DRAWING NO. 123A90-DDL-EL-DL-20132

REV. 02

RLMU LIST

REV.01_B : SHEET 1,3
REV.01_C : SHEET 1

PL=01



PL=01 E.B. NON INSTALLATO. ESTATO ESAGUITO SPARO. MODIFICA DA E13 AD E11E+E11A

PL=01 E.B NOT INSTALLED. WAS INSTALLED THE HILTI (S-BT-ER-M10-HC-120). CHANGE FROM E13 TO E11E+E11A

PL=08



PL=08 IL COLLEGAMENTO E DIVERSO DA QUANTO INDICATO DAL DOCUMENTO. MODIFICA DA E13 AD E11E+E11A

PL=08 E.B. NOT INSTALLED. AS THE TYPICAL. CHANGE FROM E13 TO E11E+E11A

PL=07 I COLLEGAMETI SONO DIVERSIDA QUANTO EVIDENZIA IL DOCUMENTO IN CAMPO CONNESSIONE SU' 3 PUNTI. LE CONNESSIONI UTTILIZZATE SONO E11C+E11E

PL=07 CONNECTED THREE WIRES ON SAME POINT. SEE TYPICAL E11C+E11E.

PL=07

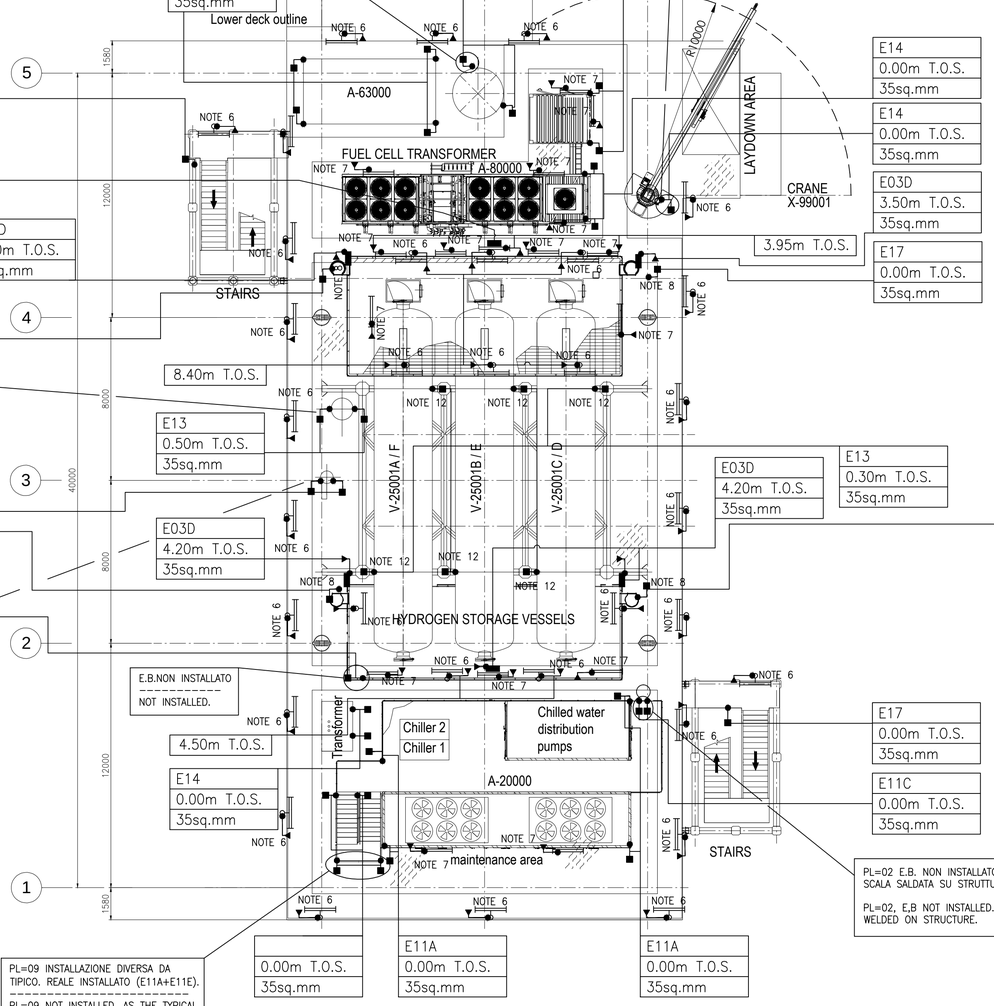


PL=09 INSTALLAZIONE DIVERSA DA TIPICO. REALE INSTALLATO (E11A+E11E).

