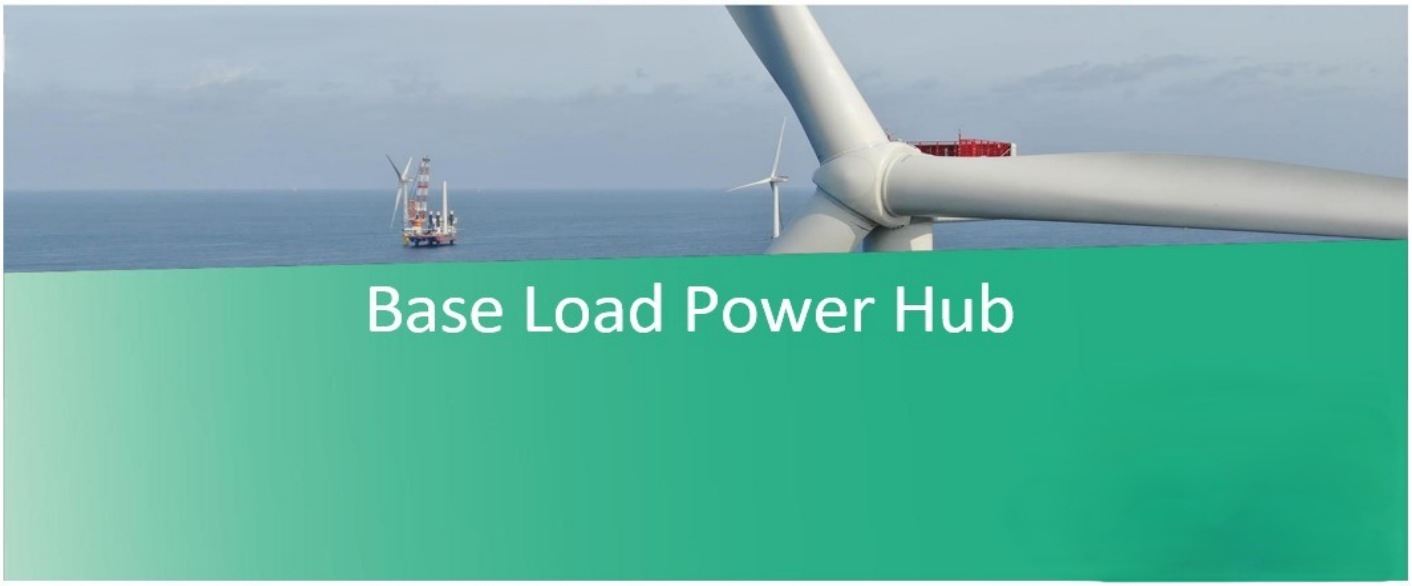
CROSSWIND

ROSETTI MARINO

PROVERLIS

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



MECHANICAL COMPLETION DOSSIER (ONSHORE)

SYSTEM	83 Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-55 Power Sockets

CROSSWIND	123A90 - HOLLANDSE KUST NOORD WIND PARK BLPH Project MECHANICAL COMPLETION DOSSIER INDEX	ROSETTI MARINO

Sub System N°:	83-55	Tick as appropriate	ONSHORE	O
Description:	Power Sockets		OFFSHORE	NA

1.	***READY FOR COMMISSIONING CERTIFICATE*** *Ready For Commissioning Certificate (RFC)*	O
2.	***CONSOLIDATED PUNCH LISTS*** *Cleared and Residual Items*	O
3.	***SYSTEM/SUB-SYSTEM LIMIT DRAWINGS*** *Mark-up drawings showing the limits of the relevant System/Sub-System*	O
4.	***MECHANICAL COMPLETION STATUS INDEX – BUILDING DISCIPLINE*** *Building Sub-System Status Index (Print out) and Check/Test sheets*	NA
5.	***MECHANICAL COMPLETION STATUS INDEX – ELECTRICAL DISCIPLINE*** *Electrical Sub-System Status Index (Print out) and Check/Test Sheets* *Hazardous Area Equipment Detailed Inspection*	O
6.	***MECHANICAL COMPLETION STATUS INDEX - INSTRUMENTAL DISCIPLINE*** *Instrumental Sub-System Status Index (Print out) and Check/Test Sheets*	NA
7.	***MECHANICAL COMPLETION STATUS INDEX - MECHANICAL DISCIPLINE*** *Mechanical SubSystem Status Index (Print out) and Check/Test Sheets*	NA
8.	***MECHANICAL COMPLETION STATUS INDEX - TELECOMMUNICATION DISCIPLINE*** *Telecommunication Sub-System Status Index (Print out) and Check/Test Sheets*	NA
9.	***MECHANICAL COMPLETION STATUS INDEX - HVAC DISCIPLINE*** *HVAC Sub-System Status Index (Print out) and Check/Test Sheets*	NA
10.	***MECHANICAL COMPLETION STATUS INDEX - PIPING DISCIPLINE*** *Piping Sub-System Status Index and Check/Test Sheets*	NA
11.	***MECHANICAL COMPLETION INDEX - SAFETY DISCIPLINE*** *Safety Sub-System Status Index (Print out) and Check/Test Sheets*	NA
12.	***FAT / VENDOR REPORTS*** *Fat reports issued by vendors and/or vendor reports*	NA
13.	***MECHANICAL COMPLETION CHANGES / MARK-UPS*** *A copy of the changes initiated during the Mechanical Completion process pertaining to the relevant Sub-System will be incorporated in this section*	NA

Note: Under the generic terminology “Building” are also covered the following disciplines: **Structural, Painting**

Under the generic terminology “Instrumental” is also covered the following discipline: **Fire & Gas**

ROSETTI MARINO

123A90 - HOLLANDSE KUST NOORD WIND PARK
BLPH Project

CROSSWIND

Ready For Commissioning (RFC) Certificate

COMPLETE	●	PARTIAL	

Revision:	2		Issued on:	2025-05-05	
System:	83	/	Main Power Distribution Low Voltage 440 V		
SubSystem:	83-55	/	Power Sockets		

1	COMPANY has, at its option and if required, reviewed the mechanical completion associated with the above-named system/sub-system of the SCOPE and observed that such functional sub-system has been brought into readiness for commencement of the associated pre-commissioning and commissioning activities, but for the outstanding punch list items, if any, attached and referred in this Certificate.
2	Issuance of this Certificate shall not release CONTRACTOR from any of his obligations, responsibilities or liabilities under the CONTRACT.
3	Mechanical Completion Status Index attached (per Discipline) Punch List report attached (Outstanding and Cleared)

PUNCH LIST	PENDING POINTS	
Note: All Category "A" Items must be cleared prior to issue a Ready For Commissioning (RFC) Certificate	A 0'	B 1

REMARKS: ONSHORE SOW completed, n. 1 outstanding tasks to be cleared in OFFSHORE phase.

	CONTRACTOR Construction Manager	**CONTRACTOR** Commissioning Manager	**COMPANY** Construction Lead (if required)	**COMPANY** Commissioning Lead (if required)
Name	Wolmer Borghi	Anthony Iveson	CPY NOT PRESENT	CPY NOT PRESENT
Date	2025-05-06	2025-05-12	2025-05-12	2025-05-12
Signature	PROVERLIS Digitaly signed by Wolmer Borghi 2025-05-06T09:49:09.616Z	PROVERLIS Digitaly signed by Anthony Iveson 2025-05-12T08:14:11.187Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2025-05-12T09:20:55.146Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2025-05-12T09:21:00.751Z

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 83-55 & process: MC

Electrical	83-55 Power Sockets						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
ESO-200N1-05-L1-01	Small Power Socket (Upper Deck)	ONSHORE	C10001852	CPX00	100	2024-12-31	RFC 1
ESO-200N1-05-L1-02	Small Power Socket (Upper Deck)	ONSHORE	C10001853	CPX00	100	2024-12-17	RFC 1
ESO-200N1-06-L2-01	Small Power Socket (Lower Deck)	ONSHORE	C10001854	CPX00	100	2024-12-12	RFC 1
ESO-200N1-06-L2-02	SMALL POWER SOCKET	ONSHORE	C10001855	CPX00	100	2024-12-05	RFC 1
ESO-200N1-06-L2-03	Small Power Socket (Below lower Deck)	ONSHORE	C10001861	CPX00	100	2025-04-30	RFC 2
P-ESO-200N1-05-L1-01	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	ONSHORE	C10000602	CPX09	100	2024-12-03	RFC 1
P-ESO-200N1-05-L1-02	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	ONSHORE	C10000604	CPX09	100	2024-12-31	RFC 1
P-ESO-200N1-06-L2-01	Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)	ONSHORE	C10000606	CPX09	100	2024-12-02	RFC 1
P-ESO-200N1-06-L2-02	Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)	ONSHORE	C10000608	CPX09	100	2024-12-05	RFC 1
P-ESO-200N1-06-L2-03	Small Power Socket JB (lower Deck) / Small Power Socket (Below lower Deck)	ONSHORE	C10001822	CPX09	100	2025-03-11	-
		OFFSHORE	C10004685	CPX09	0	-	-

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-55	Power Sockets

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30001969	A	ESO-200N1-05-L1-02 C10001853	Not enought threads are thightened between the lock nut and the cable gland body.	.		Lmussi 2024-12-17	2025-01-03	Ecarotenuto 2025-01-03	2025-01-03
C30001970	A	ESO-200N1-05-L1-02 C10001853	Earthing stud is too short and nut is not completely thightened.	.		Lmussi 2024-12-17	2025-01-02	Ecarotenuto 2025-01-02	2025-01-02
C30002260	A	P-ESO-200N1-05-L1-02 C10000604	Not enought threads are thightened between the lock nut and the cable gland body.	.		Lmussi 2024-12-31	2025-01-23	AAndreani 2025-01-23	2025-01-23
C30001119	B	P-ESO-200N1-06-L2-01 C10000606	Missing SS cable tags	.		Pschintu 2024-12-02	2025-02-04	Pschintu 2025-02-04	2025-02-04
C30001120	B	P-ESO-200N1-06-L2-01 C10000606	Missing core identification tags inside socket JB	.		Pschintu 2024-12-02	2025-02-26	Gtangianu 2025-02-26	2025-02-26
C30001182	B	P-ESO-200N1-05-L1-01 C10000602	Missing SS cable tag	.		Pschintu 2024-12-03	2025-02-04	Pschintu 2025-02-04	2025-02-04
C30001183	B	P-ESO-200N1-05-L1-01 C10000602	Missing core identification tag both side	.		Pschintu 2024-12-03	2025-02-25	APolo 2025-02-25	2025-02-25
C30001968	B	ESO-200N1-05-L1-02 C10001853	Plugs are installed without serrated washer	.		Lmussi 2024-12-17	2025-01-30	GBertuccelli 2025-01-30	2025-01-30
C30002252	B	ESO-200N1-05-L1-01 C10001852	Drainage valve is missing as per 123A90-DDL-EL-DS-20067 (c/w serrated washer).	.		Lmussi 2024-12-31	2025-01-14	Ecarotenuto 2025-01-14	2025-01-14

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-55	Power Sockets

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30002253	B	ESO-200N1-05-L1-01 C10001852	Missing indication on terminal block.	.		Lmussi 2024-12-31	2025-01-24	Lmussi 2025-01-24	2025-01-24
C30002254	B	P-ESO-200N1-05-L1-02 C10000604	On ESO-200N1-05-L1-01 side, SS cable tag is missing.	.		Lmussi 2024-12-31	2025-02-25	AAndreani 2025-02-25	2025-02-25
C30002255	B	P-ESO-200N1-05-L1-02 C10000604	On both JBs sides (ESO-200N1-05-L1-01 & ESO-200N1-05-L1-02) core identification tags are missing for all wires.	.		Lmussi 2024-12-31	2025-02-25	AAndreani 2025-02-25	2025-02-25
C30002258	B	P-ESO-200N1-05-L1-02 C10000604	MCTs are missing.	.		Lmussi 2024-12-31	2025-01-30	GBertuccelli 2025-01-30	2025-01-30
C30003444	B	DP-200N1-Q6 C10002853	Missing the socket ESO-200N1-06-L2-03 and the relative cable P-ESO-200N1-06-L2-03. See the attached.	Install the cable and the Socket.		MGirotti 2025-01-31			

Section 2 CONSOLIDATED PUNCH LISTS

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-55	Power Sockets

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30001969	A	ESO-200N1-05-L1-02 C10001853	Not enought threads are thightened between the lock nut and the cable gland body.	.		Lmussi 2024-12-17	2025-01-03	Ecarotenuto 2025-01-03	2025-01-03
C30001970	A	ESO-200N1-05-L1-02 C10001853	Earthing stud is too short and nut is not completely thightened.	.		Lmussi 2024-12-17	2025-01-02	Ecarotenuto 2025-01-02	2025-01-02
C30002260	A	P-ESO-200N1-05-L1-02 C10000604	Not enought threads are thightened between the lock nut and the cable gland body.	.		Lmussi 2024-12-31	2025-01-23	AAndreani 2025-01-23	2025-01-23
C30001119	B	P-ESO-200N1-06-L2-01 C10000606	Missing SS cable tags	.		Pschintu 2024-12-02	2025-02-04	Pschintu 2025-02-04	2025-02-04
C30001120	B	P-ESO-200N1-06-L2-01 C10000606	Missing core identification tags inside socket JB	.		Pschintu 2024-12-02	2025-02-26	Gtangianu 2025-02-26	2025-02-26
C30001182	B	P-ESO-200N1-05-L1-01 C10000602	Missing SS cable tag	.		Pschintu 2024-12-03	2025-02-04	Pschintu 2025-02-04	2025-02-04
C30001183	B	P-ESO-200N1-05-L1-01 C10000602	Missing core identification tag both side	.		Pschintu 2024-12-03	2025-02-25	APolo 2025-02-25	2025-02-25
C30001968	B	ESO-200N1-05-L1-02 C10001853	Plugs are installed without serrated washer	.		Lmussi 2024-12-17	2025-01-30	GBertuccelli 2025-01-30	2025-01-30
C30002252	B	ESO-200N1-05-L1-01 C10001852	Drainage valve is missing as per 123A90-DDL-EL-DS-20067 (c/w serrated washer).	.		Lmussi 2024-12-31	2025-01-14	Ecarotenuto 2025-01-14	2025-01-14

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-55	Power Sockets

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30002253	B	ESO-200N1-05-L1-01 C10001852	Missing indication on terminal block.	.		Lmussi 2024-12-31	2025-01-24	Lmussi 2025-01-24	2025-01-24
C30002254	B	P-ESO-200N1-05-L1-02 C10000604	On ESO-200N1-05-L1-01 side, SS cable tag is missing.	.		Lmussi 2024-12-31	2025-02-25	AAndreani 2025-02-25	2025-02-25
C30002255	B	P-ESO-200N1-05-L1-02 C10000604	On both JBs sides (ESO-200N1-05-L1-01 & ESO-200N1-05-L1-02) core identification tags are missing for all wires.	.		Lmussi 2024-12-31	2025-02-25	AAndreani 2025-02-25	2025-02-25
C30002258	B	P-ESO-200N1-05-L1-02 C10000604	MCTs are missing.	.		Lmussi 2024-12-31	2025-01-30	GBertuccelli 2025-01-30	2025-01-30
C30003444	B	DP-200N1-Q6 C10002853	Missing the socket ESO-200N1-06-L2-03 and the relative cable P-ESO-200N1-06-L2-03. See the attached.	Install the cable and the Socket.	The socket is installed and the cable was tested. Ref. C10004960 (task offshore)	MGirotti 2025-01-31	MGirotti 2025-06-03	MGirotti 2025-06-03	2025-06-03

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001970

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001853	1.4 Discipline	Electrical
1.2 Item	ESO-200N1-05-L1-02	Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Earthing stud is too short and nut is not completely thightened.

Name: Luca Mussi
Date: 2024-12-17
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Luca Mussi
3.4 Activity code	MC Mechanical Completion	Date	2024-12-17
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Eleonora Carotenuto
Date: 2025-01-02
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:



ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002252

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001852	1.4 Discipline	Electrical
1.2 Item	ESO-200N1-05-L1-01	Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Drainage valve is missing as per 123A90-DDL-EL-DS-20067 (c/w serrated washer).

Name: Luca Mussi

Date: 2024-12-31

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	2024-12-31
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

TDS is superseded by TBE and Vendor GA, drain valve not required

Name: Eleonora Carotenuto

Date: 2025-01-14

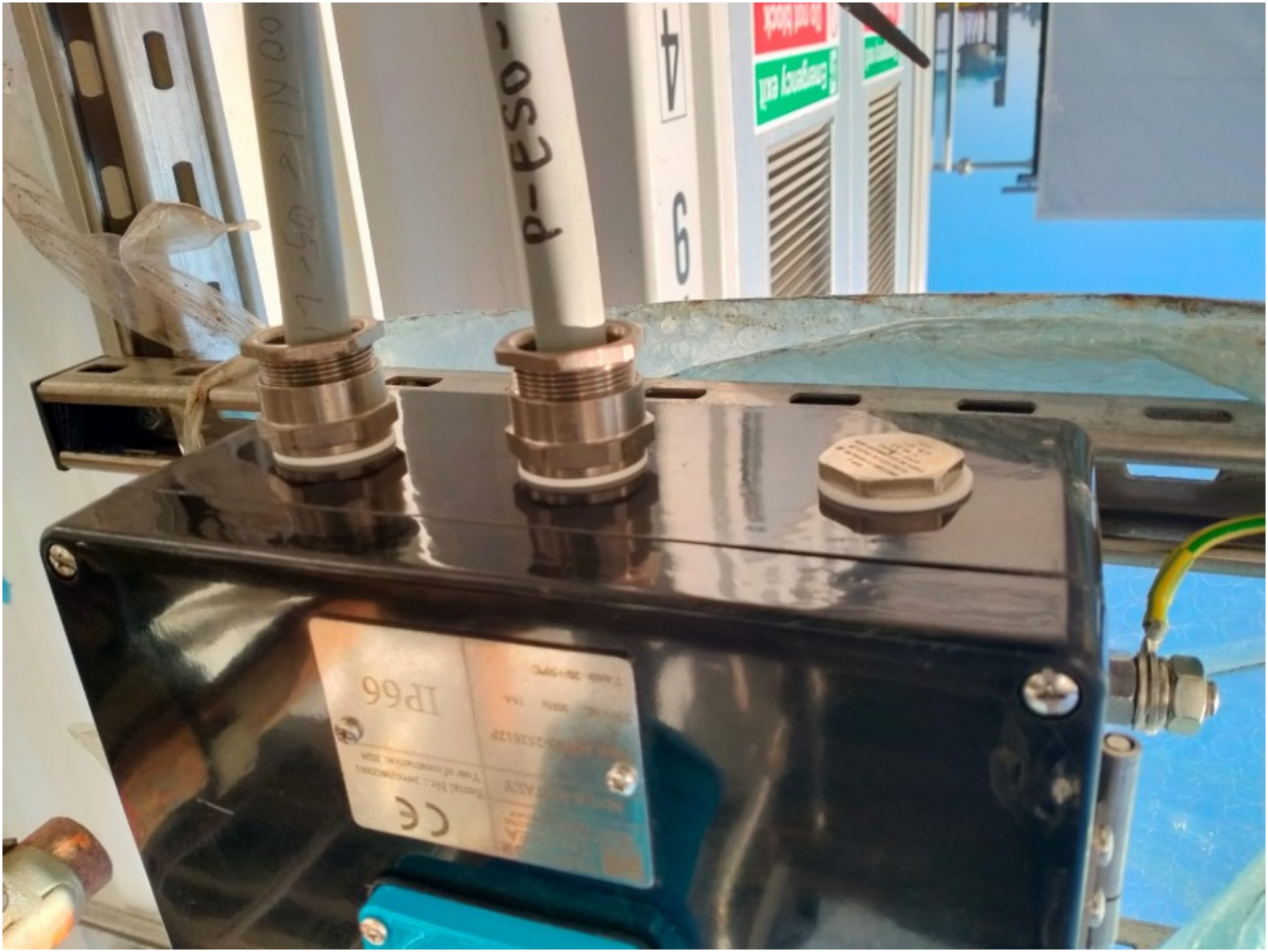
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6- CLEARANCE APPROVAL

Name:

Date:

Signature:


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ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002253

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001852	1.4 Discipline	Electrical
1.2 Item	ESO-200N1-05-L1-01	Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Missing indication on terminal block.

Name: Luca Mussi

Date: 2024-12-31

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	2024-12-31
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Luca Mussi

Date: 2025-01-23

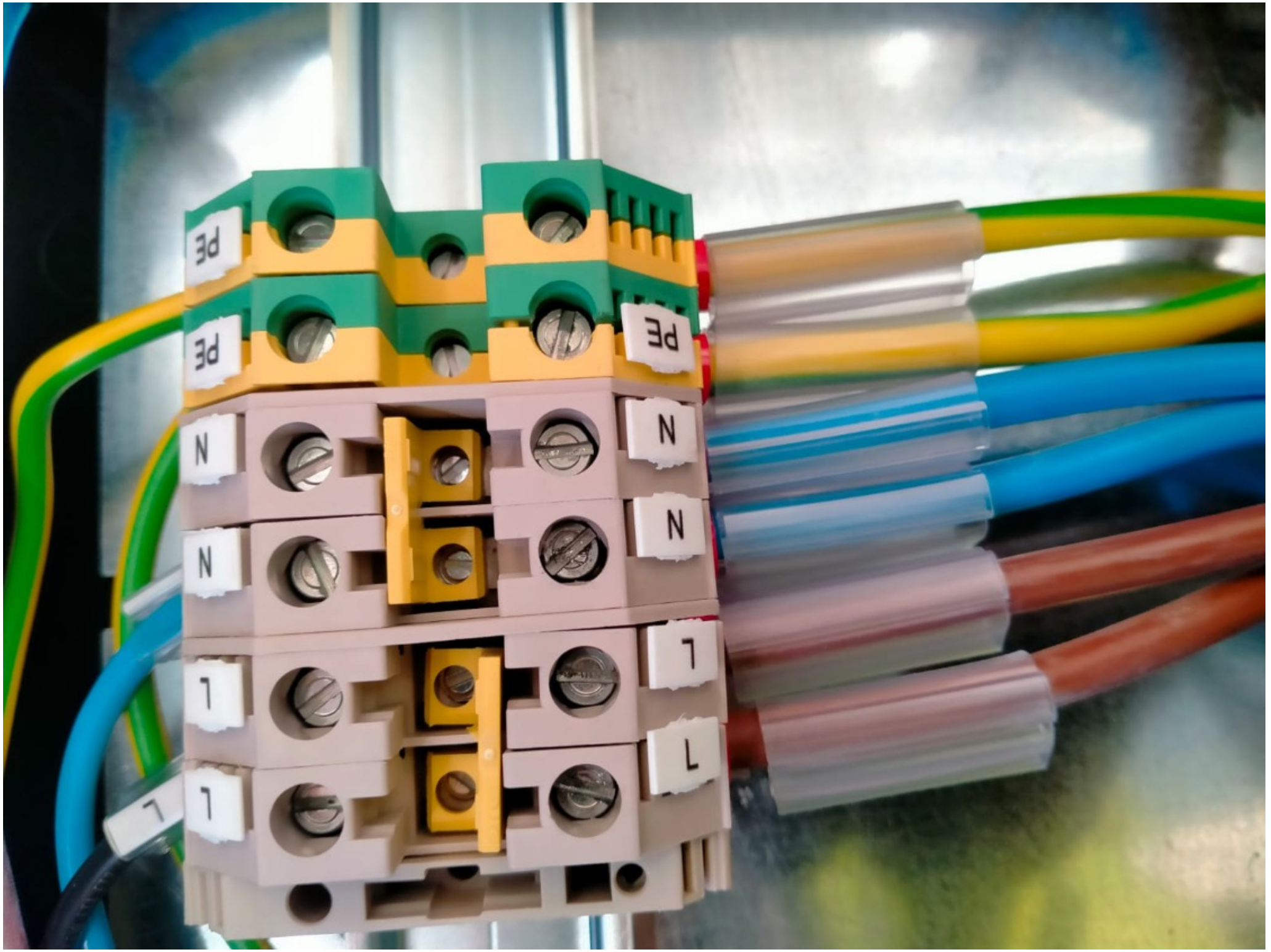
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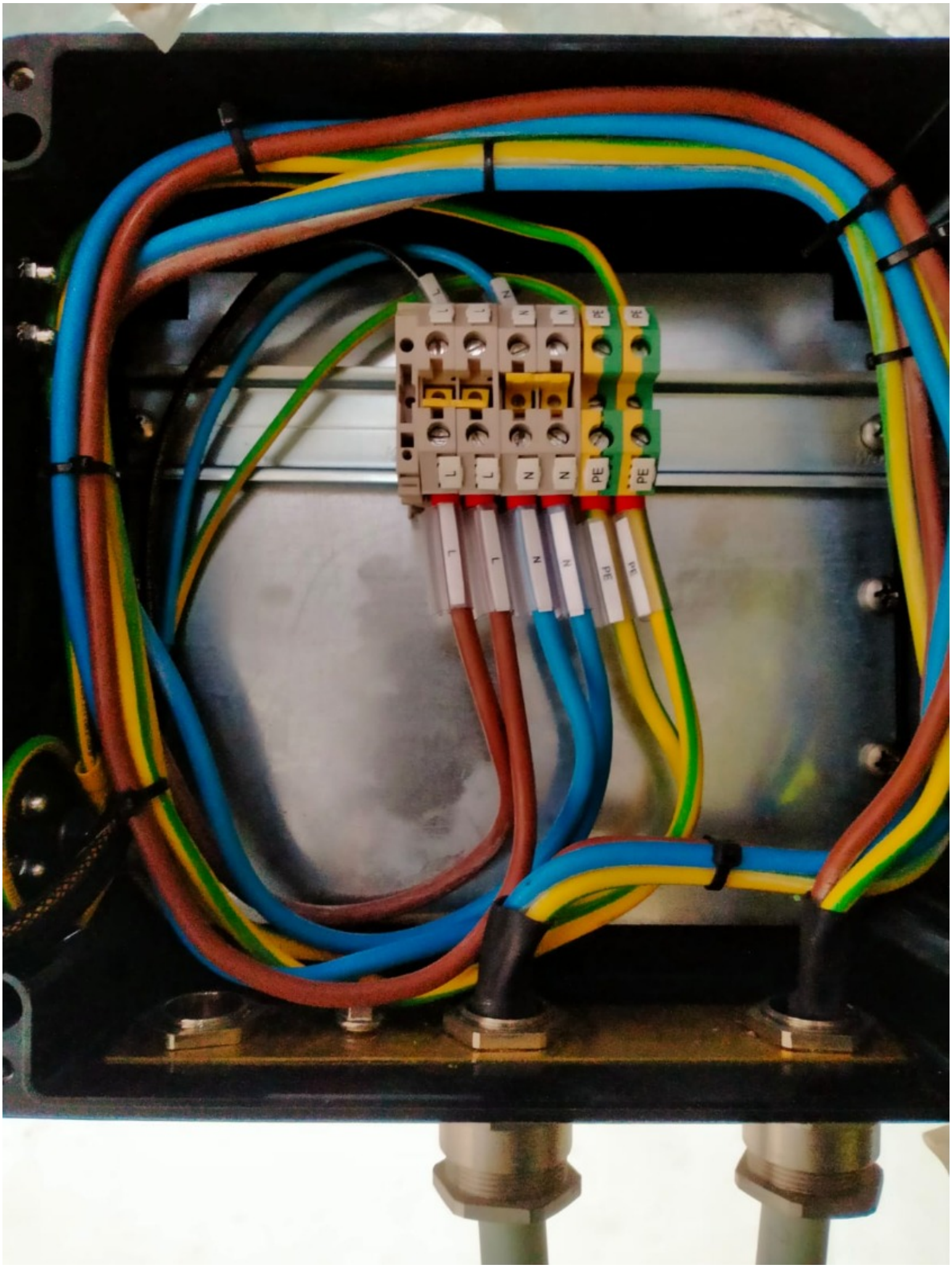
6- CLEARANCE APPROVAL

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Date:

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ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002254

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000604	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-05-L1-02		Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)
1.3 Subsystem	83-55		Power Sockets

2 - OBSERVATION

On ESO-200N1-05-L1-01 side, SS cable tag is missing.

