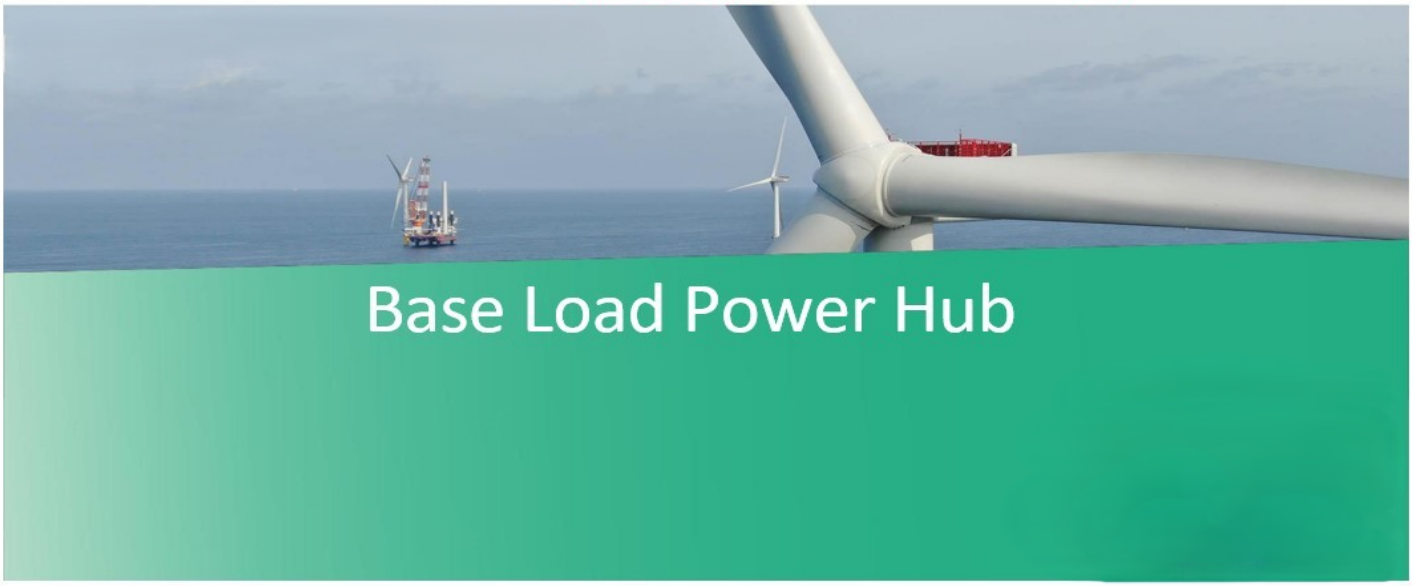
CROSSWIND

ROSETTI MARINO

PROVERLIS

PROJECT **123A90 - HOLLANDSE KUST NOORD WIND PARK**
BLPH Project



COMMISSIONING DOSSIER (ONSHORE)

SYSTEM	50 Fresh Water Systems
SUBSYSTEM	50-00 Seawater Intake System (Lifting Pumps)

CROSSWIND

123A90 - HOLLANDSE KUST NOORD WIND PARK
BLPH Project

COMMISSIONING DOSSIER INDEX

ROSETTI MARINO

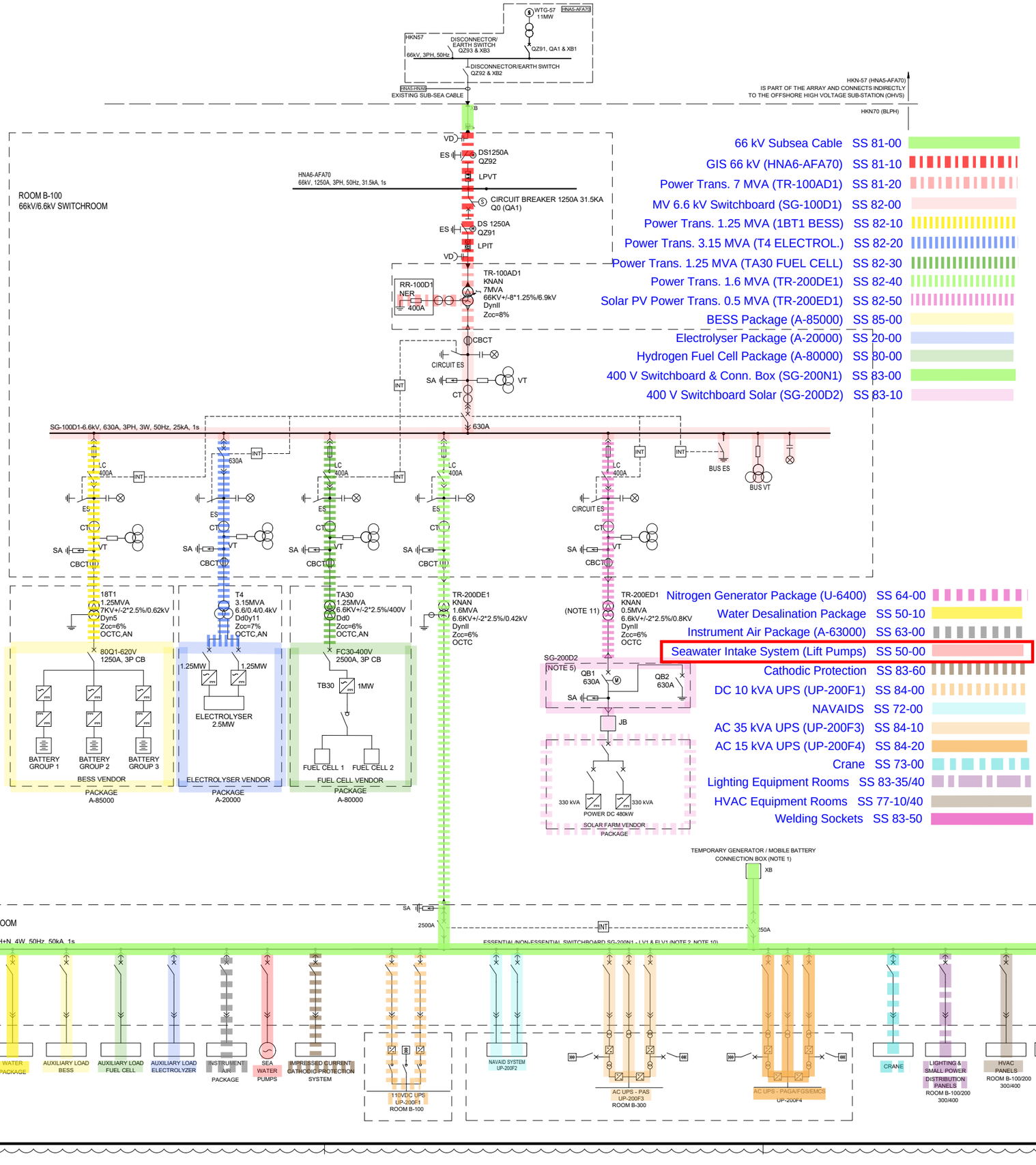
Sub System N°:	50-00	**Tick as appropriate**	ONSHORE	OK
Description:	Seawater Intake System (Lifting Pumps)		OFFSHORE	

1. *SUB-SYSTEM DEFINITION*	OK
1.1 Sub-System Description / Boundary Limit Drawings	
2. *READY FOR OPERATION CERTIFICATE*	OK
2.1 Achievement Of Ready for Operation Certificate (RFO)	
2.2 Exception Punch Lists (per discipline)	
2.3 “As-Commissioned” P&ID’s / SLD’s / D&ID’s / C&E’s	
3. *CONSOLIDATED PUNCH LISTS*	OK
3.1 Cleared and Residual Items (sorted by discipline)	
4. *FUNCTIONAL TESTS SHEETS*	OK
4.1 Electrical functional test sheets index	
4.2 Electrical “As-Commissioned” interconnection diagrams	
4.3 Instrumentation Functional Test Sheets Index	
4.4 Instrumentation “As-Commissioned” interconnection diagrams	
4.5 Telecommunication Functional Test Sheets Index	
4.6 Telecommunication “As-Commissioned” I.C.D. / TSLD’s	
5. *SITE / OPERATIONAL:*	OK
5.1 Operational Test Procedure	
5.2 Operational Test Certificates	
6. *PIPING AND VESSEL PREPARATION*	NA
6.1 Final Mechanical / Vessel Inspection Checks Index	
6.2 Leak Test / Drying / Inerting Test Sheets Index	
6.3 Chemical Loading & First Fill records Index	
6.4 Chemical Cleaning Reports and Records Index	
6.5 Lubrication Schedule	
7. *VENDORS*	OK
7.1 Vendor Package Summary Index	
7.2 SAT Procedure with associated punch list and reference (Front Page)	
7.3 Vendor Spares & Special Tools lists references	
7.4 Vendor Data / Operations / Maintenance Manuals References	
8. *LIST OF MODIFICATIONS*	NA
8.1 List of changes initiated during the WORKSITE Commissioning phase pertaining to the relevant Sub-System will be incorporated in this section with relevant references (with location and position of blinds/spades, isolation LO & LC valves, list of electrical isolation status, and remaining inhibits and overrides)	
9. *SUPPORTING DOCUMENTS*	NA
9.1 Other supporting documents (as applicable)	

	Contractor Commissioning Site Leader	Company Commissioning Site Leader
Name	Anthony Iveson	Gerry McCann
Date	2025-07-30	2025-07-30
Signature	PROVERLIS Digitaly signed by Anthony Iveson 2025-07-30T13:01:33.415Z	PROVERLIS Digitaly signed by Gerry McCann 2025-07-30T14:21:03.215Z

Section 1 SUB-SYSTEM DEFINITION

DRAWING NO. 123A90-DDL-EL-DG-20158 REV. 01



SYMBOL LEGEND:

- VOLTAGE DETECTOR
- EARTHING SWITCH DISCONNECTOR
- MOTORIZED EARTHING SWITCH
- CIRCUIT BREAKER
- FUSE
- CONTACTOR
- THREE-PHASE TRANSFORMER WITH TAP CHANGER
- THREE-PHASE TRANSFORMER
- CURRENT TRANSFORMER
- THREE-PHASE TRANSFORMER, WITH THREE WINDINGS
- NEUTRAL EARTHING RESISTOR
- SURGE ARRESTER
- CORE BALANCE CURRENT TRANSFORMER
- SURGE ARRESTOR FOR T-CONNECTOR (N.1 FOR EACH PHASE)
- VOLTAGE & CURRENT TRANSFORMER (3Ø X 2) (LPIT TYPE)
- VOLTAGE TRANSFORMER (3Ø X 2) (LPVT TYPE)
- VOLTAGE TRANSFORMER
- CABLE BOX
- T-CONNECTOR CABLE TERMINATION
- CABLE AIR TERMINATION

OLTC	= ON LOAD TAP CHANGER
OCTC	= OPEN CIRCUIT TAP CHANGER
KNAN	= NON-MINERAL OIL NATURAL AIR COOLED
AN	= AIR NATURAL
XB	= CABLE BOX
QZ	= DISCONNECT SWITCH & EARTH SWITCH
QA	= CIRCUIT BREAKER
LC	= LATCHED FUSED CONTACTOR (400A)
INT	= INTERLOCK SYSTEM
SA	= SURGE ARRESTER
CBCT	= CORE BALANCE CURRENT TRANSFORMER
ES	=EARTHING SWITCH
VD	=VOLTAGE DETECTOR
LCP	=LOCAL CONTROL PANEL
LPVT	=LOW POWER VOLTAGE TRANSFORMER
LPCT	=LOW POWER CURRENT TRANSFORMER
LPIT	=LOW POWER INSTRUMENT TRANSFORMER
JB	=JUNCTION BOX

NOTES:

1. TEMPORARY POWER SUPPLY CONNECTION BOX LOCATED ON OUTSIDE WALL OF LV SWITCHROOM / CONTAINER.
2. LOAD DEFINITION 'ESSENTIAL' / 'NON-ESSENTIAL' IS SHOWN IN THE LOAD LIST. THE CCS, EMCS AND 'SMART' SWITCHGEAR WILL OPEN / CLOSE CIRCUIT BREAKERS AS REQUIRED.
3. A COMBINED CCS/EMCS SYSTEM COMPRISES A MICROPROCESSOR BASED SYSTEM, ASSOCIATED SOFTWARE AND REQUIRED PERIPHERALS FOR MONITORING AND CONTROLLING OF ELECTRICAL POWER NETWORK. ALL ELECTRICAL EQUIPMENT AND PACKAGE UNITS SHALL BE CONNECTED TO THE CENTRAL CONTROL SYSTEM .
4. IMPRESSED CURRENT CATHODIC PROTECTION SYSTEM SUPPLIED BY COMPANY.
5. THE SOLAR FARM IN-FEED POWER CIRCUIT BREAKERS PANEL IS LOCATED INSIDE THE LV SWITCHGEAR ROOM B-200.
6. DELETED.
7. DELETED.
8. DELETED.
9. CROSSWIND SHALL BE ABLE TO CONTROL THE BLPH 66KV MOTORISED CIRCUIT BREAKER Q0 (QA1) & MOTORISED ELECTRICAL DISCONNECTOR / EARTH SWITCH (QZ92, TYPE B) USING THEIR 'HV-SCADA' SYSTEM. THIS BACK-UP / REDUNDANT CONTROL SHALL BE ADDITIONAL TO THAT PROVIDED BY THE CCS AND BE OF HIGHER PRIORITY OVER A SEPARATE FIBRE OPTIC CABLE (FOC). THE CCS OPERATOR AND 'HV-SCADA' SHALL BOTH BE KEPT FULLY AWARE OF EQUIPMENT STATUS AT ALL TIMES. INTERTRIPPING, INHIBITS & INTERLOCKING FOR BLPH 66KV EQUIPMENT SHALL BE AS PER THE WIND FARM.
10. THE LOADS IN THE LOW VOLTAGE SWITCHGEAR AND THE CURRENT VALUES OF THE CIRCUIT BREAKERS ARE ONLY INDICATIVE.
11. NEUTRAL POINT OF TR-200ED1 SHALL NOT BE GROUNDED AS REQUIRED BY SOLAR FARM SUPPLIER IN 123A90-PML-PM-TQ-00040.

REFERENCES:

1. 123A90-DDL-EL-DG-20014 ELECTRICAL CONTROL, PROTECTION AND METERING DIAGRAMS
2. 123A90-DDL-EL-DG-20015 ELECTRICAL SINGLE LINE DIAGRAM 6.6kV SYSTEMS
3. 123A90-DDL-EL-DG-20159 ELECTRICAL SINGLE LINE DIAGRAMS LV SYSTEM
4. 123A90-DDL-EL-DG-20160 ELECTRICAL SINGLE LINE DIAGRAMS AC UPS SYSTEMS
5. 123A90-DDL-EL-DG-20161 ELECTRICAL SINGLE LINE DIAGRAMS DC UPS SYSTEMS
6. 123A90-DDL-EL-DG-20185 ELECTRICAL SINGLE LINE DIAGRAM HV SYSTEMS
7. 123A90-DDL-EL-DL-20104 ELECTRICAL EQUIPMENT LAYOUT - HV SWITCHROOM
8. 123A90-DDL-EL-DL-20105 ELECTRICAL EQUIPMENT LAYOUT - LV SWITCHROOM
9. 123A90-DDL-EL-LIS-20016 ELECTRICAL LOAD LIST and BALANCE -CCS MODE CHARGING-
10. 123A90-DDL-EL-RE-20152 ELECTRICAL EQUIPMENT SIZING CCALCULATION REPORT
11. 123A90-DDL-EL-RE-20170 ELECTRICAL SYSTEM STUDY REPORT - LOAD FLOW
12. 123A90-DDL-EL-RE-20171 ELECTRICAL SYSTEM STUDY REPORT - SHORT CIRCUIT
13. 123A90-DDL-EL-RE-20172 ELECTRICAL SYSTEM STUDY REPORT - ARC FLASH ENERGY CALCULATION
14. 123A90-DDL-EL-RE-20173 ELECTRICAL SYSTEM STUDY REPORT - HARMONICS

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	26/03/2024	GPA	LMA/AMA	LMA/MDO	ISSUE FOR REVIEW (IFR)
00	02/11/2023	DSF	CB/AMA	OYFO/MDO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :

OVERALL/KEY SINGLE LINE DIAGRAM

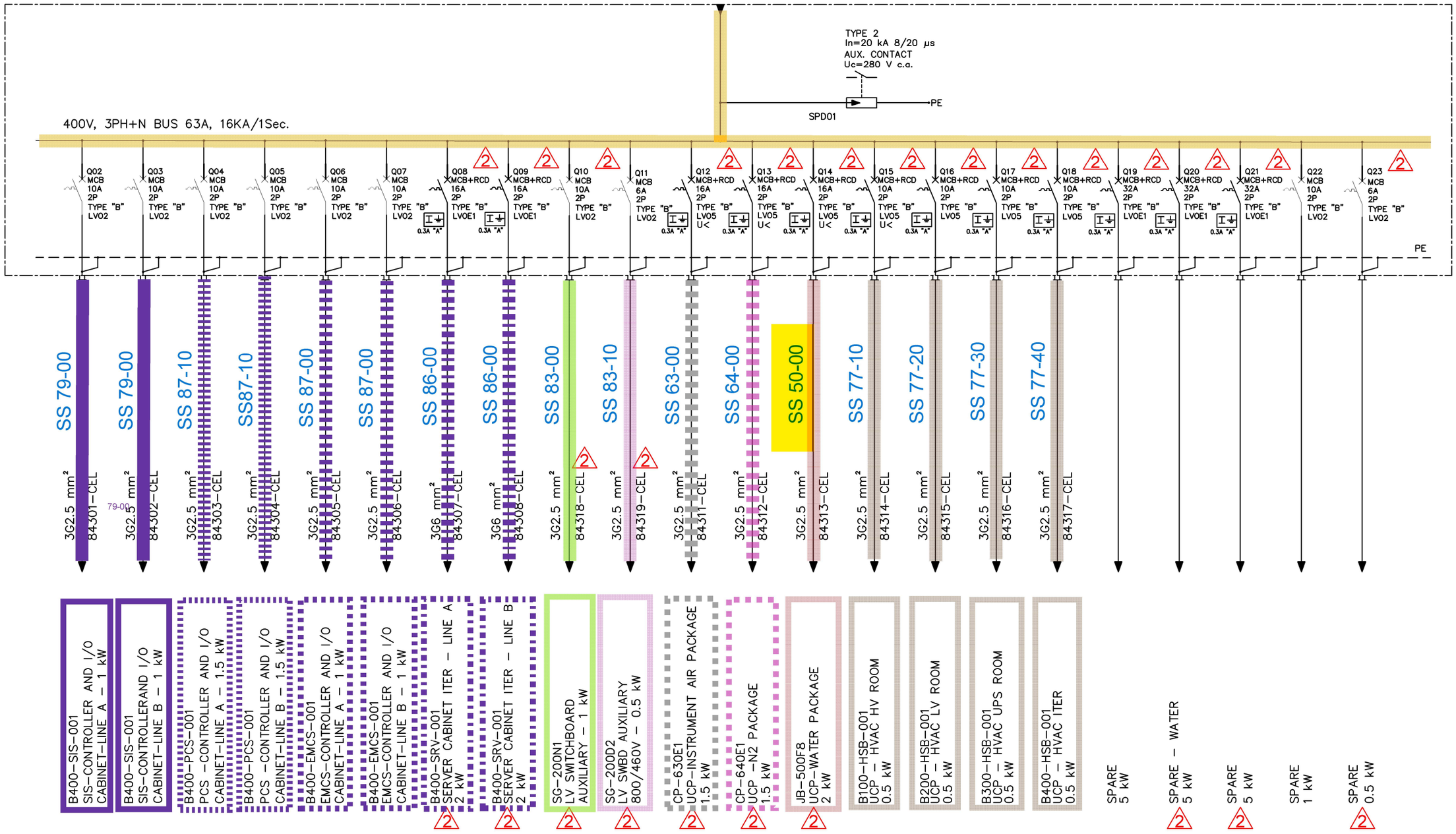
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE N/A
DRAWN GPA	CHECKED LMA/AMA	APPROVED LMA/MDO	DATE 26/03/2023
A1	DRAWING NO. 123A90-DDL-EL-DG-20158	SHEET 001	REV. 01

01

File Name : 123A90-DDL-EL-DG-20158_REV01.dwg

AC UPS – PAS SINGLE LINE DIAGRAM(UP–200F3) DISTRIBUTION BOARD DETAILS

AC UPS DISTRIBUTION BOARD–PAS
DP–200F3



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	27/09/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	12/04/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	14/02/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL SINGLE LINE DIAGRAMS AC UPS SYSTEMS
AC UPS – PAS DISTRIBUTION BOARD SLD (UP–200F3)

CONTRACT NO./TITLE CW–I–WP4–2023–05/HOLLANDSE KUST NOORD WIND PARK

SCALE : 1:X

A3

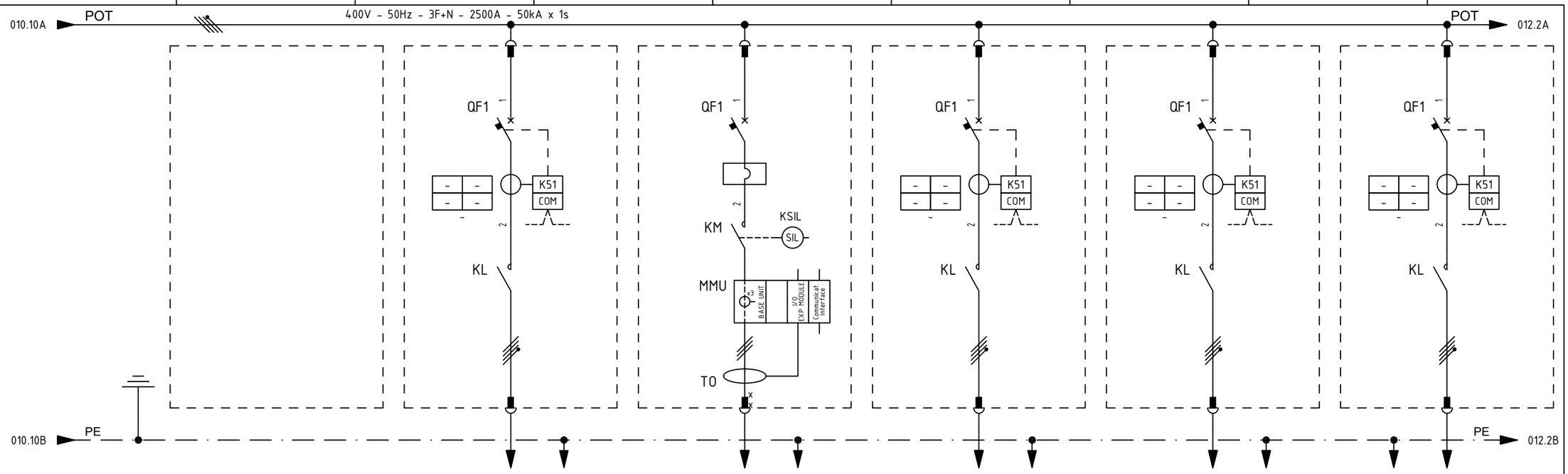
DRAWING NO. 123A90–DDL–EL–DG–20160

SHEET 005

REV. 02

File Name : 123A90–DDL–EL–DG–20160 Rev. 02

F.to UNI A3: 420mmx297mm



ITEM				K-63001-B		PM-50001 B		CP-850E1		CP-850E2		-	
UTILITY			2	INSTRUMENTS AIR PACKAGE 01B		SEA WATER PUMP B		BESS LV1 CABINET (+DISTR 1)		BESS LV2 CABINET (+DISTR 2)		SPARE	
COLUMN/CUBICLE			3	A5 / +08		A6 / +01		A6 / +02		A6 / +03		A6 / +04	
RATED POWER | RATED CURRENT			4/5	68.75 kW	111.24 A	6.1 kW	11.0 A	11.28 kW	18.09 A	11.28 kW	18.09 A	- kW	- A
TYPICAL FUNCTIONAL			6	LK2-160		M1-6		LK1-40		LK1-40		LK1-40	
CIRCUIT BREAKER (ABB)	TYPE		7	XT4S - 250		XT2S - 160		XT2S - 160		XT2S - 160		XT2S - 160	
	VERSION		8	4P - FIXED		3P - FIXED		4P - FIXED		4P - FIXED		4P - FIXED	
	TRIP UNITS		9	EKIP HI TOUCH LSIG (In = 160A)		MA (In = 20A)		EKIP HI TOUCH LSIG (In = 40A)		EKIP HI TOUCH LSIG (In = 40A)		EKIP HI TOUCH LSIG (In = 40A)	
	Icu	KA	10	50 kA		-		50 kA		50 kA		50 kA	
OVERLOAD	L	Range A	11	(0.4 - 1) x In		-		(0.4 - 1) x In		(0.4 - 1) x In		(0.4 - 1) x In	
		Range t	12	k/I^2		-		k/I^2		k/I^2		k/I^2	
SEL. SHORT-CIRCUIT	S	Range A	13	(0.6 - 10) x In		-		(0.6 - 10) x In		(0.6 - 10) x In		(0.6 - 10) x In	
		Range t	14	0.05 - 0.4 sec / k/I^2		-		0.05 - 0,4 sec / k/I^2		0.05 - 0,4 sec / k/I^2		0.05 - 0,4 sec / k/I^2	
INST. SHORT-CIRCUIT	I	Range A	15	(1.5 - 15) x In		(6 - 14) x I		(1.5 - 15) x In		(1.5 - 15) x In		(1.5 - 15) x In	
		Range t	16	instantaneous		<= 0.02 sec		instantaneous		instantaneous		instantaneous	
EARTH FAULT PROTECTION	G	Range A	17	(0.1 - 1) x In		-		(0.1 - 1) x In		(0.1 - 1) x In		(0.1 - 1) x In	
		Range t	18	t=k / t=k/I^2		-		t=k / t=k/I^2		t=k / t=k/I^2		t=k / t=k/I^2	
CONTACTOR (ABB)			19	AF190-40-11-13 (275A-AC1); 100-250 VAC/DC		AF38-30-00-13 (18.5 kW - AC3) - 100-250Vac/dc		AF40-40-00-13 (70A-AC1); 100-250VAC/DC		AF40-40-00-13 (70A-AC1); 100-250VAC/DC		AF40-40-00-13 (70A-AC1); 100-250VAC/DC	
THERMAL OVERLOAD RELAY (ABB)			20	-		UMC100.3 UC (0.24 - 63A)		-		-		-	
SURGE ARRESTER (DEHN)			21	-		-		-		-		-	
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-		-		-		-		-	
FUSE HOLDER (ITALWEBER)			23	SUBSISTEM 63.00		SUBSISTEM 50.00		SUBSISTEM 85.00		SUBSISTEM 85.00		SUBSISTEM 83.00	
INDIRECT PROTECTION (ABB)			24										
VOLTMETER			25										
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE		26	-		-		-		-		-	
	PERFORMANCE/CLASS		27	-		-		-		-		-	
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE		28	-		-		-		-		-	
	PERFORMANCE/CLASS		29	-		-		-		-		-	
LOCK-OUT RELAY (-)			30	-		-		-		-		-	
POWER CONDUCTOR		mmq	31	5G70		4G4		4 x (1 x 10)		4 x (1 x 10)		-	

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	08/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for Construction (AFC)
2	03/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	28/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	15/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

DWG n° : 231298/SD/11
Item n° : PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

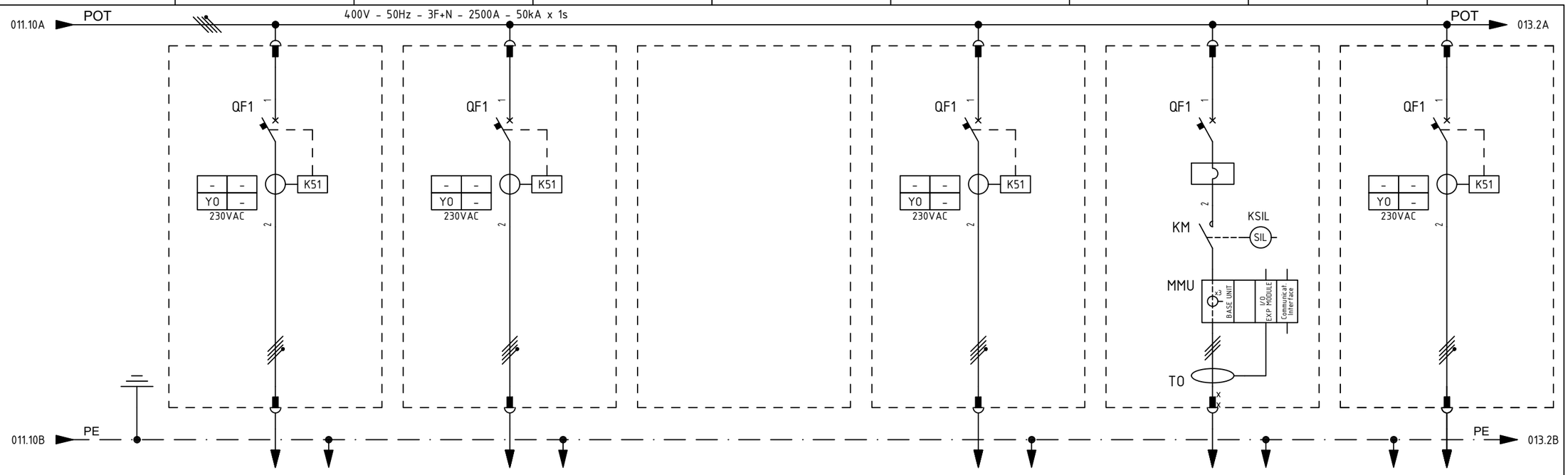
DRAWING NO. 1723002197-EL-DG-00011

SHEET 011

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00011 Rev. 03



ITEM			1	UP-200F4	UP-200F4		ESW-200N1	PM-50001 A	UP-200F3
UTILITY			2	AC UPS F&G - 8 H UP-200F4 - LINE A	AC UPS F&G - 8h UP-200F4 - LINE B		WELDING SOCKETS (TOP DECK)	SEA WATER PUMP A	AC UPS PAS - 30 min. UP-200F3 - BYPASS
COLUMN/CUBICLE			3	A6 / +05	A6 / +06		A6 / +08	A7 / +01	A7 / +02
RATED POWER | RATED CURRENT			4/5	18 kW | 28.9 A	18 kW | 28.9 A		69.84 kW | 126.15 A	6.1 kW | 11.0 A	36 kW | 57.8 A
TYPICAL FUNCTIONAL			6	L1-63	L1-63		L2-160	M1-6	L1-100
CIRCUIT BREAKER (ABB)	TYPE		7	XT2S - 160	XT2S - 160		XT4S - 250	XT2S - 160	XT2S - 160
	VERSION		8	4P - FIXED	4P - FIXED		4P - FIXED	3P - FIXED	4P - FIXED
	TRIP UNITS		9	EKIP DIP LSIG (In = 63A)	EKIP DIP LSIG (In = 63A)		EKIP DIP LSIG (In = 160A)	MA (In = 20A)	EKIP DIP LSIG (In = 100A)
	Icu	KA	10	50 kA	50kA		50kA	-	50 kA
OVERLOAD	L	Range A	11	(0.4 - 1) x In	(0.4 - 1) x In		(0.4 - 1) x In	-	(0.4 - 1) x In
		Range t	12	k/I^2	k/I^2		k/I^2	-	k/I^2
SEL. SHORT-CIRCUIT	S	Range A	13	(1 - 10) x In	(1 - 10) x In		(1 - 10) x In	-	(1 - 10) x In
		Range t	14	0.05 - 0.4 sec / k/I^2	0.05 - 0.4 sec / k/I^2		0.05 - 0.4 sec / k/I^2	-	0.05 - 0.4 sec / k/I^2
INST. SHORT-CIRCUIT	I	Range A	15	(1 - 10) x In	(1 - 10) x In		(1 - 10) x In	(6 - 14) x I	(1 - 10) x In
		Range t	16	<= 0.02 sec	<= 0.02 sec		<= 0.02 sec	<= 0.02 sec	<= 0.02 sec
EARTH FAULT PROTECTION	G	Range A	17	(0.2 - 1) x In	(0.2 - 1) x In		(0.2 - 1) x In	-	(0.2 - 1) x In
		Range t	18	0.1 - 0.8 sec	0.1 - 0.8 sec		0.1 - 0.8 sec	-	0.1 - 0.8 sec
CONTACTOR (ABB)			19	-	-		-	AF38-30-00-13 (18.5 kW - AC3) - 100-250Vac/dc	-
THERMAL OVERLOAD RELAY (ABB)			20	-	-		-	UMC100.3 UC (0.24 - 63A)	-
SURGE ARRESTER (DEHN)			21	-	-		-	-	-
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-	-		-	-	-
FUSE HOLDER (ITALWEBER)			23	SUBSISTEM 84.20	SUBSISTEM 84.20		SUBSISTEM 83.50	SUBSISTEM 50.00	SUBSISTEM 84.10
INDIRECT PROTECTION (ABB)			24						
VOLTMETER			25						
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE		26	-	-		-	-	-
	PERFORMANCE/CLASS		27	-	-		-	-	-
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE		28	-	-		-	-	-
	PERFORMANCE/CLASS		29	-	-		-	-	-
LOCK-OUT RELAY (-)			30	-	-		-	-	-
POWER CONDUCTOR		mmq	31	4G35	4G35		5G50	4G4	4G35

=
+

DWG n° : 231298/SD/11
Item n° : PF1002983/26

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	08/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for Construction (AFC)
2	03/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	28/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	15/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00011

SHEET 012

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00011 Rev. 03

DRAWING NO. DRAWING_NO.

REV. REV

P-50001 A/B
SEA WATER LIFT PUMPS

POWER : 1.6 KW
FLOW : 2.5 m³/h
DESIGN P/T : 7.6 barg / 80°C
DISCHARGE PRESSURE : 5.6 barg (NOTE 9)
MATERIAL : SDSS

02

B-50013 A/B
SEA WATER LIFT PUMPS CAISSONS

02

SIZE : 3432 mm (ID) x 27308 mm (H)
MATERIAL : CS + CA

123A90-DDL-PR-PID-80022
BIOCIDE DOSING UNIT

1"-CI-029-01CP-E

3/4" BLPH-MV-214

3/4"x1/2" CONC. RED. 1/2" BLPH-MV-215

Sea Water Intake System SS 50-00

Electrochlorinated Water SS 50-11

1-1/2"-SWS-035-01SD-E

123A90-DDL-PR-PID-80022
SEA WATER COARSE FILTER PACKAGE

BLPH-MV-043 1.1/2" 1-1/2"-SWS-031-01SD-E

BLPH-MV-050 1.1/2" 1-1/2"-SWS-033-01SD-E

50 RO 001 NOTE 7

50 XY 001 / 50 XV 001 IA NOTE 5 FC TYP.1

50 XY 002 / 50 XV 002 IA NOTE 3 FC TYP.1

50 RO 002 NOTE 7

50 XY 003 / 50 XV 003 I.A. NOTE 5 FC TYP.1

50 XY 004 / 50 XV 004 I.A. NOTE 3 FC TYP.1

3/4" BLPH-MV-044

3/4" BLPH-MV-054

INSTR. PIPING 1.1/2" BLPH-NRV-004

INSTR. PIPING 1.1/2" BLPH-NRV-008

50 PI 001 / 50 PT 001 H L 2" 2" x 1.5" BLPH-MV-464

50 PI 002 / 50 PT 002 H L 2" 2" x 1.5" BLPH-MV-465

1"-SWS-146-01SD-E

1"-SWS-147-01SD-E

BLPH-NRV-007 1" 1"-CI-030-01CP-E

BLPH-NRV-024 1" 1"-CI-032-01CP-E

START/STOP 50 HS 001
RUNNING/STOPPED 50 XI 001
AUTO START READY 50 XI 002
TRIPPED/FAULT 50 XA 001
SHUTDOWN ALARM 50 XA 002
ESD I

START/STOP 50 HS 002
RUNNING/STOPPED 50 XI 003
AUTO START READY 50 XI 004
TRIPPED/FAULT 50 XA 003
SHUTDOWN ALARM 50 XA 004
ESD I

SP 0043 MCC SP 0033 1"-SWS-222-01SD-E

SP 0044 MCC SP 0034 1"-SWS-221-01SD-E

50 PSV 006 1D2 BLOCKED OUTLET SET @ 7.6 barg 2"-SWR-289-01SD-N

50 PSV 007 1D2 BLOCKED OUTLET SET @ 7.6 barg 2"-SWR-287-01SD-N

PM-50001A M RS BLPH-MV-048 1" BLPH-MV-469 SB 1"-SWS-288-01SD-E

PM-50001B M RS BLPH-MV-051 1" BLPH-MV-470 SB 1"-SWS-286-01SD-E

LOWER DECK: +23.310 m

TOP OF CAISSON: +21.808 m

SUCTION NOTE 1, 8 P-50001A

SUCTION NOTE 1, 8 P-50001B

EL: 5.500 m PUMP RETENTION BARS B-50013A

EL: 5.500 m PUMP RETENTION BARS B-50013B

NOTES

1. SEAWATER LIFT PUMPS ARE RATED 2 X 100%
2. AUTO START OF DESIGNATED STANDBY PUMP ON LOSS OF RUNNING STATUS AND DISCHARGE LOW PRESSURE ALARM OF DUTY PUMP.
3. VALVE TO BE OPENED WHEN PUMP IS OFFLINE TO DOSE CAISSON WITH TREATED SEAWATER TO PREVENT BIOLOGICAL GROWTH.
4. DELETED. 02
5. SOFTWARE INTERLOCK PREVENTS PUMPS FROM STARTING UNLESS DISCHARGE XV IS FULLY CLOSED.
6. DELETED. 02
7. FOR ORIFICE DIAMETER REFERENCE SHALL BE MADE TO "123A90-DDL-IN-DS-40054 - TECHNICAL DATASHEET FOR RESTRICTION ORIFICE".
8. LOGIC FOR CONTROL OF P-5001A/B THAT PREVENTS SIMULTANEOUS RUNNING OF A AND B PUMP IS PROVIDED.
9. DISCHARGE PRESSURE REFERS TO THE FLANGE DISCHARGE OF THE PUMP AT LOWER DECK.

02

HOLDS

1. DELETED.
2. DELETED.
3. DELETED.
4. DELETED.
5. DELETED.

02

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	12/06/2024	CIM	RZI	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	15/02/2024	CIM	RZI	DLO	ISSUE FOR ACCEPTANCE (IFA)
00	20/10/2023	CIM	RZI	DLO	ISSUE FOR ACCEPTANCE (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :
BLPH PIPING AND INSTRUMENTATION DIAGRAM
SEA-WATER INTAKE SYSTEM SHEET 1

CONTRACT NO./TITLE	CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK		SCALE NTS
DRAWN	CHECKED	APPROVED	DATE
A1	DRAWING NO. 123A90-DDL-PR-PID-80021		SHEET 001 / REV. 02

File Name : FILE_NAME

DRAWING NO. DRAWING_NO.

REV. REV

Sea Water Intake System	SS 50-00
Electrochlorinated Water	SS 50-11
Waste Water Disposal System	SS 55-00
Waste Water Brine Disharge System	SS 55-01
Water Desalination & Distribution System	SS 50-10

A-50000
WATER TREATMENT PACKAGE
CAPACITY : 2.5 m³/hr
02

02

GAS CONFIRMED 50 XA 001 — F&G
SMOKE CONFIRMED 50 XA 002 — F&G
FAULT PACKAGE 50 XA 003 — ESD
50-XS-001 SHUT-DOWN — ESD
NOTE 6

CONTRACTOR | SUPPLIER

FOR CONTINUATION SEE DOC N. 123A90-DDL-PR-PID-80023

123A90-DDL-PR-PID-80025
TO 50-TDI-002
50 TI 001
BLOCKED OUTLET SET @ 6 barg
50 PSV 011 1D2
2"-SWR-291-01SD-N
02
BLPH-MV-471
SB
1"-SWS-290-01SD-E
50 TT 001
50 TE 001
1.1/2"
4"x1.1/2"
ECC. RED.
TP 017
E
123A90-DDL-PR-PID-80021
FROM SEA WATER LIFT PUMP
1-1/2"-SWS-035-01SD-E
BLPH-MV-241 3/4"

A-50000
WATER TREATMENT PACKAGE
SEE VENDOR DRAWING
DOC. N. 1724000448-PR-PID-00013

02
FOR CONTINUATION SEE DOC N. 123A90-DDL-PR-PID-80023

E
TP 005
123A90-DDL-PR-PID-80021
TO SEA WATER LIFT PUMP AND LIFT PUMP CAISSONS
1"-CI-029-01CP-E

1"-CI-043-01CP-E
TP 006
123A90-DDL-PR-PID-80026
TO WASTE WATER TANK
DECK HOOK-UP 003
02

SUPPLIER | CONTRACTOR

TP 003
1.1/2"x1"
3"x1.1/2"
1"-SWR-045-01CS-H
123A90-DDL-PR-PID-80025
TO BRINE DISCHARGE CAISSON

TP 007
1.1/2"x1"
1"-WW-038-01CS-H
123A90-DDL-PR-PID-80026
TO WASTE WATER TANK

NOTES

1. DELETED. 02
2. DELETED.
3. DELETED.
4. DELETED.
5. DELETED. 02
6. SERIAL COMMUNICATION WITH CONTROL SYSTEM.

HOLDS

1. DELETED.
2. DELETED.
3. DELETED.
4. DELETED. 02
5. DELETED.
6. DELETED.

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	12/06/2024	CIM	RZI	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	15/02/2024	CIM	RZI	DLO	ISSUE FOR ACCEPTANCE (IFA)
00	20/10/2023	CIM	RZI	DLO	ISSUE FOR ACCEPTANCE (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :
BLPH PIPING AND INSTRUMENTATION DIAGRAM
SEA-WATER INTAKE SYSTEM SHEET 2

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK		SCALE NTS	
DRAWN	CHECKED	APPROVED	DATE
A1	DRAWING NO. 123A90-DDL-PR-PID-80022	SHEET 001	REV. 02

File Name : FILE_NAME

DRAWING NO. DRAWING_NO.

REV. REV

Sea Water Intake System	SS 50-00
Electrochlorinated Water	SS 50-11
Waste Water Disposal System	SS 55-00
Waste Water Brine Disharge System	SS 55-01
Water Desalination & Distribution System	SS 50-10

A-50000
WATER TREATMENT PACKAGE
CAPACITY : 2.5 m³/hr
02

02

GAS CONFIRMED 50 XA 001 — F&G
SMOKE CONFIRMED 50 XA 002 — F&G
FAULT PACKAGE 50 XA 003 — ESD
50-XS-001 SHUT-DOWN — ESD
NOTE 6

CONTRACTOR | SUPPLIER

FOR CONTINUATION SEE DOC N. 123A90-DDL-PR-PID-80023

123A90-DDL-PR-PID-80025
TO 50-TDI-002
50 TI 001
BLOCKED OUTLET SET @ 6 barg
50 PSV 011 1D2
2"-SWR-291-01SD-N
02
BLPH-MV-471
SB
1"-SWS-290-01SD-E
50 TT 001
50 TE 001
1.1/2"
4"x1.1/2"
4"x1.1/2"
TP 017
E
ECC. RED.
ECC. RED.
123A90-DDL-PR-PID-80021
FROM SEA WATER LIFT PUMP
1-1/2"-SWS-035-01SD-E
BLPH-MV-241 3/4"

A-50000
WATER TREATMENT PACKAGE
SEE VENDOR DRAWING
DOC. N. 1724000448-PR-PID-00013

02
FOR CONTINUATION SEE DOC N. 123A90-DDL-PR-PID-80023

E
TP 005
123A90-DDL-PR-PID-80021
TO SEA WATER LIFT PUMP AND LIFT PUMP CAISSONS
1"-CI-029-01CP-E

1"-CI-043-01CP-E
TP 006
123A90-DDL-PR-PID-80026
TO WASTE WATER TANK
DECK HOOK-UP 003
02

SUPPLIER | CONTRACTOR

TP 003
1.1/2"x1"
3"x1.1/2"
1"-SWR-045-01CS-H
123A90-DDL-PR-PID-80025
TO BRINE DISCHARGE CAISSON

TP 007
1.1/2"x1"
1"-WW-038-01CS-H
123A90-DDL-PR-PID-80026
TO WASTE WATER TANK

NOTES

1. DELETED. 02
2. DELETED.
3. DELETED.
4. DELETED.
5. DELETED. 02
6. SERIAL COMMUNICATION WITH CONTROL SYSTEM.

HOLDS

1. DELETED.
2. DELETED.
3. DELETED.
4. DELETED. 02
5. DELETED.
6. DELETED.

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	12/06/2024	CIM	RZI	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	15/02/2024	CIM	RZI	DLO	ISSUE FOR ACCEPTANCE (IFA)
00	20/10/2023	CIM	RZI	DLO	ISSUE FOR ACCEPTANCE (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :
BLPH PIPING AND INSTRUMENTATION DIAGRAM
SEA-WATER INTAKE SYSTEM SHEET 2

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK		SCALE NTS	
DRAWN	CHECKED	APPROVED	DATE
A1	DRAWING NO. 123A90-DDL-PR-PID-80022	SHEET 001	REV. 02

File Name : FILE_NAME

Section 2 READY FOR OPERATION

Section 2.1 Achievement Of Ready for Operation Certificate (RFO)

ROSETTI MARINO

123A90 - HOLLANDSE KUST NOORD WIND PARK
BLPH Project

CROSSWIND

Ready For Operation (RFO) Certificate

COMPLETE		PARTIAL	●

Revision:	1		Issued on:	2025-07-29	

System:	50	/	Fresh Water Systems
SubSystem:	50-00	/	Seawater Intake System (Lifting Pumps)

We hereby confirm that all Mechanical Completion (MC) and Pre-Commissioning/Commissioning (Pre-Comm./Comm.) activities for the above-mentioned System/Sub-System have been successfully completed in accordance with project specifications, relevant standards and contractual requirements. The System/Sub-System has been tested and verified to ensure readiness for operation. Issuance of this Certificate shall not release CONTRACTOR from any of his obligations, responsibilities or liabilities under the CONTRACT.