PL=09 NOT INSTALLED. AS THE TYPICAL. CHANGE FROM E13 TO E11A+E11E

PL=09





PLAN ON TOP DECK
EL+30.310 T.O.S.

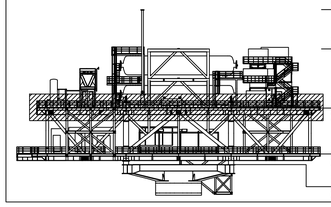
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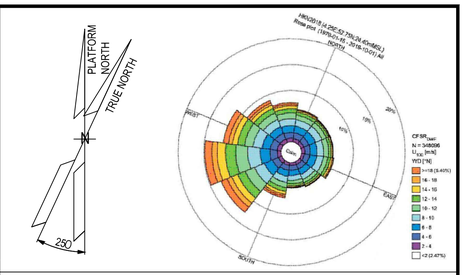


PL=02 E.B. NON INSTALLATO. SCALA SALDATA SU STRUTTURA.

PL=02, E,B NOT INSTALLED. LADDER WELDED ON STRUCTURE.

KEY PLAN





NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. THIS DOCUMENT IS ONLY VALID FOR EARTHING LAYOUT.
4. ALL ELECTRICAL EQUIPMENT NOT DIRECTLY WELDED TO SKID FRAME SHALL BE BONDED TO STEEL TO THE STRUCTURE OF SKID BASEFRAME.
5. FOR LIGHTNING PROTECTION SYSTEM SURGE PROTECTIVE DEVICES (SPD), REFER TO THE DOCUMENT 123A90-DDL-EL-RE-20154.
6. ALL NON-WELDED POLES WILL BE EARTHED AS PER TYPICAL E05 AND E24.
7. ALL LINEAR LIGHTING FIXTURE WILL BE EARTHED AS PER TYPICAL E32.
8. LADDER MUST BE EARTHED IF NOT WELDED TO THE STRUCTURE. LADDER MUST BE EARTHED TO THE UPPER BEAM OF THE STRUCTURE, COMPLETE EARTHING INCLUDING WITH 2 THREADED STUDS AS PER TYPICAL E17D.
9. ALL EARTH BAR WILL BE EARTHED AS PER TYPICAL E03D.
10. ALL POLE MOUNTED EQUIPMENTS WILL BE EARTHED AS PER TYPICAL E05.
11. EQUIPOTENTIAL BONDING GROUPING FOR BOLTED HANDRAILS ARE PROVIDED EVERY 3M FOR THE ENTIRE PERIMETER AS TYPICAL E16 AND WILL BE DEFINED DURING ASSEMBLY PHASE
12. EARTHED VESSELS V-25001D/E/F. FOR EARTHING V-25001A/B/C SEE SHEET 2

LEGEND

- LIGHTING FIXTURE POLE MOUNTED
- LINEAR LIGHTING FIXTURE
- ■ EARTHING BOSS AISI316L
- ● COMPRESSION TYPE LUG TINNED COPPER
- ▲ THREADED STUD FOR EARTHING CONNECTION
- AIR TERMINATION ROD FOR LIGHTNING PROTECTION
- Exx EARTHING TYPICAL CODE
- ▬ EARTHING BAR

TYP.	TYPICAL
ELE	ELEVATION
SIZE	

E20	AIR TERMINATION ROD NO.
ELE	ELEVATION
HEIGHT	

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20100	ELECTRICAL EQUIPMENT LAYOUT - TOP DECK
123A90-DDL-EL-DD-20090	ELECTRICAL TYPICAL INSTALLATION DETAILS - EARTHING SYSTEM
123A90-DDL-EL-RE-20154	LIGHTNING PROTECTION SYSTEM CALCULATION REPORT
123A90-DDL-EL-DL-20118	LIGHTING & SOCKET LAYOUT - TOP DECK

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	15/09/25	PS	FMA/AMA	CGI	ASBUILT (ASB)
01	31/07/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	27/05/24	NLK	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
EARTHING & LIGHTNING LAYOUT
TOP DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE 1:150