Name: Luca Mussi

Date: 2024-12-31

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	2024-12-31
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

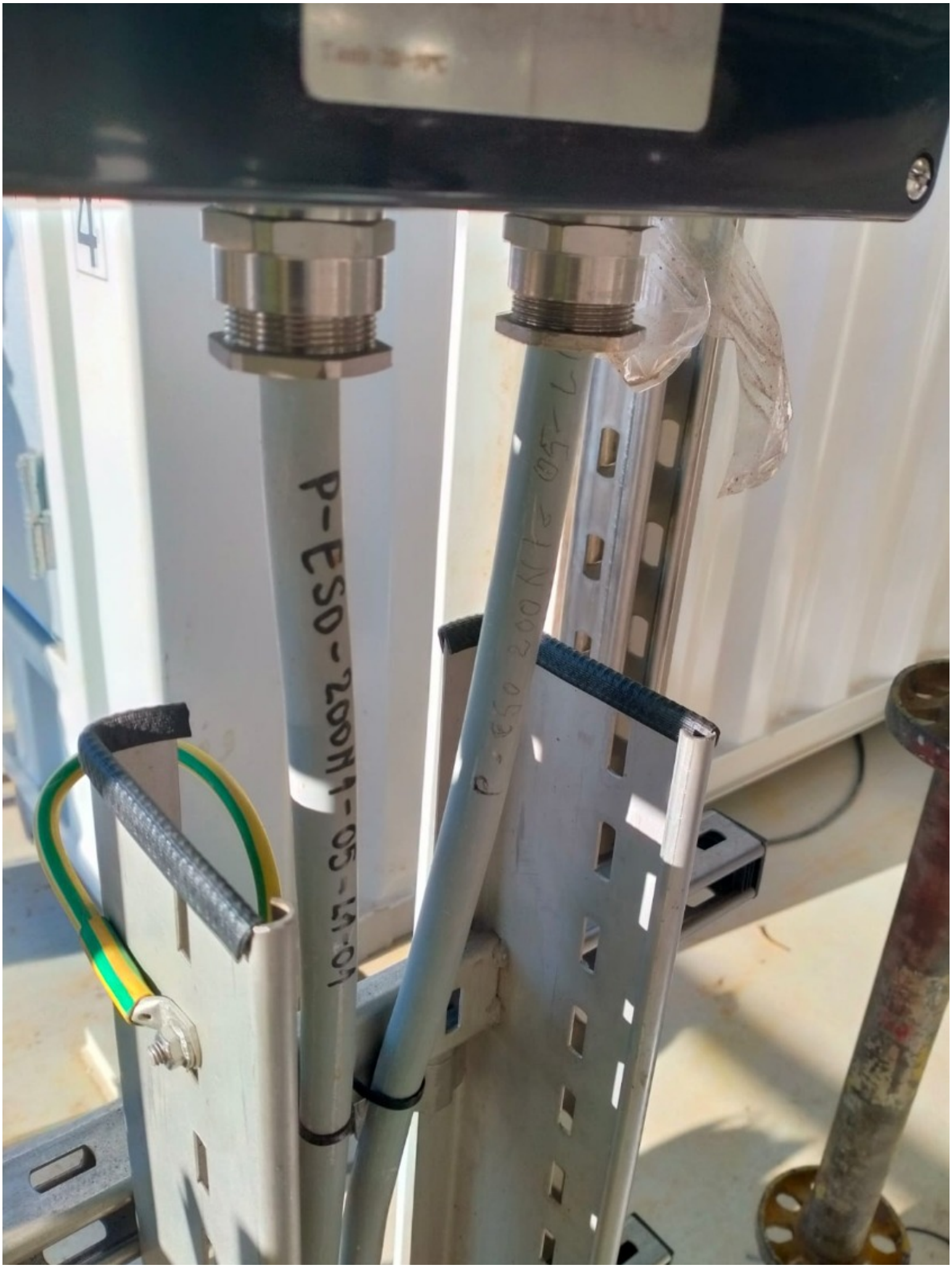
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6- CLEARANCE APPROVAL

Name:

Date:

Signature:


P-ESO-200M-05-14-01

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002255

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000604	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-05-L1-02	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

On both JBs sides (ESO-200N1-05-L1-01 & ESO-200N1-05-L1-02) core identification tags are missing for all wires.

Name: Luca Mussi

Date: 2024-12-31

Signature:

3 - DEFECT ASSESSMENT

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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	2024-12-31
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

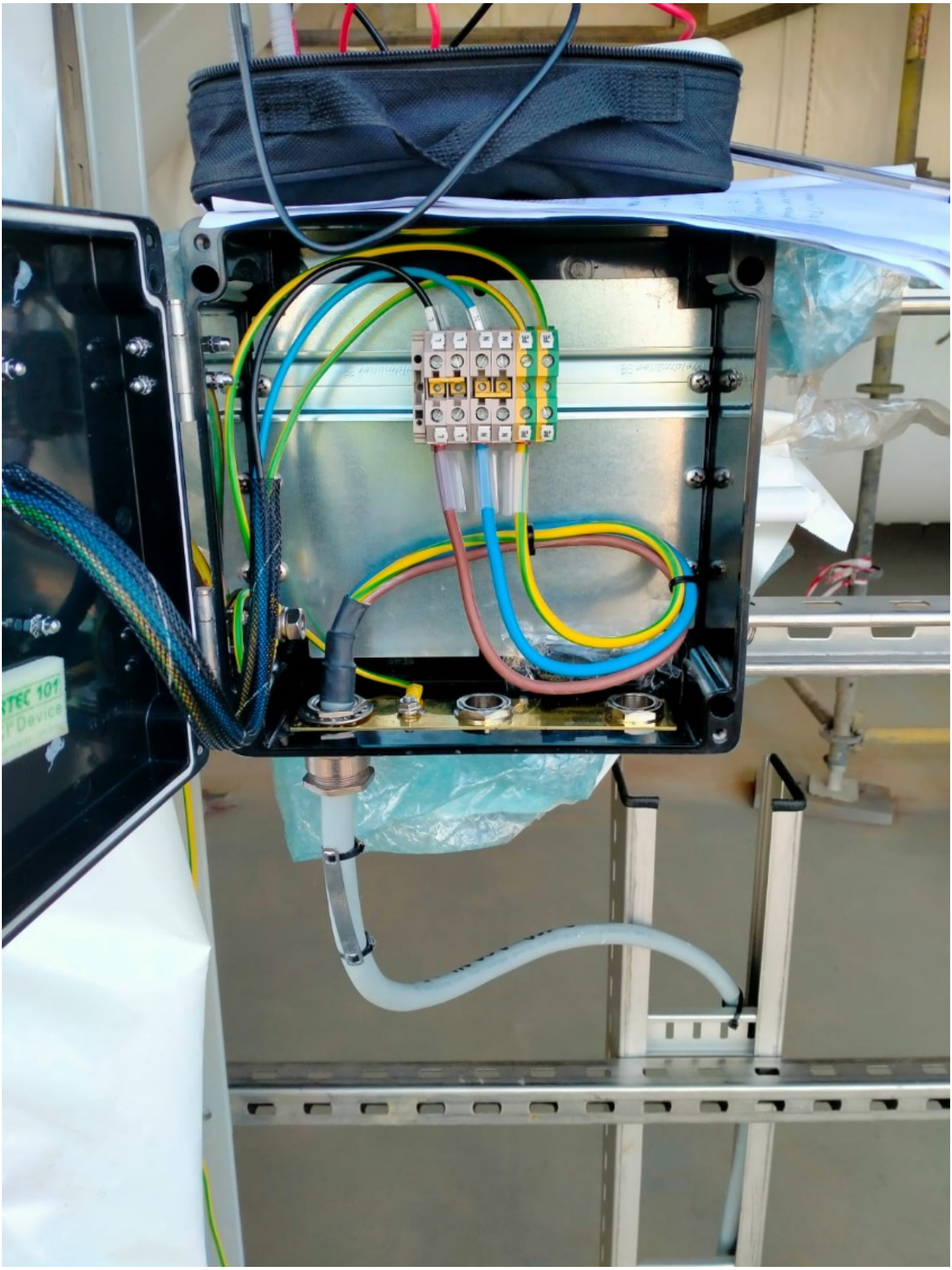
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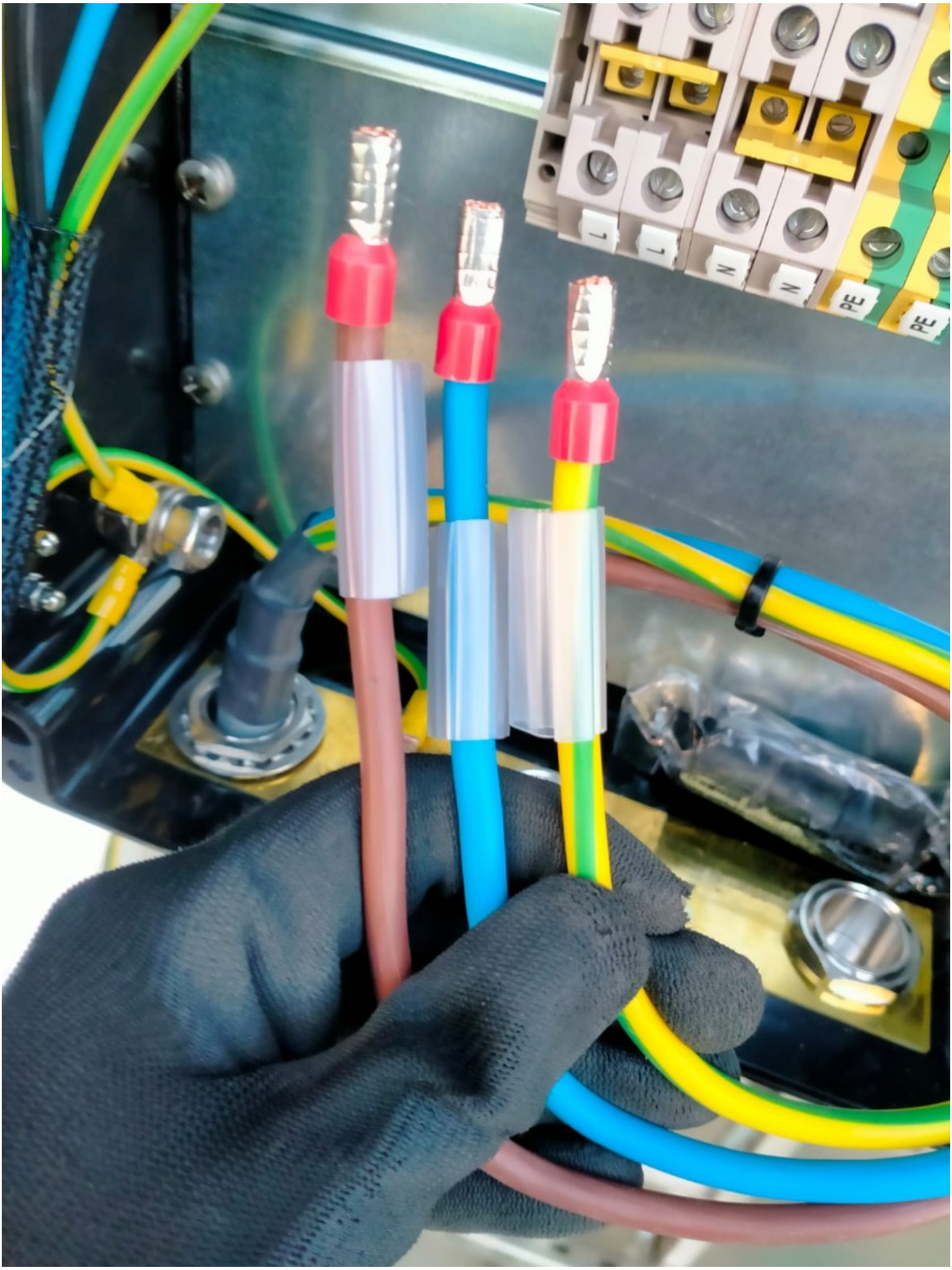
6- CLEARANCE APPROVAL

Name:

Date:

Signature:




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ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002258

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000604	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-05-L1-02	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

MCTs are missing.

Name: Luca Mussi

Date: 2024-12-31

Signature:

3 - DEFECT ASSESSMENT

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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	2024-12-31
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-30

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


UN3082



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30002260

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000604	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-05-L1-02		Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)
1.3 Subsystem	83-55		Power Sockets

2 - OBSERVATION

Not enought threads are thightened between the lock nut and the cable gland body.

Name: Luca Mussi

Date: 2024-12-31

Signature:

3 - DEFECT ASSESSMENT

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3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Luca Mussi
3.4 Activity code	MC Mechanical Completion	Date	2024-12-31
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Andrea Andreani

Date: 2025-01-23

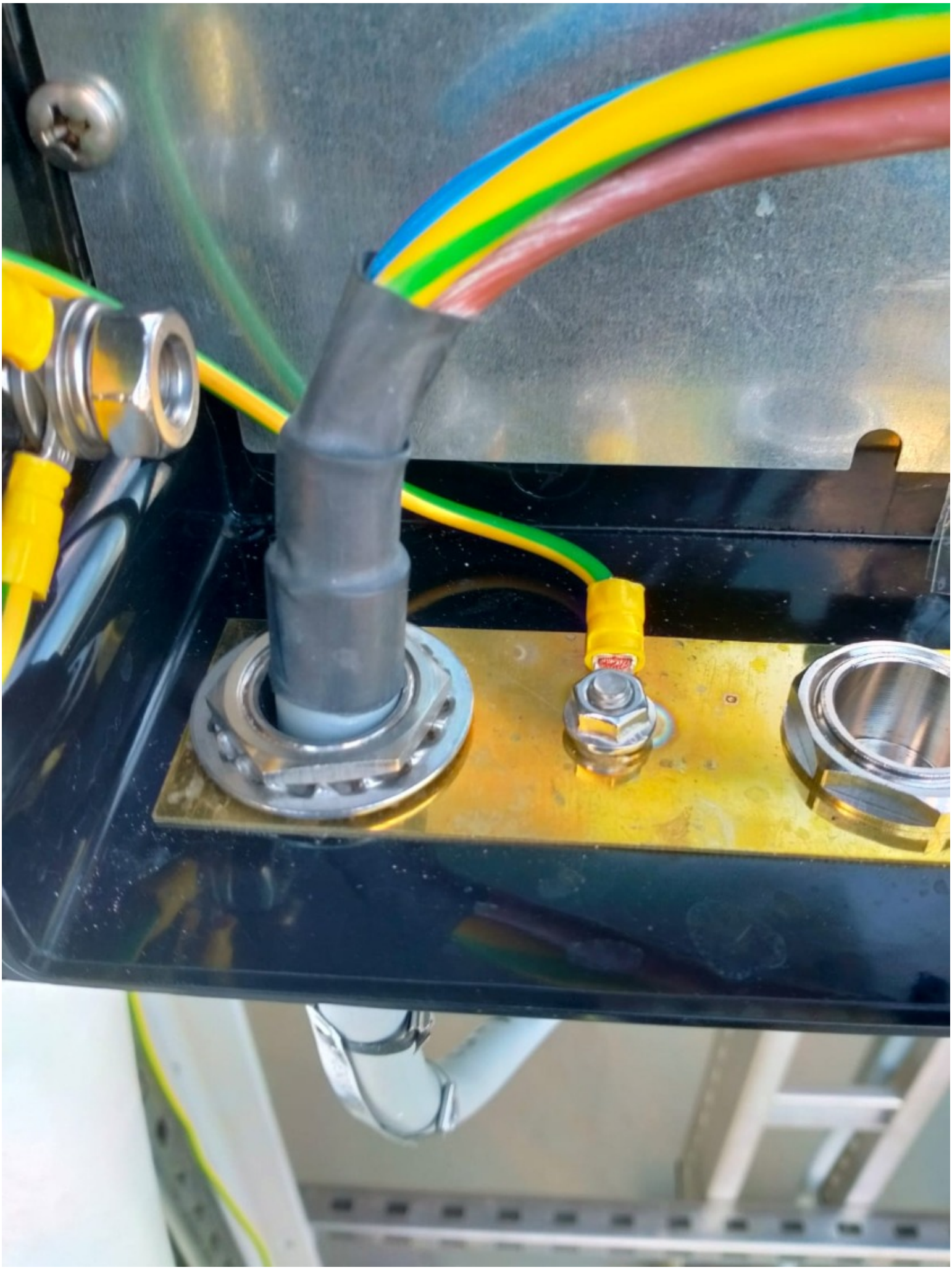
Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003444

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002853	1.4 Discipline	Electrical
1.2 Item	DP-200N1-Q6	POWER SOCKET - DP-200N1-Q6	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Missing the socket ESO-200N1-06-L2-03 and the relative cable P-ESO-200N1-06-L2-03.
See the attached.

Name: Mattia Girotti
Date: 2025-01-31
Signature:

3 - DEFECT ASSESSMENT

3.1 Corrective action proposal: Install the cable and the Socket.

3.2 Material required:

3.3 Priority: B PL B

3.4 Activity code: COMM Commissioning

3.5 Action by: RM_CONSTR RM

Name: Mattia Girotti
Date: 2025-01-31
Signature:

4 - PERFORMED ACTION

The socket is installed and the cable was tested.
Ref. C10004960 (task offshore) for the final test

Name: Mattia Girotti
Date: 2025-06-03
Signature:

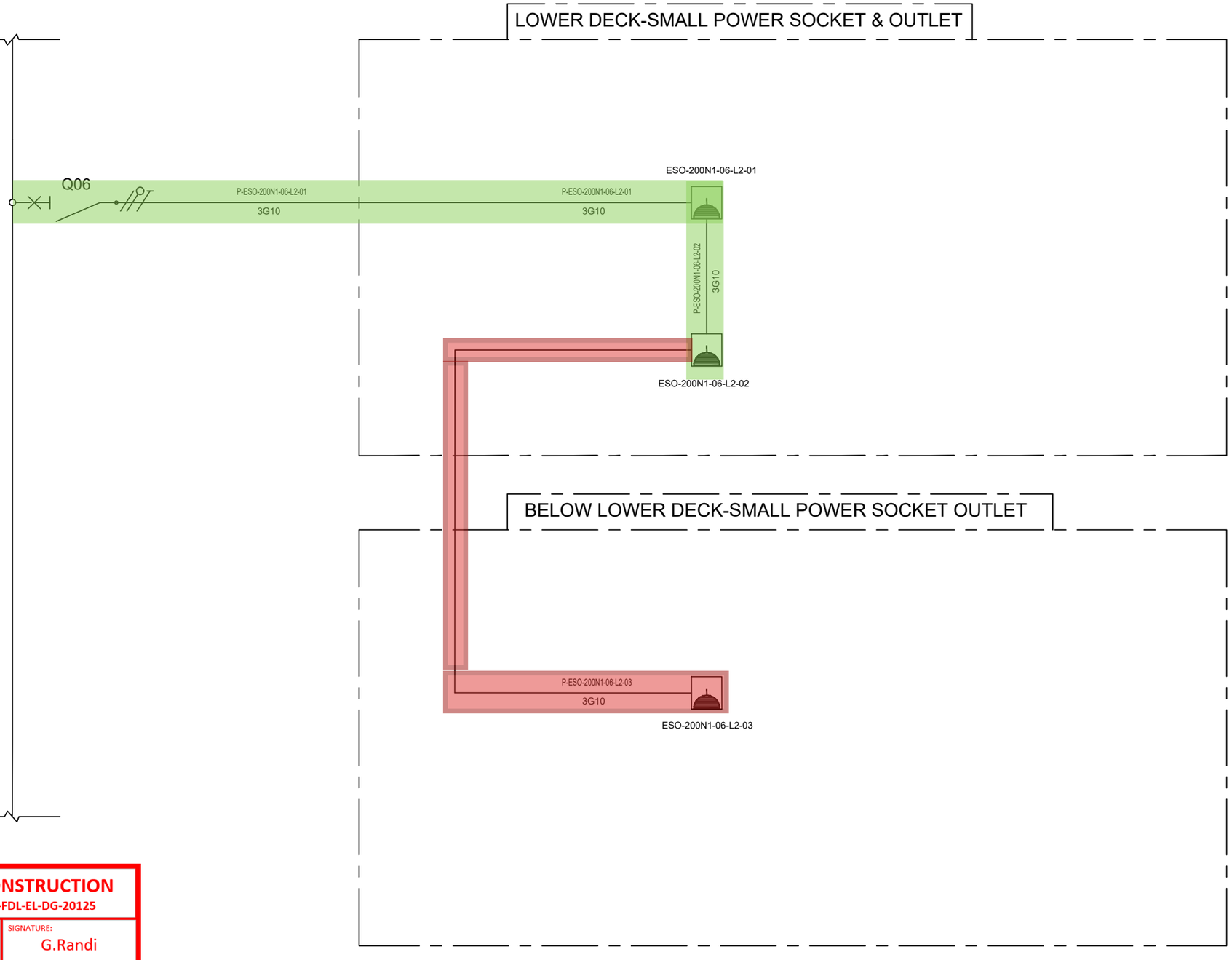
5 - CLEARANCE CHECK

Name: Mattia Girotti
Date: 2025-06-03
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

LIGHTING & SMALL POWER DB BoP - DP-200N1



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_B	20/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
LOWER DECK & BELOW LOWER DECK-SMALL POWER SOCKET

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DG-20125

SHEET 008

REV. 01

File Name : 123A90-DDL-EL-DG-20125

F.to UNI A3: 420mmx297mm

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001119

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000606	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-06-L2-01		Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)
1.3 Subsystem	83-55		Power Sockets

2 - OBSERVATION

Missing SS cable tags

Name: Paolo Schintu

Date: 2024-12-02

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Paolo Schintu
3.4 Activity code	MC Mechanical Completion	Date	2024-12-02
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Paolo Schintu

Date: 2025-02-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001120

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000606	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-06-L2-01		Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)
1.3 Subsystem	83-55		Power Sockets

2 - OBSERVATION

Missing core identification tags inside socket JB

Name: Paolo Schintu

Date: 2024-12-02

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Paolo Schintu
3.4 Activity code	MC Mechanical Completion	Date	2024-12-02
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Giovanni Tangianu

Date: 2025-02-26

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001182

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000602	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-05-L1-01	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Missing SS cable tag

Name: Paolo Schintu

Date: 2024-12-03

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Paolo Schintu
3.4 Activity code	MC Mechanical Completion	Date	2024-12-03
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Paolo Schintu

Date: 2025-02-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001183

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000602	1.4 Discipline	Electrical
1.2 Item	P-ESO-200N1-05-L1-01	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Missing core identification tag both side

Name: Paolo Schintu

Date: 2024-12-03

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Paolo Schintu
3.4 Activity code	MC Mechanical Completion	Date	2024-12-03
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:

ROSETTI MARINO CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001968

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001853	1.4 Discipline	Electrical
1.2 Item	ESO-200N1-05-L1-02	Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Plugs are installed without serrated washer

Name: Luca Mussi

Date: 2024-12-17

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	2024-12-17
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-30

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001969

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001853	1.4 Discipline	Electrical
1.2 Item	ESO-200N1-05-L1-02	Small Power Socket (Upper Deck)	
1.3 Subsystem	83-55	Power Sockets	

2 - OBSERVATION

Not enought threads are thightened between the lock nut and the cable gland body.

