BASE LOAD POWER HUB (BLPH)

ELECTRICAL SINGLE LINE DIAGRAMS

DC UPS SYSTEM

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	16/04/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	09/02/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL SINGLE LINE DIAGRAMS DC UPS SYSTEM
FRONT PAGE

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DG-20161

SHEET 001

REV. 01

File Name : 123A90-DDL-EL-DG-20161 Rev. 01

F.to UNI A3: 420mmx297mm

REV.	SHEET NUMBER	DESCRIPTION	REF. CODE
01	001	FRONT PAGE	
01	002	SUMMARY / GENERAL NOTES / REFERENCE DOCUMENTS	
01	003	LEGEND	
01	004	110V DC UPS SINGLE LINE DIAGRAM (UP-200F1)	
01	005	110V DC UPS DISTRIBUTION BOARD SLD (UP-200F1)	

GENERAL NOTES / REFERENCE DOCUMENTS

GENERAL NOTES:

1. DC UPS CONFIGURATION SHALL BE AS PER RESPECTIVE TECHNICAL SPECIFICATION & DATA SHEET.
2. FOR ALL LOAD PLEASE REFER ELECTRICAL LOAD LIST & BALANCE (CCS MODE 'IMPORT') (123A90-DDL-EL-LIS-20016).
3. DC UPS COMMUNICATION INTERFACE SHALL BE AS PER RESPECTIVE TECHNICAL SPECIFICATION & DATA SHEET.
4. DC UPS SHALL HAVE A REAL TIME INTERACTIVE OPERATOR INTERFACE USING A MICROPROCESSOR BASED HUMAN MACHINE INTERFACE (HMI) MOUNTED ON THE FRONT DOOR.
5. LVI1 – TYPICAL FOR AC, DC UPS & DISTRIBUTION BOARD INCOMER [REFER 123A90-DDL-EL-DG-20163 ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS (Distribution Boards, AC UPS, DC UPS, etc)].
6. LVO2 – TYPICAL FOR DISTRIBUTION BOARD 1PH OUTGOING WITHOUT EARTH FAULT [REFER 123A90-DDL-EL-DG-20163 ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS (Distribution Boards, AC UPS, DC UPS, etc)].

REFERENCE DOCUMENTS:

DOC. NO.	DESCRIPTION
123A90-DDL-EL-SP-20035	TECHNICAL SPECIFICATION, IDS AND DDS FOR DC UPS SYSTEM
123A90-DDL-EL-DS-20036	TECHNICAL DATA SHEET (TDS) FOR DC UPS SYSTEM
123A90-DDL-EL-DG-20158	OVERALL/KEY SINGLE LINE DIAGRAM
123A90-DDL-EL-DS-20016	ELECTRICAL LOAD LIST & BALANCE (CCS MODE 'IMPORT')
123A90-DDL-EL-DS-LIS-20165	ELECTRICAL SCHEDULES (Distribution Boards, AC UPS, DC UPS etc.)
123A90-DDL-EL-DG-20163	ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS (Distribution Boards, AC UPS, DC UPS, etc)

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	16/04/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	09/02/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL SINGLE LINE DIAGRAMS DC UPS SYSTEM
SUMMARY / GENERAL NOTES / REFERENCE DOCUMENTS

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

A3 | DRAWING NO. 123A90-DDL-EL-DG-20161 | SHEET 002 | REV. 01

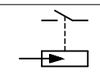
File Name : 123A90-DDL-EL-DG-20161 Rev. 01

F.to UNI A3: 420mmx297mm

LEGEND

SYMBOL	DESCRIPTION
	MOULDED CASE CIRCUIT BREAKER (MCCB)
	ON–LOAD ISOLATING SWITCH
	MINIATURE CIRCUIT BREAKER (MCB)
	RECTIFIER (POWER CONVERTER AC/DC)
	AMMETER
	VOLTMETER
	CABLE GLAND
	TRANSFORMER
	FUSE
	BLOCKING DIODE
	BATTERY
 AM	AUTO–OFF–MANUAL
 FB	FLOAT–OFF–BOOST
 AH	AUTONOMY HOURS
	FREQUENCY METER
	SIGNAL LAMP

LEGEND

SYMBOL	DESCRIPTION
2P	TWO POLE
4P	FOUR POLE
	SURGE PROTECTION DEVICE

LEGEND

SYMBOL	DESCRIPTION

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	16/04/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	09/02/24	NLK	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL SINGLE LINE DIAGRAMS DC UPS SYSTEM
LEGEND

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

SCALE : NTS

A3

DRAWING NO. 123A90–DDL–EL–DG–20162

SHEET 003

REV. 01

F.to UNI A3: 420mmx297mm

File Name : 123A90–DDL–EL–DG–20162 Rev. 01

LV SWITCHBOARD
SG–200N1
(400V, 3Ph SUPPLY)
ESSENTIAL
FEEDER–1

4G16 mm² 83034–CEL

LV SWITCHBOARD
SG–200N1
(400V, 3Ph SUPPLY)
NORMAL
FEEDER–2

4G16 mm² 83035–CEL

110V DC UPS
10 KVA
UP–200F1

MCCB
3P
MAIN BREAKER 1

Hz V A

TR 1
AC INPUT LINE
POWER TRANSFORMER

UR 1
RECTIFIER BRIDGE

D1
DIODE

V A

2P
OUTPUT RECTIFIER BRIDGE
SWITCH ISOLATOR 1

BATTERY RACK
BA–200F1

120 AH
VRLA(100%)
60 Minutes
BACKUP

BATTERY
ISOLATOR
BOX
CB–200F1

1CX25mm²
1CX25mm²

2P

A V

MCCB
3P
MAIN BREAKER 2

Hz V A

TR 2
AC INPUT LINE
POWER TRANSFORMER

UR 2
RECTIFIER BRIDGE

D2
DIODE

V A

2P
OUTPUT RECTIFIER BRIDGE
SWITCH ISOLATOR 2

UPS CABINET–1
BC–200F1A

1CX25mm²
1CX25mm²

1CX25mm²
1CX25mm²

UPS CABINET–2
BC–200F1B

110V DC UPS DISTRIBUTION BOARD
DP–200F1

DC 110V, 100A, 10kA FOR 1Sec.