	Mechanical Completion: All required MC activities have been completed and approved
	Pre-Commissioning & Commissioning: All required Pre-Comm. and Comm. activities and OTPs have been completed and approved (Status Index attached)
	Punch List: All Punch items categorized as A and B have been cleared (PL report attached)
	Documentation: As-built documentation and Commissioning dossier has been completed, reviewed and approved

PUNCH LIST	PENDING POINTS
Note: All Category "A" and "B" Items must be cleared prior to issuance of the Ready For Operation (RFO) Certificate	B: 1

REMARKS:

	CONTRACTOR Commissioning Manager	**COMPANY** Commissioning Lead
Name	Anthony Iveson	Gerry McCann
Date	2025-07-29	2025-07-30
Signature	PROVERLIS Digitaly signed by Anthony Iveson 2025-07-29T07:42:17.262Z	PROVERLIS Digitaly signed by Gerry McCann 2025-07-30T09:31:18.548Z

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Electrical	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
A6/+01-QF1	SEA WATER PUMP B - A6/+01-QF1	ONSHORE	C10002941	FP00	100	2025-01-15	RFO 1
		ONSHORE	C10002942	FTR-2	100	2024-10-02	RFO 1
		ONSHORE	C10002943	FTR-6	100	2025-02-04	RFO 1
		ONSHORE	C10002993	FTR-5	100	2025-07-28	RFO 1
A7/+01-QF1	SEA WATER PUMP A - A7/+01-QF1	ONSHORE	C10002944	FP00	100	2025-01-15	RFO 1
		ONSHORE	C10002945	FTR-2	100	2024-10-02	RFO 1
		ONSHORE	C10002946	FTR-6	100	2025-02-04	RFO 1
		ONSHORE	C10002994	FTR-5	100	2025-07-28	RFO 1
PM-50001A	Electric Motor for sea water pump	OFFSHORE	C10002947	FP13	0	-	-
		OFFSHORE	C10004549	FTR-2	0	-	-
PM-50001B	Electric Motor for sea water pump	OFFSHORE	C10002948	FP13	0	-	-
		OFFSHORE	C10004550	FTR-2	0	-	-

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Instrumental	50-00 Seawater Intake System (Lifting Pumps)

ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
50-PT-001	Pressure Transmitter - Sea Water from Pump P-50001A	ONSHORE	C10003179	FJ01A	100	2025-03-19	RFO 1
50-PT-002	Pressure Transmitter - Sea Water from Pump P-50001B	ONSHORE	C10003180	FJ01A	100	2025-03-19	RFO 1
50-TT-001	Temperature Transmitter - Sea Water from Lift Pump P-50001A/B	ONSHORE	C10003182	FJ01A	100	2025-03-19	RFO 1
50-XA-001	A-500003 (A-50000) Sea water treatment PKG confirmed gas alarm	ONSHORE	C10003774	FJ01D	100	2025-03-19	RFO 1
50-XA-002	A-500003 (A-50000) Sea water treatment PKG confirmed fire alarm	ONSHORE	C10003775	FJ01D	100	2025-03-19	RFO 1
50-XV-001	On/Off Valve - Sea Water from Pump P-50001A	ONSHORE	C10003226	FJ01V	100	2025-03-19	RFO 1
50-XV-002	On/Off Valve - Sea Water Recirculation from Pump P-50001A	ONSHORE	C10003227	FJ01V	100	2025-03-19	RFO 1
50-XV-003	On/Off Valve - Sea Water from Pump P-50001B	ONSHORE	C10003228	FJ01V	100	2025-03-19	RFO 1
50-XV-004	On/Off Valve - Sea Water Recirculation from Pump P-50001B	ONSHORE	C10003229	FJ01V	100	2025-03-19	RFO 1

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Mechanical	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
P-50001A	Sea Water Pump A	OFFSHORE	C10004860	5222	0	-	-
		OFFSHORE	C10004861	5223	0	-	-
P-50001B	Sea Water Pump B	OFFSHORE	C10004862	5222	0	-	-
		OFFSHORE	C10004863	5223	0	-	-

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Piping	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
50-00	Service Test Sea Water Intake System	OFFSHORE	C10004913	4245	0	-	-

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	50	Fresh Water Systems
SUBSYSTEM	50-00	Seawater Intake System (Lifting Pumps)

Building

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30002547	A	B-50013B C10004524	There is no nozzle 1" #150 FF facing south differently ffrom the drawing. The structural pipe OD406 mm has not been even drilled.	.		KAlbonetti 2025-01-09	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002548	A	B-50013A C10004525	There is no nozzle 1" #150 FF facing south differently ffrom the drawing. The structural pipe OD406 mm has not been even drilled.	.		KAlbonetti 2025-01-09	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002550	A	B-50013B C10004524	The flange phonography has damages due incorrect welding on the internal side.	.		KAlbonetti 2025-01-09	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002639	A	B-50013B C10004524	Interaxis distance between B-50013B and B-50013A is 1190 mm instead of 1200 mm.	.		KAlbonetti 2025-01-10	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002640	A	B-50013A C10004525	Interaxis distance between B-50013B and B-50013A is 1190 mm instead of 1200 mm.	.		KAlbonetti 2025-01-10	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002549	B	B-50013A C10004525	The flange phonography on the internal side has been ground by grinding disc.	.		KAlbonetti 2025-01-09	2025-01-09	KAlbonetti 2025-01-09	2025-01-09

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003616	A	C-50-XV-003/00 -JE-12006 C10000105	The core "OS" (overall shield terminal) is not connected.	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003634	A	50-XY-004 C10002018	the earth cable is not fixed	.		APolo 2025-02-10	2025-02-25	APolo 2025-02-25	2025-02-25
C30004081	A	50-TT-001 C10000904	Missing the earth connection on the instrument.	.		APolo 2025-02-21	2025-02-25	JKrizanic 2025-02-25	2025-02-25
C30003594	B	50-PT-002 C10000902	Missing tag SS , on the instrument.	.		APolo 2025-02-07	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003595	B	50-PT-002 C10000902	Missing PLANE WASHER	.		APolo 2025-02-07	2025-02-25	AAndreani 2025-02-25	2025-02-25
C30003596	B	50-PT-001 C10000901	Missing tag SS , on the instrument.	.		APolo 2025-02-07	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003597	B	50-PT-001 C10000901	Missing the plane washers on the u-bolt fitting	.		APolo 2025-02-07	2025-02-27	JKrizanic 2025-02-27	2025-02-27
C30003611	B	C-50-XY-003/00 -JE-13003 C10000127	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-08	2025-02-13	AAndreani 2025-02-13	2025-02-13
C30003612	B	C-50-XY-003/00 -JE-13003 C10000127	The cable (between external cable tray and instrument) to be dressed/fixed properly.	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003613	B	50-XY-003 C10002017	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003614	B	C-50-XV-003/00 -JE-12006 C10000105	Wrong cores identification tag. side J.B. 00-JE-12006 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003617	B	C-50-XV-003/00 -JE-12006 C10000105	Missing n°1 terminal block for connection The core "OS" (overall shield terminal)	.		APolo 2025-02-08	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30003618	B	C-50-XV-003/00 -JE-12006 C10000105	Missing core identification The core "OS" (overall shield terminal) inside Limit switch (ZSHL))	.		APolo 2025-02-08	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003619	B	50-XY-001 C10002015	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003620	B	C-50-XY-001/00 -JE-13003 C10000125	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003621	B	C-50-XY-001/00 -JE-13003 C10000125	The cable is laid outside the secondary cable tray. must be dressed/fixed properly.	.		APolo 2025-02-10	2025-03-05	JKrizanic 2025-03-05	2025-03-05
C30003622	B	C-50-XV-001/00 -JE-12006 C10000103	The cable is not support .	.		APolo 2025-02-10	2025-02-26	APolo 2025-02-26	2025-02-26
C30003623	B	C-50-XV-001/00 -JE-12006 C10000103	Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003624	B	C-50-XY-002/00 -JE-13003 C10000126	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003626	B	C-50-XY-002/00 -JE-13003 C10000126	The cable (between external cable tray and instrument). must be dressed/fixed properly.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003627	B	50-XY-002 C10002016	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003628	B	C-50-XV-002/00 -JE-12006 C10000104	The cable (between external cable tray and instrument). must be dressed/fixed properly.	The cable is not support .		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003629	B	C-50-XV-002/00 -JE-12006 C10000104	Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003632	B	C-50-XY-004/00 -JE-13003 C10000128	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003633	B	C-50-XY-004/00 -JE-13003 C10000128	The cable (between external cable tray and instrument). must be dressed/fixed properly.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003635	B	50-XY-004 C10002018	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003636	B	50-XV-004 C10001190	Missing data plate SS , on the valve.	.		APolo 2025-02-10	2025-02-27	JKrizanic 2025-02-27	2025-02-27

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003637	B	C-50-XV-004/00 -JE-12006 C10000106	Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003638	B	C-50-XV-004/00 -JE-12006 C10000106	The cable (between external cable tray and instrument). must be dressed/fixed properly.	.		APolo 2025-02-10	2025-02-26	APolo 2025-02-26	2025-02-26
C30004080	B	C-50-TT-001/00- JE-11004 C10000051	The cable is not support .	.		APolo 2025-02-21	2025-02-27	JKrizanic 2025-02-27	2025-02-27
C30004082	B	50-TT-001 C10000904	Missing tag SS , on the instrument.	.		APolo 2025-02-21	2025-02-24	APolo 2025-02-24	2025-02-24
C30004158	B	50-PSV-006 C10004536	Scratches on painting, general touch-up to be performed.	.		Lmussi 2025-02-26	2025-05-06	LNovaga 2025-05-06	2025-05-06
C30004183	B	50-PSV-007 C10004537	Scratches on painting, general touch-up to be performed	.		Lmussi 2025-02-28	2025-05-06	LNovaga 2025-05-06	2025-05-06

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Mechanical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004187	A	P-50001B C10002366	Suction nozzle to be installed offshore.	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004188	A	P-50001B C10002366	Seal system made by Flowserve has not been installed. To be installed offshore.	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004189	A	P-50001B C10002366	Lubrication system to be checked before commissioning. Not possible to be checked now.	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004240	A	P-50001A C10002365	Suction nozzle to be installed offshore.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004241	A	P-50001A C10002365	Seal system made by Flowserve has not been installed. To be installed offshore.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004242	A	P-50001A C10002365	Lubrication system to be checked before commissioning. Not possible to be checked now.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004185	B	P-50001B C10002366	Nameplate of Motor from ABB has Item tag wrong. Equipment number as for Vendor asset register is 3G1F2433998069. On the nameplate	.		KAlbonetti 2025-03-01	2025-03-18	LNovaga 2025-03-18	2025-03-18
C30004186	B	P-50001B C10002366	Pump has not been fixed to structure. To be dismantled and reassembled after transportation. Final fixing to structure to be done offshore after	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004239	B	P-50001A C10002365	Pump has not been fixed to structure. To be dismantled and reassembled after transportation. Final fixing to structure to be done offshore after	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Mechanical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004243	B	P-50001B C10002366	Compared to the pump A, there is no label with the arrow above the pump tag, in the annex the example of the pump A.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Piping

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004234	A	50-00-TP-028 C10003444	Flange management activity on joint 026-2-J5 is not done. (SK 026 2/2).	.	Completed	LNovaga 2025-03-10	RDegliEsposti 2025-07-10	RDegliEsposti 2025-07-10	2025-07-10
C30004396	A	50-00-TP-028 C10003444	Flange management activity on joint 026-2-J5 is not done. (SK 026 2/2).		Activity completed.	LNovaga 2025-03-10	RDegliEsposti 2025-07-24	RDegliEsposti 2025-07-24	2025-07-24
C30001983	B	50-00-TP-045 C10003577	Spool not assembled in erection. Inspection points from 3 to 6 of the ITR "Inspection before testing" to be checked during reinstatement.	.		KAlbonetti 2024-12-18	2025-03-07	LNovaga 2025-03-07	2025-03-07
C30002841	B	50-00-TP-028 C10003443	Sk.154 (Sh.1/1): On support PS-01049.1 position R1 has not been fitted at all.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002842	B	50-00-TP-028 C10003443	Sk.26 (Sh.2/2): For supports PS-01028.1 and 01028.3 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002843	B	50-00-TP-028 C10003443	Sk.26 (Sh.2/2): For supports PS-01027.1 and 01027.3 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002844	B	50-00-TP-028 C10003443	Sk.26 (Sh.1/2): For supports PS-01014.1 and 01014.5 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002845	B	50-00-TP-028 C10003443	Sk.26 (Sh.1/2): For supports PS-01015.1 and 01015.5 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002846	B	50-00-TP-028 C10003443	Flanges have not been torqued for final but only for testing. Connection points have not been checked before testing. All flange management	.		KAlbonetti 2025-01-14	2025-03-01	KAlbonetti 2025-03-01	2025-03-01

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Piping

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30002847	B	50-00-TP-028 C10003443	Piping not aligned vertically at the connection point of package A-50000.	.	Alignment was checked during the reinstatement activities. No concerns were	KAlbonetti 2025-01-14	RDegliEsposti 2025-06-12	RDegliEsposti 2025-06-12	2025-06-12
C30003137	B	50-00-TP-001 C10003233	All supports S-64 still to be assembled.	.		KAlbonetti 2025-01-21	2025-02-25	LNovaga 2025-02-25	2025-02-25
C30004131	B	50-00-TP-001 C10003234	BLPH-MV-043 has stem direction north and gear down. The valve was rotated because it was hard to maneuver.	.		LNovaga 2025-02-25	2025-02-25	LNovaga 2025-02-25	2025-02-25
C30004132	B	50-00-TP-001 C10003234	BLPH-MV-050 has stem direction north and gear down. The valve was rotated because it was hard to maneuver.	.		LNovaga 2025-02-25	2025-02-25	LNovaga 2025-02-25	2025-02-25
C30004135	B	50-00-TP-001 C10003234	All standard's supports are S-64 - 1-1/2" - 90 - 200, documents must be correct. Pipe is aligned to battery limit (pumps)	.	Changes have been recorded on RLMUs	LNovaga 2025-02-25	RDegliEsposti 2025-06-25	RDegliEsposti 2025-06-25	2025-06-25
C30004216	B	50-00-TP-028 C10003444	.	.		LNovaga 2025-03-10	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30004230	B	50-00-TP-028 C10003444	In the SK 026 1/2 supports PS-01015.1 (S-64) and PS-01015.5 (C-33) are not installed correctly.	.	Supports properly installed	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22
C30004231	B	50-00-TP-028 C10003444	In the SK 026 1/2 correct the gap in the PS-01014.1 (S-64) and installed correctly PS-01014.5 (C-33).	.	Required actions have been completed.	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22
C30004232	B	50-00-TP-028 C10003444	In the SK 026 2/2 correct the gap of the support PS-01027.3 (C-33)	.	Support installed	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Piping

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004233	B	50-00-TP-028 C10003444	In the SK 026 2/2 PS-01028.3 (C-33) is missing.	.	Support installed	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22
C30004235	B	50-00-TP-028 C10003444	On SK 154 support PS-01049.1 (S-64) there is a nut to be tightened N-E side.	.		LNovaga 2025-03-10	2025-04-07	LNovaga 2025-04-07	2025-04-07
C30004278	B	50-00-TP-045 C10003579	Missing the insulation pillow around the valve BLPH-MV-051 and BLPH-MV-048.	.		LNovaga 2025-03-25	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004307	B	50-00-TP-028 C10003445	On isometric 026 are missing the insulation around the nipple (pos. 5 sheet 1/2), insulation pillows around joints 026-2-J6, 026-2-J5 and	.	Insulation installed	LNovaga 2025-04-02	RDegliEsposti 2025-07-24	RDegliEsposti 2025-07-24	2025-07-24
C30004308	B	50-00-TP-028 C10003445	On isometric 154 are missing the insulation pillows around BLPH-MV-471 and joint 154-1-J3.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004309	B	50-00-TP-028 C10003445	The joint and the overlap of the sheets are not sealed.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004310	B	50-00-TP-001 C10003235	Missing the insulation pillows around all joints and all valves of test pack.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004311	B	50-00-TP-001 C10003235	The joints and the overlap of the sheets are not sealed.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004163	B	83019-CEL C10000540	Missing the SS cable tag side the coiled (PM-50001A).	.		Gtangianu 2025-02-27	2025-03-10	JKrizanic 2025-03-10	2025-03-10
C30004164	B	83018-CEL C10000539	Missing the SS cable tag side the coiled (PM-50001A).	.		Gtangianu 2025-02-27	2025-03-10	JKrizanic 2025-03-10	2025-03-10
C30004401	B	A6/+01-QF1 C10002993	Remote start command not working.	Drawer removed and sent to Vendor's Workshop for maintenance		FSirigu 2025-07-26			

Section 2.2 Exception Punch Lists (per discipline)

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	50	Fresh Water Systems
SUBSYSTEM	50-00	Seawater Intake System (Lifting Pumps)

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004401	B	A6/+01-QF1 C10002993	Remote start command not working.	Drawer removed and sent to Vendor's Workshop for maintenance		FSirigu 2025-07-26			

Section 2.3 “As-Commissioned” P&ID's / SLD's / D&ID's / C&E's

Section 3 CONSOLIDATED PUNCH LISTS

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	50	Fresh Water Systems
SUBSYSTEM	50-00	Seawater Intake System (Lifting Pumps)

Building

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30002547	A	B-50013B C10004524	There is no nozzle 1" #150 FF facing south differently ffrom the drawing. The structural pipe OD406 mm has not been even drilled.	.		KAlbonetti 2025-01-09	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002548	A	B-50013A C10004525	There is no nozzle 1" #150 FF facing south differently ffrom the drawing. The structural pipe OD406 mm has not been even drilled.	.		KAlbonetti 2025-01-09	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002550	A	B-50013B C10004524	The flange phonography has damages due incorrect welding on the internal side.	.		KAlbonetti 2025-01-09	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002639	A	B-50013B C10004524	Interaxis distance between B-50013B and B-50013A is 1190 mm instead of 1200 mm.	.		KAlbonetti 2025-01-10	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002640	A	B-50013A C10004525	Interaxis distance between B-50013B and B-50013A is 1190 mm instead of 1200 mm.	.		KAlbonetti 2025-01-10	2025-03-01	KAlbonetti 2025-03-01	2025-03-01
C30002549	B	B-50013A C10004525	The flange phonography on the internal side has been ground by grinding disc.	.		KAlbonetti 2025-01-09	2025-01-09	KAlbonetti 2025-01-09	2025-01-09

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003616	A	C-50-XV-003/00 -JE-12006 C10000105	The core "OS" (overall shield terminal) is not connected.	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003634	A	50-XY-004 C10002018	the earth cable is not fixed	.		APolo 2025-02-10	2025-02-25	APolo 2025-02-25	2025-02-25
C30004081	A	50-TT-001 C10000904	Missing the earth connection on the instrument.	.		APolo 2025-02-21	2025-02-25	JKrizanic 2025-02-25	2025-02-25
C30003594	B	50-PT-002 C10000902	Missing tag SS , on the instrument.	.		APolo 2025-02-07	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003595	B	50-PT-002 C10000902	Missing PLANE WASHER	.		APolo 2025-02-07	2025-02-25	AAndreani 2025-02-25	2025-02-25
C30003596	B	50-PT-001 C10000901	Missing tag SS , on the instrument.	.		APolo 2025-02-07	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003597	B	50-PT-001 C10000901	Missing the plane washers on the u-bolt fitting	.		APolo 2025-02-07	2025-02-27	JKrizanic 2025-02-27	2025-02-27
C30003611	B	C-50-XY-003/00 -JE-13003 C10000127	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-08	2025-02-13	AAndreani 2025-02-13	2025-02-13
C30003612	B	C-50-XY-003/00 -JE-13003 C10000127	The cable (between external cable tray and instrument) to be dressed/fixed properly.	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems
SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003613	B	50-XY-003 C10002017	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003614	B	C-50-XV-003/00 -JE-12006 C10000105	Wrong cores identification tag. side J.B. 00-JE-12006 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-08	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003617	B	C-50-XV-003/00 -JE-12006 C10000105	Missing n°1 terminal block for connection The core "OS" (overall shield terminal)	.		APolo 2025-02-08	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30003618	B	C-50-XV-003/00 -JE-12006 C10000105	Missing core identification The core "OS" (overall shield terminal) inside Limit switch (ZSHL))	.		APolo 2025-02-08	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003619	B	50-XY-001 C10002015	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003620	B	C-50-XY-001/00 -JE-13003 C10000125	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003621	B	C-50-XY-001/00 -JE-13003 C10000125	The cable is laid outside the secondary cable tray. must be dressed/fixed properly.	.		APolo 2025-02-10	2025-03-05	JKrizanic 2025-03-05	2025-03-05
C30003622	B	C-50-XV-001/00 -JE-12006 C10000103	The cable is not support .	.		APolo 2025-02-10	2025-02-26	APolo 2025-02-26	2025-02-26
C30003623	B	C-50-XV-001/00 -JE-12006 C10000103	Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003624	B	C-50-XY-002/00 -JE-13003 C10000126	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003626	B	C-50-XY-002/00 -JE-13003 C10000126	The cable (between external cable tray and instrument). must be dressed/fixed properly.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003627	B	50-XY-002 C10002016	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003628	B	C-50-XV-002/00 -JE-12006 C10000104	The cable (between external cable tray and instrument). must be dressed/fixed properly.	The cable is not support .		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003629	B	C-50-XV-002/00 -JE-12006 C10000104	Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003632	B	C-50-XY-004/00 -JE-13003 C10000128	Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003633	B	C-50-XY-004/00 -JE-13003 C10000128	The cable (between external cable tray and instrument). must be dressed/fixed properly.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003635	B	50-XY-004 C10002018	Missing tag SS , on Solenoid Valve.	.		APolo 2025-02-10	2025-02-21	AAndreani 2025-02-21	2025-02-21
C30003636	B	50-XV-004 C10001190	Missing data plate SS , on the valve.	.		APolo 2025-02-10	2025-02-27	JKrizanic 2025-02-27	2025-02-27

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003637	B	C-50-XV-004/00 -JE-12006 C10000106	Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)	.		APolo 2025-02-10	2025-02-22	JKrizanic 2025-02-22	2025-02-22
C30003638	B	C-50-XV-004/00 -JE-12006 C10000106	The cable (between external cable tray and instrument). must be dressed/fixed properly.	.		APolo 2025-02-10	2025-02-26	APolo 2025-02-26	2025-02-26
C30004080	B	C-50-TT-001/00- JE-11004 C10000051	The cable is not support .	.		APolo 2025-02-21	2025-02-27	JKrizanic 2025-02-27	2025-02-27
C30004082	B	50-TT-001 C10000904	Missing tag SS , on the instrument.	.		APolo 2025-02-21	2025-02-24	APolo 2025-02-24	2025-02-24
C30004158	B	50-PSV-006 C10004536	Scratches on painting, general touch-up to be performed.	.		Lmussi 2025-02-26	2025-05-06	LNovaga 2025-05-06	2025-05-06
C30004183	B	50-PSV-007 C10004537	Scratches on painting, general touch-up to be performed	.		Lmussi 2025-02-28	2025-05-06	LNovaga 2025-05-06	2025-05-06

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Mechanical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004187	A	P-50001B C10002366	Suction nozzle to be installed offshore.	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004188	A	P-50001B C10002366	Seal system made by Flowserve has not been installed. To be installed offshore.	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004189	A	P-50001B C10002366	Lubrication system to be checked before commissioning. Not possible to be checked now.	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004240	A	P-50001A C10002365	Suction nozzle to be installed offshore.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004241	A	P-50001A C10002365	Seal system made by Flowserve has not been installed. To be installed offshore.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004242	A	P-50001A C10002365	Lubrication system to be checked before commissioning. Not possible to be checked now.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004185	B	P-50001B C10002366	Nameplate of Motor from ABB has Item tag wrong. Equipment number as for Vendor asset register is 3G1F2433998069. On the nameplate	.		KAlbonetti 2025-03-01	2025-03-18	LNovaga 2025-03-18	2025-03-18
C30004186	B	P-50001B C10002366	Pump has not been fixed to structure. To be dismantled and reassembled after transportation. Final fixing to structure to be done offshore after	.		KAlbonetti 2025-03-01	2025-04-15	LNovaga 2025-04-15	2025-04-15
C30004239	B	P-50001A C10002365	Pump has not been fixed to structure. To be dismantled and reassembled after transportation. Final fixing to structure to be done offshore after	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	50	Fresh Water Systems
SUBSYSTEM	50-00	Seawater Intake System (Lifting Pumps)

Mechanical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004243	B	P-50001B C10002366	Compared to the pump A, there is no label with the arrow above the pump tag, in the annex the example of the pump A.	.		LNovaga 2025-03-12	2025-04-15	LNovaga 2025-04-15	2025-04-15

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Piping

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004234	A	50-00-TP-028 C10003444	Flange management activity on joint 026-2-J5 is not done. (SK 026 2/2).	.	Completed	LNovaga 2025-03-10	RDegliEsposti 2025-07-10	RDegliEsposti 2025-07-10	2025-07-10
C30004396	A	50-00-TP-028 C10003444	Flange management activity on joint 026-2-J5 is not done. (SK 026 2/2).		Activity completed.	LNovaga 2025-03-10	RDegliEsposti 2025-07-24	RDegliEsposti 2025-07-24	2025-07-24
C30001983	B	50-00-TP-045 C10003577	Spool not assembled in erection. Inspection points from 3 to 6 of the ITR "Inspection before testing" to be checked during reinstatement.	.		KAlbonetti 2024-12-18	2025-03-07	LNovaga 2025-03-07	2025-03-07
C30002841	B	50-00-TP-028 C10003443	Sk.154 (Sh.1/1): On support PS-01049.1 position R1 has not been fitted at all.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002842	B	50-00-TP-028 C10003443	Sk.26 (Sh.2/2): For supports PS-01028.1 and 01028.3 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002843	B	50-00-TP-028 C10003443	Sk.26 (Sh.2/2): For supports PS-01027.1 and 01027.3 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002844	B	50-00-TP-028 C10003443	Sk.26 (Sh.1/2): For supports PS-01014.1 and 01014.5 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002845	B	50-00-TP-028 C10003443	Sk.26 (Sh.1/2): For supports PS-01015.1 and 01015.5 STD C-33 and S-64 have not been assembled correctly.	.		KAlbonetti 2025-01-14	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30002846	B	50-00-TP-028 C10003443	Flanges have not been torqued for final but only for testing. Connection points have not been checked before testing. All flange management	.		KAlbonetti 2025-01-14	2025-03-01	KAlbonetti 2025-03-01	2025-03-01

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Piping

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30002847	B	50-00-TP-028 C10003443	Piping not aligned vertically at the connection point of package A-50000.	.	Alignment was checked during the reinstatement activities. No concerns were	KAlbonetti 2025-01-14	RDegliEsposti 2025-06-12	RDegliEsposti 2025-06-12	2025-06-12
C30003137	B	50-00-TP-001 C10003233	All supports S-64 still to be assembled.	.		KAlbonetti 2025-01-21	2025-02-25	LNovaga 2025-02-25	2025-02-25
C30004131	B	50-00-TP-001 C10003234	BLPH-MV-043 has stem direction north and gear down. The valve was rotated because it was hard to maneuver.	.		LNovaga 2025-02-25	2025-02-25	LNovaga 2025-02-25	2025-02-25
C30004132	B	50-00-TP-001 C10003234	BLPH-MV-050 has stem direction north and gear down. The valve was rotated because it was hard to maneuver.	.		LNovaga 2025-02-25	2025-02-25	LNovaga 2025-02-25	2025-02-25
C30004135	B	50-00-TP-001 C10003234	All standard's supports are S-64 - 1-1/2" - 90 - 200, documents must be correct. Pipe is aligned to battery limit (pumps)	.	Changes have been recorded on RLMUs	LNovaga 2025-02-25	RDegliEsposti 2025-06-25	RDegliEsposti 2025-06-25	2025-06-25
C30004216	B	50-00-TP-028 C10003444	.	.		LNovaga 2025-03-10	2025-03-10	LNovaga 2025-03-10	2025-03-10
C30004230	B	50-00-TP-028 C10003444	In the SK 026 1/2 supports PS-01015.1 (S-64) and PS-01015.5 (C-33) are not installed correctly.	.	Supports properly installed	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22
C30004231	B	50-00-TP-028 C10003444	In the SK 026 1/2 correct the gap in the PS-01014.1 (S-64) and installed correctly PS-01014.5 (C-33).	.	Required actions have been completed.	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22
C30004232	B	50-00-TP-028 C10003444	In the SK 026 2/2 correct the gap of the support PS-01027.3 (C-33)	.	Support installed	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Piping

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004233	B	50-00-TP-028 C10003444	In the SK 026 2/2 PS-01028.3 (C-33) is missing.	.	Support installed	LNovaga 2025-03-10	RDegliEsposti 2025-07-22	RDegliEsposti 2025-07-22	2025-07-22
C30004235	B	50-00-TP-028 C10003444	On SK 154 support PS-01049.1 (S-64) there is a nut to be tightened N-E side.	.		LNovaga 2025-03-10	2025-04-07	LNovaga 2025-04-07	2025-04-07
C30004278	B	50-00-TP-045 C10003579	Missing the insulation pillow around the valve BLPH-MV-051 and BLPH-MV-048.	.		LNovaga 2025-03-25	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004307	B	50-00-TP-028 C10003445	On isometric 026 are missing the insulation around the nipple (pos. 5 sheet 1/2), insulation pillows around joints 026-2-J6, 026-2-J5 and	.	Insulation installed	LNovaga 2025-04-02	RDegliEsposti 2025-07-24	RDegliEsposti 2025-07-24	2025-07-24
C30004308	B	50-00-TP-028 C10003445	On isometric 154 are missing the insulation pillows around BLPH-MV-471 and joint 154-1-J3.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004309	B	50-00-TP-028 C10003445	The joint and the overlap of the sheets are not sealed.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004310	B	50-00-TP-001 C10003235	Missing the insulation pillows around all joints and all valves of test pack.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04
C30004311	B	50-00-TP-001 C10003235	The joints and the overlap of the sheets are not sealed.	.		LNovaga 2025-04-02	2025-04-04	LNovaga 2025-04-04	2025-04-04

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 50 Fresh Water Systems

SUBSYSTEM 50-00 Seawater Intake System (Lifting Pumps)

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004163	B	83019-CEL C10000540	Missing the SS cable tag side the coiled (PM-50001A).	.		Gtangianu 2025-02-27	2025-03-10	JKrizanic 2025-03-10	2025-03-10
C30004164	B	83018-CEL C10000539	Missing the SS cable tag side the coiled (PM-50001A).	.		Gtangianu 2025-02-27	2025-03-10	JKrizanic 2025-03-10	2025-03-10
C30004401	B	A6/+01-QF1 C10002993	Remote start command not working.	Drawer removed and sent to Vendor's Workshop for maintenance	Installed.	FSirigu 2025-07-26	RDegliEsposti 2025-08-01	RDegliEsposti 2025-08-01	2025-08-01

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003594

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000902	1.4 Discipline	Instrumental
1.2 Item	50-PT-002	Pressure Transmitter - Sea Water from Pump P-50001B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing tag SS , on the instrument.

Name: Alessio Polo

Date: 2025-02-07

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-07
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003595

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000902	1.4 Discipline	Instrumental
1.2 Item	50-PT-002		Pressure Transmitter - Sea Water from Pump P-50001B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing PLANE WASHER

Name: Alessio Polo

Date: 2025-02-07

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-07
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-25

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003596

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000901	1.4 Discipline	Instrumental
1.2 Item	50-PT-001		Pressure Transmitter - Sea Water from Pump P-50001A
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing tag SS , on the instrument.

Name: Alessio Polo

Date: 2025-02-07

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-07
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003597

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000901	1.4 Discipline	Instrumental
1.2 Item	50-PT-001		Pressure Transmitter - Sea Water from Pump P-50001A
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing the plane washers on the u-bolt fitting

Name: Alessio Polo

Date: 2025-02-07

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-07
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-02-27

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003611

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000127	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-003/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo
Date: 2025-02-08
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani
Date: 2025-02-13
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001983

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003577	1.4 Discipline	Piping
1.2 Item	50-00-TP-045	Test Pack 50-00-TP-045	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Spool not assembled in erection. Inspection points from 3 to 6 of the ITR "Inspection before testing" to be checked during reinstatement.

Name: Kangi Albonetti
Date: 2024-12-18
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2024-12-18
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Done.

Name: Lorenzo Novaga
Date: 2025-03-07
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004231

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

In the SK 026 1/2 correct the gap in the PS-01014.1 (S-64) and installed correctly PS-01014.5 (C-33).

Name: Lorenzo Novaga
Date: 2025-03-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Required actions have been completed.

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-07-22
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004232

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

In the SK 026 2/2 correct the gap of the support PS-01027.3 (C-33)

Name: Lorenzo Novaga
Date: 2025-03-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Gap corrected

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-07-22
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004233

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

In the SK 026 2/2 PS-01028.3 (C-33) is missing.

Name: Lorenzo Novaga
Date: 2025-03-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Support installed

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-07-22
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004234

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Flange management activity on joint 026-2-J5 is not done. (SK 026 2/2).

Name: Lorenzo Novaga
Date: 2025-03-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Completed

Name: Raffaele Degli Esposti
Date: 2025-07-10
Signature:

5 - CLEARANCE CHECK

Name: Raffaele Degli Esposti
Date: 2025-07-10
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-07-10
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004235

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

On SK 154 support PS-01049.1 (S-64) there is a nut to be tightened N-E side.

Name: Lorenzo Novaga

Date: 2025-03-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-04-07

Signature:

5 - CLEARANCE CHECK

Done.

Name: Lorenzo Novaga

Date: 2025-04-07

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-04-07

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004239

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002365	1.4 Discipline	Mechanical
1.2 Item	P-50001A	Sea Water Pump A	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Pump has not been fixed to structure. To be dismantled and reassembled after transportation. Final fixing to structure to be done offshore after assembly with suction nozzle.

Name: Lorenzo Novaga
Date: 2025-03-12
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-12
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004930.

Name: Lorenzo Novaga
Date: 2025-04-15
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004240

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002365	1.4 Discipline	Mechanical
1.2 Item	P-50001A	Sea Water Pump A	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Suction nozzle to be installed offshore.

Name: Lorenzo Novaga

Date: 2025-03-12

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-12
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004930.

Name: Lorenzo Novaga

Date: 2025-04-15

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004241

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002365	1.4 Discipline	Mechanical
1.2 Item	P-50001A	Sea Water Pump A	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Seal system made by Flowserve has not been installed. To be installed offshore.

Name: Lorenzo Novaga

Date: 2025-03-12

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-12
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004930.

Name: Lorenzo Novaga

Date: 2025-04-15

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004242

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002365	1.4 Discipline	Mechanical
1.2 Item	P-50001A	Sea Water Pump A	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Lubrication system to be checked before commissioning. Not possible to be checked now.

Name: Lorenzo Novaga
Date: 2025-03-12
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-12
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004930.

Name: Lorenzo Novaga
Date: 2025-04-15
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004243

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002366	1.4 Discipline	Mechanical
1.2 Item	P-50001B	Sea Water Pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Compared to the pump A, there is no label with the arrow above the pump tag, in the annex the example of the pump A.

Name: Lorenzo Novaga

Date: 2025-03-12

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-12
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004931.

Name: Lorenzo Novaga

Date: 2025-04-15

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


PC
CE
N° 070P140016399
Item 317873
Cyl 462 cm3
Rpm 118
Bar 5.9
Mod 25A24
2024
Ref P-50001A

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004278

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003579	1.4 Discipline	Piping
1.2 Item	50-00-TP-045	Test Pack 50-00-TP-045	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing the insulation pillow around the valve BLPH-MV-051 and BLPH-MV-048.

Name: Lorenzo Novaga

Date: 2025-03-25

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-25
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Lorenzo Novaga

Date: 2025-04-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004307

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003445	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

On isometric 026 are missing the insulation around the nipple (pos. 5 sheet 1/2), insulation pillows around joints 026-2-J6, 026-2-J5 and valve BLPH-MV-241 (sheet 2/2).

Name: Lorenzo Novaga
Date: 2025-04-02
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-04-02
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Insulation installed

Name: Raffaele Degli Esposti
Date: 2025-07-24
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-07-24
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-07-24
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004308

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003445	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

On isometric 154 are missing the insulation pillows around BLPH-MV-471 and joint 154-1-J3.

Name: Lorenzo Novaga

Date: 2025-04-02

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-04-02
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Lorenzo Novaga

Date: 2025-04-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004309

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003445	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The joint and the overlap of the sheets are not sealed.

Name: Lorenzo Novaga

Date: 2025-04-02

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-04-02
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Lorenzo Novaga

Date: 2025-04-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004310

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003235	1.4 Discipline	Piping
1.2 Item	50-00-TP-001	Test Pack 50-00-TP-001	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing the insulation pillows around all joints and all valves of test pack.

Name: Lorenzo Novaga
Date: 2025-04-02
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-04-02
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Installed.

Name: Lorenzo Novaga
Date: 2025-04-04
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004311

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003235	1.4 Discipline	Piping
1.2 Item	50-00-TP-001	Test Pack 50-00-TP-001	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The joints and the overlap of the sheets are not sealed.

Name: Lorenzo Novaga

Date: 2025-04-02

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-04-02
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Lorenzo Novaga

Date: 2025-04-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004396

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	CLX02B	1.4 Discipline	Piping
1.2 Item	50-00-TP-028		Test Pack 50-00-TP-028	
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Flange management activity on joint 026-2-J5 is not done. (SK 026 2/2).

Name

Date 2025-07-24

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

Activity completed.

Name Raffaele Degli Esposti

Date 2025-07-24

Signature

5 - CLEARANCE CHECK

Refer to task C10003444 Report.

Name Raffaele Degli Esposti

Date 2025-07-24

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004401

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002993	1.4 Discipline	Electrical
1.2 Item	A6/+01-QF1	SEA WATER PUMP B - A6/+01-QF1	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Remote start command not working.

Name: Fabio Sirigu
Date: 2025-07-26
Signature:

3 - DEFECT ASSESSMENT

3.1 Corrective action proposal: Drawer removed and sent to Vendor's Workshop for maintenance

3.2 Material required:

3.3 Priority	B PL B	Name	Fabio Sirigu
3.4 Activity code	COMM Commissioning	Date	2025-07-26
3.5 Action by	VND Vendor	Signature	

4 - PERFORMED ACTION

Installed.

Name: Raffaele Degli Esposti
Date: 2025-08-01
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-08-01
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-08-01
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003635

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002018	1.4 Discipline	Instrumental
1.2 Item	50-XY-004		Solenoid Valve - Sea Water Recirculation from Pump P-50001B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing tag SS , on Solenoid Valve.

Name: Alessio Polo

Date: 2025-02-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003636

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001190	1.4 Discipline	Instrumental
1.2 Item	50-XV-004		On/Off Valve - Sea Water Recirculation from Pump P-50001B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing data plate SS , on the valve.

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-27
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003637

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000106	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-004/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003638

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000106	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-004/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable (between external cable tray and instrument). must be dressed/fixed properly.

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Alessio Polo
Date: 2025-02-26
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:


FLANGE
TAG
50-00
J5

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004080

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000051	1.4 Discipline	Instrumental
1.2 Item	C-50-TT-001/00-JE-11004	FLOW TRANSMITTER / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable is not support .

Name: Alessio Polo
Date: 2025-02-21
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

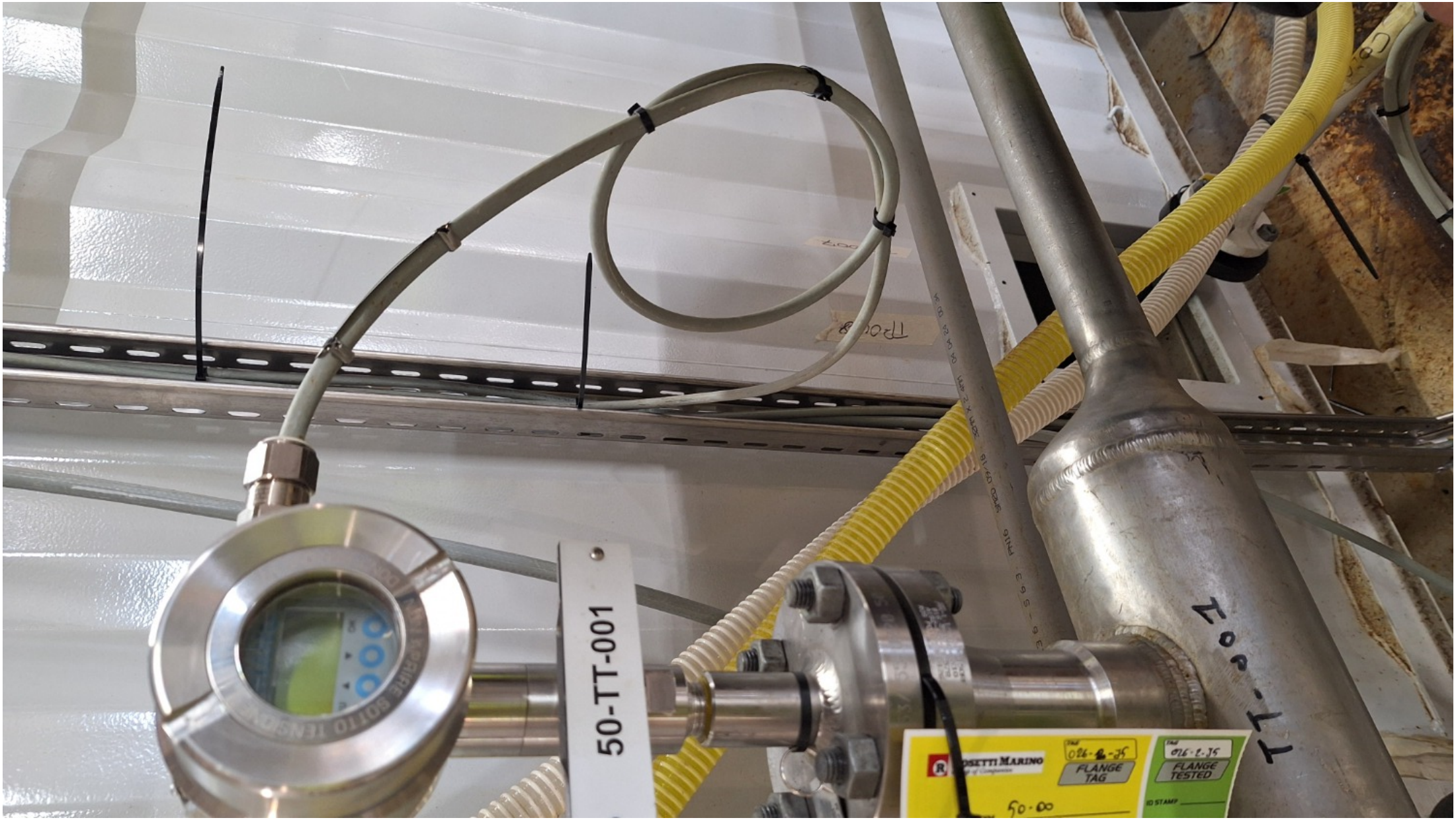
5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-27
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:


50-TT-001
FLANGE TAG
FLANGE TESTED

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004081

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000904	1.4 Discipline	Instrumental
1.2 Item	50-TT-001		Temperature Transmitter - Sea Water from Lift Pump P-50001A/B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing the earth connection on the instrument.

Name: Alessio Polo
Date: 2025-02-21
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

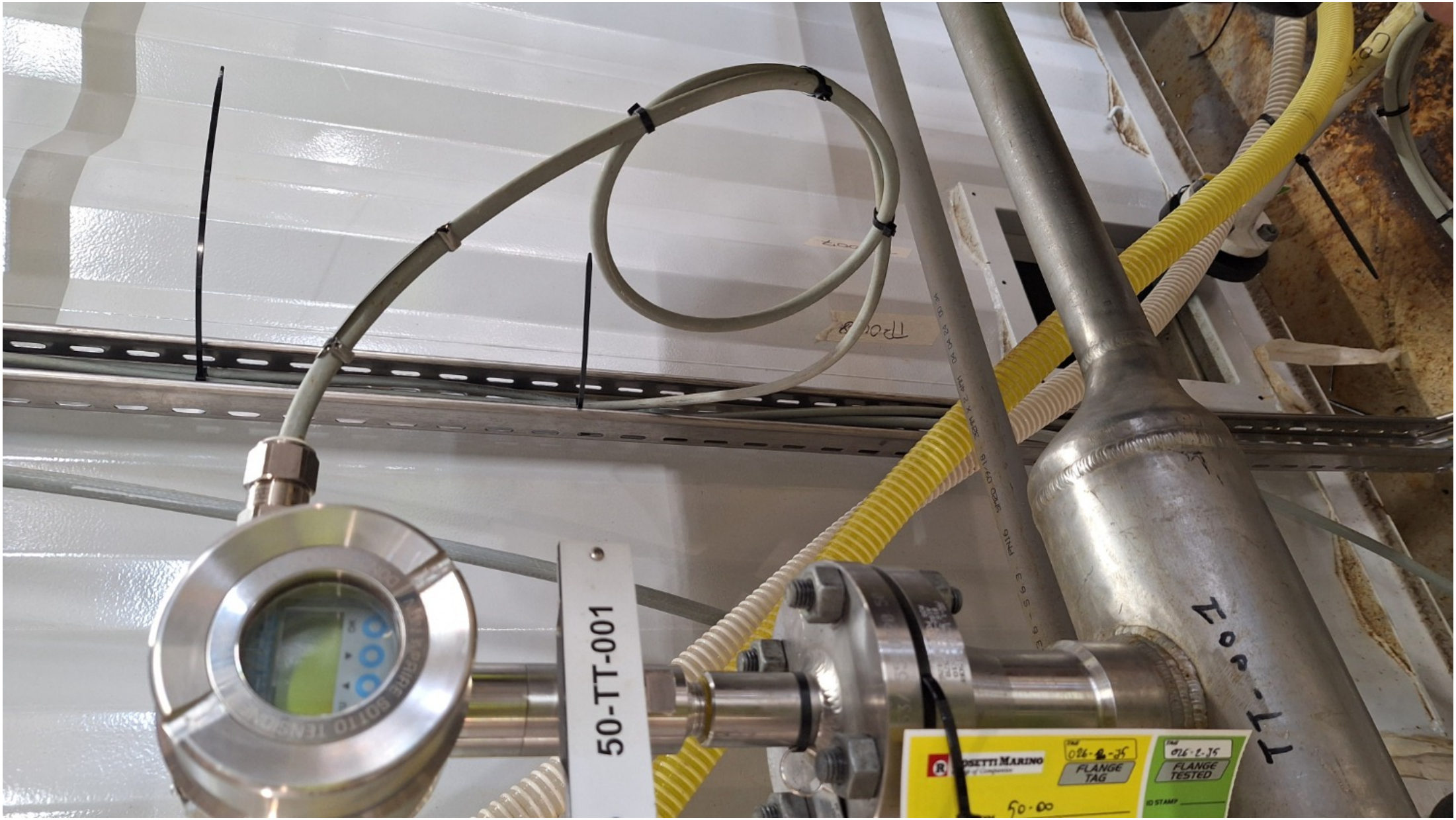
5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-25
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:


50-TT-001
FLANGE TAG
FLANGE TESTED

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004082

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000904	1.4 Discipline	Instrumental
1.2 Item	50-TT-001		Temperature Transmitter - Sea Water from Lift Pump P-50001A/B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing tag SS , on the instrument.