Name: Luca Mussi

Date: 2024-12-17

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Luca Mussi
3.4 Activity code	MC Mechanical Completion	Date	2024-12-17
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Duplicate point. Refer to C30002260

Name: Eleonora Carotenuto

Date: 2025-01-03

Signature:

6- CLEARANCE APPROVAL

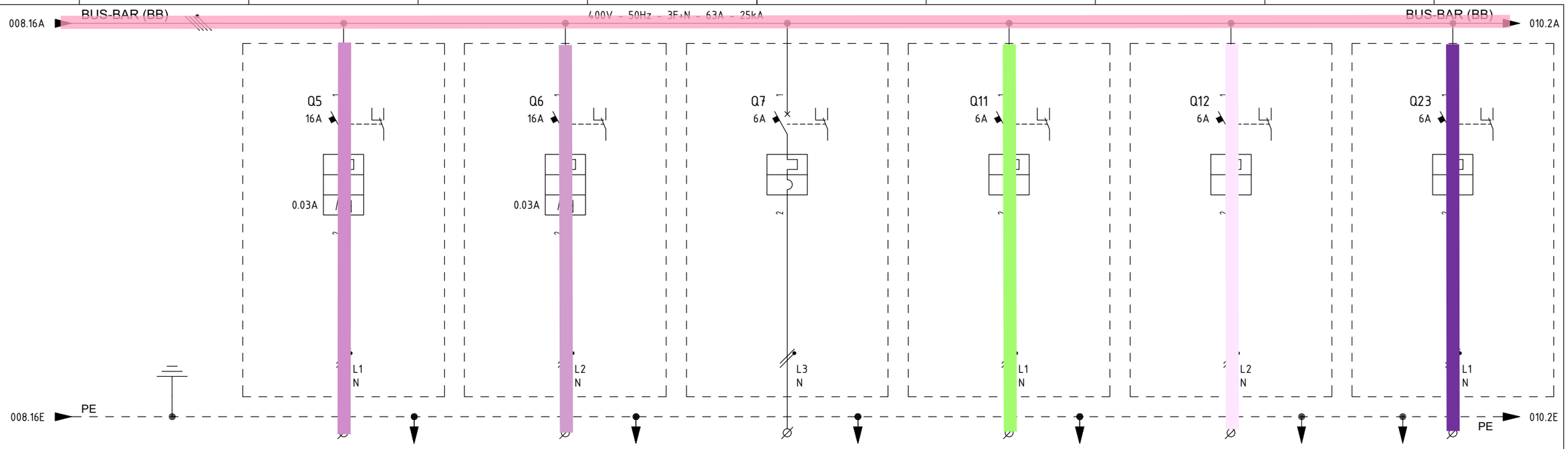
Name:

Date:

Signature:



Section 3 SYSTEM,SUB-SYSTEM LIMIT DRAWINGS



ITEM			1	ESO-200N1-05-L1-01	ESO-200N1-06-L2-01	-	ESH-200N1-11-L1-01	ESH-200N1-12-L2-01	B400-SIS-001
UTILITY			2	SMALL POWER SOCKET (UPPER DECK)	SMALL POWER SOCKET (LOWER DECK)	SPARE	SPACE HEATERS JB - WIND FARM SUBSEA CABLE	SPACE HEATERS JB - SOLAR SUBSEA CABLE	SIS-CONTROLLER AND I/O CABINET - AUXILIARY
CUBICLE			3	+03	+03	+03	+03	+03	+03
RATED POWER | RATED CURRENT			4/5	3 KW | 14.49 A	3 KW | 14.49 A	0.726 KW | 3.95 A	0.25 KW | 1.14 A	0.25 KW | 1.14 A	0.5 KW | 2.72 A
TYPICAL FUNCTIONAL			6	-	-	-	-	-	-
CIRCUIT BREAKER (ABB)	TYPE		7	S302P-C16 + DDA202 AC-25/0.03	S302P-C16 + DDA202 AC-25/0.03	S302P-C6	S302P-C6	S302P-C6	S302P-C6
	VERSION		8	2P / MINIATURE	2P / MINIATURE	2P / MINIATURE	2P / MINIATURE	2P / MINIATURE	2P / MINIATURE
	TRIP UNITS		9	In=16A - Curve C / Id=0.03A Class AC	In=16A - Curve C / Id=0.03A Class AC	In=6A - Curve C	In=6A - Curve C	In=6A - Curve C	In=6A - Curve C
	Icu	KA	10	25kA	25kA	25kA	25kA	25kA	25kA
OVERLOAD	L	Range A	11	-	-	-	-	-	-
		Range t	12	-	-	-	-	-	-
SEL. SHORT-CIRCUIT	S	Range A	13	-	-	-	-	-	-
		Range t	14	-	-	-	-	-	-
INST. SHORT-CIRCUIT	I	Range A	15	-	-	-	-	-	-
		Range t	16	-	-	-	-	-	-
EARTH FAULT PROTECTION	G	Range A	17	-	-	-	-	-	-
		Range t	18	-	-	-	-	-	-
CONTACTOR (ABB)			19	-	-	-	-	-	-
THERMAL OVERLOAD RELAY (ABB)			20	-	-	-	-	-	-
SURGE ARRESTERS (DHENN)			21	-	-	-	-	-	-
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-	-	-	-	-	-
FUSE HOLDER (ABB)			23	-	-	-	-	-	-
TWILIGHT SWITCH (ABB)			24	-	-	-	-	-	-
VOLTMETER (FRER)			25	-	-	-	-	-	-
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE		26	-	-	-	-	-	-
	PERFORMANCE/CLASS		27	-	-	-	-	-	-
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE		28	-	-	-	-	-	-
	PERFORMANCE/CLASS		29	-	-	-	-	-	-
POWER TERM. BLOCK (CABUR)		Type/mm²	30	SCREW / 10	SCREW / 10	SCREW / 4	SCREW / 4	SCREW / 4	SCREW / 4
POWER CONDUCTOR		mm²	31	3G10	3G10	3G2.5	3G2.5	3G2.5	3G2.5

SUBSYSTEM 83-55

SUBSYSTEM 83-55

SUBSYSTEM 81-00

SUBSYSTEM 83-10

SUBSYSTEM 79-00

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
3	05/07/2024	Santinelli	Flamminio	Sigismondi	Accepted for construction (AFC)
2	24/04/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
1	15/03/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)
0	08/02/2024	Santinelli	Flamminio	Sigismondi	Issued for review (IFR)

=

+

DWG n° : 231298/SD/13

Item n° : PF1002888/101

IMESA ELECTRICAL ENGINEERING

CROSSWIND

ROSETTI MARINO

TITLE : "DP-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-00013

SHEET 009

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1723002197-EL-DG-00013 Rev. 03

Section 4 MECHANICAL COMPLETION STATUS INDEX - BUILDING DISCIPLINE

NOT APPLICABLE

Section 5 MECHANICAL COMPLETION STATUS INDEX - ELECTRICAL DISCIPLINE

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 83-55 & process: MC & discipline : E

Electrical	83-55 Power Sockets						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
ESO-200N1-05-L1-01	Small Power Socket (Upper Deck)	ONSHORE	C10001852	CPX00	100	2024-12-31	RFC 1
ESO-200N1-05-L1-02	Small Power Socket (Upper Deck)	ONSHORE	C10001853	CPX00	100	2024-12-17	RFC 1
ESO-200N1-06-L2-01	Small Power Socket (Lower Deck)	ONSHORE	C10001854	CPX00	100	2024-12-12	RFC 1
ESO-200N1-06-L2-02	SMALL POWER SOCKET	ONSHORE	C10001855	CPX00	100	2024-12-05	RFC 1
ESO-200N1-06-L2-03	Small Power Socket (Below lower Deck)	ONSHORE	C10001861	CPX00	100	2025-04-30	RFC 2
P-ESO-200N1-05-L1-01	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	ONSHORE	C10000602	CPX09	100	2024-12-03	RFC 1
P-ESO-200N1-05-L1-02	Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)	ONSHORE	C10000604	CPX09	100	2024-12-31	RFC 1
P-ESO-200N1-06-L2-01	Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)	ONSHORE	C10000606	CPX09	100	2024-12-02	RFC 1
P-ESO-200N1-06-L2-02	Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)	ONSHORE	C10000608	CPX09	100	2024-12-05	RFC 1
P-ESO-200N1-06-L2-03	Small Power Socket JB (lower Deck) / Small Power Socket (Below lower Deck)	ONSHORE	C10001822	CPX09	100	2025-03-11	-
		OFFSHORE	C10004685	CPX09	0	-	-

ITEM	Tag	P-ESO-200N1-05-L1-01	: Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	LD_B-200/LD
TASK	code	C10000602		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

CABLE DATA

Type: Cu Cl.2/EPR/LSZH | Cores/Size mm²: 3G10 mm2 | Color: GREY

From: DP-200N1 | To: ESO-200N1-05-L1-01

1	Confirm cable is as specified in project cable schedule	OK
2	Visual Check cable physical integrity.	OK
3	Check is installed in accordance with layout drawing (segregation, distance…).	OK
4	Check cable is supported and fixed to rack according to project specification.	Note
5	Check bending radius is within the specified limits.	OK
6	Confirm cable glands suit for cable type, correctly mounted and tightened.	OK
7	Check gland plate for single core cables is non ferrous (non -magnetic).	NA
8	Confirm cable labelling is in accordance with specifications.	PL
9	Check cable is correctly loomed and segregated in accordance with specification.	OK
10	Check cable earthing against lastest drawings.	OK
11	Check cores marking are in accordance with termination diagram	PL
12	Check terminations are in accordance with latest termination diagram	OK
13	If required produce Red Line Mark Up for "AS BUILT"	

ROSETTI MARINO PROVERLIS CROSSWIND

ITEM	Tag	P-ESO-200N1-05-L1-01	: Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	LD_B-200/LD
TASK	code	C10000602		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

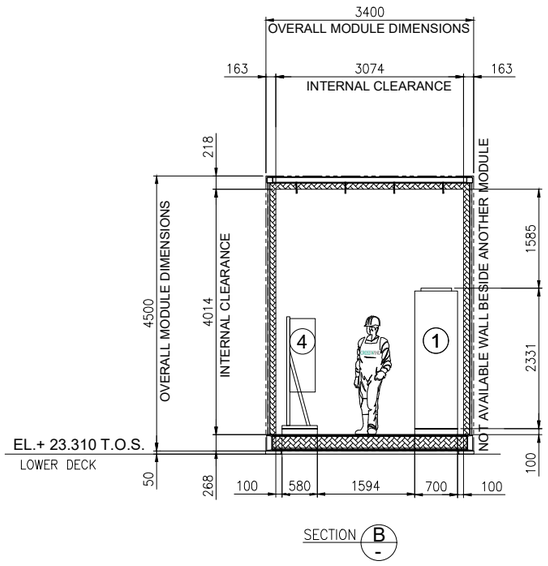
CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0,6	
6		PH 2	0,6	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,6	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

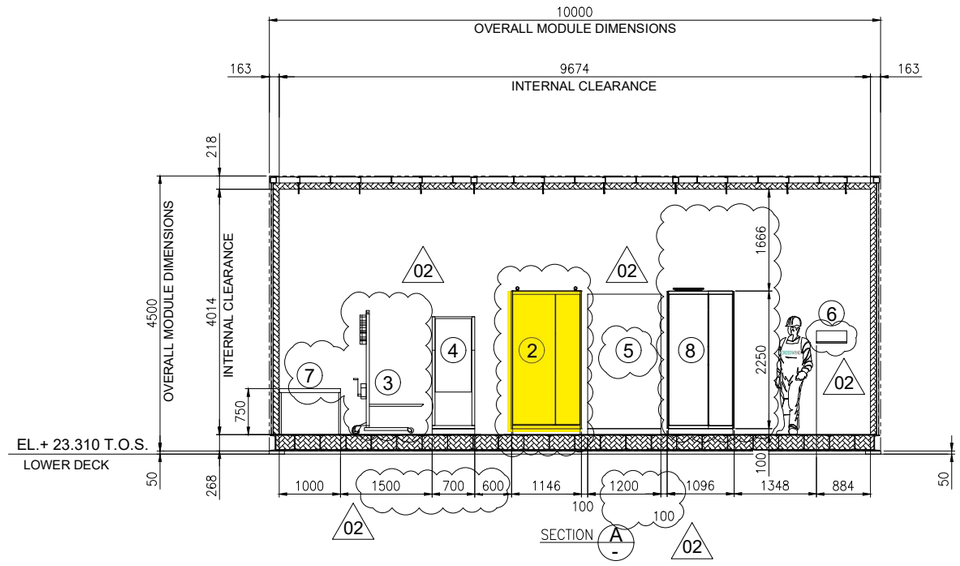
Comments: Nota 4: refer to PL C30000679

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Francesco Zucca	Paolo Schintu	
Date	2024-11-29	2024-12-03	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-11-29T10:31:21.429Z	PROVERLIS Digitaly signed by Paolo Schintu 2024-12-03T14:07:33.958Z	

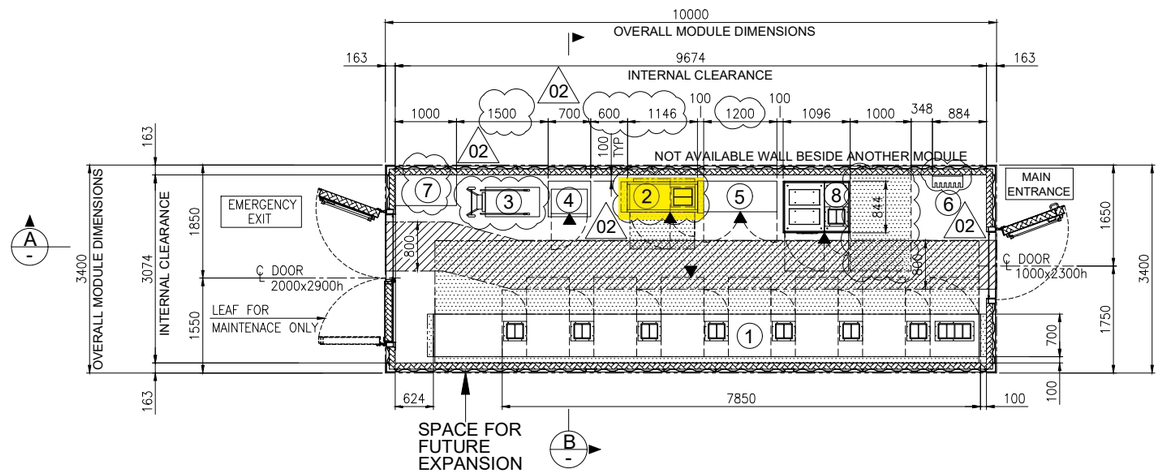
DRAWING NO. 123A90-DDL-EL-DL-20105 | REV. 02



SECTION B



SECTION A



A

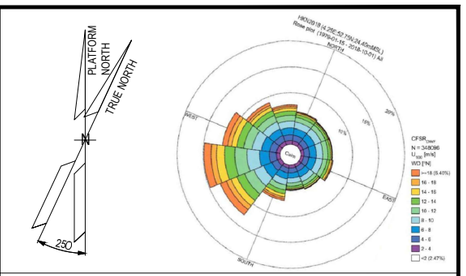
B

EQUIPMENT LAYOUT
"B-200" LV (400V) SWITCHGEAR ROOM
BOTTOM PLAN

1

EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	NOTE
1	SG-200N1	400V SWITCHGEAR	7850	700	2331	
2	DP-200N1	DISTRIBUTION BOARD FOR LIGHTING AND SMALL POWER B.O.P.	1146	520	2250	
3	-	SERVICE TROLLEY FOR 400V SWITCHGEAR	1034	490	2030	
4	CN-200N1	ICCP PANEL	700	580	1830	
5	B200-HSB-001	DISTRIBUTION & HVAC PANEL - LV ROOM	1200	600	1900	02
6	-	TOOL BOX	495	200	200	
7	-	TABLE	1000	500	750	
8	SG-200D2	ACB PANEL FOR SOLAR PACKAGE	1096	844	2294	



NOTES

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DELETED.
3. DOCUMENT VALID ONLY FOR ELECTRICAL COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.
4. FOR OTHER ITEMS, CORRECT LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND DEDICATED PROJECT DOCUMENTATION.
5. HEIGHT OF ALL PANELS IN THE EQUIPMENT LIST TABLE IS WITHOUT THE BASE FRAME (100mm)

02

LEGEND

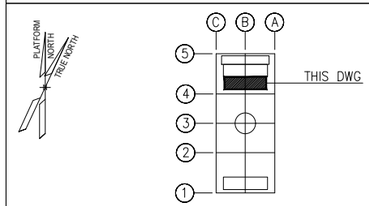
U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR - WIDTH 800mm.
_____ MAINTENANCE AREA - VENDOR REQUIREMENT
_____ SWITCHGEAR ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

REFERENCES

DOCUMENT TITLE	DOCUMENT NUMBER
SG-200N1 GENERAL ARRANGEMENT DRAWING	1723002197-EL-DA-00007
SG-200D2 GENERAL ARRANGEMENT DRAWING	1723002197-EL-DA-00008
DP-200N1 GENERAL ARRANGEMENT DRAWING	1723002197-EL-DA-00009
AC UPS – GENERAL ARRANGEMENT AND DIMENSIONAL DRAWINGS	1724000372-EL-DA-00004
AC UPS – BATTERY LAYOUT INTERCONNECTING DIAGRAM	1724000372-EL-DG-00011
B-200 -GENERAL ARRANGEMENT DRAWINGS - E&I SHELTER	1724000049-AR-DA-00015
ICCC PANEL GENERAL ARRANGEMENT DRAWING	144671-CORR-TF-FAB-DWG-0003

02

KEY PLAN



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20105**

REV.:	DATE:	SIGNATURE:
2_A	08/08/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	27/05/2024	FMO	LMA/AMA	LMA/MDO	ACCEPTED FOR CONSTRUCTION (AFC)
01	26/03/2024	GPA	LMA/AMA	LMA/MDO	ISSUE FOR REVIEW (IFR)
00	08/11/2023	DSF	CB/AMA	OYFO/MDO	ISSUE FOR REVIEW (IFR)

CROSSWIND | ROSETTI MARINO

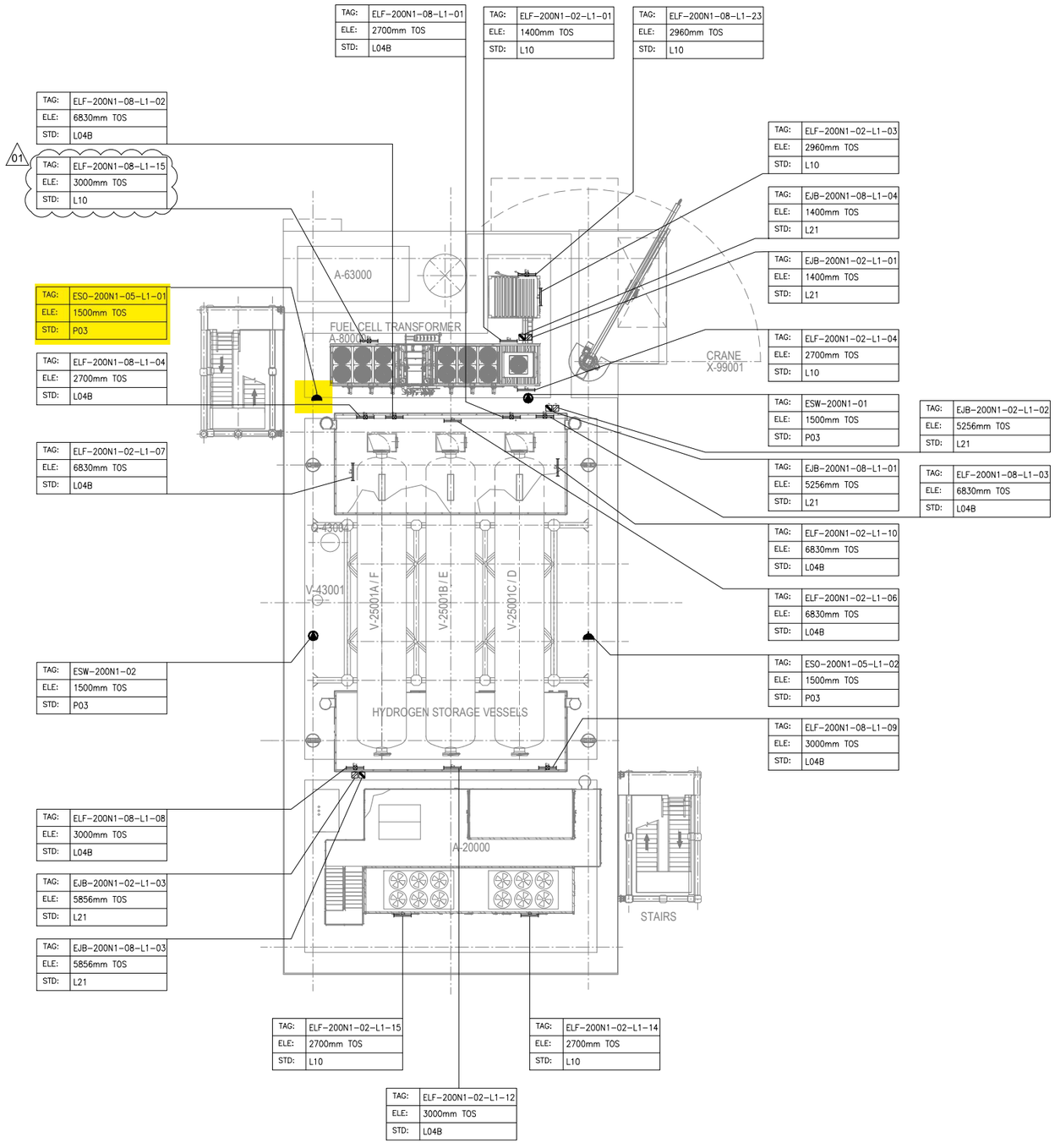
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL EQUIPMENT LAYOUT
LV SWITCHROOM

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:50
DRAWN FMO	CHECKED LMA/AMA	APPROVED LMA/MDO	DATE 27/05/2024
A1	DRAWING NO. 123A90-DDL-EL-DL-20105	SHEET 001	REV. 02

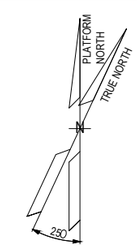
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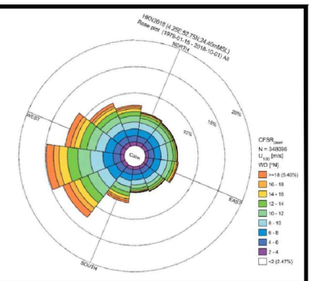
DRAWING NO. 123A90-DDL-EL-DL-20118

REV. 01



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





NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20118**

REV.:	DATE:	SIGNATURE:
1_B	22/10/24	G.Randi

ROSETTI MARINO SpA

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-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	28/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – TOP DECK

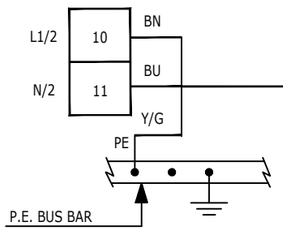
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 01/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20118	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20118

FROM	TO

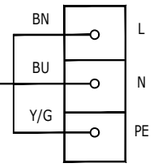
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +01/Q2

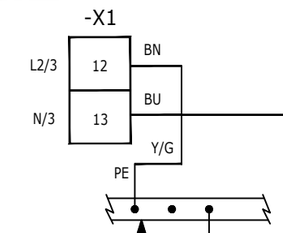


P-EJB-200N1-02-L1-01
3G4 mm²

DESCRIPTION: NORMAL LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-02-L1-01

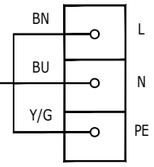


CUBICLE/CB: +02/Q3

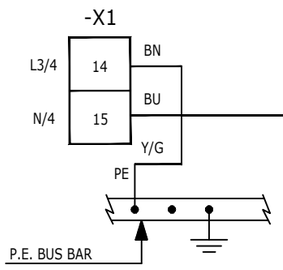


P-EJB-200N1-03-L2-01
3G4 mm²

DESCRIPTION: NORMAL LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-03-L2-01

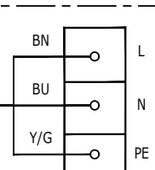


CUBICLE/CB: +02/Q4

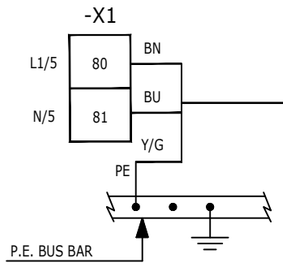


P-EJB-200N1-04-L3-01
3G4 mm²

DESCRIPTION: NORMAL LIGHTING - STAIRS
TAG NUMBER: EJB-200N1-04-L3-01

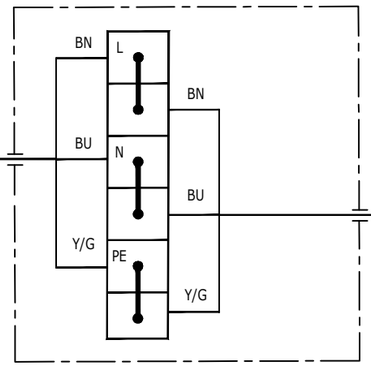


CUBICLE/CB: +03/Q5



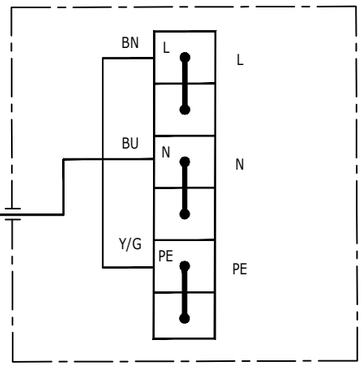
P-ESO-200N1-05-L1-01
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER: ESO-200N1-05-L1-01