FOR 110V DC UPS DISTRIBUTION BOARD DETAILS SEE NEXT SHEET

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	16/04/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	09/02/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL SINGLE LINE DIAGRAMS DC UPS SYSTEM
110V DC UPS SINGLE LINE DIAGRAM (UP–200F1)

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

SCALE : 1:X

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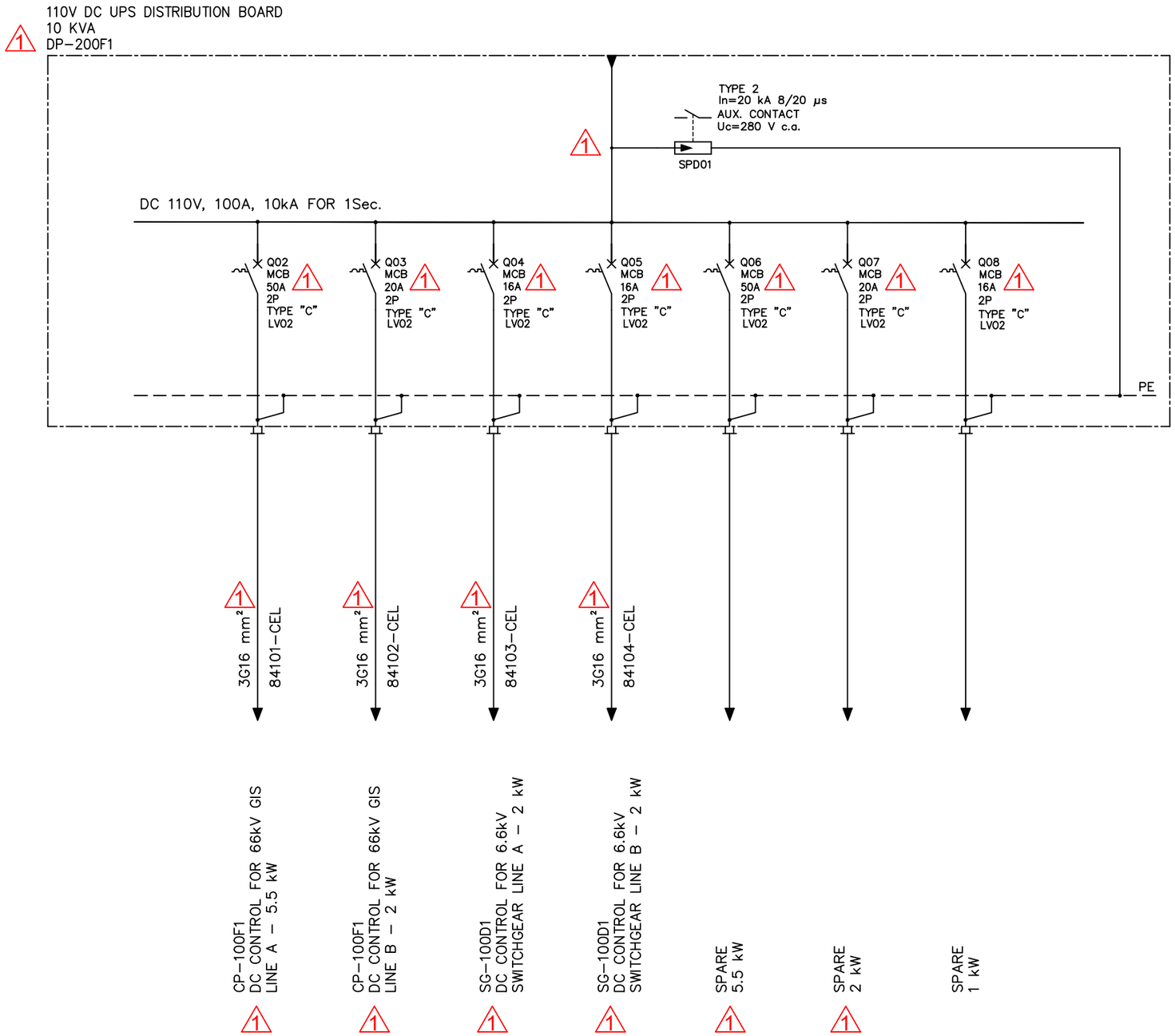
SHEET 004

REV. 01

F.to UNI A3: 420mmx297mm

File Name : 123A90–DDL–EL–DG–20161 Rev. 01

110V DC UPS SINGLE LINE DIAGRAM (UP–200F1) DISTRIBUTION BOARD DETAILS 1



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	16/04/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	09/02/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL SINGLE LINE DIAGRAMS DC UPS SYSTEM
110V DC UPS DISTRIBUTION BOARD SLD (UP–200F1)

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

SCALE : 1:X

A3

DRAWING NO. 123A90–DDL–EL–DG–20161

SHEET 005

REV. 01

File Name : 123A90–DDL–EL–DG–20161 Rev. 01

F.to UNI A3: 420mmx297mm