DRAWN NLK | CHECKED FMA/AMA | APPROVED FPA/DLO | DATE 31/07/24

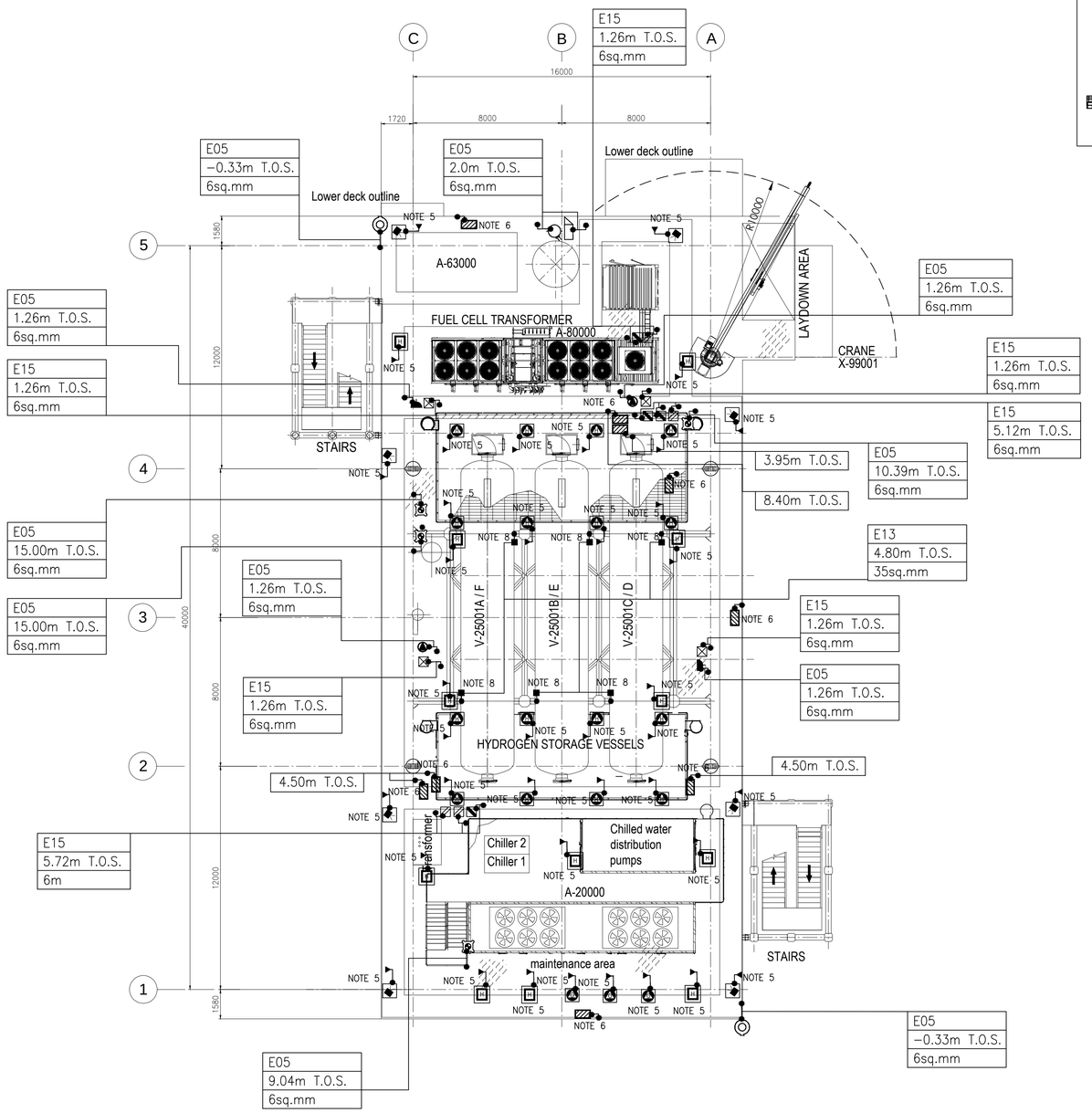
A1 | DRAWING NO. 123A90-DDL-EL-DL-20132 | SHEET 001 | REV. 02

SHEET 001 OF 003

File Name : 123A90-DDL-EL-DL-20132

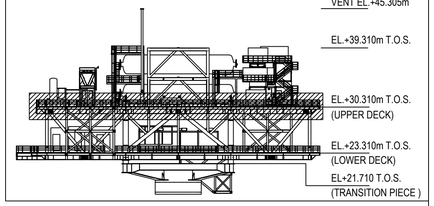
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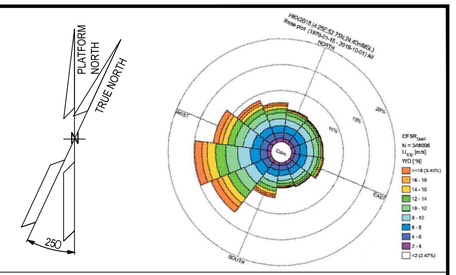
REV. 02



PLAN ON TOP DECK
EL+30.310 T.O.S.

