave #1

-GB01-WG02
/59.0
ÖLFLEX® CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals
13 14 15

FC1_FCM_OK
FC1_H2_EN
FC1_MD_EN

-XZ01
/57.0
FCwave #2 Control
Connector
-SlotB
1 2 3

GB01-X_E01
/57.0
/59.0
FCwave #1
Control Connector
-SlotB
1 2 3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1: Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 58 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

SAFE_Main GB01 | GB01 | >=LB02-KE13 | I2 | 557 VT 0,5 mm²

SAFE_FIRE Safety Signal | GB01_SAFE_FIRE | &C02/6.1 | -KE02-Slot04 | DI01 | X02 15 | 558 VT 0,5 mm²

SAFE_H2CONC Safety Signal | GB01_SAFE_H2CONC | &C02/6.1 | >=RE01+GB01-KE02-Slot04 | DI02 | X02 16 | 559 VT 0,5 mm²

SAFE_VENT Safety Signal | GB01_SAFE_VENT | &C02/6.1 | DI03 | 17 | 560 VT 0,5 mm²

SAFE_WD Safety Signal | GB01_SAFE_WD | &C02/6.1 | DI04 | 18 | 561 VT 0,5 mm²

GB01:F6 / 40.7 | 465 OG 0,5 mm²

GB01:F7 / 40.7 | 467 OG 0,5 mm²

GB01:F8 / 40.7 | 466 OG 0,5 mm²

GB01:F9 / 40.7 | 468 OG 0,5 mm²

SAFE_In GB01 | GB01 | >=LB02-KE02-KE13 | Q2 | 562 VT 0,5 mm²

SAFE_FIREMALF Safety Signal | GB01_SAFE_FIREMALF | &C02/6.1 | >=RE01+GB01-KE02-Slot04 | DI05 | X02 19 | 563 VT 0,5 mm²

SAFE_EXTERN Safety Signal | GB01_SAFE_EXTERN | &C02/6.1 | >=RE01+GB01-KE02-Slot04 | DI06 | X02 20 | 564 VT 0,5 mm²

-X60 1 2 3 4 5 6 7 8 9 10 11 12

=RE01+GB01
FCwave #1

-GB01-WG02
/58.4
CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

1 FC1_SAFE_MAIN
2 FC1_SAFE_FIRE
3 FC1_SAFE_H2
4 FC1_SAFE_VENT
5 FC1_SAFE_WD
6 FC1_ESTOP_OUT1
7 FC1_ESTOP_OUT2
8 FC1_ESTOP_IN1
9 FC1_ESTOP_IN2
10 FC1_SAFE_IN
11 FC1_SAFE_FIREMALF
12 FC1_SAFE_EXTERN

-XZ01
/57.0
FCwave #2 Control Connector
-SlotF 1 2 3 4 5 6 7 8 9 10 11 12

GB01-X_E01
/57.0
/58.0
FCwave #1
Control Connector
-SlotF 1 2 3 4 5 6 7 8 9 10 11 12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC1: Safety		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 59 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

-KF201
16 port
100/10 Ethernet Switch

Ethernet
3
Port 3

FC103_24VFB / 37.2
-FC103+ / 27.4
FC103- / 27.4
FC104+ / 27.5
FC104- / 27.5
-X51:4 / 75.3

>=RE01+GB02-GB02-XG01
Cat 6A
FC1 Ethernet
1

-X_PE 1
-X51 1 2 3 4

=RE01+GB02
FCwave #2

-GB02-WD05
CLASSIC 110 CH
5x6
300/500 V
FCwave #1 24V Supply
GNYE 1 2 3 4

-GB02-WG01
Cat.6A PUR
8x24
300 V
FCwave #1 Ethernet

-XZ01
/61.0
/62.0
FCwave #2 Control
Connector

-PE
PE
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD
Not Connected

GB02-X_E01
/61.0
/62.0
FCwave #1
Control Connector

-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC2: 24V and Ethernet		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 60 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

Fuel Cell Module OK
GB02_FCM_OK
&C02/6.1
>=RE01+GB01-KE02-Slot04
DI14
X03 29

MD_Enable Signal
GB02_MD_ENABLE
&C02/6.1
-KE02-Slot04
DO02
X01 3

41.7
GB02:B2

565 VT 0,5 mm²
566 VT 0,5 mm²

-X61 13 14 15

=RE01+GB02
FCwave #2

-GB02-WG02
/62.0
ÖLFLEX® CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals
13 14 15

FC1_FCM_OK
FC1_H2_EN
FC1_MD_EN

-XZ01
/60.0
FCwave #2 Control
Connector
-SlotB
1 2 3

GB02-X_E01
/60.0
/62.0
FCwave #1
Control Connector
-SlotB
1 2 3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC2: Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 61 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

SAFE_Main GB02 | GB02 | >=LB02-KE13 | I4
SAFE_FIRE Safety Signal | GB02_SAFE_FIRE | &C02/6.1 | >=RE01+GB01-KE02-Slot04 | DI08 | X02 | 22
SAFE_H2CONC Safety Signal | GB02_SAFE_H2CONC | &C02/6.1 | DI09 | X03 | 24
SAFE_VENT Safety Signal | GB02_SAFE_VENT | &C02/6.1 | DI10 | 25
SAFE_WD Safety Signal | GB02_SAFE_WD | &C02/6.1 | DI11 | 26
SAFE_In GB02 | GB02 | >=LB02-KE02-KE13 | Q4
SAFE_FIREMALF Safety Signal | GB02_SAFE_FIREMALF | &C02/6.1 | >=RE01+GB01-KE02-Slot04 | DI12 | X03 | 27
SAFE_EXTERN Safety Signal | GB02_SAFE_EXTERN | &C02/6.1 | >=RE01+GB01-KE02-Slot04 | DI13 | X03 | 28

567 VT 0,5 mm² -X61 1
568 VT 0,5 mm² 2
569 VT 0,5 mm² 3
570 VT 0,5 mm² 4
571 VT 0,5 mm² 5
475 OG 0,5 mm² GB02:F6 / 41.7 6
477 OG 0,5 mm² GB02:F7 / 41.7 7
476 OG 0,5 mm² GB02:F8 / 41.7 8
478 OG 0,5 mm² GB02:F9 / 41.7 9
572 VT 0,5 mm² 10
573 VT 0,5 mm² 11
574 VT 0,5 mm² 12

=RE01+GB02
FCwave #2

-GB02-WG02
/61.4
CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

1 FC1_SAFE_MAIN
2 FC1_SAFE_FIRE
3 FC1_SAFE_H2
4 FC1_SAFE_VENT
5 FC1_SAFE_WD
6 FC1_ESTOP_OUT1
7 FC1_ESTOP_OUT2
8 FC1_ESTOP_IN1
9 FC1_ESTOP_IN2
10 FC1_SAFE_IN
11 FC1_SAFE_FIREMALF
12 FC1_SAFE_EXTERN

-XZ01
/60.0
FCwave #2 Control Connector
-SlotF 1 2 3 4 5 6 7 8 9 10 11 12

GB02-X_E01
/60.0
/61.0
FCwave #1 Control Connector
-SlotF 1 2 3 4 5 6 7 8 9 10 11 12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC2: Safety		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 62 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

-KF201
16 port
100/10 Ethernet Switch

Ethernet
4
Port 4

FC111_24VFB / 37.4
-FC111+ / 30.2
FC111- / 30.2
FC111_0VFB / 37.5
FC112+ / 30.3
FC112- / 30.3
-X52:4 / 75.6

>=RE01+GB03-GB03-XG01
Cat 6A
FC1 Ethernet
1

-X_PE 1
-X52 1 2 3 4

=RE01+GB03
FCwave #3

-GB03-WD05
CLASSIC 110 CH
5x6
300/500 V
FCwave #1 24V Supply
GNYE 1 2 3 4

-GB03-WG01
Cat.6A PUR
8x24
300 V
FCwave #1 Ethernet

-XZ01
/64.0
/65.0
FCwave #2 Control
Connector

-PE
PE
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD
Not Connected

GB03-X_E01
/64.0
/65.0
FCwave #1
Control Connector

-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC3: 24V and Ethernet		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 63 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

Fuel Cell Module OK
GB03_FCM_OK
&C02/6.4
-KE02-Slot05
DI07
X02 21

MD_Enable Signal
GB03_MD_ENABLE
&C02/6.4
DO01
X01 2

42.7
GB03:B2

575 VT 0,5 mm²

576 VT 0,5 mm²

-X62 13 14 15

=RE01+GB03
FCwave #3

-GB03-WG02
/65.0
ÖLFLEX® CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

13 14 15

FC1_FCM_OK
FC1_H2_EN
FC1_MD_EN

-XZ01
/63.0
FCwave #2 Control
Connector

-SlotB
1 2 3

GB03-X_E01
/63.0
/65.0
FCwave #1
Control Connector

-SlotB
1 2 3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC3: Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 64 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

SAFE_Main GB03 | GB03 | >=LB02-KE14 | I2
SAFE_FIRE Safety Signal | GB03_SAFE_FIRE | &C02/6.4 | -KE02-Slot05 | DI01 | X02 15
SAFE_H2CONC Safety Signal | GB03_SAFE_H2CONC | &C02/6.4 | DI02 | 16
SAFE_VENT Safety Signal | GB03_SAFE_VENT | &C02/6.4 | DI03 | 17
SAFE_WD Safety Signal | GB03_SAFE_WD | &C02/6.4 | DI04 | 18
SAFE_In GB03 | GB03 | >=LB02-KE14 | Q2
SAFE_FIREMALF Safety Signal | GB03_SAFE_FIREMALF | &C02/6.4 | -KE02-Slot05 | DI05 | X02 19
SAFE_EXTERN Safety Signal | GB03_SAFE_EXTERN | &C02/6.4 | -KE02-Slot05 | DI06 | X02 20

577 VT 0,5 mm² | 578 VT 0,5 mm² | 579 VT 0,5 mm² | 580 VT 0,5 mm² | 581 VT 0,5 mm²
GB03:F6 / 42.7 — 486 OG 0,5 mm²
GB03:F7 / 42.7 — 488 OG 0,5 mm²
GB03:F8 / 42.7 — 487 OG 0,5 mm²
GB03:F9 / 42.7 — 489 OG 0,5 mm²
582 VT 0,5 mm² | 583 VT 0,5 mm² | 584 VT 0,5 mm²

-X62 1 2 3 4 5 6 7 8 9 10 11 12

=RE01+GB03
FCwave #3

-GB03-WG02
/64.4
CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals
1 2 3 4 5 6 7 8 9 10 11 12
FC1_SAFE_MAIN | FC1_SAFE_FIRE | FC1_SAFE_H2 | FC1_SAFE_VENT | FC1_SAFE_WD | FC1_ESTOP_OUT1 | FC1_ESTOP_OUT2 | FC1_ESTOP_IN1 | FC1_ESTOP_IN2 | FC1_SAFE_IN | FC1_SAFE_FIREMALF | FC1_SAFE_EXTERN

-XZ01
/63.0
FCwave #2 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

GB03-X_E01
/63.0
/64.0
FCwave #1 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC3: Safety		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 65 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

-KF201
16 port
100/10 Ethernet Switch

Ethernet
5
Port 5

>=RE01+GB04-GB04-XG01
Cat 6A
FC1 Ethernet

1

FC113_24VFB / 37.5
-FC113+ / 30.4
FC113- / 30.4
FC114+ / 30.5
FC114- / 30.5
-X53:4 / 76.1

-X_PE 1
-X53 1 2 3 4

=RE02+GB04
FCwave #4

-GB04-WD05
CLASSIC 110 CH
5x6
300/500 V
FCwave #1 24V Supply
GNYE 1 2 3 4

-GB04-WG01
Cat.6A PUR
8x24
300 V
FCwave #1 Ethernet

-XZ01
/67.0
/68.0
FCwave #2 Control
Connector

-PE
PE
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD
Not Connected

GB04-X_E01
/67.0
/68.0
FCwave #1
Control Connector

-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC4: 24V and Ethernet		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 66 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

Fuel Cell Module OK
GB04_FCM_OK
&C02/6.4
-KE02-Slot05
DI14
X03 29

MD_Enable Signal
GB04_MD_ENABLE
&C02/6.4
DO02
X01 3

43.7
GB04:B2

585 VT 0,5 mm²
586 VT 0,5 mm²

-X63 13 14 15

=RE02+GB04
FCwave #4

-GB04-WG02
/68.0
ÖLFLEX® CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

13 14 15
FC1_FCM_OK
FC1_H2_EN
FC1_MD_EN

-XZ01
/66.0
FCwave #2 Control
Connector
-SlotB
1 2 3

GB04-X_E01
/66.0
/68.0
FCwave #1
Control Connector
-SlotB
1 2 3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC4: Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 67 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

SAFE_Main GB04 | GB04 | >=LB02-KE14 | I4
SAFE_FIRE Safety Signal | GB04_SAFE_FIRE | &C02/6.4 | -KE02-Slot05 | DI08 | X02 22
SAFE_H2CONC Safety Signal | GB04_SAFE_H2CONC | &C02/6.4 | DI09 | X03 24
SAFE_VENT Safety Signal | GB04_SAFE_VENT | &C02/6.4 | DI10 | 25
SAFE_WD Safety Signal | GB04_SAFE_WD | &C02/6.4 | DI11 | 26
SAFE_In GB04 | GB04 | >=LB02-KE14 | Q4
SAFE_FIREMALF Safety Signal | GB04_SAFE_FIREMALF | &C02/6.4 | -KE02-Slot05 | DI12 | X03 27
SAFE_EXTERN Safety Signal | GB04_SAFE_EXTERN | &C02/6.4 | -KE02-Slot05 | DI13 | X03 28

587 VT 0,5 mm² → -X63 1
588 VT 0,5 mm² → 2
589 VT 0,5 mm² → 3
590 VT 0,5 mm² → 4
591 VT 0,5 mm² → 5
496 OG 0,5 mm² → GB04:F6 / 43.7 → 6
498 OG 0,5 mm² → GB04:F7 / 43.7 → 7
497 OG 0,5 mm² → GB04:F8 / 43.7 → 8
499 OG 0,5 mm² → GB04:F9 / 43.7 → 9
592 VT 0,5 mm² → 10
593 VT 0,5 mm² → 11
594 VT 0,5 mm² → 12

=RE02+GB04
FCwave #4

-GB04-WG02
/67.4
CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

1 FC1_SAFE_MAIN
2 FC1_SAFE_FIRE
3 FC1_SAFE_H2
4 FC1_SAFE_VENT
5 FC1_SAFE_WD
6 FC1_ESTOP_OUT1
7 FC1_ESTOP_OUT2
8 FC1_ESTOP_IN1
9 FC1_ESTOP_IN2
10 FC1_SAFE_IN
11 FC1_SAFE_FIREMALF
12 FC1_SAFE_EXTERN

-XZ01
/66.0
FCwave #2 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

GB04-X_E01
/66.0
/67.0
FCwave #1 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC4: Safety		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 68 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

-KF201
16 port
100/10 Ethernet Switch

Ethernet
6
Port 6

>=RE01+GB05-GB05-XG01
Cat 6A
FC1 Ethernet

FC121_24VFB / 37.6
-FC121+ / 33.1
FC121- / 33.2
FC121_0VFB / 37.8
FC122+ / 33.3
FC122- / 33.3
-X54:4 / 76.3

-X_PE 1
-X54 1 2 3 4

=RE02+GB05
FCwave #5

-GB05-WD05
CLASSIC 110 CH
5x6
300/500 V
FCwave #1 24V Supply
GNYE 1 2 3 4

-GB05-WG01
Cat.6A PUR
8x24
300 V
FCwave #1 Ethernet

-XZ01
/70.0
/71.0
FCwave #2 Control
Connector
-PE
PE
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD
Not Connected

GB05-X_E01
/70.0
/71.0
FCwave #1
Control Connector
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC5: 24V and Ethernet		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 69 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

Fuel Cell Module OK
GB05_FCM_OK
&C02/6.6
-KE02-Slot06
DI07
X02 21

MD_Enable Signal
GB05_MD_ENABLE
&C02/6.6
DO01
X01 2

44.7
GB05:B2

595 VT 0,5 mm²

596 VT 0,5 mm²

-X64 13 14 15

=RE02+GB05
FCwave #5

-GB05-WG02
/71.0
ÖLFLEX® CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

13 14 15

FC1_FCM_OK
FC1_H2_EN
FC1_MD_EN

-XZ01
/69.0
FCwave #2 Control
Connector

-SlotB
1 2 3

GB05-X_E01
/69.0
/71.0
FCwave #1
Control Connector

-SlotB
1 2 3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC5: Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 70 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

SAFE_Main GB05 | GB05 | >=LB02-KE15 | I2
SAFE_FIRE Safety Signal | GB05_SAFE_FIRE | &C02/6.6 | -KE02-Slot06 | DI01 | X02 15
SAFE_H2CONC Safety Signal | GB05_SAFE_H2CONC | &C02/6.6 | DI02 | 16
SAFE_VENT Safety Signal | GB05_SAFE_VENT | &C02/6.6 | DI03 | 17
SAFE_WD Safety Signal | GB05_SAFE_WD | &C02/6.6 | DI04 | 18
SAFE_In GB05 | GB05 | >=LB02-KE15 | Q2
SAFE_FIREMALF Safety Signal | GB05_SAFE_FIREMALF | &C02/6.6 | -KE02-Slot06 | DI05 | X02 19
SAFE_EXTERN Safety Signal | GB05_SAFE_EXTERN | &C02/6.6 | -KE02-Slot06 | DI06 | X02 20

597 VT 0,5 mm² | 598 VT 0,5 mm² | 599 VT 0,5 mm² | 600 VT 0,5 mm² | 601 VT 0,5 mm²
507 OG 0,5 mm² GB05:F6 / 44.7
509 OG 0,5 mm² GB05:F7 / 44.7
508 OG 0,5 mm² GB05:F8 / 44.7
510 OG 0,5 mm² GB05:F9 / 44.7
602 VT 0,5 mm² | 603 VT 0,5 mm² | 604 VT 0,5 mm²

-X64 1 2 3 4 5 6 7 8 9 10 11 12

=RE02+GB05
FCwave #5

-GB05-WG02
/70.4
CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

1 FC1_SAFE_MAIN | 2 FC1_SAFE_FIRE | 3 FC1_SAFE_H2 | 4 FC1_SAFE_VENT | 5 FC1_SAFE_WD | 6 FC1_ESTOP_OUT1 | 7 FC1_ESTOP_OUT2 | 8 FC1_ESTOP_IN1 | 9 FC1_ESTOP_IN2 | 10 FC1_SAFE_IN | 11 FC1_SAFE_FIREMALF | 12 FC1_SAFE_EXTERN

-XZ01
/69.0
FCwave #2 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

GB05-X_E01
/69.0
/70.0
FCwave #1 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC5: Safety		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 71 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

-KF201
16 port
100/10 Ethernet Switch

Ethernet
7
Port 7

FC123_24VFB / 37.7
-FC123+ / 33.4
-FC123- / 33.4
-FC124+ / 33.5
-FC124- / 33.5
-X55:4 / 76.6

>=RE01+GB01-GB01-XG01
/57.3
Cat 6A
FC1 Ethernet

-X_PE 1
-X55 1 2 3 4

=RE02+GB06
FCwave #6

-GB06-WD05
CLASSIC 110 CH
5x6
300/500 V
FCwave #1 24V Supply
GNYE 1 2 3 4

-GB06-WG01
Cat.6A PUR
8x24
300 V
FCwave #1 Ethernet

-XZ01
/73.0
/74.0
FCwave #2 Control
Connector
-PE
PE
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD
Not Connected

GB06-X_E01
/73.0
/74.0
FCwave #1
Control Connector
-SlotA 1 2
-SlotE 1 2
-SlotC 1-8
-SlotD

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC6: 24V and Ethernet		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 72 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

Fuel Cell Module OK
GB06_FCM_OK
&C02/6.6
-KE02-Slot06
DI14
X03 29

MD_Enable Signal
GB06_MD_ENABLE
&C02/6.6
DO02
X01 3

45.7
GB06:B2

605 VT 0,5 mm²

606 VT 0,5 mm²

-X65 13 14 15

=RE02+GB06
FCwave #6

-GB06-WG02
/74.0
ÖLFLEX® CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

13 14 15

FC1_FCM_OK
FC1_H2_EN
FC1_MD_EN

-XZ01
/72.0
FCwave #2 Control
Connector

-SlotB
1 2 3

GB06-X_E01
/72.0
/74.0
FCwave #1
Control Connector

-SlotB
1 2 3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC6: Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 73 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
40ft Container, Control Cabinet

SAFE_Main GB06 | GB06 | >=LB02-KE15 | I4
SAFE_FIRE Safety Signal | GB06_SAFE_FIRE | &C02/6.6 | -KE02-Slot06 | DI08 | X02 22
SAFE_H2CONC Safety Signal | GB06_SAFE_H2CONC | &C02/6.6 | DI09 | X03 24
SAFE_VENT Safety Signal | GB06_SAFE_VENT | &C02/6.6 | DI10 | 25
SAFE_WD Safety Signal | GB06_SAFE_WD | &C02/6.6 | DI11 | 26
SAFE_In GB06 | GB06 | >=LB02-KE15 | Q4
SAFE_FIREMALF Safety Signal | GB06_SAFE_FIREMALF | &C02/6.6 | -KE02-Slot06 | DI12 | X03 27
SAFE_EXTERN Safety Signal | GB06_SAFE_EXTERN | &C02/6.6 | -KE02-Slot06 | DI13 | X03 28

607 VT 0,5 mm² | 608 VT 0,5 mm² | 609 VT 0,5 mm² | 610 VT 0,5 mm² | 611 VT 0,5 mm² | 516 OG 0,5 mm² GB06:F6 / 45.7 | 518 OG 0,5 mm² GB06:F7 / 45.7 | 517 OG 0,5 mm² GB06:F8 / 45.7 | 519 OG 0,5 mm² GB06:F9 / 45.7 | 612 VT 0,5 mm² | 613 VT 0,5 mm² | 614 VT 0,5 mm²

-X65 ○ 1 2 3 4 5 6 7 8 9 10 11 12

=RE02+GB06
FCwave #6

-GB06-WG02
/73.4
CLASSIC 110 CH
18x0,75
300/500 V
Fcwave #1 24V Signals

1 FC1_SAFE_MAIN | 2 FC1_SAFE_FIRE | 3 FC1_SAFE_H2 | 4 FC1_SAFE_VENT | 5 FC1_SAFE_WD | 6 FC1_ESTOP_OUT1 | 7 FC1_ESTOP_OUT2 | 8 FC1_ESTOP_IN1 | 9 FC1_ESTOP_IN2 | 10 FC1_SAFE_IN | 11 FC1_SAFE_FIREMALF | 12 FC1_SAFE_EXTERN

-XZ01
/72.0
FCwave #2 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

GB06-X_E01
/72.0
/73.0
FCwave #1 Control Connector
-SlotF
1 2 3 4 5 6 7 8 9 10 11 12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - FC6: Safety		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 74 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control Cabinet, 40ft

-X50:4 / 57.2
GB01_H2EN / 40.7
-X51:4 / 60.2
GB02_H2EN / 41.7
-X52:4 / 63.2
GB03_H2EN / 42.7

615 WH 0,5 mm²
464 WH 0,5 mm²
616 WH 0,5 mm²
474 WH 0,5 mm²
617 WH 0,5 mm²
485 WH 0,5 mm²

-X106 1 2 3 4 5 6

X106 / 76.1

=HA01+DA02-AC01
Hydrogen Supply System - Non EX Box

-XT07
EX Cable gland
Wall pass-through

AC01-WG01
H2 Valve Connections
300/500 V
18x0,75
6 m
ÖLFLEX® CLASSIC 110 CH
/76.1

XD01 / 76.1

-XD01 1 2 3 4 5 6

=HA01+DA02
Hydrogen Supply System

-QM1.1-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
-QM1.1 x1 x2

-QM2.1-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
-QM2.1 x1 x2

-QM1.2-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
-QM1.2 x1 x2

-QM2.2-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
-QM2.2 x1 x2

-QM1.3-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
-QM1.3 x1 x2

-QM2.3-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
-QM2.3 x1 x2

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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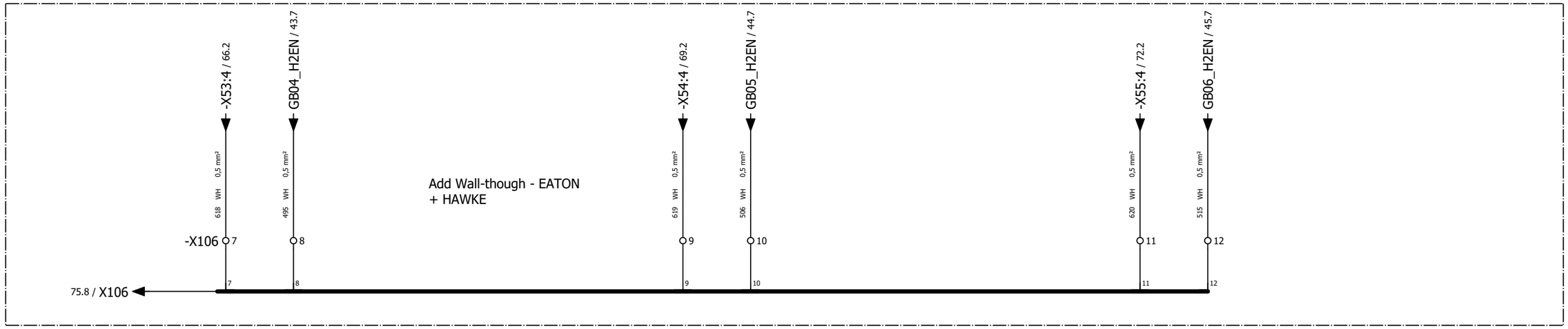
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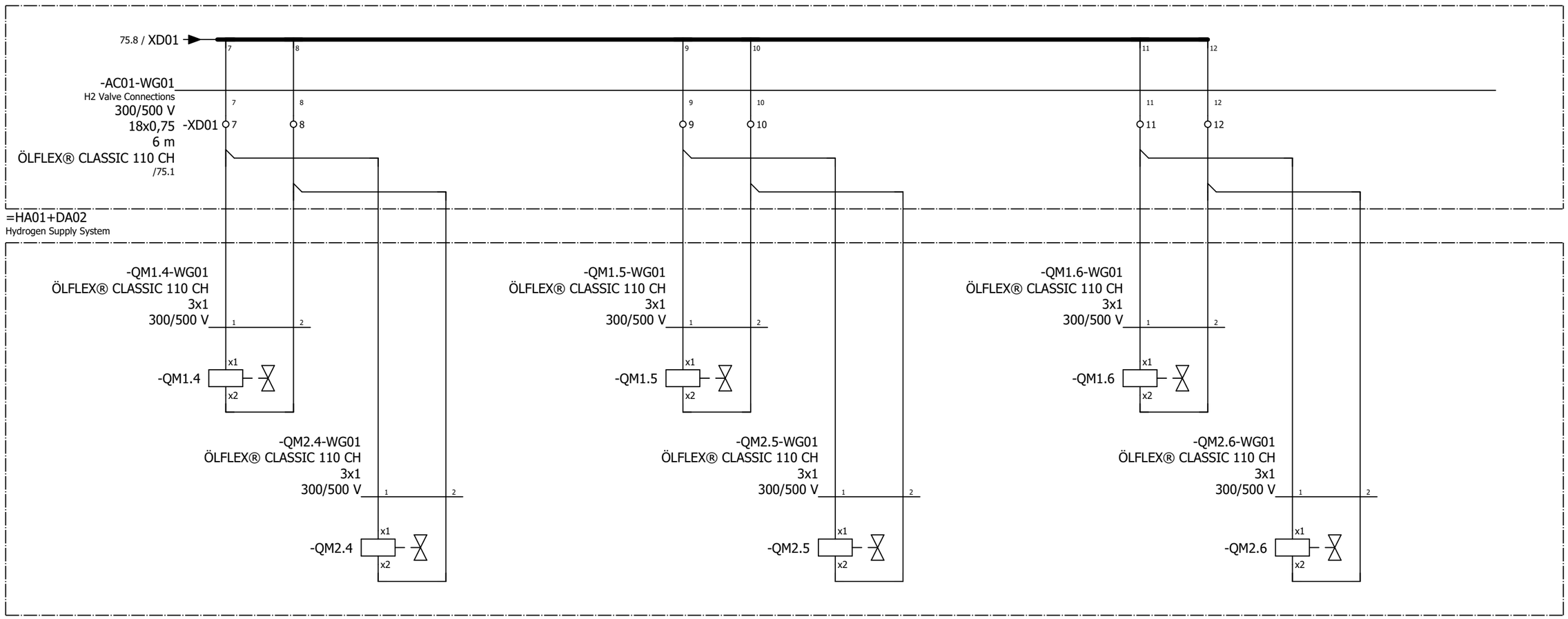
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Hydrogen Valve Cable FC1 - FC3		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 75 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control Cabinet, 40ft



=HA01+DA02-AC01
Hydrogen Supply System - Non-EX Box



=HA01+DA02
Hydrogen Supply System

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Hydrogen Valve Cable FC4 -FC6		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 76 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control Cabinet, 40ft Container

Condensate Drain Tank High Level
JB01_BL02_LSH
&C02/3.1
-KE01-Slot4
AI4
X03 | 28

Heatracing drain
JB01_QB18_EB01
&C02/2.6
-KE01-Slot3
DO4.1
X01 | 10 | 11

622

22.5 / -X202:2.2

A1
-QB18
A2

22.7 / -X202:-2.2

621

23.4 / -X204:1.1

23.6 / -X204:-1.1

-X110 ○1 ○2 ○3 ○4

12.3 -FC18:1

12.3 -FC18:2

12.4 -FC18:PE

=JA01+DA01
Condensate Drain System, Inside 40ft Container

-BL02-WG01
PUR
10 m
4x0,34
50/60 V
Process Drain Tank Level Signal
BN BU BK WH

-BL01-XG01
M12 F
1 2 3 4

-BL02
Process Water
Catchment Tank
Level Transmitter
1 L+
3 L-
V
4 Out 1/ IO-Link
2 Out 2

-EB01
/82.0
Heatracing drain line
L
PE
N

1 ▽ 2
R3 ▽ R4
R5 ▽ R6
7 ▽ 8
13 — 14 /12.3
23 — 24 /12.3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Fuel Cell Drain line		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 77 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control Cabinet

Cabinet temperature UC01
UC01_BT01_TT
&C02/9.1
-KE03-Slot4
AI1 AI20 AI21
X01 1 2 3
623 624 625

Cabinet temperature UC02
UC02_BT01_TT
&C02/9.1
-KE03-Slot4
AI4 AI23 AI24
X02 4 5 6
626 627 628

Cabinet temperature UC03
UC03_BT01_TT
&C02/9.1
AI7 AI26 AI27
X03 7 8 9
629 630 631

-X120 1 2 3 4 5 6 7 8 9 10 11 12

=BA01+UC01
DC/DC cabinet 1

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet
Temperature
PT1000
M12

=BA01+UC02
DC/DC cabinet 2

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet
Temperature
PT1000
M12

=BA01+UC03
DC/DC cabinet 3

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet
Temperature
PT1000
M12

Reference Item Number	Ballard Part # TBD		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container -DC/DC cab 1 - 3 Temperature		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 78 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control Cabinet

Cabinet temperature UC04
UC04_BT01_TT
&C02/9.1
-KE03-Slot4
AI10 AI20 AI21
X04 10 11 12
632 633 634
-X120 13 14 15 16

Cabinet temperature UC05
UC05_BT01_TT
&C02/9.1
AI13 AI23 AI24
X05 13 14 15
635 636 637
17 18 19 20

Cabinet temperature UC06
UC06_BT01_TT
&C02/9.1
AI16 AI23 AI24
X06 16 17 18
638 639 640
21 22 23 24

=BA02+UC04
DC/DC cabinet 4

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet
Temperature
1 2 3 4
PT1000
M12

=BA02+UC05
DC/DC cabinet 5

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet
Temperature
1 2 3 4
PT1000
M12

=BA02+UC06
DC/DC cabinet 6

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet
Temperature
1 2 3 4
PT1000
M12

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DESCRIPTION
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - DC/DC cab 4 - 6 Temperature		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 79 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control Cabinet, 40ft Container

31.7 / L1
31.7 / L2
31.7 / L3
31.7 / PE

101
213
229
250

L1 / 81.0
L2 / 81.0
L3 / 81.0
PE / 81.0

-FC16
/34.3
6A, B-curve
MCCB, DCDC Cooling Fan A

-FC17
/34.3
6A, B-curve
MCCB, DCDC Cooling Fan B

209
225
240
210
226
241

-X16 PE 1 2 3
-X17 PE 1 2 3

100.7
>=LA01-WG206
BN WH
641
643

=JA01+DA01
Power Converters Cooling 40ft Container

-GQ08-WD01
ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV
4x2,5
0,6/1,0 kV
GNYE 1 2 3

-GQ09-WD01
ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV
4x2,5
0,6/1,0 kV
GNYE 1 2 3

-AC07-WG01
/100.5
BUS CAN FD P
2x0,5
300 V
Ventilation (Upper) Signal
BN WH

-AC08
93x93mm
Junction Box

-AC07
93x93mm
Junction Box

-RE01
643
641
120 Ω
1 2 3 4

-GQ08-WD02
0,6/1 kV
4x2,5
0,6/1,0 kV
DCDC Cooling Fan A Power
GNYE BN BK GY

-GQ08-WG01
2x0,5
300 V
DCDC Cooling Fan B Signal
BN
WH

-GQ09-WD02
0,6/1 kV
4x2,5
0,6/1,0 kV
DCDC Cooling Fan B Power
GNYE BN BK GY

-GQ09-WG01
2x0,5
300 V
DCDC Cooling Fan A Signal
BN WH

-GQ08
1kW
DCDC Cooling Fan A
PE PE L1 L2 L3 NC COM 0-10V RSB RSA GND 10V
1 2 3 4 5 6 7 8 10 11 12 13
M 3~
PE

-GQ09
1kW
DCDC Cooling Fan B
PE PE L1 L2 L3 NC COM 0-10V RSB RSA GND 10V
1 2 3 4 5 6 7 8 10 11 12 13
M 3~
PE

Reference Item Number	Ballard Part # TBD		
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=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - DCDC Ventilation Fans		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 80 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control Cabinet, 40ft Container

80.8 / L1 → 101 → L1 /
80.8 / L2 → 213 → L2 /
80.8 / L3 → 229 → L3 /
80.8 / PE → 250 → PE /

-FC11
6A, B-curve
MCCB, Ventiation Fan A
1 3 5 / 2 4 6
211 227 242

-FC12
/34.2
6A, B-curve
MCCB, Ventilation Fan B
1 3 5 / 2 4 6
212 228 243

100.7
>=LA01-WG202
WH OR SH

-X11 1 2 3 PE
-X12 1 2 3 PE

=JA01+DA01
Container Ventilation System 40ft Container Inside

-GQ06-WD01
/81.0
0,6/1 kV
4x2,5
0,6/1,0 kV
Ventilation (Upper) Supply
BK 1 BK 2 BK 3 GNYE

-GQ06-WG01
/100.4
BUS CAN FD P
2x0,5
300 V
Ventilation (Upper) Signal
WH OR SH

WH BN

-GQ07-WD01
/81.5
0,6/1 kV
4x2,5
0,6/1,0 kV
Ventilation (Lower) Supply
BK 1 BK 2 BK 3 GNYE

-GQ07-WG01
BUS CAN FD P
2x0,5
300 V
Ventilation (Upper) Signal
WH BN SH
WH BN

-GQ06-WD01
/81.1
1 2 3 PE

-GQ06-XD01
4x2,5
1 2 3 PE
211 227 242 250

-GQ06
4,3 kW
Container Ventilation Fan
(Upper)
L1 L2 L3 PE
GND IO1 IO2 IO3 Vout GND RSA RSB RSA RSB
-CON1
-CON2
M
3~

-GQ07-WD01
/81.5
1 2 3 4

-GQ07-XD01
4x2,5
1 2 3 PE
212 228 243 250

-GQ07
4,3 kW
Container Ventilation Fan
(Lower)
L1 L2 L3 PE
GND IO1 IO2 IO3 Vout GND RSA RSB RSA RSB
-CON1
-CON2
M
3~

644 642
-GQ07-RA01
120Ω
RS485 Termination
Resistor

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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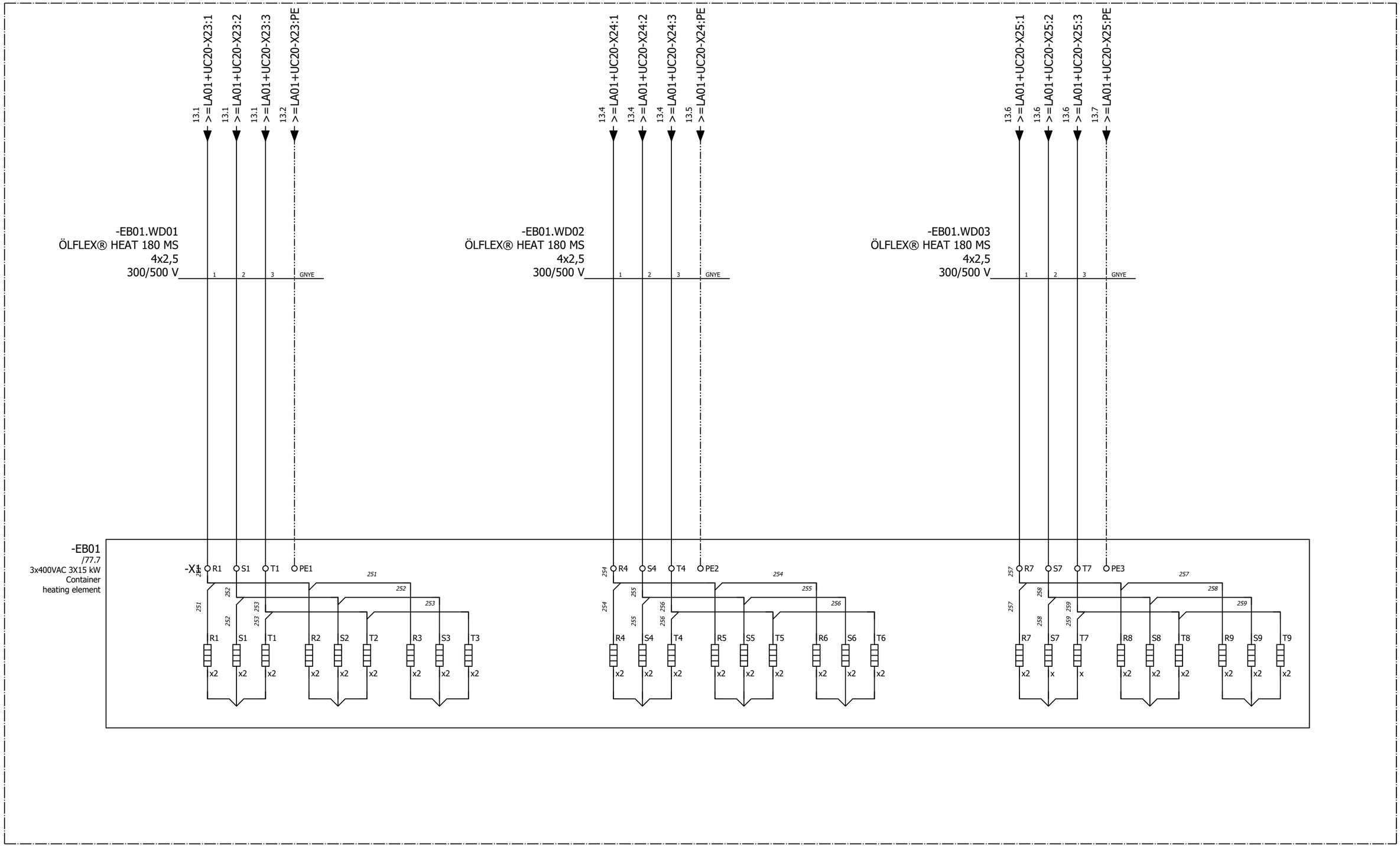
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Ventilation Intake Fans		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 81 / 2

0	1	2	3	4	5	6	7	8

=JA01+DA01

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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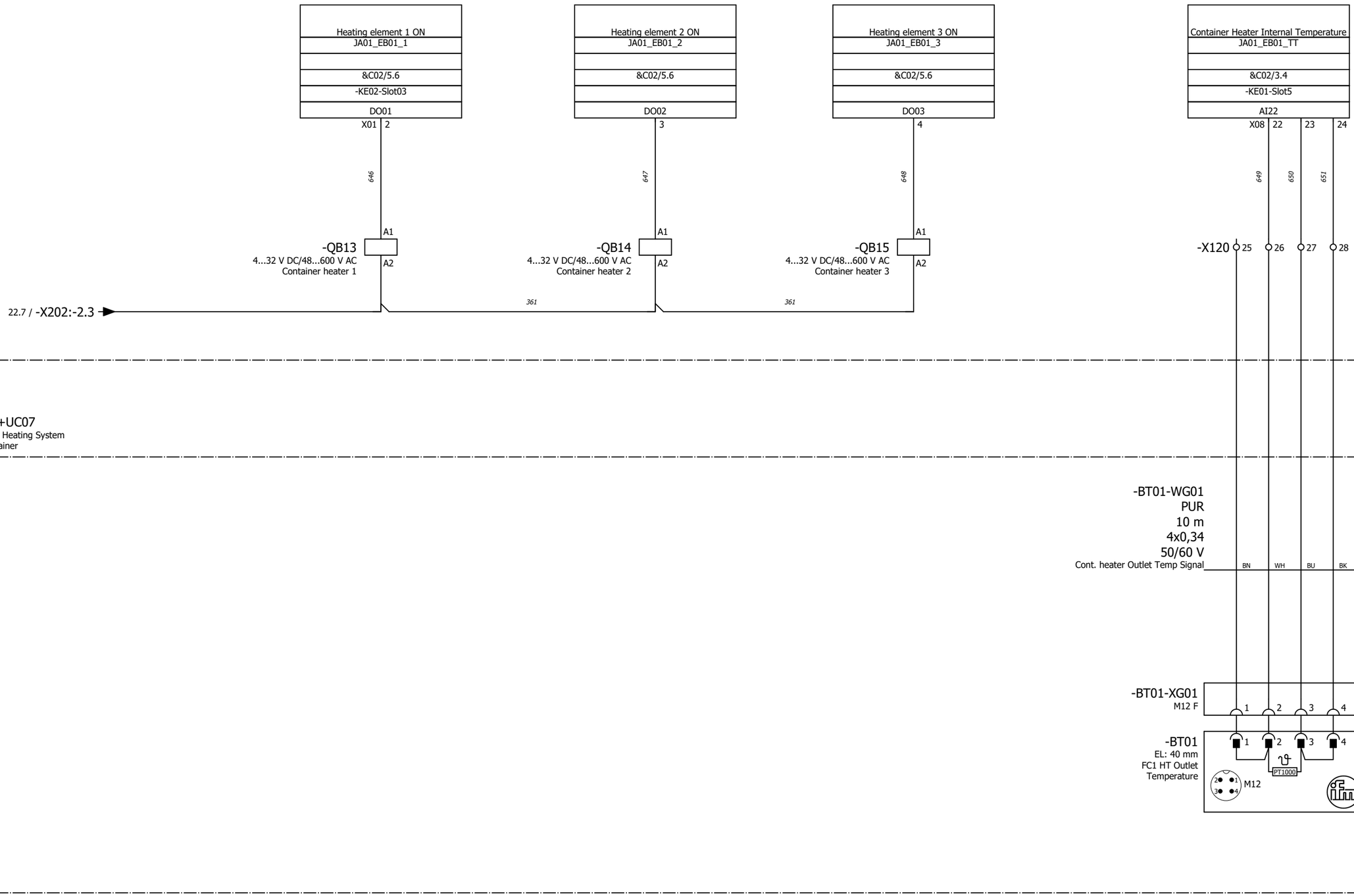
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container heater		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 82 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



=JA01+UC07
Container Heating System
40ft Container

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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=	++	+ UC20	& C03