Name: Alessio Polo
Date: 2025-02-21
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Alessio Polo
Date: 2025-02-24
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004131

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003234	1.4 Discipline	Piping
1.2 Item	50-00-TP-001	Test Pack 50-00-TP-001	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

BLPH-MV-043 has stem direction north and gear down. The valve was rotated because it was hard to maneuver.

Name: Lorenzo Novaga

Date: 2025-02-25

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-02-25
3.5 Action by	ENG Engineering	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Accettable.

Name: Lorenzo Novaga

Date: 2025-02-25

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004132

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003234	1.4 Discipline	Piping
1.2 Item	50-00-TP-001	Test Pack 50-00-TP-001	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

BLPH-MV-050 has stem direction north and gear down. The valve was rotated because it was hard to maneuver.

Name: Lorenzo Novaga

Date: 2025-02-25

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-02-25
3.5 Action by	ENG Engineering	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Accettable.

Name: Lorenzo Novaga

Date: 2025-02-25

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004135

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003234	1.4 Discipline	Piping
1.2 Item	50-00-TP-001	Test Pack 50-00-TP-001	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

All standard's supports are S-64 - 1-1/2" - 90 - 200, documents must be correct. Pipe is aligned to battery limit (pumps)

Name: Lorenzo Novaga
Date: 2025-02-25
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-02-25
3.5 Action by	ENG Engineering	Signature	

4 - PERFORMED ACTION

Changes have been recorded on RLMUs

Name: Raffaele Degli Esposti
Date: 2025-06-25
Signature:

5 - CLEARANCE CHECK

"Ref. to RLMU 123A90-DDL-PP-DD-72000-PS-01011_01_01A
+ RLMU 123A90-DDL-PP-DD-72000-PS-01013_01_01A
+ RLMU 123A90-DDL-PP-DD-72000-PS-01016_01_01A
+ LMU 123A90-DDL-PP-DD-72000-PS-01017_01_01A"

Name: Raffaele Degli Esposti
Date: 2025-06-25
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-06-25
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004158

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004536	1.4 Discipline	Instrumental
1.2 Item	50-PSV-006	Pressure Safety Valve	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Scratches on painting, general touch-up to be performed.

Name: Luca Mussi

Date: 2025-02-26

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Luca Mussi
3.4 Activity code	MC Mechanical Completion	Date	2025-02-26
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Lorenzo Novaga

Date: 2025-05-06

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004163

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000540	1.4 Discipline	Electrical
1.2 Item	83019-CEL	LV Switchgear / Sea water intake pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing the SS cable tag side the coiled (PM-50001A).

Name: Giovanni Tangianu

Date: 2025-02-27

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-02-27
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004164

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000539	1.4 Discipline	Electrical
1.2 Item	83018-CEL	LV Switchgear / Sea water intake pump A	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing the SS cable tag side the coiled (PM-50001A).

Name: Giovanni Tangianu

Date: 2025-02-27

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-02-27
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004183

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004537	1.4 Discipline	Instrumental
1.2 Item	50-PSV-007	Pressure Safety Valve	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Scratches on painting, general touch-up to be performed

Name: Luca Mussi

Date: 2025-02-28

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Luca Mussi
3.4 Activity code	MC Mechanical Completion	Date	2025-02-28
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

done

Name: Lorenzo Novaga

Date: 2025-05-06

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004185

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002366	1.4 Discipline	Mechanical
1.2 Item	P-50001B	Sea Water Pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Nameplate of Motor from ABB has Item tag wrong. Equipment number as for Vendor asset register is 3G1F2433998069. On the nameplate is 3G1F24343998069, with a 4 in place of 3 at the 8th digit.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-03-01
3.5 Action by	VND Vendor	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done.

Name: Lorenzo Novaga

Date: 2025-03-18

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004186

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002366	1.4 Discipline	Mechanical
1.2 Item	P-50001B	Sea Water Pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Pump has not been fixed to structure. To be dismantled and reassembled after transportation. Final fixing to structure to be done offshore after assembly with suction nozzle.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-03-01
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004931.

Name: Lorenzo Novaga

Date: 2025-04-15

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004187

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002366	1.4 Discipline	Mechanical
1.2 Item	P-50001B	Sea Water Pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Suction nozzle to be installed offshore.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-03-01
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004931.

Name: Lorenzo Novaga

Date: 2025-04-15

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004188

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002366	1.4 Discipline	Mechanical
1.2 Item	P-50001B	Sea Water Pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Seal system made by Flowserve has not been installed. To be installed offshore.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-03-01
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004931.

Name: Lorenzo Novaga

Date: 2025-04-15

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004189

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002366	1.4 Discipline	Mechanical
1.2 Item	P-50001B	Sea Water Pump B	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Lubrication system to be checked before commissioning. Not possible to be checked now.

Name: Kangi Albonetti
Date: 2025-03-01
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-03-01
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

The activity will be done / check during offshore phase. refer to task C10004931.

Name: Lorenzo Novaga
Date: 2025-04-15
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004216

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

.

Name Lorenzo Novaga

Date 2025-03-10

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	ENG Engineering	Signature	

4 - PERFORMED ACTION

Name

Date 2025-03-10

Signature

5 - CLEARANCE CHECK

Done

Name Lorenzo Novaga

Date 2025-03-10

Signature

6- CLEARANCE APPROVAL

Name

Date 2025-03-10

Signature

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004230

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003444	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

In the SK 026 1/2 supports PS-01015.1 (S-64) and PS-01015.5 (C-33) are not installed correctly.

Name: Lorenzo Novaga
Date: 2025-03-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Lorenzo Novaga
3.4 Activity code	MC Mechanical Completion	Date	2025-03-10
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Supports properly installed

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-07-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-07-22
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003612

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000127	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-003/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable (between external cable tray and instrument) to be dressed/fixed properly.

Name: Alessio Polo

Date: 2025-02-08

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

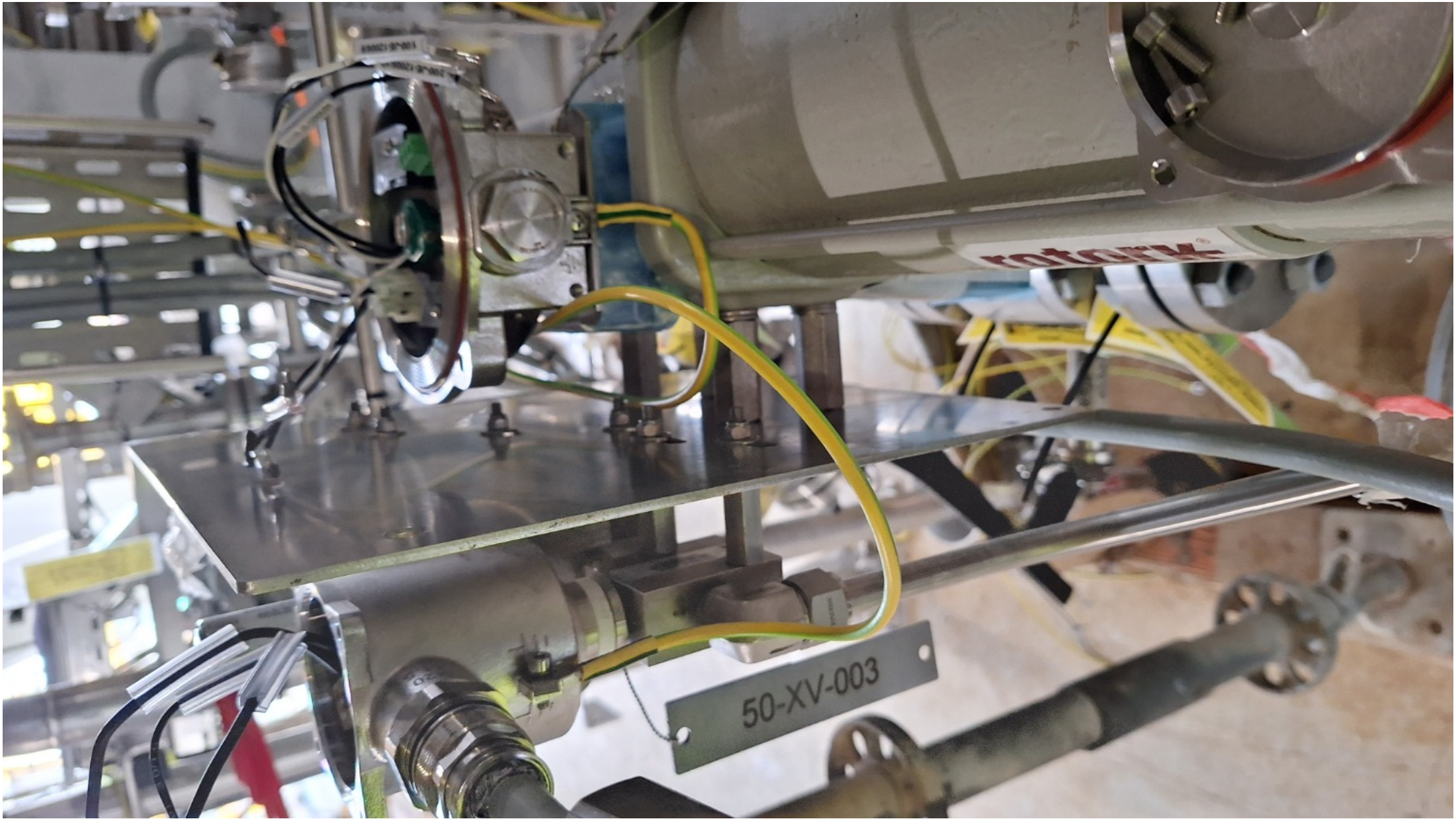
Name:

Date:

Signature:


rotork
50-XV-003


rotork
fluid systems
www.rotork.com
60-XV-003


rotork
50-XV-003

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003613

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002017	1.4 Discipline	Instrumental
1.2 Item	50-XY-003		Solenoid Valve - Sea Water from Pump P-50001B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing tag SS , on Solenoid Valve.

Name: Alessio Polo

Date: 2025-02-08

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003614

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000105	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-003/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-12006 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo
Date: 2025-02-08
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani
Date: 2025-02-21
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003616

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000105	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-003/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The core "OS" (overall shield terminal) is not connected.

Name: Alessio Polo

Date: 2025-02-08

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003617

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000105	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-003/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing n°1 terminal block for connection The core "OS" (overall shield terminal)

Name: Alessio Polo

Date: 2025-02-08

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-02-21

Signature:

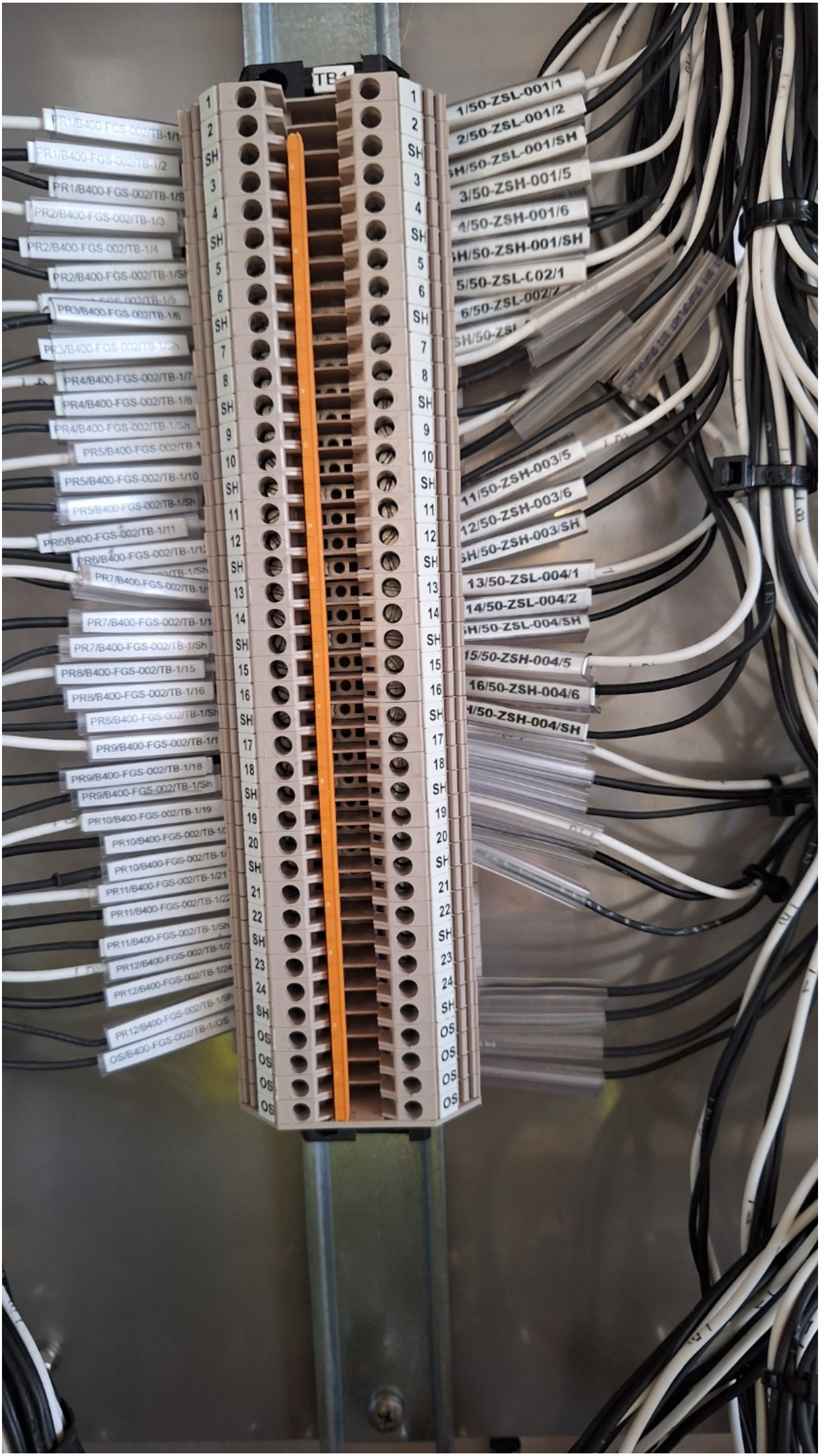
6- CLEARANCE APPROVAL

Name:

Date:

Signature:




TB1
PR1/B400-FGS-002/TB-1/1
PR1/B400-FGS-002/TB-1/2
PR1/B400-FGS-002/TB-1/S
PR2/B400-FGS-002/TB-1/3
PR2/B400-FGS-002/TB-1/4
PR2/B400-FGS-002/TB-1/Sh
PR3/B400-FGS-002/TB-1/6
PR3/B400-FGS-002/TB-1/Sh
PR4/B400-FGS-002/TB-1/7
PR4/B400-FGS-002/TB-1/8
PR4/B400-FGS-002/TB-1/Sh
PR5/B400-FGS-002/TB-1
PR5/B400-FGS-002/TB-1/10
PR5/B400-FGS-002/TB-1/Sh
PR6/B400-FGS-002/TB-1/11
PR6/B400-FGS-002/TB-1/1
PR7/B400-FGS-002/TB-1/1
PR7/B400-FGS-002/TB-1/Sh
PR8/B400-FGS-002/TB-1/15
PR8/B400-FGS-002/TB-1/16
PR8/B400-FGS-002/TB-1/Sh
PR9/B400-FGS-002/TB-1/1
PR9/B400-FGS-002/TB-1/18
PR9/B400-FGS-002/TB-1/Sh
PR10/B400-FGS-002/TB-1/19
PR10/B400-FGS-002/TB-1/2
PR10/B400-FGS-002/TB-1/
PR11/B400-FGS-002/TB-1/21
PR11/B400-FGS-002/TB-1/22
PR11/B400-FGS-002/TB-1/Sh
PR12/B400-FGS-002/TB-1/2
PR12/B400-FGS-002/TB-1/24
PR12/B400-FGS-002/TB-1/Sh
OS/B400-FGS-002/TB-1/OS
1/50-ZSL-001/1
2/50-ZSL-001/2
3/50-ZSH-001/5
4/50-ZSH-001/6
5/50-ZSL-002/1
11/50-ZSH-003/5
12/50-ZSH-003/6
13/50-ZSL-004/1
14/50-ZSL-004/2
15/50-ZSH-004/5
16/50-ZSH-004/6

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003618

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000105	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-003/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing core identification The core "OS" (overall shield terminal) inside Limit switch (ZSHL))

Name: Alessio Polo

Date: 2025-02-08

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-02-22

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003619

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002015	1.4 Discipline	Instrumental
1.2 Item	50-XY-001		Solenoid Valve - Sea Water from Pump P-50001A
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing tag SS , on Solenoid Valve.

Name: Alessio Polo

Date: 2025-02-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003620

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000125	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-001/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003621

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000125	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-001/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable is laid outside the secondary cable tray. must be dressed/fixed properly.

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-03-05
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

50-XV-001

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003622

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000103	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-001/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable is not support .

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Alessio Polo
Date: 2025-02-26
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:


50-XV-002

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003623

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000103	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-001/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003624

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000126	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-002/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003626

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000126	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-002/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable (between external cable tray and instrument). must be dressed/fixed properly.

Name: Alessio Polo

Date: 2025-02-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

rotork
fluid systems
www.rotork.com
50-XV-002


FRQ-533
50-XV-002
rotork
fluid system

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003627

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002016	1.4 Discipline	Instrumental
1.2 Item	50-XY-002		Solenoid Valve - Sea Water Recirculation from Pump P-50001A
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

Missing tag SS , on Solenoid Valve.

Name: Alessio Polo

Date: 2025-02-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003628

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000104	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-002/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable (between external cable tray and instrument). must be dressed/fixed properly.

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

The cable is not support .

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani
Date: 2025-02-21
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003629

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000104	1.4 Discipline	Instrumental
1.2 Item	C-50-XV-002/00-JE-12006	PROXIMITY SWITCH / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Missing core identification ("OS"overall shield terminal) inside Limit switch (ZSHL)

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003632

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000128	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-004/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-13003 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic
Date: 2025-02-22
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003633

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000128	1.4 Discipline	Instrumental
1.2 Item	C-50-XY-004/00-JE-13003	SOLENOID VALVE / MARSHALLING PCS	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The cable (between external cable tray and instrument). must be dressed/fixed properly.

Name: Alessio Polo
Date: 2025-02-10
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani
Date: 2025-02-21
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:




FLANGE
TAG
50-00
J5


rotork

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003634

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002018	1.4 Discipline	Instrumental
1.2 Item	50-XY-004		Solenoid Valve - Sea Water Recirculation from Pump P-50001B
1.3 Subsystem	50-00		Seawater Intake System (Lifting Pumps)

2 - OBSERVATION

the earth cable is not fixed

Name: Alessio Polo

Date: 2025-02-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Alessio Polo

Date: 2025-02-25

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


C-50-XY-00400-JE

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002547

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004524	1.4 Discipline	Building
1.2 Item	B-50013B	Sea Water Lift Pumps Caisson	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

There is no nozzle 1" #150 FF facing south differently ffrom the drawing. The structural pipe OD406 mm has not been even drilled.

Name: Kangi Albonetti
Date: 2025-01-09
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-09
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Nozzle added.

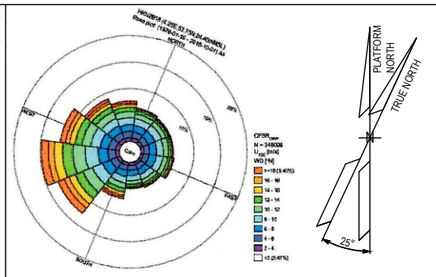
Name: Kangi Albonetti
Date: 2025-03-01
Signature:

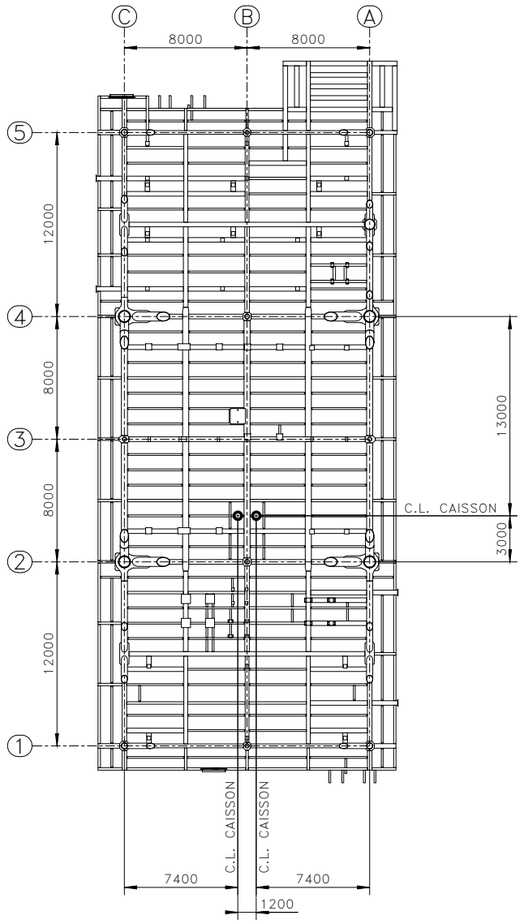
6- CLEARANCE APPROVAL

Name:
Date:
Signature:

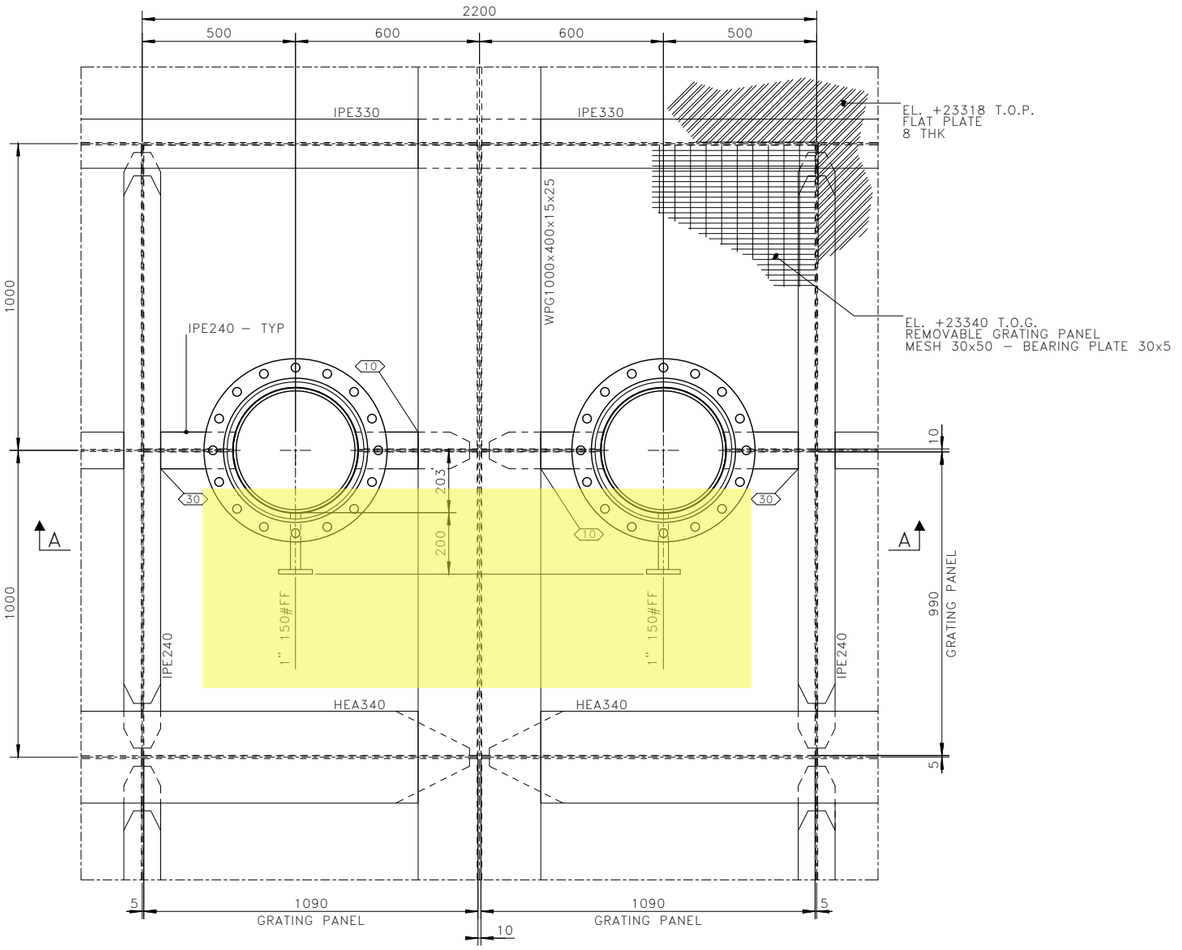
DRAWING NO. 123A90-DDL-ST-DD-90124

REV. 01

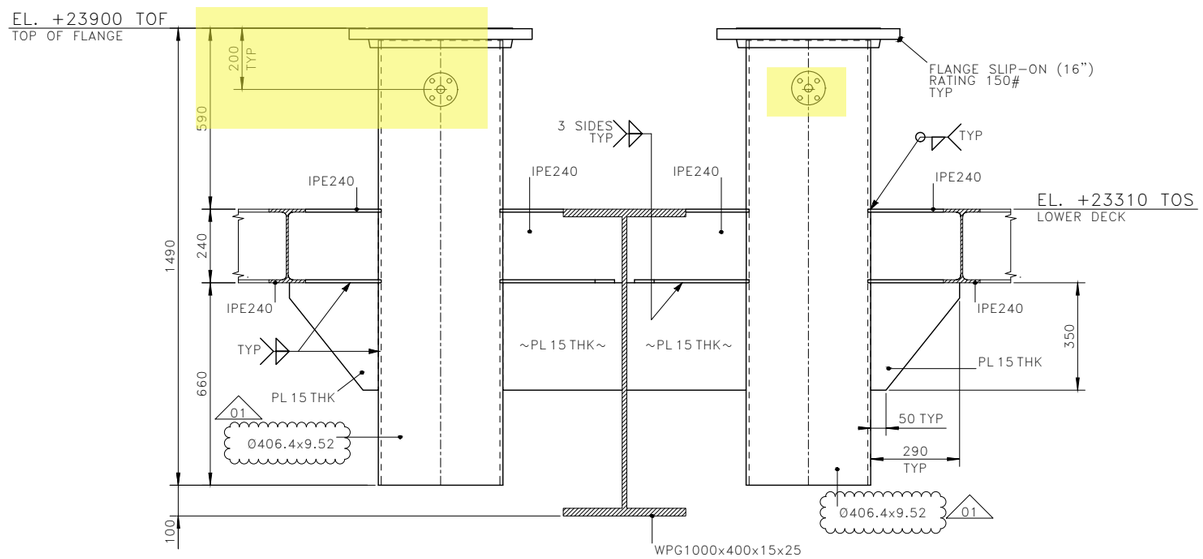




TOPSIDE – LOWER DECK
KEY PLAN
SCALE 1:200



CAISSON HATCH – PLAN VIEW
SCALE 1:10



SECTION A – A
SCALE 1:10

NOTES

1 – ALL DIMENSIONS AND ELEVATIONS ARE IN MILLIMETERS U.N.O.
2 – ALL ELEVATIONS ARE REFERED TO C.D.
3 – ALL WELDS ARE FULL PENETRATION WELDS U.N.O.
4 – ALL FILLET WELDS SHALL BE CONTINUOUS AND THE LEG SIZE SHALL BE EQUAL 0.7 THE MINIMUM THICKNESS TO BE JOINTED U.N.O.

MATERIALS

ITEM IDENTIFICATION	MATERIAL DESIGNATION
IPE240	DC4-III-355-0
PL 15 THK	DC4-III-355-0
Ø406.4x9.52	DC4-III-X52-0

HOLDS

REFERENCE DRAWINGS

DWG No.	DESCRIPTION
123A90-DDL-ST-DD-90025	DRAWING LIST
123A90-DDL-ST-DD-90026	GENERAL NOTES
123A90-DDL-ST-DD-90027	WELDING GENERAL NOTES
123A90-DDL-ST-DD-90032	PLATES – DOUBLE SIDED WELDS
123A90-DDL-ST-DD-90033	PLATES – SINGLE SIDED WELDS
123A90-DDL-ST-DD-90034	TYPICAL BEAM CONNECTIONS
123A90-DDL-ST-DD-90049	PRIMARY STEEL – PLAN AT EL. +23310 TOS
123A90-DDL-ST-DD-90057	SEC. STEEL – PLAN AT EL. +23310 TOS – SH.1
123A90-DDL-ST-DD-90104	SEC. STEEL – PLAN AT EL. +23310 TOS – SH.2

TECON

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	19/08/24	SGR	AB	DLS	ACCEPTED FOR CONSTRUCTION (AFC)
00	26/06/24	SGR	AB	DLS	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
TOPSIDE – LOWER DECK
CAISSON HATCH – ASSEMBLY AND DETAILS

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK . | SCALE 1:10

DRAWN S.GRIFFINI | CHECKED A.BALZAROTTI | APPROVED D.LO STERZO | DATE 19/08/24

A1 | DRAWING NO. 123A90-DDL-ST-DD-90124 | SHEET 001 | REV. 01

File Name : 123A90-DDL-ST-DD-90124_01.dwg



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002548

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004525	1.4 Discipline	Building
1.2 Item	B-50013A	Sea Water Lift Pumps Caisson	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

There is no nozzle 1" #150 FF facing south differently ffrom the drawing. The structural pipe OD406 mm has not been even drilled.

Name: Kangi Albonetti
Date: 2025-01-09
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-09
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Nozzle added.

Name: Kangi Albonetti
Date: 2025-03-01
Signature:

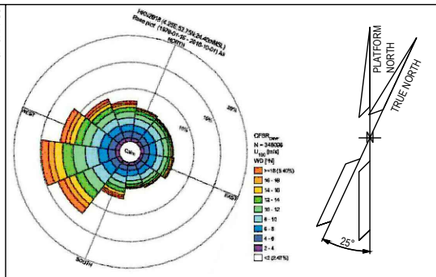
6- CLEARANCE APPROVAL

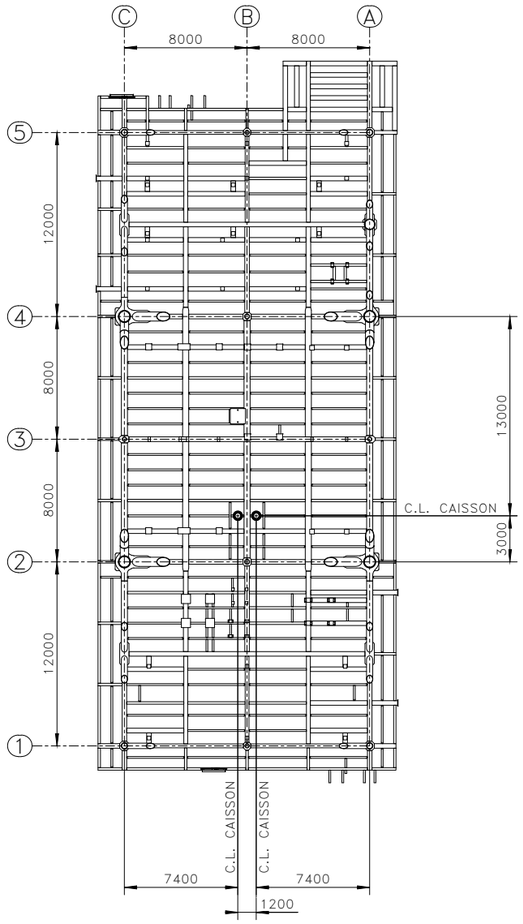
Name:
Date:
Signature:



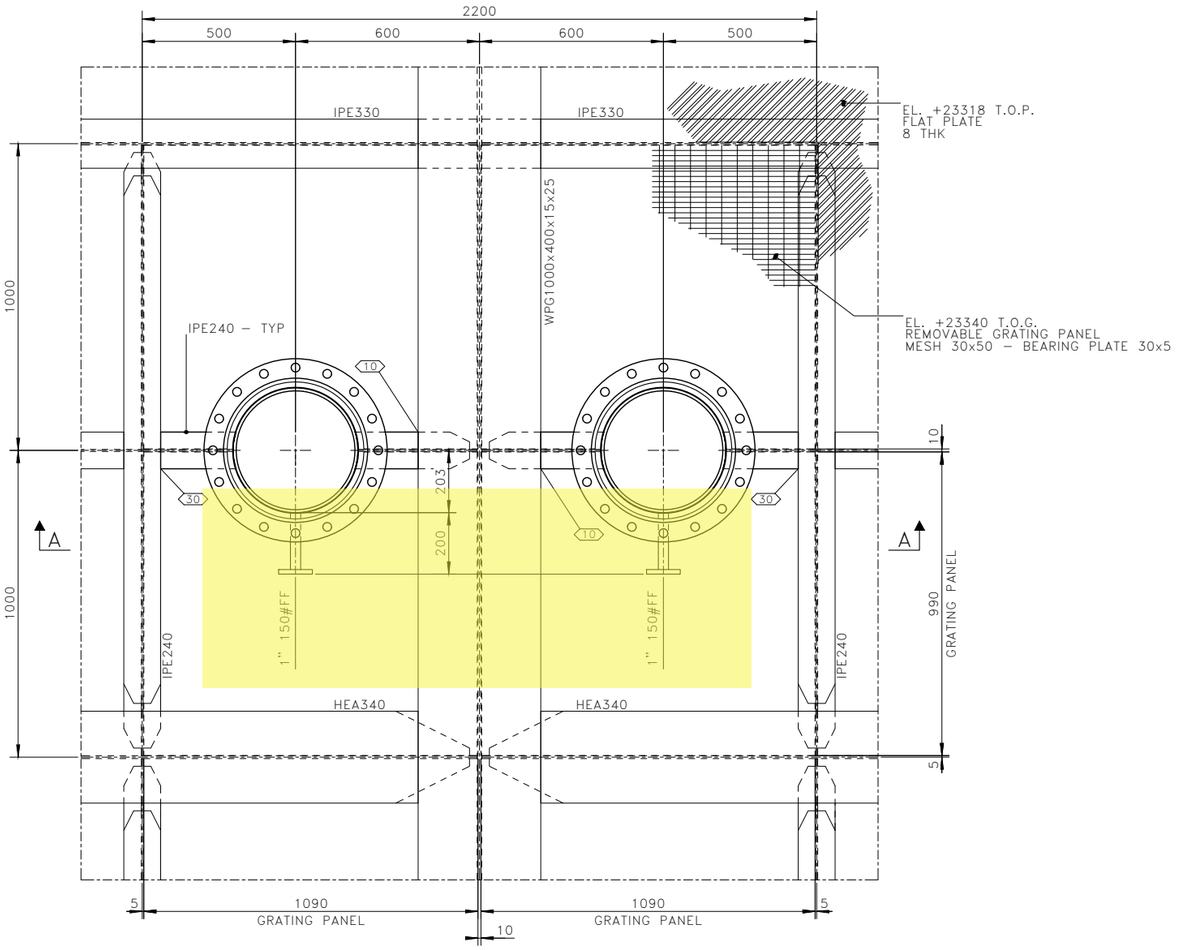
DRAWING NO. 123A90-DDL-ST-DD-90124

REV. 01

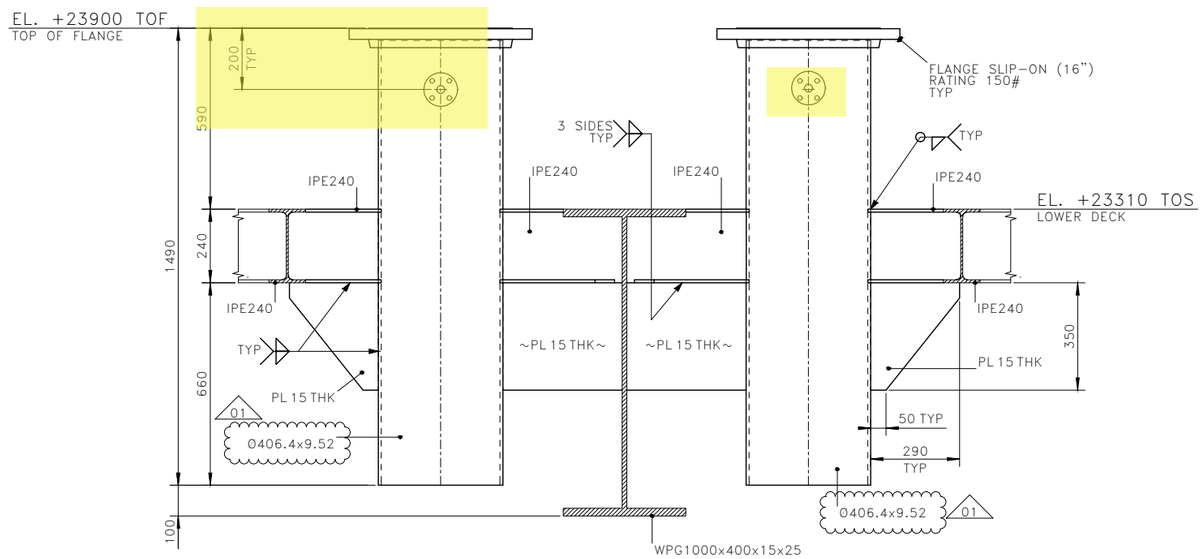




TOPSIDE – LOWER DECK
KEY PLAN
SCALE 1:200



CAISSON HATCH – PLAN VIEW
SCALE 1:10



SECTION A – A
SCALE 1:10

NOTES

1 – ALL DIMENSIONS AND ELEVATIONS ARE IN MILLIMETERS U.N.O.
2 – ALL ELEVATIONS ARE REFERED TO C.D.
3 – ALL WELDS ARE FULL PENETRATION WELDS U.N.O.
4 – ALL FILLET WELDS SHALL BE CONTINUOUS AND THE LEG SIZE SHALL BE EQUAL 0.7 THE MINIMUM THICKNESS TO BE JOINTED U.N.O.

MATERIALS

ITEM IDENTIFICATION	MATERIAL DESIGNATION
IPE240	DC4-III-355-0
PL 15 THK	DC4-III-355-0
Ø406.4x9.52	DC4-III-X52-0

HOLDS

REFERENCE DRAWINGS

DWG No.	DESCRIPTION
123A90-DDL-ST-DD-90025	DRAWING LIST
123A90-DDL-ST-DD-90026	GENERAL NOTES
123A90-DDL-ST-DD-90027	WELDING GENERAL NOTES
123A90-DDL-ST-DD-90032	PLATES – DOUBLE SIDED WELDS
123A90-DDL-ST-DD-90033	PLATES – SINGLE SIDED WELDS
123A90-DDL-ST-DD-90034	TYPICAL BEAM CONNECTIONS
123A90-DDL-ST-DD-90049	PRIMARY STEEL – PLAN AT EL. +23310 TOS
123A90-DDL-ST-DD-90057	SEC. STEEL – PLAN AT EL. +23310 TOS – SH.1
123A90-DDL-ST-DD-90104	SEC. STEEL – PLAN AT EL. +23310 TOS – SH.2

TECON

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	19/08/24	SGR	AB	DLS	ACCEPTED FOR CONSTRUCTION (AFC)
00	26/06/24	SGR	AB	DLS	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
TOPSIDE – LOWER DECK
CAISSON HATCH – ASSEMBLY AND DETAILS

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK . | SCALE 1:10

DRAWN S.GRIFFINI | CHECKED A.BALZAROTTI | APPROVED D.LO STERZO | DATE 19/08/24

A1 | DRAWING NO. 123A90-DDL-ST-DD-90124 | SHEET 001 | REV. 01

File Name : 123A90-DDL-ST-DD-90124_01.dwg

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002549

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004525	1.4 Discipline	Building
1.2 Item	B-50013A	Sea Water Lift Pumps Caisson	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The flange phonography on the internal side has been ground by grinding disc.

Name: Kangi Albonetti
Date: 2025-01-09
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-09
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Not applicable because after discussing it with construction it has been clarified the bolted joint is only for supporting and fastening and has not retaining scope.

Name: Kangi Albonetti
Date: 2025-01-09
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002550

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004524	1.4 Discipline	Building
1.2 Item	B-50013B	Sea Water Lift Pumps Caisson	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

The flange phonography has damages due incorrect welding on the internal side.

Name: Kangi Albonetti

Date: 2025-01-09

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-09
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Grinded.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

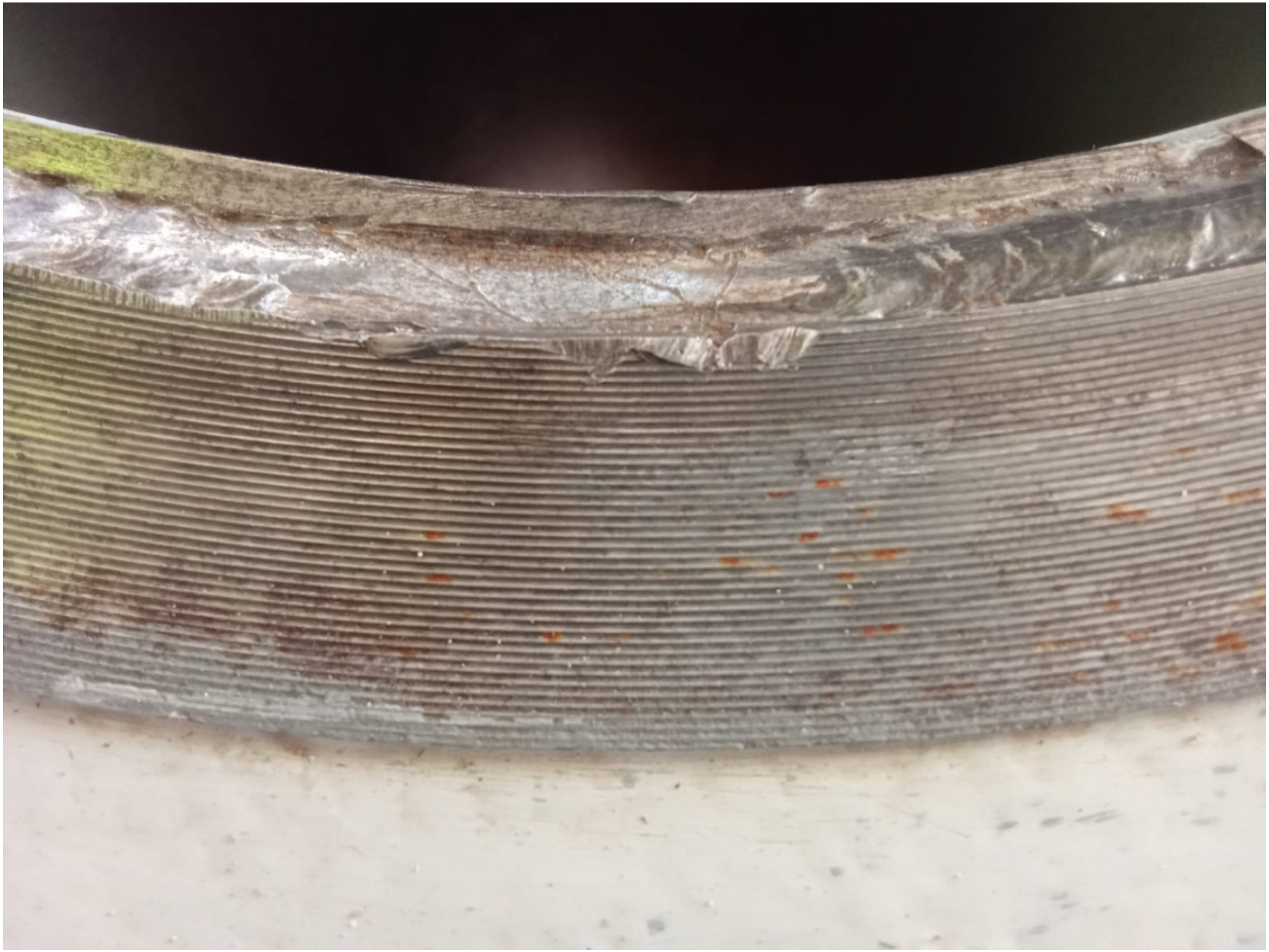
6- CLEARANCE APPROVAL

Name:

Date:

Signature:





ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002639

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004524	1.4 Discipline	Building
1.2 Item	B-50013B	Sea Water Lift Pumps Caisson	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Interaxis distance between B-50013B and B-50013A is 1190 mm instead of 1200 mm.

Name: Kangi Albonetti

Date: 2025-01-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The distance has been accepted after installation of TP-001.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002640

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10004525	1.4 Discipline	Building
1.2 Item	B-50013A	Sea Water Lift Pumps Caisson	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Interaxis distance between B-50013B and B-50013A is 1190 mm instead of 1200 mm.

Name: Kangi Albonetti

Date: 2025-01-10

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-10
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

The distance has been accepted after installation of TP-001.

Name: Kangi Albonetti

Date: 2025-03-01

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002841

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Sk.154 (Sh.1/1): On support PS-01049.1 position R1 has not been fitted at all.

Name: Kangi Albonetti

Date: 2025-01-14

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

See reinstatement's punch list.

Name: Lorenzo Novaga

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002842

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Sk.26 (Sh.2/2): For supports PS-01028.1 and 01028.3 STD C-33 and S-64 have not been assembled correctly.

Name: Kangi Albonetti

Date: 2025-01-14

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

See reinstatement's punch list.

Name: Lorenzo Novaga

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002843

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Sk.26 (Sh.2/2): For supports PS-01027.1 and 01027.3 STD C-33 and S-64 have not been assembled correctly.

Name: Kangi Albonetti

Date: 2025-01-14

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

See reinstatement's punch list.

Name: Lorenzo Novaga

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002844

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Sk.26 (Sh.1/2): For supports PS-01014.1 and 01014.5 STD C-33 and S-64 have not been assembled correctly.

Name: Kangi Albonetti

Date: 2025-01-14

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

See reinstatement's punch list.

Name: Lorenzo Novaga

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002845

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Sk.26 (Sh.1/2): For supports PS-01015.1 and 01015.5 STD C-33 and S-64 have not been assembled correctly.

Name: Kangi Albonetti

Date: 2025-01-14

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-03-10

Signature:

5 - CLEARANCE CHECK

See reinstatement's punch list.