P-ESO-200N1-05-L1-02
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER: ESO-200N1-05-L1-02



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20149**

REV.:	DATE:	SIGNATURE:
2_B	26/11/24	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

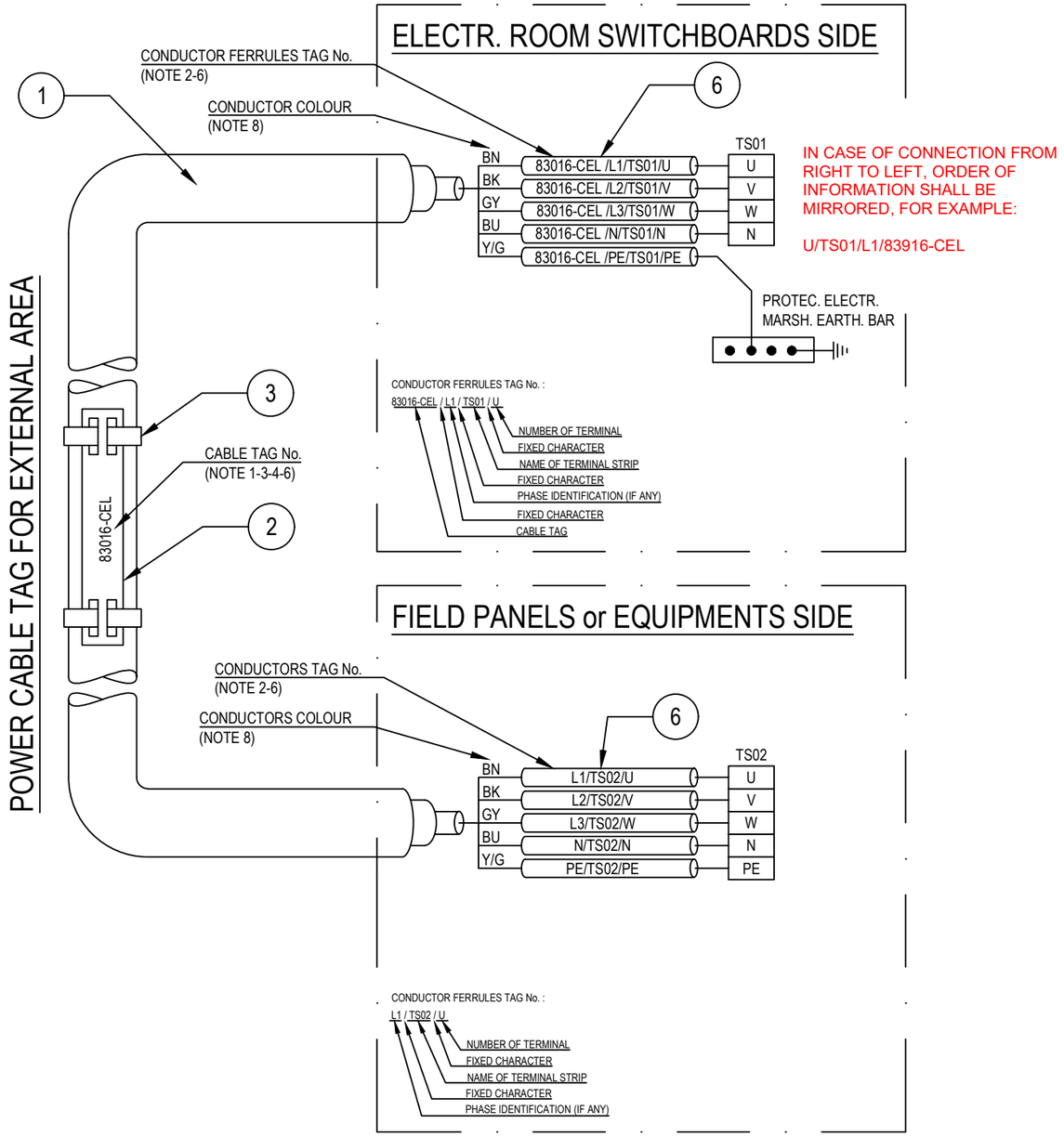
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 045 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02

C02



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	UNARMOURED CABLE				
2	CABLE TAG FOR EXTERNAL AREA	HDG/SS			NOTE 1 NOTE 4
3	TIE FOR CABLE TAG IN EXTERNAL AREA	HDG/SS			
4	CABLE TAG FOR INTERNAL AREA	PVC			NOTE 1 NOTE 5
5	TIE FOR CABLE TAG IN INTERNAL AREA	NYLON 6.6			
6	CORE FERRULES	PVC			

NOTES:

1) ALL CABLES SHALL BE IDENTIFIED AT EACH TERMINATION AND EACH SIDE OF ANY OBSTACLE (E.G. CABLE TRANSIT ON WALLS INSIDE SHELTER AND FLOOR DECK CROSSING, BY THEIR RESPECTIVE TAGS/NUMBERS, AS INDICATED ON THE CABLE SCHEDULE.
CABLE IDENTIFICATION SHALL BE ALSO DONE BELOW AND IN THE SWITCHBOARD CABLE COMPARTMENT.

2) CABLE CORE FERRULES SHALL BE FITTED AT EVERY TERMINATION. THESE FERRULES SHALL BE OF ENGRAVED PLASTIC SLIP ON, INTERLOCKED AND SELF GRIP TYPE.

3) ON CABLE TRAYS OR LADDERS, CABLES SHALL BE IDENTIFIED AT EACH END, AND EVERY 25 METERS.

4) THE CABLE TAG FOR EXTERNAL AREA SHALL DONE BY 316L STAINLESS STEEL LABELS, TAG (H=5mm) SHALL BE LASER PRINTED PREFERABLY OR EMBOSSED, LABEL HELD BY TWO 316L STAINLESS STEEL TIES.

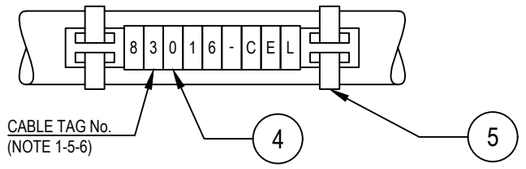
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

7) WITHIN TECHNICAL BUILDING, PROTECTIVE CONDUCTOR SHALL BE TAGGED BETWEEN FOLLOWING ITEMS:
- PANEL (SWITCHBOARD, SWITCHGEAR, DISTRIBUTION BOARD, ETC) AND EARTH BAR
- EARTH BAR AND EARTH BOSS

8) ONLY IF NECESSARY, SHRINK TUBES OF THE APPROPRIATE COLOR WILL BE INSTALLED TO COVER THE WRONG CONDUCTOR COLOR, THIS WILL BE PERFORMED IN EACH SIDE OF THE CABLES WHERE NECESSARY.

POWER CABLE TAG FOR INTERNAL AREA



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
CABLES INSTALLATION SYSTEM IDENTIFICATION FOR POWER CABLES

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

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DD-20092	007	02

F.to UNI A3: 420mmx297mm

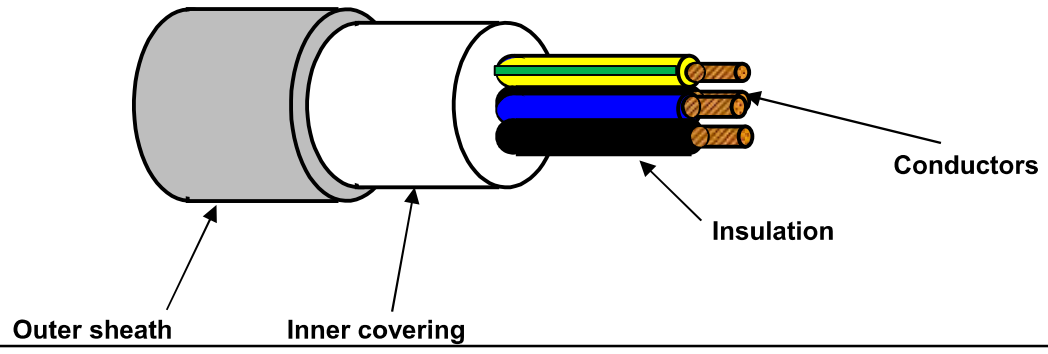
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ESO-200N1-05-L1-01	Cable	EL	VFC	123A90-DDL-EL-LIS-20148						DP-200N1	LV 0,4 / 0,23 kV Distribution Switchgear	Lower Deck (B-200)	ESO-200N1-05-L1-01	Small Power Socket 16A	Upper Deck	ELECV04-3G10	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G10mm² - Grey	M25	n.a.			T1_M25_Single				L-450-101-LVT-030 / L-600-101-LVT-020 / L-600-101-LVT-018 / L-600-101-LVT-017 / E-MCT-201 / L-750-101-LVT-011 / L-450-101-LVT-008 / L-150-101-LVT-106 / E-MCT-U13

FLEI s.r.l.

Cu Cl.2/EPR/LSZH 0,6/1 KV

3G10 - L.V. POWER CABLE - Flame Retardant



TECHNICAL FEATURES

Conductors :	**STRANDED** plain/bare annealed copper wires	IEC 60228 Class 2
Insulation :	EPR compound, quality to IEC 60092.360, Nominal Thickness 1,0 mm	
Cores colour code :	**Brown - Blue - Yellow/Green**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not Required	
Total Assembling :	Cores layed up with optimal lay length	
Overall Wrapping:	Not required	
Drain wire :	Not required	
Overall Shield:	Not required	
Inner covering :	Extruded LSZH compound, Average Thickness 1,0 mm	
Inner covering color code:	**Black or Natural**	
Armour :	Not required	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G10 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(17,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10	(in fixed installation)
Voltage test :	3,5 kV a.c. for 5' (Between Cores)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 630 MΩ x Km (@ 20°C)	
Applicable Standards		
Design Guidelines :	**IEC 60092.353**	
ON COMPLETE CABLE		
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance	IEC 61034.2 (LT ≥ 60%)	
Temperature Range :		
ON INSULATION	(max +90°C)	(max continuous operation temperature of conductors)
	(max +250°C)	(max conductors temperature during short-circuit for 5 seconds)
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C)	(in fixed installation)
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner covering together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	29/03/2024	Messa			
Checked :	29/03/2024	Spaccasassi			
Approved :	29/03/2024	Cucinotta			

The data provided, lending assent for the treatment, will be used to the sense of the article 13 of of the Regulation (UE) 2016/679, also through outsiders, in order to allow the realization of the fulfilments informatives, administrative, commercial and accounting related to the contractual relationship. Integral copy of the informative could be requested at our offices.

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ITEM	Tag	P-ESO-200N1-05-L1-02	: Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	UD
TASK	code	C10000604		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

CABLE DATA

Type: Cu Cl.2/EPR/LSZH | Cores/Size mm²: 3G10 mm2 | Color: GREY

From: ESO-200N1-05-L1-01 | To: ESO-200N1-05-L1-02

1	Confirm cable is as specified in project cable schedule	OK
2	Visual Check cable physical integrity.	OK
3	Check is installed in accordance with layout drawing (segregation, distance…).	OK
4	Check cable is supported and fixed to rack according to project specification.	PL
5	Check bending radius is within the specified limits.	OK
6	Confirm cable glands suit for cable type, correctly mounted and tightened.	PL
7	Check gland plate for single core cables is non ferrous (non -magnetic).	NA
8	Confirm cable labelling is in accordance with specifications.	PL
9	Check cable is correctly loomed and segregated in accordance with specification.	OK
10	Check cable earthing against lastest drawings.	OK
11	Check cores marking are in accordance with termination diagram	PL
12	Check terminations are in accordance with latest termination diagram	OK
13	If required produce Red Line Mark Up for "AS BUILT"	

ITEM	Tag	P-ESO-200N1-05-L1-02	: Small Power Socket JB(Upper Deck) / Small Power Socket (Upper Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	UD
TASK	code	C10000604		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

	CONTINUITY			
5	CORE CONTINUITY Ω	PH 1	0,2	
6		PH 2	0,2	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		0,2	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		NA	
	INSULATION			
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

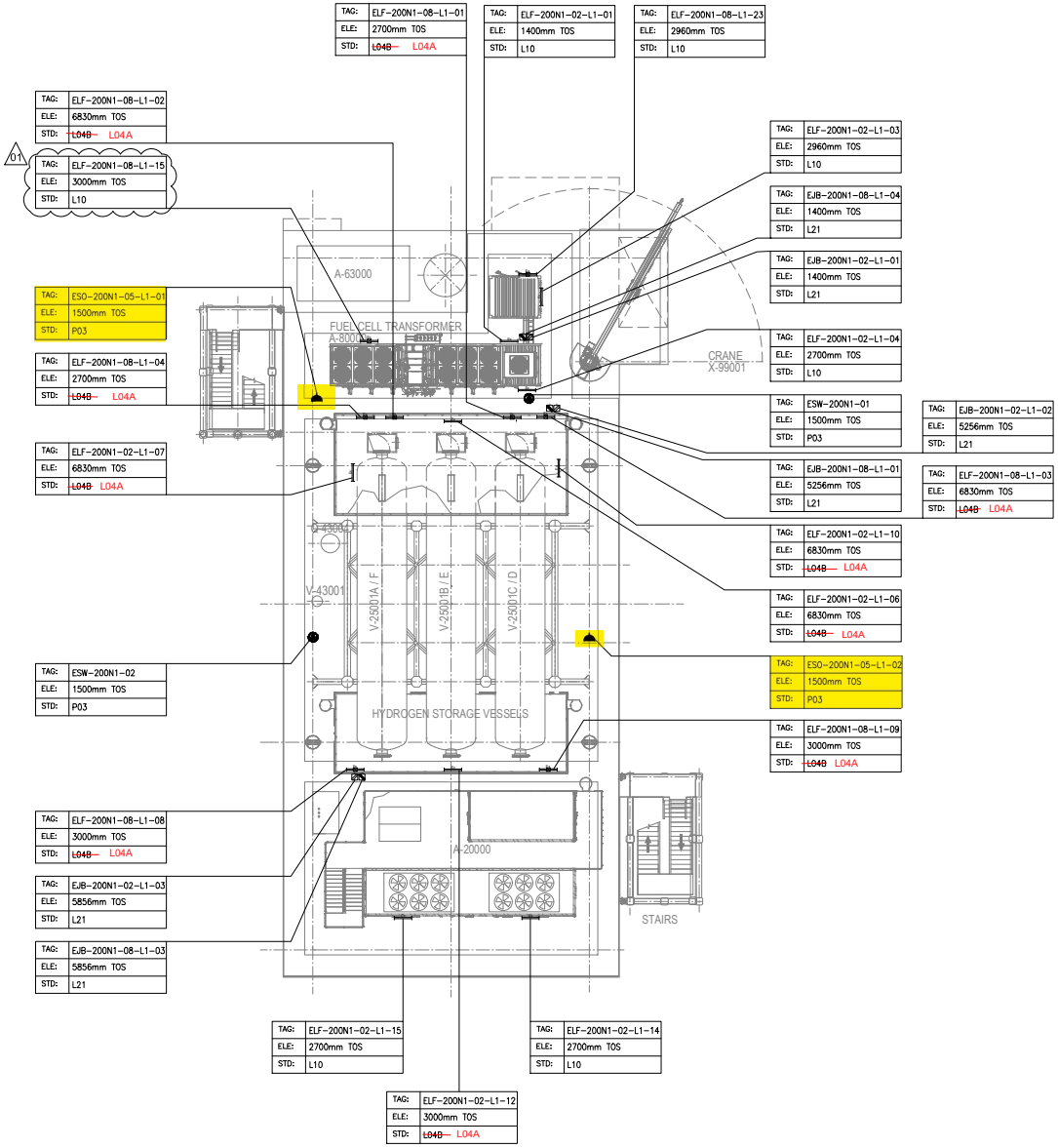
TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

Comments: Nota 4: refer to PL C30000679

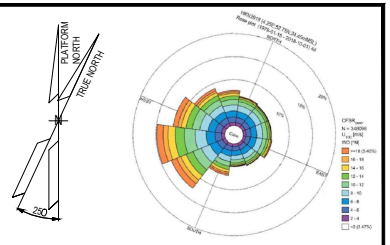
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Francesco Zucca	Luca Mussi	
Date	2024-12-10	2024-12-31	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-12-10T06:37:06.226Z	PROVERLIS Digitaly signed by Luca Mussi 2024-12-31T10:31:13.362Z	

DRAWING NO. 123A90-DDL-EL-DL-20118

REV. 01



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



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

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-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT
123A90-DDL-ST-DD-90076	IDENTIFICATION PANELS ASSEMBLY AND DETAILS

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	28/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20118**

REV.:	DATE:	SIGNATURE:
1_F	26/11/24	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – TOP DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 01/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20118	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20118

FROM

DESCRIPTION:LIGHTING & SMALL POWER DB BOP
TAG NUMBER:DP-200N1

CUBICLE/CB: +01/Q2
-X1
L1/2 10 BN
BU
N/2 11 Y/G
PE
P.E. BUS BAR

CUBICLE/CB: +02/Q3
-X1
L2/3 12 BN
BU
N/3 13 Y/G
PE
P.E. BUS BAR

CUBICLE/CB: +02/Q4
-X1
L3/4 14 BN
BU
N/4 15 Y/G
PE
P.E. BUS BAR

CUBICLE/CB: +03/Q5
-X1
L1/5 80 BN
BU
N/5 81 Y/G
PE
P.E. BUS BAR

TO

P-EJB-200N1-02-L1-01
3G4 mm²

DESCRIPTION:NORMAL LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER:EJB-200N1-02-L1-01
BN L
BU N
Y/G PE

P-EJB-200N1-03-L2-01
3G4 mm²

DESCRIPTION:NORMAL LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER:EJB-200N1-03-L2-01
BN L
BU N
Y/G PE

P-EJB-200N1-04-L3-01
3G4 mm²

DESCRIPTION:NORMAL LIGHTING - STAIRS
TAG NUMBER:EJB-200N1-04-L3-01
BN L
BU N
Y/G PE

P-ESO-200N1-05-L1-01
3G10 mm²

DESCRIPTION:SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER:ESO-200N1-05-L1-01
BN L
BU N
Y/G PE

P-ESO-200N1-05-L1-02
3G10 mm²

DESCRIPTION:SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER:ESO-200N1-05-L1-02
BN L
BU N
Y/G PE

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20149**

REV.:	DATE:	SIGNATURE:
2_C	02/12/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

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

SCALE : 1:X

A3

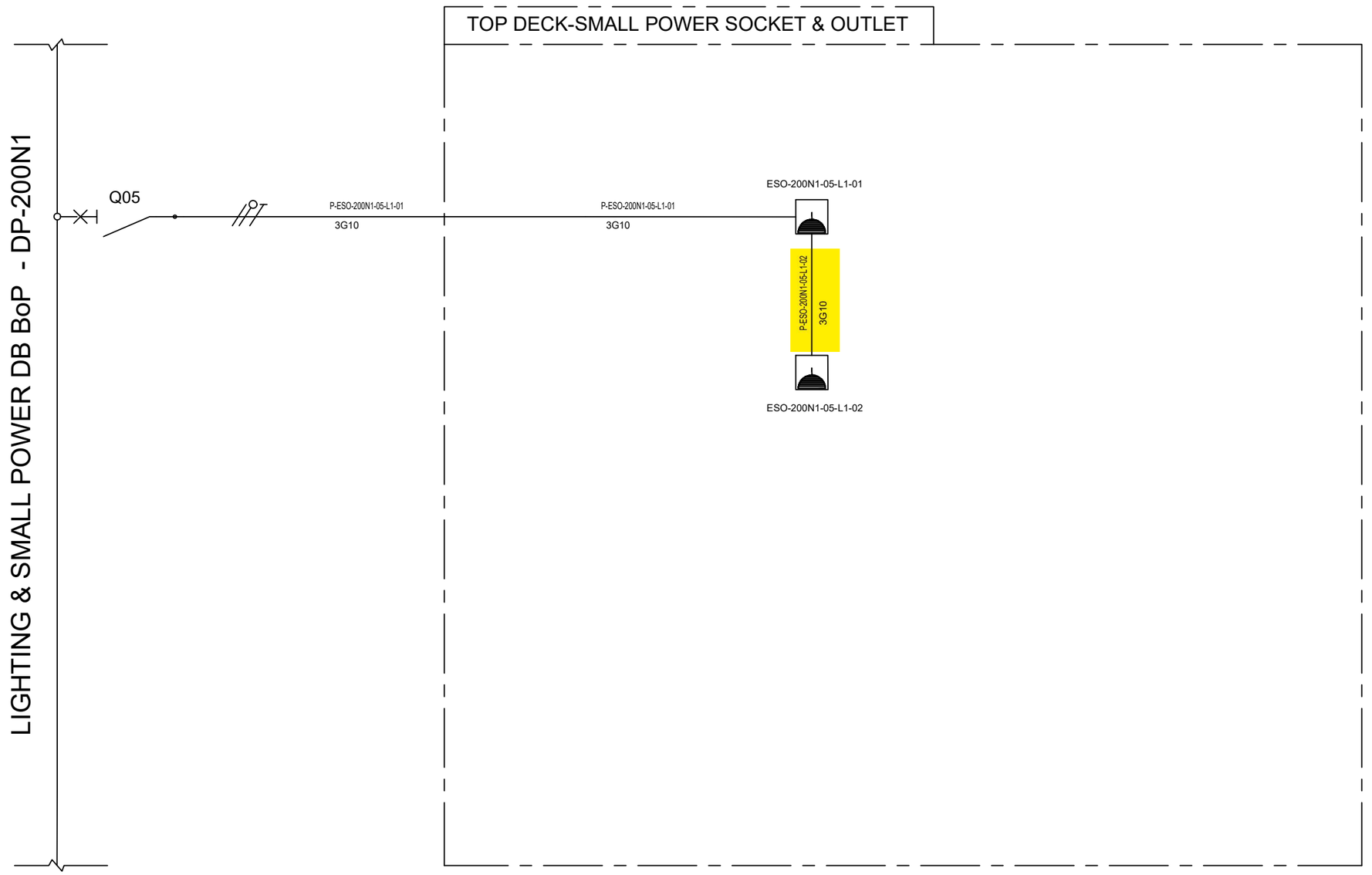
DRAWING NO. 123A90-DDL-EL-DG-20149

SHEET 045

REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02



VALID FOR CONSTRUCTION

REV.:	DATE:	SIGNATURE:
2_C	19/12/24	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
TOP DECK-SMALL POWER SOCKET

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DG-20125

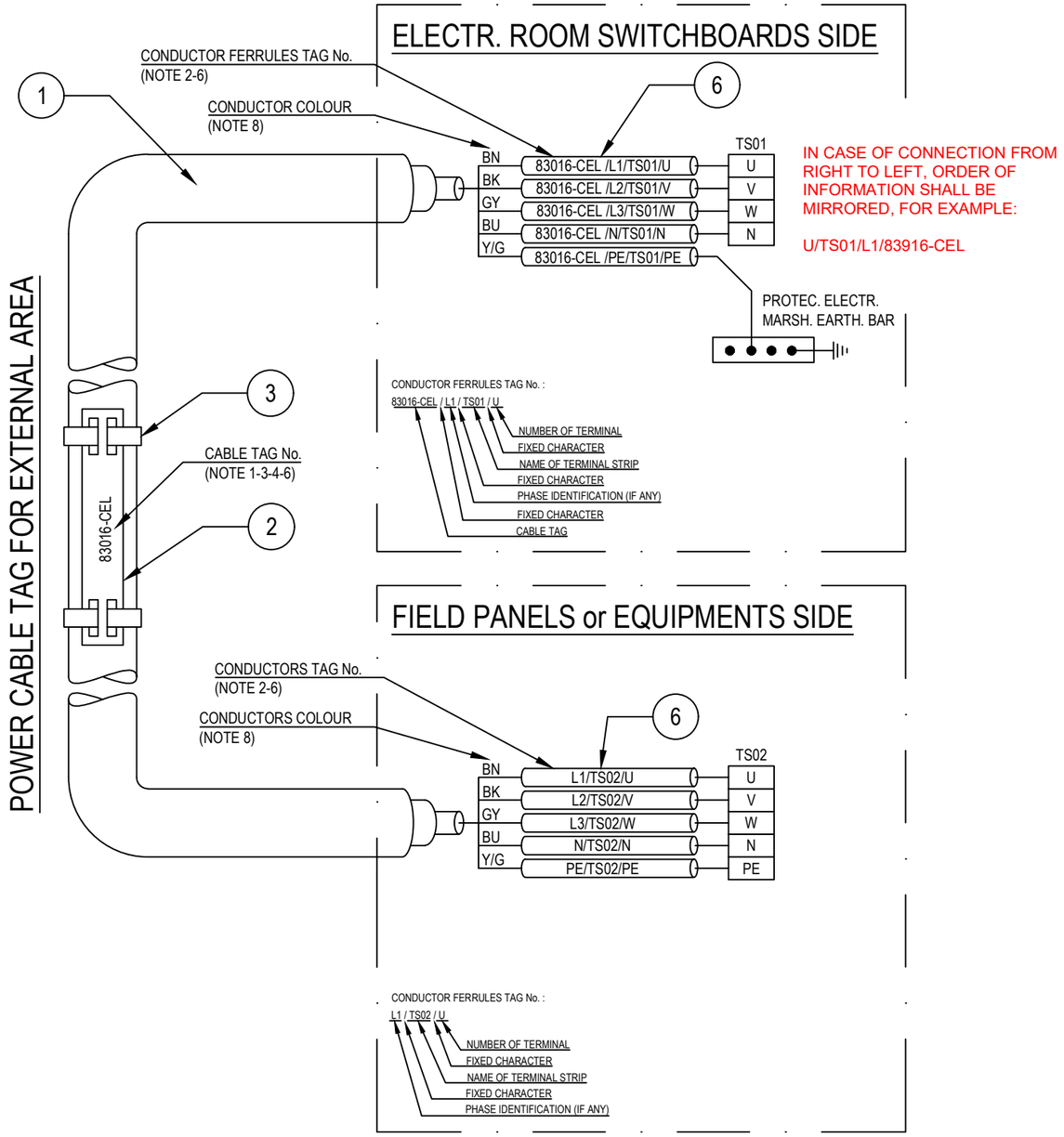
SHEET 012

REV. 01

File Name : 123A90-DDL-EL-DG-20125

F.to UNI A3: 420mmx297mm

C02



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	UNARMOURED CABLE				
2	CABLE TAG FOR EXTERNAL AREA	HDG/SS			NOTE 1 NOTE 4
3	TIE FOR CABLE TAG IN EXTERNAL AREA	HDG/SS			
4	CABLE TAG FOR INTERNAL AREA	PVC			NOTE 1 NOTE 5
5	TIE FOR CABLE TAG IN INTERNAL AREA	NYLON 6.6			
6	CORE FERRULES	PVC			

NOTES:

1) ALL CABLES SHALL BE IDENTIFIED AT EACH TERMINATION AND EACH SIDE OF ANY OBSTACLE (E.G. CABLE TRANSIT ON WALLS INSIDE SHELTER AND FLOOR DECK CROSSING, BY THEIR RESPECTIVE TAGS/NUMBERS, AS INDICATED ON THE CABLE SCHEDULE.
CABLE IDENTIFICATION SHALL BE ALSO DONE BELOW AND IN THE SWITCHBOARD CABLE COMPARTMENT.