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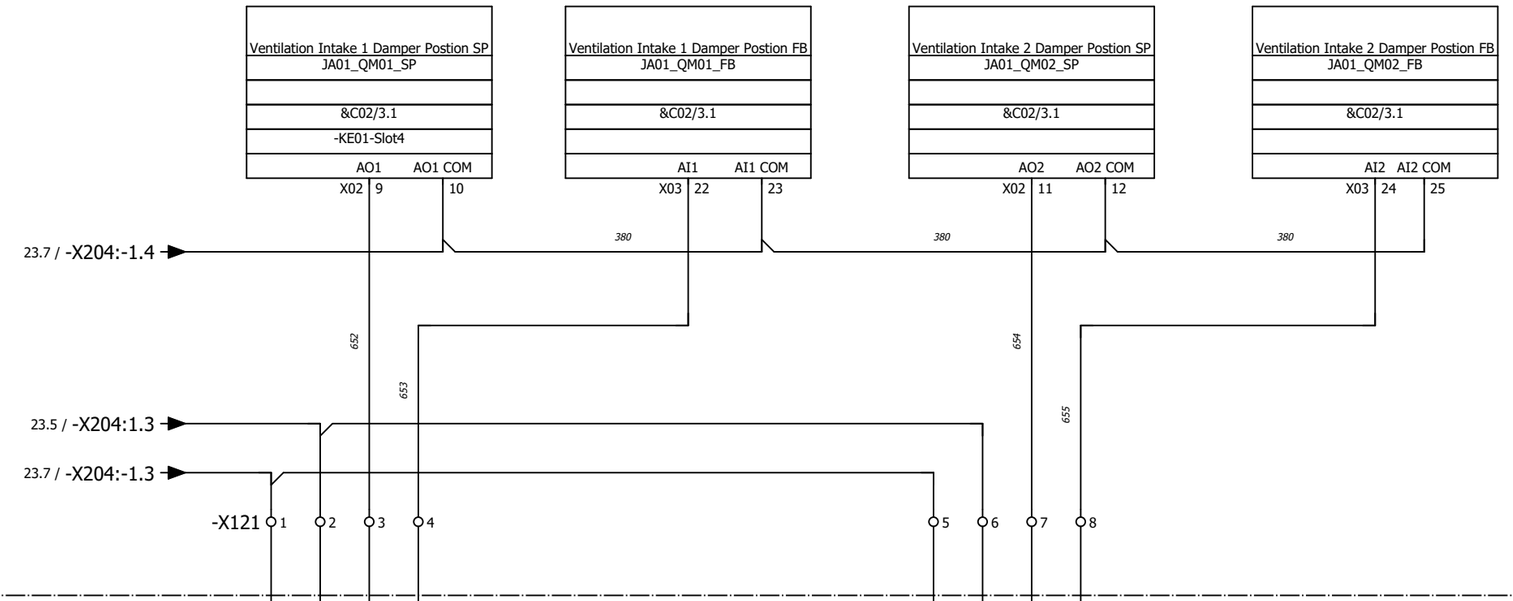
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container Heating Control		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 83 / 2

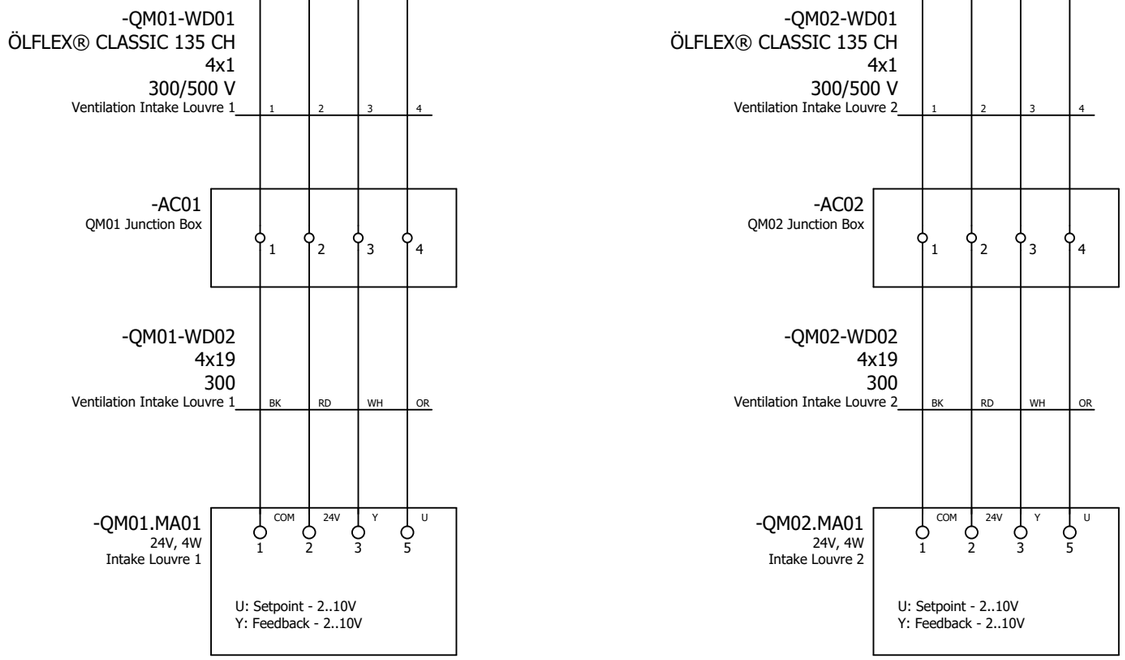
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0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control System, Container #1 Inside



=JA01+DA01
Ventilation System, Container #1 Inside



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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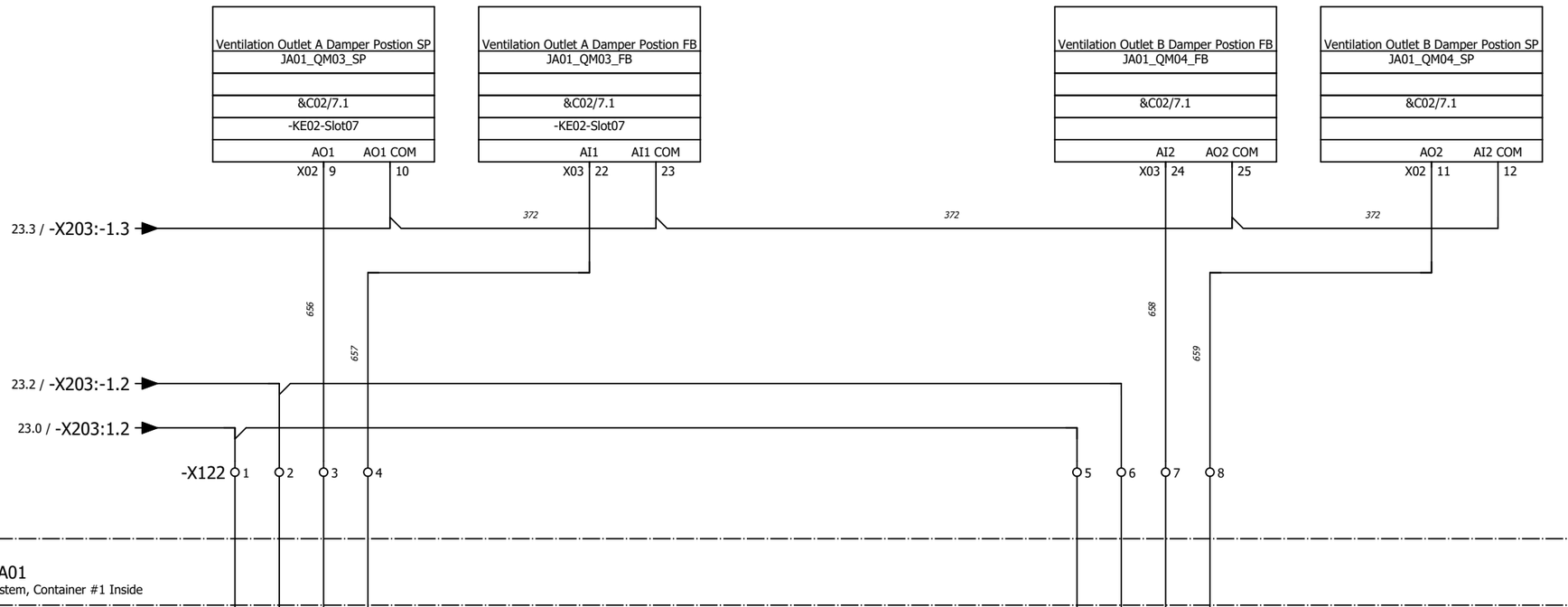
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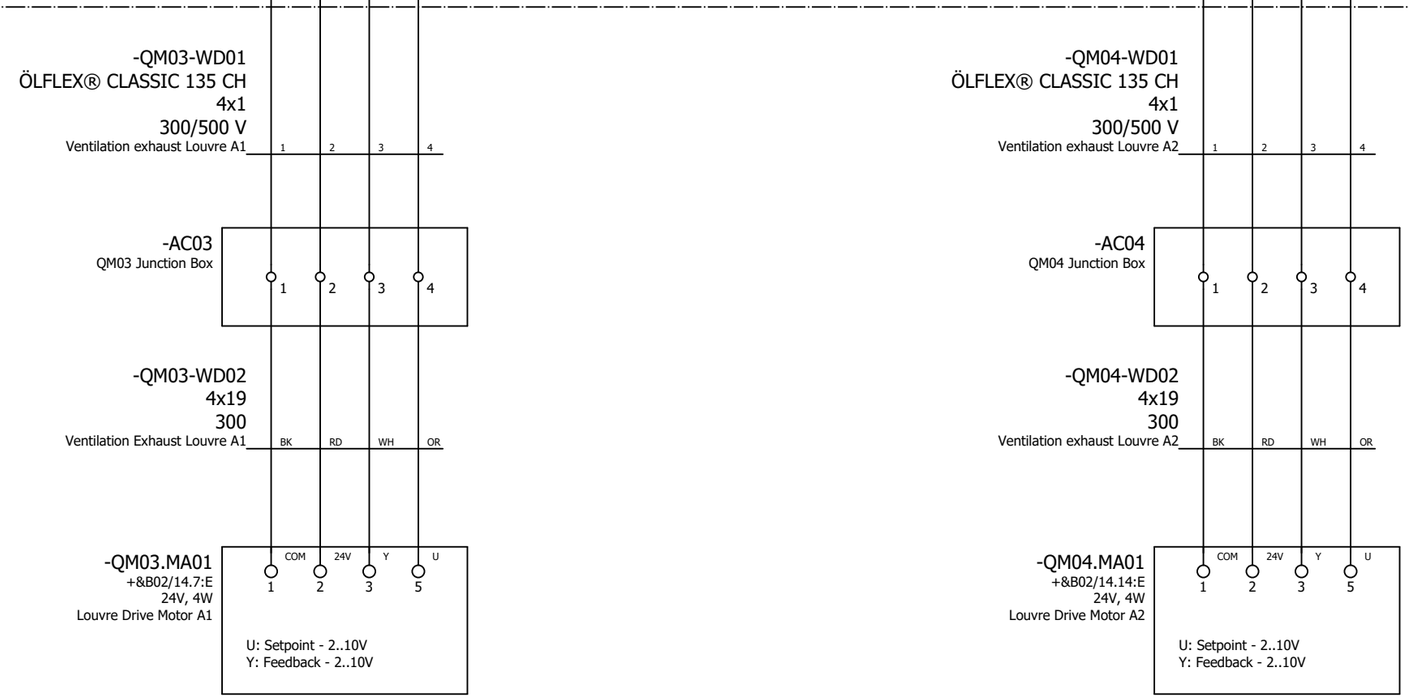
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container Intake Louvres		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 84 / 2

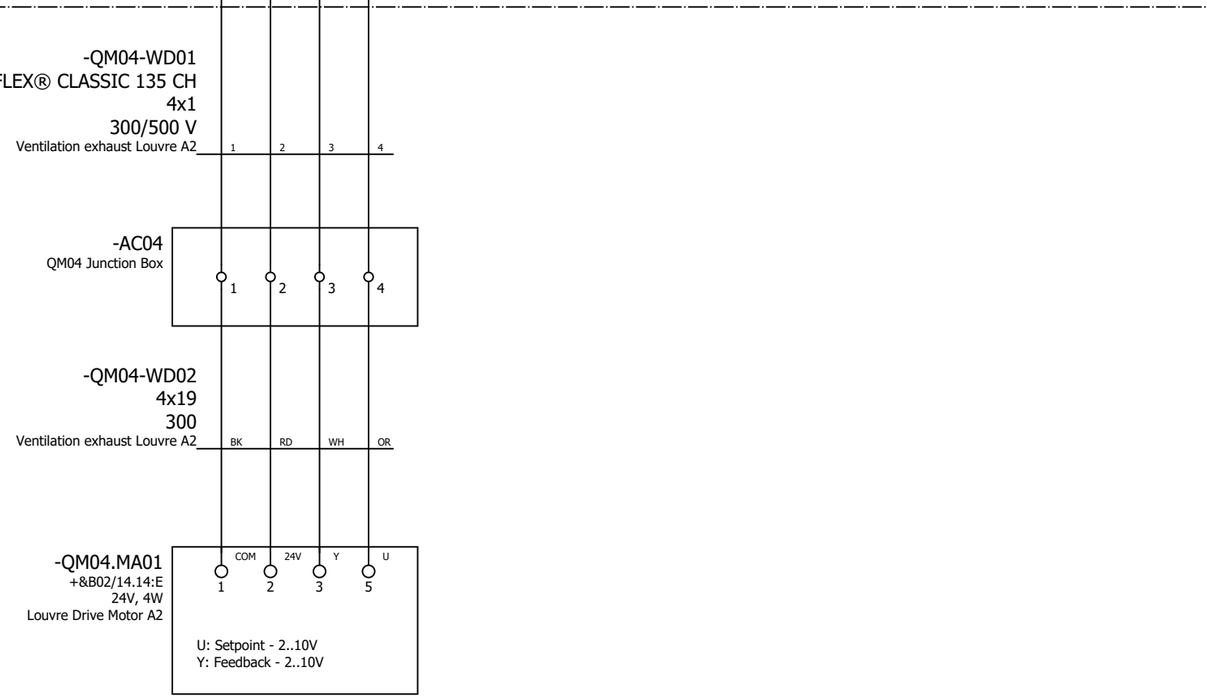
0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control System, Container #1 Inside



=JA01+DA01
Ventilation System, Container #1 Inside





Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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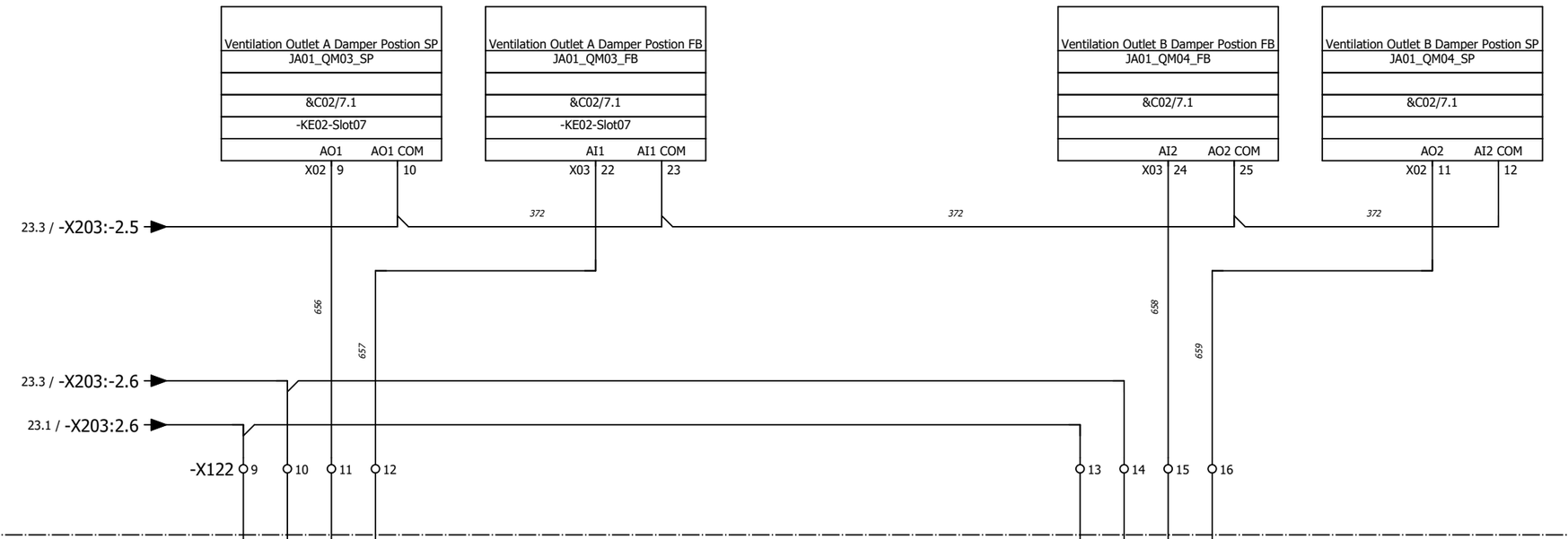
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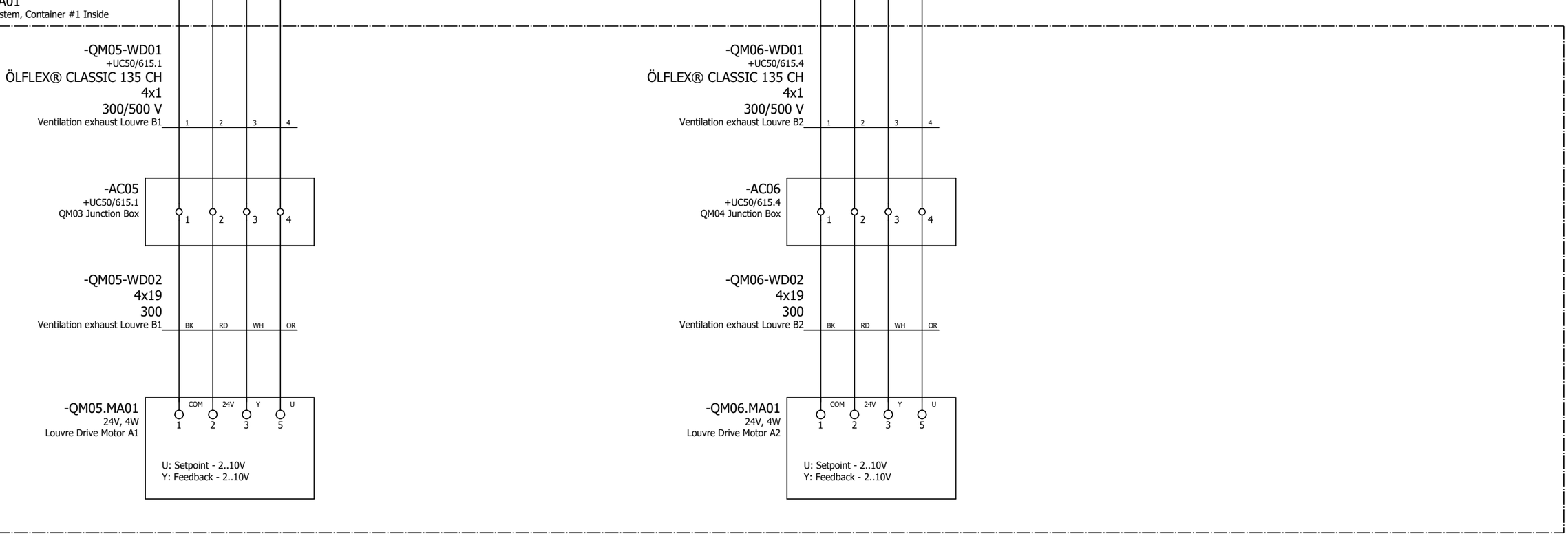
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container Exhaust Louvre A		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 85 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control System, Container #1 Inside



=JA01+DA01
Ventilation System, Container #1 Inside



Reference Item Number	Ballard Part # TBD		
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=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container Exhaust Louvre B		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 86 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control System, Container #1 Inside

Container Indoor/Outdoor Diffential Pressure
JA01_BP02_PDT
&C02/3.4
-KE01-Slot5
AI6 AI6
X06 17 18

Ventilation Intake Filter Differential-pressure
JA01_BP01_PDT
&C02/3.4
-KE01-Slot5
AI5 AI5
X05 14 15

23.3 / -X203:-1.5

374

660

661

23.1 / -X203:1.4

23.3 / -X203:-1.4

-X123 1 2 3 4 5 6

=JA01+DA01
Ventilation System, Container #1 Inside

-BP02-WD01
ÖLFLEX® CLASSIC 110 CH
4x1
300/500 V
In/Out dP Sensor 1 2 3

-BP02
Container Indoor/Outdoor Diffential Pressure Sensor

UB+ GND AOU1 AOI1
AC/DC 24 V | DC 0...5/10V | DC 4...20mA
ON 1 2 3 4 5 6
Setting: -100 to 100 Pa

-BP01-WD01
ÖLFLEX® CLASSIC 110 CH
4x1
300/500 V
Intake dP Sensor 1 2 3

-BP01
Intake dP Transducer

UB+ GND AOU1 AOI1
AC/DC 24 V | DC 0...5/10V | DC 4...20mA
ON 1 2 3 4 5 6
Setting: 0 to 500 Pa

Reference Item Number	Ballard Part # TBD		
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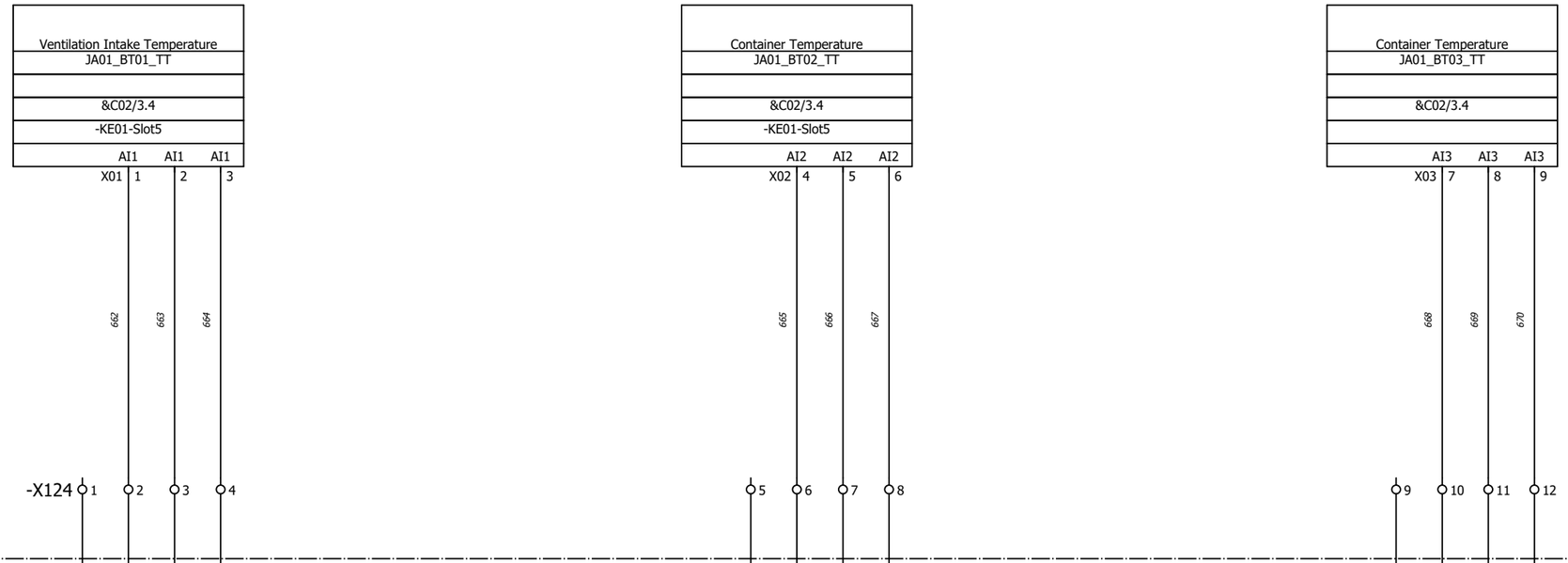
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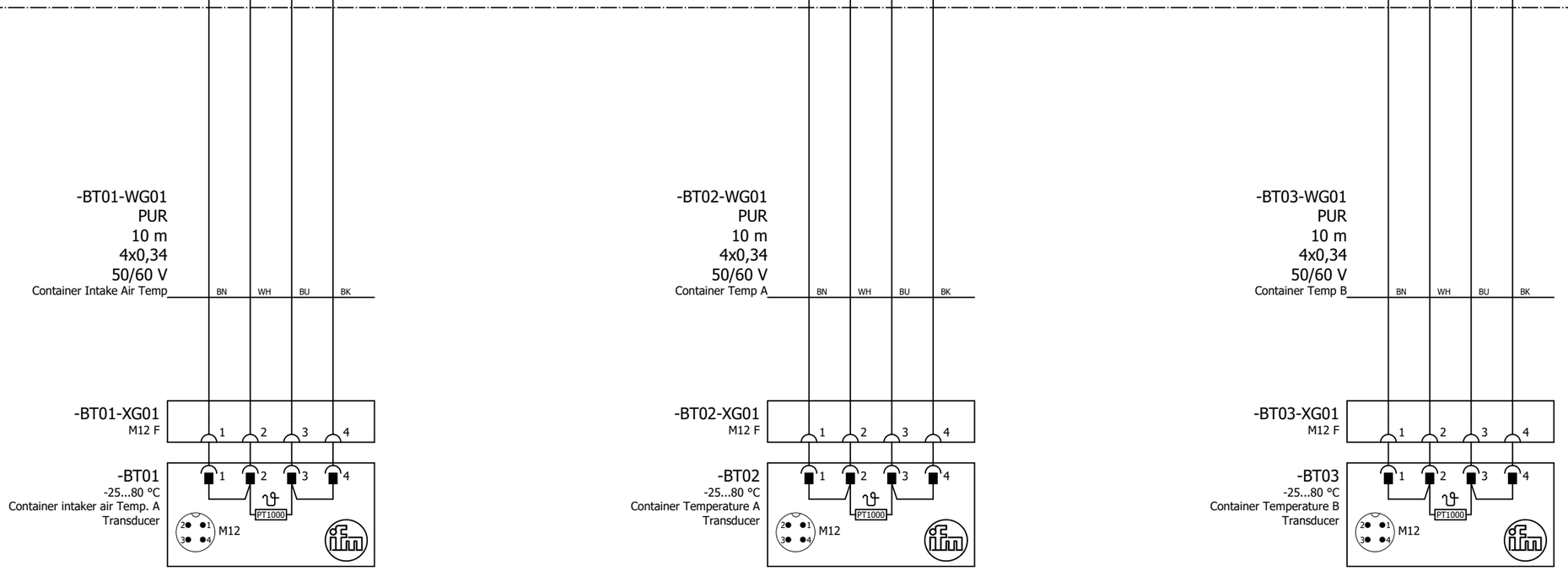
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container In/Out and Filter Diff Pressure		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 87 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control System, Container #1 Inside



=JA01+DA01
Ventilation System, Container #1 Inside



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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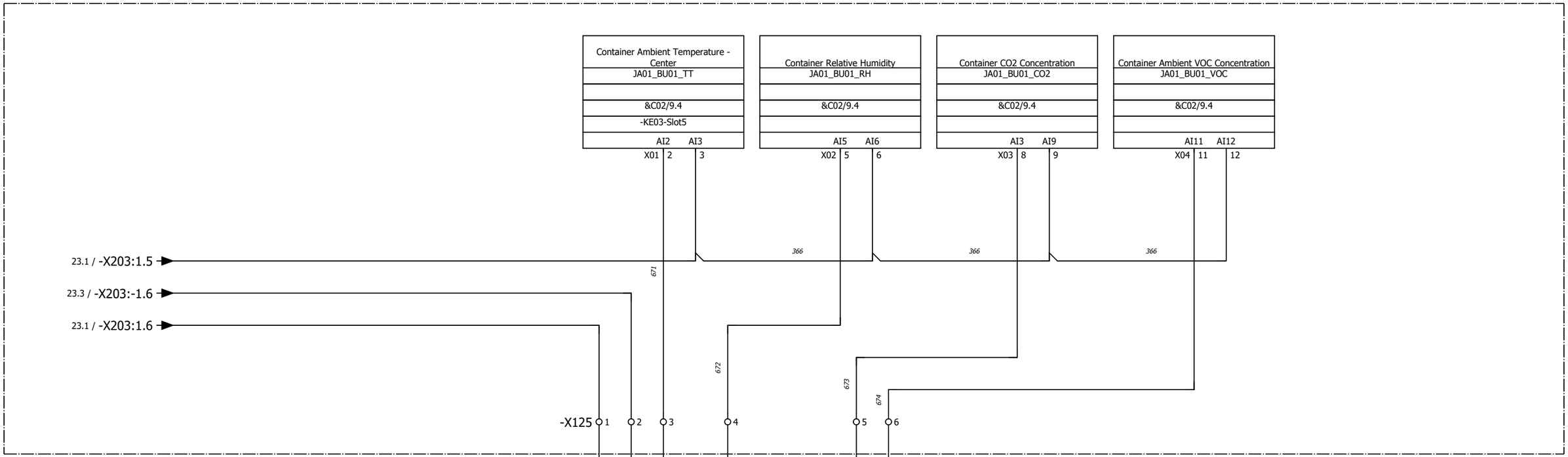
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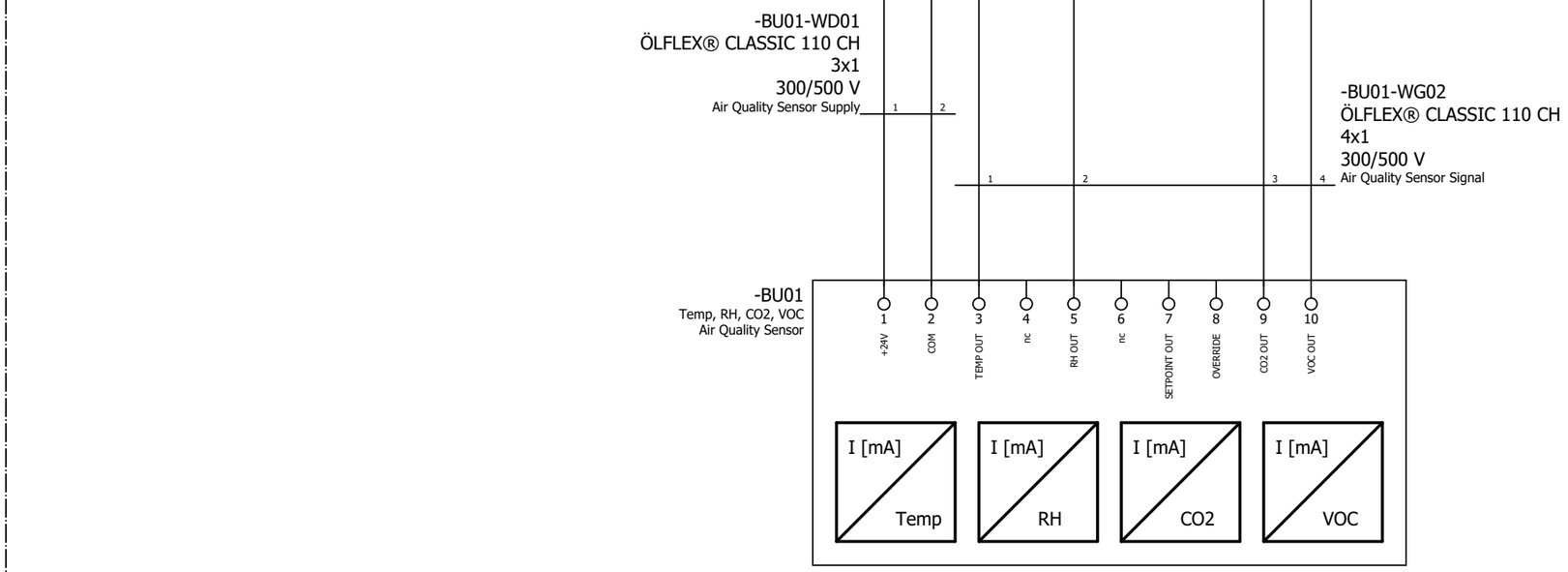
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container Temp Sensors		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 88 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control Cabinet, 40ft Container



=JA01+DA01
40ft Container, Ventilation System



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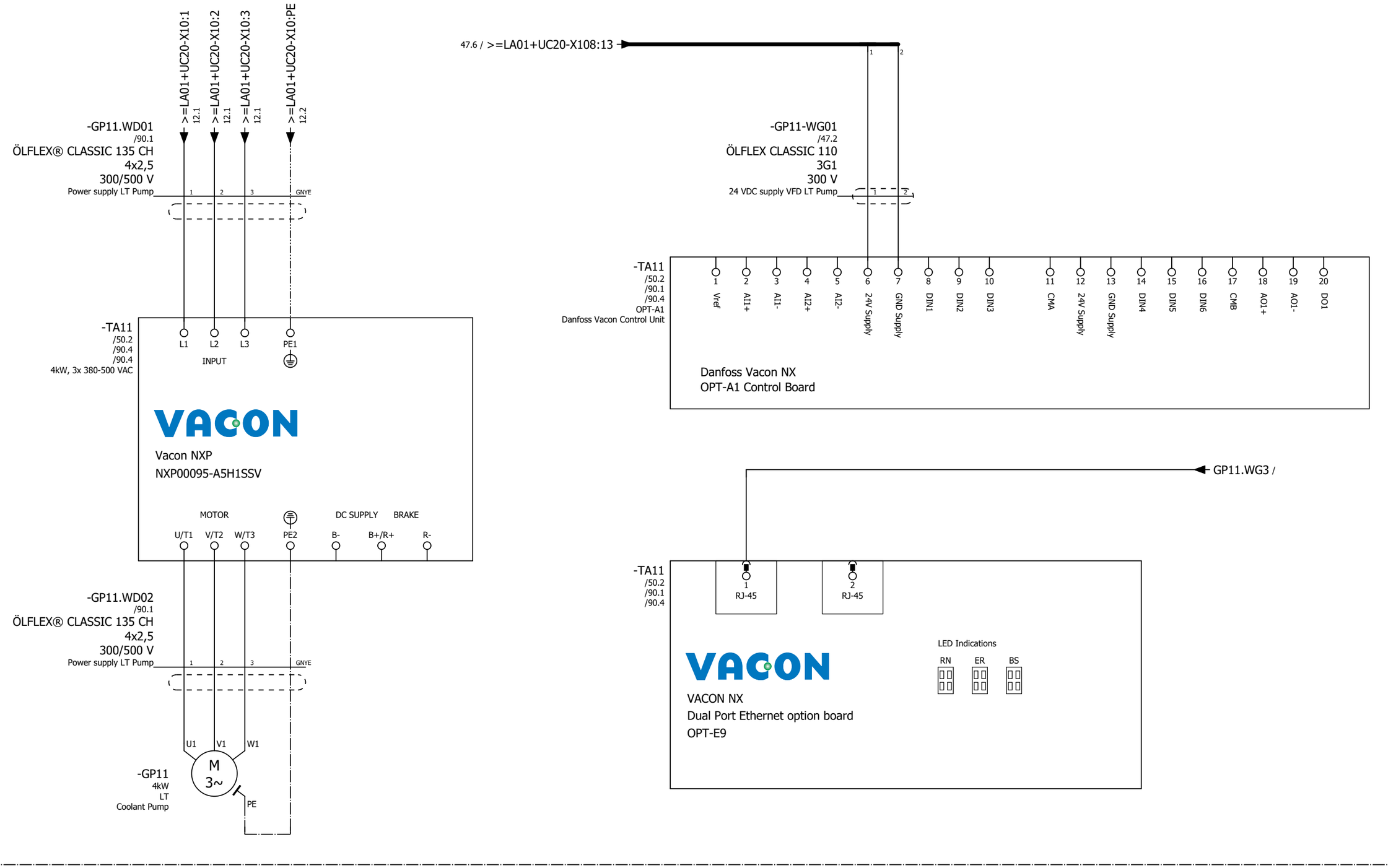
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Container Air Quality Sensor		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 89 / 2

0	1	2	3	4	5	6	7	8

=HE03+DA01

Container Safety System, Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

REVISION INFORMATION
DESCRIPTION
DATE
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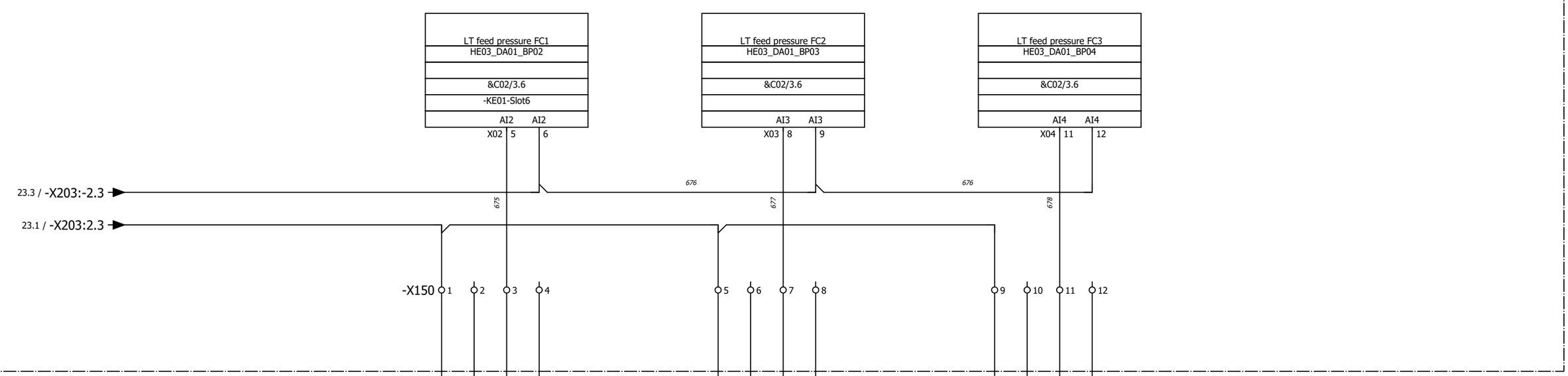
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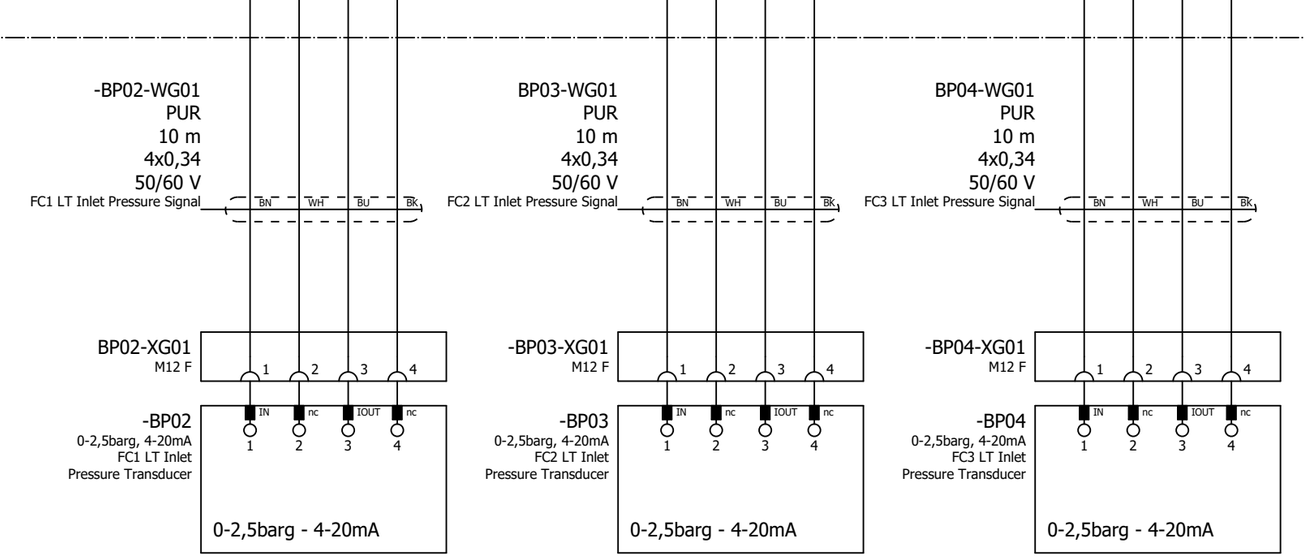
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft container - LT Pump Power Supply		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 90 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



=HE03+DA01



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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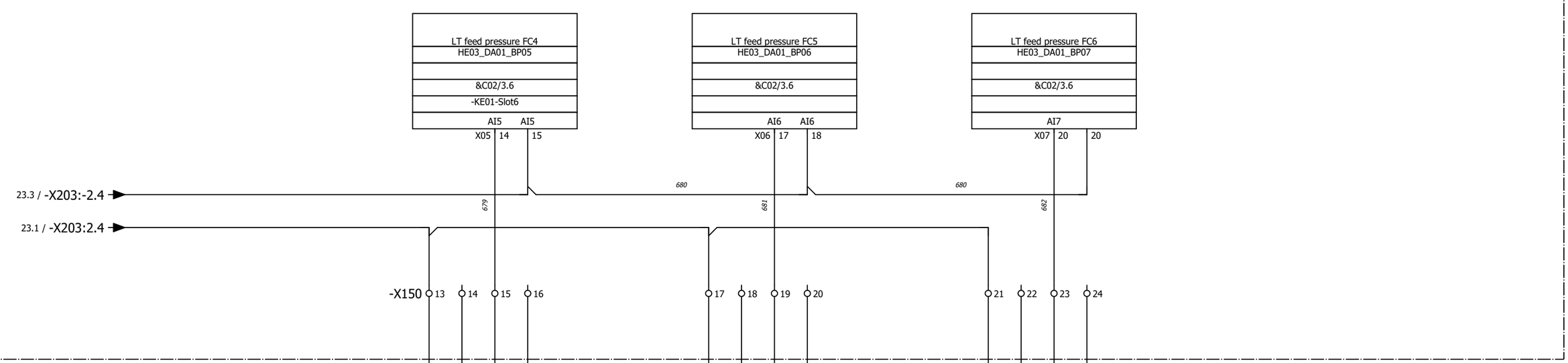
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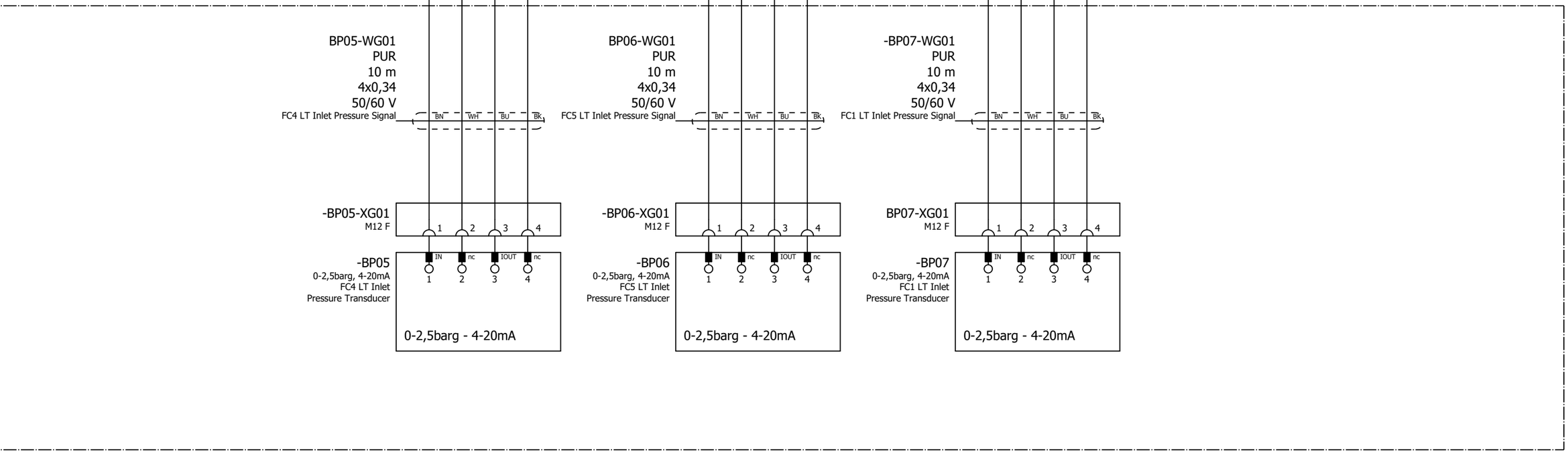
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - LT Cooling System		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 91 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20



=HE03+DA01



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - LT Cooling System		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 92 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

LT Circuit Differential-pressure
HE03_DA01_BP01
&C02/3.4
-KE01-Slot5
AI7 AI7
X07 20 21

23.3 / -X203:-2.1

683

23.1 / -X203:2.1

-X150 25 26 PE

=HE03+DA01

-BP01-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
LT Circuit dP Signal
1 2 3

-BP01-XD01
DIN 43650 Form A
Valve Plug
1 2 3 PE

-BP01
LT Circuit
Differential-pressure
Transmitter
UB+ nc AOU1 PE
AC/DC
24 V
DC
4..20mA
0..4 barg
BELIMO

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - LT Cooling System		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 93 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control Cabinet