KEY PLAN





NOTES

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3. THIS DOCUMENT IS ONLY VALID FOR EARTHING LAYOUT.
4. ALL ELECTRICAL EQUIPMENT NOT DIRECTLY WELDED TO SKID FRAME SHALL BE BONDED TO STEEL TO THE STRUCTURE OF SKID BASEFRAME.
5. ALL POLE MOUNTED INSTRUMENT DETECTORS WILL BE EARTHED AS PER TYPICAL E05 AND E24.
6. ALL INSTRUMENT RACK WILL BE EARTHED AS PER TYPICAL E05A.
7. EQUIPOTENTIAL BONDING GROUPING FOR BOLTED HANDRAILS ARE PROVIDED EVERY 3M FOR THE ENTIRE PERIMETER AS TYPICAL E16 AND WILL BE DEFINED DURING ASSEMBLY PHASE
8. EARTHED VESSELS V-25001A/B/C. FOR EARTHING V-25001D/E/F SEE SHEET 1 (01)

LEGEND

- POINT SOURCE HYDROGEN DETECTOR
- ULTRA SONIC HYDROGEN DETECTOR
- POINT SOURCE OXYGEN DETECTOR
- UV−IR FLAME DETECTOR
- INSTRUMENT RACK
- COMPRESSION TYPE LUG TINNED COPPER
- THREADED STUD FOR EARTHING CONNECTION
- EMERGENCY & NORMAL LIGHTING JB
- WELDING SOCKET & JB
- SMALL POWER SOCKET & JB
- MAIN YELLOW LANTERNS
- OBSTRUCTION RED LED LIGHTS (MEDIUM INTENSITY)
- PHOTOCELL
- VISIBILITY METER

TYP.	TYPICAL
ELE	ELEVATION
SIZE	

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20100	ELECTRICAL EQUIPMENT LAYOUT - TOP DECK
123A90-DDL-EL-DD-20090	ELECTRICAL TYPICAL INSTALLATION DETAILS - EARTHING SYSTEM
123A90-DDL-EL-RE-20154	LIGHTNING PROTECTION SYSTEM CALCULATION REPORT
123A90-DDL-EL-DL-20118	LIGHTING & SOCKET LAYOUT - TOP DECK
123A90-DDL-SAF-DL-30027	F & G DETECTORS LAYOUT - LOWER & UPPER DECK

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	15/09/25	PS	FMA/AMA	CGI	ASBUILT (ASB)
01	31/07/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	27/05/24	NLK	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
EARTHING & LIGHTNING LAYOUT
TOP DECK

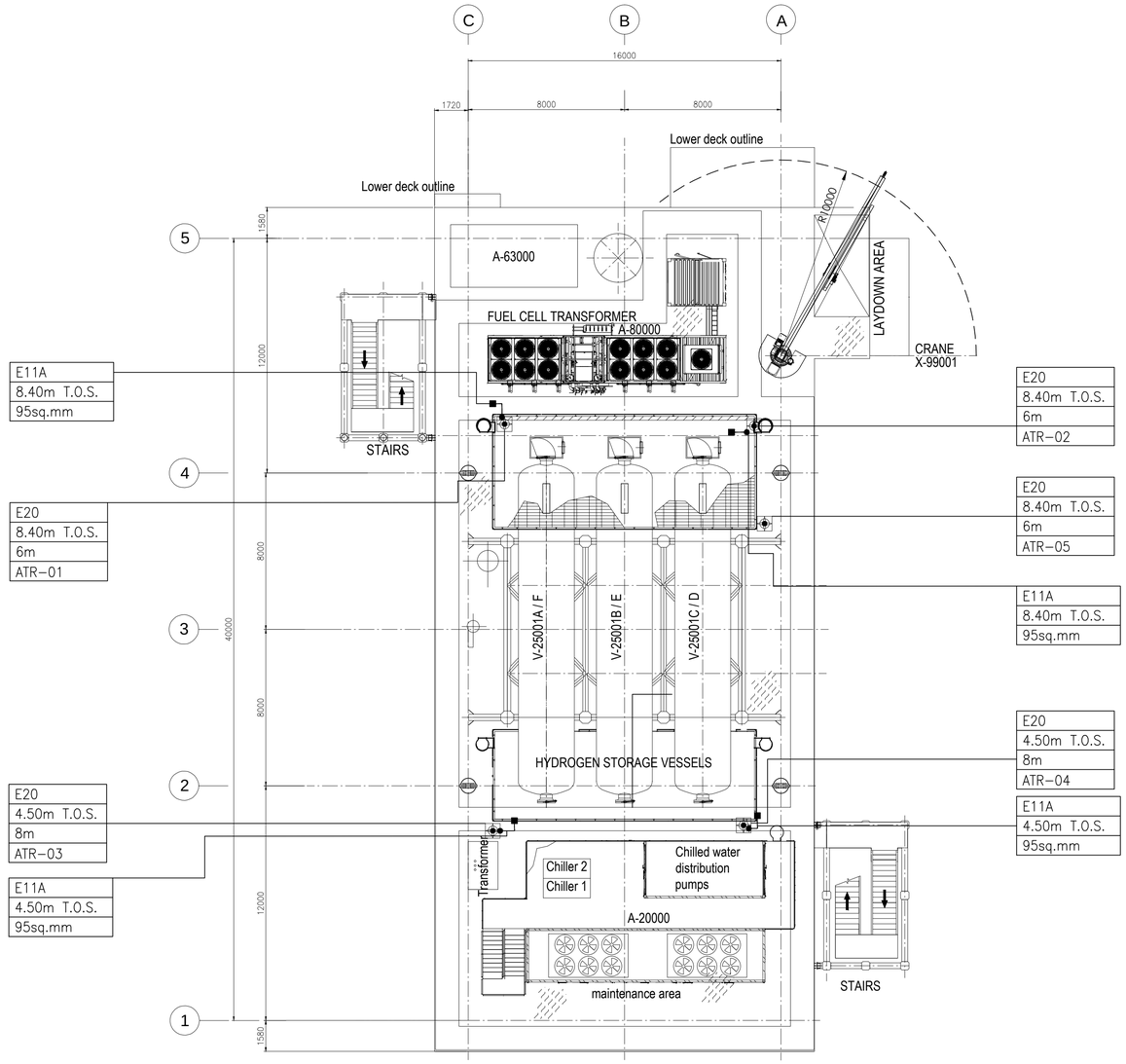
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DRAWN NLK	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 31/07/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20132	SHEET 002	REV. 02