2) CABLE CORE FERRULES SHALL BE FITTED AT EVERY TERMINATION. THESE FERRULES SHALL BE OF ENGRAVED PLASTIC SLIP ON, INTERLOCKED AND SELF GRIP TYPE.

3) ON CABLE TRAYS OR LADDERS, CABLES SHALL BE IDENTIFIED AT EACH END, AND EVERY 25 METERS.

4) THE CABLE TAG FOR EXTERNAL AREA SHALL DONE BY 316L STAINLESS STEEL LABELS, TAG (H=5mm) SHALL BE LASER PRINTED PREFERABLY OR EMBOSSED, LABEL HELD BY TWO 316L STAINLESS STEEL TIES.

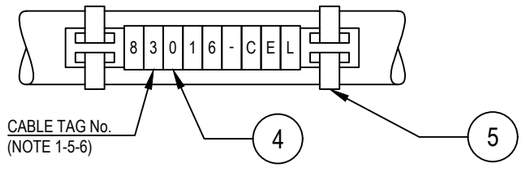
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

7) WITHIN TECHNICAL BUILDING, PROTECTIVE CONDUCTOR SHALL BE TAGGED BETWEEN FOLLOWING ITEMS:
- PANEL (SWITCHBOARD, SWITCHGEAR, DISTRIBUTION BOARD, ETC) AND EARTH BAR
- EARTH BAR AND EARTH BOSS

8) ONLY IF NECESSARY, SHRINK TUBES OF THE APPROPRIATE COLOR WILL BE INSTALLED TO COVER THE WRONG CONDUCTOR COLOR, THIS WILL BE PERFORMED IN EACH SIDE OF THE CABLES WHERE NECESSARY.

POWER CABLE TAG FOR INTERNAL AREA



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
CABLES INSTALLATION SYSTEM IDENTIFICATION FOR POWER CABLES

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

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DD-20092	007	02

F.to UNI A3: 420mmx297mm

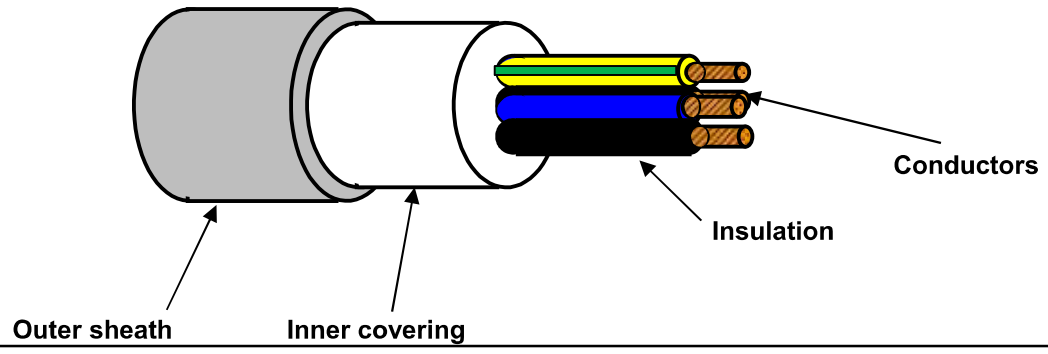
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ESO-200N1-05-L1-02	Cable	EL	VFC	123A90-DDL-EL-LIS-20148						ESO-200N1-05-L1-01	Small Power Socket 16A	Upper Deck	ESO-200N1-05-L1-02	Small Power Socket 16A	Upper Deck	ELECV04-3G10	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G10mm² - Grey	M25	T1_M25_Single			T1_M25_Single				E-MCT-U13 / L-150-101-LVT-106 / L-450-101-LVT-008 / L-600-101-LVT-012 / L-600-101-LVT-094 / L-750-101-LVT-014 / L-150-101-LVT-101 / E-MCT-U12

FLEI s.r.l.

Cu Cl.2/EPR/LSZH 0,6/1 KV

3G10 - L.V. POWER CABLE - Flame Retardant



TECHNICAL FEATURES

Conductors :	**STRANDED** plain/bare annealed copper wires	IEC 60228 Class 2
Insulation :	EPR compound, quality to IEC 60092.360, Nominal Thickness 1,0 mm	
Cores colour code :	**Brown - Blue - Yellow/Green**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not Required	
Total Assembling :	Cores layed up with optimal lay length	
Overall Wrapping:	Not required	
Drain wire :	Not required	
Overall Shield:	Not required	
Inner covering :	Extruded LSZH compound, Average Thickness 1,0 mm	
Inner covering color code:	**Black or Natural**	
Armour :	Not required	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G10 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(17,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10	(in fixed installation)
Voltage test :	3,5 kV a.c. for 5' (Between Cores)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 630 MΩ x Km (@ 20°C)	
Applicable Standards		
Design Guidelines :	**IEC 60092.353**	
ON COMPLETE CABLE		
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance	IEC 61034.2 (LT ≥ 60%)	
Temperature Range :		
ON INSULATION	(max +90°C)	(max continuous operation temperature of conductors)
	(max +250°C)	(max conductors temperature during short-circuit for 5 seconds)
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C)	(in fixed installation)
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner covering together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	29/03/2024	Messa			
Checked :	29/03/2024	Spaccasassi			
Approved :	29/03/2024	Cucinotta			

The data provided, lending assent for the treatment, will be used to the sense of the article 13 of of the Regulation (UE) 2016/679, also through outsiders, in order to allow the realization of the fulfilments informatives, administrative, commercial and accounting related to the contractual relationship. Integral copy of the informative could be requested at our offices.

All proprietary rights reserved according to law. This document shall be not reproduced without written permission. FLEI reserves the right to change characteristics and technical data of product shown at any time.

ITEM	Tag	P-ESO-200N1-06-L2-01	: Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	LD_B-200/LD
TASK	code	C10000606		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical Form CPX09		LV Power Cable

CABLE DATA

Type Cu Cl.2/EPR/LSZH Cores/Size mm² 3G10 mm2 Color GREY

From DP-200N1 To ESO-200N1-06-L2-01

1	Confirm cable is as specified in project cable schedule	OK
2	Visual Check cable physical integrity.	OK
3	Check is installed in accordance with layout drawing (segregation, distance…).	OK
4	Check cable is supported and fixed to rack according to project specification.	Note
5	Check bending radius is within the specified limits.	OK
6	Confirm cable glands suit for cable type, correctly mounted and tightened.	OK
7	Check gland plate for single core cables is non ferrous (non -magnetic).	NA
8	Confirm cable labelling is in accordance with specifications.	PL
9	Check cable is correctly loomed and segregated in accordance with specification.	OK
10	Check cable earthing against lastest drawings.	OK
11	Check cores marking are in accordance with termination diagram	PL
12	Check terminations are in accordance with latest termination diagram	OK
13	If required produce Red Line Mark Up for "AS BUILT"	

ROSETTI MARINO PROVERLIS CROSSWIND

ITEM	Tag	P-ESO-200N1-06-L2-01	: Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	LD_B-200/LD
TASK	code	C10000606		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

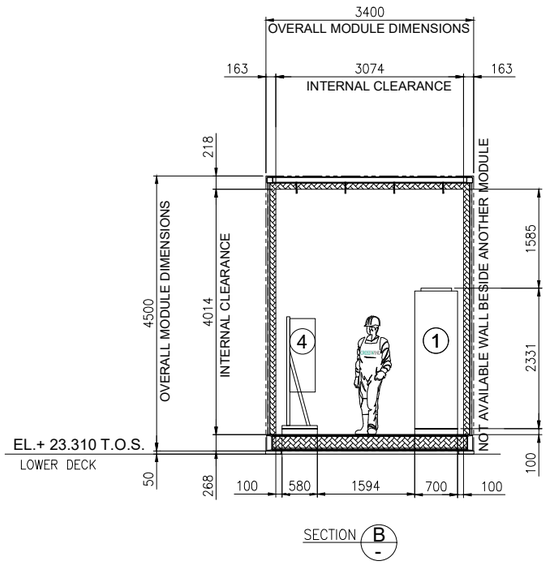
CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0,5	
6		PH 2	0,5	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,5	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

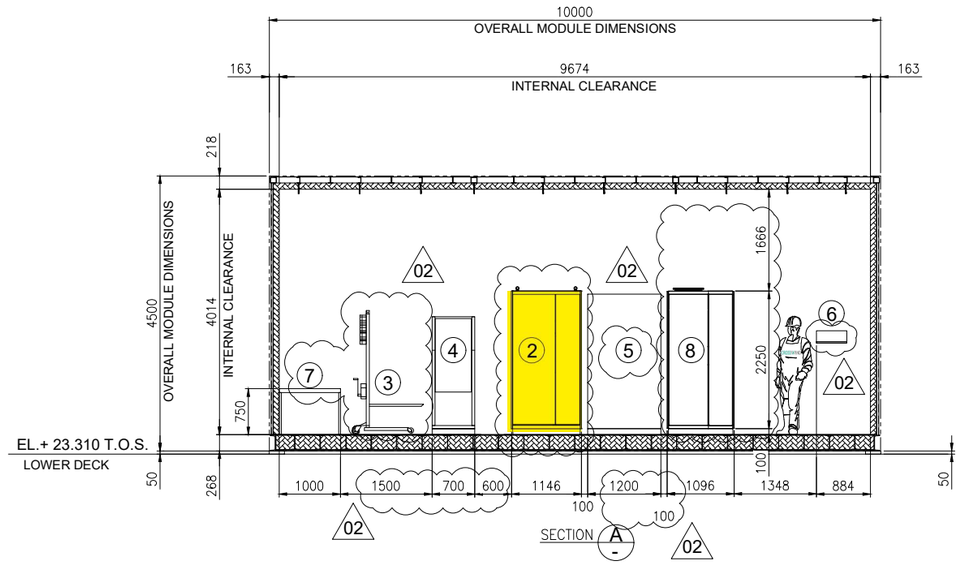
Comments: Nota 4: refer to PL C30000679

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Francesco Zucca	Paolo Schintu	
Date	2024-12-02	2024-12-02	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-12-02T13:00:20.088Z	PROVERLIS Digitaly signed by Paolo Schintu 2024-12-02T15:31:11.971Z	

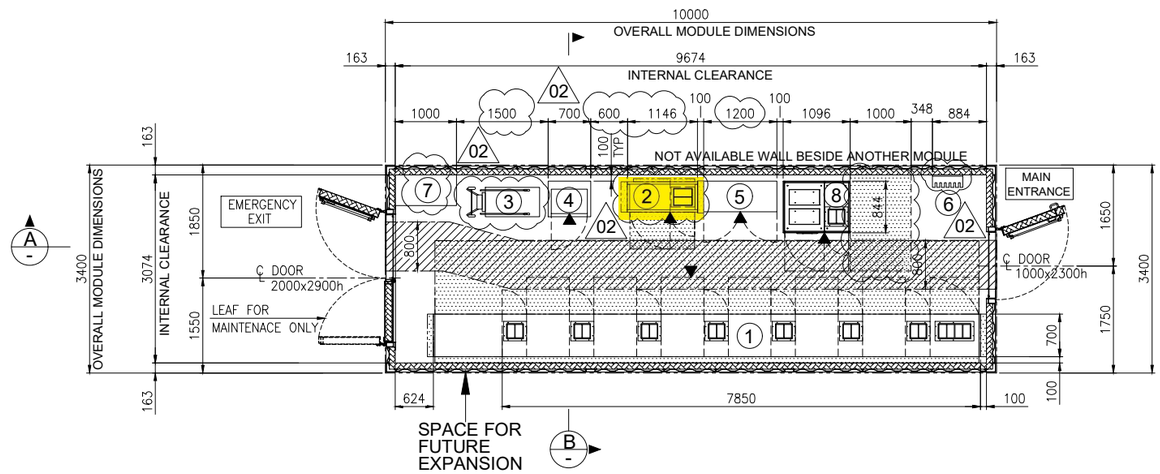
DRAWING NO. 123A90-DDL-EL-DL-20105 | REV. 02



SECTION B



SECTION A



A

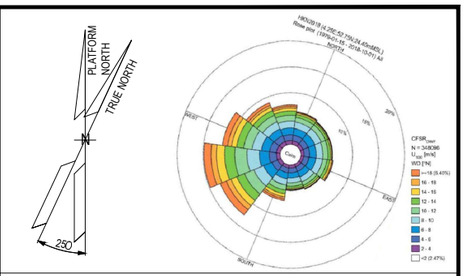
B

EQUIPMENT LAYOUT
"B-200" LV (400V) SWITCHGEAR ROOM
BOTTOM PLAN

1

EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	NOTE
1	SG-200N1	400V SWITCHGEAR	7850	700	2331	
2	DP-200N1	DISTRIBUTION BOARD FOR LIGHTING AND SMALL POWER B.O.P.	1146	520	2250	
3	-	SERVICE TROLLEY FOR 400V SWITCHGEAR	1034	490	2030	
4	CN-200N1	ICCP PANEL	700	580	1830	
5	B200-HSB-001	DISTRIBUTION & HVAC PANEL - LV ROOM	1200	600	1900	02
6	-	TOOL BOX	495	200	200	
7	-	TABLE	1000	500	750	
8	SG-200D2	ACB PANEL FOR SOLAR PACKAGE	1096	844	2294	



NOTES

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DELETED.
3. DOCUMENT VALID ONLY FOR ELECTRICAL COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.
4. FOR OTHER ITEMS, CORRECT LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND DEDICATED PROJECT DOCUMENTATION.
5. HEIGHT OF ALL PANELS IN THE EQUIPMENT LIST TABLE IS WITHOUT THE BASE FRAME (100mm)

02

LEGEND

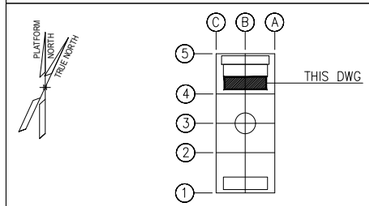
U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR - WIDTH 800mm.
_____ MAINTENANCE AREA - VENDOR REQUIREMENT
_____ SWITCHGEAR ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

REFERENCES

DOCUMENT TITLE	DOCUMENT NUMBER
SG-200N1 GENERAL ARRANGEMENT DRAWING	1723002197-EL-DA-00007
SG-200D2 GENERAL ARRANGEMENT DRAWING	1723002197-EL-DA-00008
DP-200N1 GENERAL ARRANGEMENT DRAWING	1723002197-EL-DA-00009
AC UPS – GENERAL ARRANGEMENT AND DIMENSIONAL DRAWINGS	1724000372-EL-DA-00004
AC UPS – BATTERY LAYOUT INTERCONNECTING DIAGRAM	1724000372-EL-DG-00011
B-200 -GENERAL ARRANGEMENT DRAWINGS - E&I SHELTER	1724000049-AR-DA-00015
ICCC PANEL GENERAL ARRANGEMENT DRAWING	144671-CORR-TF-FAB-DWG-0003

02

KEY PLAN



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20105**

REV.:	DATE:	SIGNATURE:
2_A	08/08/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	27/05/2024	FMO	LMA/AMA	LMA/MDO	ACCEPTED FOR CONSTRUCTION (AFC)
01	26/03/2024	GPA	LMA/AMA	LMA/MDO	ISSUE FOR REVIEW (IFR)
00	08/11/2023	DSF	CB/AMA	OYFO/MDO	ISSUE FOR REVIEW (IFR)

CROSSWIND | ROSETTI MARINO

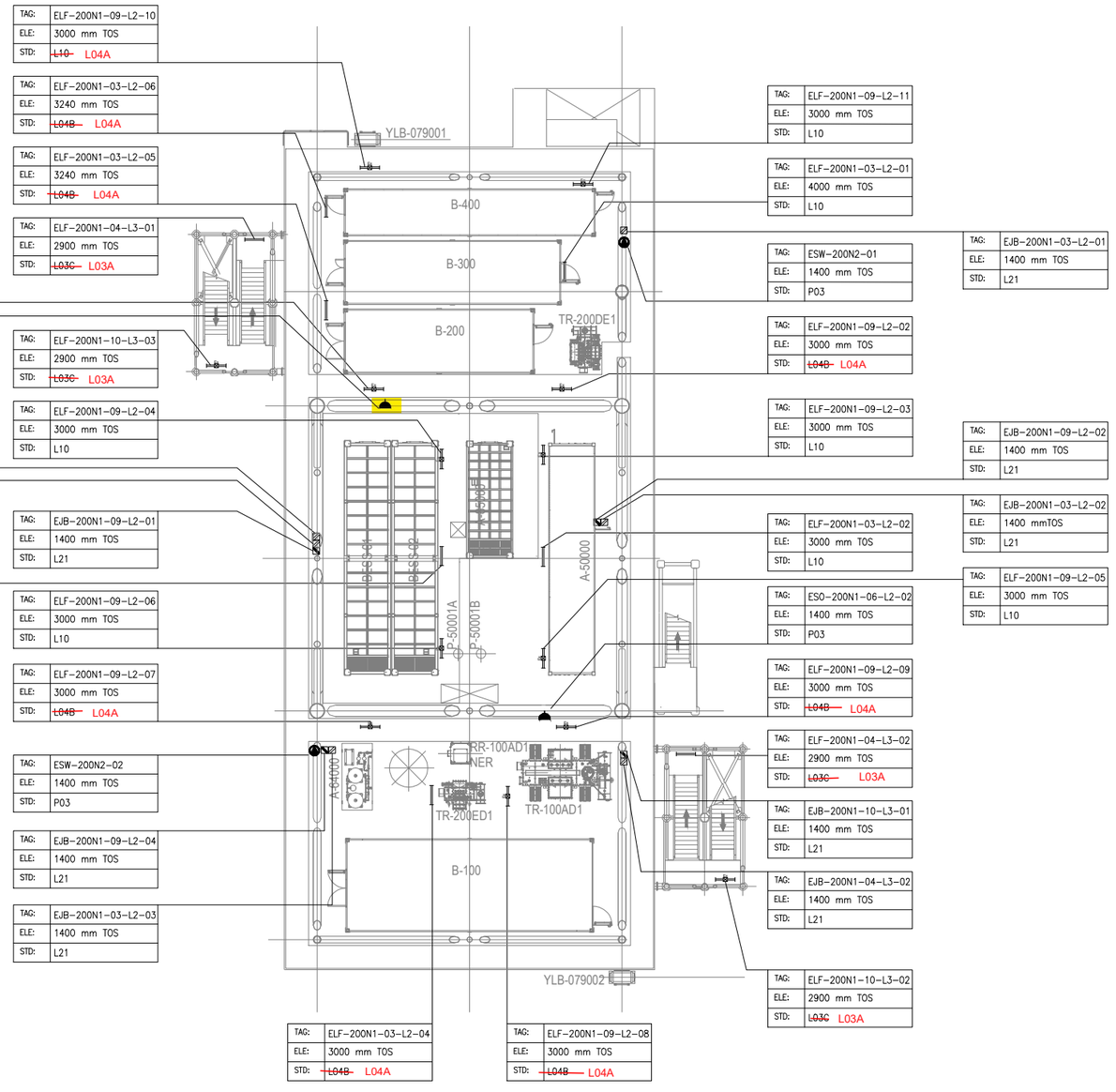
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL EQUIPMENT LAYOUT
LV SWITCHROOM

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:50
DRAWN FMO	CHECKED LMA/AMA	APPROVED LMA/MDO	DATE 27/05/2024
A1	DRAWING NO. 123A90-DDL-EL-DL-20105	SHEET 001	REV. 02

File Name : 123A90-DDL-EL-DL-20105_REV02.dwg

DRAWING NO. 123A90-DDL-EL-DL-20119

REV. 01



TAG:	ELF-200N1-09-L2-10
ELE:	3000 mm TOS
STD:	~~L10~~ L04A

TAG:	ELF-200N1-03-L2-06
ELE:	3240 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-03-L2-05
ELE:	3240 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-04-L3-01
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

TAG:	ELF-200N1-09-L2-01
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ESO-200N1-06-L2-01
ELE:	1400 mm TOS
STD:	P03

TAG:	ELF-200N1-10-L3-03
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

TAG:	ELF-200N1-09-L2-04
ELE:	3000 mm TOS
STD:	L10

TAG:	EJB-200N1-04-L3-01
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-03-L2-04
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-09-L2-01
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-03-L2-03
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-09-L2-06
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-09-L2-07
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ESW-200N2-02
ELE:	1400 mm TOS
STD:	P03

TAG:	EJB-200N1-09-L2-04
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-03-L2-03
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-03-L2-04
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-09-L2-08
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-09-L2-11
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-03-L2-01
ELE:	4000 mm TOS
STD:	L10

TAG:	ESW-200N2-01
ELE:	1400 mm TOS
STD:	P03

TAG:	EJB-200N1-03-L2-01
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-09-L2-02
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-09-L2-03
ELE:	3000 mm TOS
STD:	L10

TAG:	EJB-200N1-09-L2-02
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-03-L2-02
ELE:	1400 mmTOS
STD:	L21

TAG:	ELF-200N1-03-L2-02
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-09-L2-05
ELE:	3000 mm TOS
STD:	L10

TAG:	ESO-200N1-06-L2-02
ELE:	1400 mm TOS
STD:	P03

TAG:	ELF-200N1-09-L2-09
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

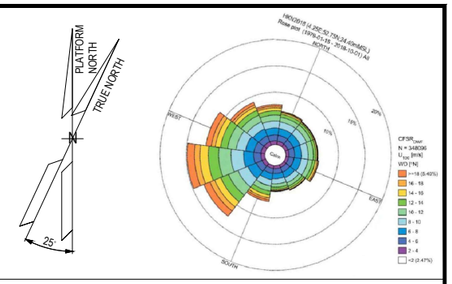
TAG:	ELF-200N1-04-L3-02
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

TAG:	EJB-200N1-10-L3-01
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-04-L3-02
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-10-L3-02
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

PLAN ON LOWER DECK
EL+23.310 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.
5. SHEET 1 OF 2 SHOWS ONLY POLE MOUNTED TYPE LIGHTING FIXTURES, SHEET 2 OF 2 SHOWS ONLY SUSPENDED TYPE LIGHTING FIXTURES.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20119**

REV.:	DATE:	SIGNATURE:
1_D	20/11/24	G.Randi

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20101	ELECTRICAL EQUIPMENT LAYOUT - LOWER DECK
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	29/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

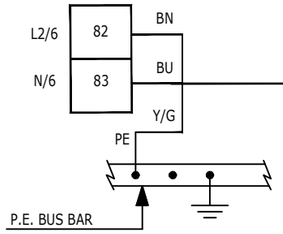
CONTRACT NO./TITLE	CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE	1:150
DRAWN	ASR	CHECKED	FMA/AMA	APPROVED	FPA/DLO	DATE	06/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20119			SHEET	2of2	REV.	01

File Name : 123A90-DDL-EL-DL-20119

FROM	TO

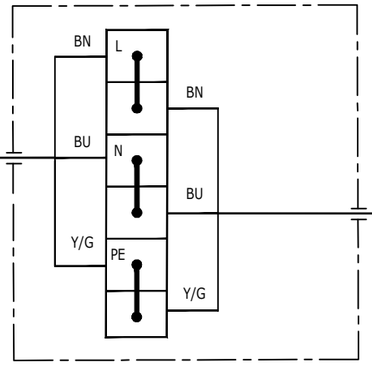
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +03/Q6