Name: Lorenzo Novaga

Date: 2025-03-10

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-03-10

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002846

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Flanges have not been torqued for final but only for testing. Connection points have not been checked before testing. All flange management related points, Inspection points from 4 to 6 of the ITR, to be checked during flange management and reinstatement.

Name: Kangi Albonetti
Date: 2025-01-14
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Flange management performed.

Name: Kangi Albonetti
Date: 2025-03-01
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002847

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003443	1.4 Discipline	Piping
1.2 Item	50-00-TP-028	Test Pack 50-00-TP-028	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

Piping not aligned vertically at the connection point of package A-50000.

Name: Kangi Albonetti
Date: 2025-01-14
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-14
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Alignment was checked during the reinstatement activities. No concerns were raised about alignment. Reference to Task C10003444 - CLX- PIPEWORK AFTER TEST

Name: Raffaele Degli Esposti
Date: 2025-06-12
Signature:

5 - CLEARANCE CHECK

Done

Name: Raffaele Degli Esposti
Date: 2025-06-12
Signature:

6- CLEARANCE APPROVAL

Name:
Date: 2025-06-12
Signature:

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003137

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10003233	1.4 Discipline	Piping
1.2 Item	50-00-TP-001	Test Pack 50-00-TP-001	
1.3 Subsystem	50-00	Seawater Intake System (Lifting Pumps)	

2 - OBSERVATION

All supports S-64 still to be assembled.

Name: Kangi Albonetti

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Kangi Albonetti
3.4 Activity code	MC Mechanical Completion	Date	2025-01-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Lorenzo Novaga

Date: 2025-02-25

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

Section 4 FUNCTIONAL TESTS SHEETS

Section 4.1 Electrical functional test sheets index

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM & discipline : E

Electrical	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
A6/+01-QF1	SEA WATER PUMP B - A6/+01-QF1	ONSHORE	C10002941	FP00	100	2025-01-15	RFO 1
		ONSHORE	C10002942	FTR-2	100	2024-10-02	RFO 1
		ONSHORE	C10002943	FTR-6	100	2025-02-04	RFO 1
		ONSHORE	C10002993	FTR-5	100	2025-07-28	RFO 1
A7/+01-QF1	SEA WATER PUMP A - A7/+01-QF1	ONSHORE	C10002944	FP00	100	2025-01-15	RFO 1
		ONSHORE	C10002945	FTR-2	100	2024-10-02	RFO 1
		ONSHORE	C10002946	FTR-6	100	2025-02-04	RFO 1
		ONSHORE	C10002994	FTR-5	100	2025-07-28	RFO 1
PM-50001A	Electric Motor for sea water pump	OFFSHORE	C10002947	FP13	0	-	-
		OFFSHORE	C10004549	FTR-2	0	-	-
PM-50001B	Electric Motor for sea water pump	OFFSHORE	C10002948	FP13	0	-	-
		OFFSHORE	C10004550	FTR-2	0	-	-

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	A6/+01-QF1	: SEA WATER PUMP B - A6/+01-QF1			Dwg	1723002197-EL-DG-00011
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10002941		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	PRE-COMM	Activity FTS	Discipline	Electrical	Form	FP00 Miscellaneous electrical Consumer

DATA

Switchboard	SG-200N1	Circuit ref:	A6/+01-QF1
Breaker rating (A)	20A	Nominal current (A)	11A

FUNCTION TEST REQUIREMENT

1	Check pre-commissioning activities have been carried out				OK
2	Check equipment for cleaness				OK
3	Measure I/R value of equipment and feeder cable at 1000V (Min value: 10 Mohm)	>1000	MΩ		OK
4	Energise control of equipment feeder				OK
5	Full test feeder breaker operation in test position				OK
6	Check protection setting				OK
7	Test interface trips and signals (remote alarms & status). Check the relevant ITR presence in the system				OK
8	Test control and safety functions according to manufacturer's procedure.				OK
9	Energize				OK
10	Measure Voltage and Current values at feeder breaker	399	V	0.1 A	OK
11	Attach test procedure, if any				NA

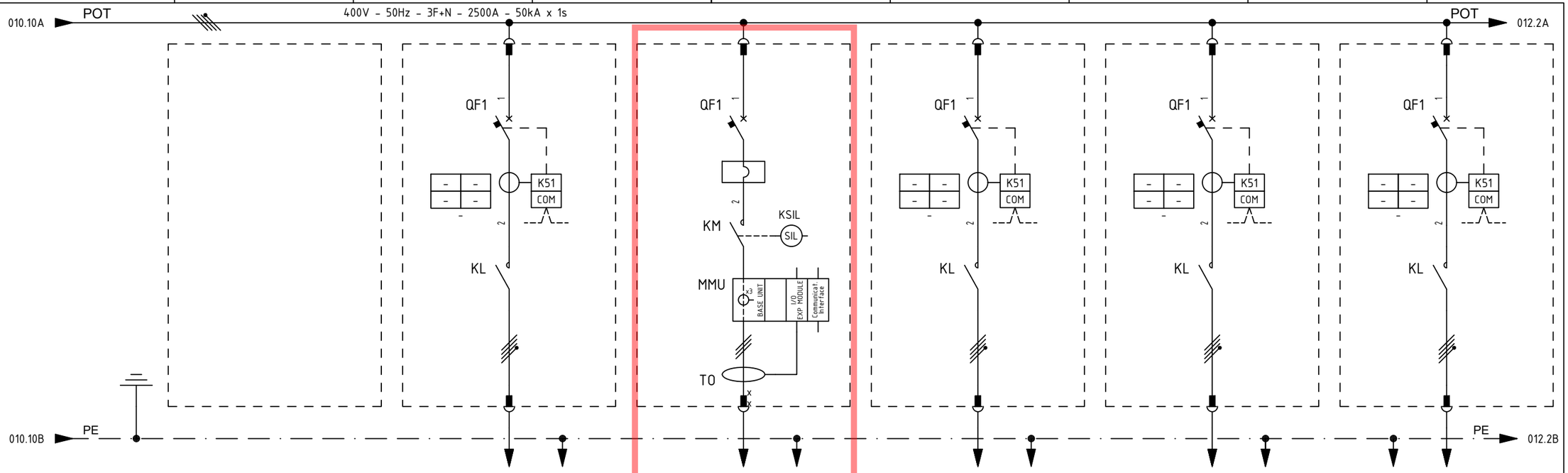
FUNCTION TEST REQUIREMENT	RESULT

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity
FLUKE 376	A1711003	7710/24	10/07/2025
FLUKE 1663	5380144	7727/24	10/07/2025

Comments:

Page 1/1	Performed by	☐ WITNESS ☑ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CPY NOT PRESENT
Name	Davide Zucconelli	Kristian Castellani	Witness waived
Date	2025-01-15	2025-01-15	2025-01-15
Signature	PROVERLIS Digitaly signed by Davide Zucconelli 2025-01-15T12:28:54.406Z ZD	PROVERLIS Digitaly signed by Kristian Castellani 2025-01-15T15:28:34.493Z KC	PROVERLIS Digitaly signed by Witness waived 2025-01-15T15:49:06.600Z



ITEM				K-63001-B	PM-50001 B	CP-850E1	CP-850E2	-
UTILITY				INSTRUMENTS AIR PACKAGE 01B	SEA WATER PUMP B	BESS LV1 CABINET (+DISTR 1)	BESS LV2 CABINET (+DISTR 2)	SPARE
COLUMN/CUBICLE				A5 / +08	A6 / +01	A6 / +02	A6 / +03	A6 / +04
RATED POWER | RATED CURRENT				68.75 kW | 111.24 A	6.1 kW | 11.0 A	11.28 kW | 18.09 A	11.28 kW | 18.09 A	- kW | - A
TYPICAL FUNCTIONAL				LK2-160	M1-6	LK1-40	LK1-40	LK1-40
CIRCUIT BREAKER (ABB)	TYPE			XT4S - 250	XT2S - 160	XT2S - 160	XT2S - 160	XT2S - 160
	VERSION			4P - FIXED	3P - FIXED	4P - FIXED	4P - FIXED	4P - FIXED
	TRIP UNITS			EKIP HI TOUCH LSIG (In = 160A)	MA (In = 20A)	EKIP HI TOUCH LSIG (In = 40A)	EKIP HI TOUCH LSIG (In = 40A)	EKIP HI TOUCH LSIG (In = 40A)
	Icu		KA	50 kA	-	50 kA	50 kA	50 kA
OVERLOAD	L	Range	A	(0.4 - 1) x In	-	(0.4 - 1) x In	(0.4 - 1) x In	(0.4 - 1) x In
		Range	t	k/I²	-	k/I²	k/I²	k/I²
SEL. SHORT-CIRCUIT	S	Range	A	(0.6 - 10) x In	-	(0.6 - 10) x In	(0.6 - 10) x In	(0.6 - 10) x In
		Range	t	0.05 - 0.4 sec / k/I²	-	0.05 - 0,4 sec / k/I²	0.05 - 0,4 sec / k/I²	0.05 - 0,4 sec / k/I²
INST. SHORT-CIRCUIT	I	Range	A	(1.5 - 15) x In	(6 - 14) x I	(1.5 - 15) x In	(1.5 - 15) x In	(1.5 - 15) x In
		Range	t	instantaneous	<= 0.02 sec	instantaneous	instantaneous	instantaneous
EARTH FAULT PROTECTION	G	Range	A	(0.1 - 1) x In	-	(0.1 - 1) x In	(0.1 - 1) x In	(0.1 - 1) x In
		Range	t	t=k / t=k/I^2	-	t=k / t=k/I^2	t=k / t=k/I^2	t=k / t=k/I^2
CONTACTOR (ABB)				AF190-40-11-13 (275A-AC1); 100-250 VAC/DC	AF38-30-00-13 (18.5 kW - AC3) - 100-250Vac/dc	AF40-40-00-13 (70A-AC1); 100-250VAC/DC	AF40-40-00-13 (70A-AC1); 100-250VAC/DC	AF40-40-00-13 (70A-AC1); 100-250VAC/DC
THERMAL OVERLOAD RELAY (ABB)				-	UMC100.3 UC (0.24 - 63A)	-	-	-
SURGE ARRESTER (DEHN)				-	-	-	-	-
TOROIDAL CURRENT TRANSFORMER (FRER)				-	-	-	-	-
FUSE HOLDER (ITALWEBER)				-	-	-	-	-
INDIRECT PROTECTION (ABB)				-	-	-	-	-
VOLTMETER				-	-	-	-	-
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE			-	-	-	-	-
	PERFORMANCE/CLASS			-	-	-	-	-
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE			-	-	-	-	-
	PERFORMANCE/CLASS			-	-	-	-	-
LOCK-OUT RELAY (-)				-	-	-	-	-
POWER CONDUCTOR			mmq	5G70	4G4	4 x (1 x 10)	4 x (1 x 10)	-

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	08/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for Construction (AFC)
2	03/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	28/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	15/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

=
+

DWG n° : 231298/SD/11
Item n° : PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00011

SHEET 011

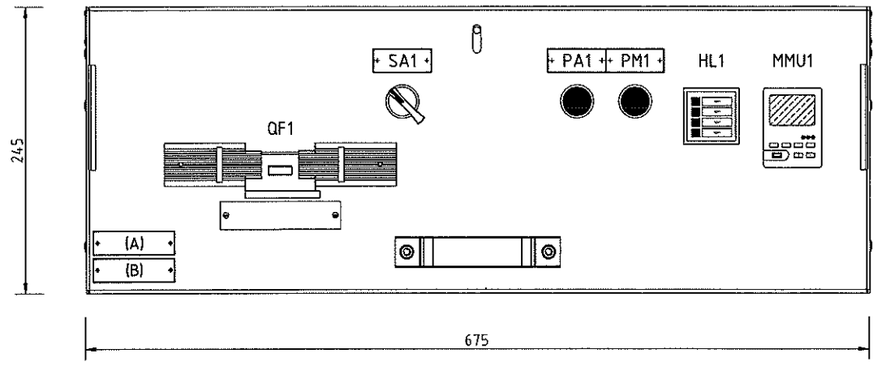
REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00011 Rev. 03

DOOR FRONT LAY-OUT

TYPICAL : MOTOR FEEDER (M1)

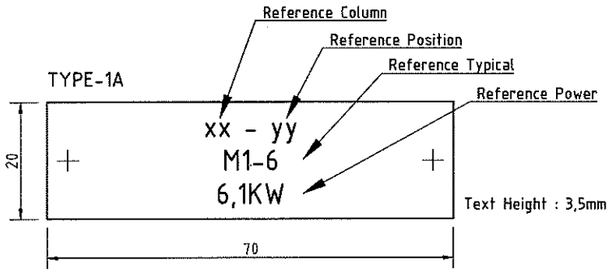


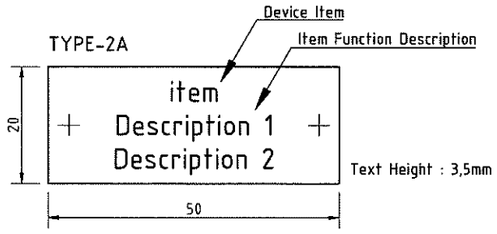
NOTE :

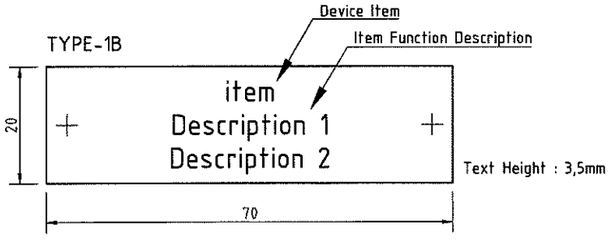
A) IDENTIFICATION name plate (type-1A) , with :
- Drawer position (Column / Position inside SWB)
- Typical name (reference applicability typical used)
- Power (reference applicability typical used)

B) USER name plate (type-1B), with :
- Item User (to see SLD diagrams)
- User Description (to see SLD diagrams)

DEVICES name plate			
ITEM	DESCRIPTION 1	DESCRIPTION 2	NOTE
MMU1	Unit Motor Control HMI		NO plate
QF1	Circuit Breaker		NO plate
SA1	LOC-REM	SELECTOR	Type-2A
PA1	STOP	MOTOR	Type-2A
PM1	RUN	MOTOR	Type-2A
HL1	Multiled	Signalling	NO plate







=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Door Front Lay-Out - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 007

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

USERS LEGEND

TYPICAL : MOTOR FEEDER (M1)

TYPICAL APPLICABILITY					
ITEM	ITEM TAG	DESCRIPTION TAG	REFERENCE POSITION (written on name name plate "type-1A)	REFERENCE POWER (written on name name plate "type-1A)	REFERENCE TYPICAL (written on name name plate "type-1A)
1	PM-50001A	SEA WATER PUMP A	A6 / +01	6,1 kW	M1-6
2	PM-50001B	SEA WATER PUMP B	A7 / +01	6,1 kW	M1-6

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

= TYPICAL
\+ M1
DWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

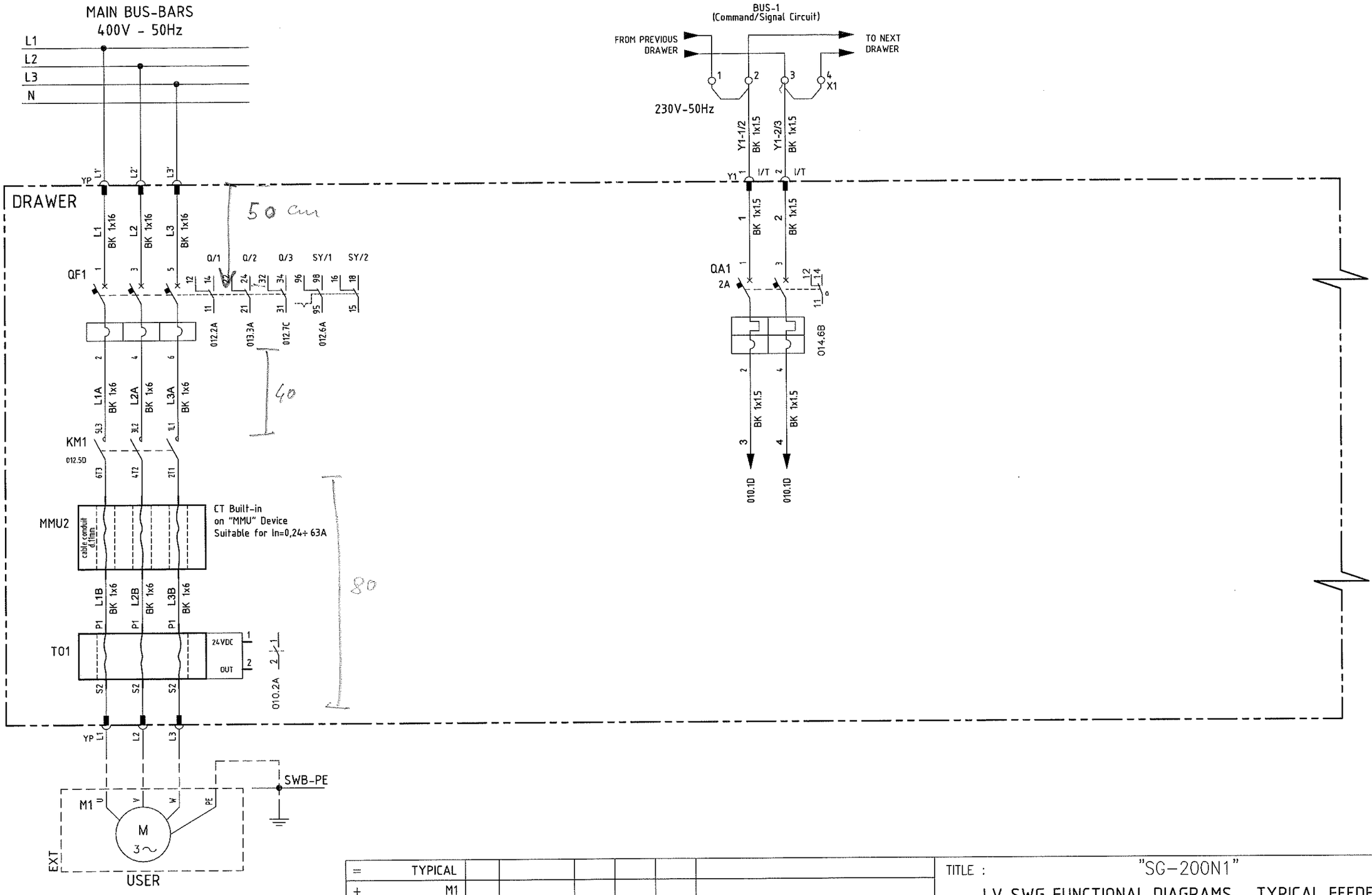
TITLE : "SG-200N1"
LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS
Users Legend - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 008 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



= TYPICAL						
+ M1						
DWG n° : 231298/SD/31						
Item n° : PF1002983/26						
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 009

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

CHECKBACK | EARTH FAULT | DRAWER ON TEST POSITION | USER ON LOCAL COMMAND | USER ON REMOTE COMMAND | RUNNING LOCAL COMMAND

KM1 012.5D | TO1 009.1D | KA6 012.9D | SA1 012.3B CLOSE ON "LOC" | SA1 012.3B CLOSE ON "REM" | KA3 012.3D

+10 RD 1x1.5 DI0 | +11 RD 1x1.5 DI1 | +12 RD 1x1.5 DI2 | +13 RD 1x1.5 DI3 | +14 RD 1x1.5 DI4 | +15 RD 1x1.5 DI5

MMU2

DI0 DI1 DI2 DI3 DI4 DI5 — X10 DIGITAL INPUT - 24VDC

1Ca 1Cb — X8 IO Bus

ABB UMC100.3 UNIVERSAL MOTOR CONTROLLER

CONTROL PANEL X9 | COMUNICATION CONNECTOR | connector

CONNECTED ON X9 CONNECTOR | #W1 | Ca 011.6B | Cb 011.6B | #W3

MMU1 HMI — Display — Operating Panel — Front port — CONNECTED ON REAR PORT

#W2.A CDP24.150 | 011.9C TO EXTERNAL COMUNICATION MODULE

Y1 16 I/T 17 I/T 18 I/T 19 I/T 20 I/T — 1 2 3 4 5

#W2.B CDP18.150

POWER 110÷240VAC/DC — X10 L N

X5 OUT 24VDC — 0V 24V DO3

DIGITAL OUT (X6) — DOC DO0 DO1 DO2

X7 — T1 T2

+24V 011.1D | RD 1x1.5 | -24V 011.1D | WH 1x1.5 | ⎓ 24V

16 BK 1x1.5 KA1 A1 A2 RUNNING COMMAND

17 BK 1x1.5 KA2 A1 A2 PROTECTION TRIPPED

009.6C 3 — 3 011.1B

009.6C 4 — 230V-50Hz — 4 011.1B

012.5B 11 12 14 22 21 24 31 32 34 41 42 44

012.6A 11 12 14 22 21 24 31 32 34 41 42 44

=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

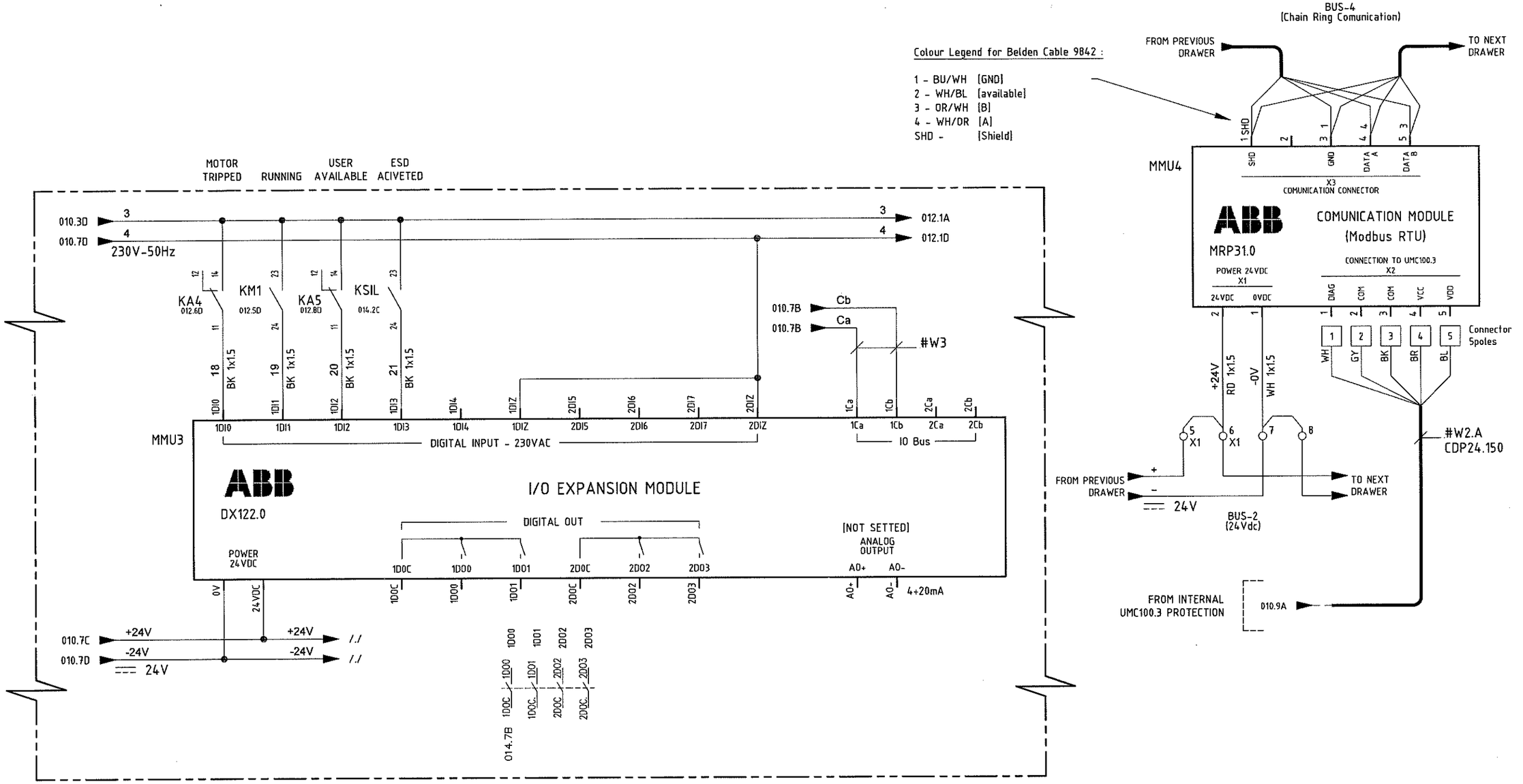
Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 010 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

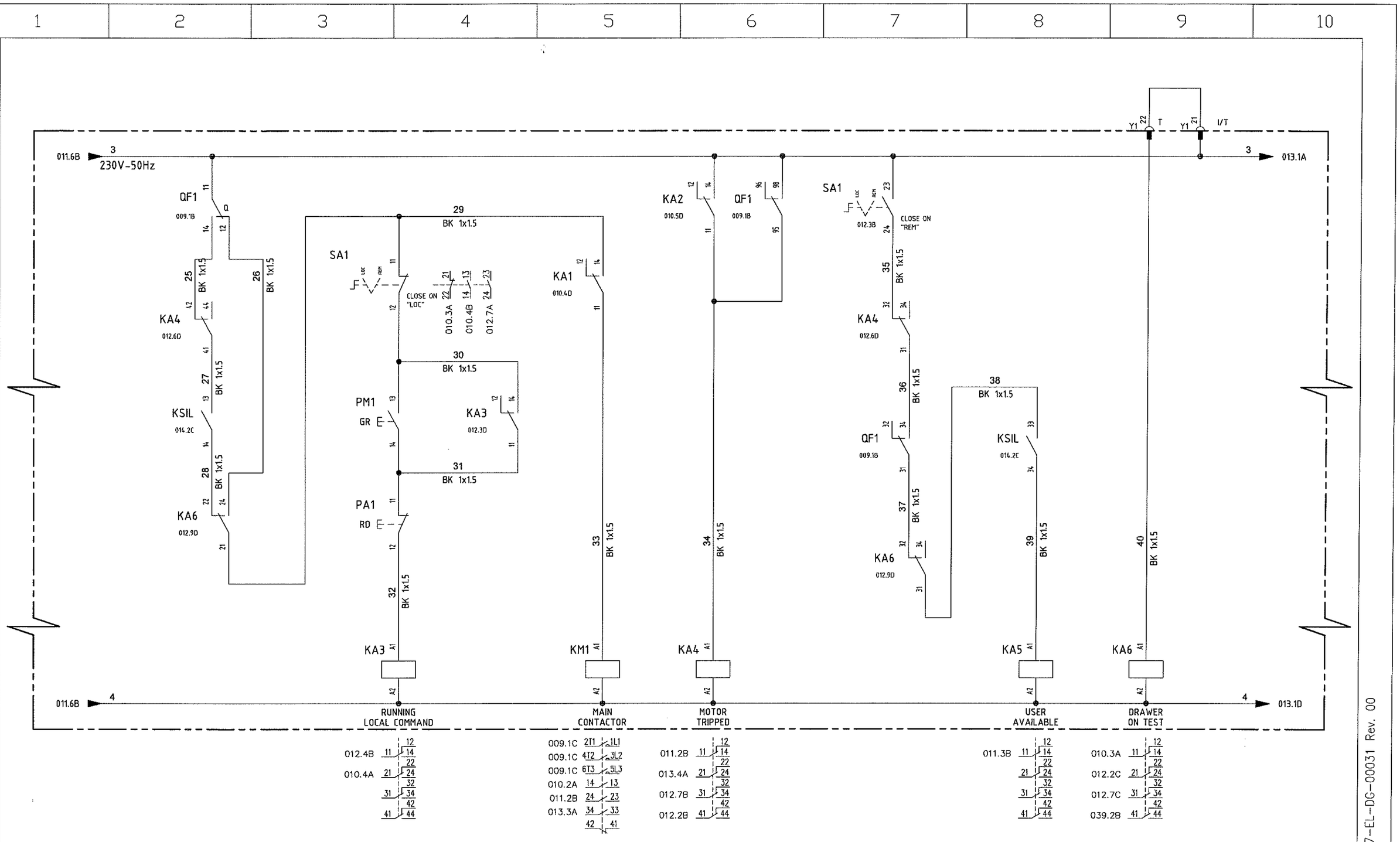
DRAWING NO. 1723002197-EL-DG-00031

SHEET 011

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

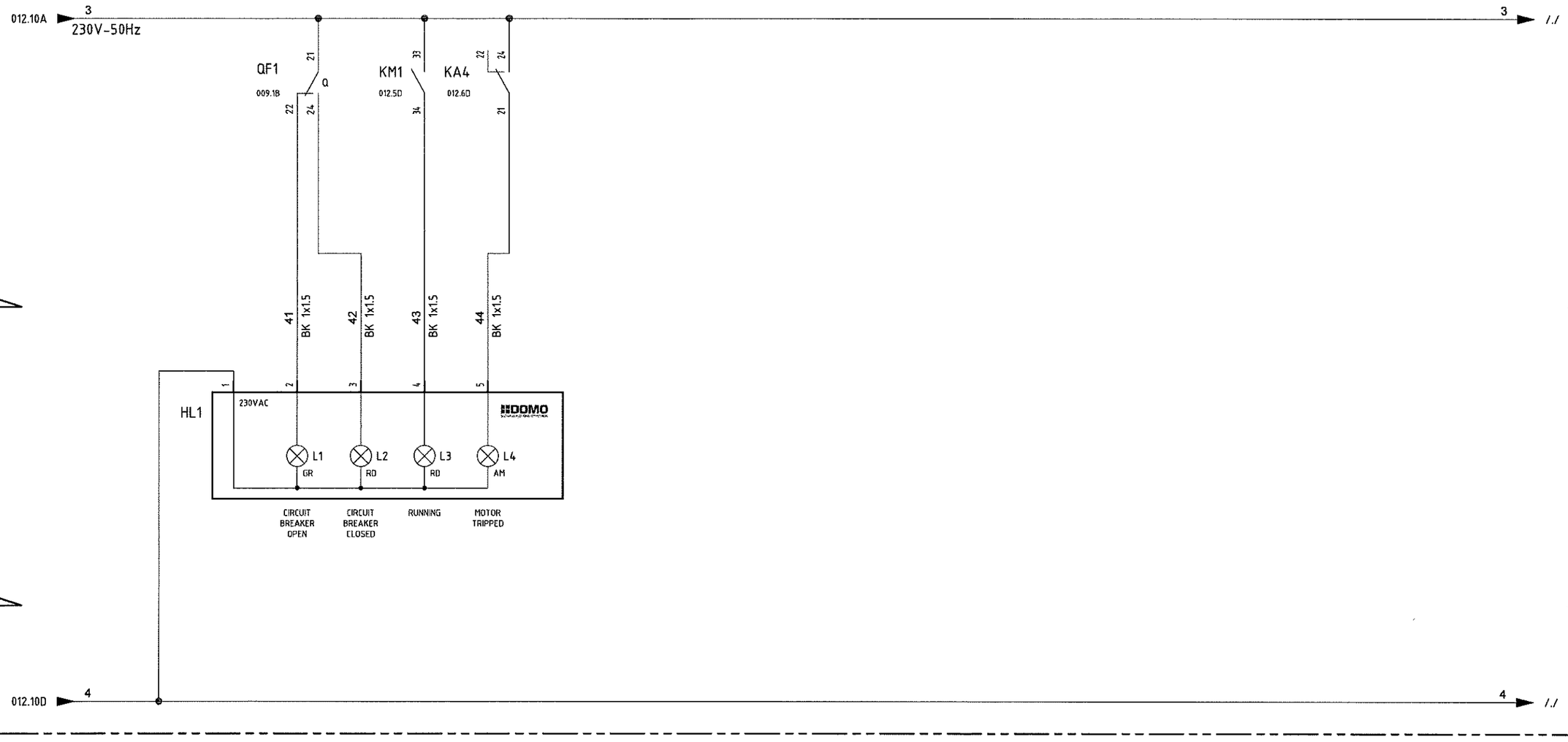
DRAWING NO. 1723002197-EL-DG-00031

SHEET 012

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
		0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
		REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 013

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ONLY FOR REPRESENTATION
FOR DETTAILS TO SEE RELEVANT
DOCUMENT N°1723002197-EL-DG-00030

SIS

BUS-3
(Internal Fault loop)

FROM PREVIOUS DRAWER

TO NEXT DRAWER

AVAILABLE

AVAILABLE

11 X1 — Y1-5/11 BK 1x1.5 — Y1 5 I/T

12 X1 — Y1-6/12 BK 1x1.5 — Y1 6 I/T

9 X1 — Y1-3/9 BK 1x1.5 — Y1 3 I/T

10 X1 — Y1-4/10 BK 1x1.5 — Y1 4 I/T

13 X1 — Y1-8/13 BK 1x1.5 — Y1 8 I/T

14 X1 — Y19/14 BK 1x1.5 — Y1 9 I/T

15 X1 — Y1-10/15 BK 1x1.5 — Y1 10 I/T

16 X1 — Y1-11/16 BK 1x1.5 — Y1 11 I/T

⎓ 24V

-45 WH 1x1.5

+46 RD 1x1.5

+47 RD 1x1.5

+48 RD 1x1.5

49 BK 1x1.5

50 BK 1x1.5

QA1
009.6B
12 14 11

MMU3
011.2B
100B 100C

KSIL
R1 X4 TEST R2
POWER SUPPLY 24VDC
ABB
Safety Relay
BSR10
13 23 33 41
1 2
OUT1 OUT2 OUT3 OUT4
14 24 34 42

012.2B 14 13
011.3B 24 23
012.8C 34 33
42 41

=	TYPICAL						
+	M1						
0	09/05/2024	Santinelli	Flamminio	Sigismondi		Issued for review (IFR)	
REV.	DATE	DRN	CHKD	APPD		DESCRIPTION	

IMESA ELECTRICAL ENGINEERING
OWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 014 | REV. 00

F.to UNI A3: 420mmx297mm

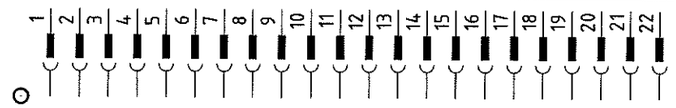
File Name : 1723002197-EL-DG-00031 Rev. 00

TYPICAL - M1 - Y1

AUXILIARY SOCKET

136450/001 (PF – 1 pcs) + 136458/005 (PM – 1 pcs)

N° PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
JUMP			●	●																		
RACKED-OUT			✕	✕																		
TEST	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RACKED-IN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PIN USED	009.6A	009.6A	014.6B	014.6B	014.2B	014.2B		014.7B	014.8B	014.9B	014.9B					010.8A	010.8A	010.8A	010.8A	010.9A	012.9A	012.9A



← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-OUT POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN TEST POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-IN POSITION

← CROS-REFERENCE USED PIN

X 2 VOLTS

= TYPICAL							
+ M1							
DWG n° : 231298/SD/31							
Item n° : PF1002983/26							
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)	
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION	

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 015

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	A6/+01-QF1	: SEA WATER PUMP B - A6/+01-QF1		Dwg	1723002197-EL-DG-00011	
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)		Module		
TASK	code	C10002942	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity FTS	Discipline Electrical	Form	FTR-2	Protection Relay

FTR2 - Protection relay
Record sheet

RELAY DATA

Manufacturer:	ABB	Serial N°:	XT2S20MA3	Relay type:	MA
Auxiliary supply:	24Vdc	Location:	B200	Cubicle:	A6/+01
Switchboard:	SG-200N1				

Current transformers

Tag	Number of	Ratio	Location

Voltage transformers

Tag	Number of	Ratio	Location

Test result (refer to manufacturer's procedure)

ANSI function	Setting	Injection	Trip value	Time delay Setting	Time delay Trip value
I	280A			INSTANT	

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity

Comments:

	Performed by	☐ WITNESS ☉ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CPY NOT PRESENT
Name	Mattia Girotti	Kristian Castellani	Witness waived
Date	2024-10-01	2024-10-01	2024-10-02
Signature	PROVERLIS Digitaly signed by Mattia Girotti 2024-10-01T12:31:57.410Z	PROVERLIS Digitaly signed by Kristian Castellani 2024-10-01T14:44:23.676Z	PROVERLIS Digitaly signed by Witness waived 2024-10-02T06:35:43.118Z

ITEM	Tag	A6/+01-QF1	: SEA WATER PUMP B - A6/+01-QF1	Dwg	1723002197-EL-DG-00011		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module			
TASK	code	C10002943	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity FTS	Discipline	Electrical	Form FTR-6	Electrical IO

FTR 6 - Electrical I/O check record sheet

Equipment Tag:	PM-50001B - SEA WATER PUMP	Instrument Type / Serial N° :	FLUKE 175 / 17140769
Cubicle N°:	A6/+01	Calibration certificate date:	7715/24 - 10/07/2025

Link Type:	Hardwired	●	Communication	(strike through unapplicable type)
I/O Type:	●	Digital	Analogic	(strike through unapplicable type)

DIGITAL

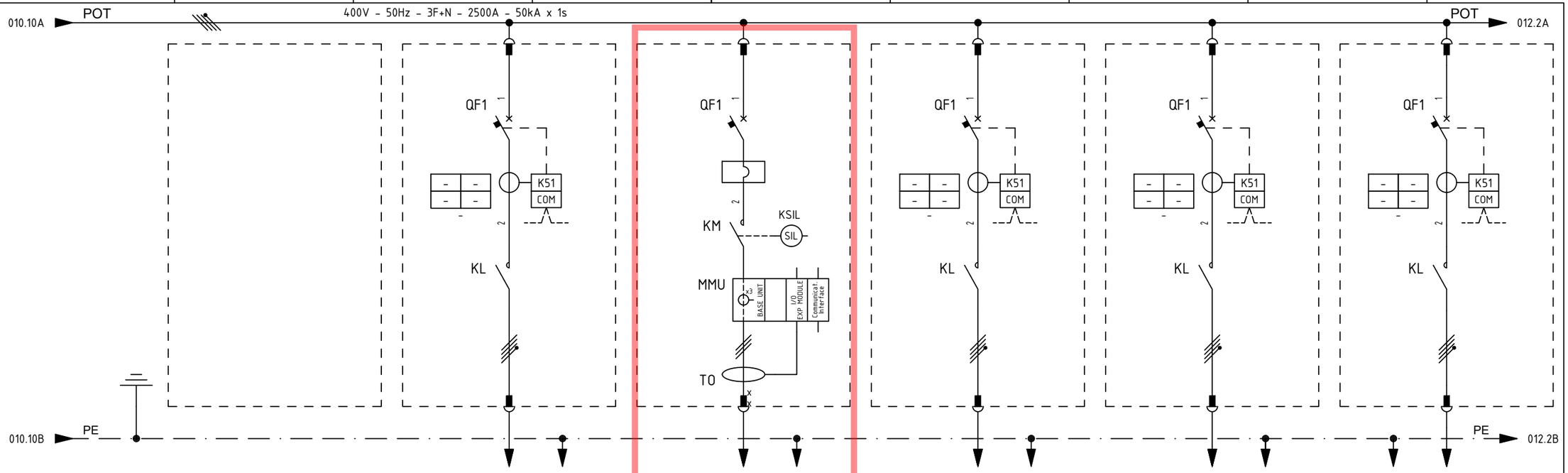
Item	Signal description	Link Type (Hardwired/ Communication)	I/O Type (Digital/Analogic)	Point of Origin (From)	Point of Receival (to)	Text Labelling Display Satisfactory (Y/N)	Blinking/Static Display Satisfactory (Y/N)	Color Coding Satisfactory (Y/N)	Status Check			Time Stamping Satisfactory (Y/N)	Refresh Time (if >1s)	Appearing in all applicable display (Y/N)
									Event (Y/N)	Alarm (Y/N)	Fault (Y/N)			
1	CHECKBACK	HW	DI	A6/+01-KM1/13-14	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
2	EARTH FAULT	HW	DI	A6/+01-TO1/1-2	ABB-MMU2	NA	NA	NA	NA	NA	Y	NA	NA	NA
3	DRAWER ON TEST POSITION	HW	DI	A6/+01-KA6/11-14	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
4	LOCAL COMMAND	HW	DI	A6/+01-SA1/21-22	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
5	REMOTE COMMAND	HW	DI	A6/+01-SA1/13-14	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
6	RUNNING LOCAL COMMAND	HW	DI	A6/+01-KA3/21-24	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
7	ESD ACTIVETED	HW	DI	A6/+01-KSIL/21-23	ABB-MMU3	NA	NA	NA	NA	NA	Y	NA	NA	NA
8	MOTOR TRIPPED	HW	DI	A6/+01-KA4/11-14	ABB-MMU3	NA	NA	NA	NA	NA	Y	NA	NA	NA

ANALOGIC

Item	Signal description	Link Type (Hardwired/ Communication)	I/O Type (Digital/Analogic)	Point of Origin (From)	Point of Receival (to)	Min value sent	Min value received	Max value sent	Max value received	Intermediate value sent	Intermediate value received	Out of scale test (OK, Not OK)	Refresh time (if >2s)	Appearing in all applicable display (Y/N)
1														
2														
3														

Comments: The test on cubicle was carried out on a test bench.