FC1 HT Coolant Outlet Temperature
HE03_DA01_BT01
&C02/8.6
-KE03-Slot3
AI19 AI20 AI21
X07 19 20 21

FC2 HT Coolant Outlet Temperature
HE03_DA01_BT02
&C02/8.6
-KE03-Slot3
AI22 AI23 AI24
X08 22 23 24

FC3 HT Coolant Outlet Temperature
HE03_DA01_BT03
&C02/8.6
AI25 AI26 AI27
X09 25 26 27

684 685 686 687 688 689 690 691 692

-X160 1 2 3 4 5 6 7 8 9 10 11 12

=HE01+DA01
HT Coolant System #1, Inside 40ft Container

-BT01-WG01
PUR
10 m
4x0,34
50/60 V
FC1 HT Outlet Temp Signal
BN WH BU BK

-BT02-WG01
PUR
10 m
4x0,34
50/60 V
FC2 HT Outlet Temp Signal
BN WH BU BK

-BT03-WG01
PUR
10 m
4x0,34
50/60 V
FC3 HT Outlet Temp Signal
BN WH BU BK

-BT01-XG01
M12 F
1 2 3 4

-BT02-XG01
M12 F
1 2 3 4

-BT03-XG01
M12 F
1 2 3 4

-BT01
EL: 160 mm
FC1 HT Outlet Temperature
1 2 3 4
PT1000
M12 2 1 3 4

-BT02
EL: 160 mm
FC2 HT Outlet Temperature
1 2 3 4
PT1000
M12 2 1 3 4

-BT03
EL: 160 mm
FC3 HT Outlet Temperature
1 2 3 4
PT1000
M12 2 1 3 4

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - HT #1/2 Module Outlet Temperature		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 94 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20
Control Cabinet

FC4 HT Coolant Outlet Temperature
HE03_DA01_BT04
&C02/9.1
-KE03-Slot4
AI19 AI20 AI21
X07 19 20 21
693 694 695

FC5 HT Coolant Outlet Temperature
HE03_DA01_BT05
&C02/9.1
AI22 AI23 AI24
X08 22 23 24
696 697 698

FC6 HT Coolant Outlet Temperature
2HE03_DA01_BT06
&C02/9.1
AI25 AI23 AI24
X09 25 23 24
699 700 701

-X160 13 14 15 16 17 18 19 20 21 22 23 24

=HE02+DA01
HT Coolant System #2, Inside 40ft Container

-BT04-WG01
PUR
10 m
4x0,34
50/60 V
FC4 HT Outlet Temp Signal
BN WH BU BK

-BT05-WG01
PUR
10 m
4x0,34
50/60 V
FC5 HT Outlet Temp Signal
BN WH BU BK

-BT06-WG01
PUR
10 m
4x0,34
50/60 V
FC5 HT Outlet Temp Signal
BN WH BU BK

-BT04-XG01
M12 F
1 2 3 4

-BT05-XG01
M12 F
1 2 3 4

-BT06-XG01
M12 F
1 2 3 4

-BT04
EL: 160 mm
FC4 HT Outlet Temperature
1 2 3 4
PT1000
M12 (2 1 3 4)

-BT05
EL: 160 mm
FC5 HT Outlet Temperature
1 2 3 4
PT1000
M12 (2 1 3 4)

-BT06
EL: 160 mm
FC5 HT Outlet Temperature
1 2 3 4
PT1000
M12 (2 1 3 4)

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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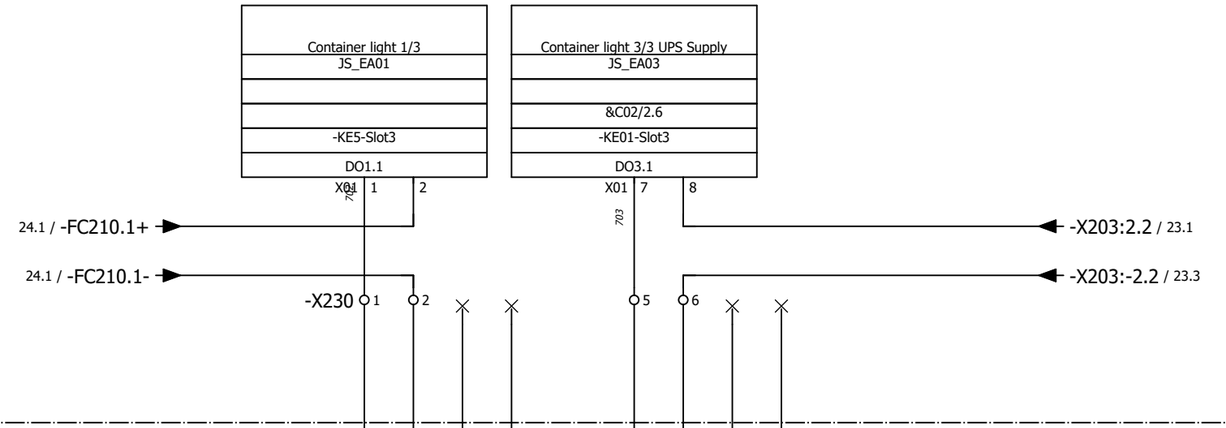
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - HT #2/2 Module Outlet Temperature		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 95 / 2

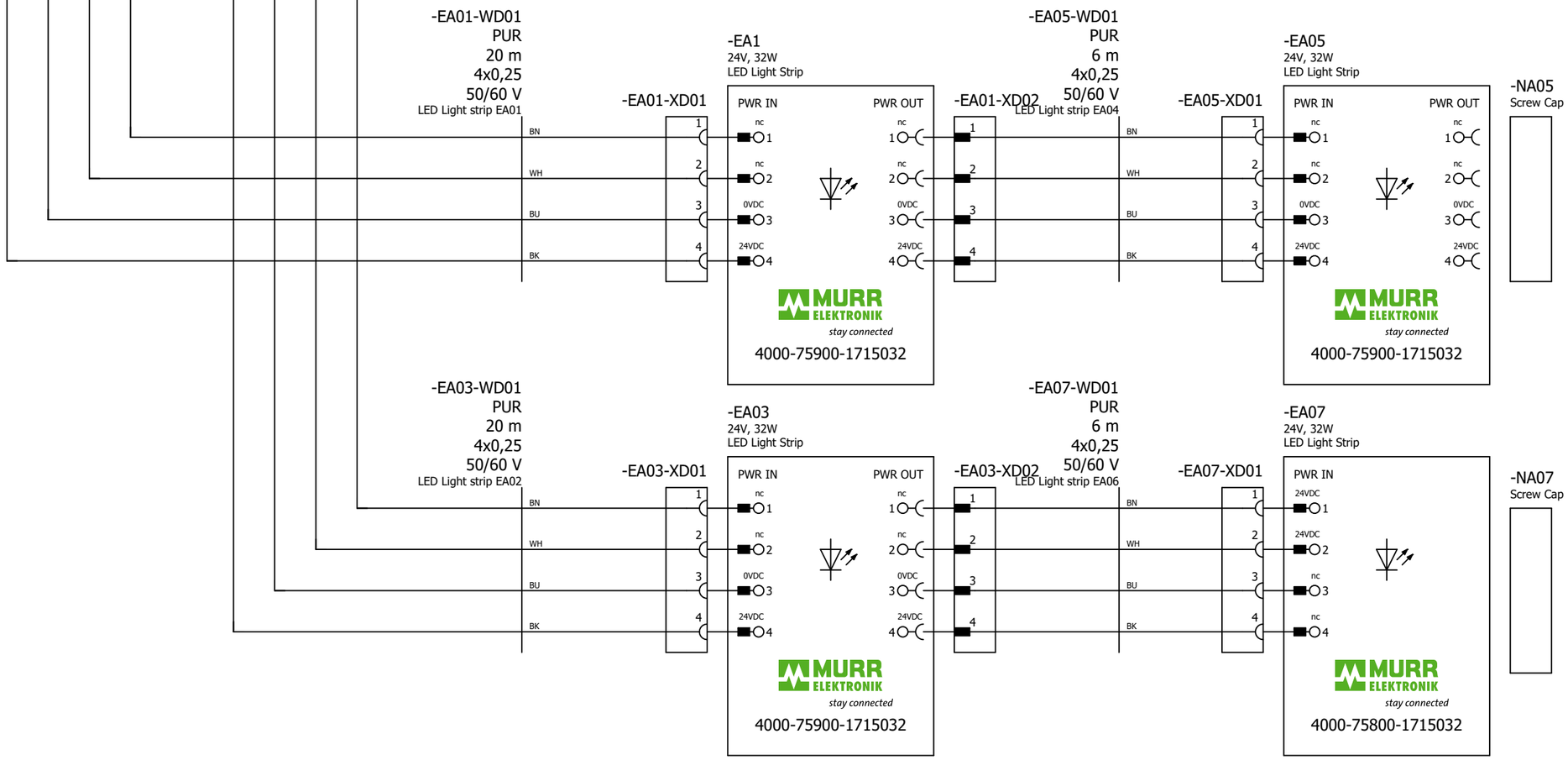
0	1	2	3	4	5	6	7	8

=LA01+UC20



=JA01+DA01

Container Ventilation, Inside Container #1



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Lighting 1/2		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 96 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

Container light 2/3
JS_EA02
-KE5-Slot3
DO2.1
X01 4 5

24.3 / -FC210.2+
24.4 / -FC210.2-
-X230 3 4

Light Switch Container
DA01_SG100
&C02/2.6
-KE01-Slot3
DIO3
X02 15

23.2 / -X203:3.3
7 8

=JA01+DA01
Container Ventilation, Inside Container #1

-EA02-WD01
PUR
20 m
4x0,25
50/60 V
LED Light strip EA05

-EA02
24V, 32W
LED Light Strip
-EA02-XD01
PWR IN
PWR OUT
BN
WH
BU
BK
nc
0VDC
24VDC
MURR ELEKTRONIK
stay connected
4000-75900-1715032

-EA02-XD02

-EA06-WD01
PUR
6 m
4x0,25
50/60 V
LED Light strip EA06

-EA06
24V, 32W
LED Light Strip
-EA06-XD01
PWR IN
PWR OUT
BN
WH
BK
BU
nc
0VDC
24VDC
MURR ELEKTRONIK
stay connected
4000-75900-1715032

-SG01-WG01
ÖLFLEX® CLASSIC 110 CH
3x1
300/500 V
1 2

-SG01 E
13
14

-EA04-WD01
PUR
20 m
4x0,25
50/60 V
LED Light strip EA07

-EA04
24V, 32W
LED Light Strip
-EA04-XD01
PWR IN
PWR OUT
BN
WH
BU
BK
nc
0VDC
24VDC
MURR ELEKTRONIK
stay connected
4000-75900-1715032

-EA04-XD02

-EA08-WD01
PUR
6 m
4x0,25
50/60 V
LED Light strip EA08

-EA08
24V, 32W
LED Light Strip
-EA08-XD01
PWR IN
PWR OUT
BN
WH
BK
BU
nc
0VDC
24VDC
MURR ELEKTRONIK
stay connected
4000-75900-1715032

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Lighting 2/2		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 97 / 2

0	1	2	3	4	5	6	7	8

=LA01+UC20

=HA01+DA02
Exterior location, hydrogen supply

Placed Top right side of cabinet

-X202:-1.6
22.7

-X202:1.6
22.5

-KF200-XD01
1 2 3 4 5 6

-KF200
16 port switch
V1- V1+ COM NO V2- V2+
-U1:1 2 3 4 5 6
PWR1 FAULT PWR2

-U2
Chassis
CHA

Other bus systems
1 2 3 4 5 6 7 8

Other bus systems
9 10 11 12 13 14

Other bus systems
15 16

-KF200-WG01
Cat.6
STP 1
/ KE01-Slot7:P1
Deif Ethernet Port 1

-KF200-WG02
Cat.6
STP
100.4 / -KF210:1

-KF200-WG16
-KF200-WG15
Cat.6
4x2x
STP 1
-KF200:16 / 99.1

-KF200:15 / Cooling skid

-XT11
EX Cable gland
Wall pass-through

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet - Ethernet switch 1		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 98 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20

Placed bottom right side of cabinet

-X202:-2.1
22.7

-X202:2.1
22.5

-KF201-XD01

1 2 3 4 5 6

-KF201
16 port switch

V1- V1+ COM NO V2- V2+

-U1:1 2 3 4 5 6

PWR1 FAULT PWR2

-U2
Chassis
CHA

Other bus systems 1 2 3 4 5 6 7 8

Other bus systems 9 10 11 12 13 14

Other bus systems 15 16

98.6 / -KF200:16

-KF201:16 /

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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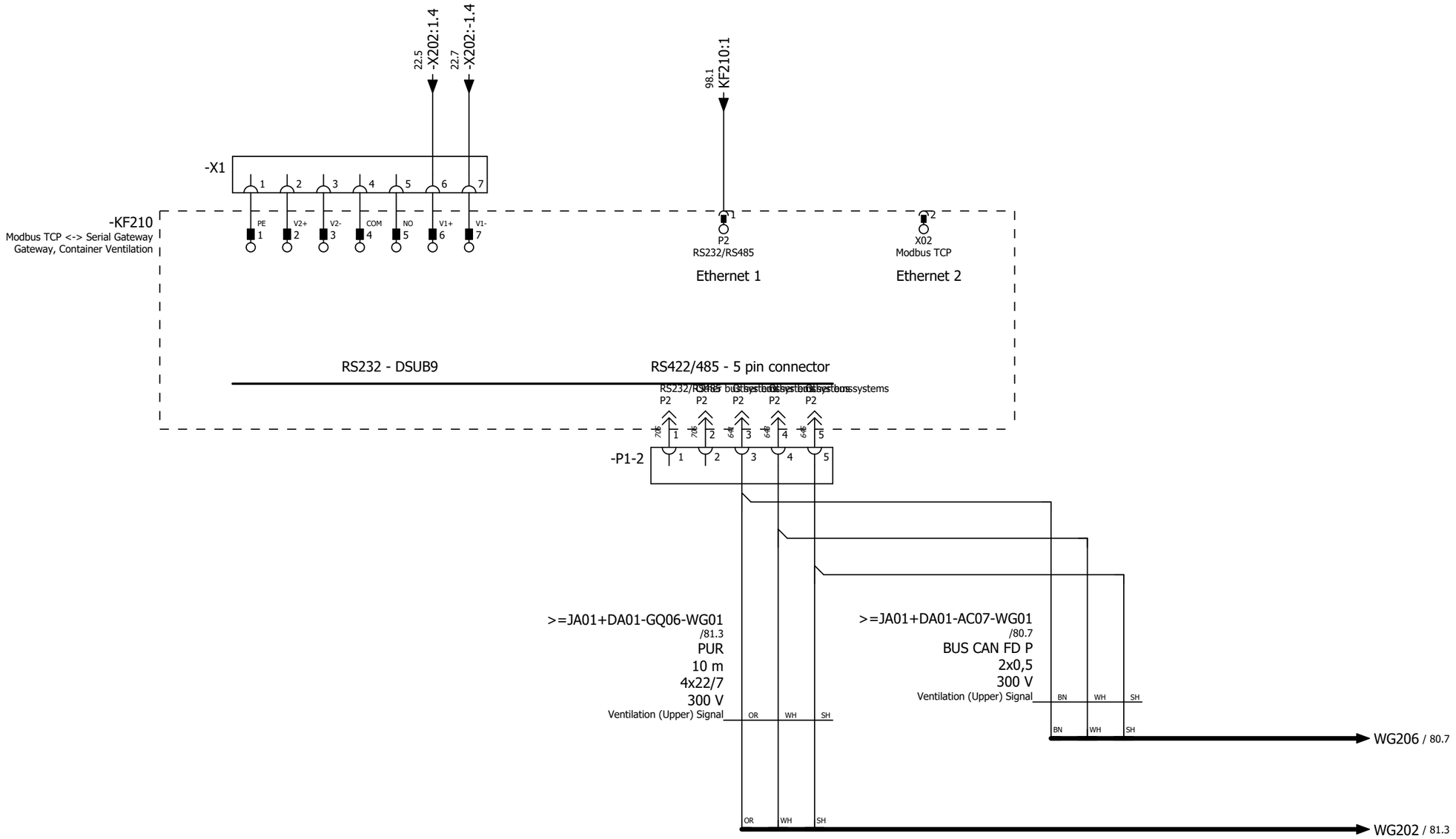
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Control Cabinet - Ethernet switch 2		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 99 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

=LA01+UC20
Container Control System
Control Cabinet 40 ft



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C03

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	40ft Container - Modbus Converter		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 100 / 2

FRM5103656/0B

0	1	2	3	4	5	6	7	8

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Ballard Power Systems Europe - Technology Solutions

Panel Documentation

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06		
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet				
SHEET TYPE/DESC	Panel Documentation and Layout				
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	1 / 18	

Terminal-strip overview

F14_001

Terminal strip	Terminal strip definition text	Terminals					Graphical page of terminal diagrams
		first	last	Total PE	Total N	Total number	
=BA20-XB01		1	1	0	0	1	
=LA01-PE		3	3	0	0	1	
=LA01-X-KE12		X1	X2	0	0	12	
=LA01-X-KE13		X1	X2	0	0	12	
=LA01-X-KE14		X1	X2	0	0	12	
=LA01-X-KE15		X1	X2	0	0	12	
=LA01-X-KE16		X1	X2	0	0	12	
=LA01-X01		1	PE	0	0	5	
=LA01-X10		1	PE	0	0	4	
=LA01-X11		1	3	1	0	4	
=LA01-X12		1	3	1	0	4	
=LA01-X13		1	PE	0	0	4	
=LA01-X14		1	PE	0	0	4	
=LA01-X15		1	PE	0	0	4	
=LA01-X16		1	3	1	0	4	
=LA01-X17		1	3	1	0	4	
=LA01-X18		1	2	0	0	2	
=LA01-X20		1	PE	0	0	5	
=LA01-X22		1	PE	0	0	5	
=LA01-X23		1	PE	0	0	3	
=LA01-X50		1	4	0	0	4	
=LA01-X51		1	4	0	0	4	
=LA01-X52		1	4	0	0	4	
=LA01-X53		1	4	0	0	4	
=LA01-X54		1	4	0	0	4	
=LA01-X55		1	4	0	0	4	
=LA01-X60		1	15	0	0	15	
=LA01-X61		1	15	0	0	15	
=LA01-X62		1	15	0	0	15	
=LA01-X63		1	15	0	0	15	
=LA01-X64		1	15	0	0	15	
=LA01-X65		1	15	0	0	15	
=LA01-X100		1	7	0	0	7	
=LA01-X101		1	4	0	0	4	
=LA01-X102		1	4	0	0	6	
=LA01-X103		1	12	0	0	12	
=LA01-X104		1	12	0	0	12	

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
DESCRIPTION
DATE
13-Jun-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Terminal-strip overview : =BA20+UC20-XB01 - =LA01+UC20-X104		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 2 /

Terminal-strip overview

F14_001

Terminal strip	Terminal strip definition text	Terminals					Graphical page of terminal diagrams
		first	last	Total PE	Total N	Total number	
=LA01-X105		1	4	0	0	4	
=LA01-X106		1	12	0	0	12	
=LA01-X107		1	12	0	0	12	
=LA01-X108		1	14	0	0	14	
=LA01-X110		1	4	0	0	6	
=LA01-X120		1	28	0	0	31	
=LA01-X121		1	8	0	0	10	
=LA01-X122		3	16	0	0	18	
=LA01-X123		1	6	0	0	8	
=LA01-X124		11	12	0	0	13	
=LA01-X125		1	6	0	0	6	
=LA01-X150		1	PE	0	0	30	
=LA01-X160		1	24	0	0	26	
=LA01-X201		0.1	0.1	0	0	1	
=LA01-X201-		1-	1-	0	0	1	
=LA01-X202		1	1	0	0	1	
=LA01-X202-		1-	1-	0	0	1	
=LA01-X203		0.1	0.1	0	0	1	
=LA01-X203-		0.1-	0.1-	0	0	1	
=LA01-X204		0.1	0.1	0	0	1	
=LA01-X204-		0.1	0.1	0	0	1	
=LA01-X230		1	8	0	0	8	
=LA01-XPE		1	PE	0	0	7	
=LA01-X_PE		1	1	0	0	6	
=LB02-X101		9	12	0	0	4	

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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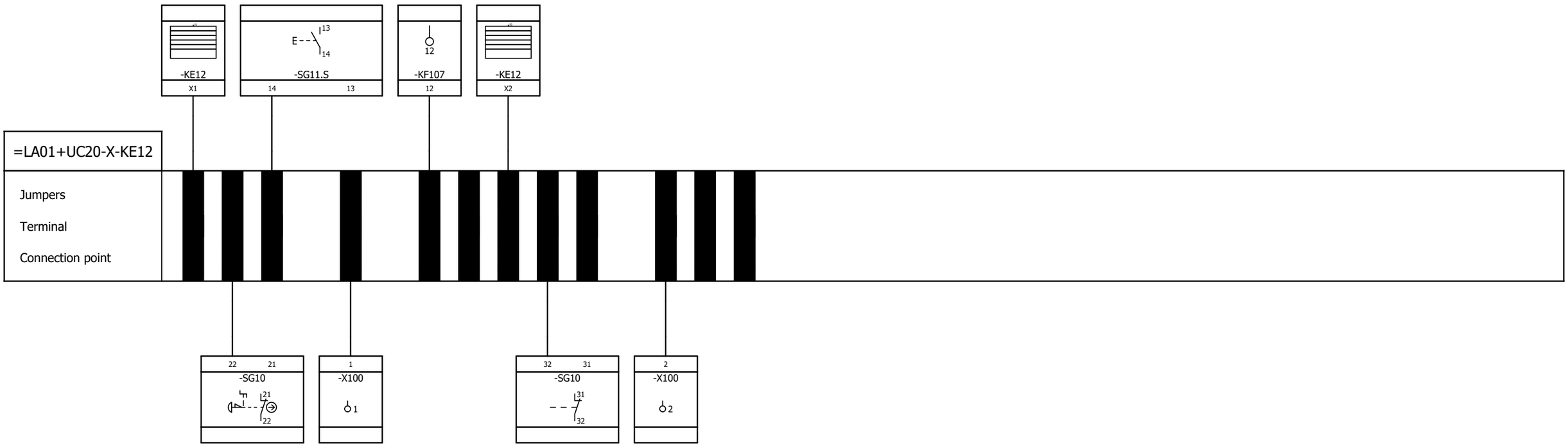
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE	Crosswind UC20 40ft Control Cabinet		
SHEET TYPE/DESC	Terminal-strip overview : =LA01+UC20-X105 - =LB02+UC20-X101		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 2.a /

Terminal-connection diagram

F11_001
PBL 20-Nov-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
DESCRIPTION
DATE
20-Nov-24

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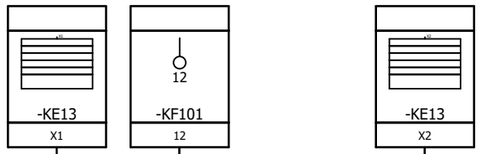
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X-KE12		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 3 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

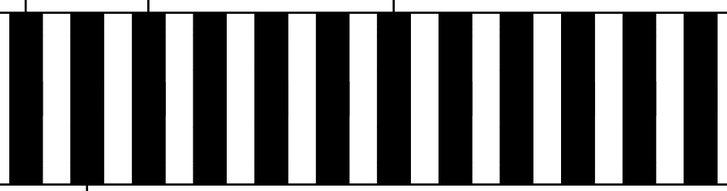


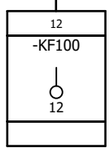
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Jumpers

Terminal

Connection point





External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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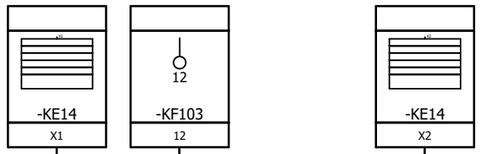
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X-KE13		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 4 /

FRM5103656/0B

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

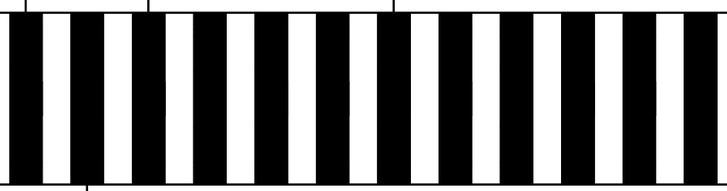


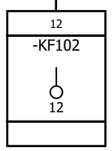
=LA01+UC20-X-KE14

Jumpers

Terminal

Connection point





External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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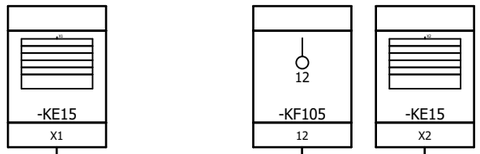
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X-KE14		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 5 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

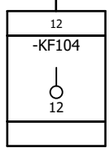


=LA01+UC20-X-KE15

Jumpers

Terminal

Connection point



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING	601456B UC20 40ft Control Cabinet			REVISION	06
DRAWING TITLE					
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X-KE15				
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	6 /	

FRM5103656/0B

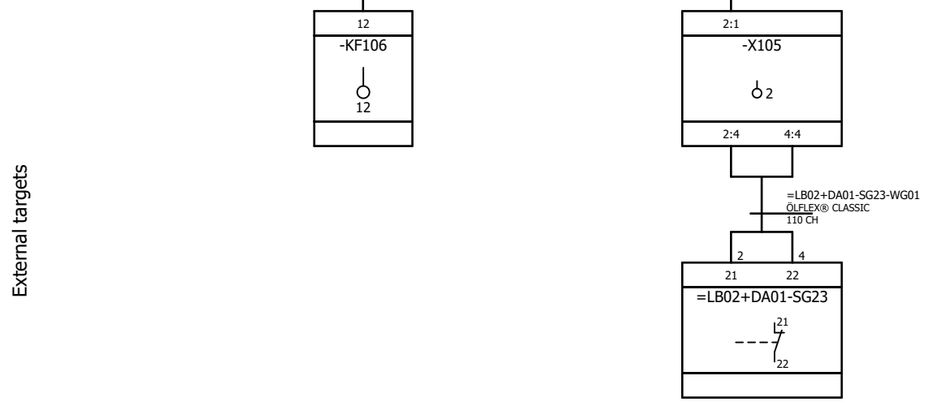
Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets



External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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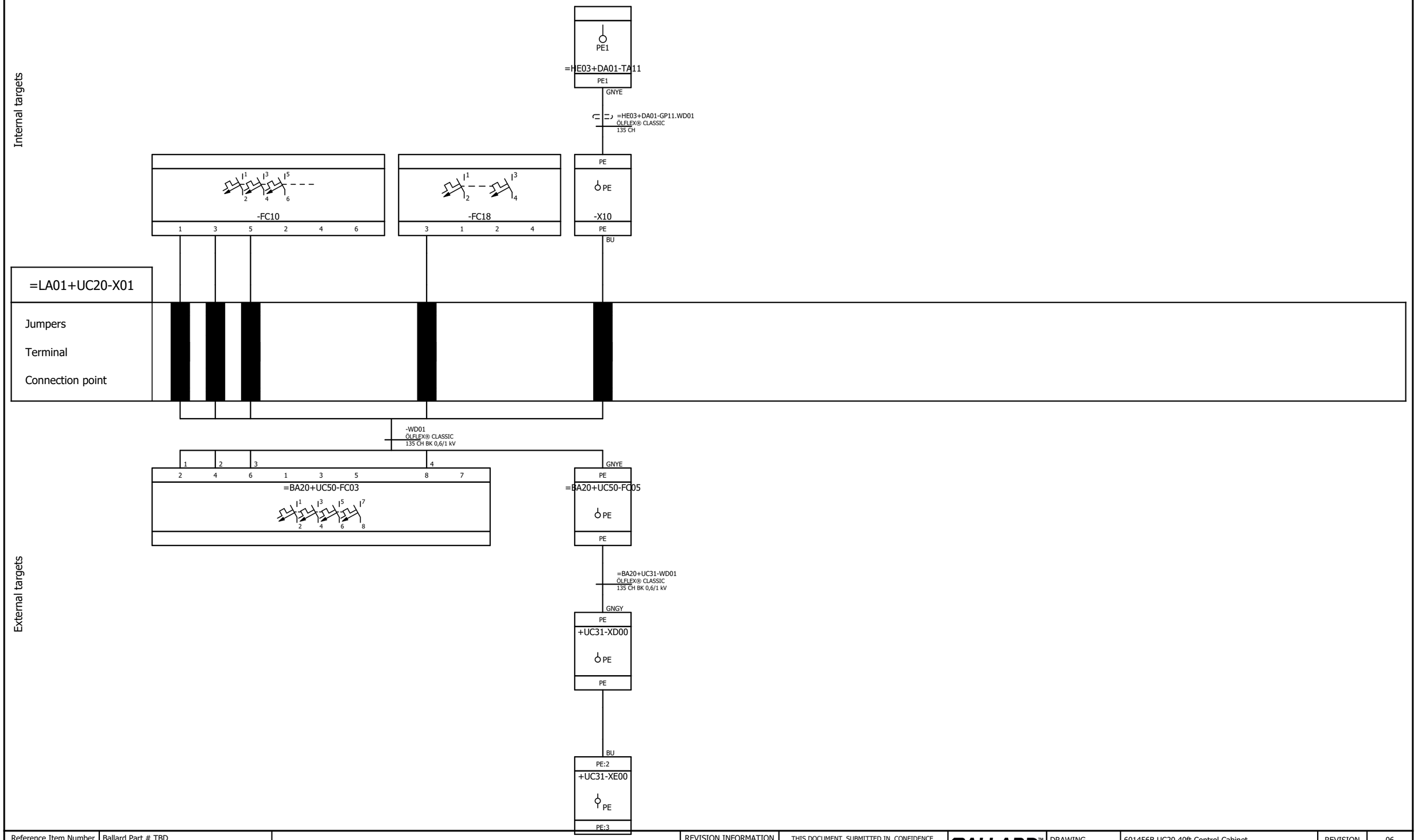
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X-KE16		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 7 /

Terminal-connection diagram

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PBL 28-Mar-25

Internal targets



External targets

Reference Item Number	Ballard Part # TBD
EPLAN Project Name	601456B - Shell Baseload Power Hub
EPLAN Revision	06
EPLAN Project Pages	628
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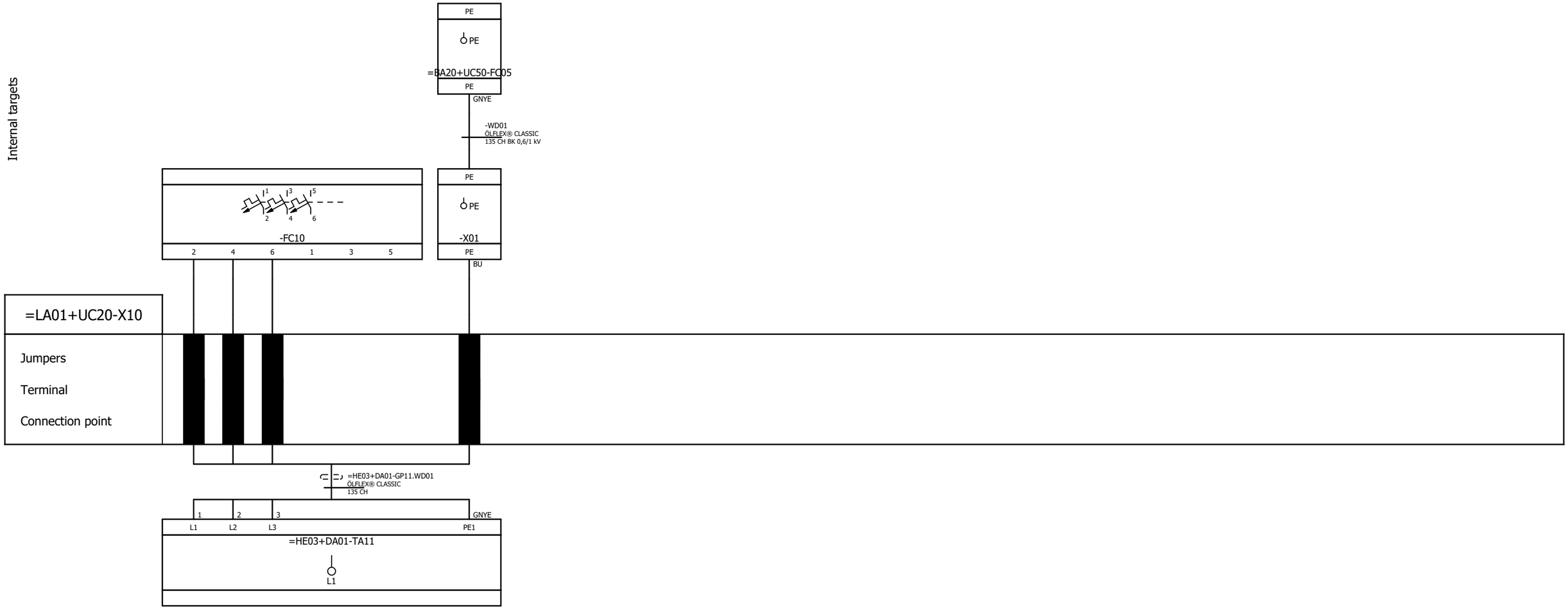
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 8 /

Terminal-connection diagram

F11_001
PBL 16-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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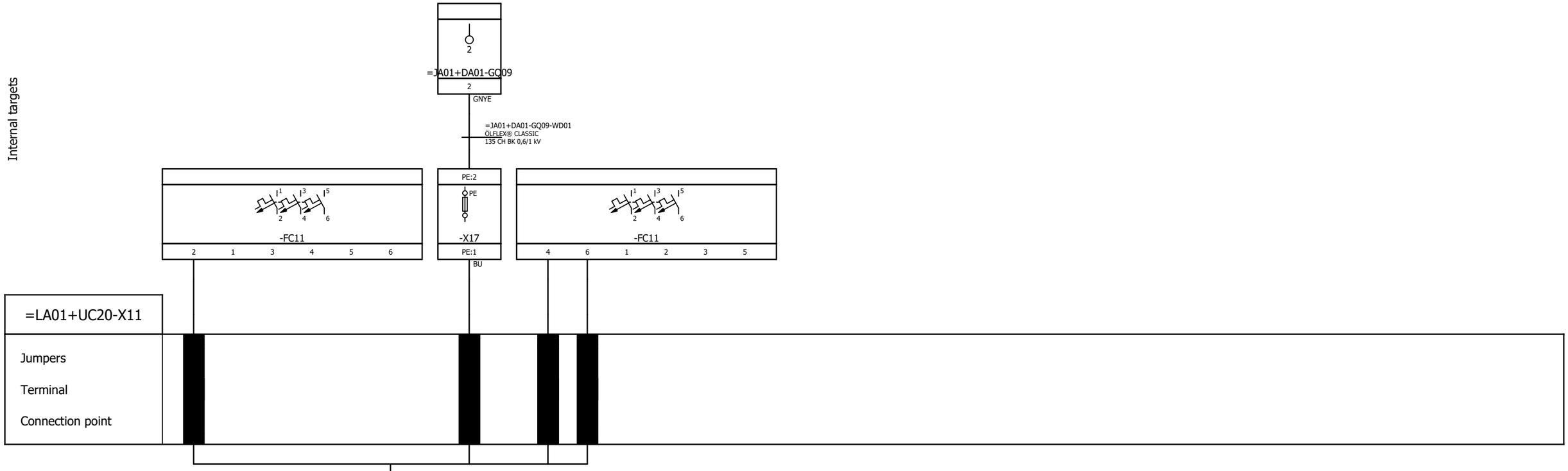
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X10		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 9 /

Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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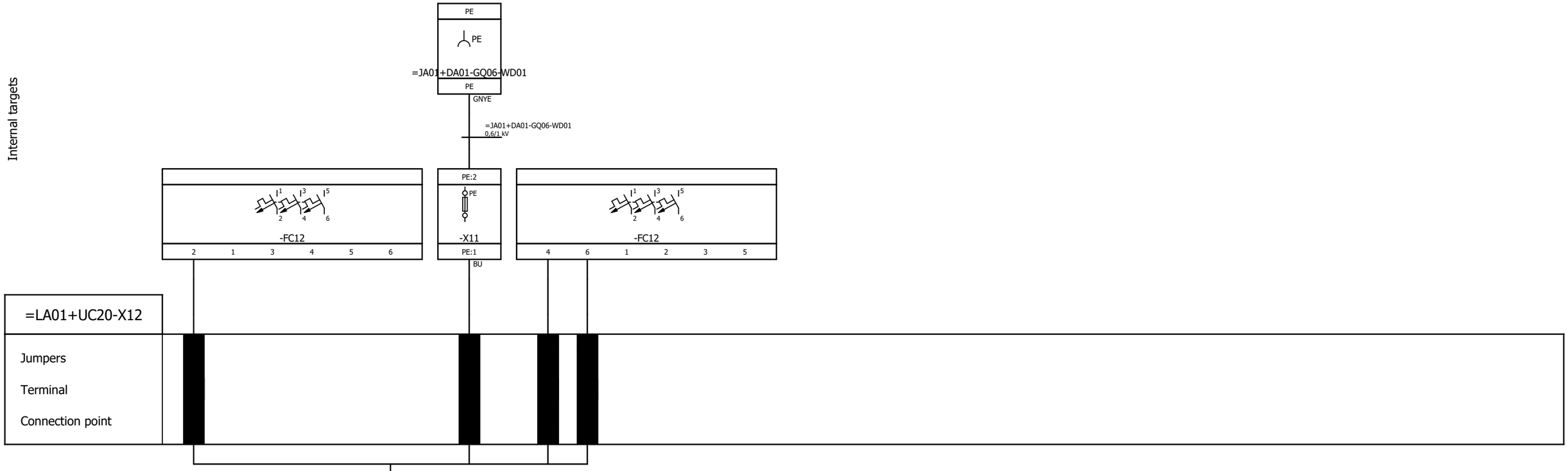
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DRAWING TITLE					
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X11				
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	10 /	

Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
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28-Mar-25

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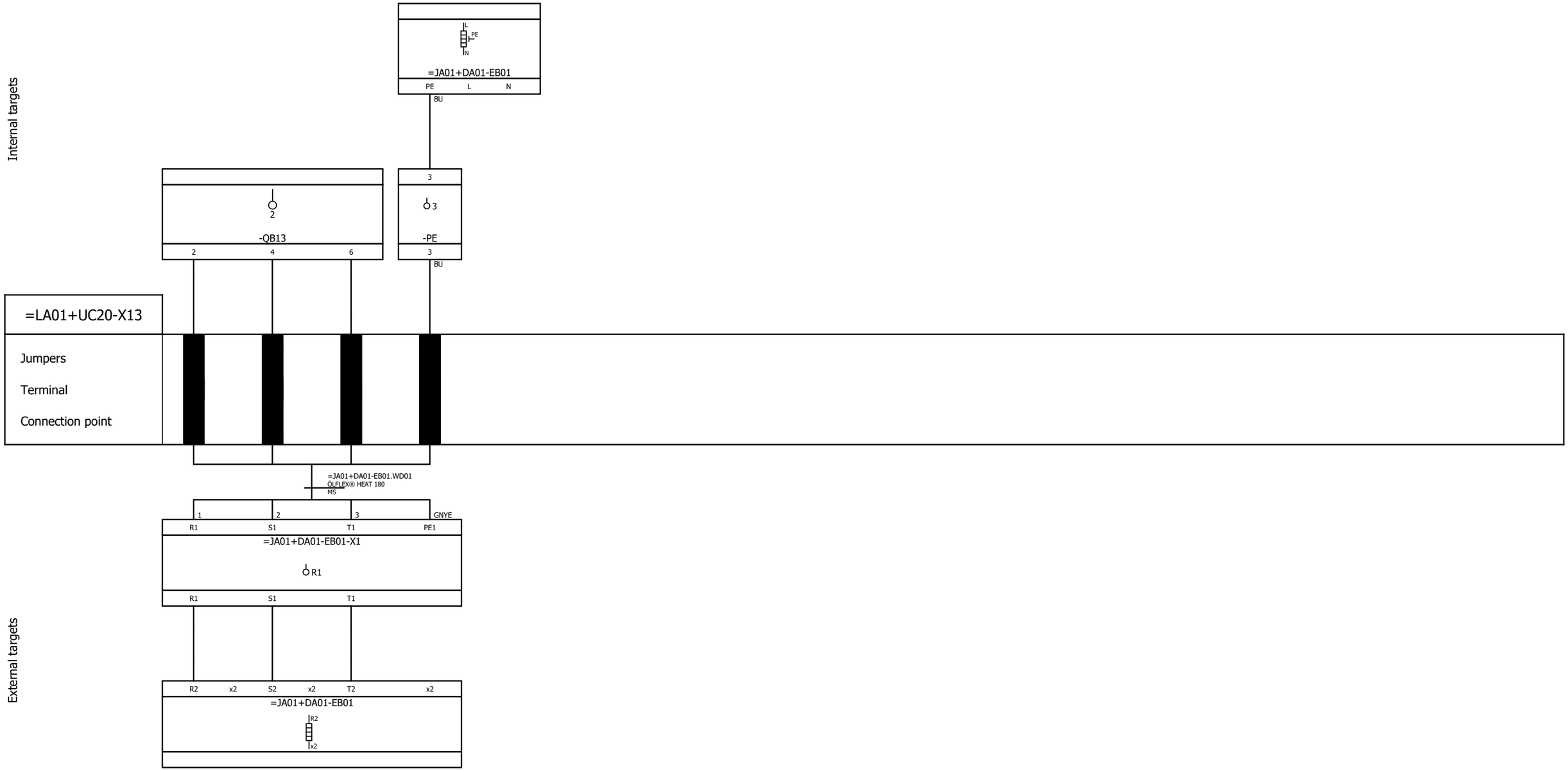
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 11 /

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Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
DESCRIPTION
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15-Oct-24