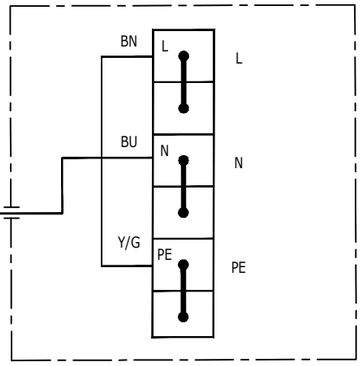
P-ESO-200N1-06-L2-01
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER: ESO-200N1-06-L2-01

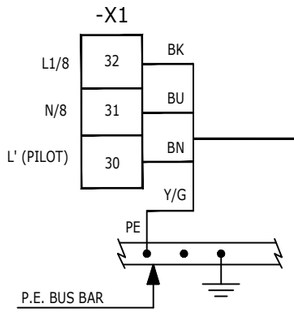


P-ESO-200N1-06-L2-02
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER: ESO-200N1-06-L2-02

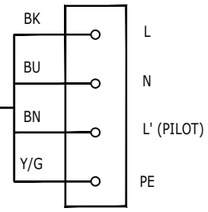


CUBICLE/CB: +01/Q8

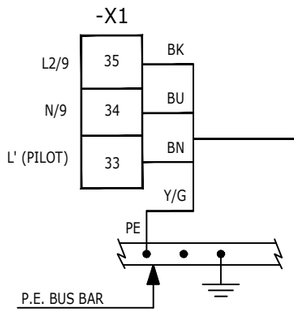


P-EJB-200N1-08-L1-04
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-08-L1-04

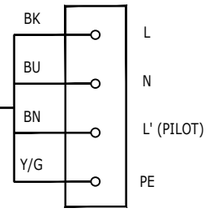


CUBICLE/CB: +01/Q9



P-EJB-200N1-09-L2-01
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-09-L2-01



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20149**

REV.:	DATE:	SIGNATURE:
2_B	26/11/24	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

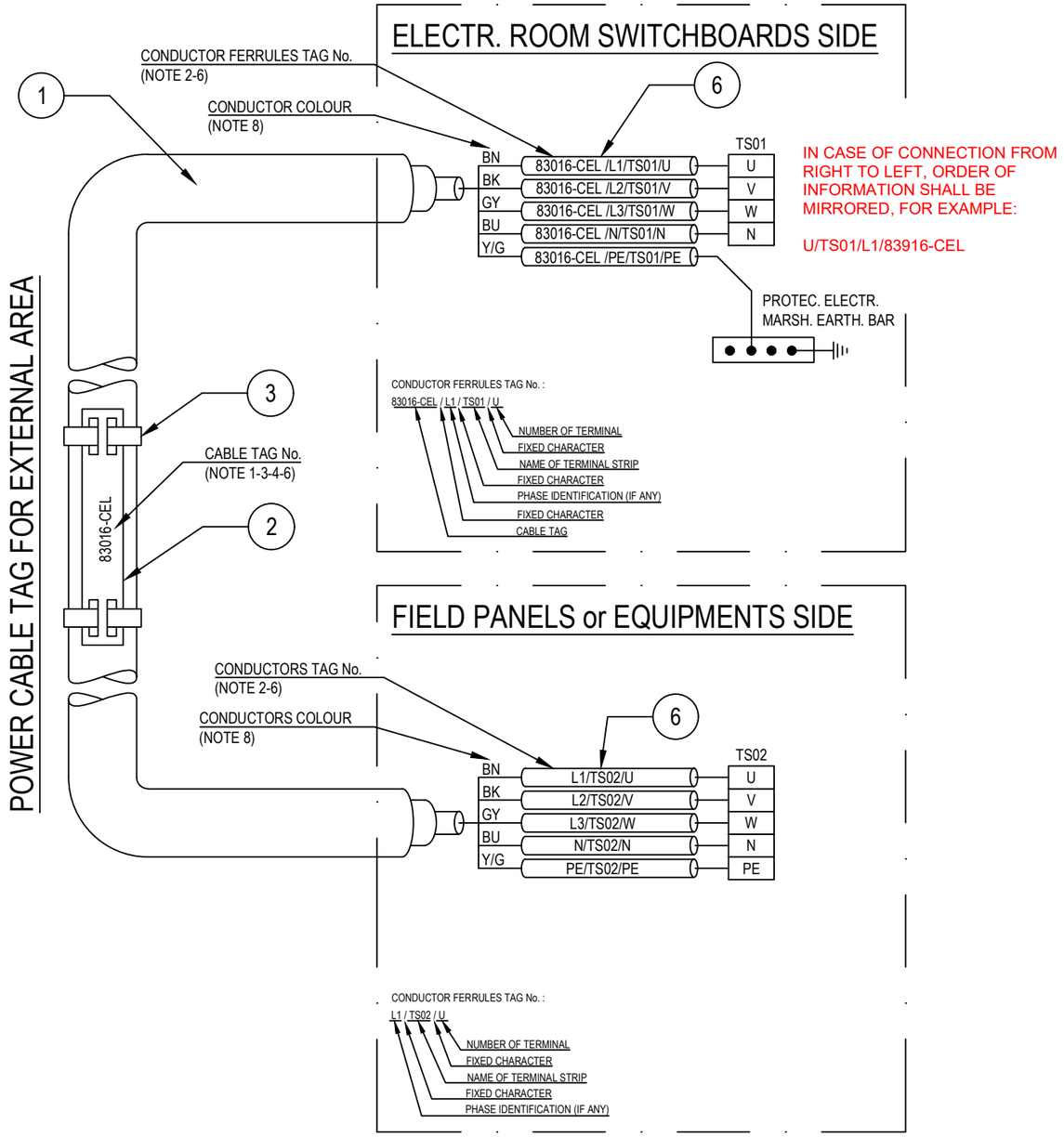
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 046 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02

C02



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	UNARMOURED CABLE				
2	CABLE TAG FOR EXTERNAL AREA	HDG/SS			NOTE 1 NOTE 4
3	TIE FOR CABLE TAG IN EXTERNAL AREA	HDG/SS			
4	CABLE TAG FOR INTERNAL AREA	PVC			NOTE 1 NOTE 5
5	TIE FOR CABLE TAG IN INTERNAL AREA	NYLON 6.6			
6	CORE FERRULES	PVC			

NOTES:

1) ALL CABLES SHALL BE IDENTIFIED AT EACH TERMINATION AND EACH SIDE OF ANY OBSTACLE (E.G. CABLE TRANSIT ON WALLS INSIDE SHELTER AND FLOOR DECK CROSSING, BY THEIR RESPECTIVE TAGS/NUMBERS, AS INDICATED ON THE CABLE SCHEDULE.
CABLE IDENTIFICATION SHALL BE ALSO DONE BELOW AND IN THE SWITCHBOARD CABLE COMPARTMENT.

2) CABLE CORE FERRULES SHALL BE FITTED AT EVERY TERMINATION. THESE FERRULES SHALL BE OF ENGRAVED PLASTIC SLIP ON, INTERLOCKED AND SELF GRIP TYPE.

3) ON CABLE TRAYS OR LADDERS, CABLES SHALL BE IDENTIFIED AT EACH END, AND EVERY 25 METERS.

4) THE CABLE TAG FOR EXTERNAL AREA SHALL DONE BY 316L STAINLESS STEEL LABELS, TAG (H=5mm) SHALL BE LASER PRINTED PREFERABLY OR EMBOSSED, LABEL HELD BY TWO 316L STAINLESS STEEL TIES.

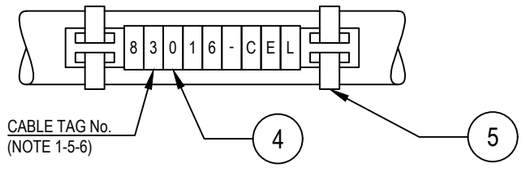
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

7) WITHIN TECHNICAL BUILDING, PROTECTIVE CONDUCTOR SHALL BE TAGGED BETWEEN FOLLOWING ITEMS:
- PANEL (SWITCHBOARD, SWITCHGEAR, DISTRIBUTION BOARD, ETC) AND EARTH BAR
- EARTH BAR AND EARTH BOSS

8) ONLY IF NECESSARY, SHRINK TUBES OF THE APPROPRIATE COLOR WILL BE INSTALLED TO COVER THE WRONG CONDUCTOR COLOR, THIS WILL BE PERFORMED IN EACH SIDE OF THE CABLES WHERE NECESSARY.

POWER CABLE TAG FOR INTERNAL AREA



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
CABLES INSTALLATION SYSTEM IDENTIFICATION FOR POWER CABLES

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

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DD-20092	007	02

F.to UNI A3: 420mmx297mm

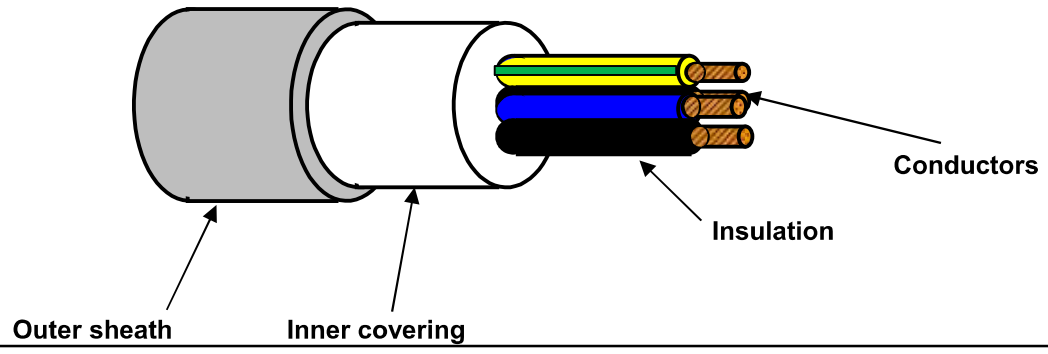
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ESO-200N1-06-L2-01	Cable	EL	VFC	123A90-DDL-EL-LIS-20148						DP-200N1	LV 0,4 / 0,23 kV Distribution Switchgear	Lower Deck (B-200)	ESO-200N1-06-L2-01	Small Power Socket 16A	Lower Deck	ELECV04-3G10	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G10mm² - Grey	M25	n.a.			T1_M25_Single				L-450-101-LVT-030 / L-600-101-LVT-020 / L-600-101-LVT-018 / L-600-101-LVT-017 / E-MCT-201 / L-750-101-LVT-011 / L-600-101-LVT-012 / L-150-101-LVT-088 / L-150-101-LVT-144

FLEI s.r.l.

Cu Cl.2/EPR/LSZH 0,6/1 KV

3G10 - L.V. POWER CABLE - Flame Retardant



TECHNICAL FEATURES

Conductors :	**STRANDED** plain/bare annealed copper wires	IEC 60228 Class 2
Insulation :	EPR compound, quality to IEC 60092.360, Nominal Thickness 1,0 mm	
Cores colour code :	**Brown - Blue - Yellow/Green**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not Required	
Total Assembling :	Cores layed up with optimal lay length	
Overall Wrapping:	Not required	
Drain wire :	Not required	
Overall Shield:	Not required	
Inner covering :	Extruded LSZH compound, Average Thickness 1,0 mm	
Inner covering color code:	**Black or Natural**	
Armour :	Not required	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G10 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(17,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10	(in fixed installation)
Voltage test :	3,5 kV a.c. for 5' (Between Cores)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 630 MΩ x Km (@ 20°C)	
Applicable Standards		
Design Guidelines :	**IEC 60092.353**	
ON COMPLETE CABLE		
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance	IEC 61034.2 (LT ≥ 60%)	
Temperature Range :		
ON INSULATION	(max +90°C)	(max continuous operation temperature of conductors)
	(max +250°C)	(max conductors temperature during short-circuit for 5 seconds)
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C)	(in fixed installation)
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner covering together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	29/03/2024	Messa			
Checked :	29/03/2024	Spaccasassi			
Approved :	29/03/2024	Cucinotta			

The data provided, lending assent for the treatment, will be used to the sense of the article 13 of of the Regulation (UE) 2016/679, also through outsiders, in order to allow the realization of the fulfilments informatives, administrative, commercial and accounting related to the contractual relationship. Integral copy of the informative could be requested at our offices.

All proprietary rights reserved according to law. This document shall be not reproduced without written permission. FLEI reserves the right to change characteristics and technical data of product shown at any time.

ITEM	Tag	P-ESO-200N1-06-L2-02	: Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)		Dwg	123A90-DDL-EL-LIS-20148	
	S/Sys	83-55	: Power Sockets		Module	LD	
TASK	code	C10000608	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	MC	Activity CCK	Discipline Electrical	Form	CPX09	LV Power Cable

CABLE DATA

Type Cu Cl.2/EPR/LSZH Cores/Size mm² 3G10 mm2 Color GREY

From ESO-200N1-06-L2-01 To ESO-200N1-06-L2-02

1	Confirm cable is as specified in project cable schedule	OK
2	Visual Check cable physical integrity.	OK
3	Check is installed in accordance with layout drawing (segregation, distance…).	OK
4	Check cable is supported and fixed to rack according to project specification.	Note
5	Check bending radius is within the specified limits.	OK
6	Confirm cable glands suit for cable type, correctly mounted and tightened.	OK
7	Check gland plate for single core cables is non ferrous (non -magnetic).	NA
8	Confirm cable labelling is in accordance with specifications.	OK
9	Check cable is correctly loomed and segregated in accordance with specification.	OK
10	Check cable earthing against lastest drawings.	OK
11	Check cores marking are in accordance with termination diagram	OK
12	Check terminations are in accordance with latest termination diagram	OK
13	If required produce Red Line Mark Up for "AS BUILT"	

ROSETTI MARINO PROVERLIS CROSSWIND

ITEM	Tag	P-ESO-200N1-06-L2-02	: Small Power Socket JB (Lower Deck) / Small Power Socket (Lower Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	LD
TASK	code	C10000608		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0,5	
6		PH 2	056	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,5	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

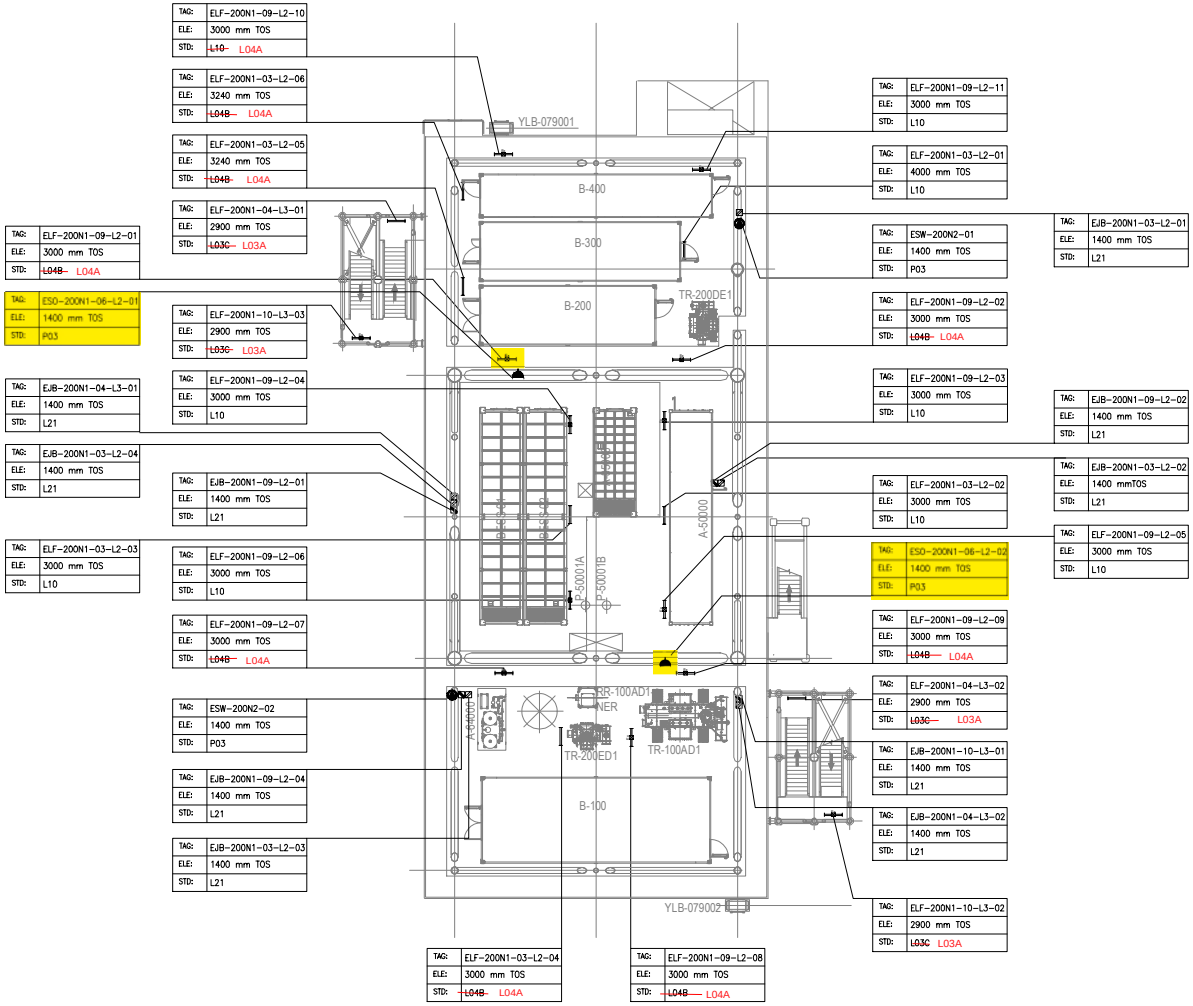
TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

Comments: Nota 4: refer to PL C30000679

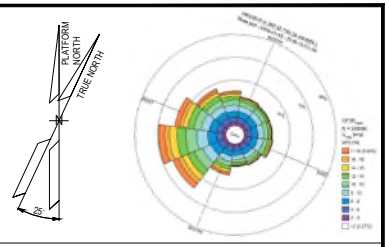
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Carmelo Bongiovanni	Giovanni Tangianu	
Date	2024-11-22	2024-12-05	
Signature	PROVERLIS Digitaly signed by Carmelo Bongiovanni 2024-11-22T17:17:33.431Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2024-12-05T16:21:53.458Z	

DRAWING NO. 123A90-DDL-EL-DL-20119

REV. 01



PLAN ON LOWER DECK
EL+23.310 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.
5. SHEET 1 OF 2 SHOWS ONLY POLE MOUNTED TYPE LIGHTING FIXTURES, SHEET 2 OF 2 SHOWS ONLY SUSPENDED TYPE LIGHTING FIXTURES.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DL-20119

REV:	DATE:	SIGNATURE:
1_D	20/11/24	G.Randi

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20101	ELECTRICAL EQUIPMENT LAYOUT - LOWER DECK
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	29/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 06/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20119	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20119

FROM

TO

DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +03/Q6

-X1

L2/6 — 82 — BN
N/6 — 83 — BU
Y/G
PE
P.E. BUS BAR

P-ESO-200N1-06-L2-01
3G10 mm²

DESCRIPTION:SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER:ESO-200N1-06-L2-01

BN — L — BN
BU — N — BU
Y/G — PE — Y/G

P-ESO-200N1-06-L2-02
3G10 mm²

DESCRIPTION:SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER:ESO-200N1-06-L2-02

BN — L — L
BU — N — N
Y/G — PE — PE

CUBICLE/CB: +01/Q8

-X1

L1/8 — 32 — BK
N/8 — 31 — BU
L' (PILOT) — 30 — BN
Y/G
PE
P.E. BUS BAR

P-EJB-200N1-08-L1-04
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-08-L1-04

BK — L
BU — N
BN — L' (PILOT)
Y/G — PE

CUBICLE/CB: +01/Q9

-X1

L2/9 — 35 — BK
N/9 — 34 — BU
L' (PILOT) — 33 — BN
Y/G
PE
P.E. BUS BAR

P-EJB-200N1-09-L2-01
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-09-L2-01

BK — L
BU — N
BN — L' (PILOT)
Y/G — PE

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DG-20149

REV.:	DATE:	SIGNATURE:
2_C	02/12/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

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

SCALE : 1:X

A3

DRAWING NO. 123A90-DDL-EL-DG-20149

SHEET 046

REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02

GENERAL NOTES:

1. FOR EQUIPMENT AND SYSTEM TAG NUMBERING REFER THE DOCUMENT 123A90-PML-DIG-PRO-00002

2. IDENTIFICATION ABBREVIATIONS FOR CABLES & OTHER ELECTRICAL EQUIPMENTS:

A) IDENTIFICATION COLOR CODE OF THE ELECTRICAL CABLE

BK = BLACK
BN = BROWN
BU = BLUE
GY = GRAY
RD = RED
Y/G = YELLOW AND GREEN

B) IDENTIFICATION CODE OF THE ELECTRICAL EQUIPMENT

TR = TRANSFORMER
NER = NEUTRAL EARTH RESISTOR
JB = JUNCTION BOX
CP = CONTROL PANEL

C) FUNCTION CODE OF THE ELECTRICAL EQUIPMENT

AP = ALARM PANEL
UP = AC UPS & DC UPS
BA = BATTERY
BC = BATTERY CHARGER / RECTIFIER
CB =CIRCUIT BRAKER BOX
CN = CATHODIC PROTECTION
CP = CONTROL PANEL
DP = DISTRIBUTION PANEL
JB = JUNCTION BOX
NC = NAVIGATIONAL AID CENTRAL CONTROL PANEL
RR = RESISTOR (EARTHING)
SB = SWITCHBOARD

D) IDENTIFIER ABBREVIATIONS OF THE ELECTRICAL SYSTEM:

EMCS = ELECTRICAL MONITORING & CONTROL SYSTEM
GIS = GAS INSULATED SWITCHGEAR
HVAC = HEATING, VENTILATION, AIR CONDITIONING
HV = HIGH VOLTAGE
MV = MEDIUM VOLTAGE
LCP = LOCAL CONTROL PANEL
LV = LOW VOLTAGE
UPS = UNINTERRUPTIBLE POWER SUPPLY
BESS = BATTERY ENERGY STORAGE SYSTEM
PAS = PROCESS AUTOMATION SYSTEM

E) IDENTIFIER OF THE LOADED PHASE FOR SINGLE-PHASE EQUIPMENT POWER SUPPLY(LV):

L = LINE
N = NEUTRAL
PE = PROTECTIVE EARTH

F) IDENTIFIER OF THE LOADED PHASE FOR THREE-PHASE EQUIPMENT POWER SUPPLY(MV&LV):

L1 = LINE 1
L2 = LINE 2
L3 = LINE 3

3. RED CONDUCTOR MUST BE COVERED WITH BLUE SLEEVE AT THE ENDS, TO USE IT AS NEUTRAL.

4. THE MINIMUM CABLE LENGTH IS 15 M, THE CABLE CANNOT BE SHORTER.

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DG-20149
REV.: 2_C | DATE: 02/12/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
GENERAL NOTES

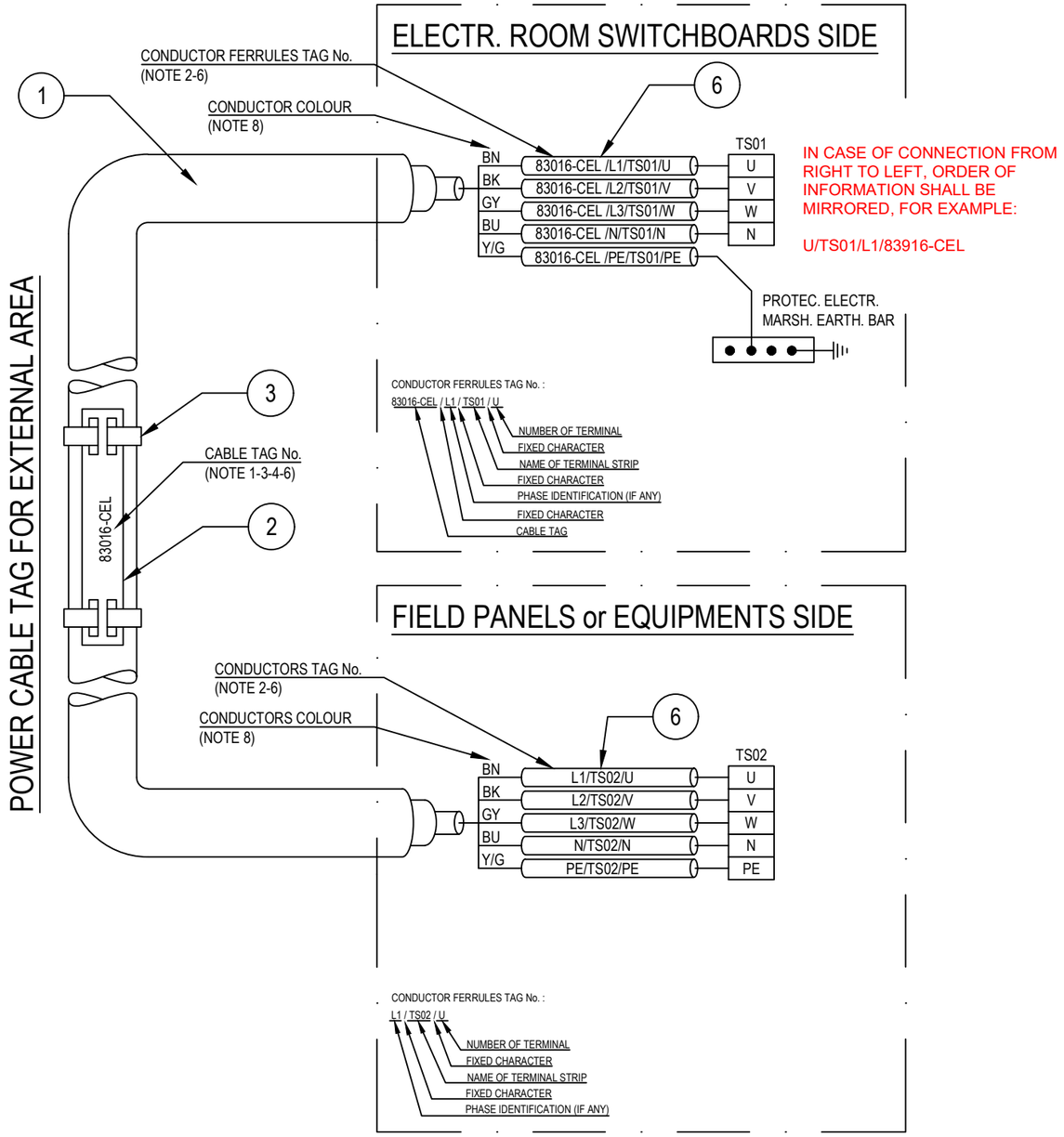
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 006 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02

C02



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	UNARMOURED CABLE				
2	CABLE TAG FOR EXTERNAL AREA	HDG/SS			NOTE 1 NOTE 4
3	TIE FOR CABLE TAG IN EXTERNAL AREA	HDG/SS			
4	CABLE TAG FOR INTERNAL AREA	PVC			NOTE 1 NOTE 5
5	TIE FOR CABLE TAG IN INTERNAL AREA	NYLON 6.6			
6	CORE FERRULES	PVC			

NOTES:

1) ALL CABLES SHALL BE IDENTIFIED AT EACH TERMINATION AND EACH SIDE OF ANY OBSTACLE (E.G. CABLE TRANSIT ON WALLS INSIDE SHELTER AND FLOOR DECK CROSSING, BY THEIR RESPECTIVE TAGS/NUMBERS, AS INDICATED ON THE CABLE SCHEDULE.
CABLE IDENTIFICATION SHALL BE ALSO DONE BELOW AND IN THE SWITCHBOARD CABLE COMPARTMENT.