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CPY NOT PRESENT
Name	Mattia Girotti	Kristian Castellani	Witness waived
Date	2025-02-03	2025-02-04	2025-02-04
Signature	Digitaly signed by Mattia Girotti 2025-02-03T14:55:27.203Z	Digitaly signed by Kristian Castellani 2025-02-04T10:44:23.392Z	Digitaly signed by Witness waived 2025-02-04T13:37:27.879Z



ITEM				K-63001-B	PM-50001 B	CP-850E1	CP-850E2	-
UTILITY				INSTRUMENTS AIR PACKAGE 01B	SEA WATER PUMP B	BESS LV1 CABINET (+DISTR 1)	BESS LV2 CABINET (+DISTR 2)	SPARE
COLUMN/CUBICLE				A5 / +08	A6 / +01	A6 / +02	A6 / +03	A6 / +04
RATED POWER | RATED CURRENT				68.75 kW | 111.24 A	6.1 kW | 11.0 A	11.28 kW | 18.09 A	11.28 kW | 18.09 A	- kW | - A
TYPICAL FUNCTIONAL				LK2-160	M1-6	LK1-40	LK1-40	LK1-40
CIRCUIT BREAKER (ABB)	TYPE			XT4S - 250	XT2S - 160	XT2S - 160	XT2S - 160	XT2S - 160
	VERSION			4P - FIXED	3P - FIXED	4P - FIXED	4P - FIXED	4P - FIXED
	TRIP UNITS			EKIP HI TOUCH LSIG (In = 160A)	MA (In = 20A)	EKIP HI TOUCH LSIG (In = 40A)	EKIP HI TOUCH LSIG (In = 40A)	EKIP HI TOUCH LSIG (In = 40A)
	Icu		KA	50 kA	-	50 kA	50 kA	50 kA
OVERLOAD	L	Range	A	(0.4 - 1) x In	-	(0.4 - 1) x In	(0.4 - 1) x In	(0.4 - 1) x In
		Range	t	k/I²	-	k/I²	k/I²	k/I²
SEL. SHORT-CIRCUIT	S	Range	A	(0.6 - 10) x In	-	(0.6 - 10) x In	(0.6 - 10) x In	(0.6 - 10) x In
		Range	t	0.05 - 0.4 sec / k/I²	-	0.05 - 0,4 sec / k/I²	0.05 - 0,4 sec / k/I²	0.05 - 0,4 sec / k/I²
INST. SHORT-CIRCUIT	I	Range	A	(1.5 - 15) x In	(6 - 14) x I	(1.5 - 15) x In	(1.5 - 15) x In	(1.5 - 15) x In
		Range	t	instantaneous	<= 0.02 sec	instantaneous	instantaneous	instantaneous
EARTH FAULT PROTECTION	G	Range	A	(0.1 - 1) x In	-	(0.1 - 1) x In	(0.1 - 1) x In	(0.1 - 1) x In
		Range	t	t=k / t=k/I^2	-	t=k / t=k/I^2	t=k / t=k/I^2	t=k / t=k/I^2
CONTACTOR (ABB)				AF190-40-11-13 (275A-AC1); 100-250 VAC/DC	AF38-30-00-13 (18.5 kW - AC3) - 100-250Vac/dc	AF40-40-00-13 (70A-AC1); 100-250VAC/DC	AF40-40-00-13 (70A-AC1); 100-250VAC/DC	AF40-40-00-13 (70A-AC1); 100-250VAC/DC
THERMAL OVERLOAD RELAY (ABB)				-	UMC100.3 UC (0.24 - 63A)	-	-	-
SURGE ARRESTER (DEHN)				-	-	-	-	-
TOROIDAL CURRENT TRANSFORMER (FRER)				-	-	-	-	-
FUSE HOLDER (ITALWEBER)				-	-	-	-	-
INDIRECT PROTECTION (ABB)				-	-	-	-	-
VOLTMETER				-	-	-	-	-
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE			-	-	-	-	-
	PERFORMANCE/CLASS			-	-	-	-	-
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE			-	-	-	-	-
	PERFORMANCE/CLASS			-	-	-	-	-
LOCK-OUT RELAY (-)				-	-	-	-	-
POWER CONDUCTOR			mmq	5G70	4G4	4 x (1 x 10)	4 x (1 x 10)	-

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	08/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for Construction (AFC)
2	03/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	28/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	15/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

=
+

DWG n° : 231298/SD/11
Item n° : PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00011

SHEET 011

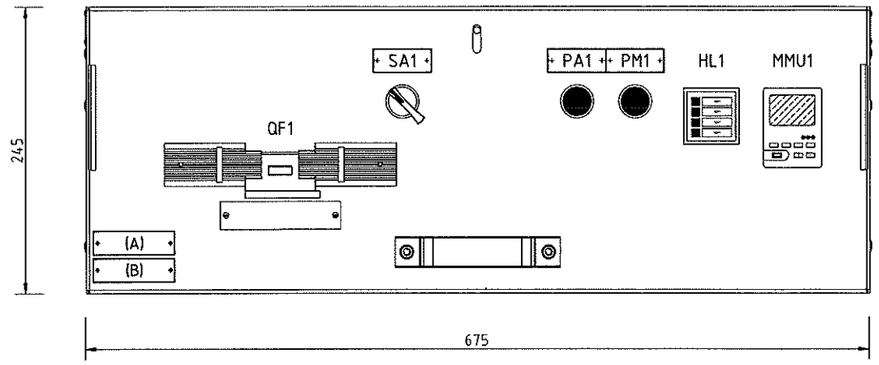
REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00011 Rev. 03

DOOR FRONT LAY-OUT

TYPICAL : MOTOR FEEDER (M1)

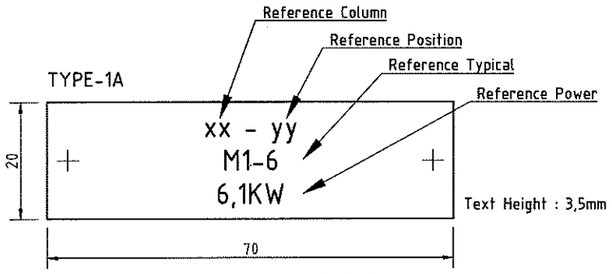


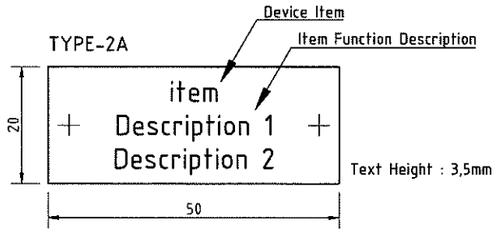
NOTE :

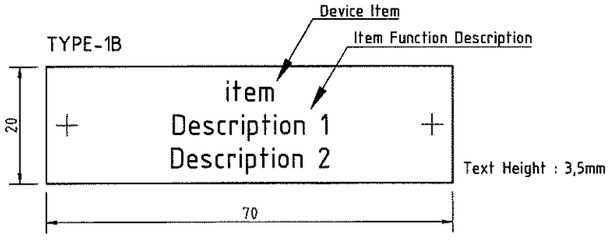
A) IDENTIFICATION name plate (type-1A) , with :
- Drawer position (Column / Position inside SWB)
- Typical name (reference applicability typical used)
- Power (reference applicability typical used)

B) USER name plate (type-1B), with :
- Item User (to see SLD diagrams)
- User Description (to see SLD diagrams)

DEVICES name plate			
ITEM	DESCRIPTION 1	DESCRIPTION 2	NOTE
MMU1	Unit Motor Control HMI		NO plate
QF1	Circuit Breaker		NO plate
SA1	LOC-REM	SELECTOR	Type-2A
PA1	STOP	MOTOR	Type-2A
PM1	RUN	MOTOR	Type-2A
HL1	Multiled	Signalling	NO plate







=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Door Front Lay-Out - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 007

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

USERS LEGEND

TYPICAL : MOTOR FEEDER (M1)

TYPICAL APPLICABILITY					
ITEM	ITEM TAG	DESCRIPTION TAG	REFERENCE POSITION (written on name name plate "type-1A)	REFERENCE POWER (written on name name plate "type-1A)	REFERENCE TYPICAL (written on name name plate "type-1A)
1	PM-50001A	SEA WATER PUMP A	A6 / +01	6,1 kW	M1-6
2	PM-50001B	SEA WATER PUMP B	A7 / +01	6,1 kW	M1-6

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

= TYPICAL
\+ M1
DWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

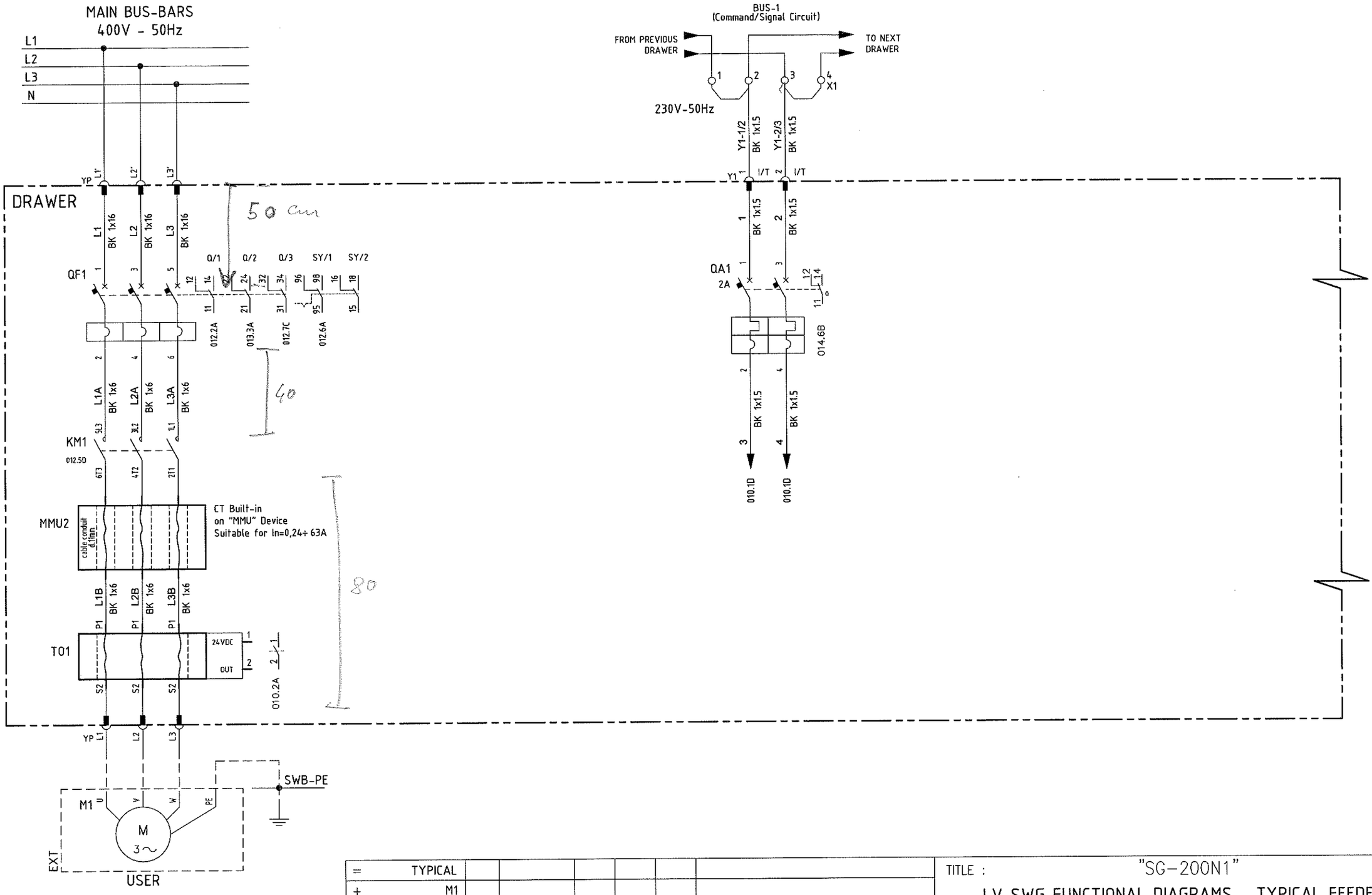
TITLE : "SG-200N1"
LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS
Users Legend - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 008 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



= TYPICAL						
+ M1						
DWG n° : 231298/SD/31						
Item n° : PF1002983/26						
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 009

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

CHECKBACK | EARTH FAULT | DRAWER ON TEST POSITION | USER ON LOCAL COMMAND | USER ON REMOTE COMMAND | RUNNING LOCAL COMMAND

KM1 012.5D | TO1 009.1D | KA6 012.9D | SA1 012.3B CLOSE ON "LOC" | SA1 012.3B CLOSE ON "REM" | KA3 012.3D

+10 RD 1x1.5 DI0 | +11 RD 1x1.5 DI1 | +12 RD 1x1.5 DI2 | +13 RD 1x1.5 DI3 | +14 RD 1x1.5 DI4 | +15 RD 1x1.5 DI5

MMU2

DI0 DI1 DI2 DI3 DI4 DI5 — X10 DIGITAL INPUT - 24VDC

1Ca 1Cb — X8 IO Bus

ABB UMC100.3 UNIVERSAL MOTOR CONTROLLER

CONTROL PANEL X9 | COMUNICATION CONNECTOR | connector

CONNECTED ON X9 CONNECTOR | #W1 | Ca 011.6B | Cb 011.6B | #W3

MMU1 HMI — Display — Operating Panel — Front port — CONNECTED ON REAR PORT

#W2.A CDP24.150 | 011.9C TO EXTERNAL COMUNICATION MODULE

Y1 16 I/T 17 I/T 18 I/T 19 I/T 20 I/T — 1 2 3 4 5

#W2.B CDP18.150

POWER 110÷240VAC/DC — X10 L N

X5 OUT 24VDC — 0V 24V DO3

DIGITAL OUT (X6) — DOC DO0 DO1 DO2

X7 — T1 T2

+24V 011.1D | RD 1x1.5 | -24V 011.1D | WH 1x1.5 | ⎓ 24V

16 BK 1x1.5 KA1 A1 A2 RUNNING COMMAND

17 BK 1x1.5 KA2 A1 A2 PROTECTION TRIPPED

009.6C 3 — 3 011.1B

009.6C 4 — 230V-50Hz — 4 011.1B

012.5B 11 12 14 22 21 24 31 32 34 41 42 44

012.6A 11 12 14 22 21 24 31 32 34 41 42 44

=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

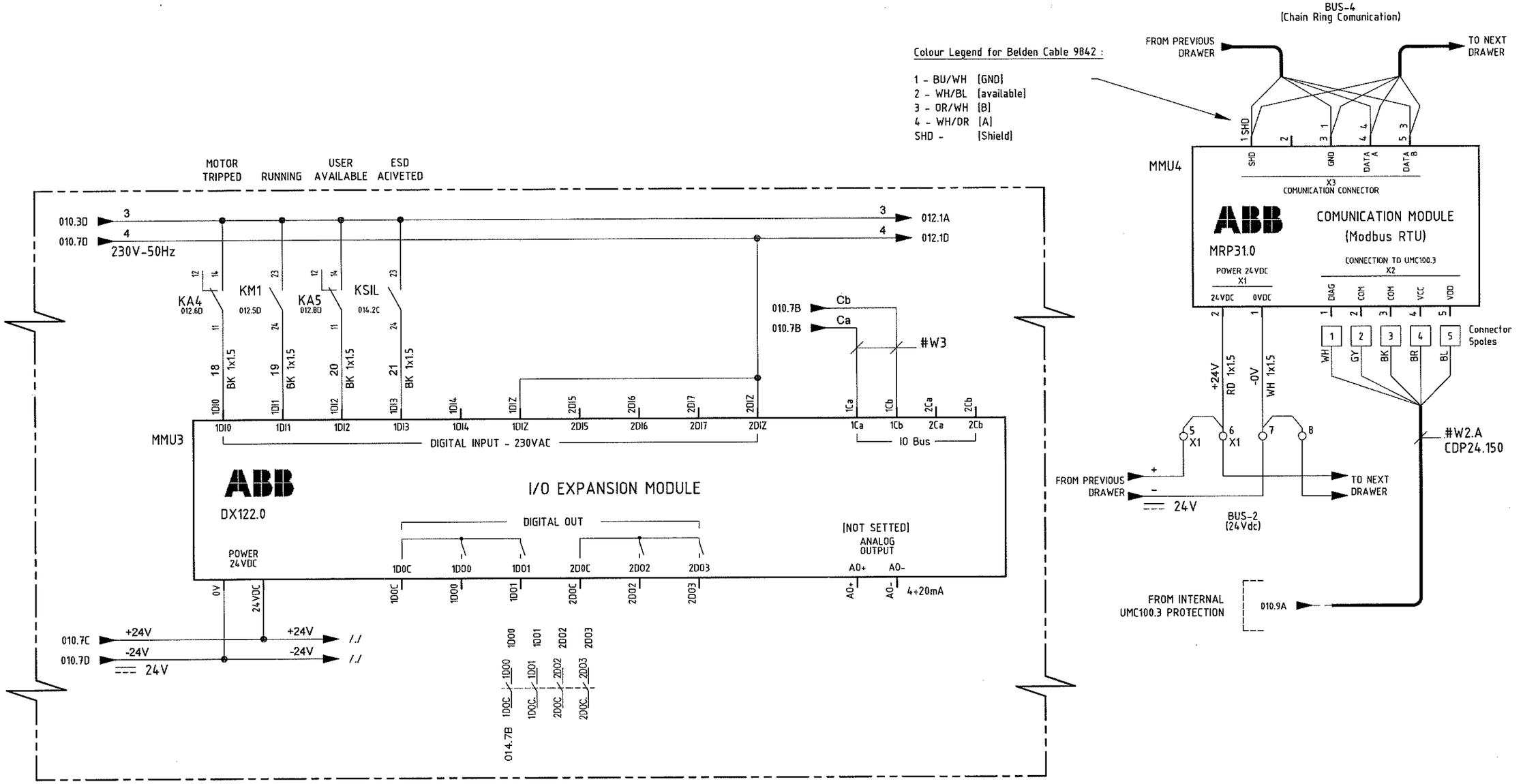
Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 010 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

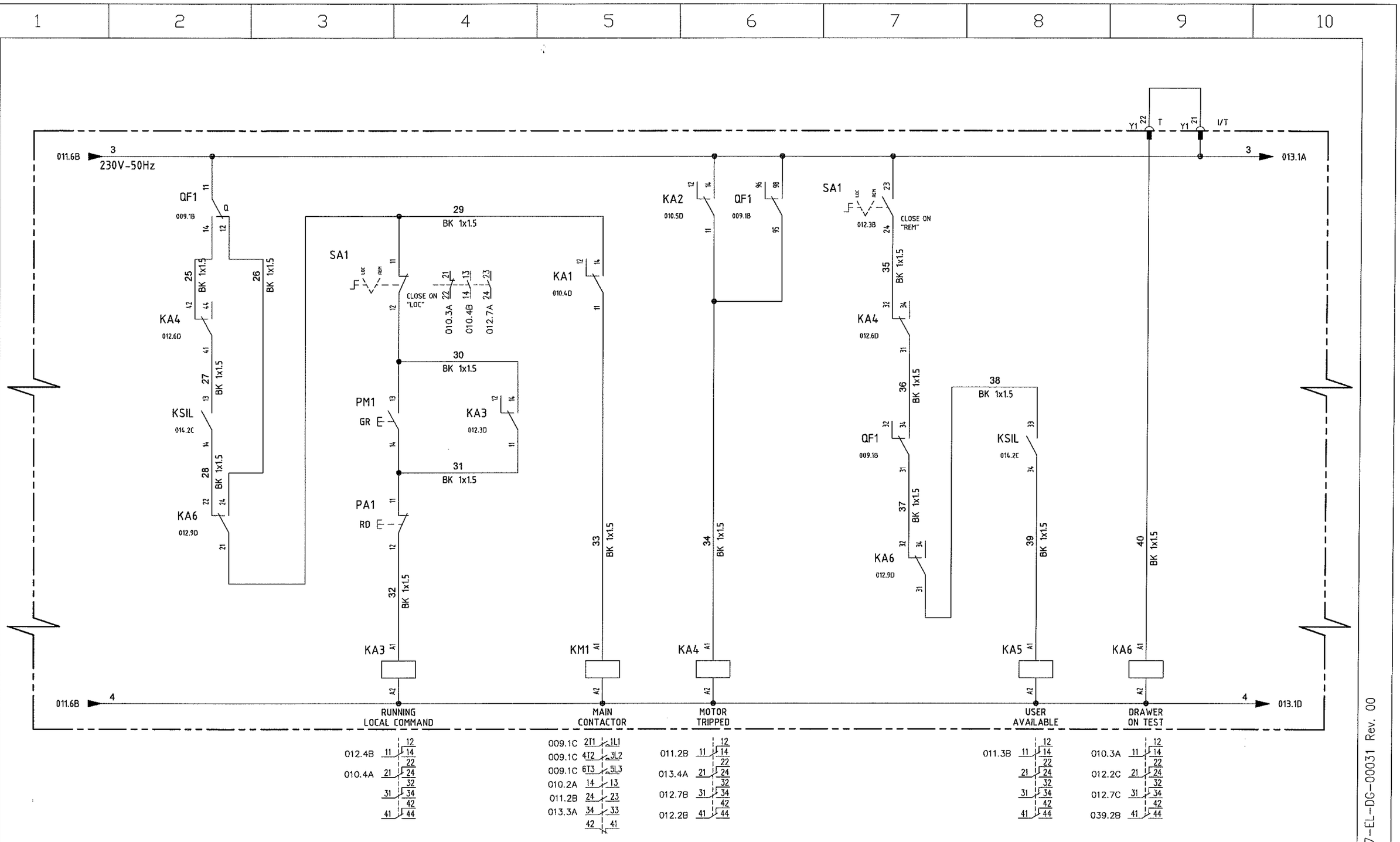
DRAWING NO. 1723002197-EL-DG-00031

SHEET 011

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

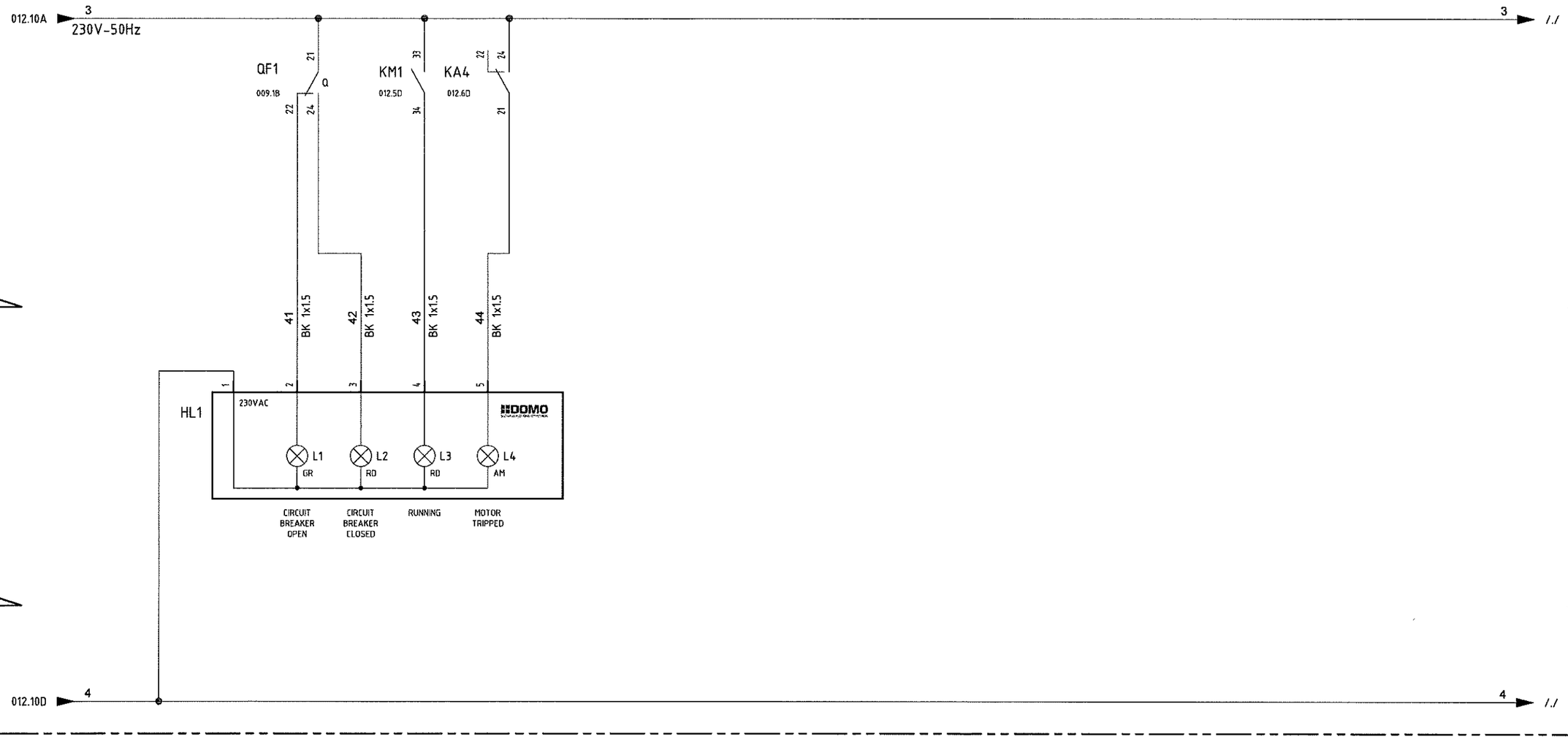
DRAWING NO. 1723002197-EL-DG-00031

SHEET 012

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
		0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
		REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 013

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ONLY FOR REPRESENTATION
FOR DETTAILS TO SEE RELEVANT
DOCUMENT N°1723002197-EL-DG-00030

SIS

BUS-3
(Internal Fault loop)

FROM PREVIOUS DRAWER

TO NEXT DRAWER

AVAILABLE

AVAILABLE

11 X1 — Y1-5/11 BK 1x1.5 — Y1 5 I/T

12 X1 — Y1-6/12 BK 1x1.5 — Y1 6 I/T

9 X1 — Y1-3/9 BK 1x1.5 — Y1 3 I/T

10 X1 — Y1-4/10 BK 1x1.5 — Y1 4 I/T

13 X1 — Y1-8/13 BK 1x1.5 — Y1 8 I/T

14 X1 — Y19/14 BK 1x1.5 — Y1 9 I/T

15 X1 — Y1-10/15 BK 1x1.5 — Y1 10 I/T

16 X1 — Y1-11/16 BK 1x1.5 — Y1 11 I/T

⎓ 24V

-45 WH 1x1.5

+46 RD 1x1.5

+47 RD 1x1.5

+48 RD 1x1.5

49 BK 1x1.5

50 BK 1x1.5

QA1
009.6B
12 14 11

MMU3
011.2B
100B 100C

KSIL
R1 X4 TEST R2
POWER SUPPLY 24VDC
ABB
Safety Relay
BSR10
13 23 33 41
1 2
OUT1 OUT2 OUT3 OUT4
14 24 34 42

012.2B 14 13
011.3B 24 23
012.8C 34 33
42 41

=	TYPICAL						
+	M1						
0	09/05/2024	Santinelli	Flamminio	Sigismondi		Issued for review (IFR)	
REV.	DATE	DRN	CHKD	APPD		DESCRIPTION	

IMESA ELECTRICAL ENGINEERING
OWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 014 | REV. 00

F.to UNI A3: 420mmx297mm

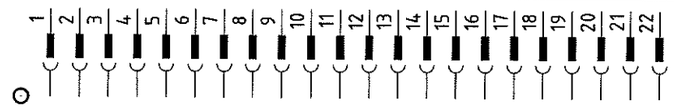
File Name : 1723002197-EL-DG-00031 Rev. 00

TYPICAL - M1 - Y1

AUXILIARY SOCKET

136450/001 (PF – 1 pcs) + 136458/005 (PM – 1 pcs)

N° PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
JUMP			●	●																		
RACKED-OUT			✕	✕																		
TEST	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RACKED-IN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PIN USED	009.6A	009.6A	014.6B	014.6B	014.2B	014.2B		014.7B	014.8B	014.9B	014.9B					010.8A	010.8A	010.8A	010.8A	010.9A	012.9A	012.9A



← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-OUT POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN TEST POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-IN POSITION

← CROS-REFERENCE USED PIN

X 2 VOLTS

= TYPICAL							
+ M1							
DWG n° : 231298/SD/31							
Item n° : PF1002983/26							
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)	
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION	

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 015

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	A7/+01-QF1	: SEA WATER PUMP A - A7/+01-QF1		Dwg	1723002197-EL-DG-00011	
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)		Module		
TASK	code	C10002944	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity FTS	Discipline Electrical	Form	FP00	Miscellaneous electrical Consumer

DATA

Switchboard	SG-200N1	Circuit ref:	A7/+01-QF1
Breaker rating (A)	20A	Nominal current (A)	11A

FUNCTION TEST REQUIREMENT

1	Check pre-commissioning activities have been carried out				OK
2	Check equipment for cleaness				OK
3	Measure I/R value of equipment and feeder cable at 1000V (Min value: 10 Mohm)	>1000	MΩ		OK
4	Energise control of equipment feeder				OK
5	Full test feeder breaker operation in test position				OK
6	Check protection setting				OK
7	Test interface trips and signals (remote alarms & status). Check the relevant ITR presence in the system				OK
8	Test control and safety functions according to manufacturer's procedure.				OK
9	Energize				OK
10	Measure Voltage and Current values at feeder breaker	400v	V	0,1 A	OK
11	Attach test procedure, if any				NA

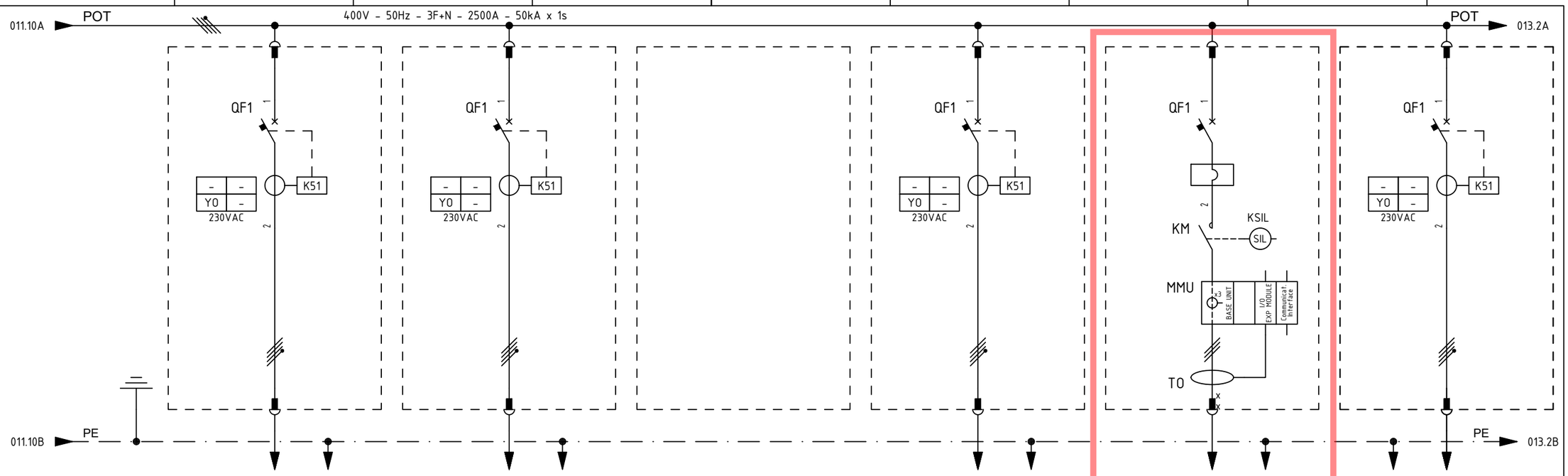
FUNCTION TEST REQUIREMENT	RESULT

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity
FLUKE 376	A1711003	7710/24	10/07/2025
FLUKE 1663	5380144	7727/24	10/07/2025

Comments:

Page 1/1	Performed by	☐ WITNESS ☑ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CPY NOT PRESENT
Name	Davide Zucconelli	Kristian Castellani	Witness waived
Date	2025-01-15	2025-01-15	2025-01-15
Signature	PROVERLIS Digitaly signed by Davide Zucconelli 2025-01-15T12:29:18.157Z	PROVERLIS Digitaly signed by Kristian Castellani 2025-01-15T15:29:44.867Z	PROVERLIS Digitaly signed by Witness waived 2025-01-15T15:49:40.696Z



ITEM			1	UP-200F4	UP-200F4		ESW-200N1	PM-50001 A	UP-200F3
UTILITY			2	AC UPS F&G - 8 H UP-200F4 - LINE A	AC UPS F&G - 8h UP-200F4 - LINE B		WELDING SOCKETS (TOP DECK)	SEA WATER PUMP A	AC UPS PAS - 30 min. UP-200F3 - BYPASS
COLUMN/CUBICLE			3	A6 / +05	A6 / +06		A6 / +08	A7 / +01	A7 / +02
RATED POWER | RATED CURRENT			4/5	18 kW | 28.9 A	18 kW | 28.9 A		69.84 kW | 126.15 A	6.1 kW | 11.0 A	36 kW | 57.8 A
TYPICAL FUNCTIONAL			6	L1-63	L1-63		L2-160	M1-6	L1-100
CIRCUIT BREAKER (ABB)	TYPE		7	XT2S - 160	XT2S - 160		XT4S - 250	XT2S - 160	XT2S - 160
	VERSION		8	4P - FIXED	4P - FIXED		4P - FIXED	3P - FIXED	4P - FIXED
	TRIP UNITS		9	EKIP DIP LSIG (In = 63A)	EKIP DIP LSIG (In = 63A)		EKIP DIP LSIG (In = 160A)	MA (In = 20A)	EKIP DIP LSIG (In = 100A)
	Icu	KA	10	50 kA	50kA		50kA	-	50 kA
OVERLOAD	L	Range A	11	(0.4 - 1) x In	(0.4 - 1) x In		(0.4 - 1) x In	-	(0.4 - 1) x In
		Range t	12	k/I^2	k/I^2		k/I^2	-	k/I^2
SEL. SHORT-CIRCUIT	S	Range A	13	(1 - 10) x In	(1 - 10) x In		(1 - 10) x In	-	(1 - 10) x In
		Range t	14	0.05 - 0.4 sec / k/I^2	0.05 - 0.4 sec / k/I^2		0.05 - 0.4 sec / k/I^2	-	0.05 - 0.4 sec / k/I^2
INST. SHORT-CIRCUIT	I	Range A	15	(1 - 10) x In	(1 - 10) x In		(1 - 10) x In	(6 - 14) x I	(1 - 10) x In
		Range t	16	<= 0.02 sec	<= 0.02 sec		<= 0.02 sec	<= 0.02 sec	<= 0.02 sec
EARTH FAULT PROTECTION	G	Range A	17	(0.2 - 1) x In	(0.2 - 1) x In		(0.2 - 1) x In	-	(0.2 - 1) x In
		Range t	18	0.1 - 0.8 sec	0.1 - 0.8 sec		0.1 - 0.8 sec	-	0.1 - 0.8 sec
CONTACTOR (ABB)			19	-	-		-	AF38-30-00-13 (18.5 kW - AC3) - 100-250Vac/dc	-
THERMAL OVERLOAD RELAY (ABB)			20	-	-		-	UMC100.3 UC (0.24 - 63A)	-
SURGE ARRESTER (DEHN)			21	-	-		-	-	-
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-	-		-	-	-
FUSE HOLDER (ITALWEBER)			23	-	-		-	-	-
INDIRECT PROTECTION (ABB)			24	-	-		-	-	-
VOLTMETER			25	-	-		-	-	-
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE		26	-	-		-	-	-
	PERFORMANCE/CLASS		27	-	-		-	-	-
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE		28	-	-		-	-	-
	PERFORMANCE/CLASS		29	-	-		-	-	-
LOCK-OUT RELAY (-)			30	-	-		-	-	-
POWER CONDUCTOR		mmq	31	4G35	4G35		5G50	4G4	4G35

=

+

DWG n° : 231298/SD/11

Item n° : PF1002983/26

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	08/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for Construction (AFC)
2	03/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	28/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	15/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00011

SHEET 012

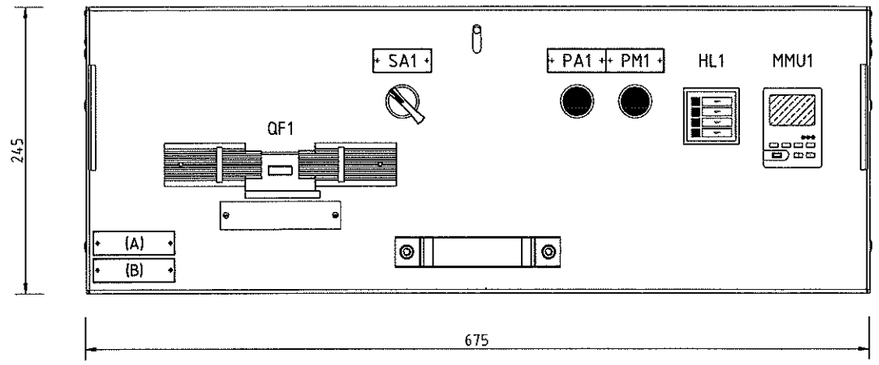
REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00011 Rev. 03

DOOR FRONT LAY-OUT

TYPICAL : MOTOR FEEDER (M1)

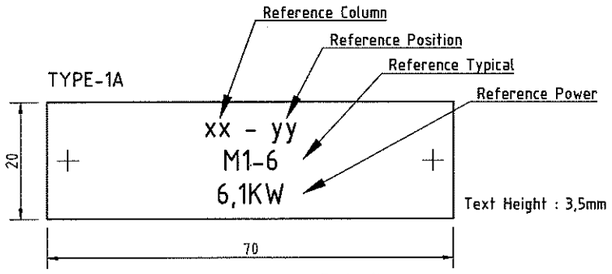


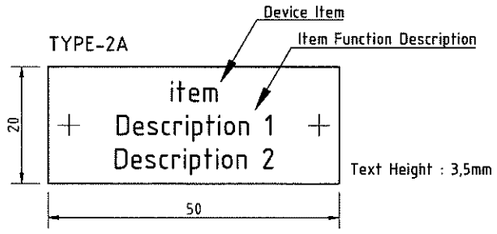
NOTE :

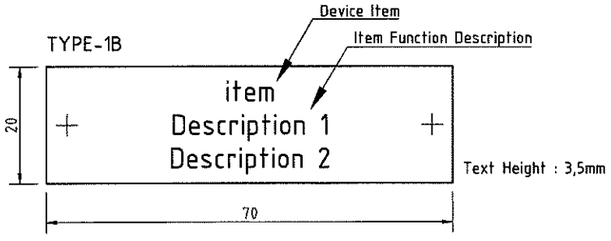
A) IDENTIFICATION name plate (type-1A) , with :
- Drawer position (Column / Position inside SWB)
- Typical name (reference applicability typical used)
- Power (reference applicability typical used)

B) USER name plate (type-1B), with :
- Item User (to see SLD diagrams)
- User Description (to see SLD diagrams)

DEVICES name plate			
ITEM	DESCRIPTION 1	DESCRIPTION 2	NOTE
MMU1	Unit Motor Control HMI		NO plate
QF1	Circuit Breaker		NO plate
SA1	LOC-REM	SELECTOR	Type-2A
PA1	STOP	MOTOR	Type-2A
PM1	RUN	MOTOR	Type-2A
HL1	Multiled	Signalling	NO plate







=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Door Front Lay-Out - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 007

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

USERS LEGEND

TYPICAL : MOTOR FEEDER (M1)

TYPICAL APPLICABILITY					
ITEM	ITEM TAG	DESCRIPTION TAG	REFERENCE POSITION (written on name name plate "type-1A)	REFERENCE POWER (written on name name plate "type-1A)	REFERENCE TYPICAL (written on name name plate "type-1A)
1	PM-50001A	SEA WATER PUMP A	A6 / +01	6,1 kW	M1-6
2	PM-50001B	SEA WATER PUMP B	A7 / +01	6,1 kW	M1-6

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

= TYPICAL
\+ M1
DWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

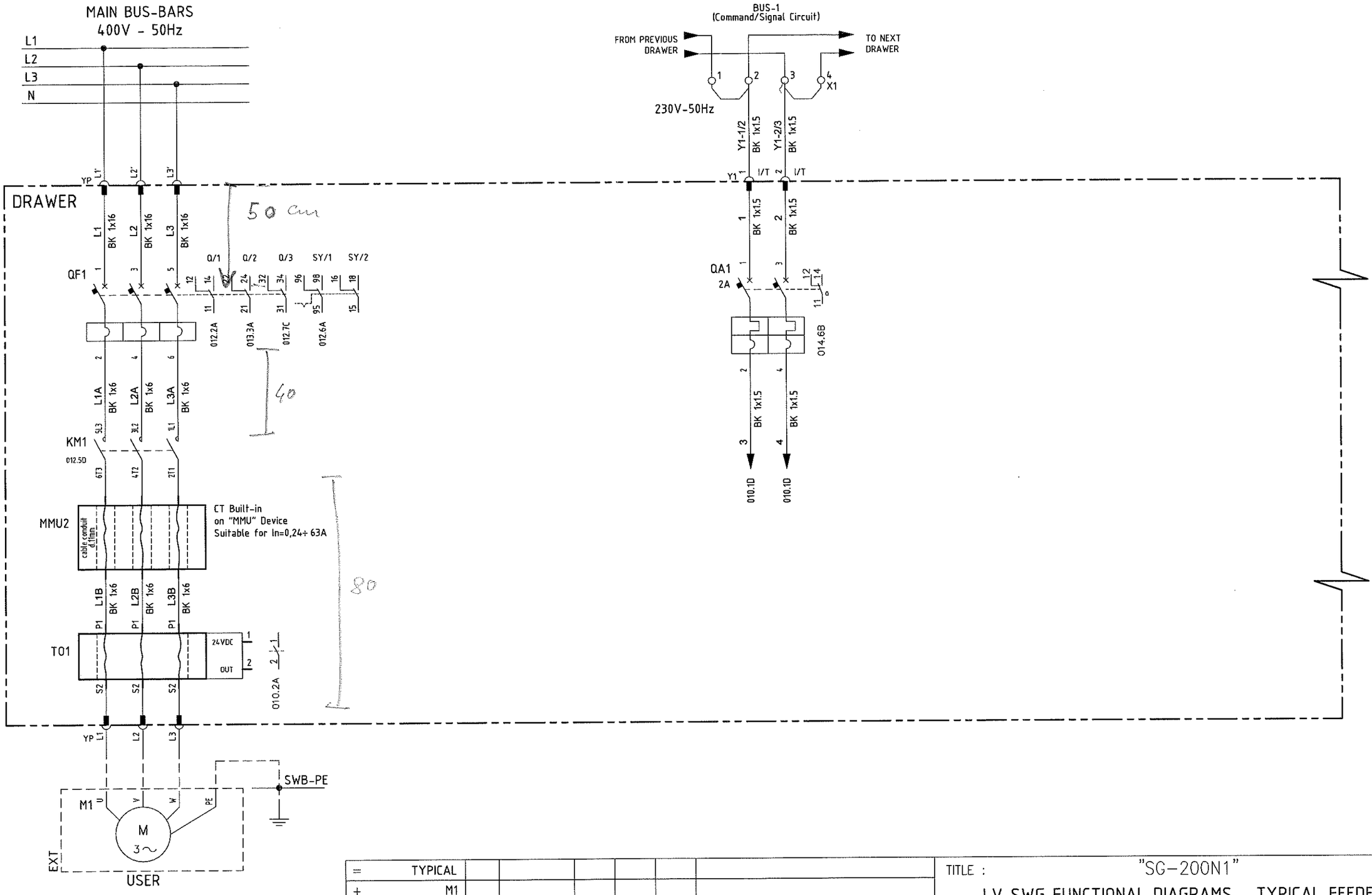
TITLE : "SG-200N1"
LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS
Users Legend - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 008 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



= TYPICAL						
+ M1						
DWG n° : 231298/SD/31						
Item n° : PF1002983/26						
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 009

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

CHECKBACK | EARTH FAULT | DRAWER ON TEST POSITION | USER ON LOCAL COMMAND | USER ON REMOTE COMMAND | RUNNING LOCAL COMMAND

KM1 012.5D | TO1 009.1D | KA6 012.9D | SA1 012.3B CLOSE ON "LOC" | SA1 012.3B CLOSE ON "REM" | KA3 012.3D

+10 RD 1x1.5 DI0 | +11 RD 1x1.5 DI1 | +12 RD 1x1.5 DI2 | +13 RD 1x1.5 DI3 | +14 RD 1x1.5 DI4 | +15 RD 1x1.5 DI5

MMU2

DI0 DI1 DI2 DI3 DI4 DI5 — X10 DIGITAL INPUT - 24VDC

1Ca 1Cb — X8 IO Bus

ABB UMC100.3 UNIVERSAL MOTOR CONTROLLER

CONTROL PANEL X9 | COMUNICATION CONNECTOR | connector

CONNECTED ON X9 CONNECTOR | #W1 | Ca 011.6B | Cb 011.6B | #W3

MMU1 HMI — Display — Operating Panel — Front port — CONNECTED ON REAR PORT

#W2.A CDP24.150 | 011.9C TO EXTERNAL COMUNICATION MODULE

Y1 16 I/T 17 I/T 18 I/T 19 I/T 20 I/T — 1 2 3 4 5

#W2.B CDP18.150

POWER 110÷240VAC/DC — X10 L N

X5 OUT 24VDC — 0V 24V DO3

DIGITAL OUT (X6) — DOC DO0 DO1 DO2

X7 — T1 T2

+24V 011.1D | RD 1x1.5 | -24V 011.1D | WH 1x1.5 | ⎓ 24V

16 BK 1x1.5 KA1 A1 A2 RUNNING COMMAND

17 BK 1x1.5 KA2 A1 A2 PROTECTION TRIPPED

009.6C 3 — 3 011.1B

009.6C 4 — 230V-50Hz — 4 011.1B

012.5B 11 12 14 22 21 24 31 32 34 41 42 44

012.6A 11 12 14 22 21 24 31 32 34 41 42 44

=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

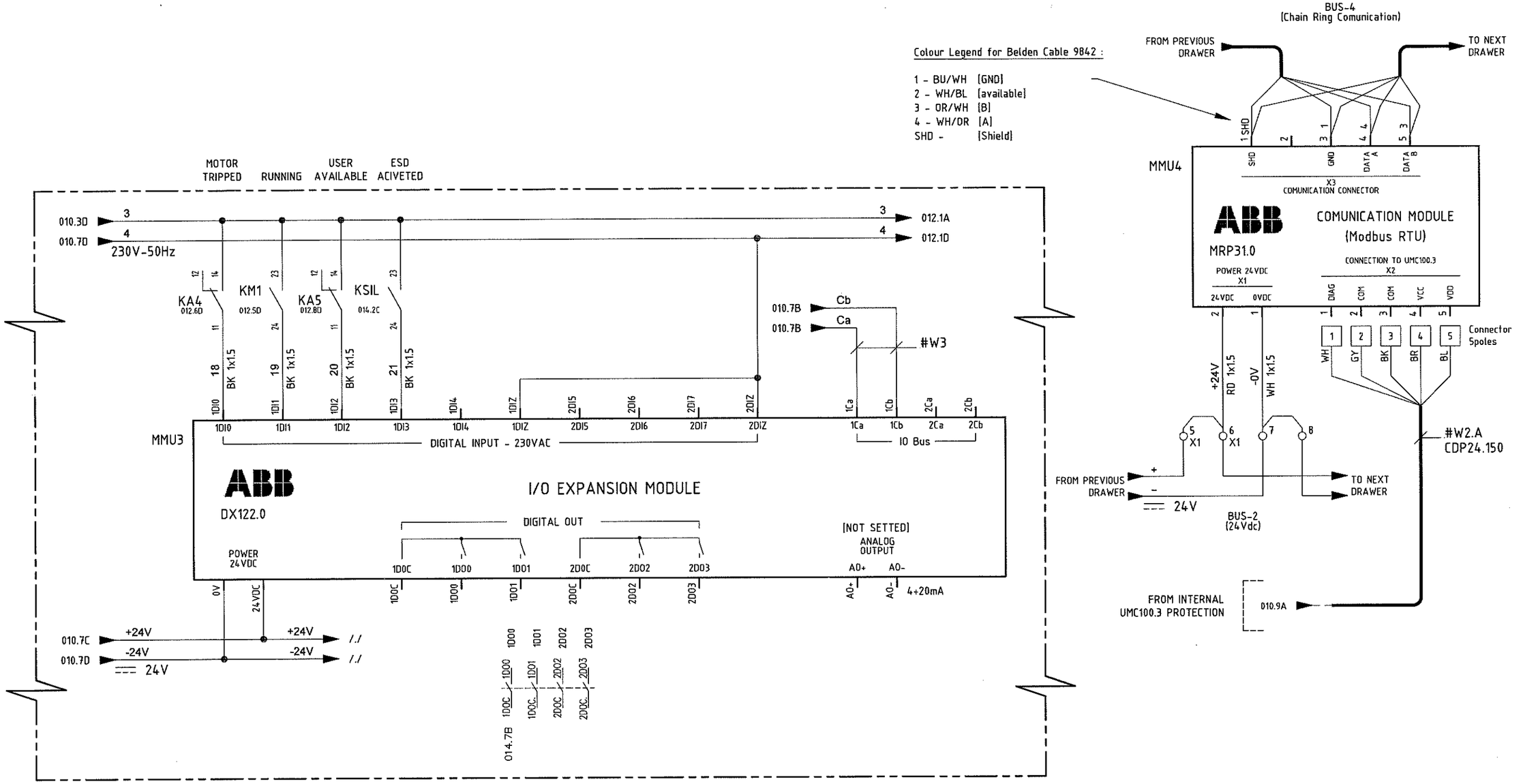
Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 010 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