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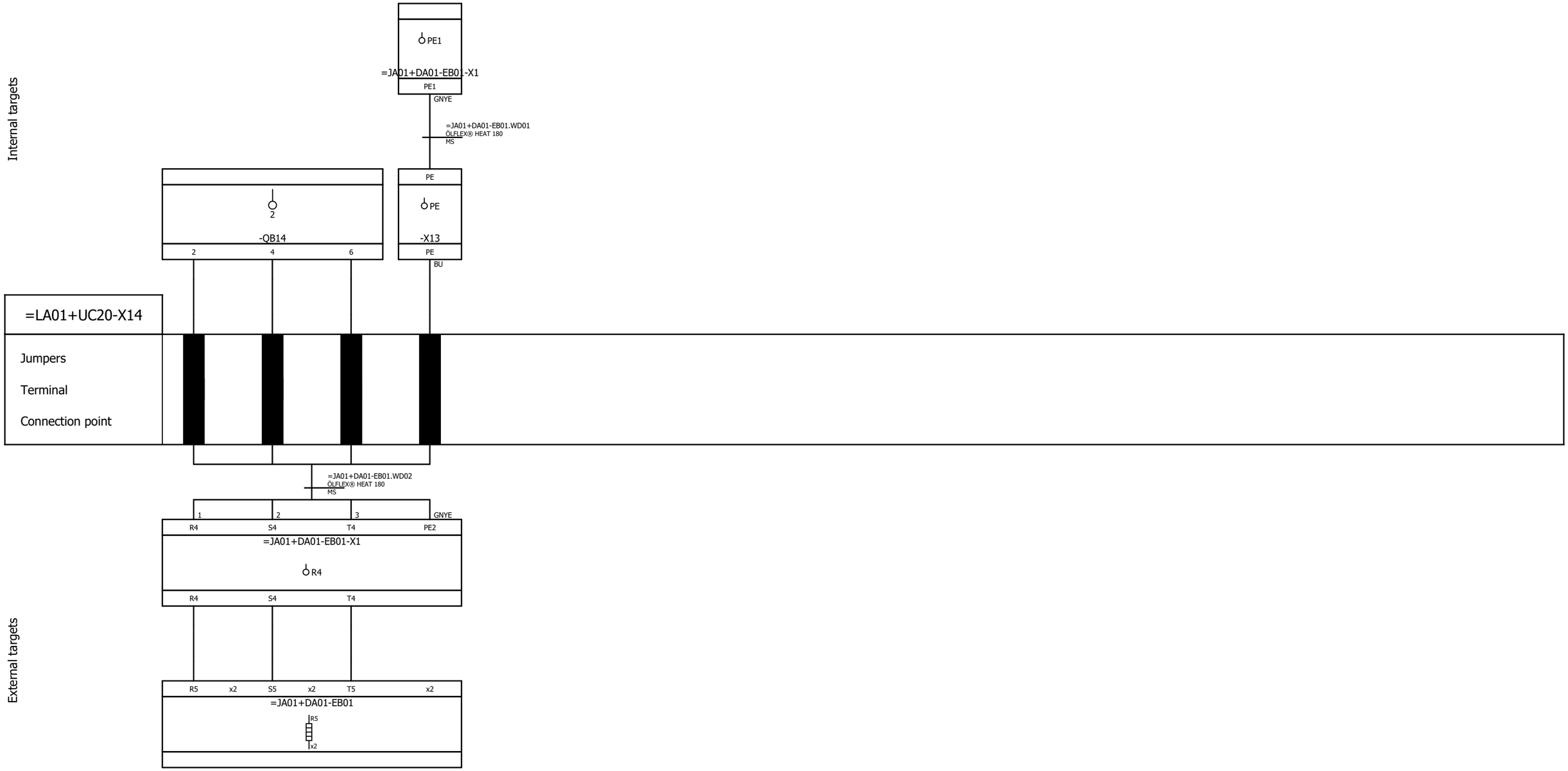
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X13		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 12 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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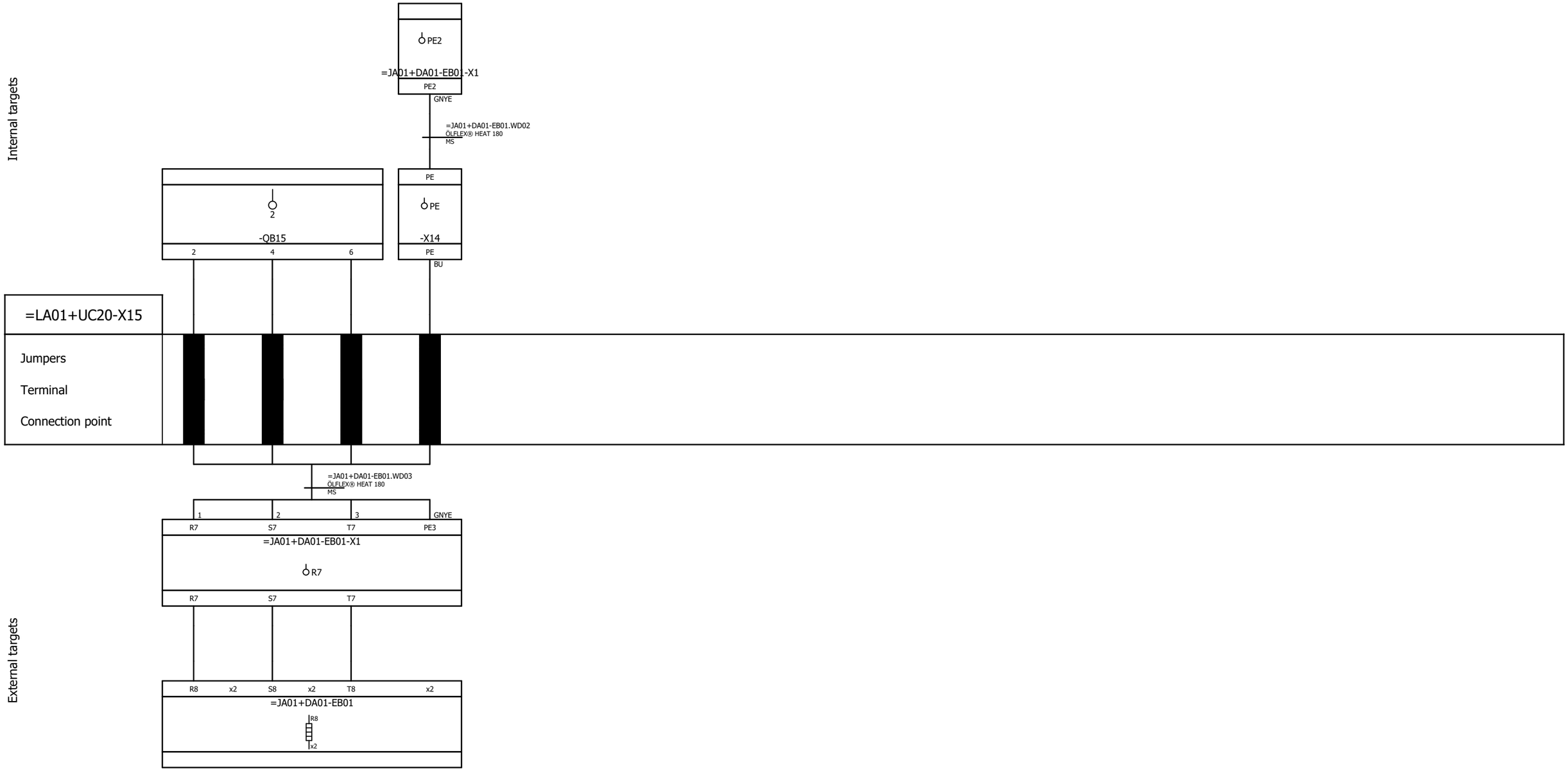
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SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X14		
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Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
DATE
15-Oct-24

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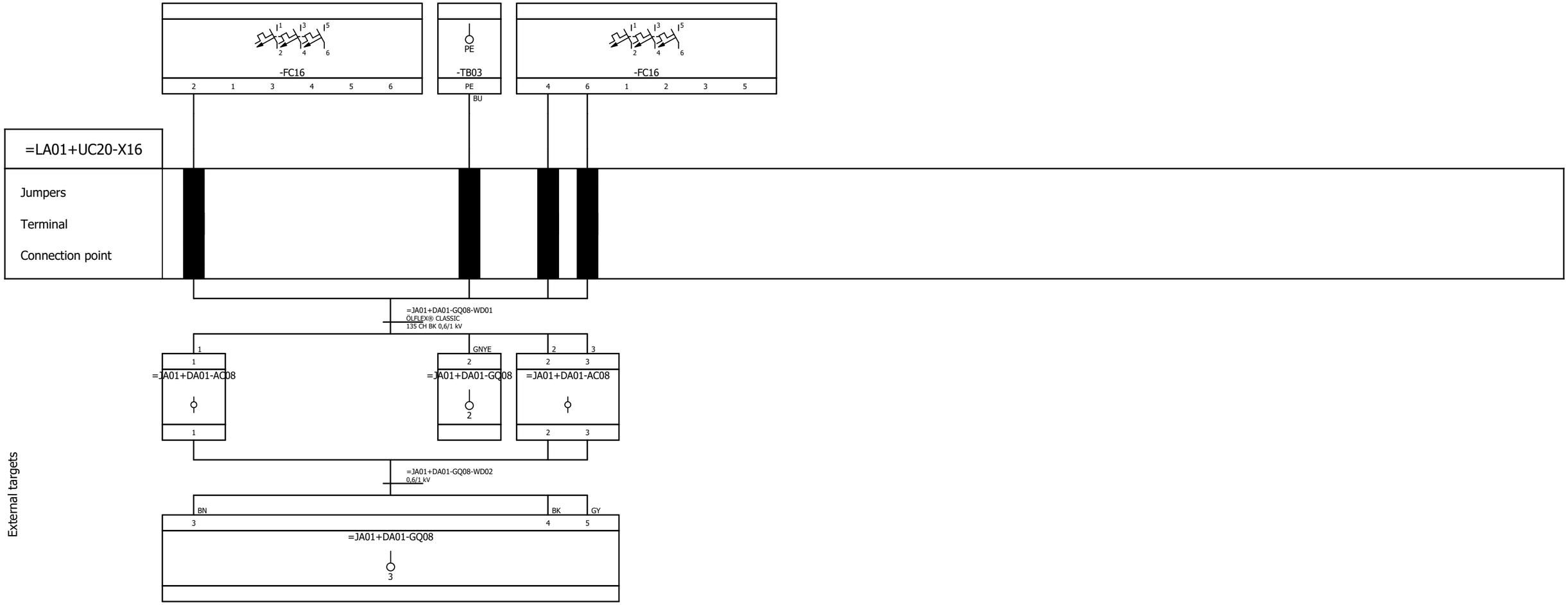
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Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
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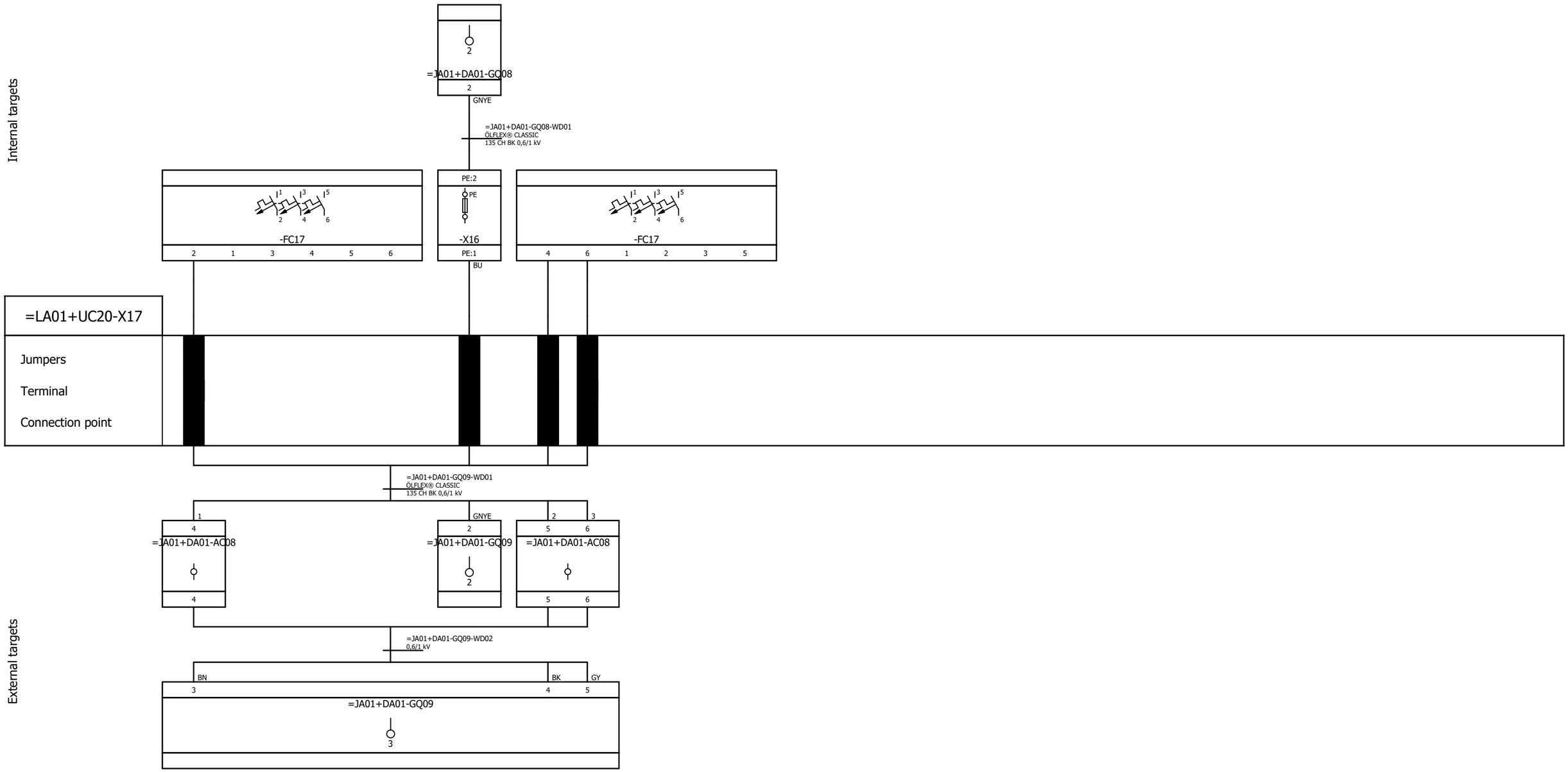
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X16		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 15 /

Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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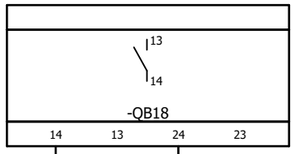
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Terminal-connection diagram

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PBL 15-Oct-24

Internal targets

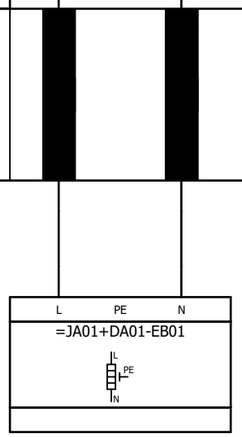


=LA01+UC20-X18

Jumpers

Terminal

Connection point



External targets

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EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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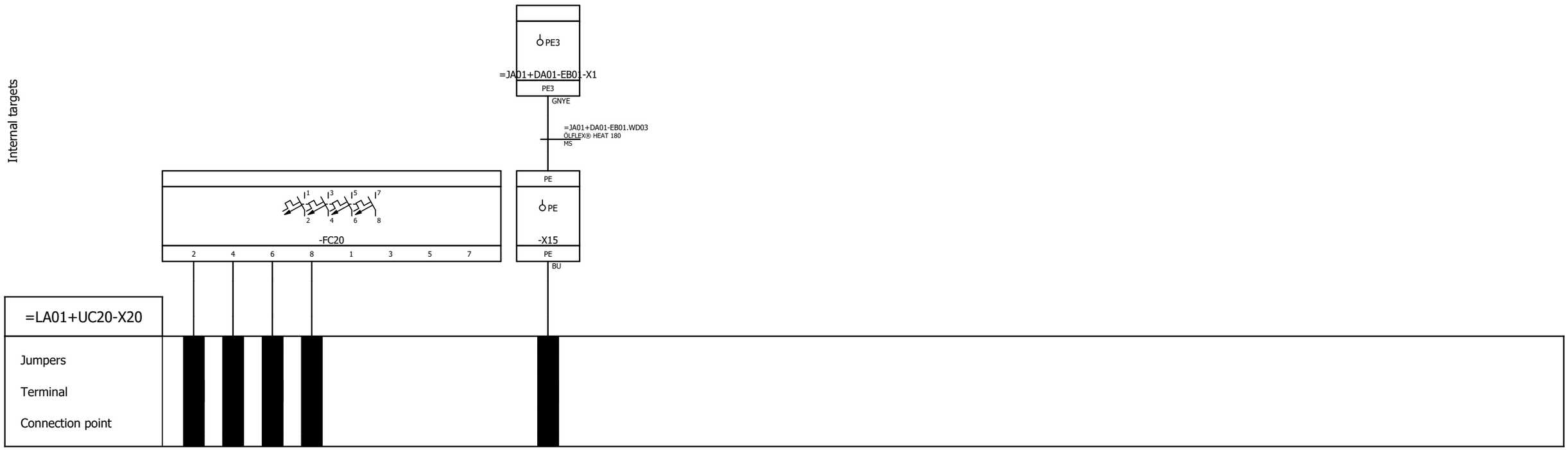
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Terminal-connection diagram

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Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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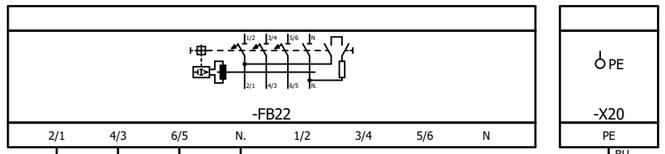
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 18 /

Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



=LA01+UC20-X22

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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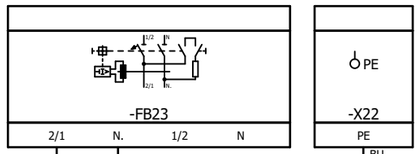
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 19 /

Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



=LA01+UC20-X23

Jumpers	
Terminal	
Connection point	

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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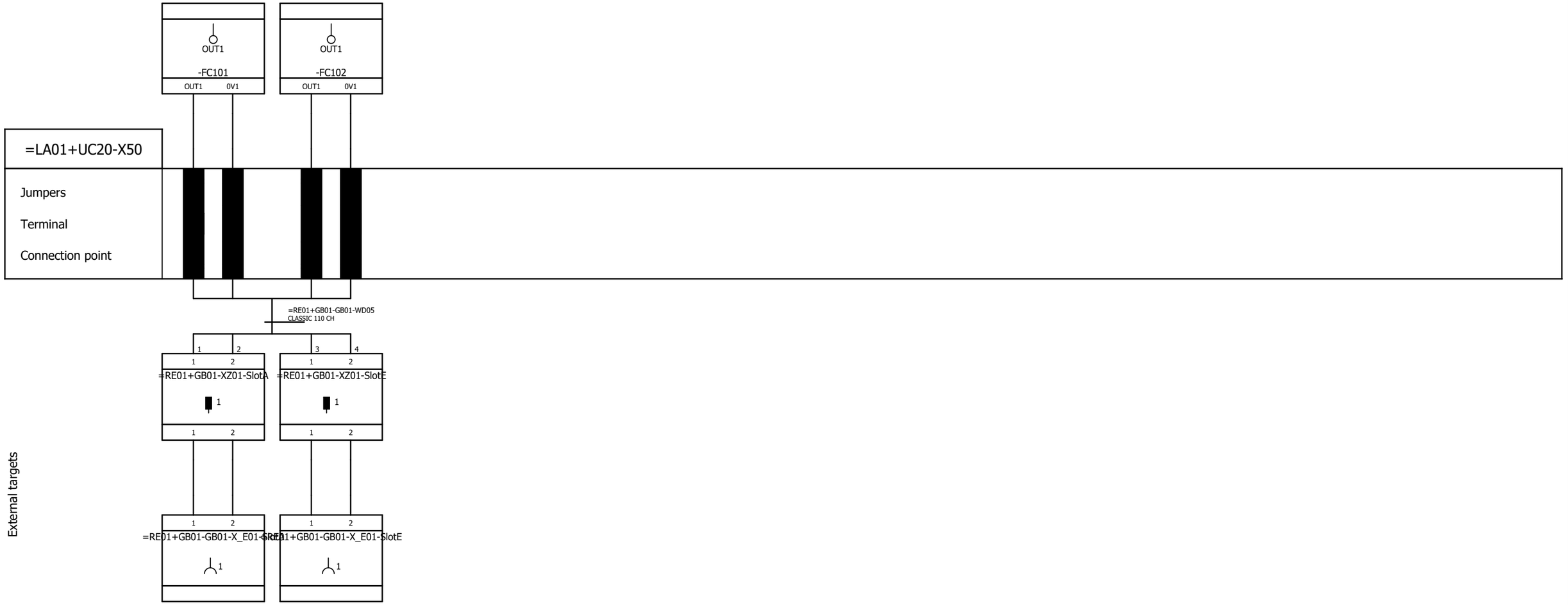
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Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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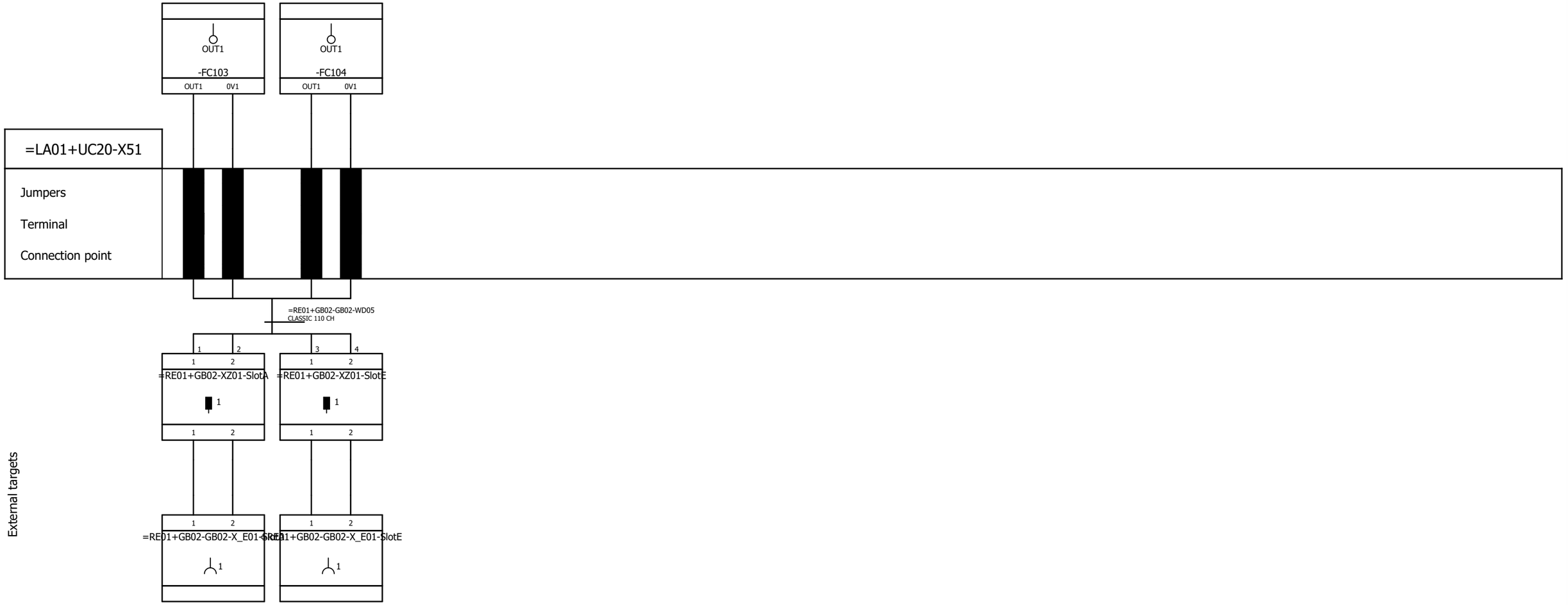
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Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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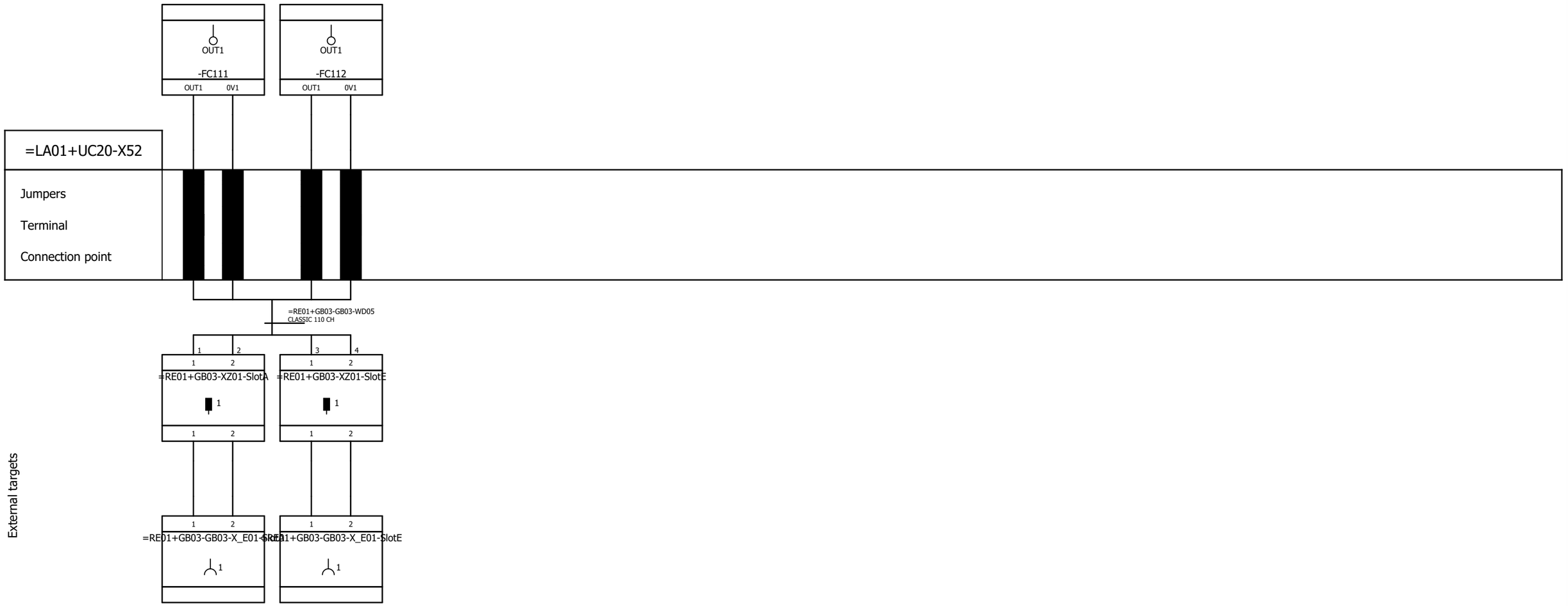
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Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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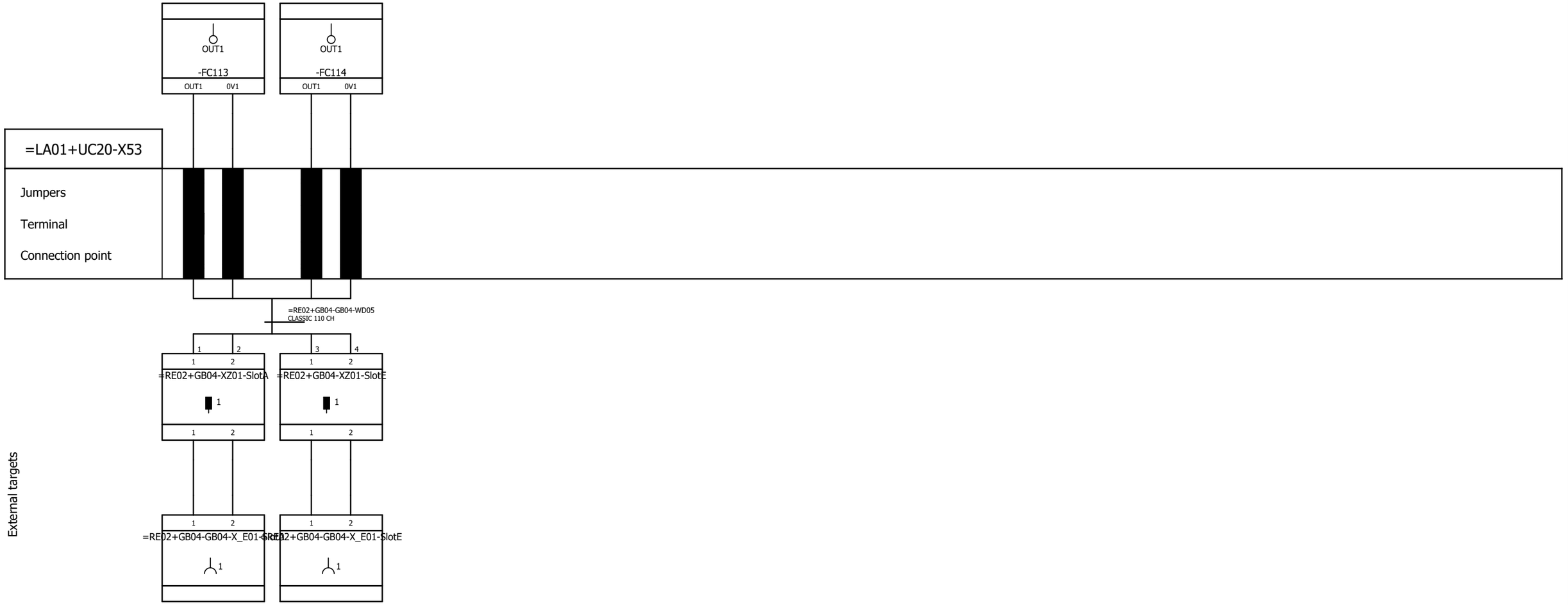
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Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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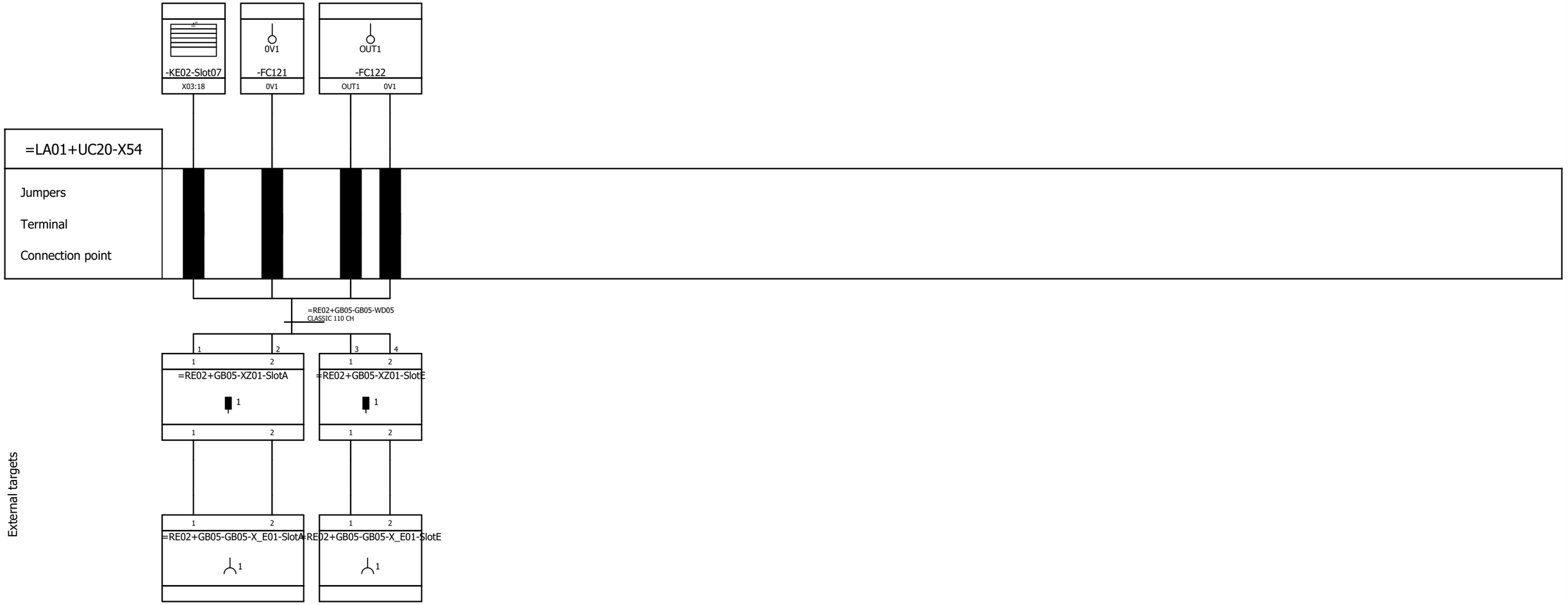
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Terminal-connection diagram

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PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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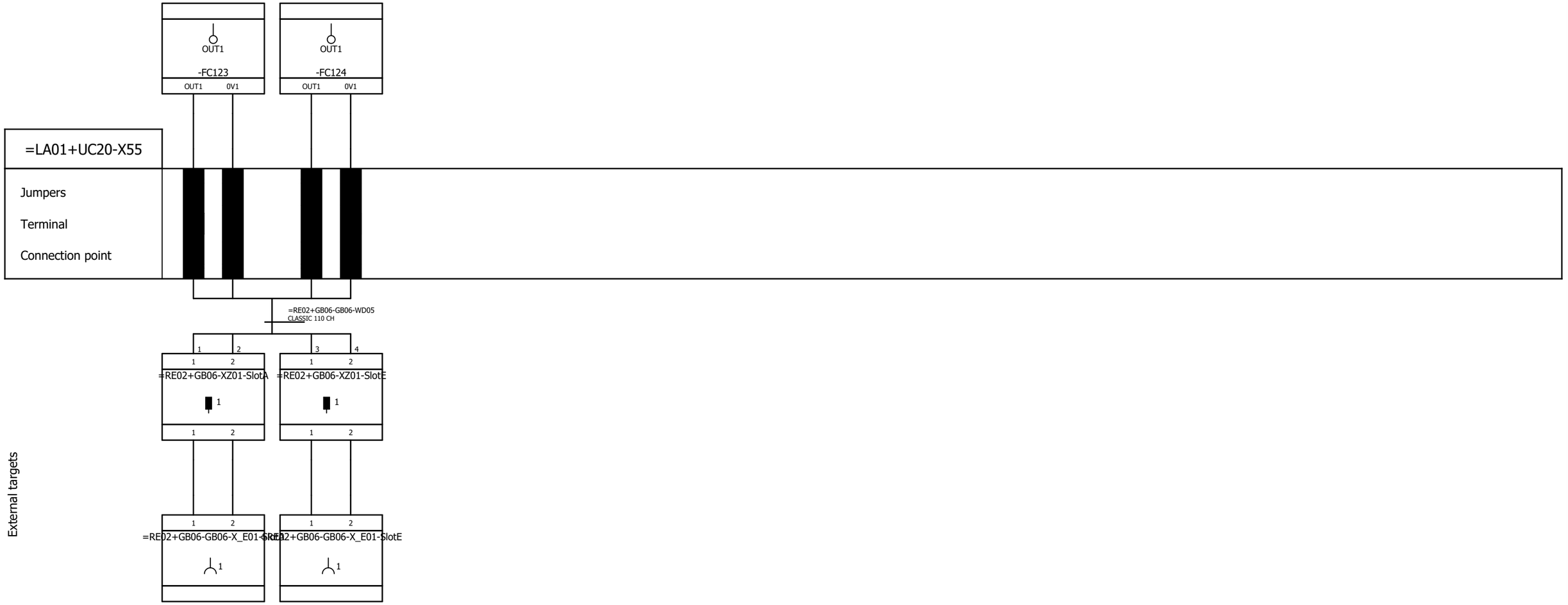
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Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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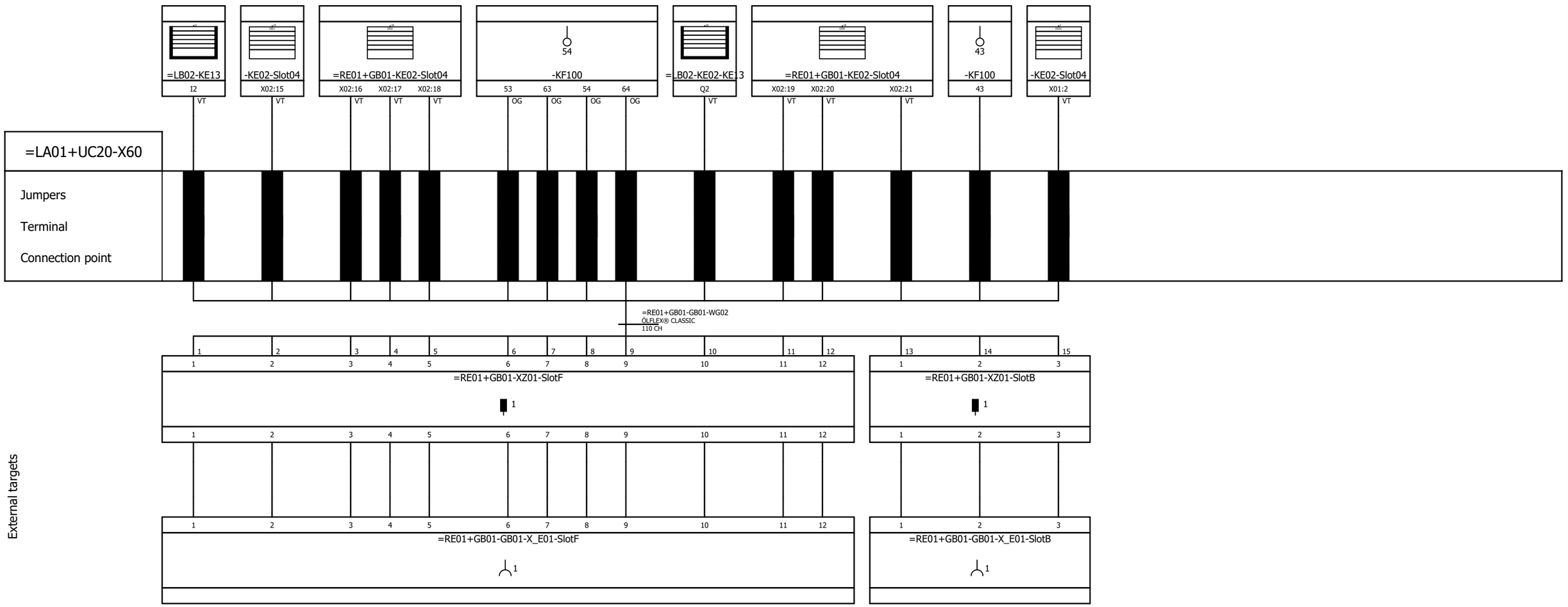
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Terminal-connection diagram

F11_001
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Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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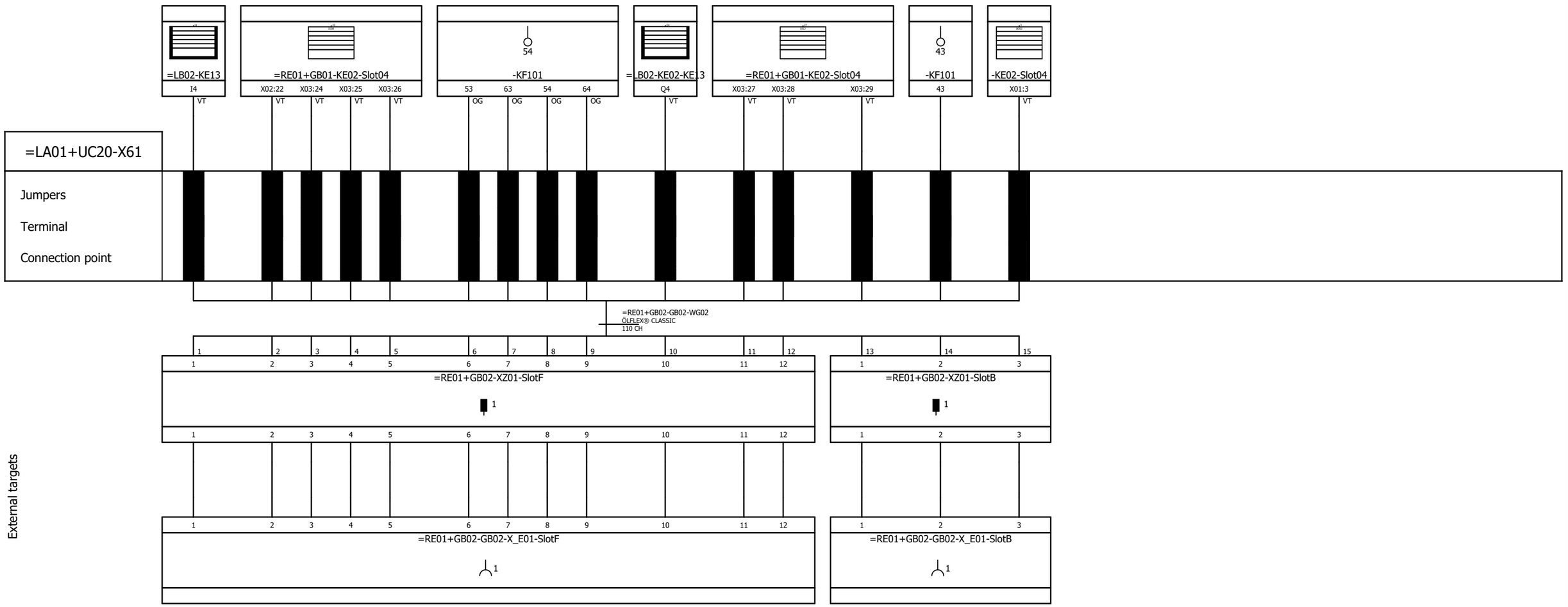
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Terminal-connection diagram

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Internal targets

External targets



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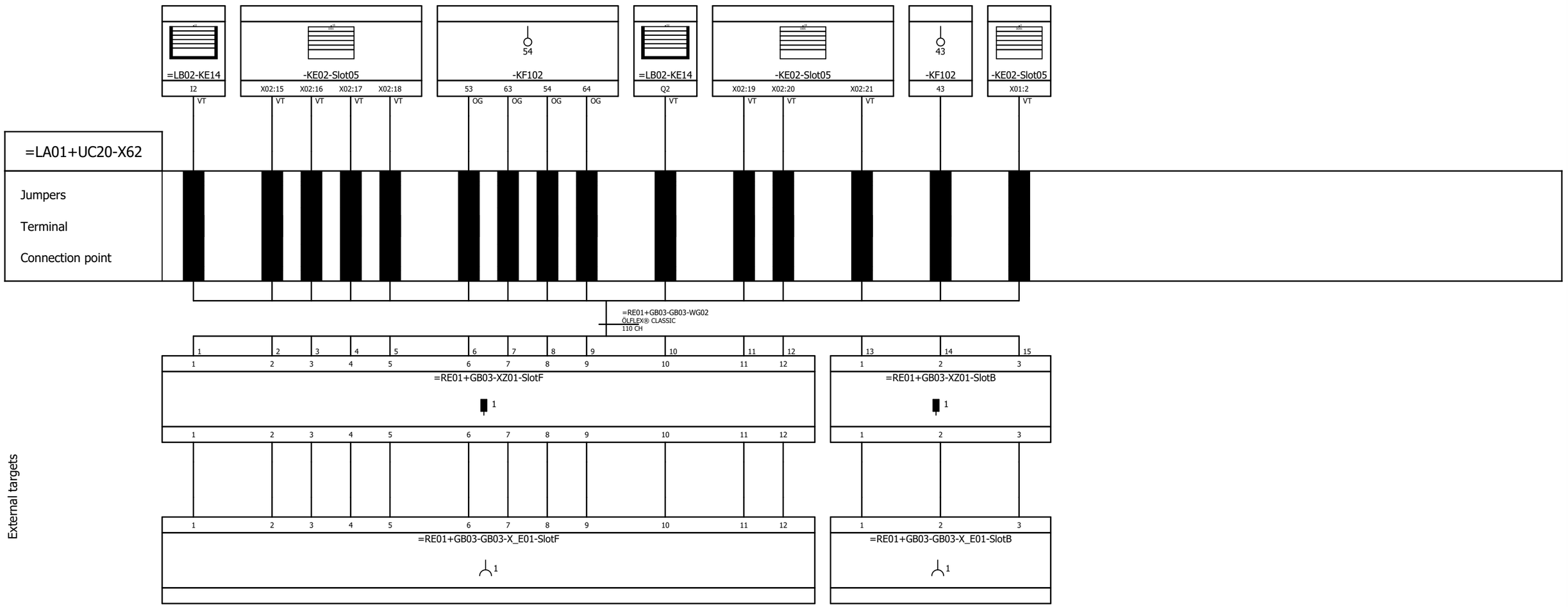
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X61		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 28 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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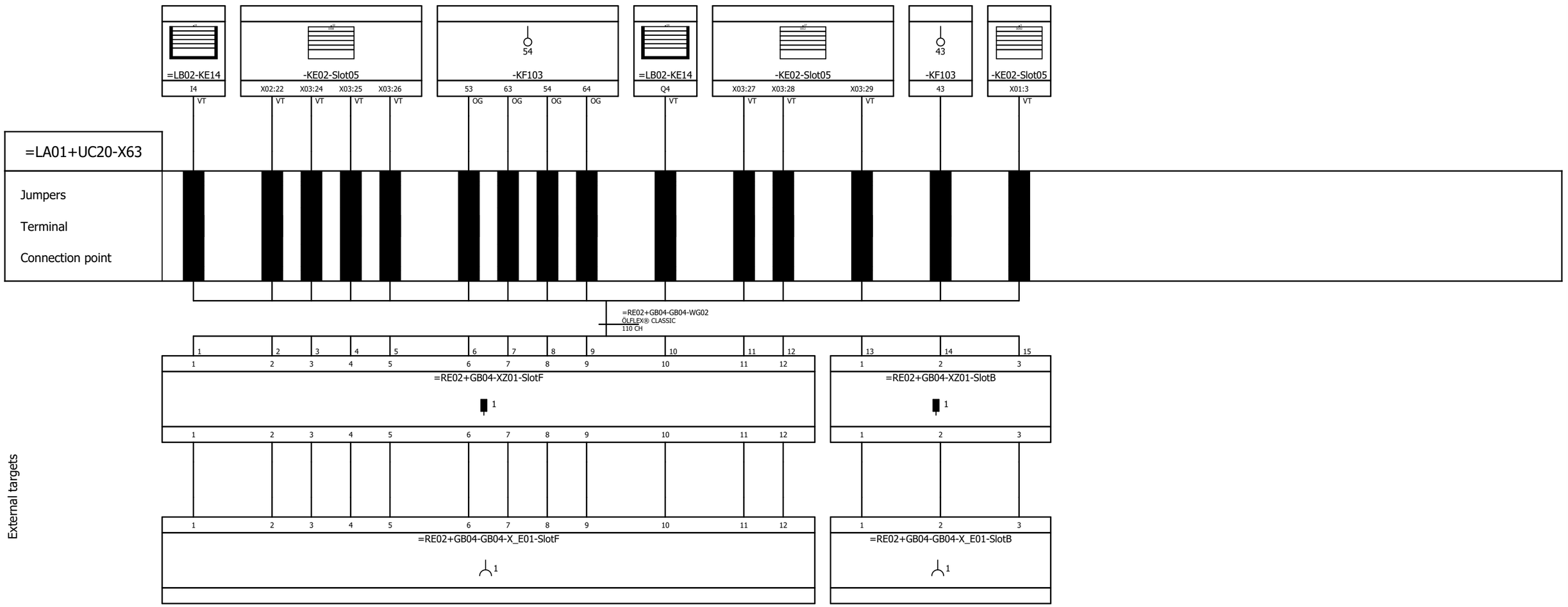
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X62		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 29 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
DESCRIPTION
DATE
15-Oct-24