2) CABLE CORE FERRULES SHALL BE FITTED AT EVERY TERMINATION. THESE FERRULES SHALL BE OF ENGRAVED PLASTIC SLIP ON, INTERLOCKED AND SELF GRIP TYPE.

3) ON CABLE TRAYS OR LADDERS, CABLES SHALL BE IDENTIFIED AT EACH END, AND EVERY 25 METERS.

4) THE CABLE TAG FOR EXTERNAL AREA SHALL DONE BY 316L STAINLESS STEEL LABELS, TAG (H=5mm) SHALL BE LASER PRINTED PREFERABLY OR EMBOSSED, LABEL HELD BY TWO 316L STAINLESS STEEL TIES.

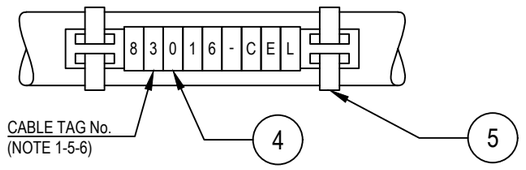
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

7) WITHIN TECHNICAL BUILDING, PROTECTIVE CONDUCTOR SHALL BE TAGGED BETWEEN FOLLOWING ITEMS:
- PANEL (SWITCHBOARD, SWITCHGEAR, DISTRIBUTION BOARD, ETC) AND EARTH BAR
- EARTH BAR AND EARTH BOSS

8) ONLY IF NECESSARY, SHRINK TUBES OF THE APPROPRIATE COLOR WILL BE INSTALLED TO COVER THE WRONG CONDUCTOR COLOR, THIS WILL BE PERFORMED IN EACH SIDE OF THE CABLES WHERE NECESSARY.

POWER CABLE TAG FOR INTERNAL AREA



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
CABLES INSTALLATION SYSTEM IDENTIFICATION FOR POWER CABLES

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 007 | REV. 02

F.to UNI A3: 420mmx297mm

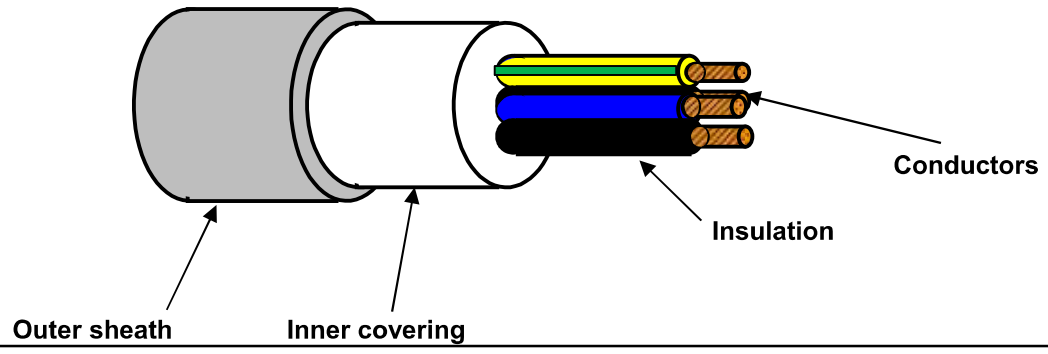
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ESO-200N1-06-L2-02	Cable	EL	VFC	123A90-DDL-EL-LIS-20148						ESO-200N1-06-L2-01	Small Power Socket 16A	Lower Deck	ESO-200N1-06-L2-02	Small Power Socket 16A	Lower Deck	ELECV04-3G10	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G10mm² - Grey	M25	T1_M25_Single			T1_M25_Single				L-150-101-LVT-144 / L-150-101-LVT-088 / L-600-101-LVT-012 / L-600-101-LVT-094 / L-750-101-LVT-014 / L-150-101-LVT-097 / L-150-101-LVT-143

FLEI s.r.l.

Cu Cl.2/EPR/LSZH 0,6/1 KV

3G10 - L.V. POWER CABLE - Flame Retardant



TECHNICAL FEATURES

Conductors :	**STRANDED** plain/bare annealed copper wires	IEC 60228 Class 2
Insulation :	EPR compound, quality to IEC 60092.360, Nominal Thickness 1,0 mm	
Cores colour code :	**Brown - Blue - Yellow/Green**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not Required	
Total Assembling :	Cores layed up with optimal lay length	
Overall Wrapping:	Not required	
Drain wire :	Not required	
Overall Shield:	Not required	
Inner covering :	Extruded LSZH compound, Average Thickness 1,0 mm	
Inner covering color code:	**Black or Natural**	
Armour :	Not required	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G10 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(17,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10	(in fixed installation)
Voltage test :	3,5 kV a.c. for 5' (Between Cores)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 630 MΩ x Km (@ 20°C)	
Applicable Standards		
Design Guidelines :	**IEC 60092.353**	
ON COMPLETE CABLE		
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance	IEC 61034.2 (LT ≥ 60%)	
Temperature Range :		
ON INSULATION	(max +90°C)	(max continuous operation temperature of conductors)
	(max +250°C)	(max conductors temperature during short-circuit for 5 seconds)
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C)	(in fixed installation)
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner covering together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	29/03/2024	Messa			
Checked :	29/03/2024	Spaccasassi			
Approved :	29/03/2024	Cucinotta			

The data provided, lending assent for the treatment, will be used to the sense of the article 13 of of the Regulation (UE) 2016/679, also through outsiders, in order to allow the realization of the fulfilments informatives, administrative, commercial and accounting related to the contractual relationship. Integral copy of the informative could be requested at our offices.

All proprietary rights reserved according to law. This document shall be not reproduced without written permission. FLEI reserves the right to change characteristics and technical data of product shown at any time.

ITEM	Tag	P-ESO-200N1-06-L2-03	: Small Power Socket JB (lower Deck) / Small Power Socket (Below lower Deck)		Dwg	123A90-DDL-EL-LIS-20148	
	S/Sys	83-55	: Power Sockets		Module	LD/TP	
TASK	code	C10001822	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	MC	Activity CCK	Discipline Electrical	Form	CPX09	LV Power Cable

CABLE DATA

Type Cu Cl.2/EPR/LSZH Cores/Size mm² 3G10 mm2 Color GREY

From ESO-200N1-06-L2-02 To ESO-200N1-06-L2-03

1	Confirm cable is as specified in project cable schedule	OK
2	Visual Check cable physical integrity.	OK
3	Check is installed in accordance with layout drawing (segregation, distance…).	Note
4	Check cable is supported and fixed to rack according to project specification.	OK
5	Check bending radius is within the specified limits.	OK
6	Confirm cable glands suit for cable type, correctly mounted and tightened.	OK
7	Check gland plate for single core cables is non ferrous (non -magnetic).	NA
8	Confirm cable labelling is in accordance with specifications.	OK
9	Check cable is correctly loomed and segregated in accordance with specification.	OK
10	Check cable earthing against lastest drawings.	OK
11	Check cores marking are in accordance with termination diagram	OK
12	Check terminations are in accordance with latest termination diagram	Note
13	If required produce Red Line Mark Up for "AS BUILT"	

ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	P-ESO-200N1-06-L2-03	: Small Power Socket JB (lower Deck) / Small Power Socket (Below lower Deck)			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-55	: Power Sockets			Module	LD/TP
TASK	code	C10001822	Location	Onshore Activities		User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0,3	
6		PH 2	0,3	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,3	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	VOLCRAFT 1000V - ET-200 S/N:H240103023	TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207
Calibration certificate N° and date:	N°LAT 042 00768/24 _ 12/10/2024	Calibration certificate N° and date:	N°7722/24 _ 10/07/2024

Comments:

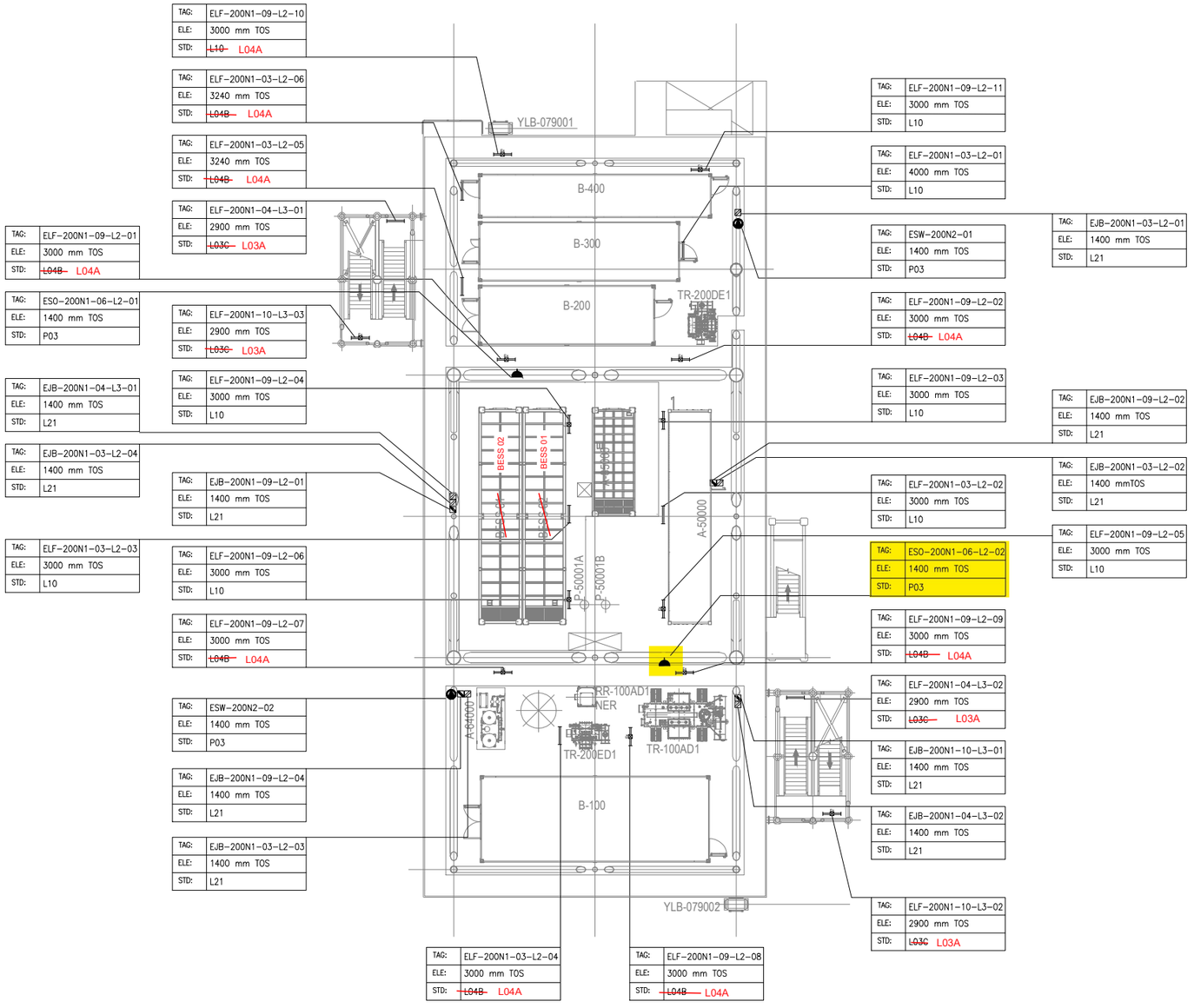
Note 03:Cable installation and connection on both side will be completed during OFFSHORE phase (See Ref. task C10001861)

Note 12: The electrical wiring 123A90-DDL-EL-DG-20149_REV_2M needs to be updated for the ESO-200N1-06-L2-03.

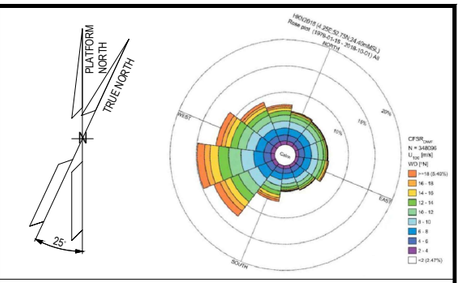
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-03-11	2025-03-11	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-03-11T10:25:23.131Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-03-11T15:15:30.823Z	

DRAWING NO. 123A90-DDL-EL-DL-20119

REV. 01



PLAN ON LOWER DECK
EL+23.310 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.
5. SHEET 1 OF 2 SHOWS ONLY POLE MOUNTED TYPE LIGHTING FIXTURES, SHEET 2 OF 2 SHOWS ONLY SUSPENDED TYPE LIGHTING FIXTURES.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20101	ELECTRICAL EQUIPMENT LAYOUT - LOWER DECK
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	29/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION

REV.:	DATE:	SIGNATURE:
1_E	12/12/24	C.Pilato

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

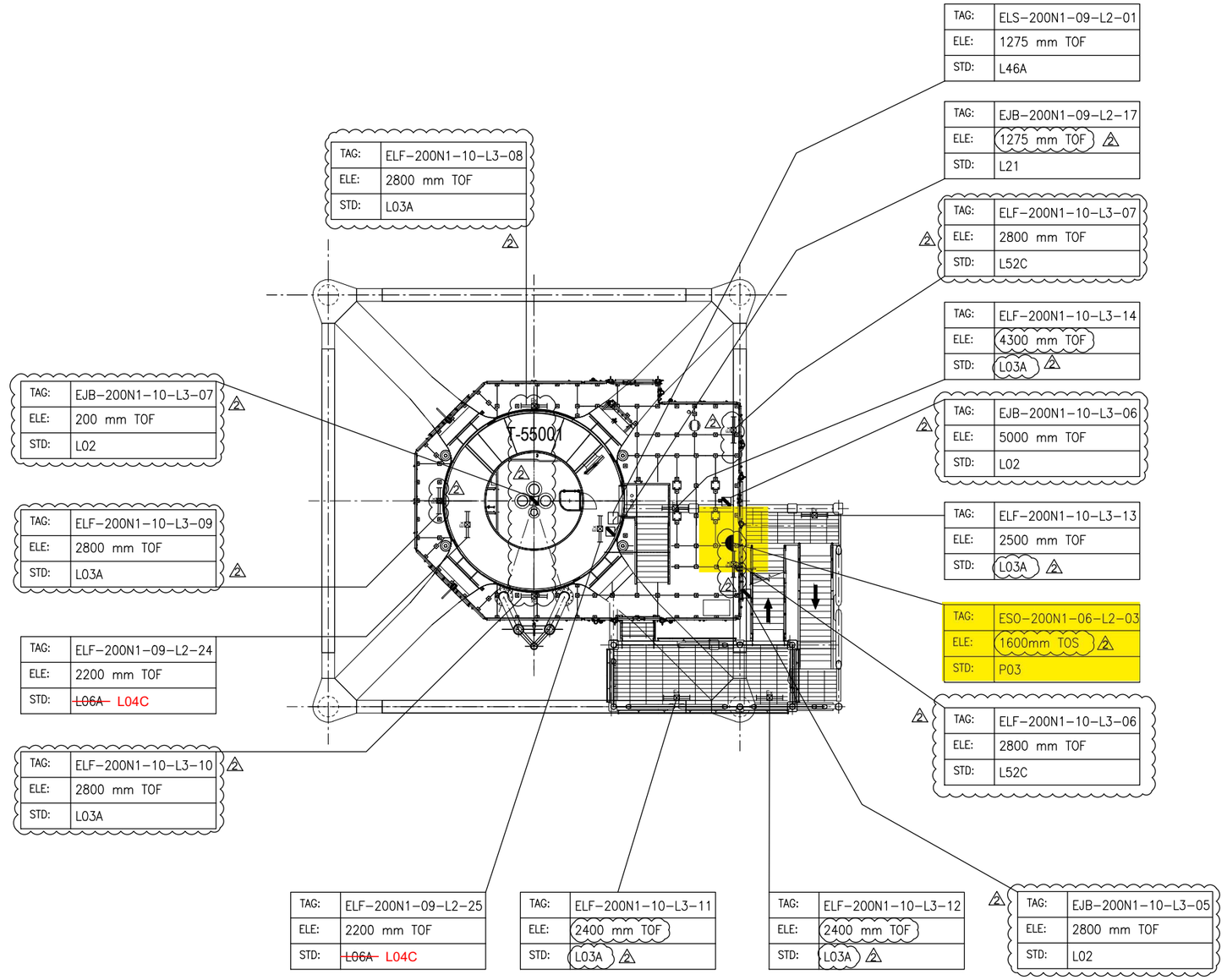
TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 06/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20119	SHEET 2of2	REV. 01

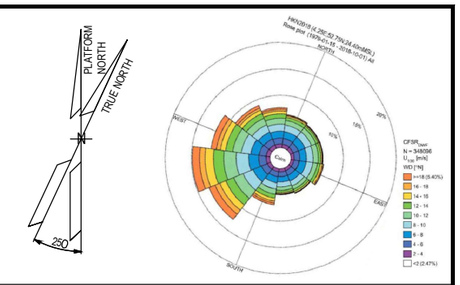
File Name : 123A90-DDL-EL-DL-20119

DRAWING NO. 123A90-DDL-EL-DL-20120

REV. 02



PLAN ON EXISTING PLATFORM AT EL.+16.860 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S / T.O.F.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. ELEVATION OR STANDARD PRESENT IN THE MASK, WHERE JB AND FIXTURE ARE SHOWN, ARE RELATIVE TO THE ORDER OF THE TAGS, 1°ROW JB AND 2°ROW FIXTURE = ELEVATION JB / ELEVATION FIXTURE.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- SMALL POWER SOCKET WITH INTEGRATED JB
- LOCAL SWITCH IP66 TYPE

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

T.O.S TOP OF STEEL
T.O.F TOP OF FOOTING (Walkway plan)

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20120**

REV.:	DATE:	SIGNATURE:
2_B	27/01/25	G.Randi

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

123A90-DDL-EL-DL-20102	ELECTRICAL EQUIPMENT LAYOUT - TRANSITION PIECE
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-PP-DL-70070	BASE LOAD POWER HUB (BLPH) - PLOT PLAN - LOWER AND UPPER DECK
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	07/10/24	AMA	CGI	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	04/06/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

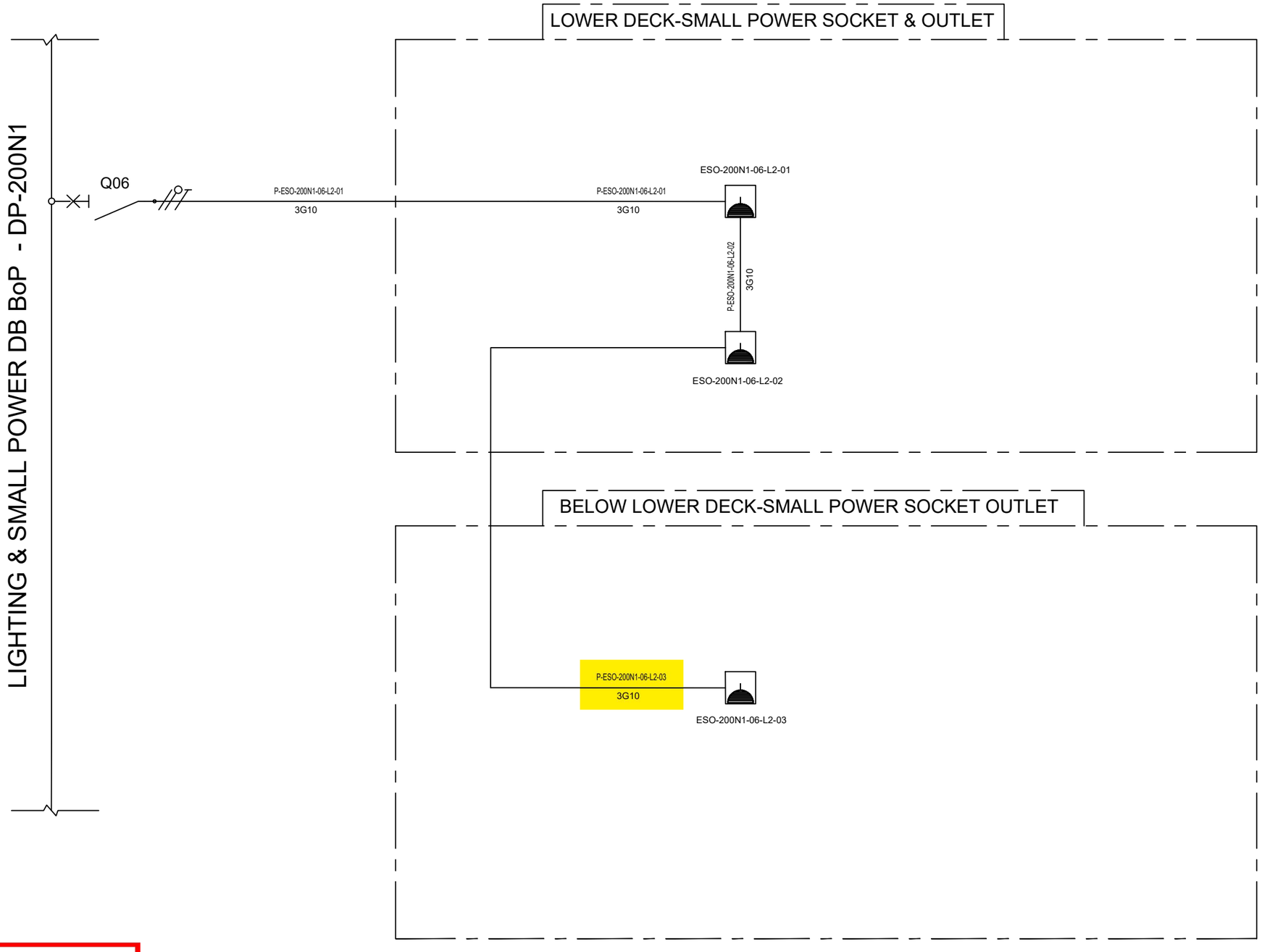
CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:100
DRAWN AMA	CHECKED CGI	APPROVED DLO	DATE 07/10/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20120	SHEET 001	REV. 02

File Name : 123A90-DDL-EL-DL-20120



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_H	24/01/25	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
LOWER DECK & BELOW LOWER DECK–SMALL POWER SOCKET

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

SCALE : NTS

A3

DRAWING NO. 123A90–DDL–EL–DG–20125

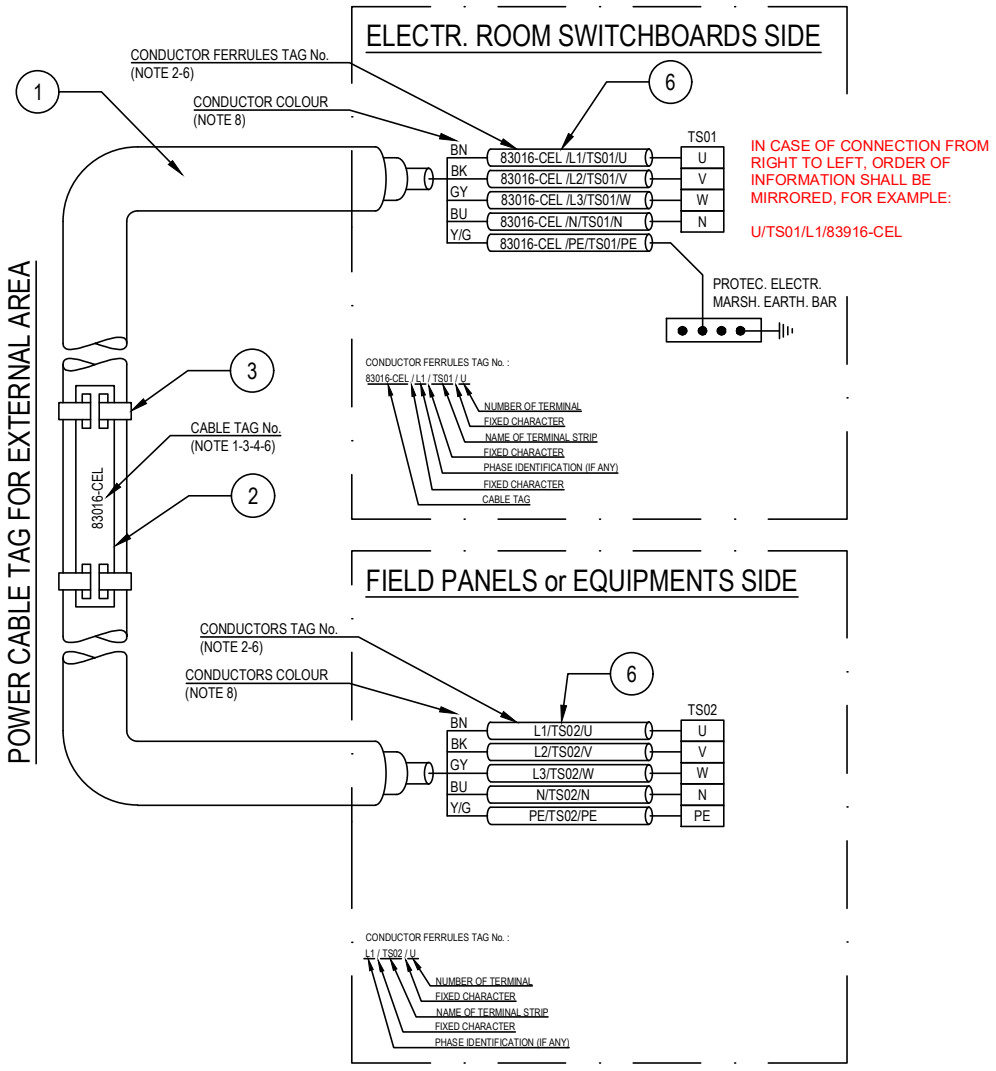
SHEET 008

REV. 01

F.to UNI A3: 420mmx297mm

File Name : 123A90–DDL–EL–DG–20125

C02



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	UNARMOURED CABLE				
2	CABLE TAG FOR EXTERNAL AREA	HDG/SS			NOTE 1 NOTE 4
3	TIE FOR CABLE TAG IN EXTERNAL AREA	HDG/SS			
4	CABLE TAG FOR INTERNAL AREA	PVC			NOTE 1 NOTE 5
5	TIE FOR CABLE TAG IN INTERNAL AREA	NYLON 6.6			
6	CORE FERRULES	PVC			

NOTES:

1) ALL CABLES SHALL BE IDENTIFIED AT EACH TERMINATION AND EACH SIDE OF ANY OBSTACLE (E.G. CABLE TRANSIT ON WALLS INSIDE SHELTER AND FLOOR DECK CROSSING, BY THEIR RESPECTIVE TAGS/NUMBERS, AS INDICATED ON THE CABLE SCHEDULE.
CABLE IDENTIFICATION SHALL BE ALSO DONE BELOW AND IN THE SWITCHBOARD CABLE COMPARTMENT.