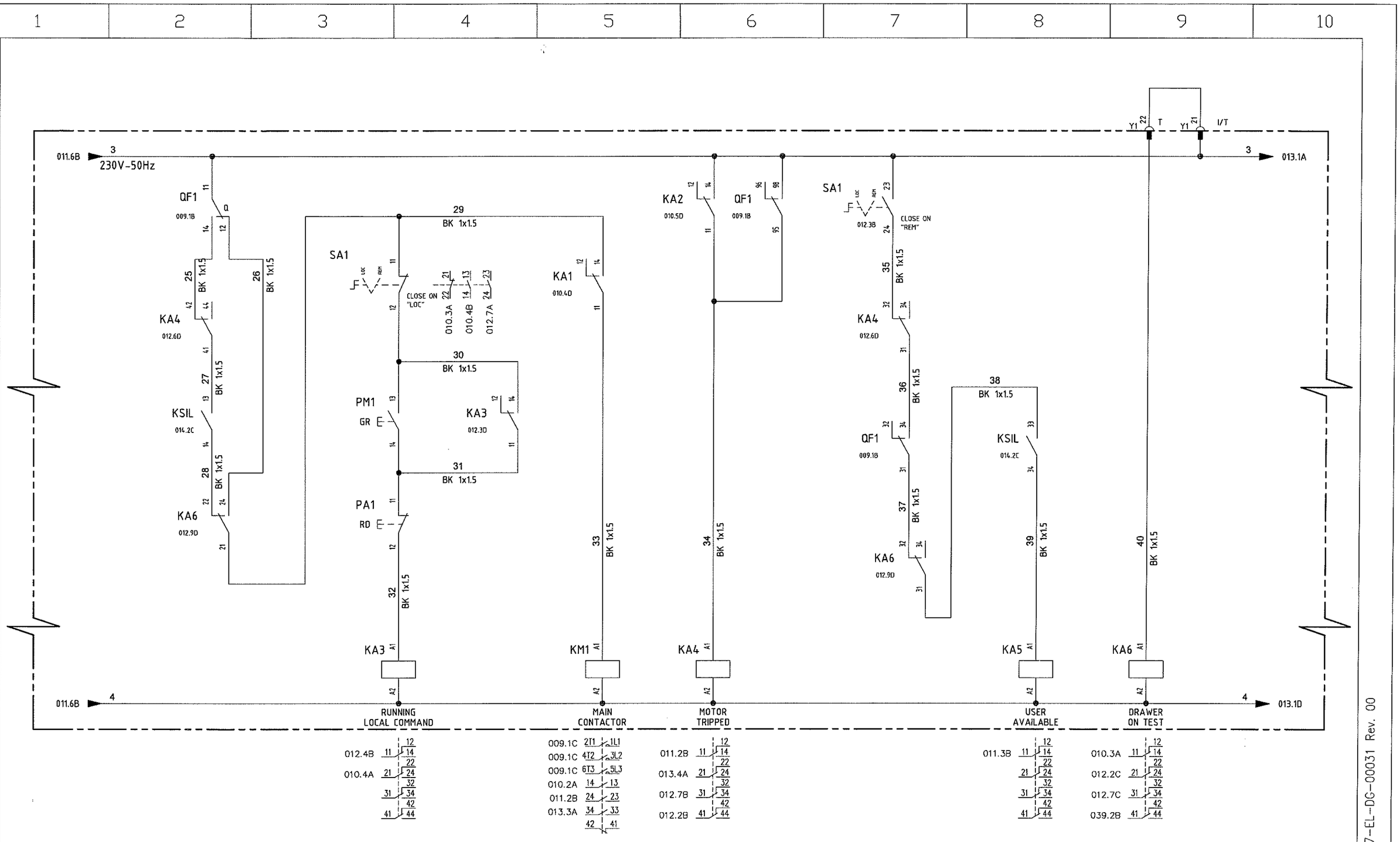
DRAWING NO. 1723002197-EL-DG-00031

SHEET 011

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

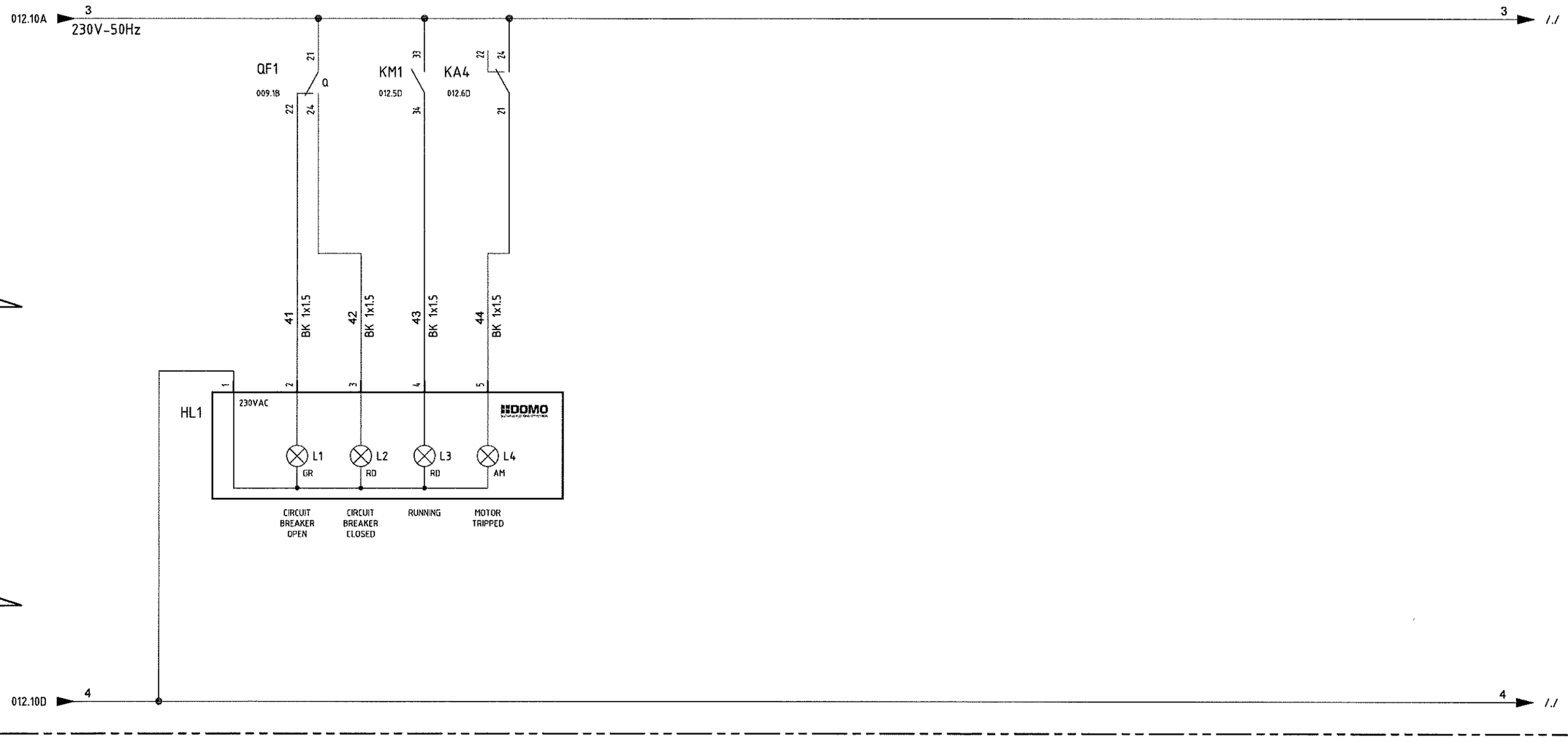
DRAWING NO. 1723002197-EL-DG-00031

SHEET 012

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
		0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
		REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 013

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ONLY FOR REPRESENTATION
FOR DETTAILS TO SEE RELEVANT
DOCUMENT N°1723002197-EL-DG-00030

SIS

BUS-3
(Internal Fault loop)

FROM PREVIOUS DRAWER

TO NEXT DRAWER

AVAILABLE

AVAILABLE

11 X1 — Y1-5/11 BK 1x1.5 — Y1 5 I/T

12 X1 — Y1-6/12 BK 1x1.5 — Y1 6 I/T

9 X1 — Y1-3/9 BK 1x1.5 — Y1 3 I/T

10 X1 — Y1-4/10 BK 1x1.5 — Y1 4 I/T

13 X1 — Y1-8/13 BK 1x1.5 — Y1 8 I/T

14 X1 — Y19/14 BK 1x1.5 — Y1 9 I/T

15 X1 — Y1-10/15 BK 1x1.5 — Y1 10 I/T

16 X1 — Y1-11/16 BK 1x1.5 — Y1 11 I/T

⎓ 24V

-45 WH 1x1.5

+46 RD 1x1.5

+47 RD 1x1.5

+48 RD 1x1.5

49 BK 1x1.5

50 BK 1x1.5

QA1
009.6B
12 14 11

MMU3
011.2B
100B 100C

KSIL
R1 X4 TEST R2
POWER SUPPLY 24VDC
ABB
Safety Relay
BSR10
13 23 33 41
1 2
OUT1 OUT2 OUT3 OUT4
14 24 34 42

012.2B 14 13
011.3B 24 23
012.8C 34 33
42 41

=	TYPICAL						
+	M1						
0	09/05/2024	Santinelli	Flamminio	Sigismondi		Issued for review (IFR)	
REV.	DATE	DRN	CHKD	APPD		DESCRIPTION	

IMESA ELECTRICAL ENGINEERING
OWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 014 | REV. 00

F.to UNI A3: 420mmx297mm

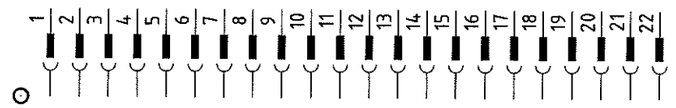
File Name : 1723002197-EL-DG-00031 Rev. 00

TYPICAL - M1 - Y1

AUXILIARY SOCKET

136450/001 (PF – 1 pcs) + 136458/005 (PM – 1 pcs)

N° PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
JUMP			●	●																		
RACKED-OUT			✕	✕																		
TEST	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RACKED-IN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PIN USED	009.6A	009.6A	014.6B	014.6B	014.2B	014.2B		014.7B	014.8B	014.9B	014.9B					010.8A	010.8A	010.8A	010.8A	010.9A	012.9A	012.9A



← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-OUT POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN TEST POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-IN POSITION

← CROS-REFERENCE USED PIN

X 2 VOLTS

= TYPICAL							
+ M1							
DWG n° : 231298/SD/31							
Item n° : PF1002983/26							
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)	
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION	

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 015

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ITEM	Tag	A7/+01-QF1	: SEA WATER PUMP A - A7/+01-QF1		Dwg	1723002197-EL-DG-00011	
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)		Module		
TASK	code	C10002945	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity FTS	Discipline Electrical	Form	FTR-2	Protection Relay

FTR2 - Protection relay
Record sheet

RELAY DATA

Manufacturer:	ABB	Serial N°:	XT2S20MA3	Relay type:	MA
Auxiliary supply:	24Vdc	Location:	B200	Cubicle:	A7/+01
Switchboard:	SG-200N1				

Current transformers

Tag	Number of	Ratio	Location

Voltage transformers

Tag	Number of	Ratio	Location

Test result (refer to manufacturer's procedure)

ANSI function	Setting	Injection	Trip value	Time delay	
				Setting	Trip value
I	280A			INSTANT	

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity

Comments:

	Performed by	☐ WITNESS ☉ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CPY NOT PRESENT
Name	Mattia Girotti	Kristian Castellani	Witness waived
Date	2024-10-01	2024-10-01	2024-10-02
Signature	PROVERLIS Digitaly signed by Mattia Girotti 2024-10-01T12:29:35.496Z	PROVERLIS Digitaly signed by Kristian Castellani 2024-10-01T14:44:53.927Z	PROVERLIS Digitaly signed by Witness waived 2024-10-02T06:36:07.146Z

ITEM	Tag	A7/+01-QF1	: SEA WATER PUMP A - A7/+01-QF1	Dwg	1723002197-EL-DG-00011		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module			
TASK	code	C10002946	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity	FTS	Discipline	Electrical	Form	FTR-6		Electrical IO

FTR 6 - Electrical I/O check record sheet

Equipment Tag:	PM-500001A - SEA WATER PUMP	Instrument Type / Serial N° :	FLUKE 175 / 17140769
Cubicle N°:	A7/+01	Calibration certificate date:	7715/24 / 10/07/25

Link Type:	Hardwired	●	Communication	(strike through unapplicable type)
I/O Type:	●	Digital	Analogic	(strike through unapplicable type)

DIGITAL

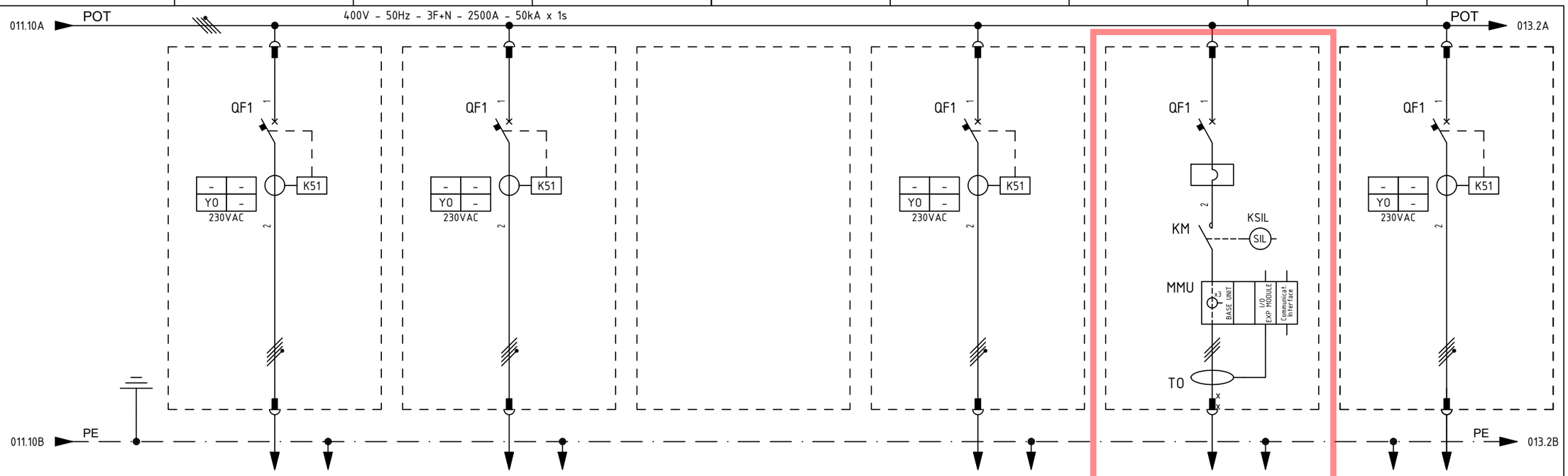
Item	Signal description	Link Type (Hardwired/ Communication)	I/O Type (Digital/Analogic)	Point of Origin (From)	Point of Receival (to)	Text Labelling Display Satisfactory (Y/N)	Blinking/Static Display Satisfactory (Y/N)	Color Coding Satisfactory (Y/N)	Status Check			Time Stamping Satisfactory (Y/N)	Refresh Time (if >1s)	Appearing in all applicable display (Y/N)
									Event (Y/N)	Alarm (Y/N)	Fault (Y/N)			
1	CHECKBACK	HW	DI	A6/+01-KM1/13-14	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
2	EARTH FAULT	HW	DI	A6/+01-TO1/1-2	ABB-MMU2	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	DRAWER ON TEST POSITION	HW	DI	A6/+01-KA6/11-14	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
4	LOCAL COMMAND	HW	DI	A6/+01-SA1/21-22	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
5	REMOTE COMMAND	HW	DI	A6/+01-SA1/13-14	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
6	RUNNING LOCAL COMMAND	HW	DI	A6/+01-KA3/21-24	ABB-MMU2	NA	NA	NA	Y	NA	NA	NA	NA	NA
7	ESD ACTIVETED	HW	DI	A6/+01-KSIL/21-23	ABB-MMU3	NA	NA	NA	NA	NA	Y	NA	NA	NA
8	MOTOR TRIPPED	HW	DI	A6/+01-KA4/11-14	ABB-MMU3	NA	NA	NA	NA	NA	Y	NA	NA	NA

ANALOGIC

Item	Signal description	Link Type (Hardwired/ Communication)	I/O Type (Digital/Analogic)	Point of Origin (From)	Point of Receival (to)	Min value sent	Min value received	Max value sent	Max value received	Intermediate value sent	Intermediate value received	Out of scale test (OK, Not OK)	Refresh time (if >2s)	Appearing in all applicable display (Y/N)
1														
2														
3														

Comments:

Page 1/1	Performed by	☐ WITNESS ● REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CPY NOT PRESENT
Name	Mattia Girotti	Kristian Castellani	Witness waived
Date	2025-02-03	2025-02-04	2025-02-04
Signature	PROVERLIS Digitaly signed by Mattia Girotti 2025-02-03T15:05:04.441Z	PROVERLIS Digitaly signed by Kristian Castellani 2025-02-04T10:46:28.283Z	PROVERLIS Digitaly signed by Witness waived 2025-02-04T13:37:59.624Z



ITEM			1	UP-200F4	UP-200F4		ESW-200N1	PM-50001 A	UP-200F3
UTILITY			2	AC UPS F&G - 8 H UP-200F4 - LINE A	AC UPS F&G - 8h UP-200F4 - LINE B		WELDING SOCKETS (TOP DECK)	SEA WATER PUMP A	AC UPS PAS - 30 min. UP-200F3 - BYPASS
COLUMN/CUBICLE			3	A6 / +05	A6 / +06		A6 / +08	A7 / +01	A7 / +02
RATED POWER | RATED CURRENT			4/5	18 kW | 28.9 A	18 kW | 28.9 A		69.84 kW | 126.15 A	6.1 kW | 11.0 A	36 kW | 57.8 A
TYPICAL FUNCTIONAL			6	L1-63	L1-63		L2-160	M1-6	L1-100
CIRCUIT BREAKER (ABB)	TYPE		7	XT2S - 160	XT2S - 160		XT4S - 250	XT2S - 160	XT2S - 160
	VERSION		8	4P - FIXED	4P - FIXED		4P - FIXED	3P - FIXED	4P - FIXED
	TRIP UNITS		9	EKIP DIP LSIG (In = 63A)	EKIP DIP LSIG (In = 63A)		EKIP DIP LSIG (In = 160A)	MA (In = 20A)	EKIP DIP LSIG (In = 100A)
	Icu	KA	10	50 kA	50kA		50kA	-	50 kA
OVERLOAD	L	Range A	11	(0.4 - 1) x In	(0.4 - 1) x In		(0.4 - 1) x In	-	(0.4 - 1) x In
		Range t	12	k/I^2	k/I^2		k/I^2	-	k/I^2
SEL. SHORT-CIRCUIT	S	Range A	13	(1 - 10) x In	(1 - 10) x In		(1 - 10) x In	-	(1 - 10) x In
		Range t	14	0.05 - 0.4 sec / k/I^2	0.05 - 0.4 sec / k/I^2		0.05 - 0.4 sec / k/I^2	-	0.05 - 0.4 sec / k/I^2
INST. SHORT-CIRCUIT	I	Range A	15	(1 - 10) x In	(1 - 10) x In		(1 - 10) x In	(6 - 14) x I	(1 - 10) x In
		Range t	16	<= 0.02 sec	<= 0.02 sec		<= 0.02 sec	<= 0.02 sec	<= 0.02 sec
EARTH FAULT PROTECTION	G	Range A	17	(0.2 - 1) x In	(0.2 - 1) x In		(0.2 - 1) x In	-	(0.2 - 1) x In
		Range t	18	0.1 - 0.8 sec	0.1 - 0.8 sec		0.1 - 0.8 sec	-	0.1 - 0.8 sec
CONTACTOR (ABB)			19	-	-		-	AF38-30-00-13 (18.5 kW - AC3) - 100-250Vac/dc	-
THERMAL OVERLOAD RELAY (ABB)			20	-	-		-	UMC100.3 UC (0.24 - 63A)	-
SURGE ARRESTER (DEHN)			21	-	-		-	-	-
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-	-		-	-	-
FUSE HOLDER (ITALWEBER)			23	-	-		-	-	-
INDIRECT PROTECTION (ABB)			24	-	-		-	-	-
VOLTMETER			25	-	-		-	-	-
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE		26	-	-		-	-	-
	PERFORMANCE/CLASS		27	-	-		-	-	-
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE		28	-	-		-	-	-
	PERFORMANCE/CLASS		29	-	-		-	-	-
LOCK-OUT RELAY (-)			30	-	-		-	-	-
POWER CONDUCTOR		mmq	31	4G35	4G35		5G50	4G4	4G35

=

+

DWG n° : 231298/SD/11

Item n° : PF1002983/26

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	08/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for Construction (AFC)
2	03/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	28/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	15/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00011

SHEET 012

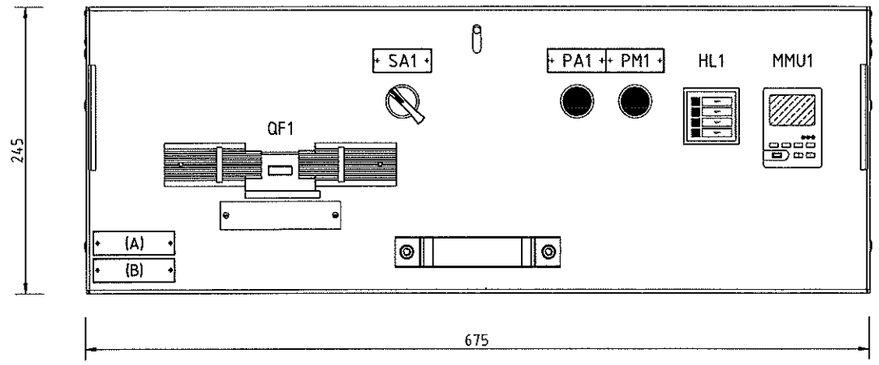
REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00011 Rev. 03

DOOR FRONT LAY-OUT

TYPICAL : MOTOR FEEDER (M1)

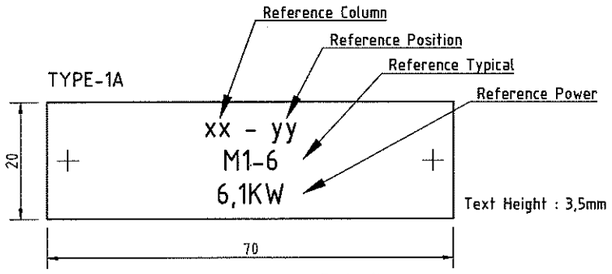


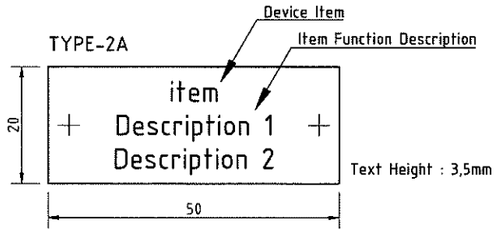
NOTE :

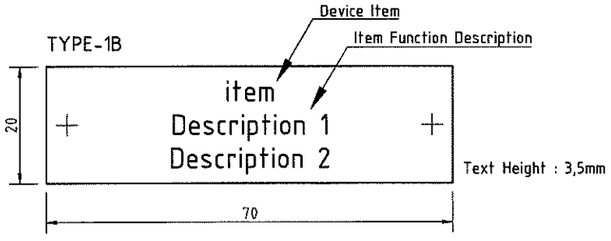
A) IDENTIFICATION name plate (type-1A) , with :
- Drawer position (Column / Position inside SWB)
- Typical name (reference applicability typical used)
- Power (reference applicability typical used)

B) USER name plate (type-1B), with :
- Item User (to see SLD diagrams)
- User Description (to see SLD diagrams)

DEVICES name plate			
ITEM	DESCRIPTION 1	DESCRIPTION 2	NOTE
MMU1	Unit Motor Control HMI		NO plate
QF1	Circuit Breaker		NO plate
SA1	LOC-REM	SELECTOR	Type-2A
PA1	STOP	MOTOR	Type-2A
PM1	RUN	MOTOR	Type-2A
HL1	Multiled	Signalling	NO plate







=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Door Front Lay-Out - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 007

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

USERS LEGEND

TYPICAL : MOTOR FEEDER (M1)

TYPICAL APPLICABILITY					
ITEM	ITEM TAG	DESCRIPTION TAG	REFERENCE POSITION (written on name name plate "type-1A)	REFERENCE POWER (written on name name plate "type-1A)	REFERENCE TYPICAL (written on name name plate "type-1A)
1	PM-50001A	SEA WATER PUMP A	A6 / +01	6,1 kW	M1-6
2	PM-50001B	SEA WATER PUMP B	A7 / +01	6,1 kW	M1-6

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

= TYPICAL
\+ M1
DWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

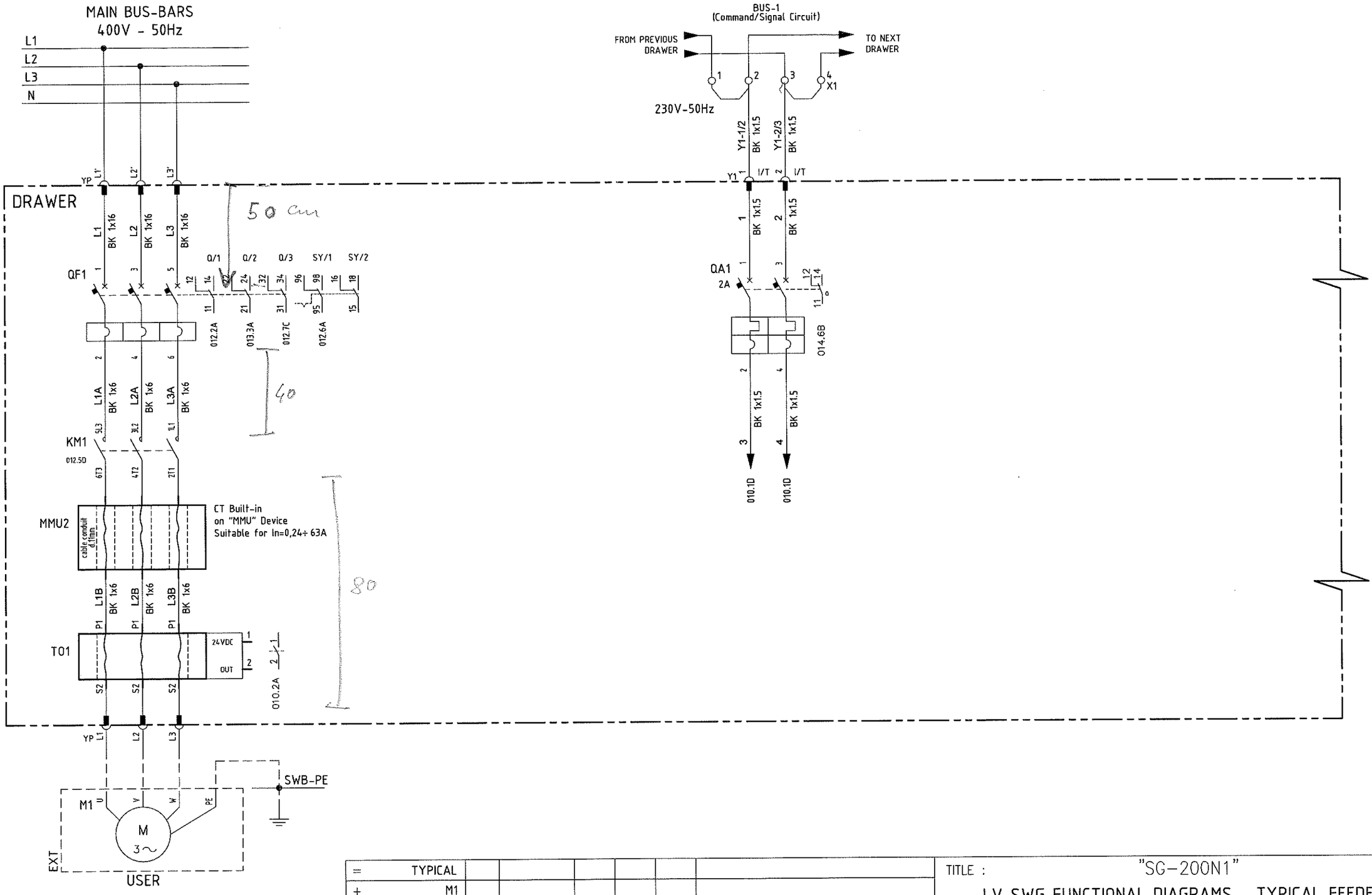
TITLE : "SG-200N1"
LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS
Users Legend - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 008 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



= TYPICAL						
+ M1						
DWG n° : 231298/SD/31						
Item n° : PF1002983/26						
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 009

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

CHECKBACK | EARTH FAULT | DRAWER ON TEST POSITION | USER ON LOCAL COMMAND | USER ON REMOTE COMMAND | RUNNING LOCAL COMMAND

KM1 012.5D | TO1 009.1D | KA6 012.9D | SA1 012.3B CLOSE ON "LOC" | SA1 012.3B CLOSE ON "REM" | KA3 012.3D

+10 RD 1x1.5 DI0 | +11 RD 1x1.5 DI1 | +12 RD 1x1.5 DI2 | +13 RD 1x1.5 DI3 | +14 RD 1x1.5 DI4 | +15 RD 1x1.5 DI5

MMU2

DI0 DI1 DI2 DI3 DI4 DI5 — X10 DIGITAL INPUT - 24VDC

1Ca 1Cb — X8 IO Bus

ABB UMC100.3 UNIVERSAL MOTOR CONTROLLER

CONTROL PANEL X9 | COMUNICATION CONNECTOR | connector

CONNECTED ON X9 CONNECTOR | #W1 | Ca 011.6B | Cb 011.6B | #W3

MMU1 HMI — Display — Operating Panel — Front port — CONNECTED ON REAR PORT

#W2.A CDP24.150 | 011.9C TO EXTERNAL COMUNICATION MODULE

Y1 16 I/T 17 I/T 18 I/T 19 I/T 20 I/T — 1 2 3 4 5

#W2.B CDP18.150

POWER 110÷240VAC/DC — X10 L N

X5 OUT 24VDC — 0V 24V DO3

DIGITAL OUT (X6) — DOC DO0 DO1 DO2

X7 — T1 T2

+24V 011.1D | RD 1x1.5 | -24V 011.1D | WH 1x1.5 | ⎓ 24V

16 BK 1x1.5 KA1 A1 A2 RUNNING COMMAND

17 BK 1x1.5 KA2 A1 A2 PROTECTION TRIPPED

009.6C 3 — 3 011.1B

009.6C 4 — 230V-50Hz — 4 011.1B

012.5B 11 12 14 22 21 24 31 32 34 41 42 44

012.6A 11 12 14 22 21 24 31 32 34 41 42 44

=	TYPICAL
+	M1
DWG n° :	231298/SD/31
Item n° :	PF1002983/26

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

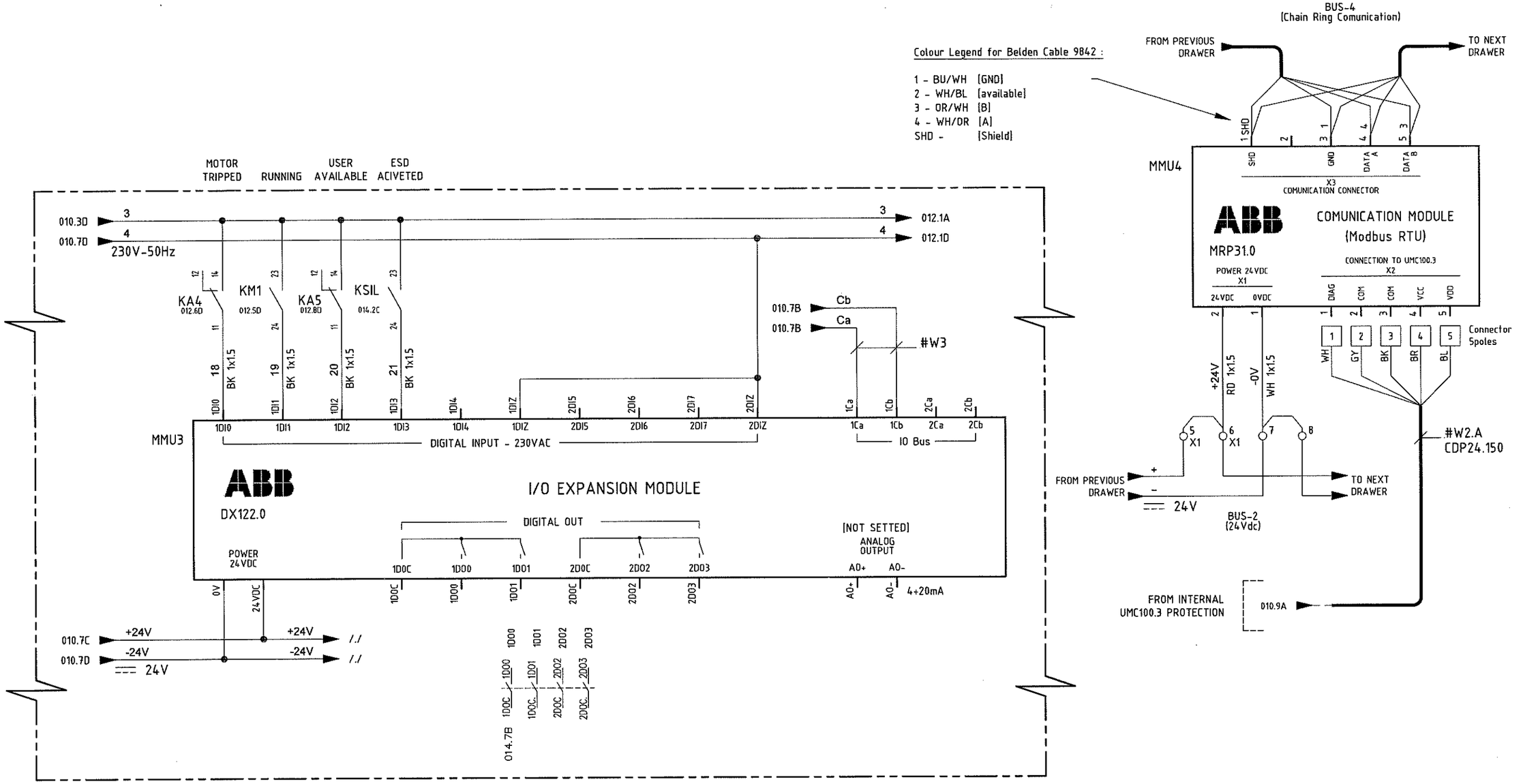
Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 010 | REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

CROSSWIND

ROSETTI MARINO

IMESA ELECTRICAL ENGINEERING

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

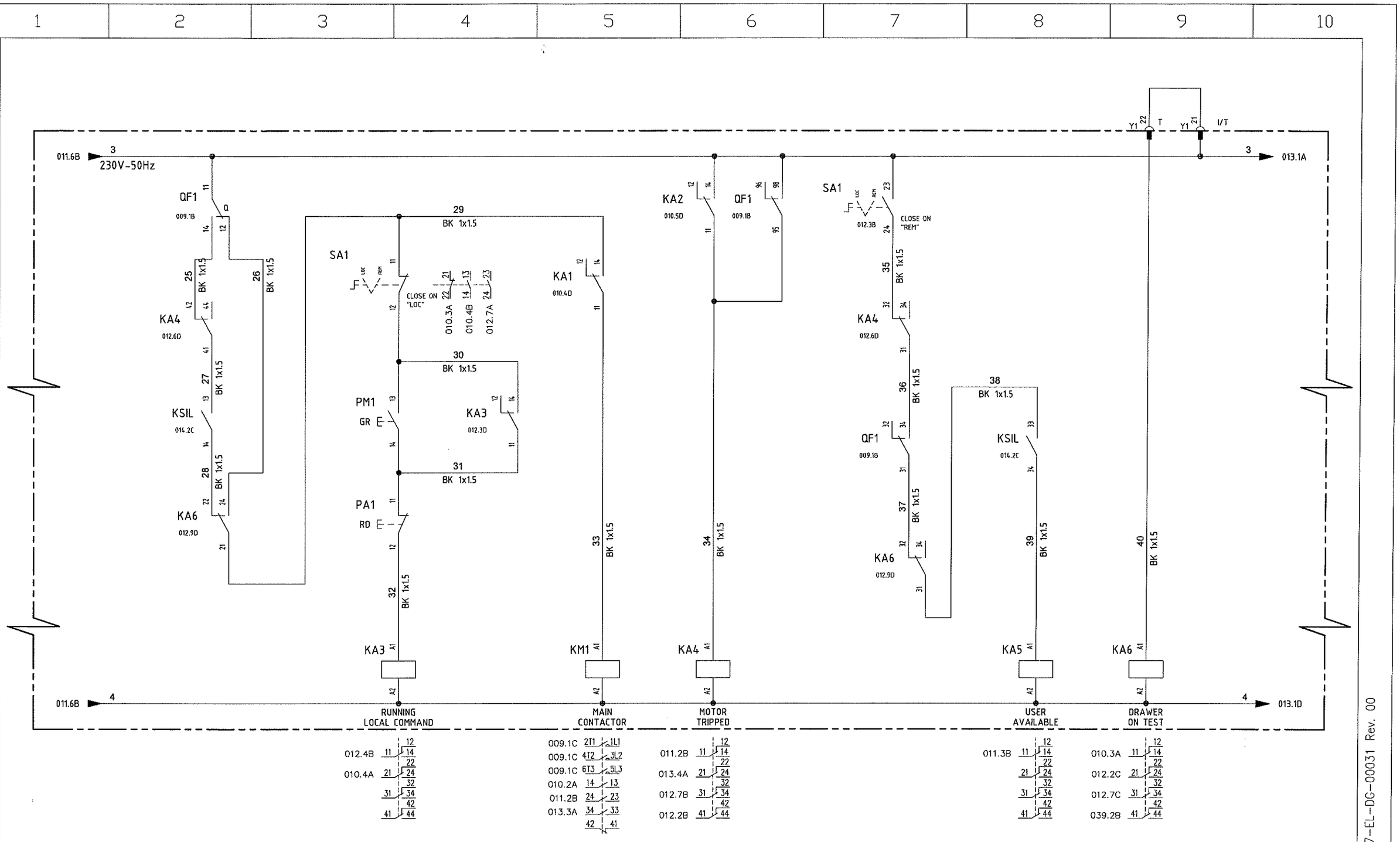
DRAWING NO. 1723002197-EL-DG-00031

SHEET 011

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)		
REV.	DATE	DRN	CHKD	APPD	DESCRIPTION		

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

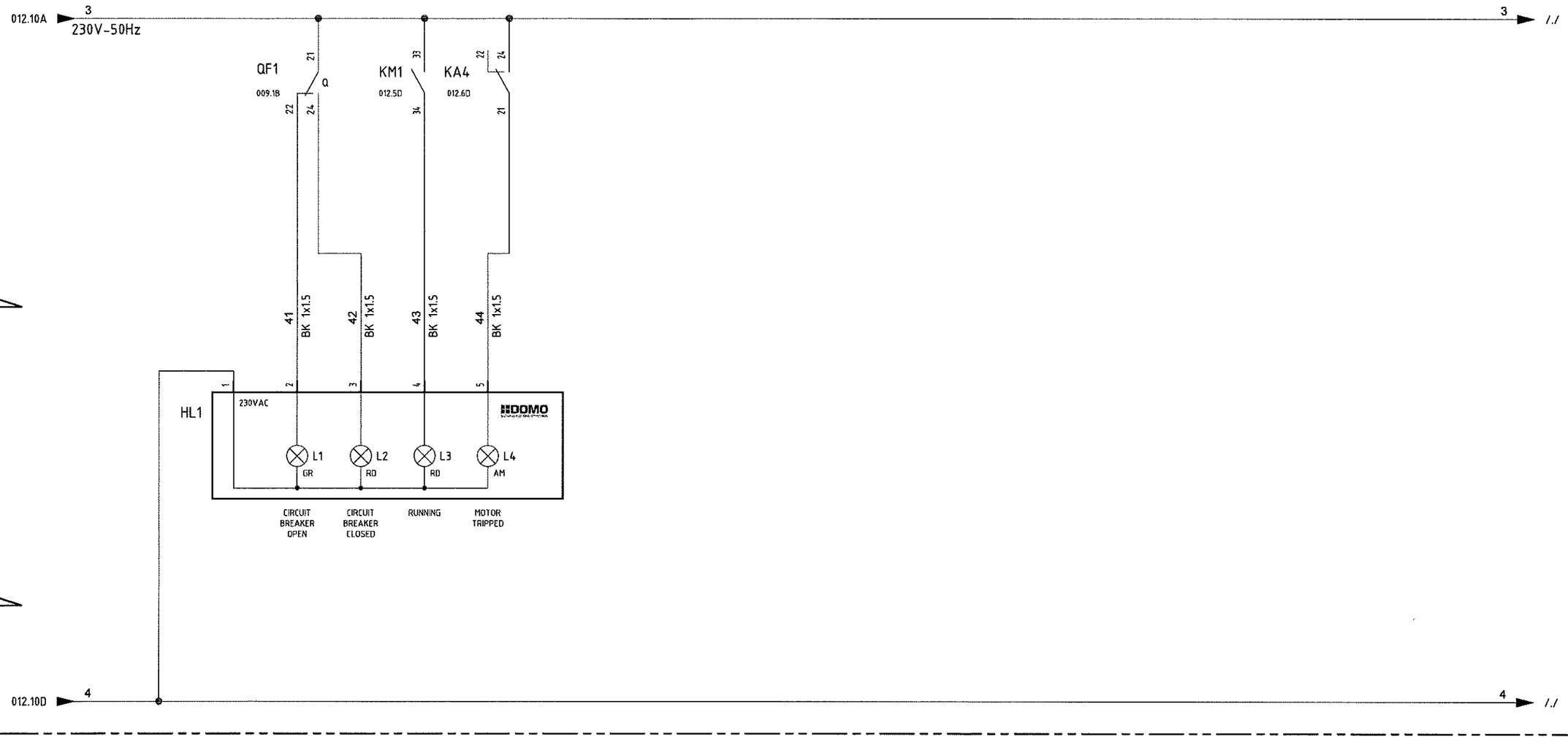
DRAWING NO. 1723002197-EL-DG-00031

SHEET 012

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00



=	TYPICAL						
+	M1						
DWG n° :	231298/SD/31						
Item n° :	PF1002983/26						
		0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
		REV.	DATE	DRN	CHKD	APPD	DESCRIPTION

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 013

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ONLY FOR REPRESENTATION
FOR DETTAILS TO SEE RELEVANT
DOCUMENT N°1723002197-EL-DG-00030

SIS

BUS-3
(Internal Fault loop)

FROM PREVIOUS DRAWER

TO NEXT DRAWER

AVAILABLE

AVAILABLE

11 X1 — Y1-5/11 BK 1x1.5 — Y1 5 I/T

12 X1 — Y1-6/12 BK 1x1.5 — Y1 6 I/T

9 X1 — Y1-3/9 BK 1x1.5 — Y1 3 I/T

10 X1 — Y1-4/10 BK 1x1.5 — Y1 4 I/T

13 X1 — Y1-8/13 BK 1x1.5 — Y1 8 I/T

14 X1 — Y19/14 BK 1x1.5 — Y1 9 I/T

15 X1 — Y1-10/15 BK 1x1.5 — Y1 10 I/T

16 X1 — Y1-11/16 BK 1x1.5 — Y1 11 I/T

⎓ 24V

-45 WH 1x1.5

+46 RD 1x1.5

+47 RD 1x1.5

+48 RD 1x1.5

49 BK 1x1.5

50 BK 1x1.5

QA1
009.6B
12 14 11

MMU3
011.2B
100B 100C

KSIL
R1 X4 TEST R2
POWER SUPPLY 24VDC
ABB
Safety Relay
BSR10
13 23 33 41
1 2
OUT1 OUT2 OUT3 OUT4
14 24 34 42

012.2B 14 13
011.3B 24 23
012.8C 34 33
42 41

=	TYPICAL						
+	M1						
0	09/05/2024	Santinelli	Flamminio	Sigismondi		Issued for review (IFR)	
REV.	DATE	DRN	CHKD	APPD		DESCRIPTION	

IMESA ELECTRICAL ENGINEERING
OWG n° : 231298/SD/31
Item n° : PF1002983/26

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 1723002197-EL-DG-00031 | SHEET 014 | REV. 00

F.to UNI A3: 420mmx297mm

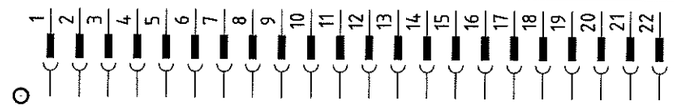
File Name : 1723002197-EL-DG-00031 Rev. 00

TYPICAL - M1 - Y1

AUXILIARY SOCKET

136450/001 (PF – 1 pcs) + 136458/005 (PM – 1 pcs)

N° PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
JUMP			●	●																		
RACKED-OUT			✕	✕																		
TEST	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RACKED-IN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PIN USED	009.6A	009.6A	014.6B	014.6B	014.2B	014.2B		014.7B	014.8B	014.9B	014.9B					010.8A	010.8A	010.8A	010.8A	010.9A	012.9A	012.9A



← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-OUT POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN TEST POSITION

← FIELD WHIT "X" - CONTACT CLOSE WHEN DRAWER IS IN RACKED-IN POSITION

← CROS-REFERENCE USED PIN

X 2 VOLTS

= TYPICAL							
+ M1							
DWG n° : 231298/SD/31							
Item n° : PF1002983/26							
	0	09/05/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)	
	REV.	DATE	DRN	CHKD	APPD	DESCRIPTION	

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "SG-200N1"

LV SWG FUNCTIONAL DIAGRAMS - TYPICAL FEEDERS

Functional Drawing - Typical "M1-n"

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00031

SHEET 015

REV. 00

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00031 Rev. 00

ITEM	Tag	PM-50001A	: Electric Motor for sea water pump			Dwg	123A90-DDL-PR-PID-80021
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10002947		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	PRE-COMM	Activity FTS	Discipline	Electrical	Form	FP13 — LV Motor

DATA

Manufacturer	Rating kW	SC/FLC
Frame Size	Voltage V	Protection Type
Serial N°	Current A	Unsulation Class
Duty	RPM	t° Rise Class

1	Check MC activities have been carried out		
2	Check equipment for cleaness		
3	Measure I/R value of motor windings and cables at 1000V (Min value: 200 Mohm)		MΩ
4	Measure I/R value ofmotor anti-condensation heater at 500 V (Min value: 10 Mohm)		MΩ
5	Energise motor anti-condensation heater and check related voltage & current at terminal box.	V	A
6	Energize control of motor starter and put starter in test position		
7	Verify that the secondary injection test on the protection relays and metering is present in the system		
8	Check protection setting according to relay protection study		
9	Test interface trips and signals (remote alarms, status and local/remote command). Check the ITR presence in the syste		
10	Energise start and stop (impulse) motor uncoupled to check direction of rotation.		
11	Perform a 4 hours no load test of the motor and record results in following table. Couple / Uncouple		
12	Starting current (A)		A

Time period (minutes)		0	15	30	45	60
Ambient temp	°C					
Bearing temp. DE (if any)	°C					
Bearing temp.NDE (if any)	°C					
Current	A					
Winding temp. readings from R.T.D's	1					
	2					
	3					

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company			
Name			
Date			
Signature			

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	PM-50001B	: Electric Motor for sea water pump			Dwg	123A90-DDL-PR-PID-80021
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10002948		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	PRE-COMM	Activity FTS	Discipline	Electrical	Form FP13	LV Motor

DATA

Manufacturer	Rating kW	SC/FLC
Frame Size	Voltage V	Protection Type
Serial N°	Current A	Unsulation Class
Duty	RPM	t° Rise Class

1	Check MC activities have been carried out		
2	Check equipment for cleaness		
3	Measure I/R value of motor windings and cables at 1000V (Min value: 200 Mohm)		MΩ
4	Measure I/R value ofmotor anti-condensation heater at 500 V (Min value: 10 Mohm)		MΩ
5	Energise motor anti-condensation heater and check related voltage & current at terminal box.	V	A
6	Energize control of motor starter and put starter in test position		
7	Verify that the secondary injection test on the protection relays and metering is present in the system		
8	Check protection setting according to relay protection study		
9	Test interface trips and signals (remote alarms, status and local/remote command). Check the ITR presence in the syste		
10	Energise start and stop (impulse) motor uncoupled to check direction of rotation.		
11	Perform a 4 hours no load test of the motor and record results in following table. Couple / Uncouple		
12	Starting current (A)		A