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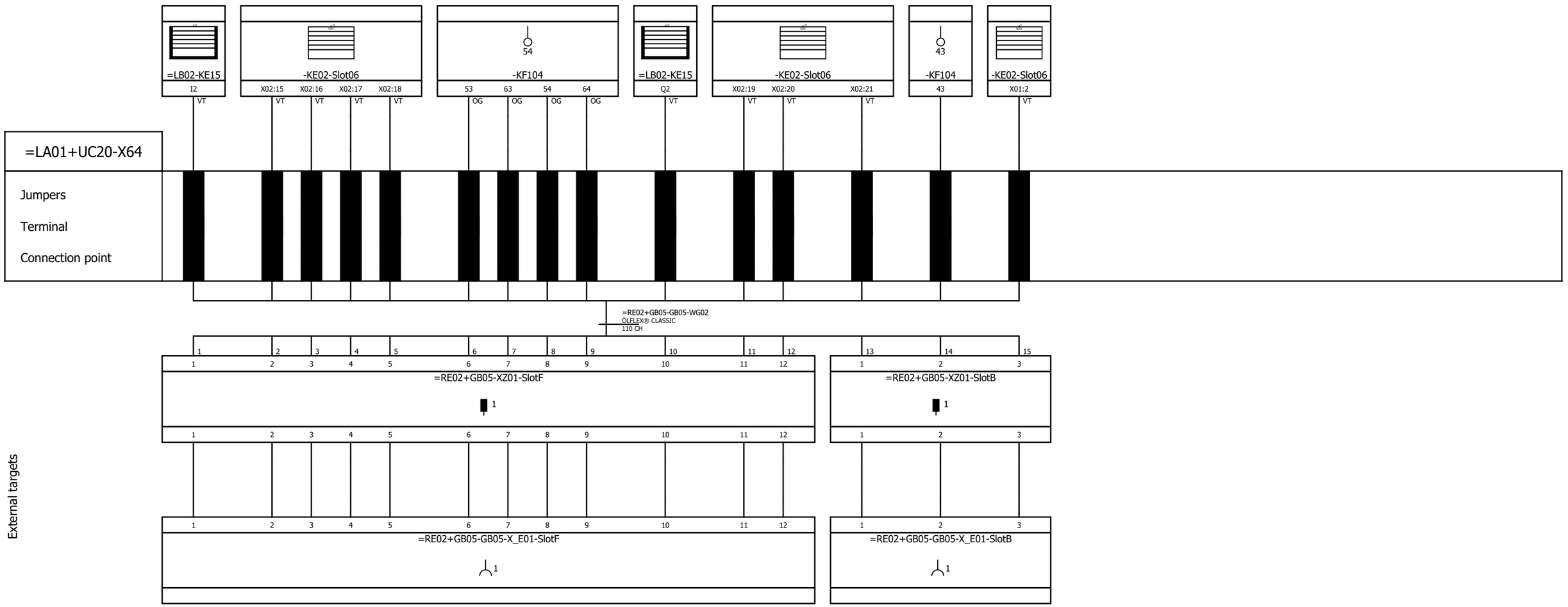
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X63		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 30 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
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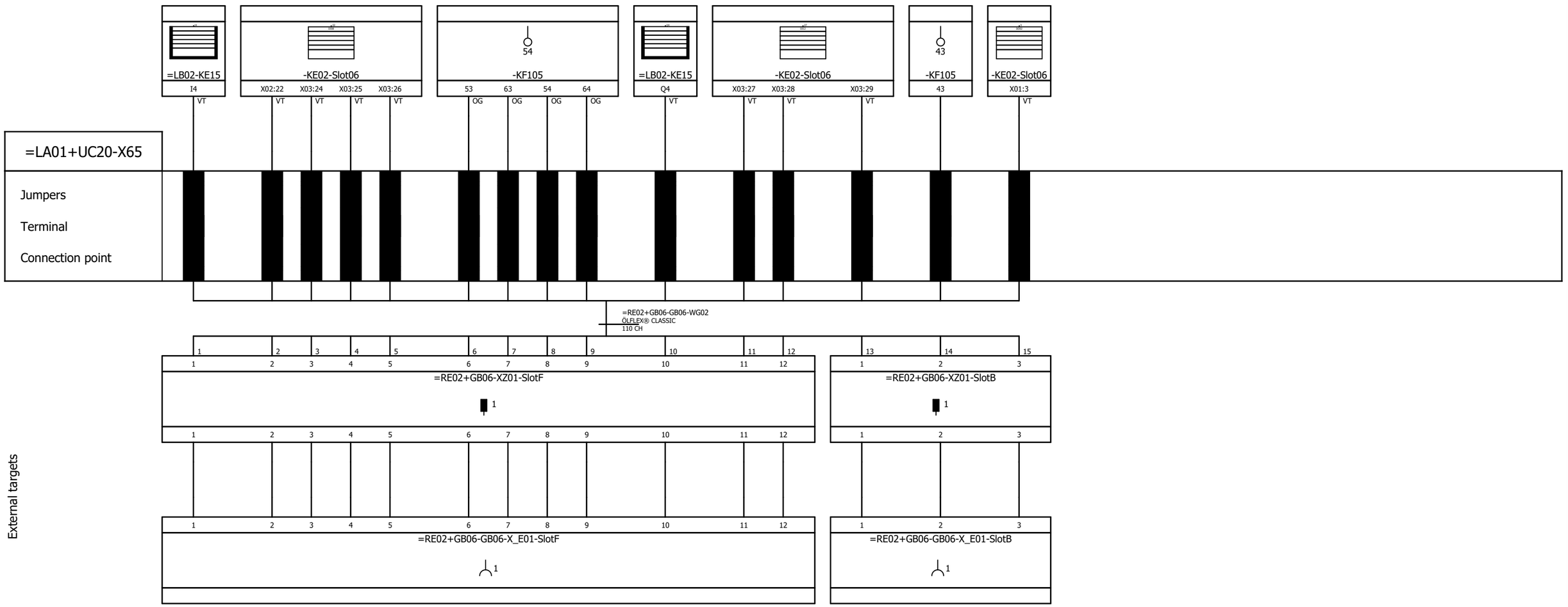
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X64		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 31 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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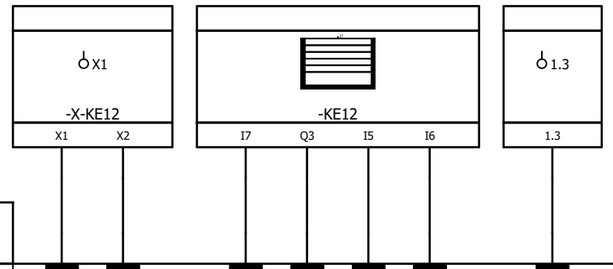
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X65		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 32 /

Terminal-connection diagram

F11_001
PBL 20-Nov-24

Internal targets



=LA01+UC20-X100

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
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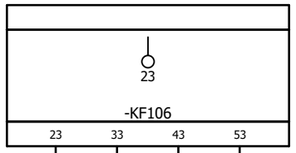
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X100		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 33 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X101

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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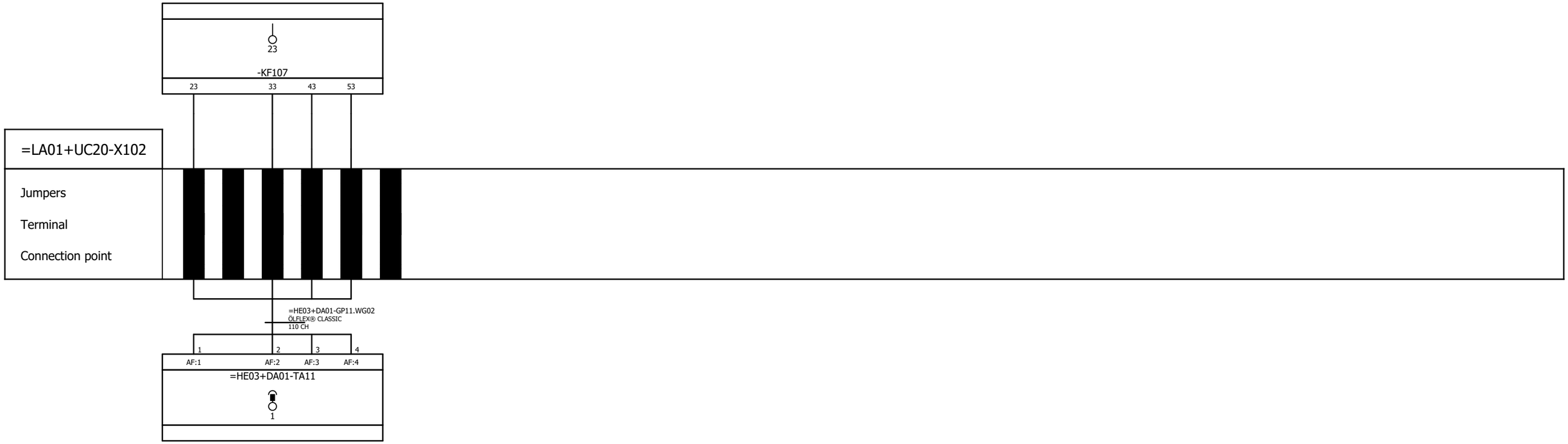
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X101		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 34 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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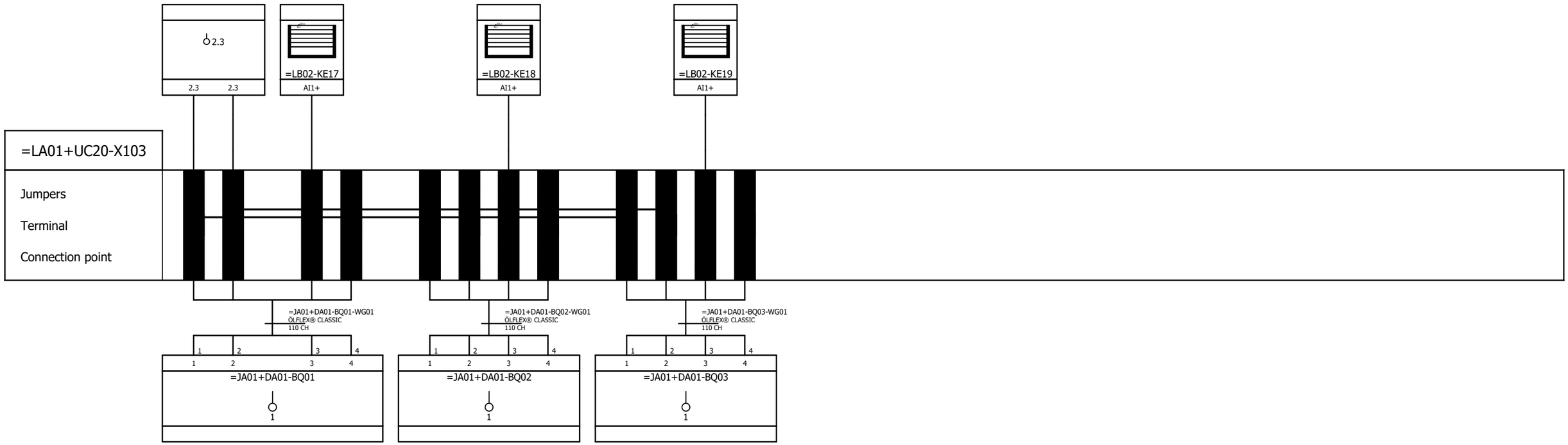
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X102		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 35 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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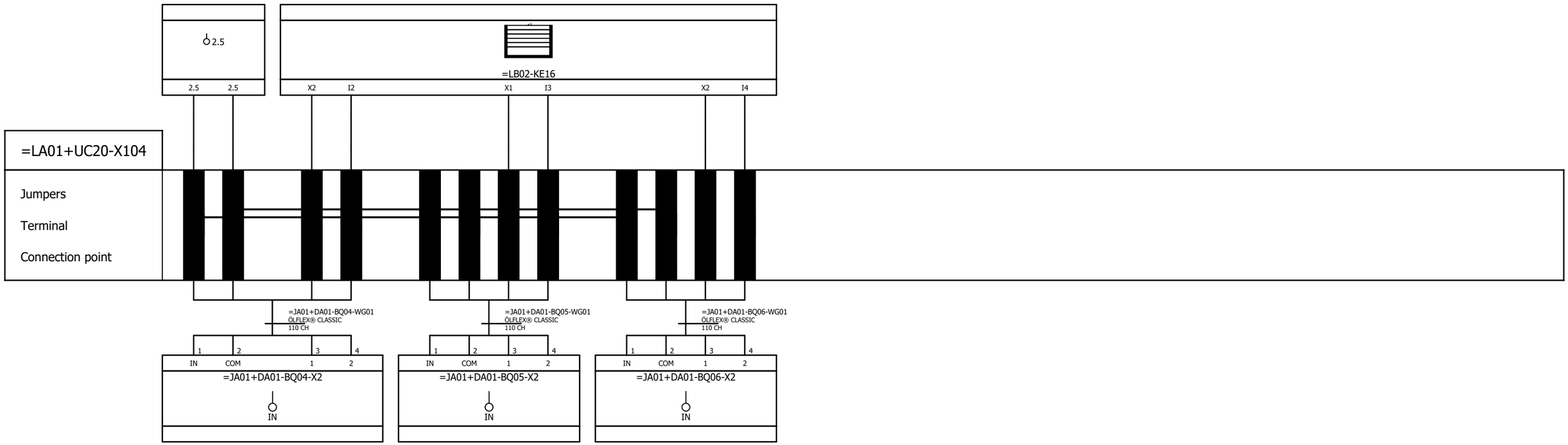
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X103		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 36 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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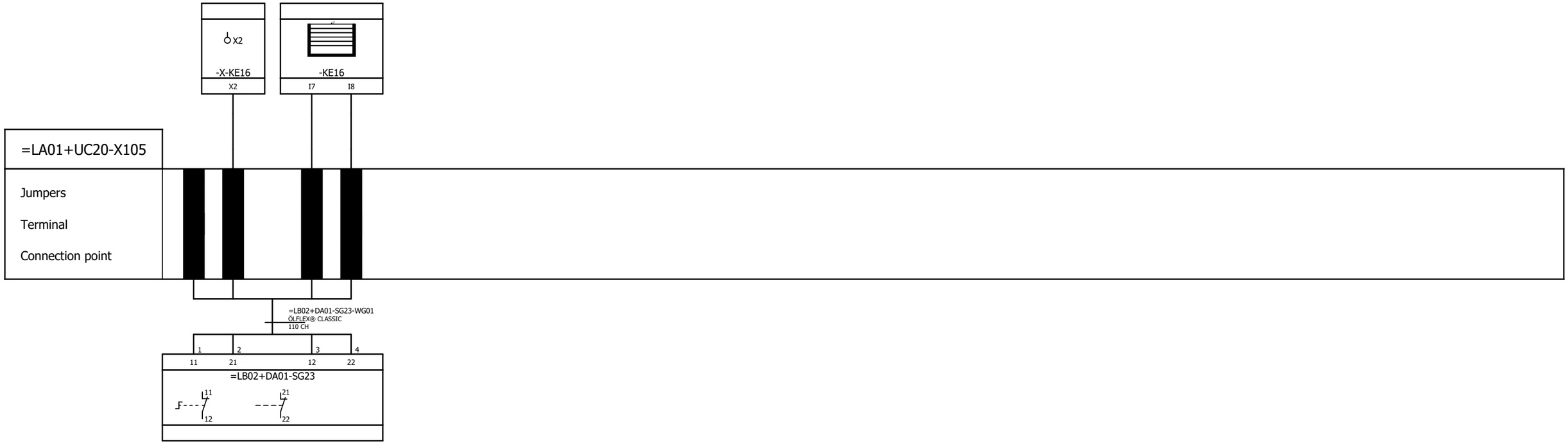
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X104		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 37 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X105		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 38 /

Terminal-connection diagram

F11_001
PBL 20-Nov-24

Internal targets

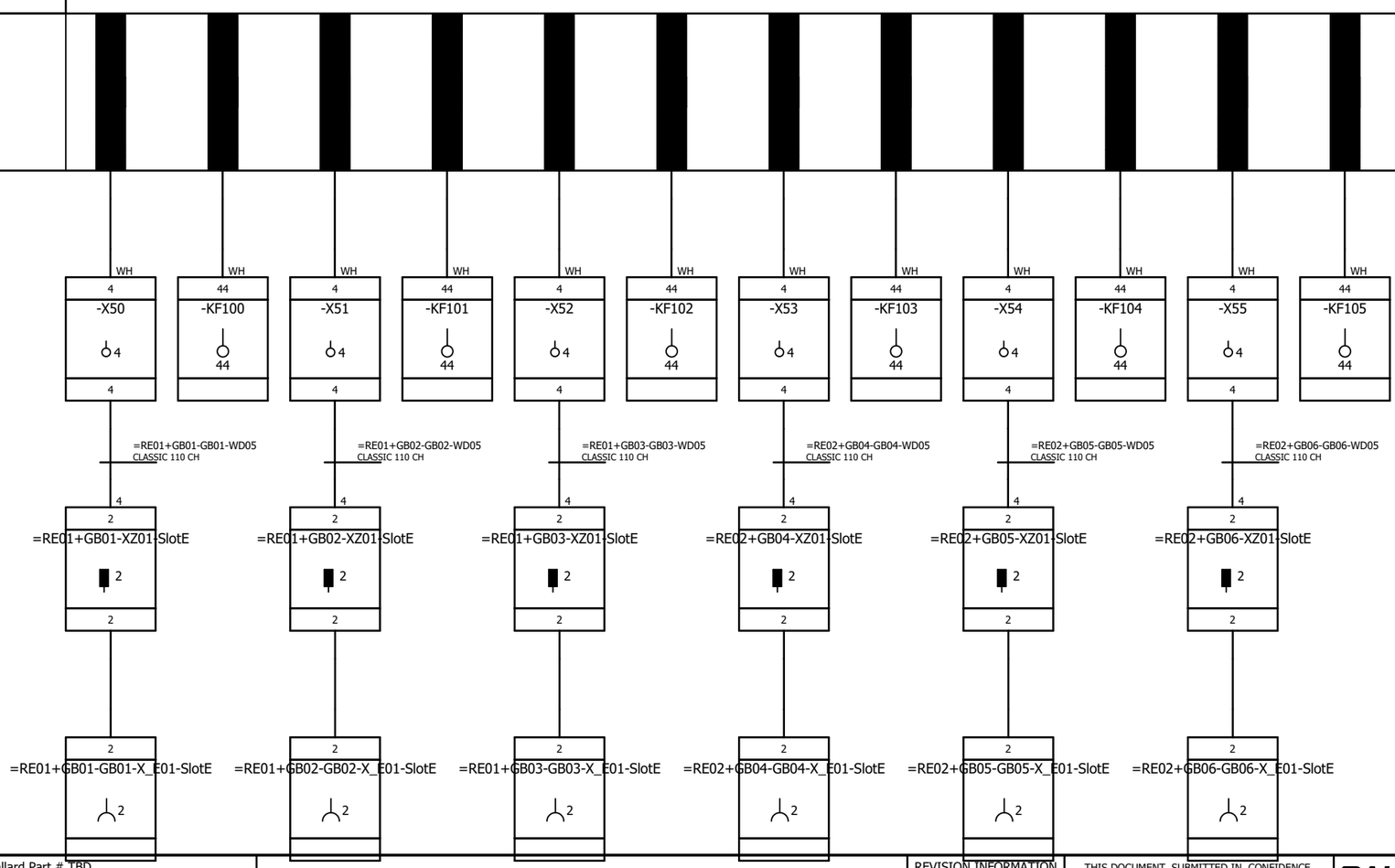
External targets

=LA01+UC20-X106

Jumpers

Terminal

Connection point



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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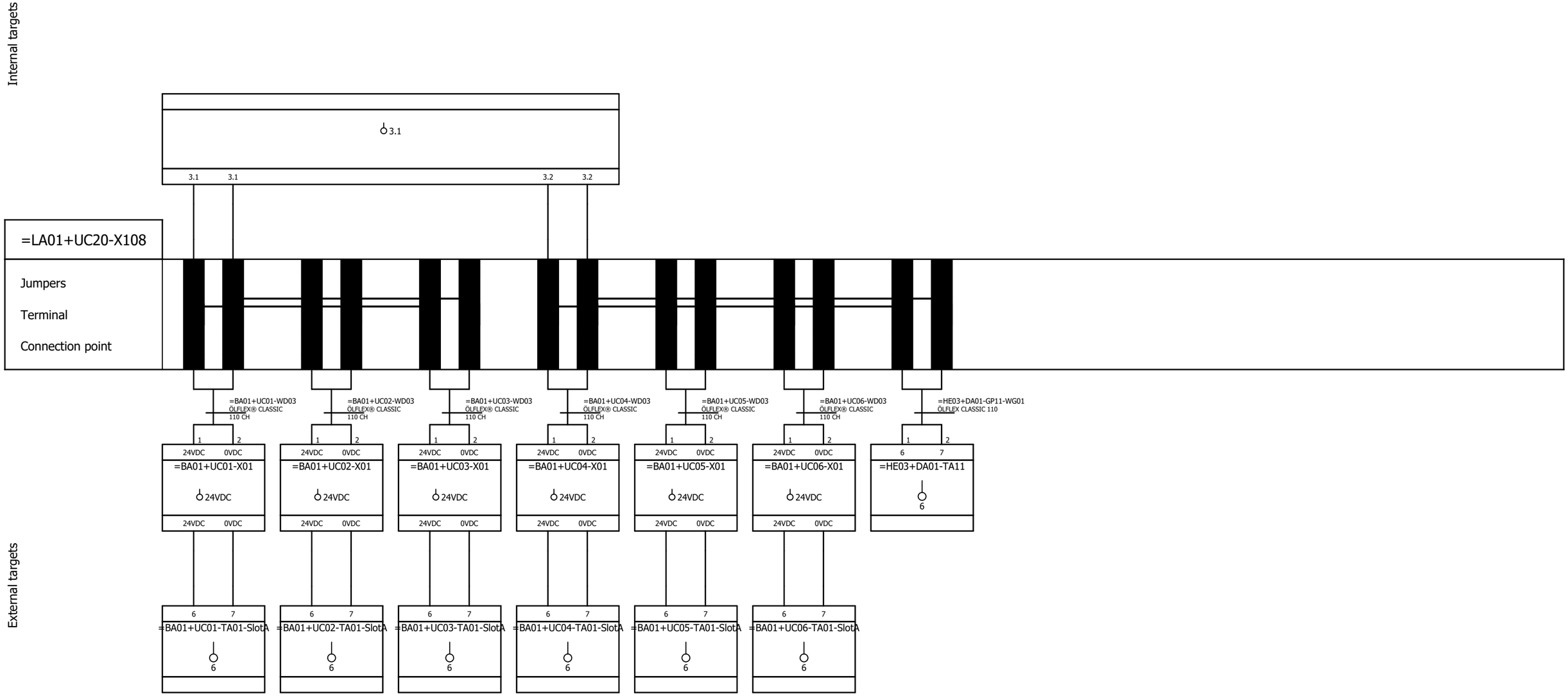
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X106		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 39 /

Terminal-connection diagram

F11_001
PBL 16-Oct-24



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X108		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 40 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X110		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 41 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

External targets

=LA01+UC20-X120

Jumpers

Terminal

Connection point

-KE03-Slot4

X01:1 X01:2 X01:3 X02:4 X02:5 X02:6 X03:7 X03:8 X03:9 X04:10 X04:11 X04:12 X05:13 X05:14 X05:15 X06:16

AI20 2

=BA01+UC01-BT01-WG01 PUR BN WH
=BA01+UC01-BT01-XG01 1 2
=BA01+UC01-BT01 1 2

=BA02+UC04-BT01-WG01 PUR BN
=BA02+UC04-BT01-XG01 1
=BA02+UC04-BT01 1

=BA01+UC01-BT01-WG01 PUR BU BK
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Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X120		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 42 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

=LA01+UC20-X120

Jumpers

Terminal

Connection point

-KE03-Slot4 X06:17 — 17 AI23

-KE01-Slot5 X08:22

-KE03-Slot4 X06:18 — 18 AI24

-KE01-Slot5 X08:23 X08:24 — 23

=BA02+UC06-BT01-WG01 PUR BU 3

=JA01+UC07-BT01-WG01 PUR WH 2

=BA02+UC06-BT01-WG01 PUR BK 4

=JA01+UC07-BT01-WG01 PUR BU BK 3 4

=BA02+UC06-BT01-XG01 3 3

=JA01+UC07-BT01-XG01 2 2

=BA02+UC06-BT01-XG01 4 4

=JA01+UC07-BT01-XG01 3 3 4

External targets

=BA02+UC06-BT01 3 3

=JA01+UC07-BT01 2 2

=BA02+UC06-BT01 4 4

=JA01+UC07-BT01 3 3 4

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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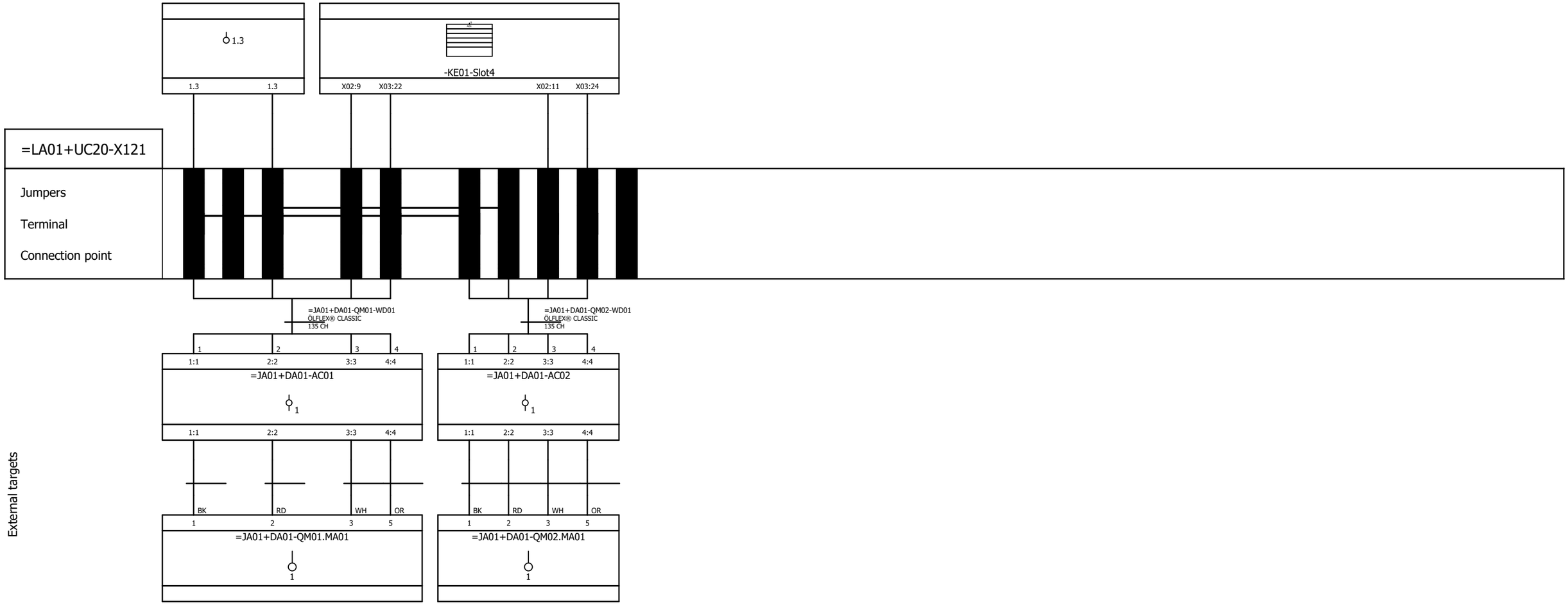
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X120		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 43 /

Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
DATE
28-Mar-25

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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X121		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 44 /

Terminal-connection diagram

F11_001
PBL 28-Mar-25

Internal targets

External targets

=LA01+UC20-X122

Jumpers

Terminal

Connection point

-KE02-Slot07 X02:9 X02:9

1.2 1.2 1.2 2.6 2.6

-KE02-Slot07 X03:22 X03:22 X03:24 X03:24 X02:11 X02:11

=JA01+DA01-QM03-WD01 ÖLFLEX® CLASSIC 135 CH
=JA01+DA01-QM05-WD01 ÖLFLEX® CLASSIC 135 CH
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=JA01+DA01-QM06-WD01 ÖLFLEX® CLASSIC 135 CH
=JA01+DA01-QM04-WD01 ÖLFLEX® CLASSIC 135 CH
=JA01+DA01-QM06-WD01 ÖLFLEX® CLASSIC 135 CH
=JA01+DA01-QM04-WD01 ÖLFLEX® CLASSIC 135 CH
=JA01+DA01-QM06-WD01 ÖLFLEX® CLASSIC 135 CH

3 3 1 2 1 2 4 1 4 1 2 3 2 3 4 4

3:3 3:3 1:1 2:2 1:1 2:2 4:4 1:1 4:4 1:1 2:2 3:3 2:2 3:3 4:4 4:4

=JA01+DA01-AC03 =JA01+DA01-AC05 =JA01+DA01-AC03 =JA01+DA01-AC05 =JA01+DA01-AC03 =JA01+DA01-AC04 =JA01+DA01-AC05 =JA01+DA01-AC06 =JA01+DA01-AC04 =JA01+DA01-AC06 =JA01+DA01-AC04 =JA01+DA01-AC06

3 3 1 1 4 1 4 1 2 2 4 4

3:3 3:3 1:1 2:2 1:1 2:2 4:4 1:1 4:4 1:1 2:2 3:3 2:2 3:3 4:4 4:4

WH WH BK RD BK RD OR BK OR BK RD WH RD WH OR OR

3 3 1 2 1 2 5 1 5 1 2 3 2 3 5 5

=JA01+DA01-QM03.MA01 =JA01+DA01-QM05.MA01 =JA01+DA01-QM03.MA01 =JA01+DA01-QM05.MA01 =JA01+DA01-QM03.MA01 =JA01+DA01-QM04.MA01 =JA01+DA01-QM05.MA01 =JA01+DA01-QM06.MA01 =JA01+DA01-QM04.MA01 =JA01+DA01-QM06.MA01 =JA01+DA01-QM04.MA01 =JA01+DA01-QM06.MA01

3 3 1 1 5 1 5 1 2 2 5 5

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
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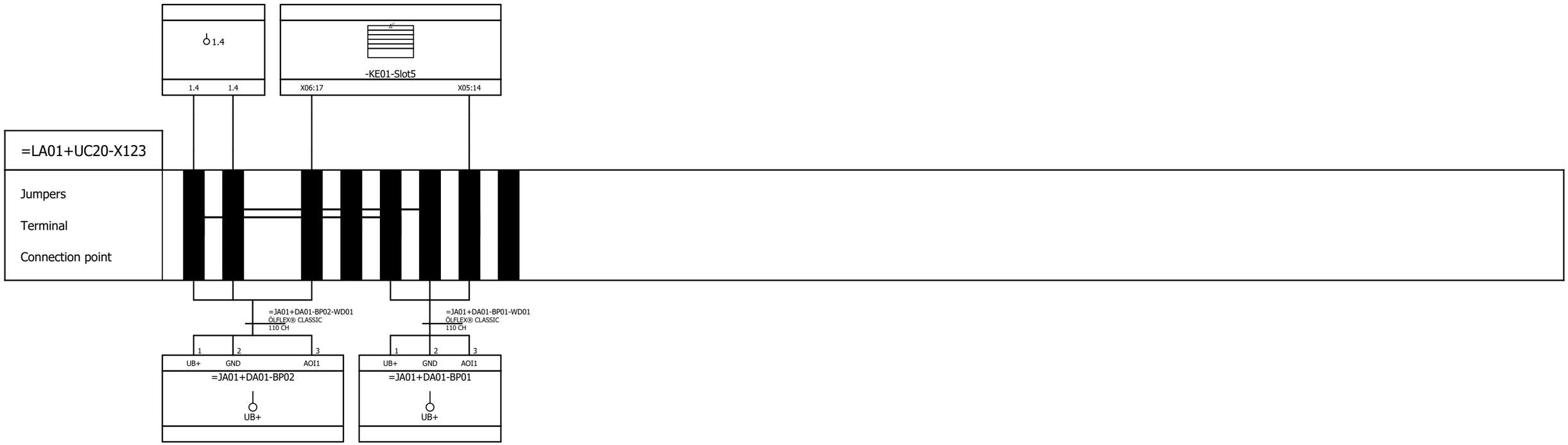
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X122		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 45 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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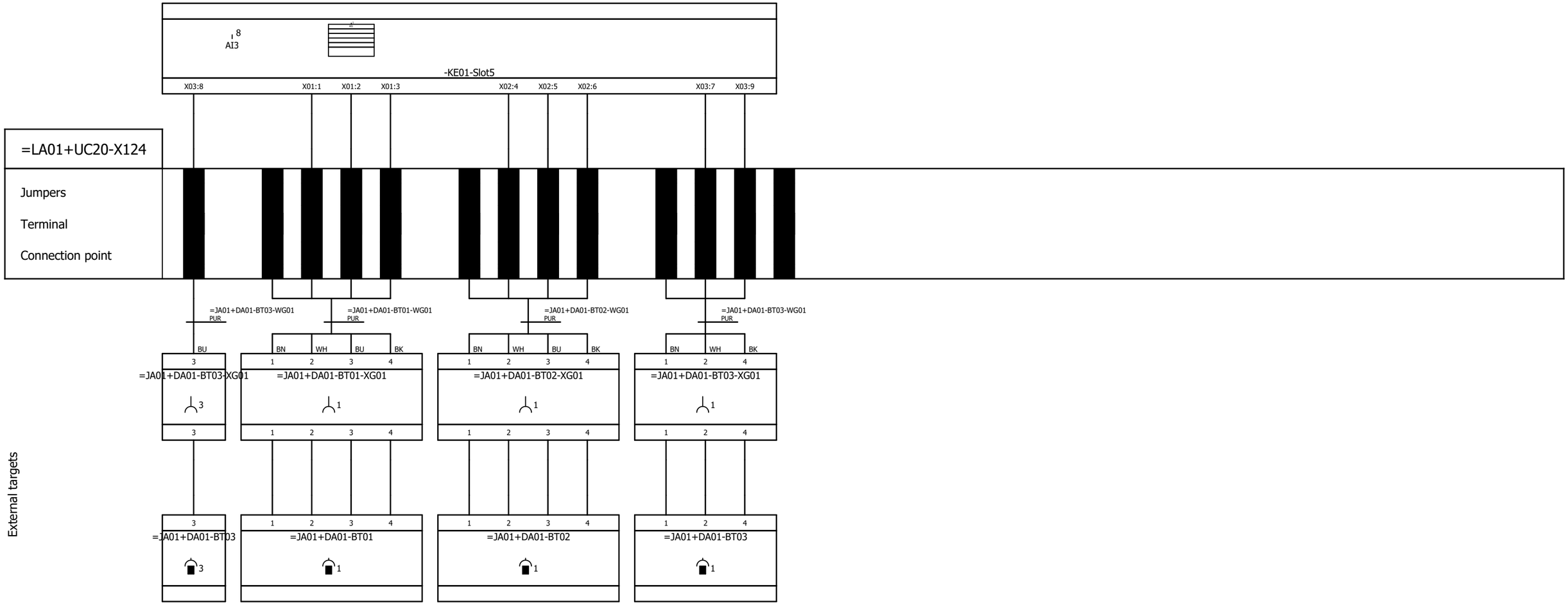
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X123		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 46 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X124		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 47 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING TITLE					
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X125				
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 48 /		

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

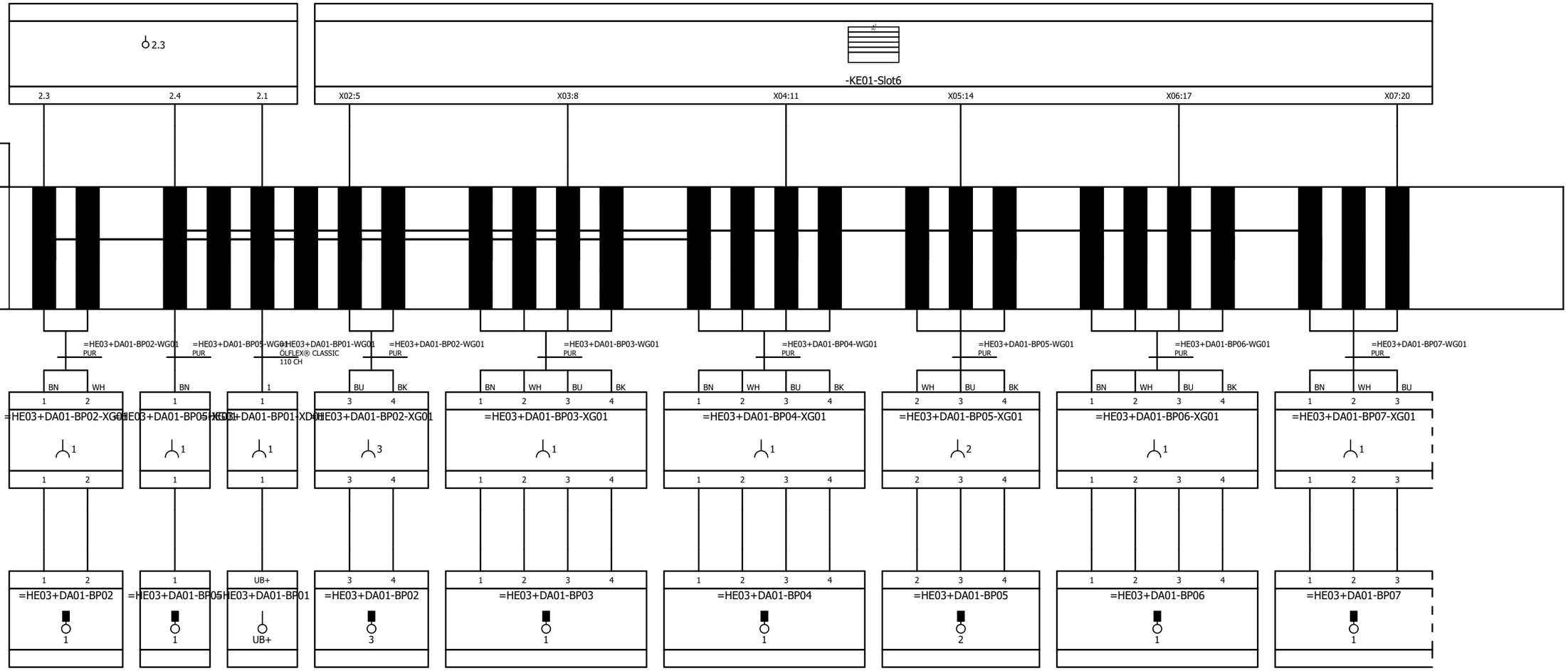
External targets

=LA01+UC20-X150

Jumpers

Terminal

Connection point



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X150		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 49 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

-KE01-Slot5
X07:20

=LA01+UC20-X150

Jumpers

Terminal

Connection point

=HE03+DA01-BP07-WG01
PUR
BK
4
=HE03+DA01-BP07-XG01
4
4
=HE03+DA01-BP07
4

=HE03+DA01-BP01-WG01
ÖLFLEX® CLASSIC
110 CH
2
3
3
PE
=HE03+DA01-BP01-XD01
3
3
PE
AOU1
PE
=HE03+DA01-BP01
AOU1

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X150		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 50 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets

External targets

=LA01+UC20-X160

Jumpers

Terminal

Connection point

-KE03-Slot3

AI20

X07:19 X07:20 X07:21 X08:22 X08:23 X08:24 X09:25 X09:26 X09:27

-KE03-Slot4

AI20

X07:19 X07:20 X07:21 X08:22 X08:23 X08:24 X09:25 X09:23 X09:24

=HE01+DA01-BT01-WG01 PUR	=HE02+DA01-BT04-WG01 PUR	=HE01+DA01-BT01-WG01 PUR	=HE01+DA01-BT02-WG01 PUR	=HE01+DA01-BT03-WG01 PUR	=HE02+DA01-BT04-WG01 PUR	=HE02+DA01-BT05-WG01 PUR	=HE02+DA01-BT06-WG01 PUR
BN WH	BN	BU BK	BN WH BU BK	BN WH BU BK	WH BU BK	BN WH BU BK	BN WH BU BK
1 2	1	3 4	1 2 3 4	1 2 3 4	2 3 4	1 2 3 4	1 2 3 4
=HE01+DA01-BT01-XG01	=HE02+DA01-BT04-XG01	=HE01+DA01-BT01-XG01	=HE01+DA01-BT02-XG01	=HE01+DA01-BT03-XG01	=HE02+DA01-BT04-XG01	=HE02+DA01-BT05-XG01	=HE02+DA01-BT06-XG01
1	1	3	1	1	2	1	1
1 2	1	3 4	1 2 3 4	1 2 3 4	2 3 4	1 2 3 4	1 2 3 4
=HE01+DA01-BT01	=HE02+DA01-BT04	=HE01+DA01-BT01	=HE01+DA01-BT02	=HE01+DA01-BT03	=HE02+DA01-BT04	=HE02+DA01-BT05	=HE02+DA01-BT06
1	1	3	1	1	2	1	1

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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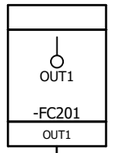
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DRAWING	601456B UC20 40ft Control Cabinet		REVISION	06
DRAWING TITLE				
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X160			
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	51 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X201

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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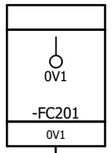
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X201		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 52 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X201-

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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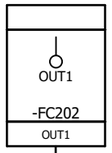
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X201-		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 53 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X202

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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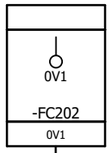
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X202		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 54 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X202-

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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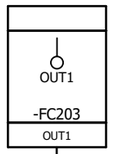
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X202-		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 55 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X203

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
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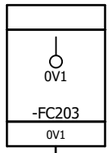
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DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X203		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 56 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X203-

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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REVISION INFORMATION
DESCRIPTION
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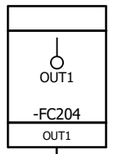
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DRAWING TITLE					
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ALL SHEETS ARE THE SAME REVISION STATUS		SIZE A3	LANGUAGE EN	SHEET/TOTAL	57 /

FRM5103656/0B

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X204

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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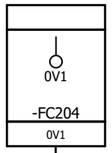
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DRAWING	601456B UC20 40ft Control Cabinet		REVISION	06
DRAWING TITLE				
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X204			
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL	58 /

Terminal-connection diagram

F11_001
PBL 15-Oct-24

Internal targets



=LA01+UC20-X204-

Jumpers

Terminal

Connection point

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

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DESCRIPTION
DATE
15-Oct-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X204-		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 59 /

FRM5103656/0B

Terminal-connection diagram

F11_001
PBL 16-Oct-24

Internal targets

=LA01+UC20-X230

Jumpers

Terminal

Connection point

-KE5-Slot3 X01:1
-FC210.1 1-
-KE5-Slot3 X01:4
-FC210.2 1-
-KE01-Slot3 X01:7
2.2 2.2 3.3
-KE01-Slot3 X02:15

=JA01+DA01-EA01-WD01 PUR BK BU
=JA01+DA01-EA02-WD01 PUR BK BU
=JA01+DA01-EA03-WD01 PUR BK BU
=JA01+DA01-SG01-WG01 ÖLFLEX® CLASSIC 110 CH 1 2

4 3 =JA01+DA01-EA01-XD01 4 4 3
4 3 =JA01+DA01-EA02-XD01 4 4 3
4 3 =JA01+DA01-EA03-XD01 4 4 3
13 14 =JA01+DA01-SG01 E 13 14

4 3 =JA01+DA01-EA1 4
4 3 =JA01+DA01-EA02 4
4 3 =JA01+DA01-EA03 4

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& C04

REVISION INFORMATION
DESCRIPTION
DATE
16-Oct-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Terminal-connection diagram =LA01+UC20-X230		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 60 /