SHEET 002 OF 003

File Name : 123A90-DDL-EL-DL-20132

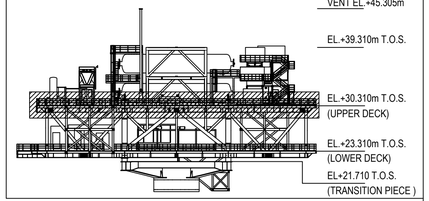
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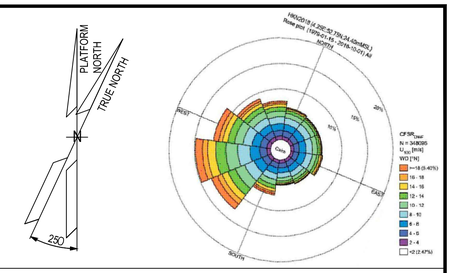
REV. 02



PLAN ON TOP DECK
EL+30.310 T.O.S.

KEY PLAN





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6. ALL INSTRUMENT RACK WILL BE EARTHED AS PER TYPICAL E05A.
7. EQUIPOTENTIAL BONDING GROUPING FOR BOLTED HANDRAILS ARE PROVIDED EVERY 3M FOR THE ENTIRE PERIMETER AS TYPICAL E16 AND WILL BE DEFINED DURING ASSEMBLY PHASE

LEGEND

- ■ EARTHING BOSS AISI316L
- ● COMPRESSION TYPE LUG TINNED COPPER
- ▲ THREADED STUD FOR EARTHING CONNECTION
- AIR TERMINATION ROD FOR LIGHTNING PROTECTION

TYP.	TYPICAL
ELE	ELEVATION
LENGTH	
TAG	

TYP.	TYPICAL
ELE	ELEVATION
SIZE	

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20100	ELECTRICAL EQUIPMENT LAYOUT - TOP DECK
123A90-DDL-EL-DD-20090	ELECTRICAL TYPICAL INSTALLATION DETAILS - EARTHING SYSTEM
123A90-DDL-EL-RE-20154	LIGHTNING PROTECTION SYSTEM CALCULATION REPORT
123A90-DDL-EL-DL-20118	LIGHTING & SOCKET LAYOUT - TOP DECK

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	15/09/25	PS	FMA/AMA	CGI	ASBUILT (ASB)
01	31/07/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	27/05/24	NLK	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
EARTHING & LIGHTNING LAYOUT
TOP DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN NLK	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 31/07/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20132	SHEET 003	REV. 02

SHEET 001 OF 002

File Name : 123A90-DDL-EL-DL-20132