Time period (minutes)		0	15	30	45	60
Ambient temp	°C					
Bearing temp. DE (if any)	°C					
Bearing temp.NDE (if any)	°C					
Current	A					
Winding temp. readings from R.T.D's	1					
	2					
	3					

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company			
Name			
Date			
Signature			

ROSETTI MARINO — PROVERLIS — CROSSWIND

ITEM	Tag	A6/+01-QF1	: SEA WATER PUMP B - A6/+01-QF1			Dwg	1723002197-EL-DG-00011
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10002993		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	COMM	Activity FTS	Discipline	Electrical	Form	FTR-5 Remote Signalling

FTR5 - Remote signalling
Record sheet

DATA

Switchboard:	SG-200N1	Cubicle N°:	A6/+01

FUNCTION TEST

	Order/Inputs				Status/Output									
	Start order		Stop order		Run		Fault		Stop Signalisation		Available/Ready to start		TRIP	
UCP														
ECS														
SSS														
PSS														
PCS	●	●	●	●	●	●			●	●	●	●	●	●
Control Station														
Control Panel														
HVAC Panel														
MCC	●	●	●	●	●	●			●	●	●	●	●	●

Column 1 (To check) to be filled during commissioning preparation stage - black if the check is asked
Column 2 (Checked) to be filled black if check is Ok

Comments: Current indication (AI to PCS) comm ok, value to be checked once the pump can run

Page 1/1	Performed by	● WITNESS ☐ REVIEW	● WITNESS ☐ REVIEW
Company	Rosetti Marino		Crosswind
Name	Fabio Sirigu	Anthony Iveson	Jamie McAllister
Date	2025-07-26	2025-07-26	2025-07-28
Signature	PROVERLIS Digitaly signed by Fabio Sirigu 2025-07-26T09:07:44.731Z	PROVERLIS Digitaly signed by Anthony Iveson 2025-07-26T13:05:48.642Z	PROVERLIS Digitaly signed by Jamie McAllister 2025-07-28T14:08:22.845Z

ITEM	SWITCHGEAR TAG	VOLTAGE	TAG NAME	DEVICE	SIGNAL_DESCRIPTION	TYPE ANALOG/DIGITAL	RELAY/DEVICE MODEL	RANGE	UNIT	Note	WORD	BIT	MODBUS TCP/IP Data Type	TAG YOKOGAWA
1	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	CURRENT (% OF Ie)	SW-AI	MRP31.0	0-800	%	motor current in % of Ie (0-800%)	38192	--	U16	50XI-001B
2	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	SA1 ON "LOCAL" POSITION	SW-DI	MRP31.0			1=local	34096	2	BIT	50XL-002B
3	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR RUNNING	SW-DI	MRP31.0			1=running	34096	1	BIT	50XL-001B
4	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR TRIPPED	SW-DI	MRP31.0			1=tripped	34096	4	BIT	50XA-004B
5	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	USER AVAILABLE	SW-DI	MRP31.0			1=available	34096	7	BIT	50XL-003B
8	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR RUN COMMAND	SW-DO	MRP31.0			1=run (pulse)	06144	--	BIT	50HS-001B
9	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR STOP COMMAND	SW-DO	MRP31.0			1=stop (pulse)	06145	--	BIT	50HS-005B
10	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	CURRENT (% OF Ie)	SW-AI	MRP31.0	0-800	%	motor current in % of Ie (0-800%)	38192	--	U16	50XI-001A
11	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	SA1 ON "LOCAL" POSITION	SW-DI	MRP31.0			1=local	34096	2	BIT	50XL-002A
12	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR RUNNING	SW-DI	MRP31.0			1=running	34096	1	BIT	50XL-001A
13	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR TRIPPED	SW-DI	MRP31.0			1=tripped	34096	4	BIT	50XA-004A
14	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	USER AVAILABLE	SW-DI	MRP31.0			1=available	34096	7	BIT	50XL-003A
17	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR RUN COMMAND	SW-DO	MRP31.0			1=run (pulse)	06144	--	BIT	50HS-001A
18	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR STOP COMMAND	SW-DO	MRP31.0			1=stop (pulse)	06145	--	BIT	50HS-005A

FABIO SURIGA (ROS)
26 JUL '25

JAMIE M°ALLISTER
26 JULY 25

ROSETTI MARINO — CROSSWIND

ITEM	Tag	A7/+01-QF1	: SEA WATER PUMP A - A7/+01-QF1			Dwg	1723002197-EL-DG-00011
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10002994		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	COMM	Activity FTS	Discipline	Electrical	Form	FTR-5 Remote Signalling

FTR5 - Remote signalling
Record sheet

DATA

Switchboard:	SG-200N1	Cubicle N°:	A7/+01

FUNCTION TEST

	Order/Inputs				Status/Output									
	Start order		Stop order		Run		Fault		Stop Signalisation		Available/Ready to start		TRIP		Local/Remote	
UCP														
ECS														
SSS														
PSS														
PCS	●	●	●	●	●	●			●	●	●	●	●	●	●	●
Control Station														
Control Panel														
HVAC Panel														
MCC	●	●	●	●	●	●			●	●	●	●	●	●	●	●

Column 1 (To check) to be filled during commissioning preparation stage - black if the check is asked
Column 2 (Checked) to be filled black if check is Ok

Comments: Current indication (AI to PCS) comm ok, value to be checked once the pump can run

	Performed by	☐ WITNESS ☒ REVIEW	☒ WITNESS ☐ REVIEW
Company	Rosetti Marino		Crosswind
Name	Fabio Sirigu	Anthony Iveson	Jamie McAllister
Date	2025-07-26	2025-07-26	2025-07-28
Signature	Digitaly signed by Fabio Sirigu 2025-07-26T09:05:37.033Z	Digitaly signed by Anthony Iveson 2025-07-26T13:05:11.763Z	Digitaly signed by Jamie McAllister 2025-07-28T14:09:16.360Z

ITEM	SWITCHGEAR TAG	VOLTAGE	TAG NAME	DEVICE	SIGNAL_DESCRIPTION	TYPE ANALOG/DIGITAL	RELAY/DEVICE MODEL	RANGE	UNIT	Note	WORD	BIT	MODBUS TCP/IP Data Type	TAG YOKOGAWA
1	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	CURRENT (% OF Ie)	SW-AI	MRP31.0	0-800	%	motor current in % of Ie (0-800%)	38192	--	U16	50XI-001B
2	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	SA1 ON "LOCAL" POSITION	SW-DI	MRP31.0			1=local	34096	2	BIT	50XL-002B
3	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR RUNNING	SW-DI	MRP31.0			1=running	34096	1	BIT	50XL-001B
4	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR TRIPPED	SW-DI	MRP31.0			1=tripped	34096	4	BIT	50XA-004B
5	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	USER AVAILABLE	SW-DI	MRP31.0			1=available	34096	7	BIT	50XL-003B
8	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR RUN COMMAND	SW-DO	MRP31.0			1=run (pulse)	06144	--	BIT	50HS-001B
9	SG200N1	0.4/0,23kV	A6/+01 PM-50001B	MMU4	MOTOR STOP COMMAND	SW-DO	MRP31.0			1=stop (pulse)	06145	--	BIT	50HS-005B
10	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	CURRENT (% OF Ie)	SW-AI	MRP31.0	0-800	%	motor current in % of Ie (0-800%)	38192	--	U16	50XI-001A
11	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	SA1 ON "LOCAL" POSITION	SW-DI	MRP31.0			1=local	34096	2	BIT	50XL-002A
12	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR RUNNING	SW-DI	MRP31.0			1=running	34096	1	BIT	50XL-001A
13	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR TRIPPED	SW-DI	MRP31.0			1=tripped	34096	4	BIT	50XA-004A
14	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	USER AVAILABLE	SW-DI	MRP31.0			1=available	34096	7	BIT	50XL-003A
17	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR RUN COMMAND	SW-DO	MRP31.0			1=run (pulse)	06144	--	BIT	50HS-001A
18	SG200N1	0.4/0,23kV	A7/+01 PM-50001A	MMU4	MOTOR STOP COMMAND	SW-DO	MRP31.0			1=stop (pulse)	06145	--	BIT	50HS-005A

FABIO SURIGA (ROS)
26 JUL '25

JAMIE M°ALLISTER
26 JULY 25

ITEM	Tag	PM-50001A	: Electric Motor for sea water pump			Dwg	123A90-DDL-PR-PID-80021
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	LD
TASK	code	C10004549		Location	Offshore Activities	User	Rosetti Marino Quality Control
FORM	Process	COMM	Activity FTS	Discipline	Electrical	Form	FTR-2 Protection Relay

FTR2 - Protection relay
Record sheet

RELAY DATA		
Manufacturer:	Serial N°:	Relay type:
Auxiliary supply:	Location:	Cubicle:
Switchboard:		

Current transformers

Tag	Number of	Ratio	Location

Voltage transformers

Tag	Number of	Ratio	Location

Test result (refer to manufacturer's procedure)

ANSI function	Setting	Injection	Trip value	Time delay	
				Setting	Trip value

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company			
Name			
Date			
Signature			

ITEM	Tag	PM-50001B	: Electric Motor for sea water pump			Dwg	123A90-DDL-PR-PID-80021
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	LD
TASK	code	C10004550		Location	Offshore Activities	User	Rosetti Marino Quality Control
FORM	Process	COMM	Activity FTS	Discipline	Electrical	Form	FTR-2 Protection Relay

FTR2 - Protection relay
Record sheet

RELAY DATA		
Manufacturer:	Serial N°:	Relay type:
Auxiliary supply:	Location:	Cubicle:
Switchboard:		

Current transformers

Tag	Number of	Ratio	Location

Voltage transformers

Tag	Number of	Ratio	Location

Test result (refer to manufacturer's procedure)

ANSI function	Setting	Injection	Trip value	Time delay	
				Setting	Trip value

Testing & measurement instruments used

Type	Serial n°	Calibration certificate	Validity

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company			
Name			
Date			
Signature			

Section 4.2 Electrical
“As-Commissioned” interconnection diagrams

NOT APPLICABLE

Section 4.3 Instrumentation functional test sheets index

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & discipline : I

Instrumental	50-00 Seawater Intake System (Lifting Pumps)

ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
50-PT-001	Pressure Transmitter - Sea Water from Pump P-50001A	ONSHORE	C10003179	FJ01A	100	2025-03-19	RFO 1
50-PT-002	Pressure Transmitter - Sea Water from Pump P-50001B	ONSHORE	C10003180	FJ01A	100	2025-03-19	RFO 1
50-TT-001	Temperature Transmitter - Sea Water from Lift Pump P-50001A/B	ONSHORE	C10003182	FJ01A	100	2025-03-19	RFO 1
50-XA-001	A-500003 (A-50000) Sea water treatment PKG confirmed gas alarm	ONSHORE	C10003774	FJ01D	100	2025-03-19	RFO 1
50-XA-002	A-500003 (A-50000) Sea water treatment PKG confirmed fire alarm	ONSHORE	C10003775	FJ01D	100	2025-03-19	RFO 1
50-XV-001	On/Off Valve - Sea Water from Pump P-50001A	ONSHORE	C10003226	FJ01V	100	2025-03-19	RFO 1
50-XV-002	On/Off Valve - Sea Water Recirculation from Pump P-50001A	ONSHORE	C10003227	FJ01V	100	2025-03-19	RFO 1
50-XV-003	On/Off Valve - Sea Water from Pump P-50001B	ONSHORE	C10003228	FJ01V	100	2025-03-19	RFO 1
50-XV-004	On/Off Valve - Sea Water Recirculation from Pump P-50001B	ONSHORE	C10003229	FJ01V	100	2025-03-19	RFO 1

ROSETTI MARINO | CROSSWIND

ITEM	Tag	50-PT-001	: Pressure Transmitter - Sea Water from Pump P-50001A	Dwg	123A90-DDL-IN-DS-40039		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module	LD		
TASK	code	C10003179	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity	FTS	Discipline	Instrumental	Form	FJ01A		Analog Loop

LOOP DATA

Loop TAG	50-PT-001			TSLD	123A90-FDL-IN-DG-40014 rev.1A		
IO Type	Input	Yes	Output	No	Energy by transmitter	No	Energy by system	Yes
Marshalling	B400-PCS-001	Terminal	03A/03B	Slot	01	Rack	03	Chanel	03

LOOP TEST

1	Check earth isolation of the loop							OK
2	Connect loop to terminal							OK
3	Confirm Process Scale	Unit	barg	Min	0	Max	18	OK

LOOP RANGE

			0%	25%	50%	75%	100%
4	Physical value applied for test	Unit barg	0	4,5	9	13,5	18
5	Control System Display	Unit barg	0,1	4,5	9,02	13,51	18,1

LOOP SERVICE

		Value	Trip	Gen Alarm	DCS Alarm	SOE	DCS display	
6	Threshold 1	4 barg	No		Yes	NA	OK	OK
7	Threshold 2		NA	NA	NA	NA	NA	NA
8	Threshold 3		NA	NA	NA	NA	NA	NA
9	Threshold 4		NA	NA	NA	NA	NA	NA
10	Checking of line monitoring		NA	NA	NA	NA	NA	NA
11	Checking of Maintenance Inhibition		NA	NA	NA	NA	NA	NA
12	Associated safety Level / bar							NA
13	Associated outputs							NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
HYDRAULIC PUMP	06/190151		
PRESSURE SENSOR	930547		

LOOP DOCUMENTATION

14	Loop diagram is marked up and attached to this test sheet	OK
15	Cause and effect chart is highlighted accordingly	NA
16	Any defect is recorded for punch list issuance	OK

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-17	2025-03-18	2025-03-19
Signature	Digitaly signed by Laurentiu Grozavu 2025-03-17T14:28:57.808Z	Digitaly signed by Giandonato Delmissier 2025-03-18T06:56:52.939Z	Digitaly signed by John Mackillop 2025-03-19T12:15:19.333Z

ABR SERVICE S.r.l.
Via Manlio Monti, 40 – 48123 RAVENNA
Tel. +39 0544 685411 info@abrservice.net
C.F. Part. IVA 02764420390

Plant	CROSSWIND	Description	SEA WATER FROM PUMP P 50001A TO SEA WATER TREAT		
Area	N.P.	Loop Tag	50-PI-001	Instrument Tag	50-PT-001
Type of verification	periodic	Calibration range	0,00 ÷ 18,00 bar	Report N°	018
Type of instrument	Pressure meter	Max uncertainty required	± 0,070 % s.r.	Reference procedure data sheet	123A90-PML-QHSE-PRO-00122 Page N°8

UNDER EXAMINATION INSTRUMENT 'S DATA

Tag	Manufacture	Model	S/N
50-PT-001	SPRIANO	SST76	SE240660

USED REFERENCE SAMPLE 'S DATA

Manufacture	Model	S/N	n° of certification and calibration center	uncertainty (u.m.)	Date of issue
BEAMEX	MCS-IS	20177766	0640/MP/2024 _LAT 150	± 0,001 c.s.	24/04/2024
	Digital pressure gauge			± 0,001 c.s.	24/04/2024

environment temperature at the time of check 25 °C

Value indicated before starting the check 0 bar

CHECK RESULT: *as found*

Verification functionality loop check

Generated value	Expected value	Read value	Error	Error % on s.r.
bar	mA	mA	mA	
0,00	4,00	4,003	+0,003	+0,019
4,50	8,00	8,001	+0,001	+0,006
9,00	12,00	12,002	+0,002	+0,013
13,50	16,00	16,002	+0,002	+0,012
18,00	20,00	20,006	+0,006	+0,038
13,50	16,00	16,003	+0,003	+0,019
9,00	12,00	12,003	+0,003	+0,019
4,50	8,00	7,999	-0,001	-0,006
0,00	4,00	4,002	+0,002	+0,012
		max error detected %		0,038

Check: PASSED

Verification activation of blocks/threshold alarms

Alarm signalling	Type of activation	Alarm intervention	Block description	Action type	Block intervention
bar					

Blocks/alarms check:

Corrective action

CHECK RESULT: *as left*

Verification functionality loop check

Generated value	Expected value	Read value	Error	Error % on s.r.
bar	mA	mA	mA	
		errore massimo rilevato %		0,00

Check:

Verification activation of blocks/threshold alarms

Alarm signalling	Type of activation	Alarm intervention	Block description	Action type	Block intervention
bar	DESCENT				

Blocks/alarms check:

Value indicated after the check 0 bar

Note:

FINAL OUTCOME OF THE VERIFICATION: *The Instrument is SUITABLE*

Verification Date	Verification Expiration	Technical Executor	Viewed	Approved by
20/09/2024	09/2025	PENSO SILVIO		
		signature	*signature*	*signature*

ABR SERVICE srl
Via M. Monti, 40 - 48123 RAVENNA
Tel. 0544 685411
C.F. e P.IVA 02764420390

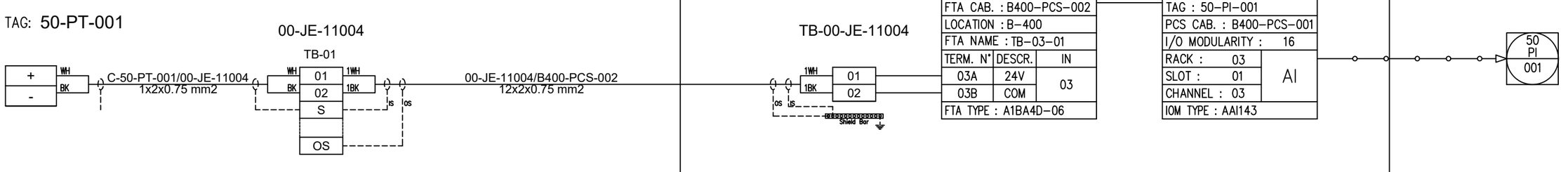
GENERAL	1	Tag Number		50-PT-001	
	2	Service		SEA WATER FROM PUMP P-50001A TO SEA WATER TREAT.	
	3	P&ID Number	Location	123A90-DDL-PR-PID-80021	1-1/2"-SWS-031-01SD-E
	4	Function		PRESSURE MEASUREMENT	
	5	Mounting		DIRECT ON-LINE	
	6	Area Classification		ATEX Zone2 - IIC (IIB+H2) T1	
	7	Ambient Temperature		Min: -8.4 °C, Norm: 10.5 °C, Max: +25.0 °C.	
PROCESS CONDITIONS	8	Fluid		SEA WATER	
	9	Pressure Des.	Oper. [barg]	17.7	15
	10	Temperature Des.	Oper. [°C]	100	+1.3 / +20.2
	11	Oper. Spec. Gravity	Oper. Viscosity	-	-
	12	Flow Rate	Allowable Temp.	-	-
TRANSMITTER	13	Instrument Range Min.	Max. [barg]	0	30
	14	Calibration Range Min.	Max. [barg]	0	18
	15	Elevation	Suppression	-	-
	16	Element Type		Diaphragm	
	17	Element Material		MONEL 400	
	18	Body Material	Body Rating	AISI 316 SS	20 bar
	19	Process Connection		-	
	20	Wetted O-Rings Material		-	
	21	Fill Fluid		-	
	22	Bolts	Housing	-	SS AISI 316/316L
	23	Paint		N/A	
	24	ATEX Certification	Ingress Protection	ATEX Ex II 2G Ex db IIC T5	IP66
	25	Process Connection	Electrical Connection	Inner Diaphragm Seal	2 X M20X1.5
	26	Accuracy		0.07% of Nominal Range	
	27	SIL Certification	PED Certification	-	Required
DIAPHRAGM SEAL	28	Process Connection & Rating		2"	150# RF
	29	Diaphragm Material	Housing Material	MONEL 400	SS AISI 316/316L
	30	Fill Fluid	Capillary Material	Siliconic Oil	S.S. Capillary
	31	Capillary Type	Capillary Length	Required in Option	3 m
	32	Flushing Connection		-	
OPTIONS	33	Integral Meter	Scale	Required	-
	34	Hydrostatic Testing	Cleaning	Required	-
	35	Mounting Brackets	Manifold Model No	Required	N/A
	36	Lightning Protection	Barrier Manuf./Model	-	-
COMMUNICATION AND SOFTWARE	37	Communication Type	Signal Type	HART 6	4-20mA Loop Powered 24 Vdc
	38	D D Revision	CFF Revision	-	-
	39	Device Tag	Hart Tag	-	-
	40	Internal Diagnostics	Capacitance	-	-
	41	Segment	Device Address	-	-
	42	Device Class	Simulate	-	-
	43	Nominal Current	Operating Voltage	-	-
PURCHASE	44	Manufacturer		TERRANOVA SRL	
	45	Model		SST76-H-7-K-2-9-2-1-4 + SEA03 + CAP-2-03	
	46	Purchase Order Number		4718_OS	

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

DRAWING NO. 123A90-DDL-IN-DG-40014

REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	PROCESS CONTROL SYSTEM	OPERATOR CONSOLE



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV.: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

INSTRUMENT LOOP DIAGRAM
50-PI-001 <01>
SEA WATER FROM PUMP P-50001A

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-IN-DG-40014	010	01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO — CROSSWIND

ITEM	Tag	50-PT-002	: Pressure Transmitter - Sea Water from Pump P-50001B	Dwg	123A90-DDL-IN-DS-40039		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module	LD		
TASK	code	C10003180	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity	FTS	Discipline	Instrumental	Form	FJ01A		Analog Loop

LOOP DATA

Loop TAG	50-PT-002			TSLD	123A90-FDL-IN-DG-40014 rev.1A		
IO Type	Input	Yes	Output	No	Energy by transmitter	No	Energy by system	Yes
Marshalling	B400-PCS-001	Terminal	04A/04B	Slot	01	Rack	03	Chanel	04

LOOP TEST

1	Check earth isolation of the loop							OK
2	Connect loop to terminal							OK
3	Confirm Process Scale	Unit	barg	Min	0	Max	18	OK

LOOP RANGE

			0%	25%	50%	75%	100%
4	Physical value applied for test	Unit barg	0	4,5	9	13,5	18
5	Control System Display	Unit barg	0	4,5	9	13,49	17,98

LOOP SERVICE

		Value	Trip	Gen Alarm	DCS Alarm	SOE	DCS display	
6	Threshold 1	4 barg	No		Yes	NA	OK	OK
7	Threshold 2		NA	NA	NA	NA	NA	NA
8	Threshold 3		NA	NA	NA	NA	NA	NA
9	Threshold 4		NA	NA	NA	NA	NA	NA
10	Checking of line monitoring		NA	NA	NA	NA	NA	NA
11	Checking of Maintenance Inhibition		NA	NA	NA	NA	NA	NA
12	Associated safety Level / bar							NA
13	Associated outputs							NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
HYDRAULIC PUMP	06/190151		
PRESSURE SENSOR	930547		

LOOP DOCUMENTATION

14	Loop diagram is marked up and attached to this test sheet	OK
15	Cause and effect chart is highlighted accordingly	NA
16	Any defect is recorded for punch list issuance	OK

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-17	2025-03-18	2025-03-19
Signature	Digitaly signed by Laurentiu Grozavu 2025-03-17T14:28:31.765Z	Digitaly signed by Giandonato Delmissier 2025-03-18T06:57:20.600Z	Digitaly signed by John Mackillop 2025-03-19T12:15:29.480Z

ABR SERVICE S.r.l.
Via Manlio Monti, 40 – 48123 RAVENNA
Tel. +39 0544 685411 info@abrservice.net
C.F. Part. IVA 02764420390

Plant	CROSSWIND	Description	SEA WATER FROM PUMP P 50001B TO SEA WATER TREAT		
Area	N.P.	Loop Tag	50-PI-002	Instrument Tag	50-PT-002
Type of verification	periodic	Calibration range	0,00 ÷ 18,00 bar	Report N°	019
Type of instrument	Pressure meter	Max uncertainty required	± 0,070 % s.r.	Reference procedure data sheet	123A90-PML-QHSE-PRO-00122 Page N°8

UNDER EXAMINATION INSTRUMENT 'S DATA

Tag	Manufacture	Model	S/N
50-PT-002	SPRIANO	SST76	SE240661

USED REFERENCE SAMPLE 'S DATA

Manufacture	Model	S/N	n° of certification and calibration center	uncertainty (u.m.)	Date of issue
BEAMEX	MC5-IS	20177766	0640/MP/2024_LAT 150	± 0,001 c.s.	24/04/2024
Digital pressure gauge				± 0,001 c.s.	24/04/2024

environment temperature at the time of check 25 °C

Value indicated before starting the check 0 bar

CHECK RESULT: as found

Verification functionality loop check

Generated value	Expected value	Read value	Error	Error % on s.r.
bar	mA	mA	mA	
0,00	4,000	4,001	+0,001	+0,006
4,50	8,000	8,002	+0,002	+0,013
9,00	12,000	12,001	+0,001	+0,006
13,50	16,000	15,998	-0,002	-0,013
18,00	20,000	19,999	-0,001	-0,006
13,50	16,000	15,999	-0,001	-0,006
9,00	12,000	12,002	+0,002	+0,013
4,50	8,000	8,001	+0,001	+0,006
0,00	4,000	4,000	+0,000	+0,000
		max error detected %		0,013

Check: PASSED

Verification activation of blocks/threshold alarms

Alarm signalling	Type of activation	Alarm intervention	Block description	Action type	Block intervention
bar					

Blocks/alarms check:

Corrective action

CHECK RESULT: as left

Verification functionality loop check

Generated value	Expected value	Read value	Error	Error % on s.r.
bar	mA	mA	mA	
		errore massimo rilevato %		0,00

Check:

Verification activation of blocks/threshold alarms

Alarm signalling	Type of activation	Alarm intervention	Block description	Action type	Block intervention
bar	DESCENT				

Blocks/alarms check:

Value indicated after the check 0 bar

Note:

FINAL OUTCOME OF THE VERIFICATION: The Instrument Is SUITABLE

Verification Date	Verification Expiration	Technical Executor	Viewed	Approved by
20/09/2024	09/2025	PENSO SILVIO		
		signature	signature	signature

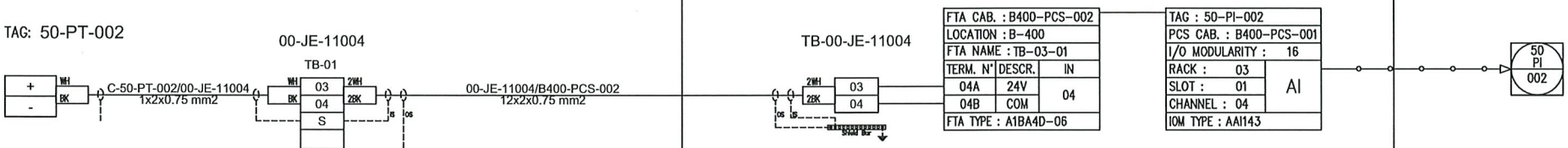
ABR SERVICE srl
Via M. Monti, 40 - 48123 RAVENNA
Tel. 0544 685411
C.F. e P.IVA 02764420390

GENERAL	1	Tag Number		50-PT-002	
	2	Service		SEA WATER FROM PUMP P-50001B TO SEA WATER TREAT.	
	3	P&ID Number	Location	123A90-DDL-PR-PID-80021	1-1/2"-SWS-033-01SD-E
	4	Function		PRESSURE MEASUREMENT	
	5	Mounting		DIRECT ON-LINE	
	6	Area Classification		ATEX Zone2 - IIC (IIB+H2) T1	
	7	Ambient Temperature		Min: -8.4 °C, Norm: 10.5 °C, Max: +25.0 °C.	
PROCESS CONDITIONS	8	Fluid		SEA WATER	
	9	Pressure Des.	Oper. [barg]	17.7	15
	10	Temperature Des.	Oper. [°C]	100	+1.3 / +20.2
	11	Oper. Spec. Gravity	Oper. Viscosity	-	-
	12	Flow Rate	Allowable Temp.	-	-
TRANSMITTER	13	Instrument Range Min.	Max. [barg]	0	30
	14	Calibration Range Min.	Max. [barg]	0	18
	15	Elevation	Suppression	-	-
	16	Element Type		Diaphragm	
	17	Element Material		MONEL 400	
	18	Body Material	Body Rating	AISI 316 SS	20 bar
	19	Process Connection		-	
	20	Wetted O-Rings Material		-	
	21	Fill Fluid		-	
	22	Bolts	Housing	-	SS AISI 316/316L
	23	Paint		N/A	
	24	ATEX Certification	Ingress Protection	ATEX Ex II 2G Ex db IIC T5	IP66
	25	Process Connection	Electrical Connection	Inner Diaphragm Seal	2 X M20X1.5
	26	Accuracy		0.07% of Nominal Range	
	27	SIL Certification	PED Certification	-	Required
DIAPHRAGM SEAL	28	Process Connection & Rating		2"	150# RF
	29	Diaphragm Material	Housing Material	MONEL 400	SS AISI 316/316L
	30	Fill Fluid	Capillary Material	Siliconic Oil	S.S. Capillary
	31	Capillary Type	Capillary Length	Required in Option	3 m
	32	Flushing Connection		-	
OPTIONS	33	Integral Meter	Scale	Required	-
	34	Hydrostatic Testing	Cleaning	Required	-
	35	Mounting Brackets	Manifold Model No	Required	N/A
	36	Lightning Protection	Barrier Manuf./Model	-	-
COMMUNICATION AND SOFTWARE	37	Communication Type	Signal Type	HART 6	4-20mA Loop Powered 24 Vdc
	38	D D Revision	CFF Revision	-	-
	39	Device Tag	Hart Tag	-	-
	40	Internal Diagnostics	Capacitance	-	-
	41	Segment	Device Address	-	-
	42	Device Class	Simulate	-	-
	43	Nominal Current	Operating Voltage	-	-
PURCHASE	44	Manufacturer		TERRANOVA SRL	
	45	Model		SST76-H-7-K-2-9-2-1-4 + SEA03 + CAP-2-03	
	46	Purchase Order Number		4718_OS	

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	PROCESS CONTROL SYSTEM	OPERATOR CONSOLE



NO MARK UP
LCwgam
12/03/25

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-PI-002
SEA WATER FROM PUMP P-50001B

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024

A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 013	REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO | CROSSWIND

ITEM	Tag	50-TT-001	: Temperature Transmitter - Sea Water from Lift Pump P-50001A/B	Dwg	123A90-DDL-IN-DS-40039		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module	LD		
TASK	code	C10003182	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity FTS	Discipline	Instrumental	Form FJ01A	Analog Loop

LOOP DATA

Loop TAG	50-TT-001			TSLD	123A90-FDL-IN-DG-40014 rev.1A		
IO Type	Input	Yes	Output No	Energy by transmitter	No	Energy by system	Yes
Marshalling	B400-PCS-001	Terminal	07A/07B	Slot	01	Rack 03	Chanel 07

LOOP TEST

1	Check earth isolation of the loop						OK
2	Connect loop to terminal						OK
3	Confirm Process Scale	Unit	° C	Min	0	Max 50	OK

LOOP RANGE			**0%**	**25%**	**50%**	**75%**	**100%**
4	Physical value applied for test	Unit mA	4	8	12	16	20
5	Control System Display	Unit ° C	0	12,5	25	37,49	49,98

LOOP SERVICE

		Value	**Trip**	**Gen Alarm**	**DCS Alarm**	**SOE**	**DCS display**	
6	Threshold 1	No		Yes	NA	OK	OK	
7	Threshold 2	NA	NA	NA	NA	NA	NA	
8	Threshold 3	NA	NA	NA	NA	NA	NA	
9	Threshold 4	NA	NA	NA	NA	NA	NA	
10	Checking of line monitoring	NA	NA	NA	NA	NA	NA	
11	Checking of Maintenance Inhibition	NA	NA	NA	NA	NA	NA	
12	Associated safety Level / bar							NA
13	Associated outputs							NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
HART COMMUNICATOR MERIAM	1948000038		

LOOP DOCUMENTATION

14	Loop diagram is marked up and attached to this test sheet	OK
15	Cause and effect chart is highlighted accordingly	
16	Any defect is recorded for punch list issuance	OK

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-17	2025-03-18	2025-03-19
Signature	Digitaly signed by Laurentiu Grozavu 2025-03-17T14:27:35.142Z	Digitaly signed by Giandonato Delmissier 2025-03-18T06:58:20.039Z	Digitaly signed by John Mackillop 2025-03-19T12:15:52.713Z

ABR SERVICE S.r.l.
Via Manlio Monti, 40 – 48123 RAVENNA
Tel. +39 0544 685411 Info@abrservice.net
C.F. Part. IVA 02764420390

Plant	CROSSWIND	Description	SEA WATER LIFT PUMP B-S0013A&B DISCHARGE		
Area	N.P.	Loop Tag	50-TI-001	Instrument Tag	50-TT-001
Type of verification	periodic	Calibration range	0,00 ÷ 50,00 °C	Report N°	027
Type of Instrument	RTD 3 wire Pt100	Max uncertainty required	± 0,1 % s.r.	Control procedures	123A90-PML-QHSE-PRO-00122 Page N°13

UNDER EXAMINATION INSTRUMENT 'S DATA

Tag	Manufacture	Model	S/N
50-TT-001	SPRIANO	ST72	SE240658

USED REFERENCE SAMPLE 'S DATA

Manufacture	Model	S/N	n° of certification and calibration center	uncertainty (u.m.)	Expiration
BEAMEX	MC5-IS	20177766	0452/MT/2024 _LAT 150	± 0,1 °C	23/04/2024
ASIT INSTRUMENT	PT-100	20170421-5411	0452/MT/2024 _LAT 150	± 0,1 °C	23/04/2024

environment temperature at the time of check 24 °C

Value indicated before starting the check 23,81 °C

CHECK RESULT: *as found*

Verification functionality loop check

Generated value	Expected value	Read value	Error	Error % on s.r.
°C	mA	mA	mA	
0,00	4,000	3,925	-0,075	-0,469
24,05	11,680	11,620	-0,060	-0,375
25,00	12,000	11,923	-0,077	-0,481
50,00	20,000	19,923	-0,077	-0,481
25,00	12,000	11,924	-0,076	-0,475
24,05	11,680	11,619	-0,061	-0,381
0,00	4,000	3,926	-0,074	-0,462
		max error detected %		0,481

Check: FAILED

Verification activation of blocks/threshold alarms

Alarm signalling	Type of activation	Alarm intervention	Block description	Action type	Block intervention
°C					

Blocks/alarms check:

Corrective action The instrument score less than the set range. Recalibrated.

CHECK RESULT: *as left*

Verification functionality loop check

Generated value	Expected value	Read value	Error	Error % on s.r.
°C	mA	mA	mA	
0	4,000	4,001	+0,001	+0,006
24,05	11,680	11,681	+0,001	+0,006
25	12,000	11,998	-0,002	-0,013
50,00	20,000	19,997	-0,003	-0,019
25	12,000	11,997	-0,003	-0,019
24,05	11,680	11,682	+0,002	+0,013
0	4,000	4,002	0,002	0,012
		errore massimo rilevato %		0,019

Check: PASSED

Verification activation of blocks/threshold alarms

Alarm signalling	Type of activation	Alarm intervention	Block description	Action type	Block intervention
°C	DESCENT				

Blocks/alarms check:

Value indicated after the check 24,05 °C

Note:

FINAL OUTCOME OF THE VERIFICATION: *The instrument is SUITABLE*

Verification Date	Verification Expiration	Technical Executor	Viewed	Approved by
23/09/2024	09/2025	PENSO SILVIO		
		signature	*signature*	*signature*

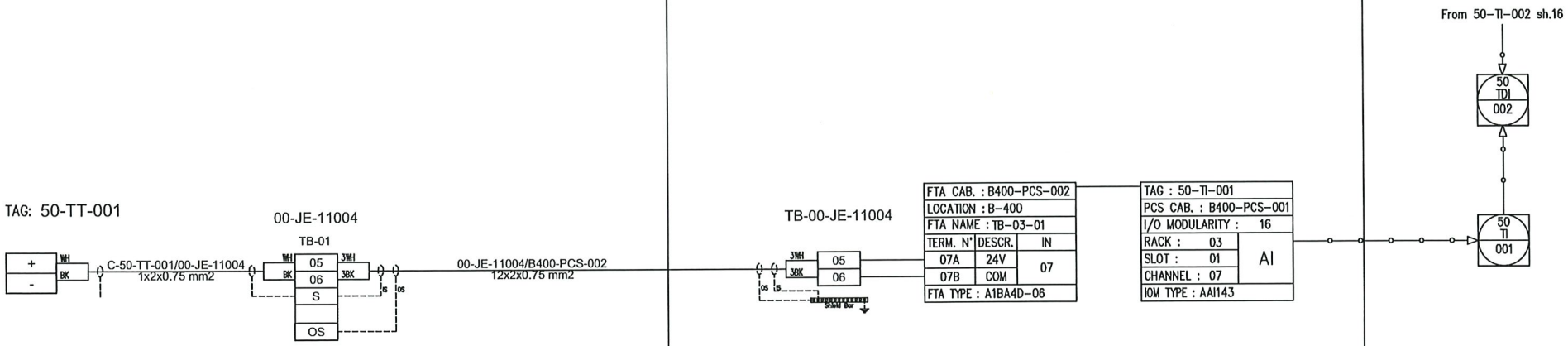
ABR SERVICE srl
Via M. Monti, 40 - 48123 RAVENNA
Tel. 0544 685411
C.F. e P.IVA 02764420390

GENERAL	1	Tag Number					50-TT-001 / 50-TE-001 / 50-TW-001			
	2	Service					SEA WATER LIFT PUMP(B-50013A&B) DISCHARGE			
	3	P&ID Number	Area Classification				123A90-DDL-PR-PID-80022	ATEX Zone2-IIC(IIB+H2) T1		
PIPE LINE	4	Line Number	Equipment Numbrer				1-1/2"-SWS-035-01SD-E	-		
	5	Line Size	Schedule				4"	3.05 Thk (mm)		
	6	Pipe Material	Pipe Insulation				ASTM A790 UNS S32760	ELECTRICALLY HEAT TRACED		
PROCESS CONDITIONS	7	Fluid	Phase				SEA WATER SUPPLY	LIQUID		
	8	Temperature	Min.	Oper.	Max.		1.3 °C	-	20.2 °C	
	9	Pressure	Min.	Oper.	Max.			5 barg		
	10	Design Temperature	Min.		Max.		-29 °C	100 °C		
	11	Design Pressure	Min.		Max.		7.6 barg			
	12	Vibrations					ASME PTC 19.3			
	13	Erosion	Corrosion				-	-		
	14	Flow Rate Max.	Velocity Max.				2500 kg/h	0.08 m/s		
	15	Density					1000 kg/m^3			
	16	Viscosity					1 cP			
	17	Ambient Temperature					Min: -8.4 °C, Norm: 10.5 °C, Max: +25.0 °C.			
ELEMENT	18	T/C	Type				-			
	19		Epoxy.	Ground		Unground	-	-	-	
	20		Sheath Material							
	21	RTD	Type				RTD, 3 wire PT100			
	22		Sensor Material			Insulator Material	Platinum	MgO		
	23		Tollerance Class			Resistance	Class A according IEC 60751	100 Ω at 0°C/138.5 at 100°C		
	24	Single/Duplex/Other	2/3/4 Wire				Single	3 Wire		
	25	Diameter	Length				6 mm	to be assembled with TWE		
TRANSMITTER	26	Type	Mounting				4-20 mA - HART/Smart	Integral, head mounted		
	27	Input	Head Material				-	N/A		
	28	ATEX Certification	Ingress Protection				ATEX Ex II 2G Ex db IIC T5	IP-66		
	29	Housing	Painting				SS AISI 316/316L	N/A		
	30	Power Supply	Load Resistance				24 Vdc	220 ÷ 640 Ω (for HART)		
	31	Electrical Connection	Input		Output		-	2 X M20X1.5		
	32	Accuracy					As Per IEC 60751 Class A			
	33	Linearization					As Per IEC 60751 Class A			
	34	Instrument Range	Min.		Max.		-50 °C	450 °C		
	35	Calibration Range	Min.		Max.		0 °C	50 °C		
	36	SIL Certification					-			
	37	PED Certification					Required			
COMMUNICATION AND SOFTWARE	38	Communication Type	Signal Type				HART 6	4-20mA Loop Powered24 Vdc		
	39	D D Revision	CFF Revision				-	-		
	40	Hart Descriptor	Hart Tag				-	-		
	41	Internal Diagnostics	Capacitance				-	-		
	42	Segment	Device Address				-	-		
	43	Device Class	Simulate				-	-		
	44	Nominal Current	Operating Volage				-	-		
WELL	45	Process Connection	Rating				1-1/2" Flanged	150# RF ASME B31.3		
	46	Material	Type				ASTM A182 F53/F55	Tapered Type		
	47	Construction Type	Internal Connection				Barstock Tapered	1/2" NPT-F		
	48	Immersion Length ("U")	Head Length ("T")				220 mm	70 mm		
	49	Treatments	Finish				-	-		
	50	Tip Thickness	Bore Diameter				7 mm	6.5 mm		
	51	Insertion Diam. Min.	Max.				28 mm	18 mm		
PURCHASE	52	Manufacturer					TERRANOVA SRL			
	53	Model					SST72-TH-1-C-9-1-B-4-3 + TWE			
	54	Purchase Order Number					4718_OS			

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	PROCESS CONTROL SYSTEM	OPERATOR CONSOLE



NO MARK UP
L Grojam
12/03/25

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-TI-001
SEA WATER FROM LIFT PUMP P-50001A/B

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024
A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 015	REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO — CROSSWIND

ITEM	Tag	50-XV-001	: On/Off Valve - Sea Water from Pump P-50001A	Dwg	123A90-DDL-IN-LIS-40088		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module	LD		
TASK	code	C10003226	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity	FTS	Discipline	Instrumental	Form	FJ01V	ON/OFF Valve

Data

Loop TAG: 50-XV-001 — TDSL Rev: 123A90-FDL-IN-DG-40014 rev.1A — Valve type: ON/OFF VALVE

Functional Test				Associated Tag	Comment	Result
Local reset						NA
Remote command : Solenoid valve 1 energized				50-XY-001		OK
Remote command : Solenoid valve 2 energized						NA
Local indication of the valve position						OK
Open limit switch				50-ZSH-001		OK
Closed limit switch				50-ZSL-001		OK
Pressure transmitter on control line						NA
Local closing command						NA
Local opening command						NA
Opening time	1 sec	Restriction adjusted	No			OK
Closing time	1 sec	Restriction adjusted	No			OK
Interlock function						NA
Fail safe position on loss of electrical signal				CLOSE		OK
Fail safe position on loss of power fluid				CLOSE		OK
Timer checking					4 SEC.	OK
Number of operations on accumulator						NA
ESD signal and solenoid valve test facility						NA
Solenoid valve override indication on ICS						OK
Local indication of the solenoid valve deenergization						NA
Partial stroke cheching						NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
MULTIMETER FLUKE 175	AW1/018 (17140769)	7715/24	10/07/2025

Comments:

	Performed by	☉ WITNESS ☐ REVIEW	☉ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-18	2025-03-18	2025-03-19
Signature	PROVERLIS Digitaly signed by Laurentiu Grozavu 2025-03-18T17:03:39.665Z	PROVERLIS Digitaly signed by Giandonato Delmissier 2025-03-18T17:10:30.476Z	PROVERLIS Digitaly signed by John Mackillop 2025-03-19T12:18:14.000Z

GENERAL	1	Tag Number	Location			50-XV-001	50
	2	Service				SEA WATER P-50001A DISCHARGE	
	3	P&ID Number	Area Classification			123A90-DDL-PR-PID-80021	Zone 2, Gas Group IIC (or IIB+H2), Class T1
PIPELINE	4	Line Number				1-1/2"-SWS-031-01SD-E	
	5	Line Size and Schedule	Inlet	Outlet		1-1/2" / 3.68 mm	1-1/2" / 3.68 mm
	6	Line Material	Line Insulation			ASTM A790 UNS S32760	ELECTRICALLY HEAT TRACED (35)
PROCESS DATA	7	Fluid				SEA WATER SUPPLY	
	8	Fluid State	Phase			LIQUID	LIQUID
	9	Operating Pressure Norm/Min/Max			[barg]	15 - -	
	10	Design Pressure	Full Vacuum		[barg]	17.7	
	11	Operating Temperature Norm/Min/Max			[°C]	22 - -	
	12	Design Temperature	Minimum	Maxi	[°C]	-29	100
	13	Max. Diff. Pressure for Actuator Size			[bar]	17.7	
	14						
	15						
	16	Speed of	Design			Close : (12)	Open : (12)
	17	Operation (seconds)	Actual			Close : 0.3 minimum	Open : -
	18						
	19						
VALVE BODY (34)	20	Body Type				BALL VALVE (FLOATING BALL) - SPLIT BODY (BS01F01RF)	
	21	Body Size	Body Form			1-1/2"	FULL BORE
	22	Body Material	Bonnet Type			ASTM A182 F53	(*)
	23	Connections	Rating			FLANGED ASME B16.5	#150
	24	Flange Finish	Gasket Material			RF	Inside the valve (*) (38)
	25	Packing	Lubrication & Isolation			PTFE (*)	(*)
	26	Bolting				A193 B7 +HDG / A194 Gr. 2H + HDG	
	27	Trim Material	Ball	Stem	Seat	ASTM A182 F53	ASTM A182 F53 RPTFE
	28	Leakage Class				(1)	
	29	Fire Safe				(2)	
ACTUATOR	30	Manufacturer	Type			Rotork	Spring Return
	31	Model No.	Size			CP/S	035-100A/BA
	32	Actuator Orientation	Actuator Form			Horizontal	Cylinder
	33	Ingress Protection	Certification			IP-66	II 2 G Ex h IIC T5 Gb
	34	Air Supply	Min	Max	Design	4 barg	10 barg 11 barg
	35	Action on Air Failure	Action on Power Failure			CLOSE	CLOSE
	36	Fireproofing				NOT APPLICABLE	
	37	Solenoid Valve				50-XY-001 (9, 14, 15, 16) - Bifold FP06P	
	38	Limit Switch Closed	Limit Switch Open			50-ZSL-001 (9, 17) - Soldo SS	50-ZSH-001 (9, 17) - Soldo SS
	39	Elect. Reset Pushbutton (Actuator mounted)				NOT REQUIRED	
	40	Air Set	Handwheel			(*)	NOT REQUIRED
	41	Mounting Position				HORIZONTAL / VERTICAL	
	42	Partial Stroke Test Facility				-	
	43	Control Type				-	
	44	Electrical Connection	Electrical Class			No. (*) / M20	H
EMERGENCY A/S VESSEL	45	Capacity	Fabrication Code			-	- -
	46	No of Strokes Per Capacity				-	
	47	Safety Valve	Model			-	-
	48	Check Valve	Mounting			-	-
PURCHASE	49	Manufacturer				FLUITEK	
	50	Model				FB3	
	51	Purchase Order Number				1724000204	

NOTE
(1) N.1 PSV INSTALLED DOWNSTREAM THE AIR FILTER REGULATOR, SIZE 1/4", SS, set 4.7 barg.