0	1	2	3	4	5	6	7	8

Cable Overview / Cable Schedule

F10_001_Ballard

Cable Name	Function Text	Source (From)	Target (To)	Cable Type	All Conductors	Cross-Section [Unit]	Length [Unit]	Manufacturer	Type Number	Order Number
=HE01+DA01-BT01-WG01	FC1 HT Outlet Temp Signal	=HE01+DA01-BT01-XG01	=LA01-X160	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE01+DA01-BT02-WG01	FC2 HT Outlet Temp Signal	=HE01+DA01-BT02-XG01	=LA01-X160	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE01+DA01-BT03-WG01	FC3 HT Outlet Temp Signal	=HE01+DA01-BT03-XG01	=LA01-X160	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE02+DA01-BT04-WG01	FC4 HT Outlet Temp Signal	=HE02+DA01-BT04-XG01	=LA01-X160	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE02+DA01-BT05-WG01	FC5 HT Outlet Temp Signal	=HE02+DA01-BT05-XG01	=LA01-X160	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE02+DA01-BT06-WG01	=	=HE02+DA01-BT06-XG01	=LA01-X160	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BF01-WG01	LT Circuit Flow Signal	=BA20+UC50-X10	=HE03+DA01-BF01-XD01	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BP01-WG01	LT Circuit dP Signal	=HE03+DA01-BP01-XD01	=LA01-X150	ÖLFLEX® CLASSIC 110 CH	3	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035056
=HE03+DA01-BP02-WG01	FC1 LT Inlet Pressure Signal	=HE03+DA01-BP02-XG01	=LA01-X150	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BP03-WG01	FC2 LT Inlet Pressure Signal	=HE03+DA01-BP03-XG01	=LA01-X150	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BP04-WG01	FC3 LT Inlet Pressure Signal	=HE03+DA01-BP04-XG01	=LA01-X150	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BP05-WG01	FC4 LT Inlet Pressure Signal	=HE03+DA01-BP05-XG01	=LA01-X150	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BP06-WG01	FC5 LT Inlet Pressure Signal	=HE03+DA01-BP06-XG01	=LA01-X150	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BP07-WG01	FC1 LT Inlet Pressure Signal	=HE03+DA01-BP07-XG01	=LA01-X150	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=HE03+DA01-BT04-WG01	LT Return Temp Signal	=BA20+UC50-X10	=HE03+DA01-BT04-XG01	PUR	4	0,34 mm²	15 m	IFM Electronic AS	ADOAH040MSS0015K04	EVC698
=HE03+DA01-BT05-WG01	LT Radiator Outlet Signal	=BA20+UC50-X10	=HE03+DA01-BT05-XG01	PUR	4	0,34 mm²	15 m	IFM Electronic AS	ADOAH040MSS0015K04	EVC698
=HE03+DA01-GP11-WG01	24 VDC supply VFD LT Pump	=LA01-X108	=HE03+DA01-TA11	ÖLFLEX CLASSIC 110	3G	1 mm²		Lapp Group	ÖLFLEX CLASSIC 110	1119 203
=HE03+DA01-GP11.WD01	Power supply LT Pump	=LA01-X10	=HE03+DA01-TA11	ÖLFLEX® CLASSIC 135 CH	4	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123342
=HE03+DA01-GP11.WD02	=	=HE03+DA01-GP11	=HE03+DA01-TA11	ÖLFLEX® CLASSIC 135 CH	4	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123342
=HE03+DA01-GP11.WG02	STO LT Pump	=LA01-X102	=HE03+DA01-TA11	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=HE03+DA01-QN01.WG01	LT Mixing Valve Supply and Signal	=BA20+UC50-X10	=HE03+DA01-TF01	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=HE03+DA01-QN01.WG02	=	=HE03+DA01-QN01.MA01	=HE03+DA01-TF01	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-AC07-WG01	Ventilation (Upper) Signal	=JA01+DA01-AC07	=LA01-P1-2	BUS CAN FD P	2	0,5 mm²		Lapp Group	UNITRONIC® BUS CAN FD P	2170278
								Lapp Group	UNITRONIC® BUS CAN FD P	2170278
=JA01+DA01-BL02-WG01	Process Drain Tank Level Signal	=JA01+DA01-BL01-XG01	=LA01-X110	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=JA01+DA01-BP01-WD01	Intake dP Sensor	=LA01-X123	=JA01+DA01-BP01	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BP02-WD01	In/Out dP Sensor	=LA01-X123	=JA01+DA01-BP02	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BQ01-WG01	H2 Sensor Ventlation Inlet Signal	=LA01-X103	=JA01+DA01-BQ01	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BQ02-WG01	H2 Sensor Ventlation Outlet A Signal	=LA01-X103	=JA01+DA01-BQ02	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BQ03-WG01	H2 Sensor Ventlation Outlet B Signal	=LA01-X103	=JA01+DA01-BQ03	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BQ04-WG01	Smoke Detector Ventlation Inlet Signal	=LA01-X104	=JA01+DA01-BQ04-X2	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BQ05-WG01	Smoke Detector Ventlation Outlet B Signal	=LA01-X104	=JA01+DA01-BQ05-X2	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BQ06-WG01	=	=LA01-X104	=JA01+DA01-BQ06-X2	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-BT01-WG01	Container Intake Air Temp	=JA01+DA01-BT01-XG01	=LA01-X124	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=JA01+DA01-BT02-WG01	Container Temp A	=JA01+DA01-BT02-XG01	=LA01-X124	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=JA01+DA01-BT03-WG01	Container Temp B	=JA01+DA01-BT03-XG01	=LA01-X124	PUR	4	0,34 mm²	10 m	IFM Electronic AS	ADOGH040VAT0025H04/3G/2D	EVC540
=JA01+DA01-BU01-WD01	Air Quality Sensor Supply	=LA01-X125	=JA01+DA01-BU01	ÖLFLEX® CLASSIC 110 CH	3	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035056
=JA01+DA01-BU01-WG02	Air Quality Sensor Signal	=LA01-X125	=JA01+DA01-BU01	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059
=JA01+DA01-EA01-WD01	LED Light strip EA01	=JA01+DA01-EA01-XD01		PUR	4	0,25 mm²	20 m			
			=LA01-X230							
=JA01+DA01-EA02-WD01	LED Light strip EA05	=JA01+DA01-EA02-XD01		PUR	4	0,25 mm²	20 m			
			=LA01-X230							
			=JA01+DA01-EA04-XD01							
=JA01+DA01-EA03-WD01	LED Light strip EA02	=JA01+DA01-EA03-XD01		PUR	4	0,25 mm²	20 m			
			=LA01-X230							
=JA01+DA01-EA04-WD01	LED Light strip EA07	=JA01+DA01-EA04-XD01		PUR	4	0,25 mm²	20 m			

Reference Item Number	Ballard Part # TBD
EPLAN Project Name	601456B - Shell Baseload Power Hub
EPLAN Revision	06
EPLAN Project Pages	628
=	++ + UC20 & D01

REVISION INFORMATION
DESCRIPTION
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20-Nov-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable overview : =HE01+DA01-BT01-WG01 - =JA01+DA01-EA04-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 1 /

Cable Overview / Cable Schedule

F10_001_Ballard

Cable Name	Function Text	Source (From)	Target (To)	Cable Type	All Conductors	Cross-Section [Unit]	Length [Unit]	Manufacturer	Type Number	Order Number
=JA01+DA01-EA05-WD01	LED Light strip EA04	=JA01+DA01-EA01-XD02	=JA01+DA01-EA05-XD01	PUR	4	0,25 mm²	6 m			
=JA01+DA01-EA06-WD01	LED Light strip EA06	=JA01+DA01-EA02-XD02	=JA01+DA01-EA06-XD01	PUR	4	0,25 mm²	6 m			
=JA01+DA01-EA07-WD01	=	=JA01+DA01-EA03-XD02	=JA01+DA01-EA07-XD01	PUR	4	0,25 mm²	6 m			
=JA01+DA01-EA08-WD01	LED Light strip EA08	=JA01+DA01-EA04-XD02	=JA01+DA01-EA08-XD01	PUR	4	0,25 mm²	6 m			
=JA01+DA01-EB01.WD01		=JA01+DA01-EB01-X1	=LA01-X13	ÖLFLEX® HEAT 180 MS	4	2,5 mm²		Lapp Group	ÖLFLEX® HEAT 180 MS	00466303
=JA01+DA01-EB01.WD02		=JA01+DA01-EB01-X1	=LA01-X14	ÖLFLEX® HEAT 180 MS	4	2,5 mm²		Lapp Group	ÖLFLEX® HEAT 180 MS	00466303
=JA01+DA01-EB01.WD03		=JA01+DA01-EB01-X1	=LA01-X15	ÖLFLEX® HEAT 180 MS	4	2,5 mm²		Lapp Group	ÖLFLEX® HEAT 180 MS	00466303
=JA01+DA01-GQ06-WD01	Ventilation (Upper) Supply	=JA01+DA01-GQ06-WD01	=LA01-X11	0,6/1 kV	4	2,5 mm²		Murrelektronik	MQ15 Female 0° to open cable, 10m	7000-P8221-P361000
=JA01+DA01-GQ06-WG01	Ventilation (Upper) Signal	=LA01-P1-2	=JA01+DA01-GQ06-CON2	BUS CAN FD P	2	0,5 mm²		Lapp Group	UNITRONIC® BUS CAN FD P	2170278
								Murrelektronik	7000-14541-7981000	7000-14541-7981000
=JA01+DA01-GQ07-WD01	Ventilation (Lower) Supply	=JA01+DA01-GQ07-WD01	=LA01-X12	0,6/1 kV	4	2,5 mm²		Murrelektronik	MQ15 Female 0° to open cable, 10m	7000-P8221-P361000
=JA01+DA01-GQ07-WG01	Ventilation (Upper) Signal	=JA01+DA01-GQ06-CON2	=JA01+DA01-GQ07-CON2	BUS CAN FD P	2	0,5 mm²		Lapp Group	UNITRONIC® BUS CAN FD P	2170278
=JA01+DA01-GQ08-WD01		=LA01-X16	=JA01+DA01-AC08	ÖLFLEX® CLASSIC 135 CH	BK 0,6/1 kV	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV	1123478
			=JA01+DA01-GQ08							
=JA01+DA01-GQ08-WD02	DCDC Cooling Fan A Power	=JA01+DA01-AC08	=JA01+DA01-GQ08	0,6/1 kV	4	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV	1123478
=JA01+DA01-GQ08-WG01	DCDC Cooling Fan B Signal	=JA01+DA01-AC07	=JA01+DA01-GQ08		2	0,5 mm²		Lapp Group	UNITRONIC® BUS CAN FD P	2170278
=JA01+DA01-GQ09-WD01		=LA01-X17	=JA01+DA01-AC08	ÖLFLEX® CLASSIC 135 CH	BK 0,6/1 kV	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV	1123478
			=JA01+DA01-GQ09							
=JA01+DA01-GQ09-WD02	DCDC Cooling Fan B Power	=JA01+DA01-AC08	=JA01+DA01-GQ09	0,6/1 kV	4	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV	1123478
=JA01+DA01-GQ09-WG01	DCDC Cooling Fan A Signal	=JA01+DA01-AC07	=JA01+DA01-GQ09		2	0,5 mm²		Lapp Group	UNITRONIC® BUS CAN FD P	2170278
=JA01+DA01-QM01-WD01	Ventilation Intake Louvre 1	=JA01+DA01-AC01	=LA01-X121	ÖLFLEX® CLASSIC 135 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
=JA01+DA01-QM02-WD01	Ventilation Intake Louvre 2	=JA01+DA01-AC02	=LA01-X121	ÖLFLEX® CLASSIC 135 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
=JA01+DA01-QM03-WD01	Ventilation exhaust Louvre A1	=JA01+DA01-AC03	=LA01-X122	ÖLFLEX® CLASSIC 135 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
=JA01+DA01-QM04-WD01	Ventilation exhaust Louvre A2	=JA01+DA01-AC04	=LA01-X122	ÖLFLEX® CLASSIC 135 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
=JA01+DA01-QM05-WD01	Ventilation exhaust Louvre B1	=JA01+DA01-AC05	=LA01-X122	ÖLFLEX® CLASSIC 135 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
			=BA20+UC50-X11					Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
=JA01+DA01-QM06-WD01	Ventilation exhaust Louvre B2	=JA01+DA01-AC06	=LA01-X122	ÖLFLEX® CLASSIC 135 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
			=BA20+UC50-X11					Lapp Group	ÖLFLEX® CLASSIC 135 CH	1123270
=JA01+DA01-SG01-WG01		=LA01-X230	=JA01+DA01-SG01	ÖLFLEX® CLASSIC 110 CH	3	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035056
=LA01+DA01-CA30-WD01	Battery supply RB30	=LA01+DA01-CA30	=LA01-RB30	ÖLFLEX CLASSIC 100 H	3G	2,5 mm²		Lapp Group	ÖLFLEX CLASSIC 100 H	0014 103
=LA01+DA01-CA30-WG01	Temp sensor CA30	=LA01+DA01-CA30	=LA01-RB30	ÖLFLEX® CLASSIC 130 H	3G	1 mm		Lapp Group	ÖLFLEX® CLASSIC 130 H	1123067
=LA01+DA01-RB01-WD01	Battery Supply RB01	=LA01+DA01-CA01	=LA01-RB01	ÖLFLEX® CLASSIC 110 CH	3	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035089
=LA01+DA01-RB01-WG01	Temp Sensor CA01	=LA01+DA01-CA01	=LA01-RB01	UNITRONIC®-FD CP (TP) PLUS	4	0,5 mm²		Lapp Group	UNITRONIC®-FD CP (TP) PLUS	0030937
=LA01+DA01-RB02-WD01	Battery Supply RB02	=LA01+DA01-CA02	=LA01-RB02	ÖLFLEX® CLASSIC 110 CH	3	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035089
=LA01+DA01-RB02-WG01	Temp Sensor CA02	=LA01+DA01-CA02	=LA01-RB02	UNITRONIC®-FD CP (TP) PLUS	4	0,5 mm²		Lapp Group	UNITRONIC®-FD CP (TP) PLUS	0030937
=LA01+DA01-RB03-WD01	Battery Supply RB03	=LA01+DA01-CA03	=LA01-RB03	ÖLFLEX® CLASSIC 110 CH	3	2,5 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035089
=LA01+DA01-RB03-WG01	Temp Sensor CA03	=LA01+DA01-CA03	=LA01-RB03	UNITRONIC®-FD CP (TP) PLUS	4	0,5 mm²		Lapp Group	UNITRONIC®-FD CP (TP) PLUS	0030937
=LA01-EA01-WD01		=LA01-X23	=LA01-EA1	YAKY	3	16 AWG	3 m	Rittal	SZ.2500500	2500500
		=LA01-FC21								
		=LA01-TB30								
=LA01-KE01-WG01		=LA01-KE01-Slot1	=LA01-KE02-Slot1					Lapp Group	IE-6A-RJ45-L0.5-P-4-26-7-RJ45	2172363
=LA01-KE02-WG01		=LA01-KE02-Slot1	=LA01-KE03-Slot1					Lapp Group	IE-6A-RJ45-L0.5-P-4-26-7-RJ45	2172363
=LA01-KE03-WG01		=HA01+DA02-XT10	=LA01-KE03-Slot1	Profinet 4pair cabling Cat.6A FRNC flexi	8	23 mm²		Lapp Group	Profinet 4pair cabling Cat.6A FRNC flexible	2170931
=LA01-KF200-WG01	STP			Cat.6						
=LA01-KF200-WG02	=	=LA01-KF200	=LA01-KF210	Cat.6						
=LA01-KF200-WG15	=	=HA01+DA02-XT11	=LA01-KF200	Cat.6	4x2					

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable overview : =JA01+DA01-EA05-WD01 - =LA01+UC20-KF200-WG15		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 1.a /

0	1	2	3	4	5	6	7	8

Cable Overview / Cable Schedule

F10_001_Ballard

Cable Name	Function Text	Source (From)	Target (To)	Cable Type	All Conductors	Cross-Section [Unit]	Length [Unit]	Manufacturer	Type Number	Order Number
=LA01-KF200-WG16	STP	=LA01-KF200	=LA01-KF201	Cat.6	4x2					
=LA01-WD01	Supply UC20 MCU cabinet	=LA01-X01	=BA20+UC50-FC03	ÖLFLEX® CLASSIC 135 CH	BK 0,6/1 kV	16 mm²		Lapp Group	ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV	1123493
			=BA20+UC50-FC05							
=LB02+DA01-SG23-WG01	ESTOP Container Door	=LA01-X105	=LB02+DA01-SG23	ÖLFLEX® CLASSIC 110 CH	4	1 mm²		Lapp Group	ÖLFLEX® CLASSIC 110 CH	10035059

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DATE
15-Oct-24

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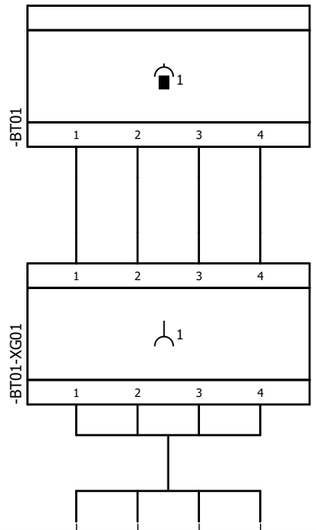
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Cable connection diagram

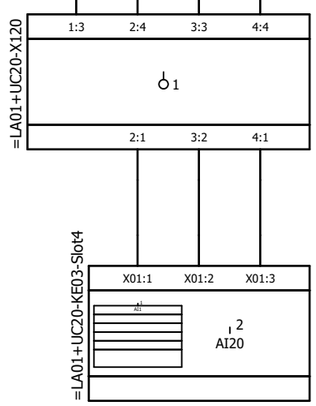
F07_001
PBL 28-Mar-25

Internal targets



=BA01+UC01-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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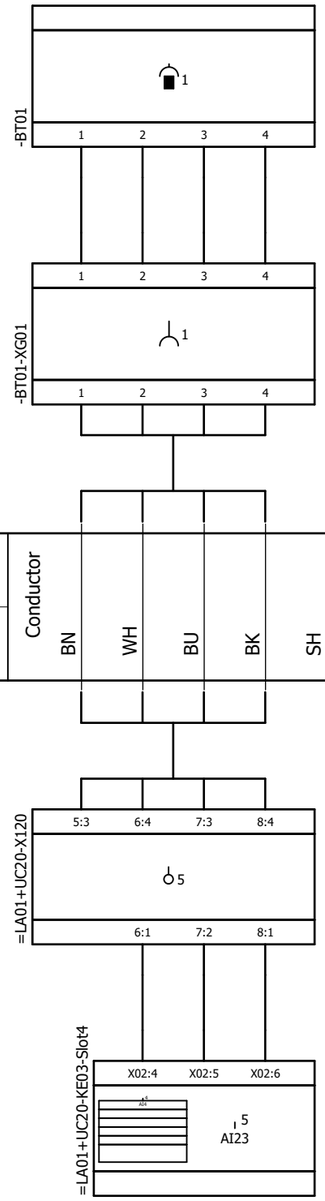
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =BA01+UC01-BT01-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 2 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=BA01+UC02-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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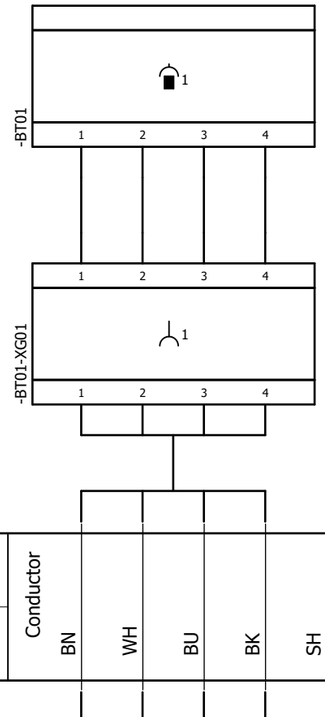
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =BA01+UC02-BT01-WG01		
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Cable connection diagram

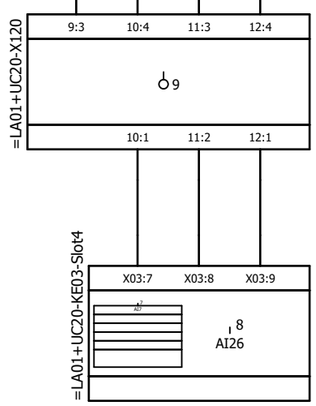
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PBL 28-Mar-25

Internal targets



=BA01+UC03-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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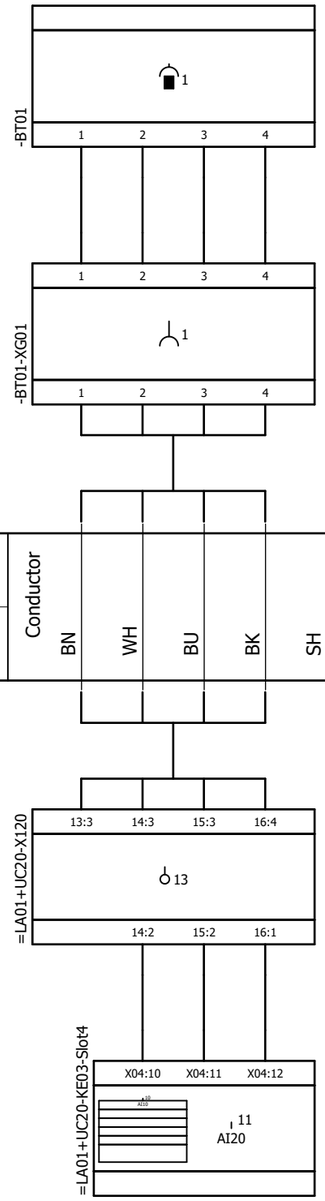
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 4 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=BA02+UC04-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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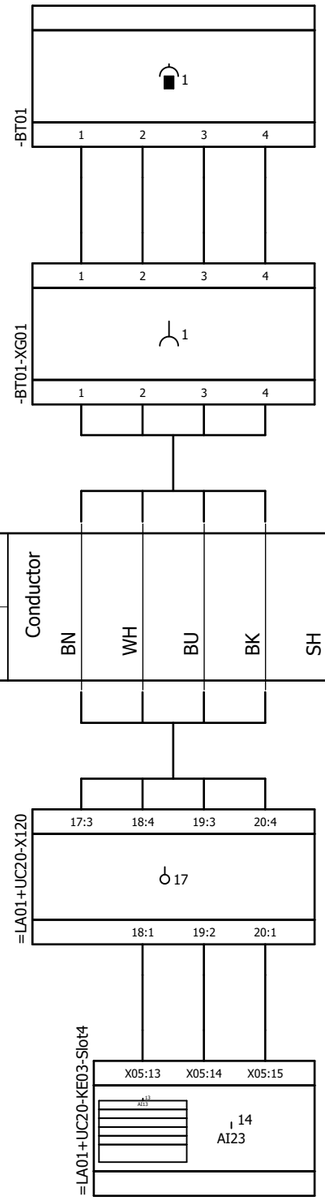
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =BA02+UC04-BT01-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 5 /

Cable connection diagram

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Internal targets



=BA02+UC05-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets

Reference Item Number	Ballard Part # TBD		
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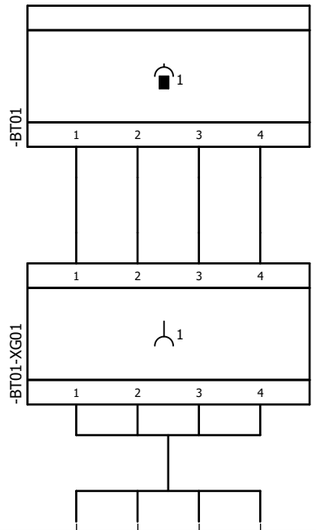
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DRAWING TITLE			
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Cable connection diagram

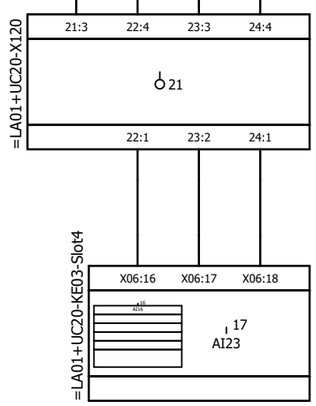
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Internal targets



=BA02+UC06-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
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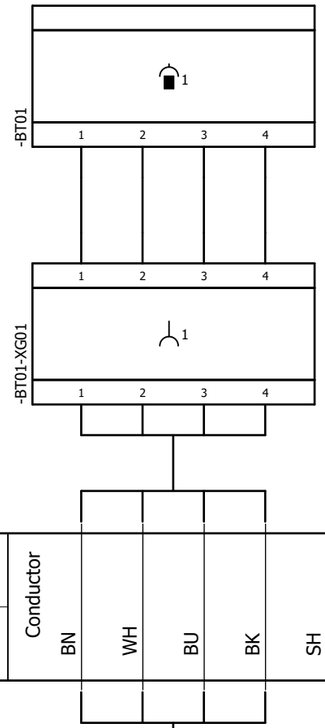
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 7 /

Cable connection diagram

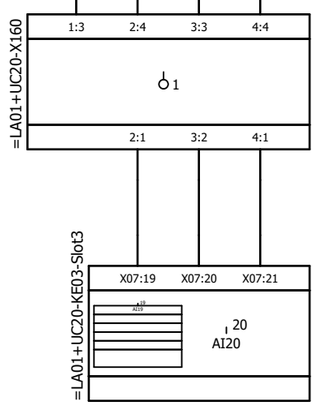
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Internal targets



=HE01+DA01-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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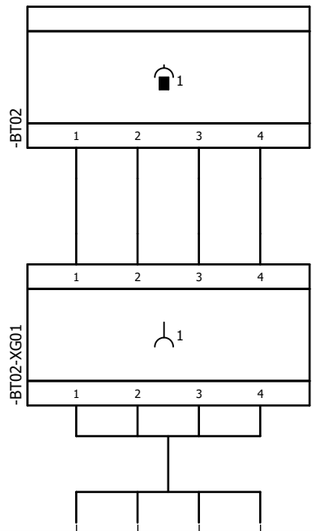
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DRAWING TITLE			
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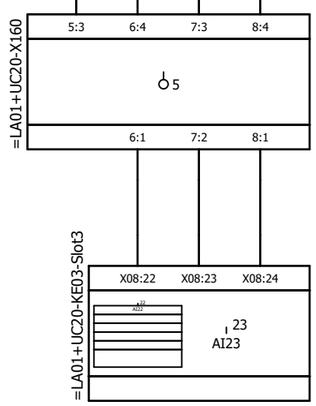
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Internal targets



=HE01+DA01-BT02-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
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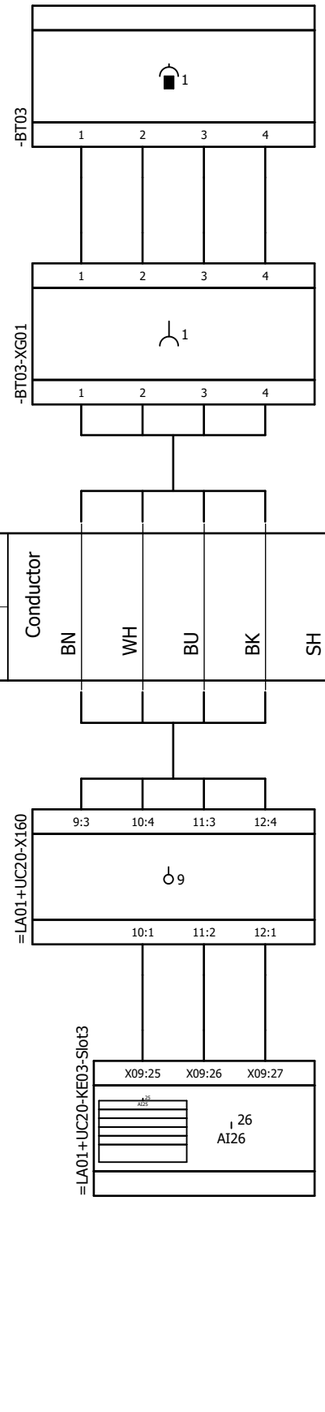
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Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=HE01+DA01-BT03-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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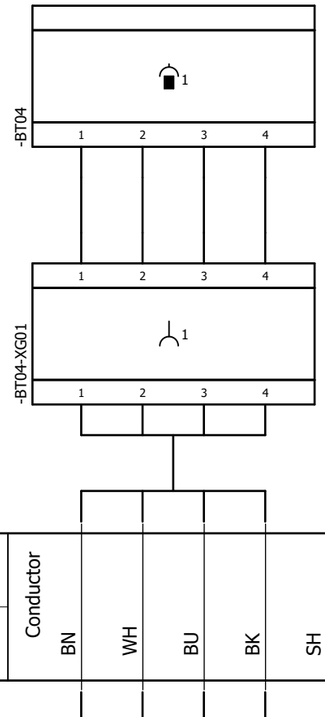
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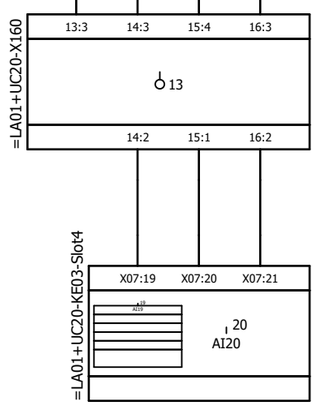
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Internal targets



=HE02+DA01-BT04-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



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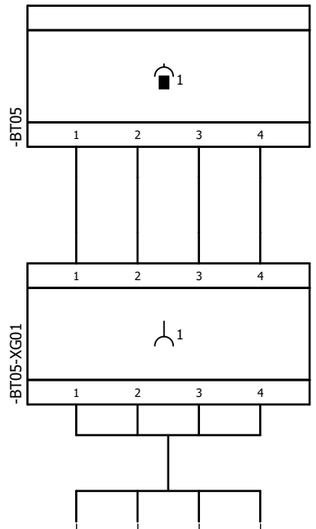
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Cable connection diagram

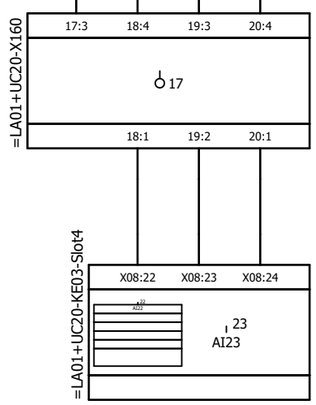
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Internal targets



=HE02+DA01-BT05-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
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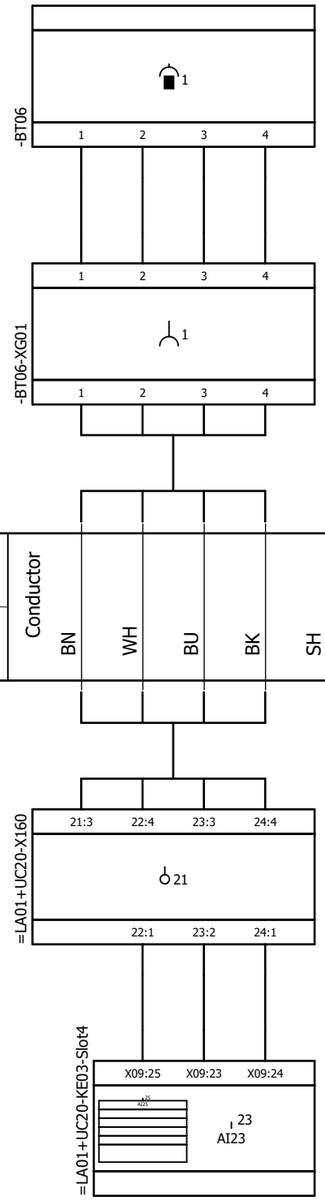
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 13 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=HE02+DA01-BT06-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets

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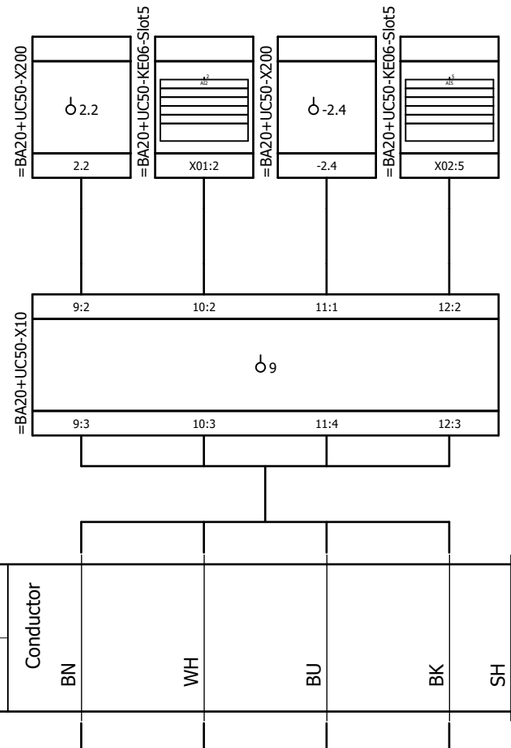
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Cable connection diagram

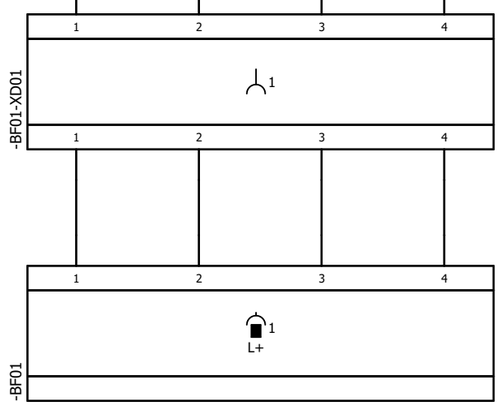
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PBL 28-Mar-25

Internal targets



=HE03+DA01-BF01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



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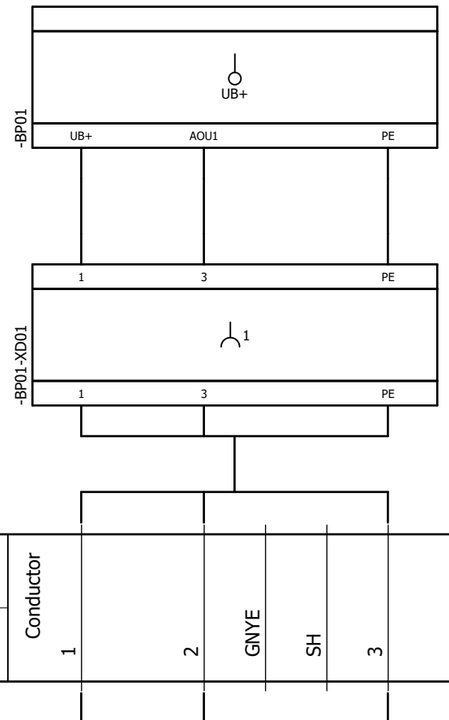
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-BF01-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 15 /

Cable connection diagram

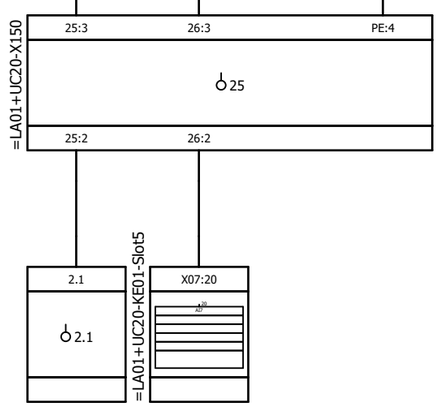
F07_001
PBL 28-Mar-25

Internal targets



=HE03+DA01-BP01-WG01	Conductor	1	2	GNYE	SH	3
ÖLFLEX® CLASSIC 110 CH						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
DATE
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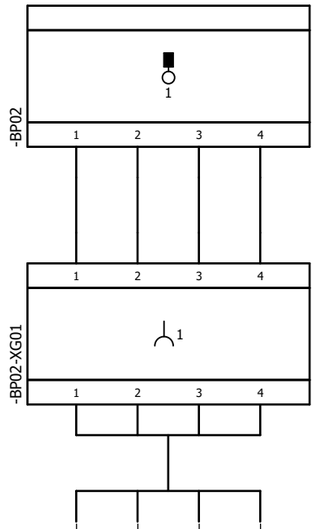
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-BP01-WG01		
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Cable connection diagram

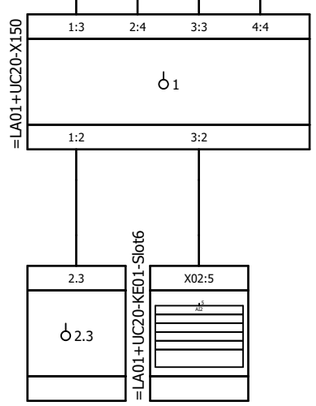
F07_001
PBL 28-Mar-25

Internal targets



=HE03+DA01-BP02-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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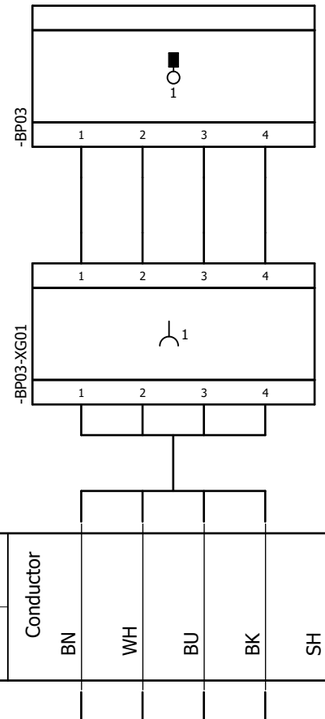
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-BP02-WG01		
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Cable connection diagram

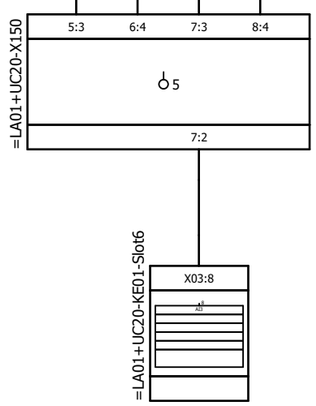
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PBL 28-Mar-25

Internal targets



=HE03+DA01-BP03-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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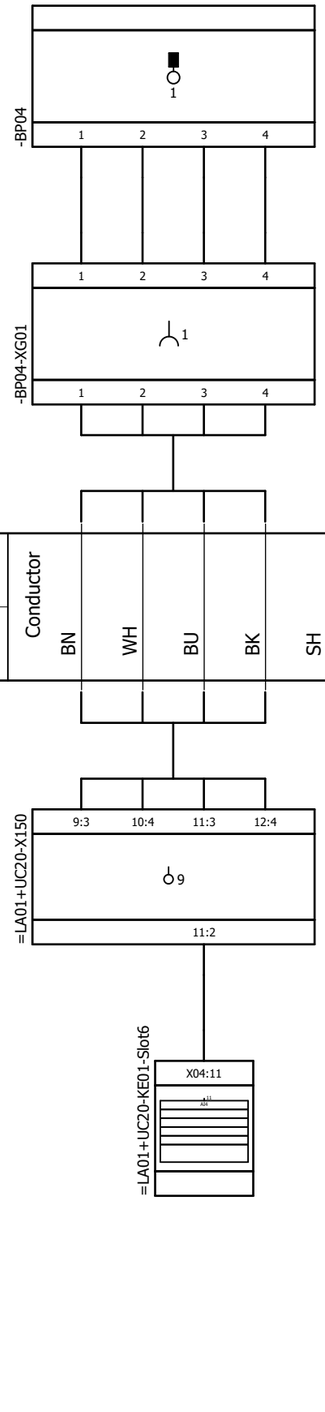
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-BP03-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 18 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=HE03+DA01-BP04-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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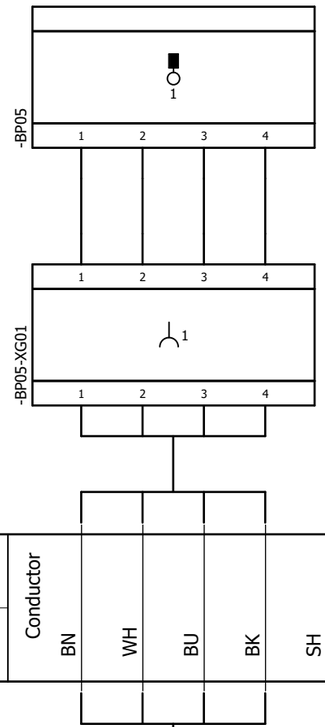
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-BP04-WG01		
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Cable connection diagram

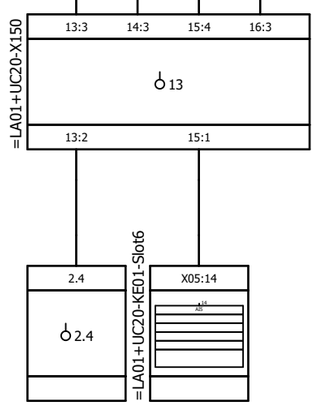
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Internal targets



=HE03+DA01-BP05-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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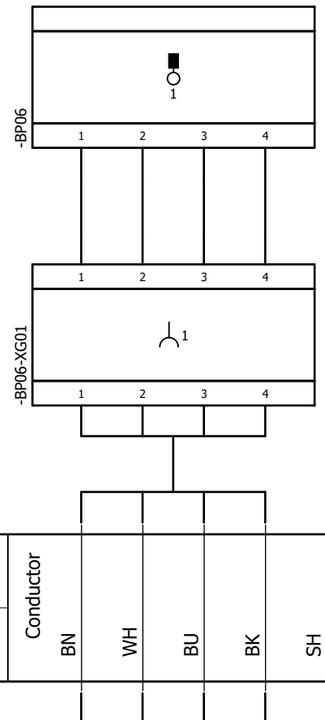
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DRAWING TITLE			
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Cable connection diagram

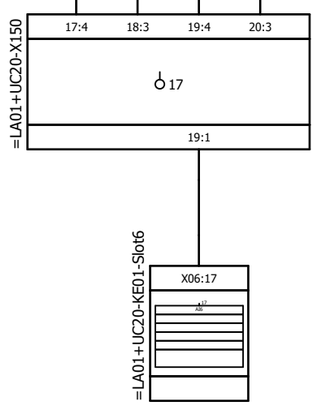
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PBL 28-Mar-25

Internal targets



=HE03+DA01-BP06-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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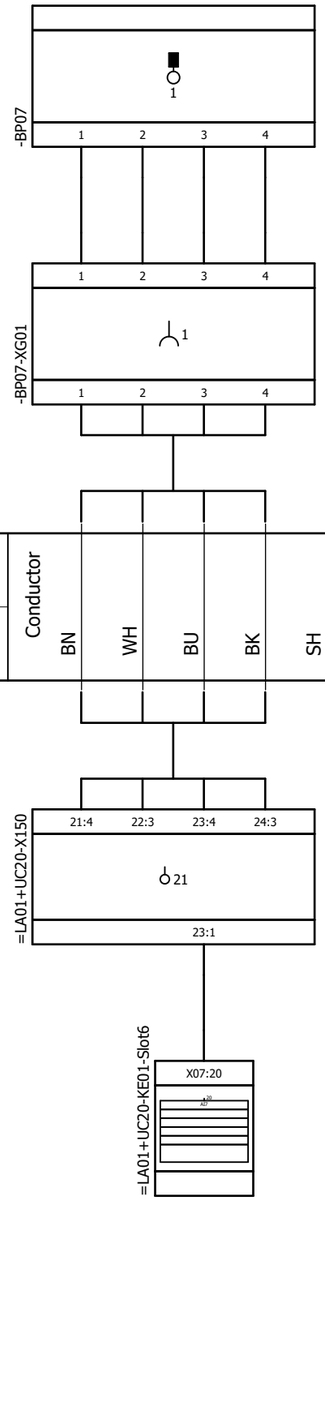
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-BP06-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 21 /

Cable connection diagram

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PBL 28-Mar-25

Internal targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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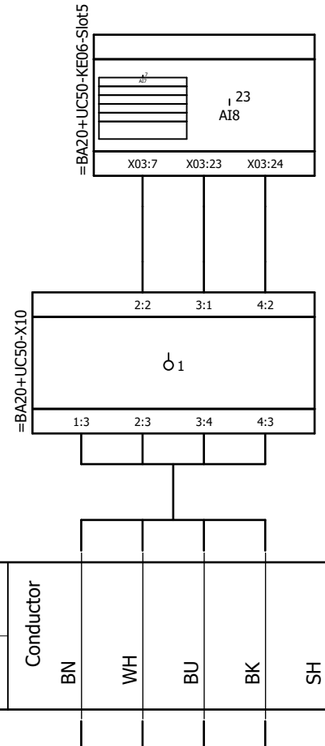
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DRAWING TITLE			
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Cable connection diagram