No.	Date	By	Chkd	Appr	Description
03	06/12/24	VBA	LCA	DLO	Accepted for Construction (AFC)
02	28/08/24	VBA	LCA	DLO	Accepted for Construction (AFC)
01	20/12/23	VBA	LCA	DLO	Issued for Review (IFR)
00	06/11/23	VBA	LCA	DLO	Issued for Review (IFR)

INSTRUMENT DATASHEET

SDV/BDV and Tight Shut-Off XV Valves

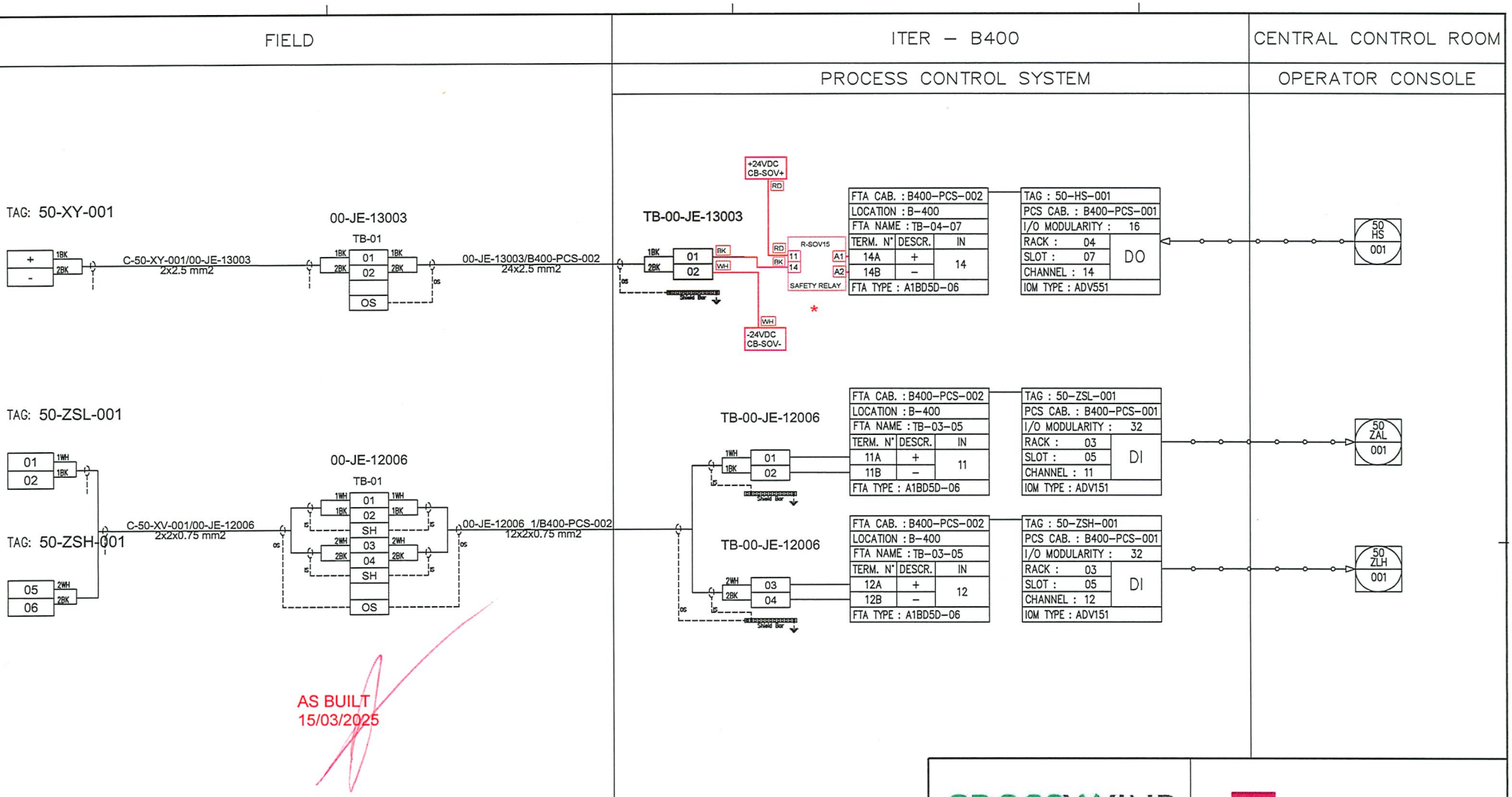
CROSSWIND

ROSETTI MARINO

Code : Dwg. No.: 123A90-DDL-IN-DS-40030 Rev.03

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as “NOT CONTROLLED” copy

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV. 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-XV-001
SEA WATER FROM PUMP P-50001A

CONTRACT NO./TITLE CONTRACT_NO. | SCALE 1:1
DRAWN: VBA | CHECKED: LCA | APPROVED: DLO | DATE 23/10/2024

A3 | DRAWING NO. 123A90-DDL-IN-DG-40014 | SHEET 055 | REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO — CROSSWIND

ITEM	Tag	50-XV-002	: On/Off Valve - Sea Water Recirculation from Pump P-50001A	Dwg	123A90-DDL-IN-LIS-40088		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module	LD		
TASK	code	C10003227	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity	FTS	Discipline	Instrumental	Form	FJ01V	ON/OFF Valve

Data

Loop TAG: 50-XV-002 — TDSL Rev: 123A90-FDL-IN-DG-40014 rev.1A — Valve type: ON/OFF VALVE

Functional Test				Associated Tag	Comment	Result
Local reset						NA
Remote command : Solenoid valve 1 energized				50-XY-002		OK
Remote command : Solenoid valve 2 energized						NA
Local indication of the valve position						OK
Open limit switch				50-ZSH-002		OK
Closed limit switch				50-ZSL-002		OK
Pressure transmitter on control line						NA
Local closing command						NA
Local opening command						NA
Opening time	1 sec	Restriction adjusted	No			OK
Closing time	1 sec	Restriction adjusted	No			OK
Interlock function						NA
Fail safe position on loss of electrical signal				CLOSE		OK
Fail safe position on loss of power fluid				CLOSE		OK
Timer checking					4 SEC.	OK
Number of operations on accumulator						NA
ESD signal and solenoid valve test facility						NA
Solenoid valve override indication on ICS						OK
Local indication of the solenoid valve deenergization						NA
Partial stroke cheching						NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
MULTIMETER FLUKE 175	AW1/018 (17140769)	7715/24	10/07/2025

Comments:

	Performed by	☉ WITNESS ☐ REVIEW	☉ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-18	2025-03-18	2025-03-19
Signature	PROVERLIS Digitaly signed by Laurentiu Grozavu 2025-03-18T17:02:33.432Z	PROVERLIS Digitaly signed by Giandonato Delmissier 2025-03-18T17:10:50.750Z	PROVERLIS Digitaly signed by John Mackillop 2025-03-19T12:18:24.582Z

GENERAL	1	Tag Number	Location			50-XV-002		50
	2	Service				SEA WATER P-50001A INLET		
	3	P&ID Number	Area Classification			123A90-DDL-PR-PID-80021		Zone 2, Gas Group IIC (or IIB+H2), Class T1
PIPELINE	4	Line Number				1"-SWS-146-01SD-E		
	5	Line Size and Schedule	Inlet		Outlet	1" / 3.38 mm		1" / 3.38 mm
	6	Line Material	Line Insulation			ASTM A790 UNS S32760		ELECTRICALLY HEAT TRACED (35)
PROCESS DATA	7	Fluid				SEA WATER SUPPLY		
	8	Fluid State	Phase			LIQUID		LIQUID
	9	Operating Pressure Norm/Min/Max			[barg]	-	ATM	15
	10	Design Pressure	Full Vacuum		[barg]	17.7		
	11	Operating Temperature Norm/Min/Max			[°C]	-	-	-
	12	Design Temperature	Minimum	Maxi	[°C]	-29		100
	13	Max. Diff. Pressure for Actuator Size			[bar]	17.7		
	14							
	15							
	16	Speed of	Design			Close : (12)		Open : (12)
	17	Operation (seconds)	Actual			Close : 0.3 minimum		Open : -
	18							
	19							
VALVE BODY (34)	20	Body Type				BALL VALVE (FLOATING BALL) - SPLIT BODY (BS01F01RF)		
	21	Body Size	Body Form			1"		FULL BORE
	22	Body Material	Bonnet Type			ASTM A182 F53		(*)
	23	Connections	Rating			FLANGED ASME B16.5		#150
	24	Flange Finish	Gasket Material			RF		Inside the valve (*) (38)
	25	Packing	Lubrication & Isolation			PTFE (*)		(*)
	26	Bolting				A193 B7 +HDG / A194 Gr. 2H + HDG		
	27	Trim Material	Ball	Stem	Seat	ASTM A182 F53	ASTM A182 F53	RPTFE
	28	Leakage Class				(1)		
	29	Fire Safe				(2)		
ACTUATOR	30	Manufacturer	Type			Rotork		Spring Return
	31	Model No.	Size			CP/S		035-100A/BA
	32	Actuator Orientation	Actuator Form			Horizontal		Cylinder
	33	Ingress Protection	Certification			IP-66		II 2 G Ex h IIC T5 Gb
	34	Air Supply	Min	Max	Design	4 barg	10 barg	11 barg
	35	Action on Air Failure	Action on Power Failure			CLOSE		CLOSE
	36	Fireproofing				NOT APPLICABLE		
	37	Solenoid Valve				50-XY-002 (9, 14, 15, 16) - Bifold FP06P		
	38	Limit Switch Closed	Limit Switch Open			50-ZSL-002 (9, 17) - Soldo SS		50-ZSH-002 (9, 17) - Soldo SS
	39	Elect. Reset Pushbutton (Actuator mounted)				NOT REQUIRED		
	40	Air Set	Handwheel			(*)		NOT REQUIRED
	41	Mounting Position				HORIZONTAL / VERTICAL		
	42	Partial Stroke Test Facility				-		
	43	Control Type				-		
	44	Electrical Connection	Electrical Class			No. (*) / M20		H
EMERGENCY A/S VESSEL	45	Capacity	Fabrication Code			-		-
	46	No of Strokes Per Capacity				-		
	47	Safety Valve	Model			-		-
	48	Check Valve	Mounting			-		-
PURCHASE	49	Manufacturer				FLUITEK		
	50	Model				FB3		
	51	Purchase Order Number				1724000204		

NOTE
(1) N.1 PSV INSTALLED DOWNSTREAM THE AIR FILTER REGULATOR, SIZE 1/4", SS, set 4.7 barg.

No.	Date	By	Chkd	Appr	Description
03	06/12/24	VBA	LCA	DLO	Accepted for Construction (AFC)
02	28/08/24	VBA	LCA	DLO	Accepted for Construction (AFC)
01	20/12/23	VBA	LCA	DLO	Issued for Review (IFR)
00	06/11/23	VBA	LCA	DLO	Issued for Review (IFR)

INSTRUMENT DATASHEET

SDV/BDV and Tight Shut-Off XV Valves

CROSSWIND

ROSETTI MARINO

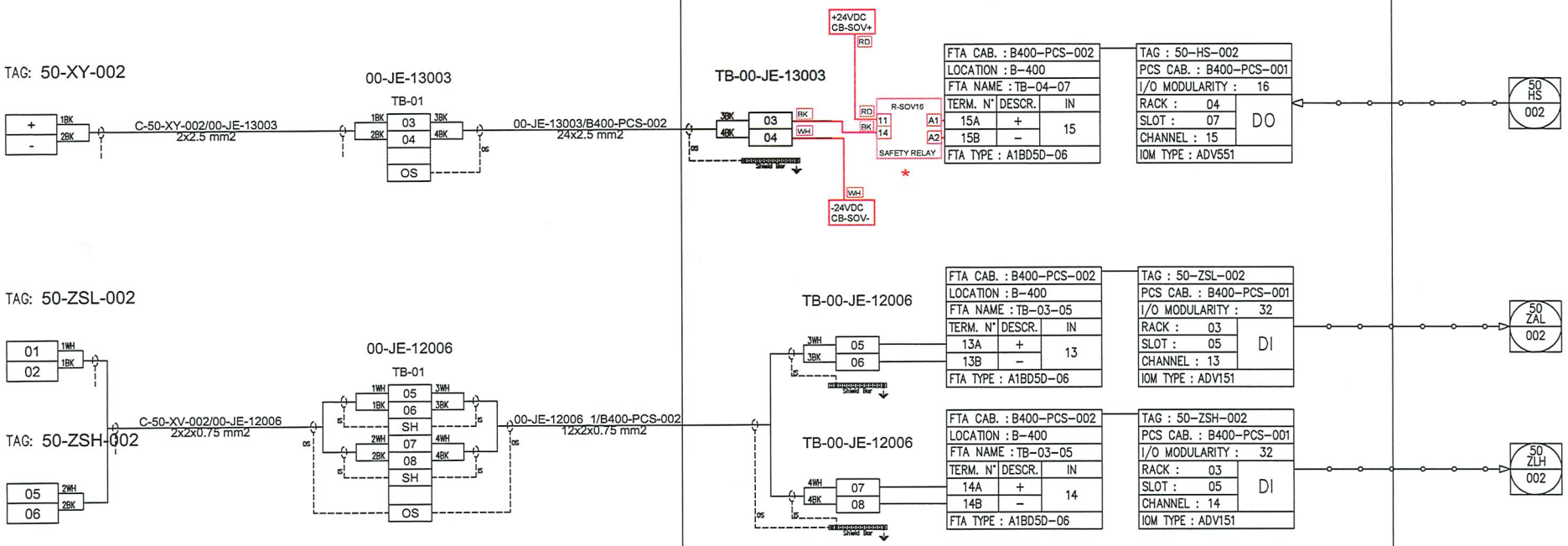
Sheet 30 of 33

Code : Dwg. No.: 123A90-DDL-IN-DS-40030 Rev.03

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as “NOT CONTROLLED” copy

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	PROCESS CONTROL SYSTEM	OPERATOR CONSOLE



AS BUILT
15/03/2025

* RELAY SOVxx
PLC-RSC-24DC/21

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV.: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-XV-002
SEA WATER RECIRCULATION FROM PUMP P-50001A

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024

A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 056	REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO — CROSSWIND

ITEM	Tag	50-XV-003	: On/Off Valve - Sea Water from Pump P-50001B	Dwg	123A90-DDL-IN-LIS-40088		
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)	Module	LD		
TASK	code	C10003228	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	PRE-COMM	Activity	FTS	Discipline	Instrumental	Form	FJ01V	ON/OFF Valve

Data

Loop TAG: 50-XV-003 — TDSL Rev: 123A90-FDL-IN-DG-40014 rev.1A — Valve type: ON/OFF VALVE

Functional Test				Associated Tag	Comment	Result
Local reset						NA
Remote command : Solenoid valve 1 energized				50-XY-003		OK
Remote command : Solenoid valve 2 energized						NA
Local indication of the valve position						OK
Open limit switch				50-ZSH-003		OK
Closed limit switch				50-ZSL-003		OK
Pressure transmitter on control line						NA
Local closing command						NA
Local opening command						NA
Opening time	1 sec	Restriction adjusted	No			OK
Closing time	1 sec	Restriction adjusted	No			OK
Interlock function						NA
Fail safe position on loss of electrical signal				CLOSE		OK
Fail safe position on loss of power fluid				CLOSE		OK
Timer checking					4 SEC.	OK
Number of operations on accumulator						NA
ESD signal and solenoid valve test facility						NA
Solenoid valve override indication on ICS						OK
Local indication of the solenoid valve deenergization						NA
Partial stroke cheching						NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
MULTIMETER FLUKE 175	AW1/018 (17140769)	7715/24	10/07/2025

Comments:

	Performed by	☉ WITNESS ☐ REVIEW	☉ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-18	2025-03-18	2025-03-19
Signature	Digitaly signed by Laurentiu Grozavu 2025-03-18T17:03:04.248Z	Digitaly signed by Giandonato Delmissier 2025-03-18T17:11:06.895Z	Digitaly signed by John Mackillop 2025-03-19T12:18:35.564Z

GENERAL	1	Tag Number	Location			50-XV-003		50
	2	Service				SEA WATER P-50001B DISCHARGE		
	3	P&ID Number	Area Classification			123A90-DDL-PR-PID-80021		Zone 2, Gas Group IIC (or IIB+H2), Class T1
PIPELINE	4	Line Number				1-1/2"-SWS-033-01SD-E		
	5	Line Size and Schedule	Inlet		Outlet	1-1/2" / 3.68 mm		1-1/2" / 3.68 mm
	6	Line Material	Line Insulation			ASTM A790 UNS S32760		ELECTRICALLY HEAT TRACED (35)
PROCESS DATA	7	Fluid				SEA WATER SUPPLY		
	8	Fluid State	Phase			LIQUID		LIQUID
	9	Operating Pressure Norm/Min/Max			[barg]	15	-	-
	10	Design Pressure	Full Vacuum		[barg]	17.7		
	11	Operating Temperature Norm/Min/Max			[°C]	22	-	-
	12	Design Temperature	Minimum	Maxi	[°C]	-29		100
	13	Max. Diff. Pressure for Actuator Size			[bar]	17.7		
	14							
	15							
	16	Speed of	Design			Close : (12)		Open : (12)
	17	Operation (seconds)	Actual			Close : 0.3 minimum		Open : -
	18							
	19							
VALVE BODY (34)	20	Body Type				BALL VALVE (FLOATING BALL) - SPLIT BODY (BS01F01RF)		
	21	Body Size	Body Form			1-1/2"		FULL BORE
	22	Body Material	Bonnet Type			ASTM A182 F53		(*)
	23	Connections	Rating			FLANGED ASME B16.5		#150
	24	Flange Finish	Gasket Material			RF		Inside the valve (*) (38)
	25	Packing	Lubrication & Isolation			PTFE (*)		(*)
	26	Bolting				A193 B7 +HDG / A194 Gr. 2H + HDG		
	27	Trim Material	Ball	Stem	Seat	ASTM A182 F53	ASTM A182 F53	RPTFE
	28	Leakage Class				(1)		
	29	Fire Safe				(2)		
ACTUATOR	30	Manufacturer	Type			Rotork		Spring Return
	31	Model No.	Size			CP/S		035-100A/BA
	32	Actuator Orientation	Actuator Form			Horizontal		Cylinder
	33	Ingress Protection	Certification			IP-66		II 2 G Ex h IIC T5 Gb
	34	Air Supply	Min	Max	Design	4 barg	10 barg	11 barg
	35	Action on Air Failure	Action on Power Failure			CLOSE		CLOSE
	36	Fireproofing				NOT APPLICABLE		
	37	Solenoid Valve				50-XY-003 (9, 14, 15, 16) - Bifold FP06P		
	38	Limit Switch Closed	Limit Switch Open			50-ZSL-003 (9, 17) - Soldo SS		50-ZSH-003 (9, 17) - Soldo SS
	39	Elect. Reset Pushbutton (Actuator mounted)				NOT REQUIRED		
	40	Air Set	Handwheel			(*)		NOT REQUIRED
	41	Mounting Position				HORIZONTAL / VERTICAL		
	42	Partial Stroke Test Facility				-		
	43	Control Type				-		
	44	Electrical Connection	Electrical Class			No. (*) / M20		H
EMERGENCY A/S VESSEL	45	Capacity	Fabrication Code			-	-	-
	46	No of Strokes Per Capacity				-		
	47	Safety Valve	Model			-		-
	48	Check Valve	Mounting			-		-
PURCHASE	49	Manufacturer				FLUITEK		
	50	Model				FB3		
	51	Purchase Order Number				1724000204		

NOTE
(1) N.1 PSV INSTALLED DOWNSTREAM THE AIR FILTER REGULATOR, SIZE 1/4", SS, set 4.7 barg.

No.	Date	By	Chkd	Appr	Description
03	06/12/24	VBA	LCA	DLO	Accepted for Construction (AFC)
02	28/08/24	VBA	LCA	DLO	Accepted for Construction (AFC)
01	20/12/23	VBA	LCA	DLO	Issued for Review (IFR)
00	06/11/23	VBA	LCA	DLO	Issued for Review (IFR)

INSTRUMENT DATASHEET

SDV/BDV and Tight Shut-Off XV Valves

CROSSWIND

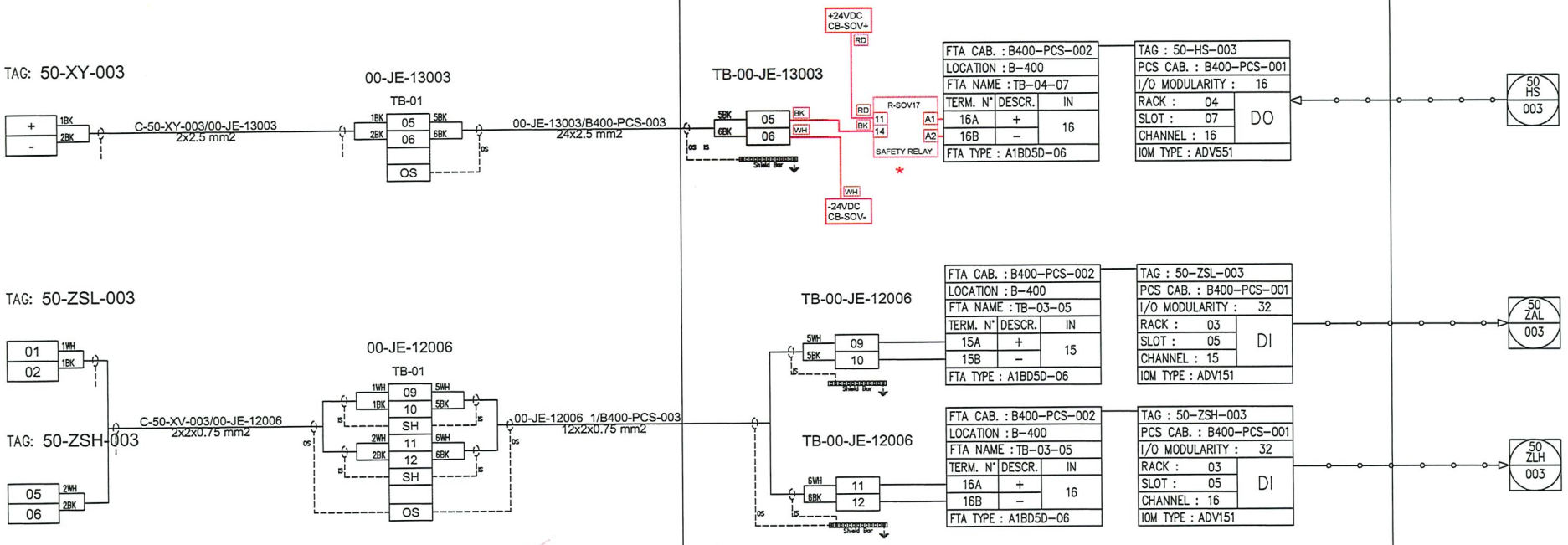
ROSETTI MARINO

Code : Dwg. No.: 123A90-DDL-IN-DS-40030 Rev.03

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as “NOT CONTROLLED” copy

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	PROCESS CONTROL SYSTEM	OPERATOR CONSOLE



AS BUILT
15/03/2025

* RELAY SOVxx
PLC-RSC-24DC/21

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV.: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-XV-003
SEA WATER FROM PUMP P-50001B

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024
A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 057	REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO — PROVERLIS — CROSSWIND

ITEM	Tag	50-XV-004	: On/Off Valve - Sea Water Recirculation from Pump P-50001B			Dwg	123A90-DDL-IN-LIS-40088
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	LD
TASK	code	C10003229		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	PRE-COMM	Activity FTS	Discipline	Instrumental	Form FJ01V	ON/OFF Valve

Data

Loop TAG: 50-XV-004 — TDSL Rev: 123A90-FDL-IN-DG-40014 rev.1A — Valve type: ON/OFF VALVE

Functional Test				Associated Tag	Comment	Result
Local reset						NA
Remote command : Solenoid valve 1 energized				50-XY-004		OK
Remote command : Solenoid valve 2 energized						NA
Local indication of the valve position						OK
Open limit switch				50-ZSH-004		OK
Closed limit switch				50-ZSL-004		
Pressure transmitter on control line						NA
Local closing command						NA
Local opening command						NA
Opening time	1 sec	Restriction adjusted	No			OK
Closing time	1 sec	Restriction adjusted	No			OK
Interlock function						NA
Fail safe position on loss of electrical signal				CLOSE		OK
Fail safe position on loss of power fluid				CLOSE		OK
Timer checking					4 SEC.	OK
Number of operations on accumulator						NA
ESD signal and solenoid valve test facility						NA
Solenoid valve override indication on ICS						OK
Local indication of the solenoid valve deenergization						NA
Partial stroke cheching						NA

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
MULTIMETER FLUKE 175	AW1/018 (17140769)	7715/24	10/07/2025

Comments:

	Performed by	☑ WITNESS ☐ REVIEW	☑ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-18	2025-03-18	2025-03-19
Signature	PROVERLIS Digitaly signed by Laurentiu Grozavu 2025-03-18T17:02:08.074Z	PROVERLIS Digitaly signed by Giandonato Delmissier 2025-03-18T17:11:24.454Z	PROVERLIS Digitaly signed by John Mackillop 2025-03-19T12:18:47.231Z

GENERAL	1	Tag Number	Location			50-XV-004		50
	2	Service				SEA WATER P-50001B INLET		
	3	P&ID Number	Area Classification			123A90-DDL-PR-PID-80021		Zone 2, Gas Group IIC (or IIB+H2), Class T1
PIPELINE	4	Line Number				1"-SWS-147-01SD-E		
	5	Line Size and Schedule	Inlet	Outlet		1" / 3.38 mm		1" / 3.38 mm
	6	Line Material	Line Insulation			ASTM A790 UNS S32760		ELECTRICALLY HEAT TRACED (35)
PROCESS DATA	7	Fluid				SEA WATER SUPPLY		
	8	Fluid State	Phase			LIQUID		LIQUID
	9	Operating Pressure Norm/Min/Max			[barg]	-	ATM	15
	10	Design Pressure	Full Vacuum		[barg]	17.7		
	11	Operating Temperature Norm/Min/Max			[°C]	-	-	-
	12	Design Temperature	Minimum	Maxi	[°C]	-29		100
	13	Max. Diff. Pressure for Actuator Size			[bar]	17.7		
	14							
	15							
	16	Speed of	Design			Close : (12)		Open : (12)
	17	Operation (seconds)	Actual			Close : 0.3 minimum		Open : -
	18							
	19							
VALVE BODY (34)	20	Body Type				BALL VALVE (FLOATING BALL) - SPLIT BODY (BS01F01RF)		
	21	Body Size	Body Form			1"		FULL BORE
	22	Body Material	Bonnet Type			ASTM A182 F53		(*)
	23	Connections	Rating			FLANGED ASME B16.5		#150
	24	Flange Finish	Gasket Material			RF		Inside the valve (*) (38)
	25	Packing	Lubrication & Isolation			PTFE (*)		(*)
	26	Bolting				A193 B7 +HDG / A194 Gr. 2H + HDG		
	27	Trim Material	Ball	Stem	Seat	ASTM A182 F53	ASTM A182 F53	RPTFE
	28	Leakage Class				(1)		
	29	Fire Safe				(2)		
ACTUATOR	30	Manufacturer	Type			Rotork		Spring Return
	31	Model No.	Size			CP/S		035-100A/BA
	32	Actuator Orientation	Actuator Form			Horizontal		Cylinder
	33	Ingress Protection	Certification			IP-66		II 2 G Ex h IIC T5 Gb
	34	Air Supply	Min	Max	Design	4 barg	10 barg	11 barg
	35	Action on Air Failure	Action on Power Failure			CLOSE		CLOSE
	36	Fireproofing				NOT APPLICABLE		
	37	Solenoid Valve				50-XY-004 (9, 14, 15, 16) - Bifold FP06P		
	38	Limit Switch Closed	Limit Switch Open			50-ZSL-004 (9, 17) - Soldo SS		50-ZSH-004 (9, 17) - Soldo SS
	39	Elect. Reset Pushbutton (Actuator mounted)				NOT REQUIRED		
	40	Air Set	Handwheel			(*)		NOT REQUIRED
	41	Mounting Position				HORIZONTAL / VERTICAL		
	42	Partial Stroke Test Facility				-		
	43	Control Type				-		
	44	Electrical Connection	Electrical Class			No. (*) / M20		H
EMERGENCY A/S VESSEL	45	Capacity	Fabrication Code			-	-	-
	46	No of Strokes Per Capacity				-		
	47	Safety Valve	Model			-		-
	48	Check Valve	Mounting			-		-
PURCHASE	49	Manufacturer				FLUITEK		
	50	Model				FB3		
	51	Purchase Order Number				1724000204		

NOTE
(1) N.1 PSV INSTALLED DOWNSTREAM THE AIR FILTER REGULATOR, SIZE 1/4", SS, set 4.7 barg.

No.	Date	By	Chkd	Appr	Description
03	06/12/24	VBA	LCA	DLO	Accepted for Construction (AFC)
02	28/08/24	VBA	LCA	DLO	Accepted for Construction (AFC)
01	20/12/23	VBA	LCA	DLO	Issued for Review (IFR)
00	06/11/23	VBA	LCA	DLO	Issued for Review (IFR)

INSTRUMENT DATASHEET

SDV/BDV and Tight Shut-Off XV Valves

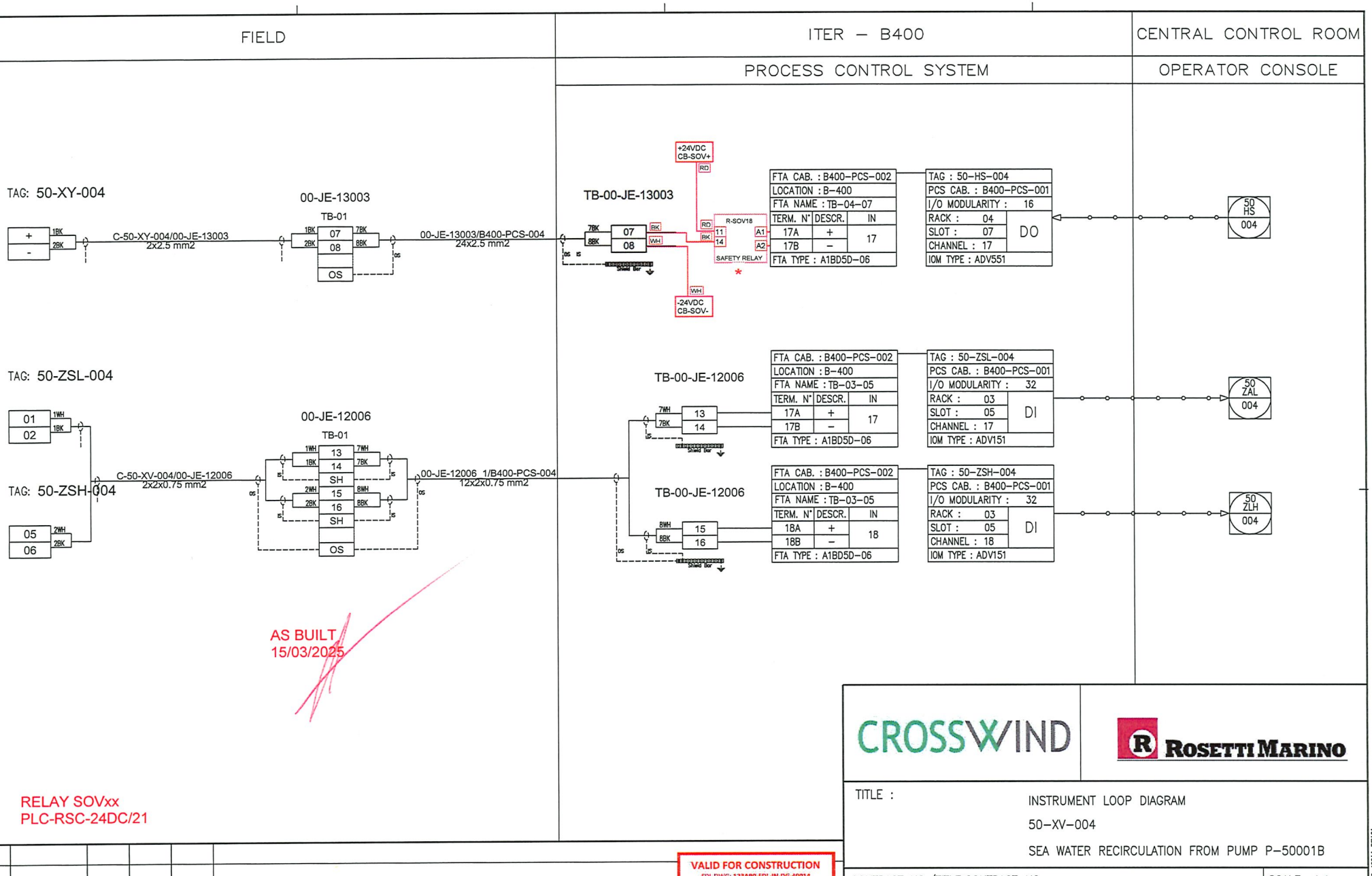
CROSSWIND

ROSETTI MARINO

Code : Dwg. No.: 123A90-DDL-IN-DS-40030 Rev.03

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as “NOT CONTROLLED” copy

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV.: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-XV-004
SEA WATER RECIRCULATION FROM PUMP P-50001B

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024

A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 058	REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	50-XA-001	: A-500003 (A-50000) Sea water treatment PKG confirmed gas alarm			Dwg	123A90-DDL-PR-PID-80022
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10003774		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	PRE-COMM	Activity FTS	Discipline	Instrumental	Form	FJ01D Digital Loop

LOOP DATA

Loop TAG	50-XA-001				TSLD	123A90-FDL-IN-DG-40014 rev.1A			
IO Type	Input	Yes	Output	No	Energy by transmitter	No	Energy by system	Yes	
Marshalling	B400-FGS-001	Terminal	07A/07B		Slot	05	Rack	05	Chanel 07

LOOP TEST

1	Check earth isolation of the loop.					OK
2	Connect loop to terminal					OK
3	Energise Loop (close loop) and record status	Normal	Yes	Alarm/trip	No	OK
4	De-Energise Loop (open loop) and record status	Normal	No	Alarm/trip	Yes	OK
5	Record Fail Safe position	Open	NA	Closed	NA	NA

LOOP SERVICE

		Action	Alarm / Control			Display	
		Trip	GA	DCS	SOE	DCS	
6	Loop energized	No		Yes		OK	OK
7	Loop not energized	Yes		Yes		OK	OK
8	Checking of line monitoring	No		No		OK	OK
9	Checking of Maintenance Inhibition	NA	NA	NA	NA	NA	NA
10	Associated safety Level / bar	ESD-1D					OK
11	Associated outputs						

LOOP DOCUMENTATION

12	Loop diagram is marked up and attached to this test sheet	OK
13	Cause and effect chart is highlighted accordingly	NA
14	Any defect is recorded for punch list issuance	OK

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
MULTIMETER FLUKE 175	AW1/018 17140769	7715/24	10/07/2025

Comments:

Page 1/1	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-17	2025-03-18	2025-03-19

PROVERLIS Digitaly signed by Laurentiu Grozavu 2025-03-17T12:13:53.997Z

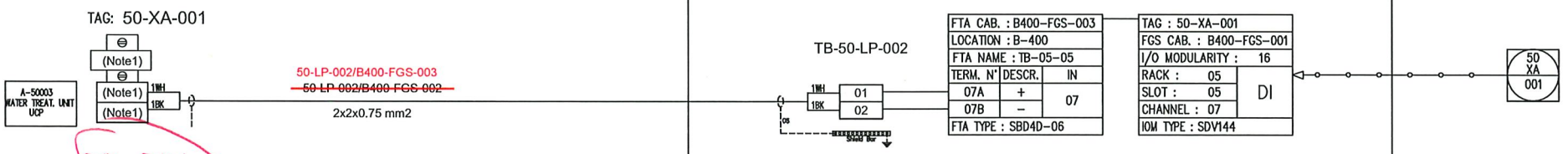
PROVERLIS Digitaly signed by Giandonato Delmissier 2025-03-18T07:00:19.051Z

PROVERLIS Digitaly signed by John Mackillop 2025-03-19T12:19:00.636Z

Signature			

DRAWING NO.: 123A90-DDL-IN-DG-40014 REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	FIRE AND GAS SYSTEM	OPERATOR CONSOLE



TB-RLY
5
6

26/02/25

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : INSTRUMENT LOOP DIAGRAM
50-XA-001
A-500003 SEA WATER TREATMENT PKG CONFIRMED GAS ALARM

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024

A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 298	REV. 01

File Name : 123A90-DDL-IN-DG-40014_R01.01

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	50-XA-002	: A-500003 (A-50000) Sea water treatment PKG confirmed fire alarm			Dwg	123A90-DDL-PR-PID-80022
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)			Module	
TASK	code	C10003775		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	PRE-COMM	Activity FTS	Discipline	Instrumental	Form	FJ01D Digital Loop

LOOP DATA

Loop TAG	50-XA-002				TSLD	123A90-FDL-IN-DG-40014 rev.1A			
IO Type	Input	Yes	Output	No	Energy by transmitter	No	Energy by system	Yes	
Marshalling	B400-FGS-001	Terminal	08A/08B		Slot	05	Rack	05	Chanel 08

LOOP TEST

1	Check earth isolation of the loop.					OK
2	Connect loop to terminal					OK
3	Energise Loop (close loop) and record status	Normal	Yes	Alarm/trip	No	OK
4	De-Energise Loop (open loop) and record status	Normal	No	Alarm/trip	Yes	OK
5	Record Fail Safe position	Open	NA	Closed	NA	NA

LOOP SERVICE

		Action		Alarm / Control		Display	
		Trip	GA	DCS	SOE	DCS	
6	Loop energized	No		Yes		OK	OK
7	Loop not energized	Yes		Yes		OK	OK
8	Checking of line monitoring	No		No		OK	OK
9	Checking of Maintenance Inhibition	NA	NA	NA	NA	NA	NA
10	Associated safety Level / bar	ESD-1D					OK
11	Associated outputs						

LOOP DOCUMENTATION

12	Loop diagram is marked up and attached to this test sheet	OK
13	Cause and effect chart is highlighted accordingly	NA
14	Any defect is recorded for punch list issuance	OK

TESTING & MEASUREMENT INSTRUMENT USED

Type	Serial N.	Calibration Certificate	Validity
MULTIMETER FLUKE 175	AW1/018 17140769	7715/24	10/07/2025

Comments:

Page 1/1

	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	RM COMM	RM COMM	CW
Name	Laurentiu Grozavu	Giandonato Delmissier	John Mackillop
Date	2025-03-17	2025-03-18	2025-03-19

PROVERLIS Digitaly signed by Laurentiu Grozavu 2025-03-17T12:13:42.723Z

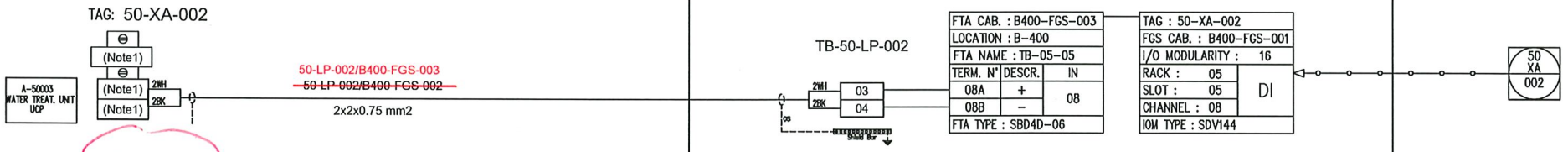
PROVERLIS Digitaly signed by Giandonato Delmissier 2025-03-18T07:00:42.173Z

PROVERLIS Digitaly signed by John Mackillop 2025-03-19T12:19:12.449Z

Signature			

DRAWING NO. 123A90-DDL-IN-DG-40014 REV. 01

FIELD	ITER – B400	CENTRAL CONTROL ROOM
	FIRE AND GAS SYSTEM	OPERATOR CONSOLE



TB-RLY
1
2

26/02/25

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/12/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	23/10/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DG-40014
REV: 1_A | DATE: 20/12/24 | SIGNATURE: C.Pilato
ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : TYPICAL LOOP DIAGRAM
50-XA-002
A-500003 SEA WATER TREATMENT PKG CONFIRMED FIRE ALARM

CONTRACT NO./TITLE CONTRACT_NO.			SCALE 1:1
DRAWN: VBA	CHECKED: LCA	APPROVED: DLO	DATE 23/10/2024
A3	DRAWING NO. 123A90-DDL-IN-DG-40014	SHEET 299	REV. 01

File Name : 123A90-DDL-IN-DG-40014_REV.01

Section 4.4 Instrumentation “As-Commissioned” interconnection diagrams

NOT APPLICABLE

Section 4.5 Telecommunication functional test sheets index

NOT APPLICABLE

Section 4.6 Telecommunication
“As-Commissioned” I.C.D. / TSLD's

NOT APPLICABLE

Section 5 SITE / OPERATIONAL

Section 5.1 Operational Test Procedure

Section 5.2 Operational Test Certificates

NOT APPLICABLE

Section 6 PIPING AND VESSEL PREPARATION

Section 6.1 Final Mechanical / Vessel Inspection Checks Index

NOT APPLICABLE

Section 6.2 Leak Test / Drying / Inerting Test Sheets Index

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Electrical	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
A6/+01-QF1	SEA WATER PUMP B - A6/+01-QF1	ONSHORE	C10002941	FP00	100	2025-01-15	RFO 1
		ONSHORE	C10002942	FTR-2	100	2024-10-02	RFO 1
		ONSHORE	C10002943	FTR-6	100	2025-02-04	RFO 1
		ONSHORE	C10002993	FTR-5	100	2025-07-28	RFO 1
A7/+01-QF1	SEA WATER PUMP A - A7/+01-QF1	ONSHORE	C10002944	FP00	100	2025-01-15	RFO 1
		ONSHORE	C10002945	FTR-2	100	2024-10-02	RFO 1
		ONSHORE	C10002946	FTR-6	100	2025-02-04	RFO 1
		ONSHORE	C10002994	FTR-5	100	2025-07-28	RFO 1
PM-50001A	Electric Motor for sea water pump	OFFSHORE	C10002947	FP13	0	-	-
		OFFSHORE	C10004549	FTR-2	0	-	-
PM-50001B	Electric Motor for sea water pump	OFFSHORE	C10002948	FP13	0	-	-
		OFFSHORE	C10004550	FTR-2	0	-	-

ITEM	Tag	P-50001A	: Sea Water Pump A		Dwg	123A90-DDL-PR-PID-80021	
	S/Sys	50-00	: Seawater Intake System (Lifting Pumps)		Module	LD	
TASK	code	C10004860	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	COMM	Activity PVP	Discipline Mechanical	Form	5222	Reciprocating Pump

It	Check List	Check	Comments
1	Pre-commissioning Tasks completed.		
2	Driver running tests completed.		
3	Alignment verified (TMX08).		
4	Seals packings tight.		
5	Oil levels completed.		
6	Required overrides installed.		
7	Measurements and safety devices on line.		
8	Flow dampeners on line.		
9	Configuration established.		
10	Stroke adjusted to zero.		
11	Level in suction vessel established.		

Comments:

	Performed by	☐ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
	COMMISSIONING DISCIPLINE LEAD	RM COMMISSIONING MANAGER	CPY COMMISSIONING MANAGER
Name			
Date			
Signature			

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Instrumental	50-00 Seawater Intake System (Lifting Pumps)

ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
50-PT-001	Pressure Transmitter - Sea Water from Pump P-50001A	ONSHORE	C10003179	FJ01A	100	2025-03-19	RFO 1
50-PT-002	Pressure Transmitter - Sea Water from Pump P-50001B	ONSHORE	C10003180	FJ01A	100	2025-03-19	RFO 1
50-TT-001	Temperature Transmitter - Sea Water from Lift Pump P-50001A/B	ONSHORE	C10003182	FJ01A	100	2025-03-19	RFO 1
50-XA-001	A-500003 (A-50000) Sea water treatment PKG confirmed gas alarm	ONSHORE	C10003774	FJ01D	100	2025-03-19	RFO 1
50-XA-002	A-500003 (A-50000) Sea water treatment PKG confirmed fire alarm	ONSHORE	C10003775	FJ01D	100	2025-03-19	RFO 1
50-XV-001	On/Off Valve - Sea Water from Pump P-50001A	ONSHORE	C10003226	FJ01V	100	2025-03-19	RFO 1
50-XV-002	On/Off Valve - Sea Water Recirculation from Pump P-50001A	ONSHORE	C10003227	FJ01V	100	2025-03-19	RFO 1
50-XV-003	On/Off Valve - Sea Water from Pump P-50001B	ONSHORE	C10003228	FJ01V	100	2025-03-19	RFO 1
50-XV-004	On/Off Valve - Sea Water Recirculation from Pump P-50001B	ONSHORE	C10003229	FJ01V	100	2025-03-19	RFO 1

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Mechanical	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
P-50001A	Sea Water Pump A	OFFSHORE	C10004860	5222	0	-	-
		OFFSHORE	C10004861	5223	0	-	-
P-50001B	Sea Water Pump B	OFFSHORE	C10004862	5222	0	-	-
		OFFSHORE	C10004863	5223	0	-	-

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 50-00 & process: COMM

Piping	50-00 Seawater Intake System (Lifting Pumps)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
50-00	Service Test Sea Water Intake System	OFFSHORE	C10004913	4245	0	-	-

Section 6.3 Chemical Loading & First Fill records Index

NOT APPLICABLE

Section 6.4 Chemical Cleaning Reports and Records Index

NOT APPLICABLE

Section 6.5 Lubrication Schedule

NOT APPLICABLE

Section 7 VENDOR

Section 7.1 Vendor Package Summary Index

NOT APPLICABLE

Section 7.2 SAT Procedure with associated punch list and reference (Front Page)

NOT APPLICABLE

Section 7.3 Vendor Spares & Special Tools lists references

NOT APPLICABLE

Section 7.4 Vendor Data / Operations / Maintenance Manuals References

NOT APPLICABLE

Section 8 LIST OF MODIFICATIONS

NOT APPLICABLE

Section 8.1 List of changes

NOT APPLICABLE

Section 9 SUPPORTING DOCUMENTS

NOT APPLICABLE