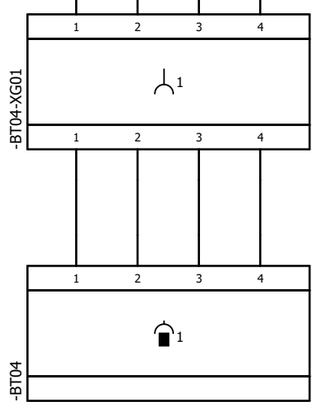
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PBL 28-Mar-25

Internal targets



=HE03+DA01-BT04-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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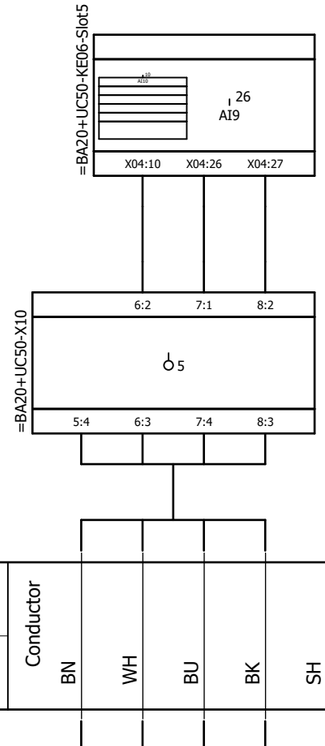
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DRAWING TITLE			
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Cable connection diagram

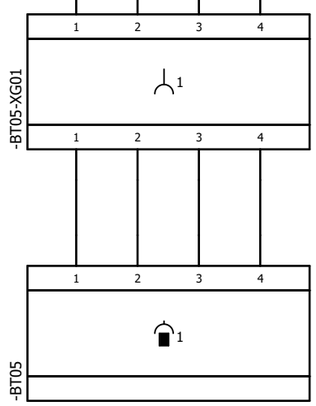
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PBL 28-Mar-25

Internal targets



=HE03+DA01-BT05-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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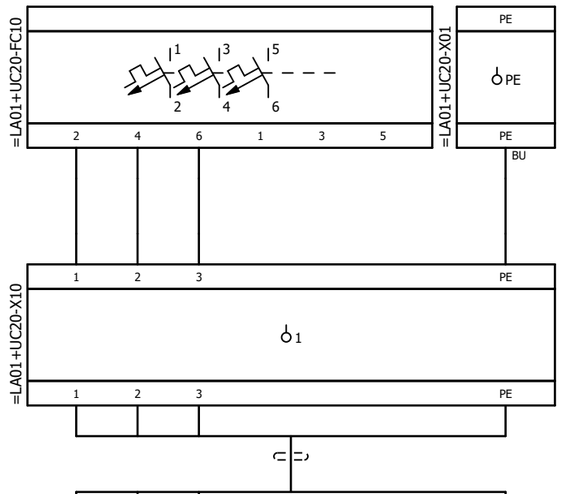
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DRAWING TITLE			
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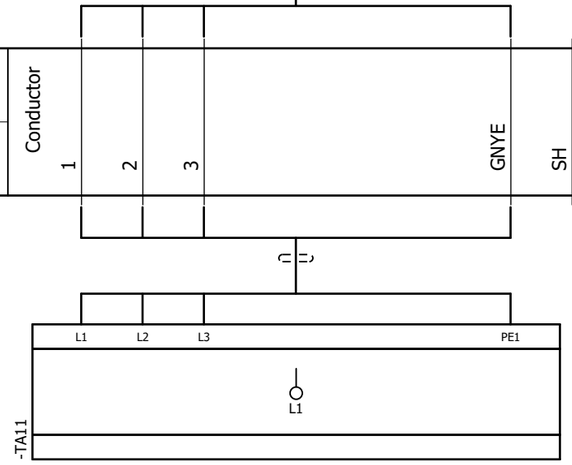
Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets



=HE03+DA01-GP11.WD01	Conductor	1	2	3	GNYE	SH
ÖLFLEX® CLASSIC 135 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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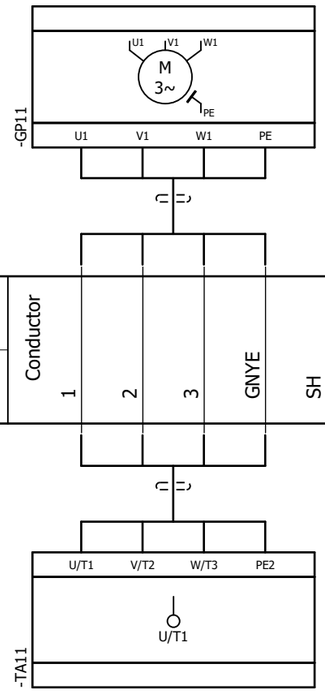
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-GP11.WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 25 /

Cable connection diagram

Internal targets



=HE03+DA01-GP11.WD02	Conductor	1	2	3	GNYE	SH
ÖLFLEX® CLASSIC 135 CH						

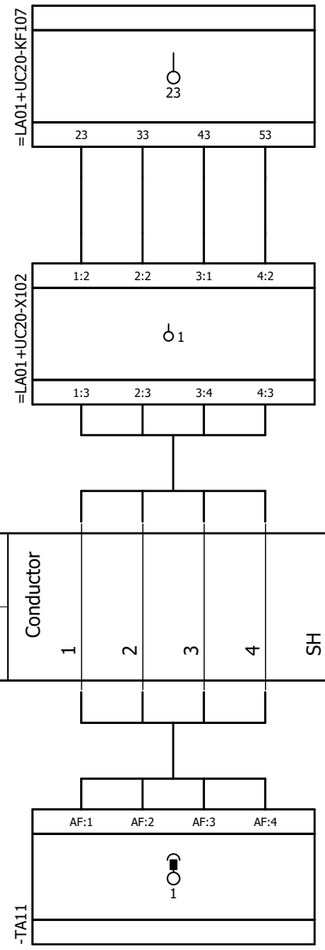
External targets

Reference Item Number	Ballard Part # TBD			REVISION INFORMATION	THIS DOCUMENT, SUBMITTED IN CONFIDENCE, CONTAINS PROPRIETARY INFORMATION WHICH SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR MANUFACTURING OR ANY OTHER PURPOSE WITHOUT PRIOR WRITTEN PERMISSION OF BALLARD POWER SYSTEMS INC. OR A RELATED WHOLLY-OWNED SUBSIDIARY OR AFFILIATE.	BALLARD™ CONFIDENTIAL	DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
EPLAN Project Name	601456B - Shell Baseload Power Hub			DESCRIPTION			DRAWING TITLE			
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EPLAN Project Pages	628			DATE			ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 26 /
=	++	+ UC20	& D01	15-Oct-24						

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=HE03+DA01-GP11.WG02	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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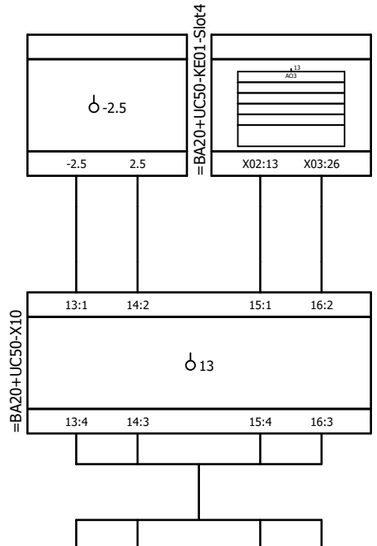
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DRAWING TITLE			
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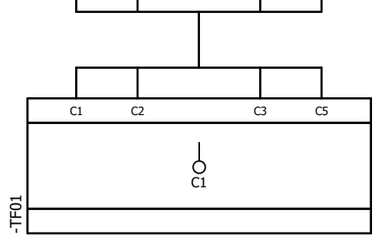
Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=HE03+DA01-QN01.WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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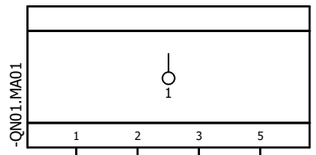
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DRAWING TITLE			
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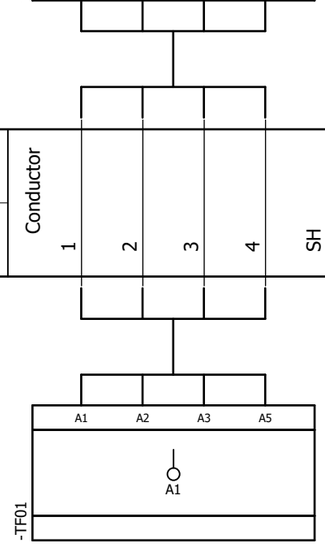
Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets



=HE03+DA01-QN01.WG02	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
DATE
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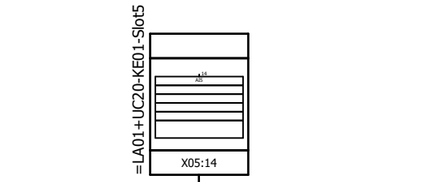
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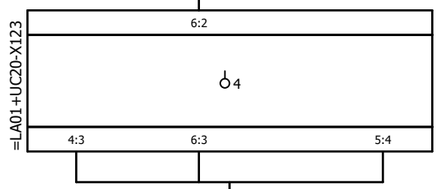
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =HE03+DA01-QN01.WG02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 30 /

Cable connection diagram

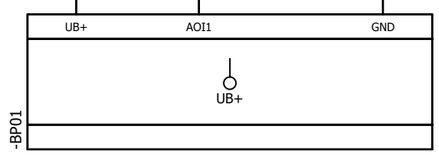
F07_001
PBL 28-Mar-25

Internal targets





=JA01+DA01-BP01-WD01	Conductor						
ÖLFLEX® CLASSIC 110 CH	1	2	3	4	SH	2	



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
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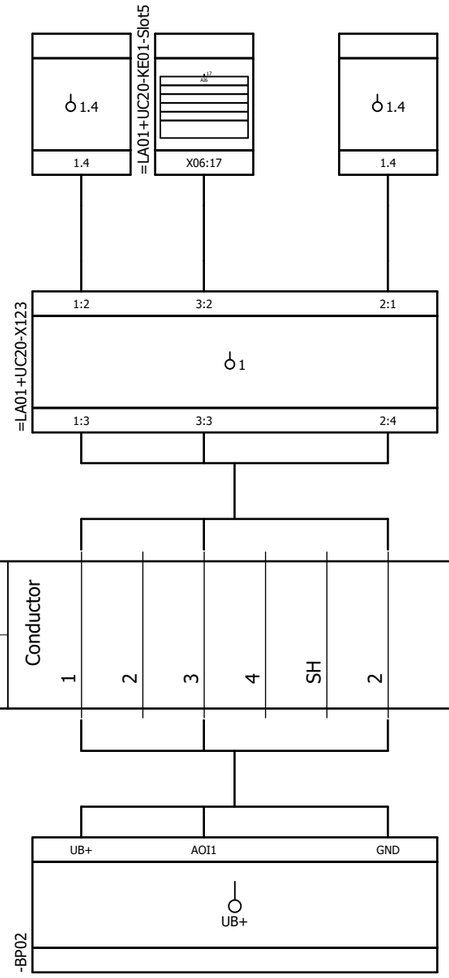
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BP01-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 31 /

Cable connection diagram

Internal targets



=JA01+DA01-BP02-WD01	Conductor	1	2	3	4	SH	2
ÖLFLEX® CLASSIC 110 CH							

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
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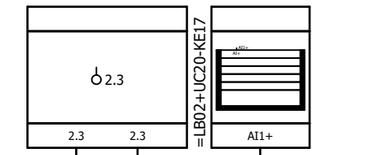
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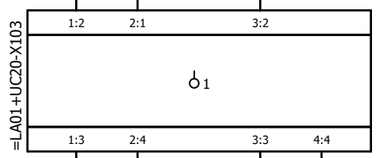
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BP02-WD01		
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Cable connection diagram

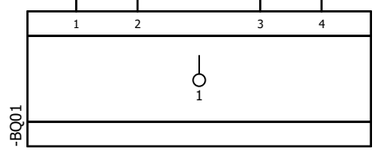
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PBL 28-Mar-25

Internal targets





=JA01+DA01-BQ01-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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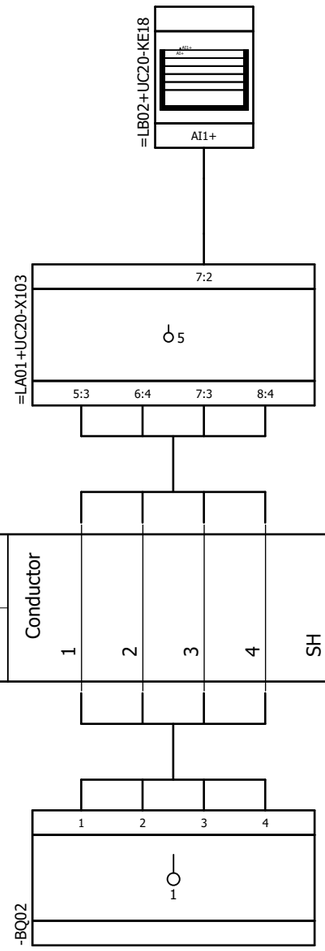
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BQ01-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 33 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BQ02-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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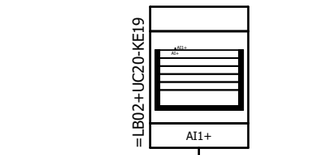
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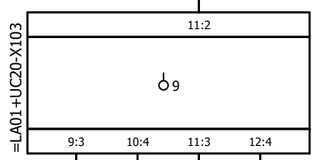
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 34 /

Cable connection diagram

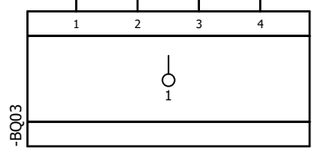
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PBL 28-Mar-25

Internal targets





=JA01+DA01-BQ03-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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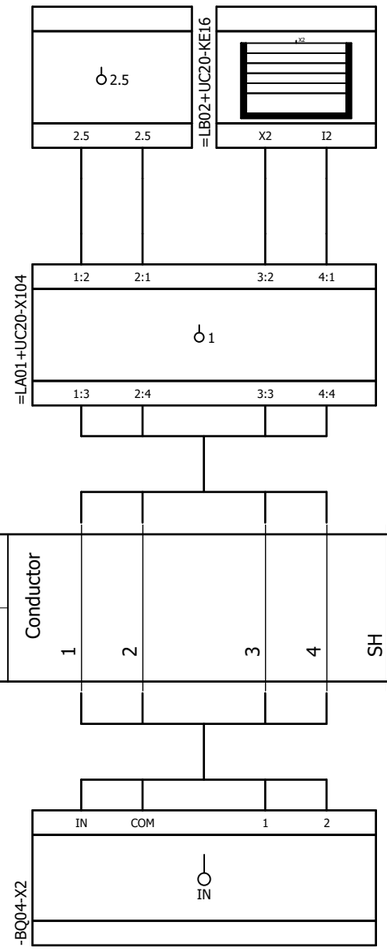
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 35 /

FRM5103656/0B

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BQ04-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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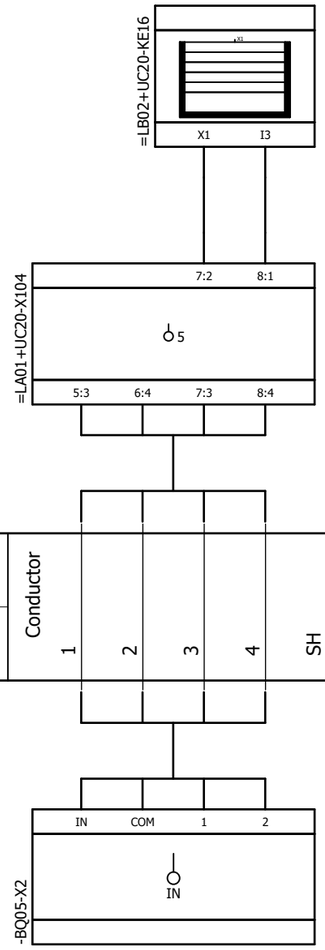
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BQ04-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 36 /

FRM5103656/0B

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BQ05-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						

External targets

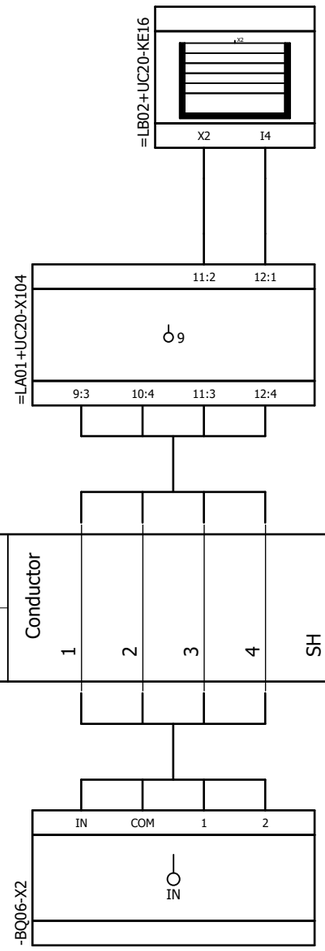
Reference Item Number	Ballard Part # TBD			REVISION INFORMATION	THIS DOCUMENT, SUBMITTED IN CONFIDENCE, CONTAINS PROPRIETARY INFORMATION WHICH SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR MANUFACTURING OR ANY OTHER PURPOSE WITHOUT PRIOR WRITTEN PERMISSION OF BALLARD POWER SYSTEMS INC. OR A RELATED WHOLLY-OWNED SUBSIDIARY OR AFFILIATE.	BALLARD™ CONFIDENTIAL	DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
EPLAN Project Name	601456B - Shell Baseload Power Hub			DESCRIPTION			DRAWING TITLE			
EPLAN Revision	06						SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BQ05-WG01		
EPLAN Project Pages	628			DATE		THIS DOCUMENT'S APPROVAL IS MANAGED BY E-SIGNATURE ON FILE IN BALLARD POWER SYSTEMS' PLM SYSTEM	ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 37 /
=	++	+ UC20	& D01	28-Mar-25						

FRM5103656/0B

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BQ06-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
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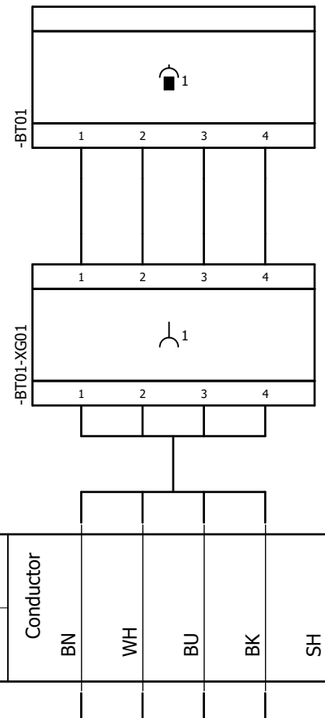
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
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Cable connection diagram

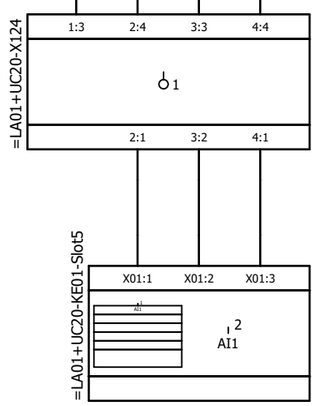
F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BT01-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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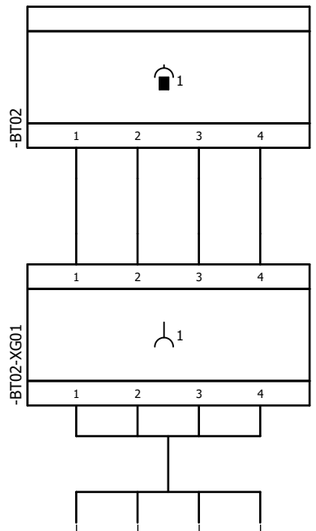
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
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Cable connection diagram

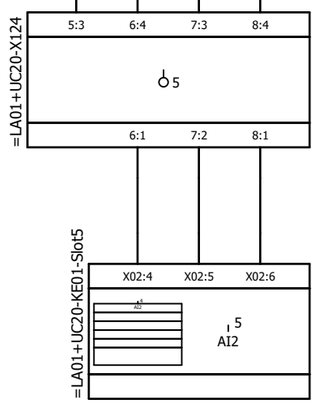
F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BT02-WG01	Conductor	BN	WH	BU	BK	SH
PUR						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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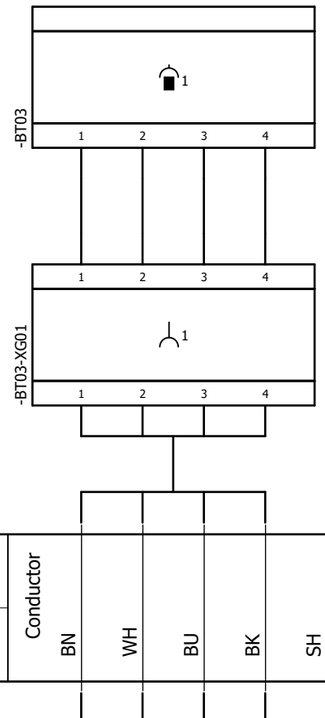
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DRAWING TITLE			
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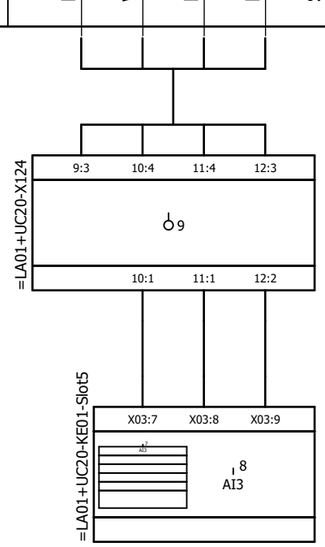
Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BT03-WG01	Conductor	BN	WH	BU	BK	SH
PUR						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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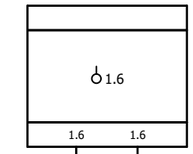
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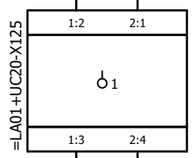
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 41 /

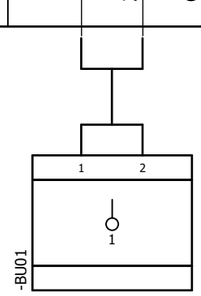
Cable connection diagram

Internal targets





=JA01+DA01-BU01-WD01	Conductor	1	2	GNYE	SH
ÖLFLEX® CLASSIC 110 CH					



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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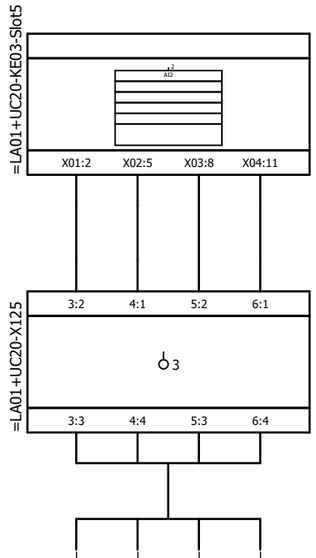
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BU01-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 42 /

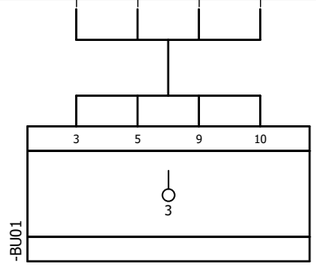
Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-BU01-WG02	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
DATE
28-Mar-25

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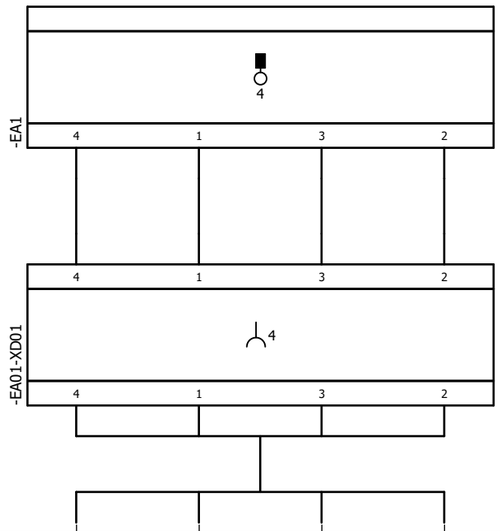
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-BU01-WG02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 43 /

Cable connection diagram

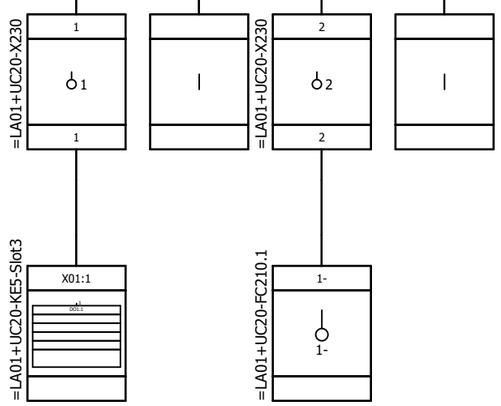
F07_001
PBL 15-Oct-24

Internal targets



=JA01+DA01-EA01-WD01	Conductor	BK	BN	BU	WH
PUR					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
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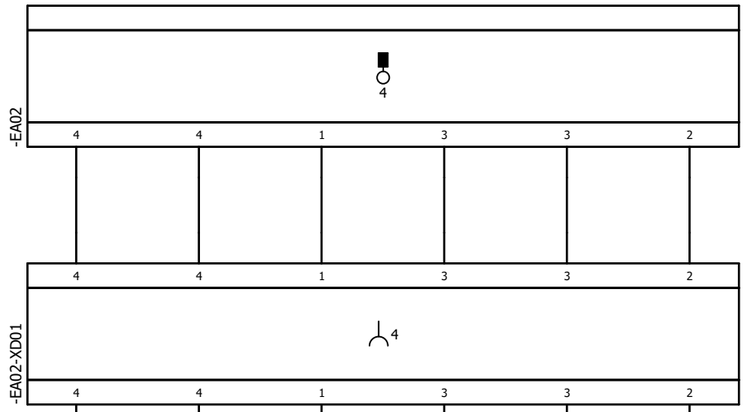
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA01-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 44 /

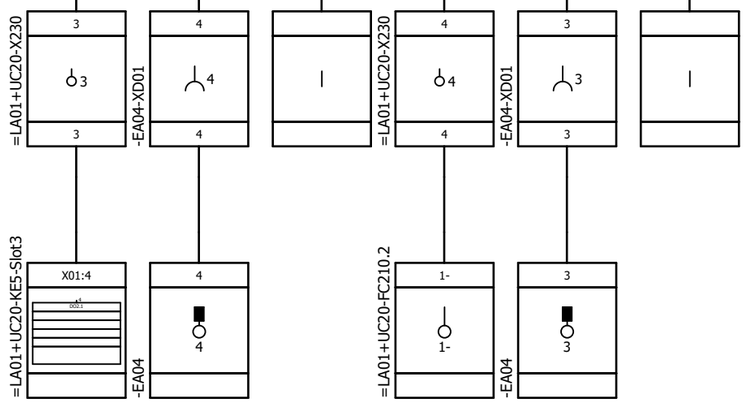
Cable connection diagram

Internal targets



=JA01+DA01-EA02-WD01	Conductor	BK	BK	BN	BU	BU	WH
PUR							

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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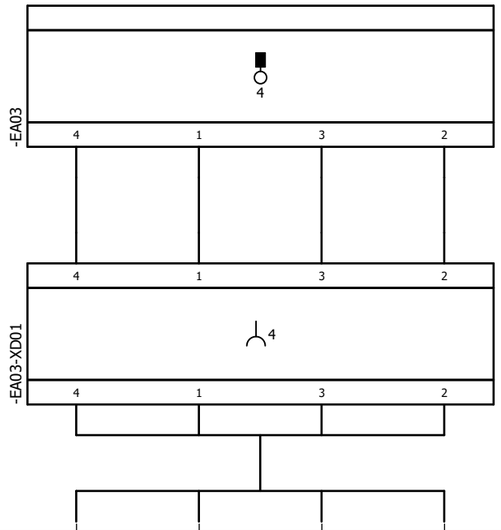
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA02-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 45 /

Cable connection diagram

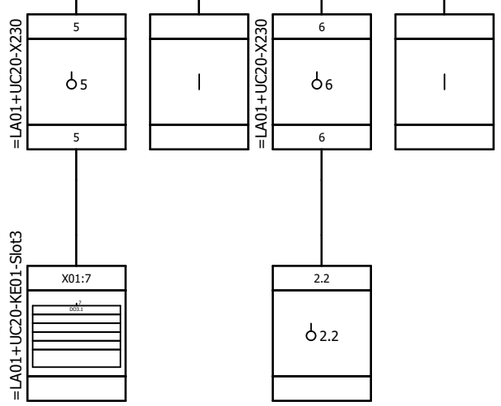
F07_001
PBL 15-Oct-24

Internal targets



=JA01+DA01-EA03-WD01	Conductor	BK	BN	BU	WH
PUR					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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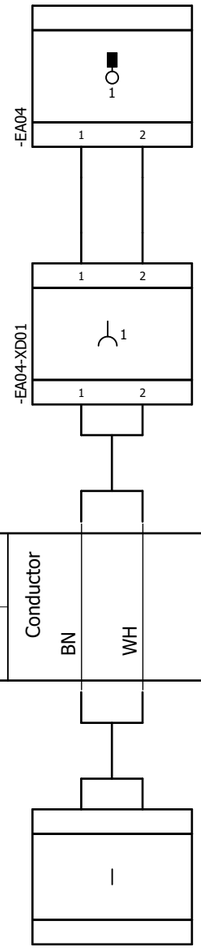
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA03-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 46 /

Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets



=JA01+DA01-EA04-WD01	Conductor	BN	WH
PUR			

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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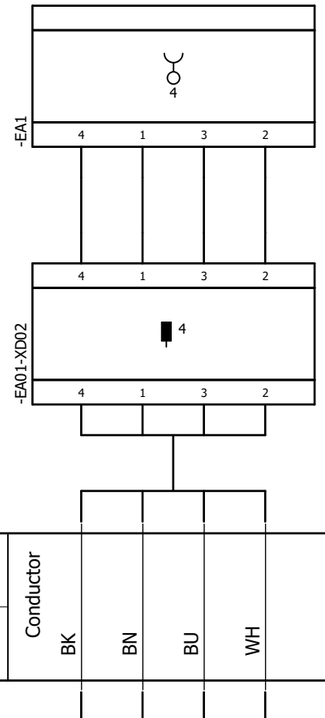
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA04-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 47 /

Cable connection diagram

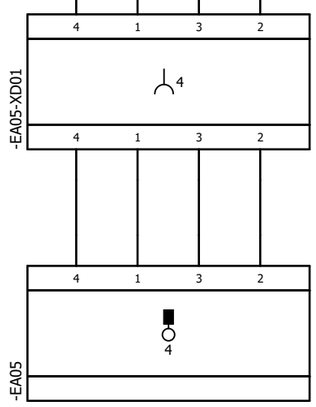
F07_001
PBL 15-Oct-24

Internal targets



=JA01+DA01-EA05-WD01	Conductor	BK	BN	BU	WH
PUR					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DATE
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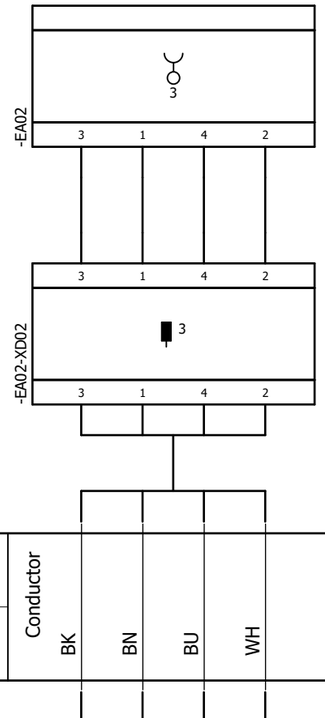
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA05-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 48 /

Cable connection diagram

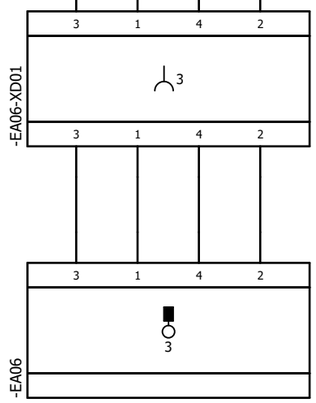
F07_001
PBL 15-Oct-24

Internal targets



=JA01+DA01-EA06-WD01	Conductor	BK	BN	BU	WH
PUR					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DATE
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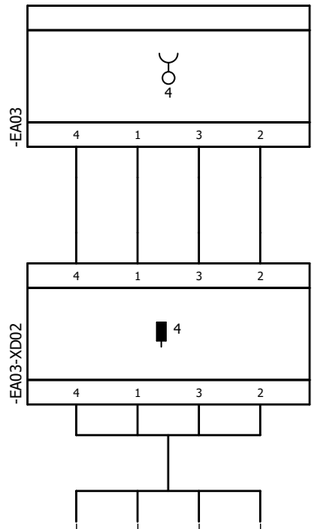
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA06-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 49 /

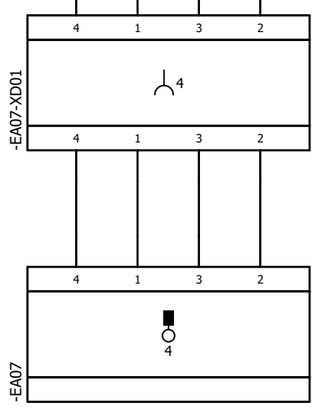
Cable connection diagram

Internal targets



=JA01+DA01-EA07-WD01	Conductor	BK	BN	BU	WH
PUR					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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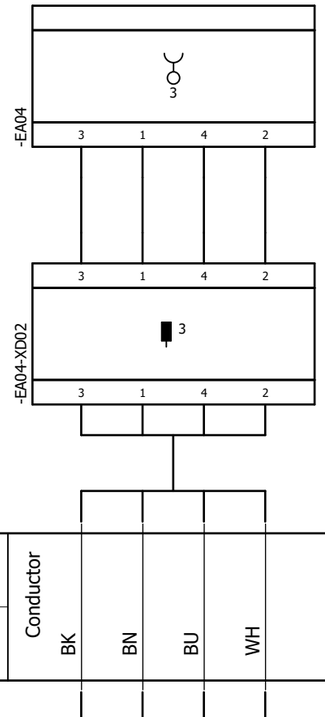
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EA07-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 50 /

Cable connection diagram

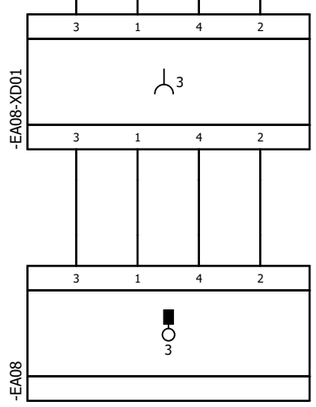
F07_001
PBL 15-Oct-24

Internal targets



=JA01+DA01-EA08-WD01	Conductor	BK	BN	BU	WH
PUR					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
DATE
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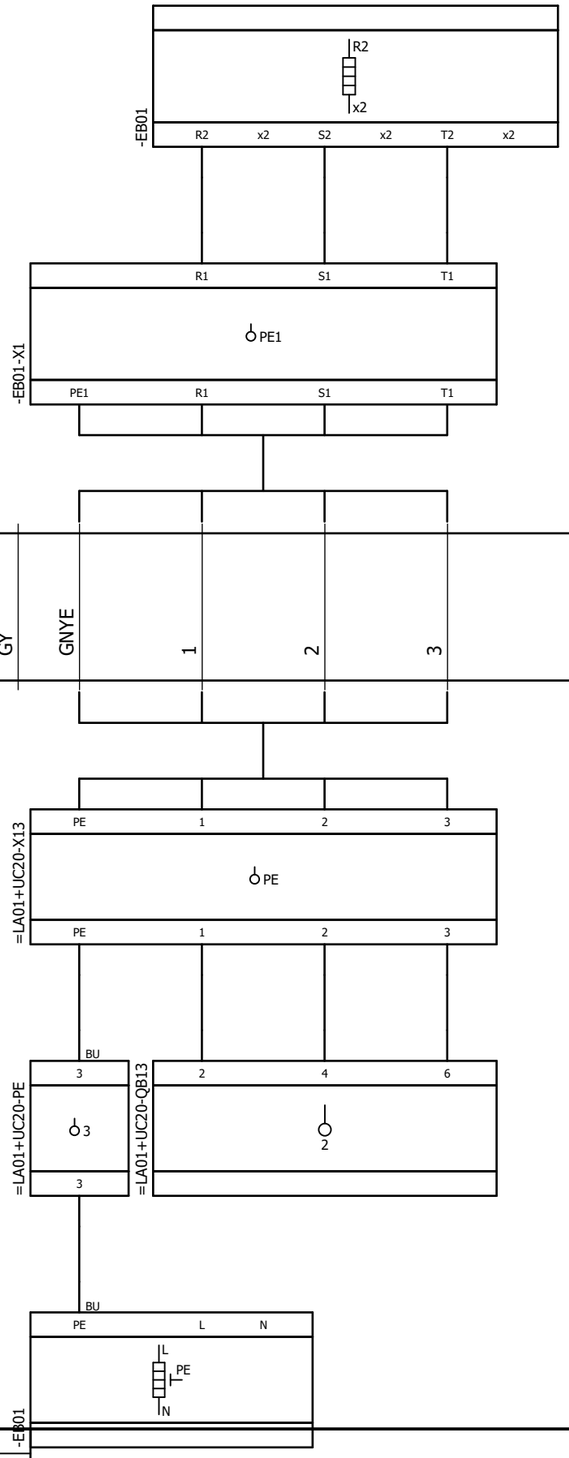
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 51 /

0	1	2	3	4	5	6	7	8

Cable connection diagram

F07_001
PBL 16-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DATE
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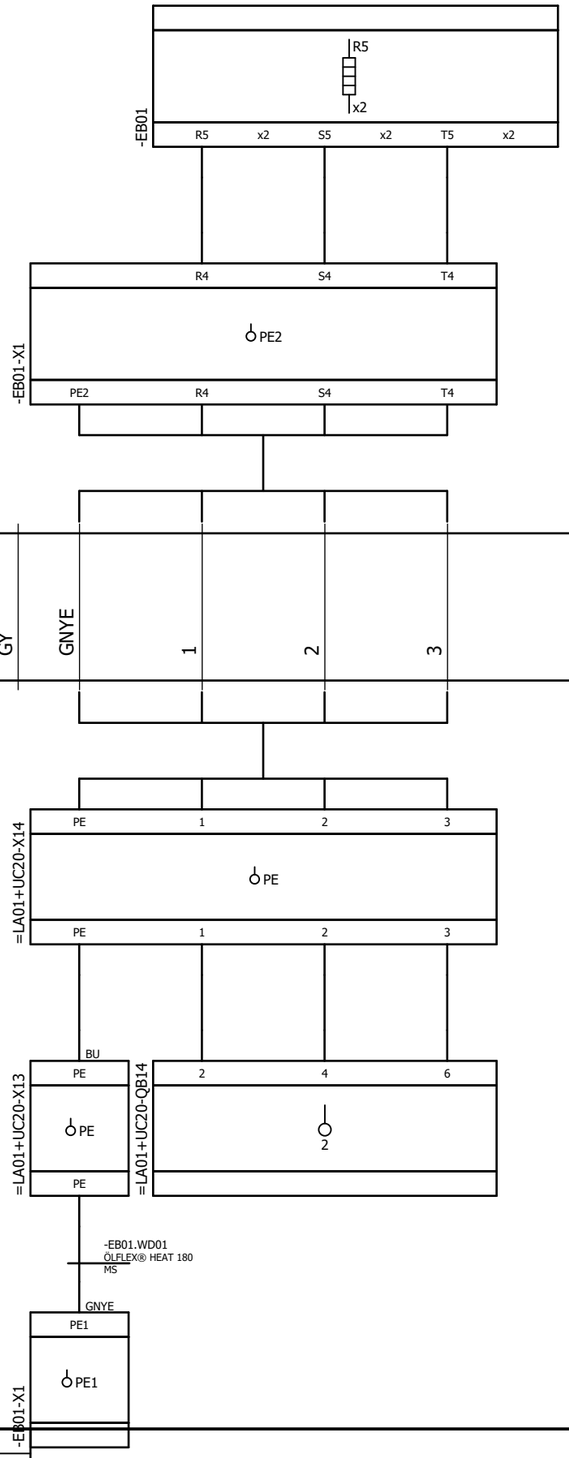
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 52 /

FRM5103656/0B

Cable connection diagram

F07_001
PBL 16-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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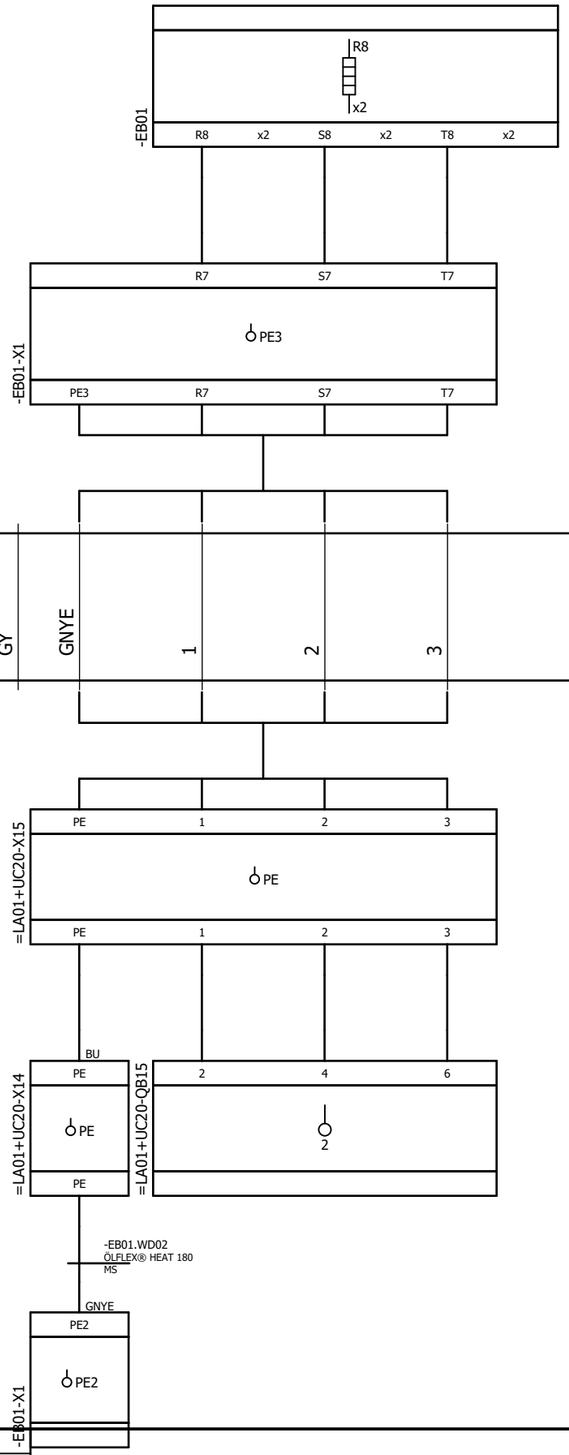
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EB01.WD02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 53 /

Cable connection diagram

F07_001
PBL 16-Oct-24

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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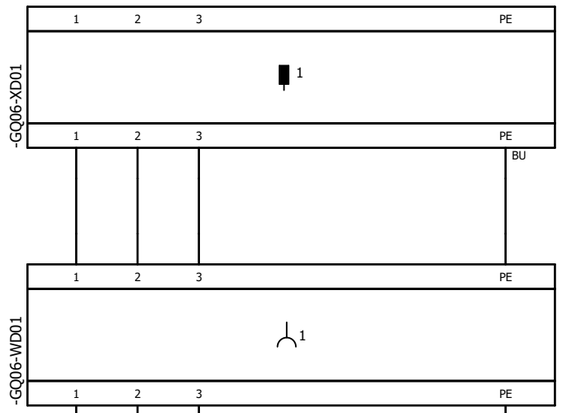
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-EB01.WD03		
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0	1	2	3	4	5	6	7	8

Cable connection diagram

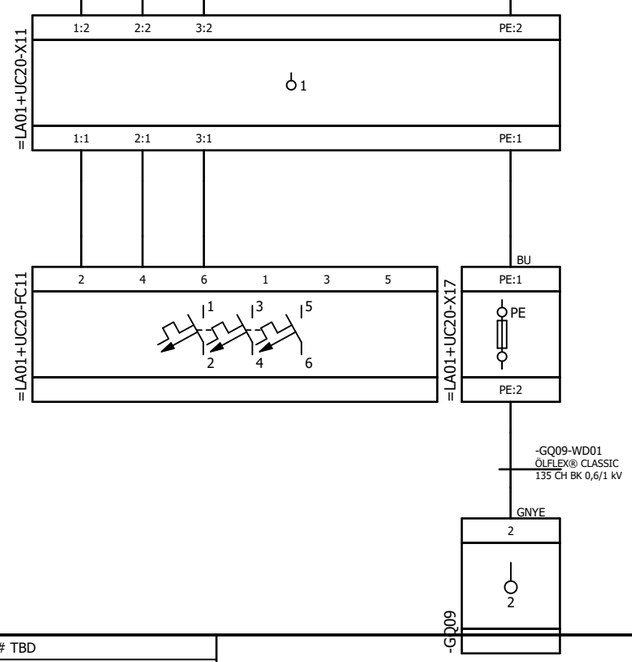
F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-GQ06-WD01	Conductor	BK 1	BK 2	BK 3	GNYE
0,6/1 kV					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
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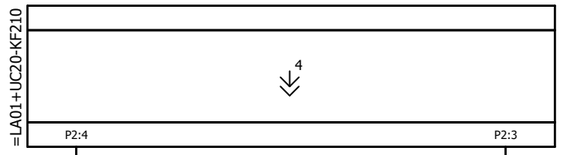
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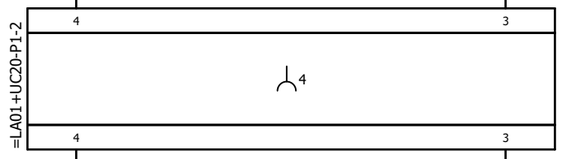
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 55 /

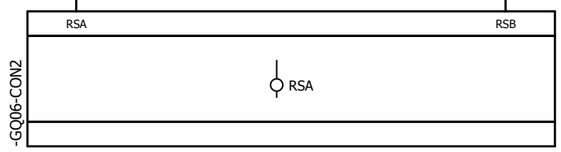
Cable connection diagram

Internal targets





=JA01+DA01-GQ06-WG01	Conductor	WH	BN	SH	WH	BU	YE	OG	OR
BUS CAN FD P									



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
DATE
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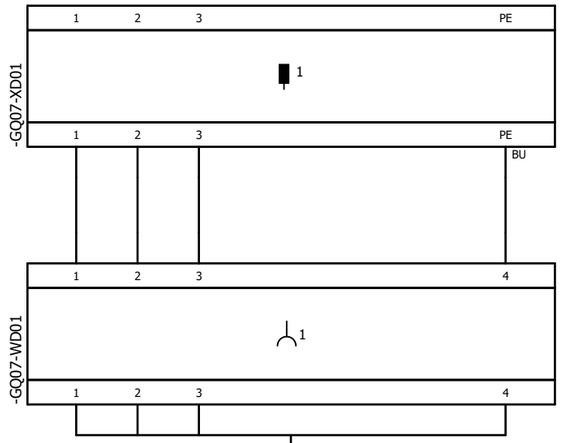
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-GQ06-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 56 /

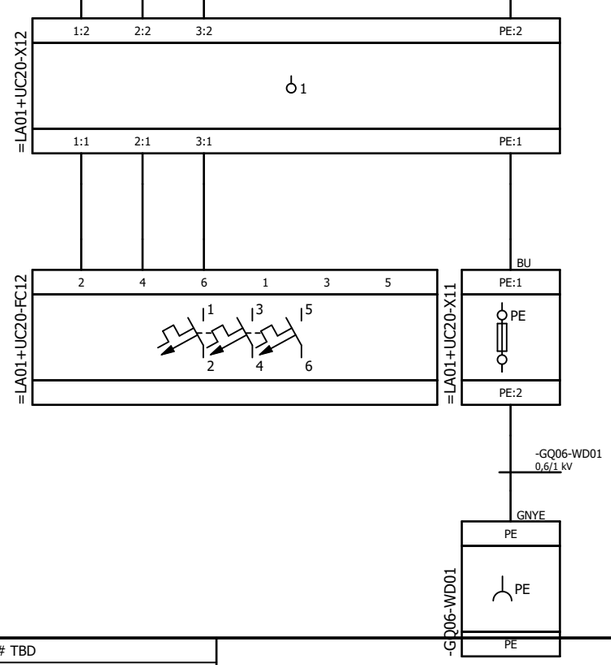
Cable connection diagram

Internal targets



=JA01+DA01-GQ07-WD01	Conductor	BK 1	BK 2	BK 3	GNYE
0,6/1 kV					

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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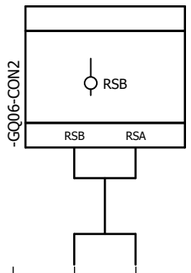
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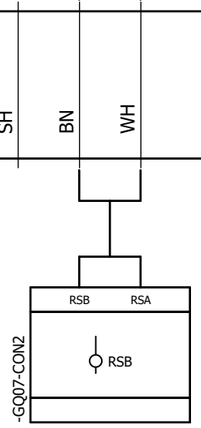
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-GQ07-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 57 /

Cable connection diagram

Internal targets



=JA01+DA01-GQ07-WG01	Conductor	WH	BN	SH	BN	WH
BUS CAN FD P						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
DATE
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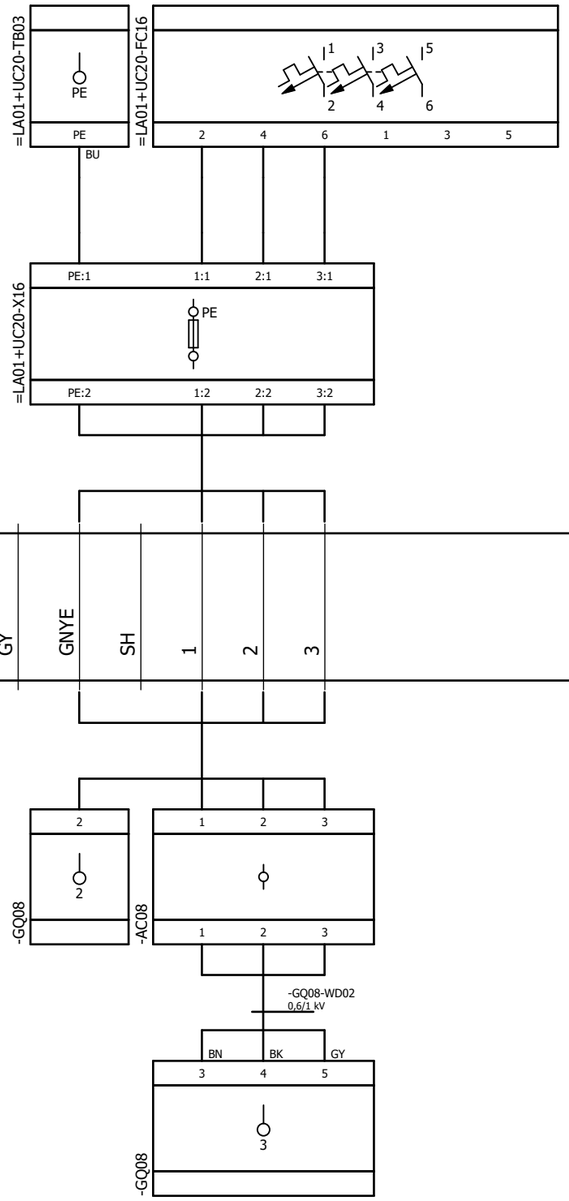
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-GQ07-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 58 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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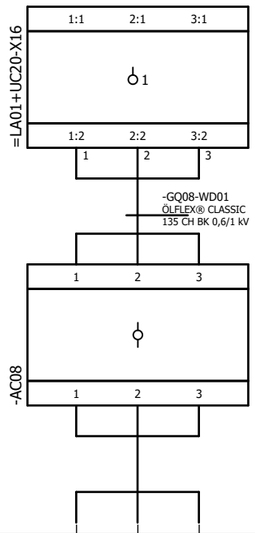
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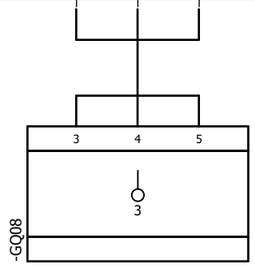
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-GQ08-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 59 /

Cable connection diagram

Internal targets



=JA01+DA01-GQ08-WD02	Conductor	BN	BK	GY	GNYE	SH
0,6/1 kV						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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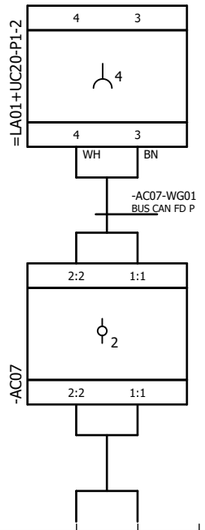
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DRAWING TITLE			
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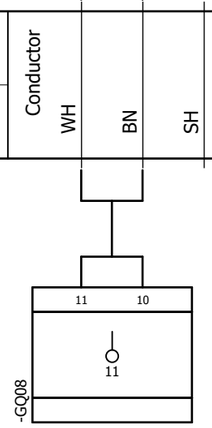
Cable connection diagram

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PBL 28-Mar-25

Internal targets



=JA01+DA01-GQ08-WG01	Conductor	WH	BN	SH



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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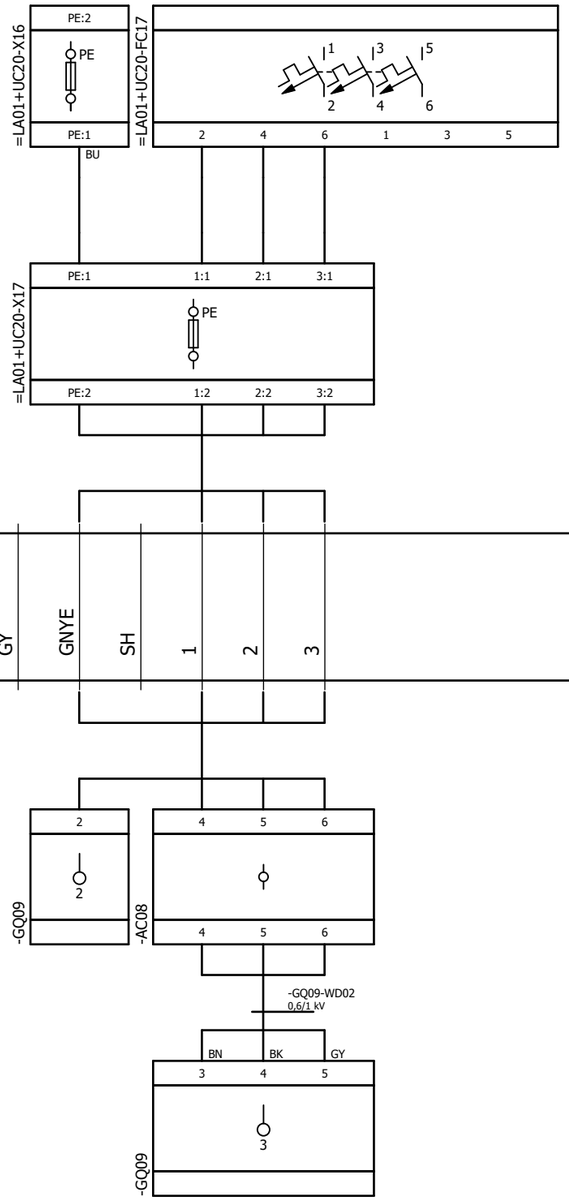
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-GQ08-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 61 /

Cable connection diagram

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PBL 28-Mar-25

Internal targets



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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28-Mar-25

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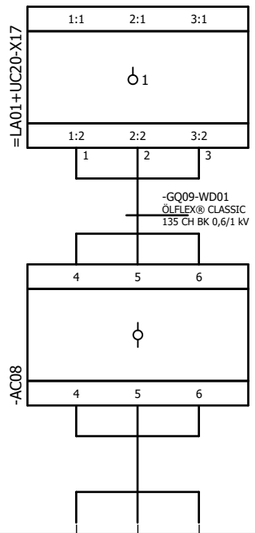
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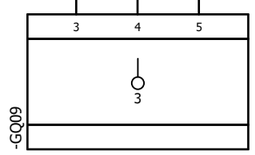
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 62 /

Cable connection diagram

Internal targets



=JA01+DA01-GQ09-WD02	Conductor	BN	BK	GY	GNYE	SH
0,6/1 kV						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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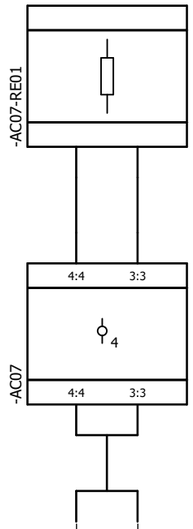
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
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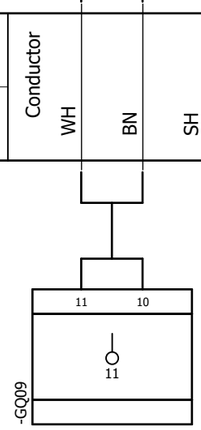
Cable connection diagram

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Internal targets



=JA01+DA01-GQ09-WG01	Conductor	WH	BN	SH



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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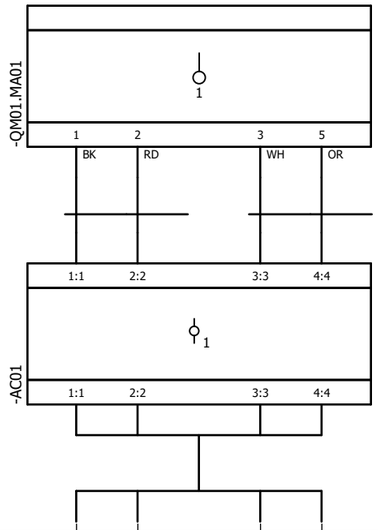
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-GQ09-WG01		
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Cable connection diagram

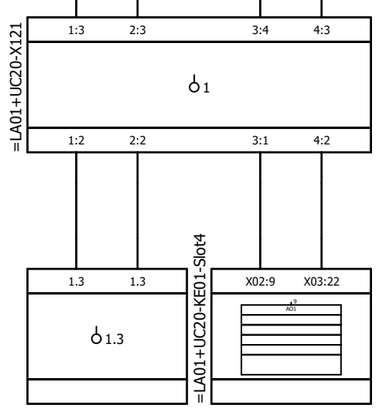
F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-QM01-WD01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 135 CH						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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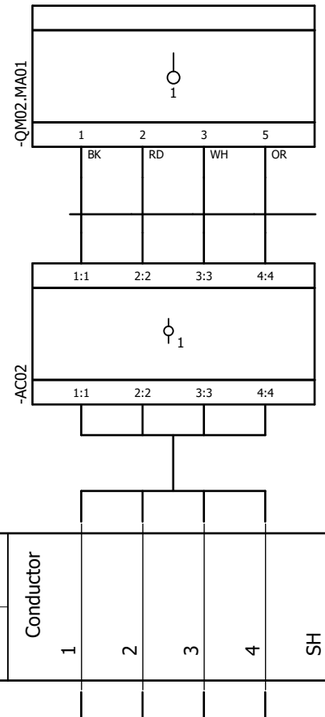
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-QM01-WD01		
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Cable connection diagram

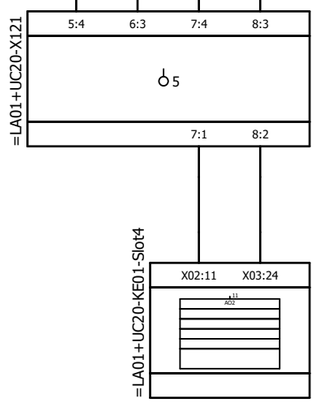
F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-QM02-WD01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 135 CH						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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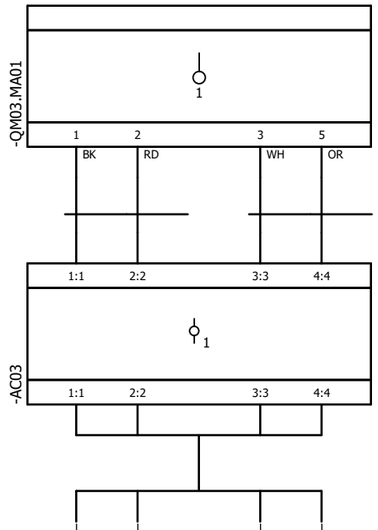
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
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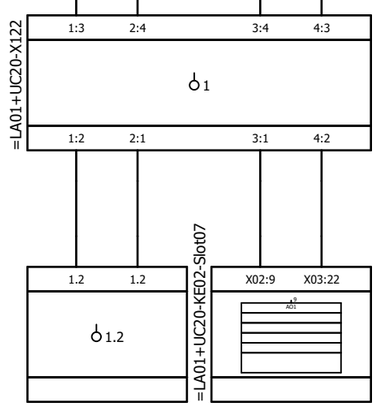
Cable connection diagram

Internal targets



=JA01+DA01-QM03-WD01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 135 CH						

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
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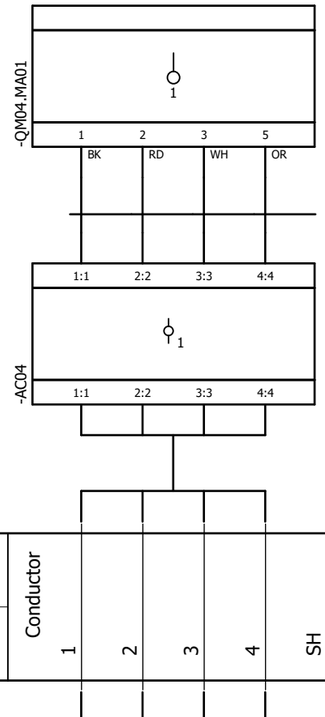
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DRAWING TITLE			
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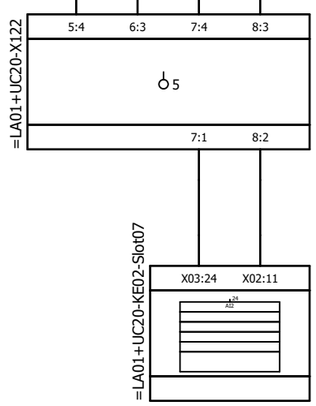
Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-QM04-WD01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 135 CH						



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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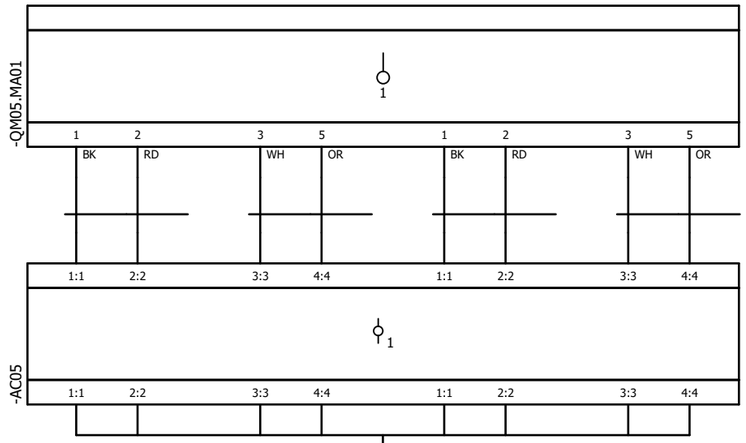
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DRAWING TITLE			
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ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 68 /

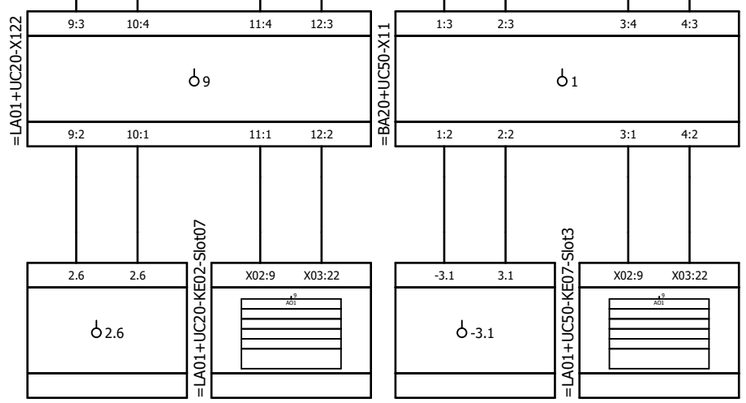
Cable connection diagram

Internal targets



=JA01+DA01-QM05-WD01	Conductor	1	2	3	4	SH	1	2	3	4	SH
ÖLFLEX® CLASSIC 135 CH											

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
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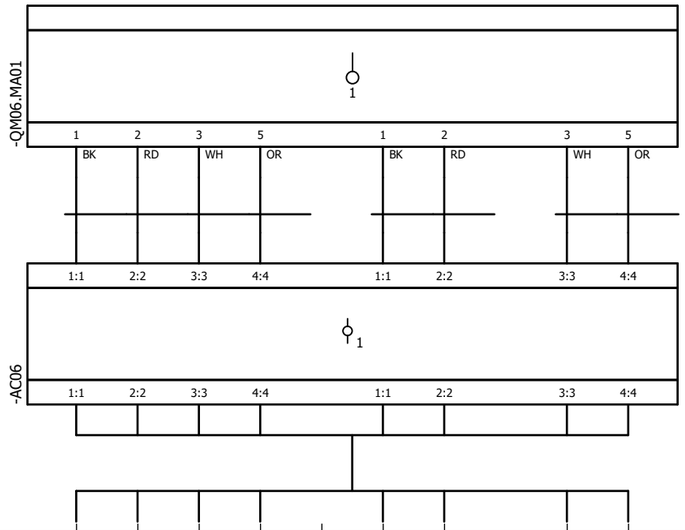
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-QM05-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 69 /

Cable connection diagram

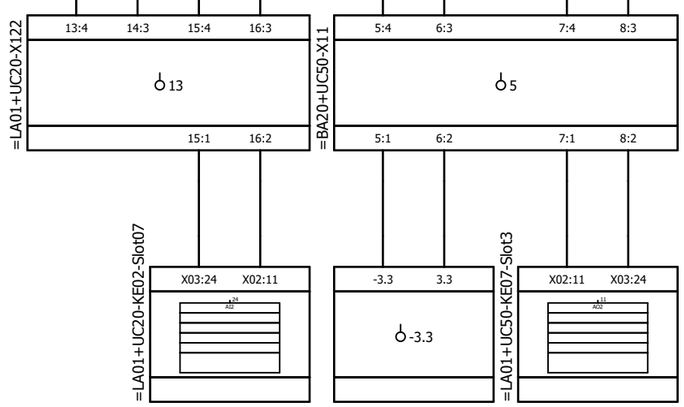
F07_001
PBL 28-Mar-25

Internal targets



=JA01+DA01-QM06-WD01	Conductor	1	2	3	4	SH	1	2	3	4	SH
ÖLFLEX® CLASSIC 135 CH											

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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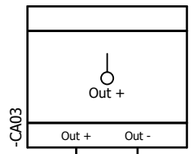
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =JA01+DA01-QM06-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 70 /

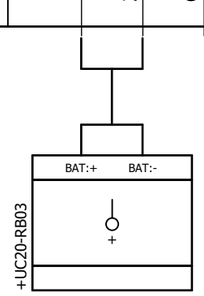
Cable connection diagram

F07_001
PBL 16-Oct-24

Internal targets



=LA01+DA01-RB03-WD01	Conductor	1	2	GNYE	SH
ÖLFLEX® CLASSIC 110 CH					



External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
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16-Oct-24

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =LA01+DA01-RB03-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 72 /

Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets

=LA01+UC20-KE03-WG01	Conductor	WHBU	BU	WHOG	OG	WHGN	GN	WHBN	BN	SH
Profinet 4pair cabling Cat.6A FRNC flexi										

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
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15-Oct-24

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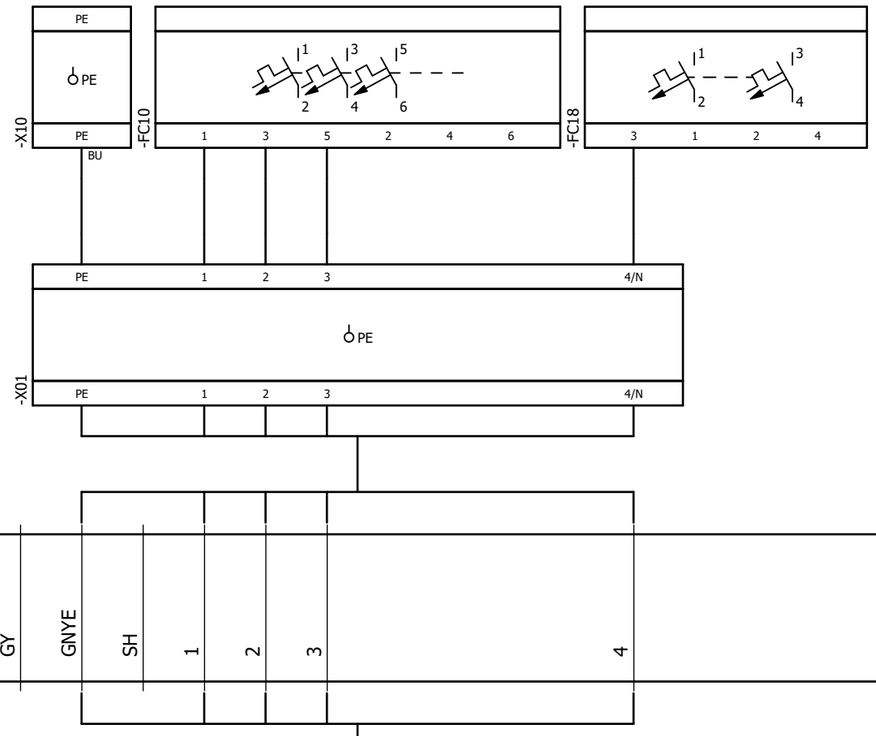
DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =LA01+UC20-KE03-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 73 /

0	1	2	3	4	5	6	7	8

Cable connection diagram

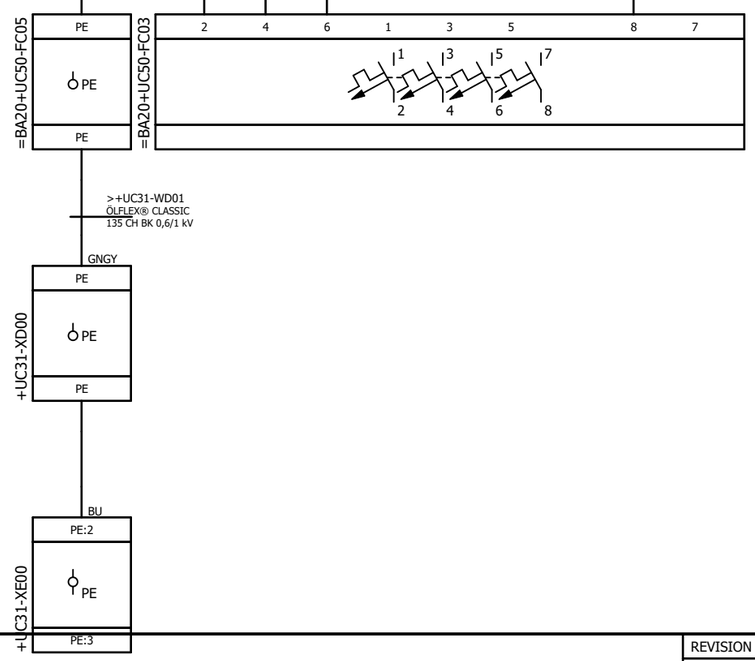
F07_001
PBL 28-Mar-25

Internal targets



=LA01+UC20-WD01	Conductor	BU	BN	BK	GY	GNYE	SH	1	2	3	4
ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV											

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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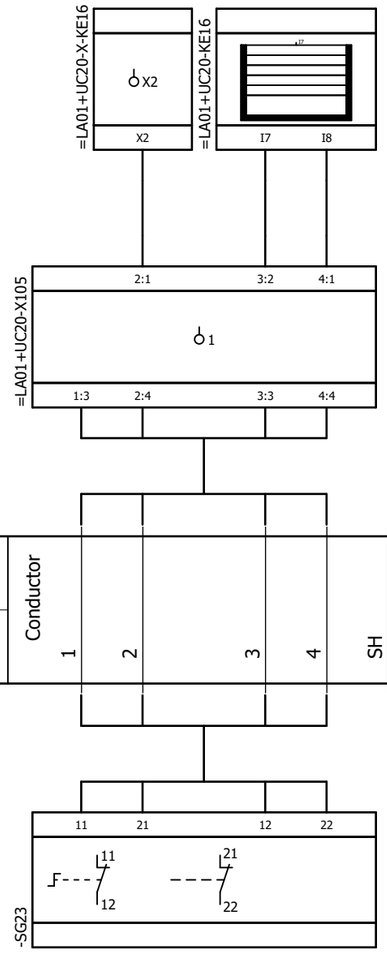
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =LA01+UC20-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 76 /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets



=LB02+DA01-SG23-WG01	Conductor	1	2	3	4	SH
ÖLFLEX® CLASSIC 110 CH						

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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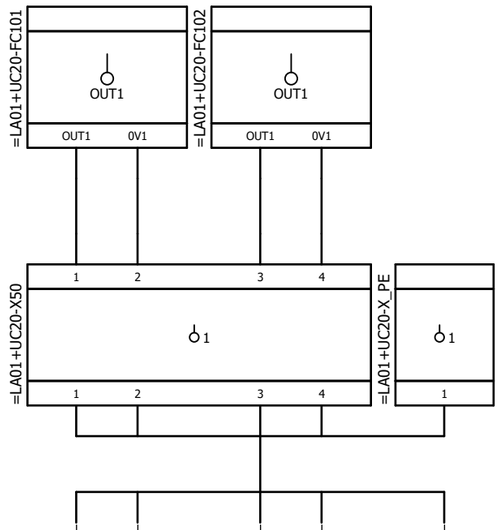
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =LB02+DA01-SG23-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 77 /

Cable connection diagram

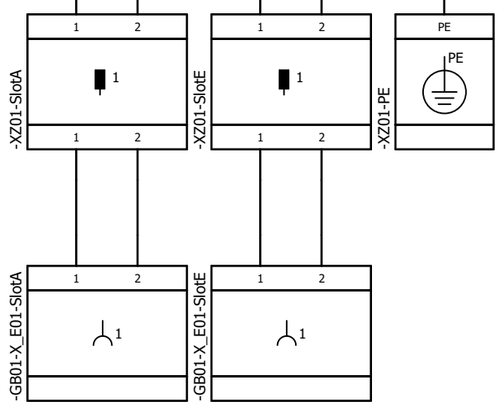
F07_001
PBL 15-Oct-24

Internal targets



=RE01+GB01-GB01-WD05	Conductor	1	2	3	4	GNYE	SH
CLASSIC 110 CH							

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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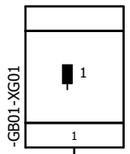
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB01-GB01-WD05		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 78 /

Cable connection diagram

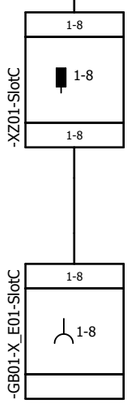
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PBL 15-Oct-24

Internal targets



=RE01+GB01-GB01-WG01	Conductor	WHBU	BU	WHOG	OG	WHGN	GN	WHBN	BN	SH
Cat.6A PUR										

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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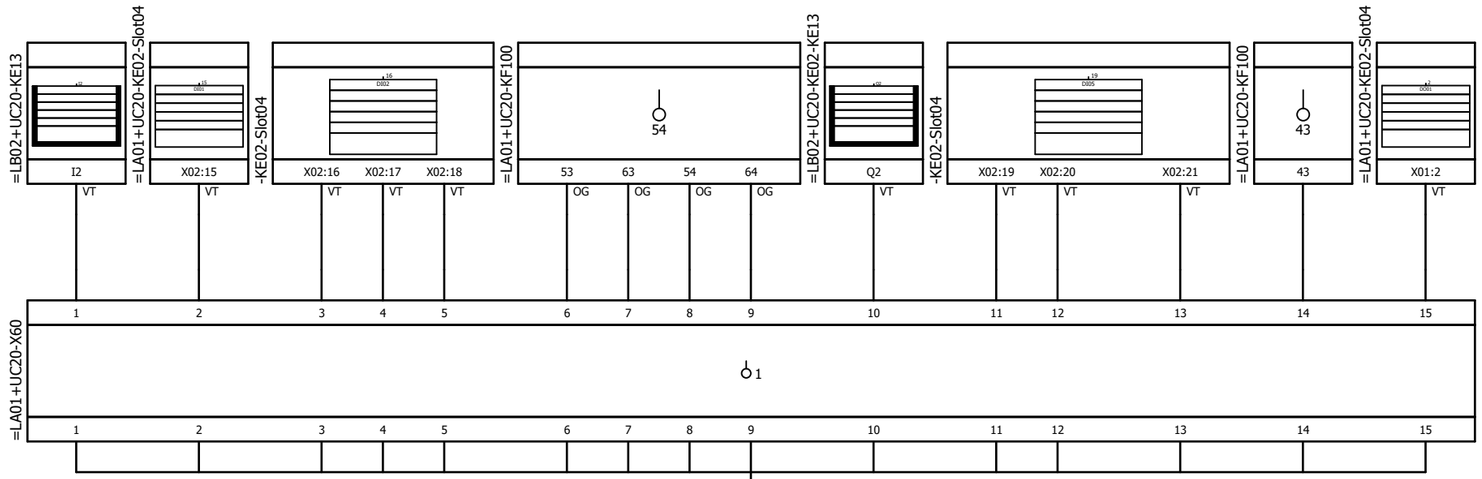
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB01-GB01-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 79 /

Cable connection diagram

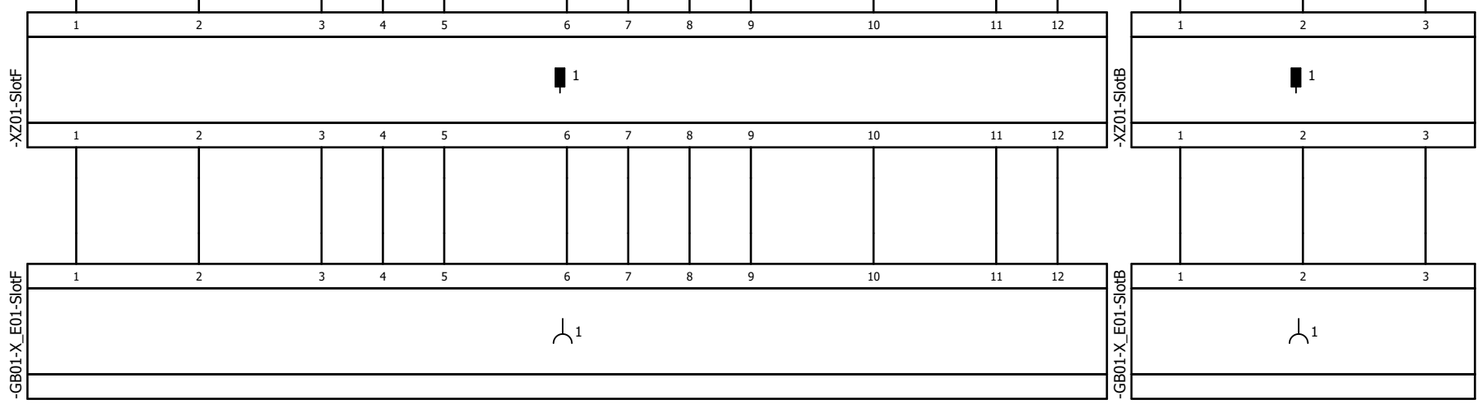
F07_001
PBL 15-Oct-24

Internal targets



=RE01+GB01-GB01-WG02	Conductor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	GNYE	SH	1	2	3	4	5
ÖLFLEX® CLASSIC 110 CH																									

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DESCRIPTION
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB01-GB01-WG02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 80 /

Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets

=RE01+GB01-GB01-WG02	Conductor	6	7	8	9	10	11	12	13	14	15	16	17	GNYE	SH
ÖLFLEX® CLASSIC 110 CH															

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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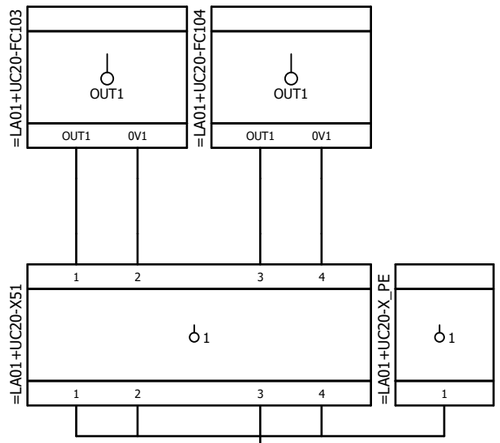
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB01-GB01-WG02		
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Cable connection diagram

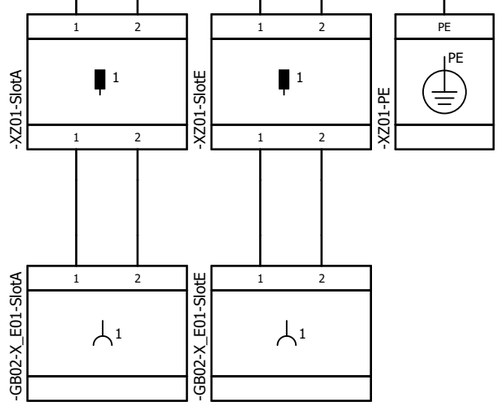
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PBL 15-Oct-24

Internal targets



=RE01+GB02-GB02-WD05	Conductor	1	2	3	4	GNYE	SH
CLASSIC 110 CH							

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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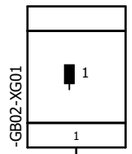
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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-GB02-WD05		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 81 /

Cable connection diagram

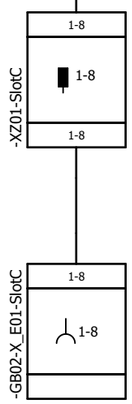
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PBL 15-Oct-24

Internal targets



=RE01+GB02-GB02-WG01	Conductor	WHBU	BU	WHOG	OG	WHGN	GN	WHBN	BN	SH
Cat.6A PUR										

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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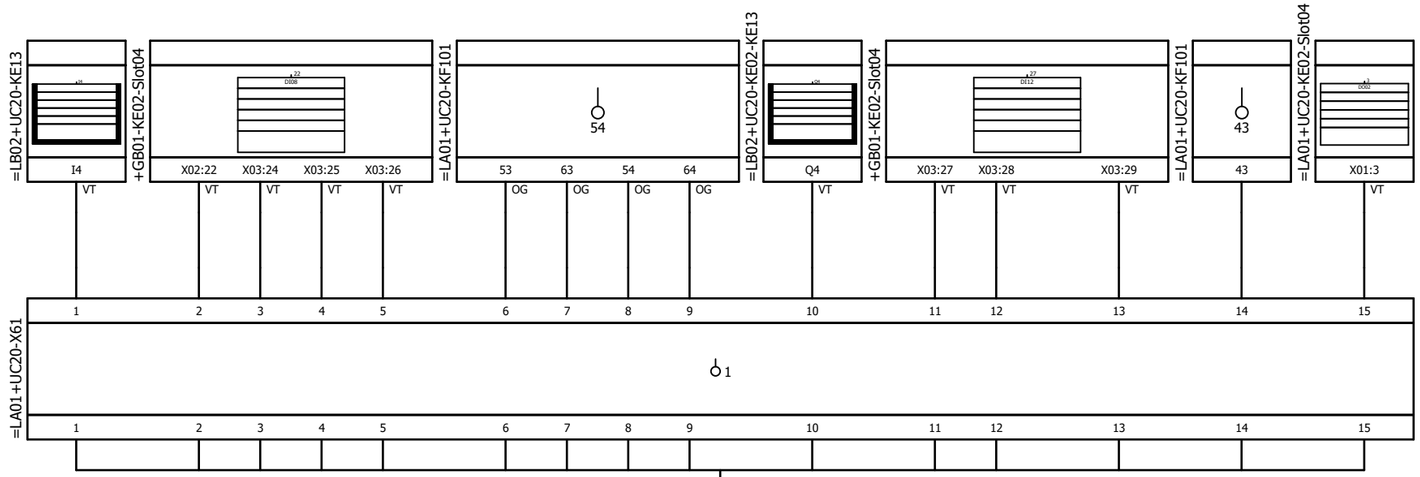
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-GB02-WG01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 82 /

FRM5103656/0B

Cable connection diagram

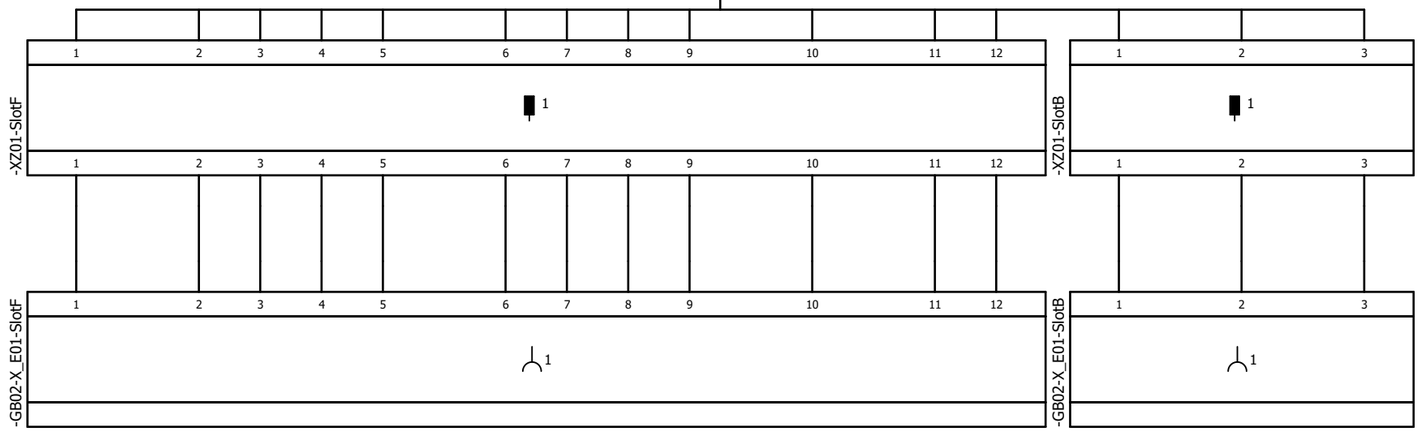
F07_001
PBL 15-Oct-24

Internal targets



=RE01+GB02-GB02-WG02	Conductor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	GNYE	SH	1	2	3	4	5	6
ÖLFLEX® CLASSIC 110 CH																										

External targets



Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-GB02-WG02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 83 /

Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets

=RE01+GB02-GB02-WG02	Conductor	7	8	9	10	11	12	13	14	15	16	17	GNYE	SH
ÖLFLEX® CLASSIC 110 CH														

External targets

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-GB02-WG02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 83.a /

Cable connection diagram

F07_001
PBL 28-Mar-25

Internal targets

=BA01+UC02-X02
1
1

=RE01+GB02-WD01	Conductor	BK	SH
ÖLFLEX® FD 90 CP			

External targets

-XB01
1
1
1

-GB02-X_HV
1:A+
1

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
=	++	+ UC20	& D01

REVISION INFORMATION
DESCRIPTION
DATE
28-Mar-25

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DRAWING	601456B UC20 40ft Control Cabinet	REVISION	06
DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-WD01		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 84 /

Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets

=BA01+UC02-X02
2
2

=RE01+GB02-WD02	Conductor	
ÖLFLEX® FD 90 CP	BK	SH

External targets

-XB02
1
1
1

-GB02-X_HV
3
3

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-WD02		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 85 /

Cable connection diagram

F07_001
PBL 15-Oct-24

Internal targets

=BA01+UC02-X02
3
3

=RE01+GB02-WD03	Conductor	BK	SH
ÖLFLEX® FD 90 CP			

External targets

-XB03
1
1
1

-GB02-X_HV
2
2

Reference Item Number	Ballard Part # TBD		
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EPLAN Revision	06		
EPLAN Project Pages	628		
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DRAWING TITLE			
SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-WD03		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 86 /

Cable connection diagram

Internal targets

=BA01+UC02-X02
4
4

=RE01+GB02-WD04	Conductor	BK	SH
ÖLFLEX® FD 90 CP			

External targets

-XB04
1
1
1

-GB02-X_HV
4
4

Reference Item Number	Ballard Part # TBD		
EPLAN Project Name	601456B - Shell Baseload Power Hub		
EPLAN Revision	06		
EPLAN Project Pages	628		
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SHEET TYPE/DESC	Cable-connection diagram =RE01+GB02-WD04		
ALL SHEETS ARE THE SAME REVISION STATUS	SIZE A3	LANGUAGE EN	SHEET/TOTAL 87 /