2) CABLE CORE FERRULES SHALL BE FITTED AT EVERY TERMINATION. THESE FERRULES SHALL BE OF ENGRAVED PLASTIC SLIP ON, INTERLOCKED AND SELF GRIP TYPE.

3) ON CABLE TRAYS OR LADDERS, CABLES SHALL BE IDENTIFIED AT EACH END, AND EVERY 25 METERS.

4) THE CABLE TAG FOR EXTERNAL AREA SHALL DONE BY 316L STAINLESS STEEL LABELS, TAG (H=5mm) SHALL BE LASER PRINTED PREFERABLY OR EMBOSSED, LABEL HELD BY TWO 316L STAINLESS STEEL TIES.

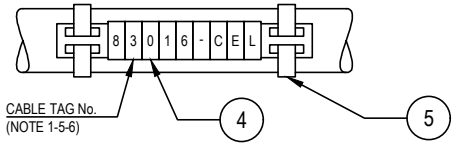
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

7) WITHIN TECHNICAL BUILDING, PROTECTIVE CONDUCTOR SHALL BE TAGGED BETWEEN FOLLOWING ITEMS:
- PANEL (SWITCHBOARD, SWITCHGEAR, DISTRIBUTION BOARD, ETC) AND EARTH BAR
- EARTH BAR AND EARTH BOSS

8) ONLY IF NECESSARY, SHRINK TUBES OF THE APPROPRIATE COLOR WILL BE INSTALLED TO COVER THE WRONG CONDUCTOR COLOR, THIS WILL BE PERFORMED IN EACH SIDE OF THE CABLES WHERE NECESSARY.

POWER CABLE TAG FOR INTERNAL AREA



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_D	20/12/24	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
CABLES INSTALLATION SYSTEM IDENTIFICATION FOR POWER CABLES

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 007 | REV. 02

F.to UNI A3: 420mmx297mm

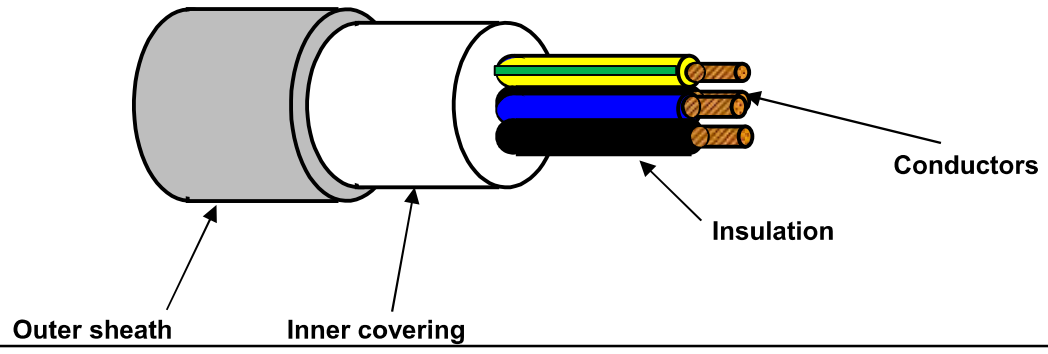
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ESO-200N1-06-L2-03	Cable	EL	VFC	123A90-DDL-EL-LIS-20148						ESO-200N1-06-L2-02	Small Power Socket 16A	Lower Deck	ESO-200N1-06-L2-03	Small Power Socket 16A	Below Lower Deck	ELECV04-3G10	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G10mm² - Grey	M25	T1_M25_Single			T1_M25_Single				L-150-101-LVT-143 / L-150-101-LVT-097 / L-750-101-LVT-014 / L-300-101-LVT-079 / L-300-101-LVT-080 / L-150-100-LVT-008 / L-150-100-LVT-007 / L-50-100-LVT-010

FLEI s.r.l.

Cu Cl.2/EPR/LSZH 0,6/1 KV

3G10 - L.V. POWER CABLE - Flame Retardant



TECHNICAL FEATURES

Conductors :	**STRANDED** plain/bare annealed copper wires	IEC 60228 Class 2
Insulation :	EPR compound, quality to IEC 60092.360, Nominal Thickness 1,0 mm	
Cores colour code :	**Brown - Blue - Yellow/Green**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not Required	
Total Assembling :	Cores layed up with optimal lay length	
Overall Wrapping:	Not required	
Drain wire :	Not required	
Overall Shield:	Not required	
Inner covering :	Extruded LSZH compound, Average Thickness 1,0 mm	
Inner covering color code:	**Black or Natural**	
Armour :	Not required	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G10 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(17,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10	(in fixed installation)
Voltage test :	3,5 kV a.c. for 5' (Between Cores)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 630 MΩ x Km (@ 20°C)	
Applicable Standards		
Design Guidelines :	**IEC 60092.353**	
ON COMPLETE CABLE		
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance	IEC 61034.2 (LT ≥ 60%)	
Temperature Range :		
ON INSULATION	(max +90°C)	(max continuous operation temperature of conductors)
	(max +250°C)	(max conductors temperature during short-circuit for 5 seconds)
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C)	(in fixed installation)
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner covering together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	29/03/2024	Messa			
Checked :	29/03/2024	Spaccasassi			
Approved :	29/03/2024	Cucinotta			

The data provided, lending assent for the treatment, will be used to the sense of the article 13 of of the Regulation (UE) 2016/679, also through outsiders, in order to allow the realization of the fulfilments informatives, administrative, commercial and accounting related to the contractual relationship. Integral copy of the informative could be requested at our offices.

All proprietary rights reserved according to law. This document shall be not reproduced without written permission. FLEI reserves the right to change characteristics and technical data of product shown at any time.

ITEM	Tag	ESO-200N1-05-L1-01	: Small Power Socket (Upper Deck)			Dwg	123A90-DDL-EL-DL-20118
	S/Sys	83-55	: Power Sockets			Module	UD
TASK	code	C10001852		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

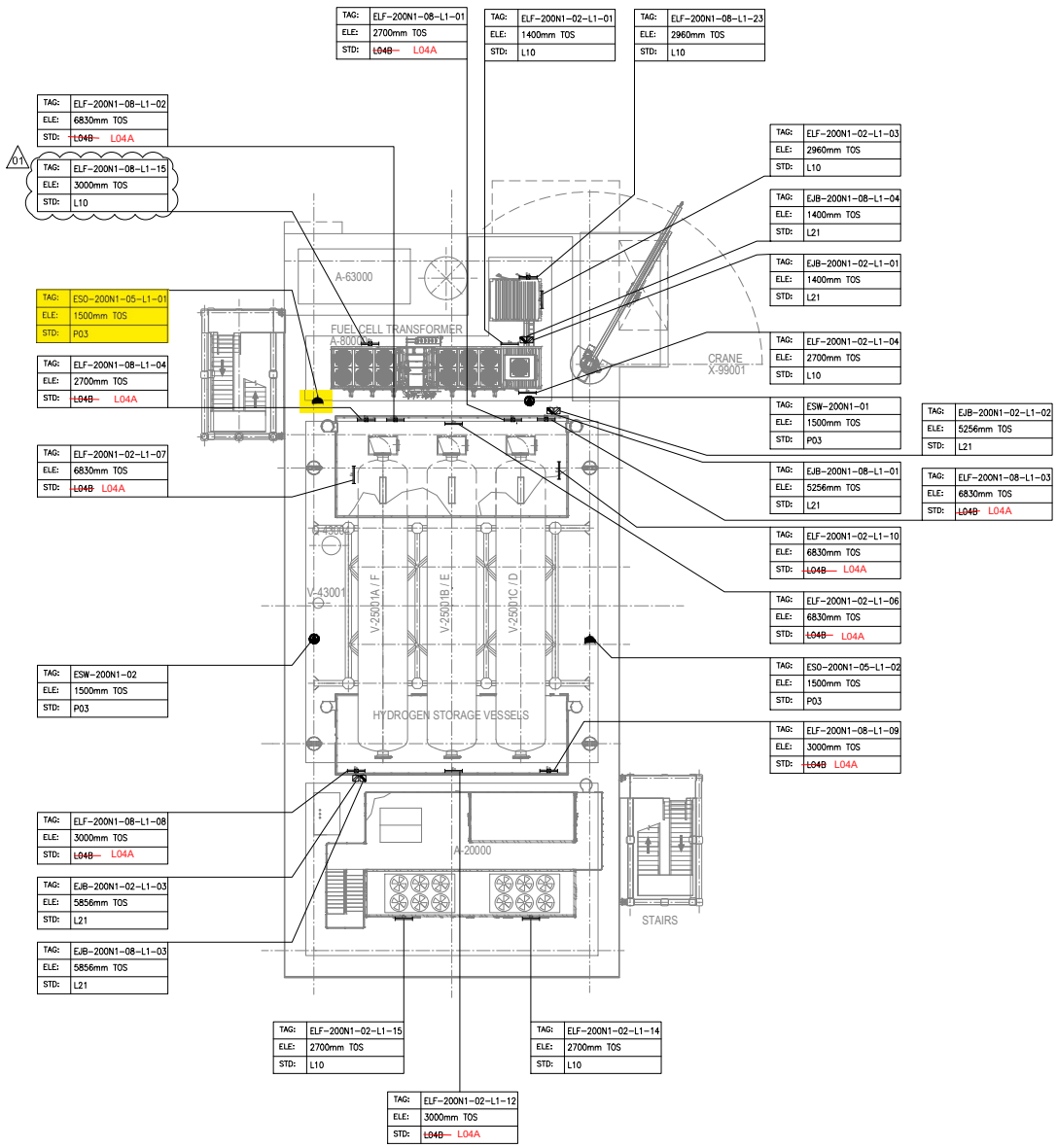
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	PL
4	Check nameplate data is correct.	OK
5	Check all bolts are fitted and all unused entries are suitably plugged.	PL
6	Check terminals for proper size and installation crimps	OK
7	Check earthing and bonding against drawings.	OK
8	Check items are properly fixed on support.	OK
9	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

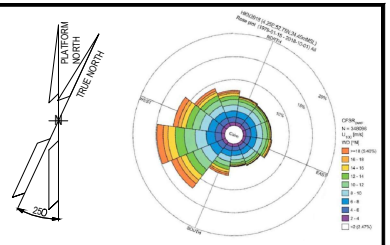
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Michele Tartaglia	Luca Mussi	
Date	2024-12-20	2024-12-31	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2024-12-20T12:51:37.000Z	PROVERLIS Digitaly signed by Luca Mussi 2024-12-31T10:07:23.185Z	

DRAWING NO. 123A90-DDL-EL-DL-20118

REV. 01



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



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

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-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT
123A90-DDL-ST-DD-90076	IDENTIFICATION PANELS ASSEMBLY AND DETAILS

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	28/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20118**

REV.:	DATE:	SIGNATURE:
1_F	26/11/24	G.Randi

ROSETTI MARINO SpA

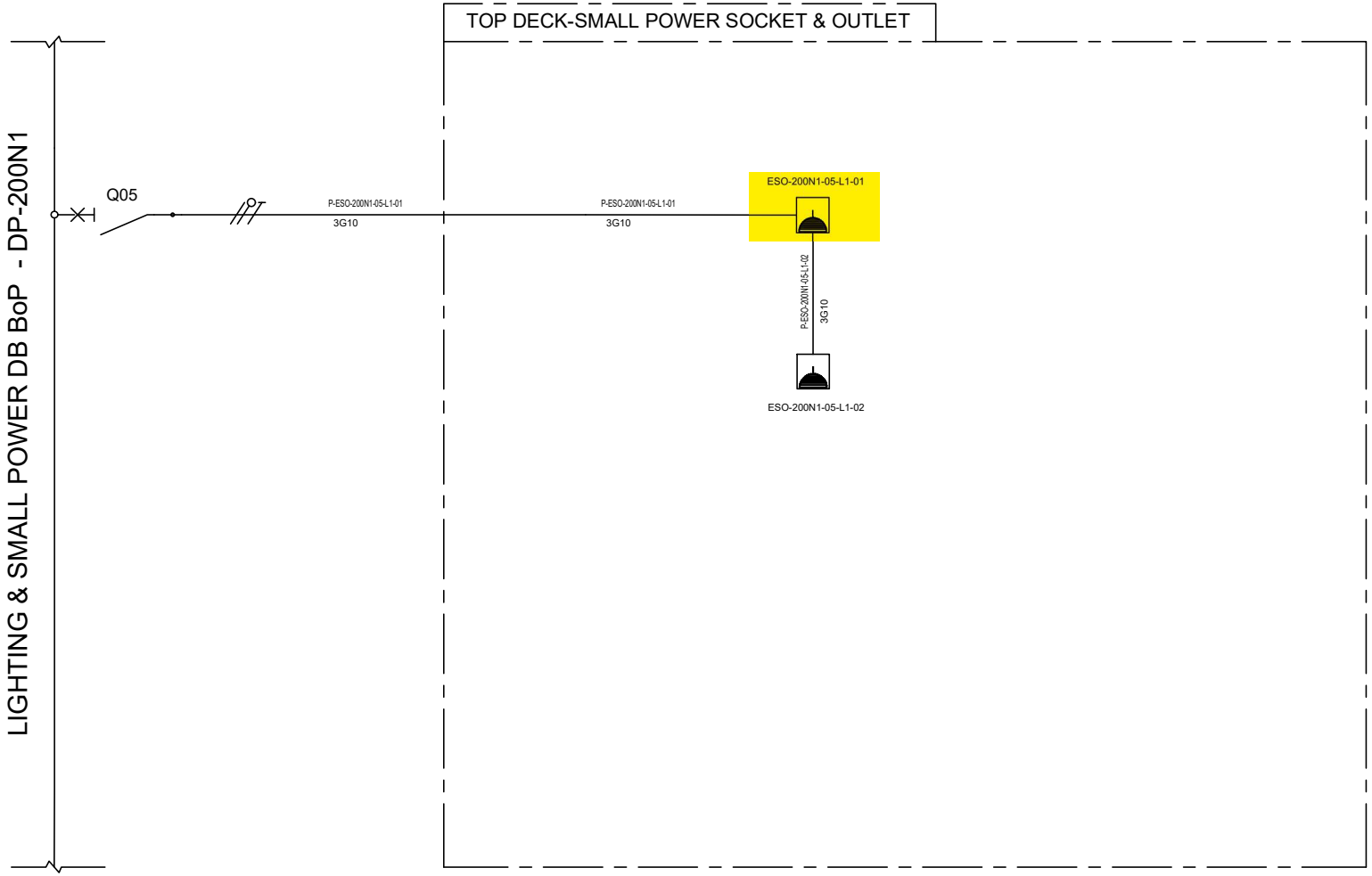
CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – TOP DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 01/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20118	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20118



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_C	20/12/24	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
TOP DECK-SMALL POWER SOCKET

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

SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	012	01

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20125

FROM	TO

DESCRIPTION:LIGHTING & SMALL POWER DB BOP
TAG NUMBER:DP-200N1

CUBICLE/CB: +01/Q2
-X1
L1/2 10 BN
BU
N/2 11 Y/G
PE
P.E. BUS BAR
P-EJB-200N1-02-L1-01
3G4 mm²

CUBICLE/CB: +02/Q3
-X1
L2/3 12 BN
BU
N/3 13 Y/G
PE
P.E. BUS BAR
P-EJB-200N1-03-L2-01
3G4 mm²

CUBICLE/CB: +02/Q4
-X1
L3/4 14 BN
BU
N/4 15 Y/G
PE
P.E. BUS BAR
P-EJB-200N1-04-L3-01
3G4 mm²

CUBICLE/CB: +03/Q5
-X1
L1/5 80 BN
BU
N/5 81 Y/G
PE
P.E. BUS BAR
P-ESO-200N1-05-L1-01
3G10 mm²

DESCRIPTION:NORMAL LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER:EJB-200N1-02-L1-01
BN L
BU N
Y/G PE

DESCRIPTION:NORMAL LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER:EJB-200N1-03-L2-01
BN L
BU N
Y/G PE

DESCRIPTION:NORMAL LIGHTING - STAIRS
TAG NUMBER:EJB-200N1-04-L3-01
BN L
BU N
Y/G PE

DESCRIPTION:SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER:ESO-200N1-05-L1-01
BN L
BU N
Y/G PE
BN
BU
Y/G

P-ESO-200N1-05-L1-02
3G10 mm²

DESCRIPTION:SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER:ESO-200N1-05-L1-02
BN L
BU N
Y/G PE
L
N
PE

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20149**

REV.:	DATE:	SIGNATURE:
2_E	20/12/24	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

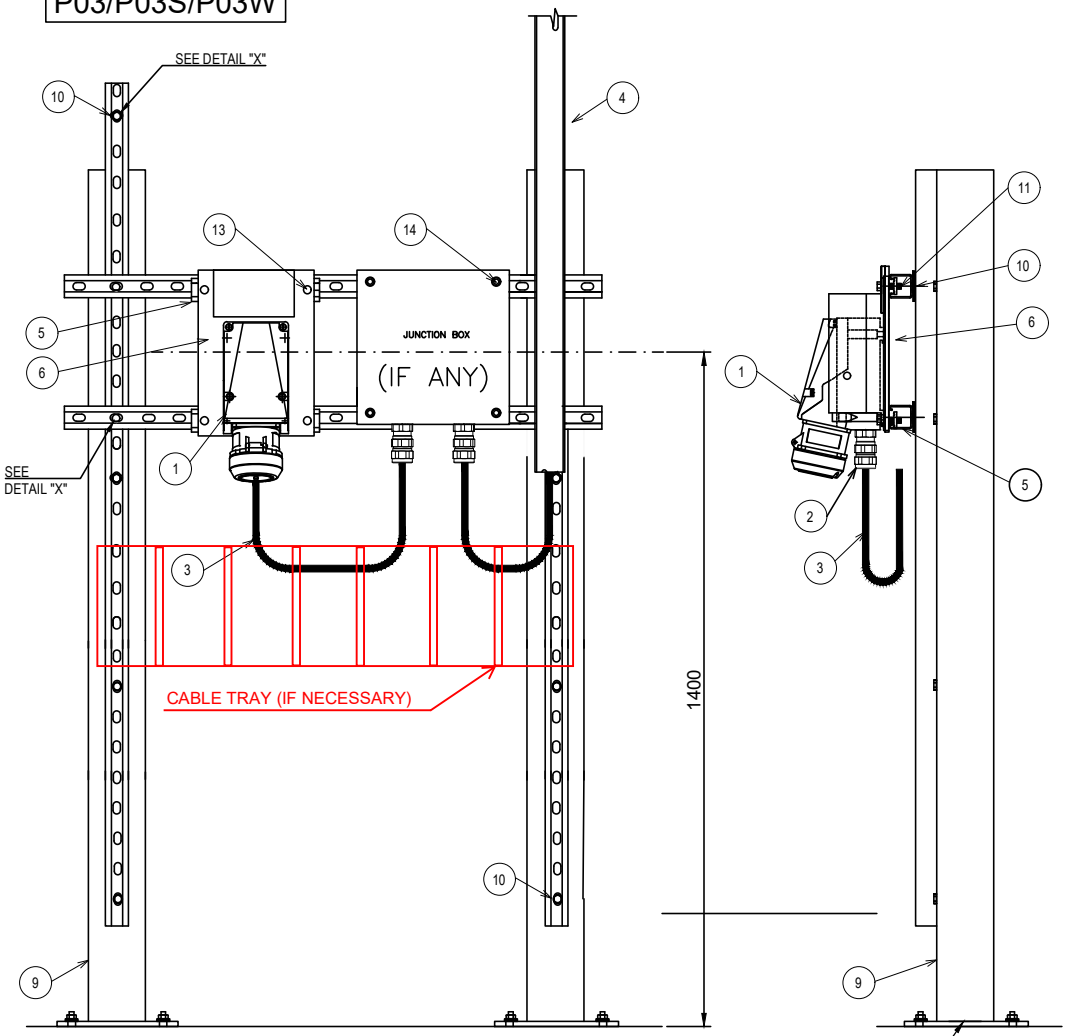
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK
SCALE : 1:X

A3
DRAWING NO. 123A90-DDL-EL-DG-20149
SHEET 045
REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02

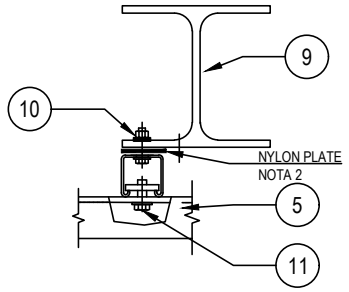
P03/P03S/P03W



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	POWER SOCKET			1	
2	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE	NICK.PL.BRASS		3	NOTE 3
3	UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
5	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L	41x41x2	AS R.	NOTE 1
6	PLATE SUPPORT FOR POWER SOCKET	AISI 316L		1	
9	PROFILE SUPPORT	PAINTED C.S.		2	
10	HEXAGONAL BOLT WITH NYLON WASHER, PLANE WASHERS, GROWER AND NUT.	AISI 316L	M10x40	AS R.	
11	HEXAGONAL BOLT WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M12x30	AS R.	
12	DOUBLE SLOT CROWNED HEAD SCREW WITH NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M6x20	AS R.	
13	HEXAGONAL BOLT WITH PALNE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M8x30	4	
14	SCREW WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x40	4	

02

DETAIL "X"



NOTE :
1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY FASE.
2) INTERPOSING TEFLON OR NYLON PLATE BETWEEN DISSIMILAR CONDUCTIIN MATERIAL.
3) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).

02

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DD-20092

REV.:	DATE:	SIGNATURE:
2_C	06/12/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

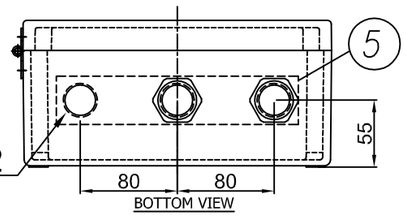
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS POWER SOCKET FLOOR MOUNTED

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 004 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG



8 3 N°3 PASSING HOLES Ø25.2
C/W N°2 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

4 I2400722-B040I00029801

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC
Via Italia 33 - 20060 Gessate (MI) ITALY

MADE IN ITALY

Serial Nr.:
Year of construction:

Type: MXBS-252612P

230VAC 50Hz 16A

T.amb -20/+50°C

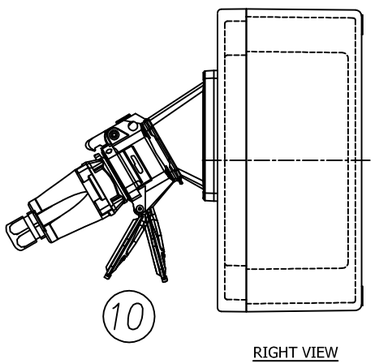
IP66

9 PLATE DETAIL

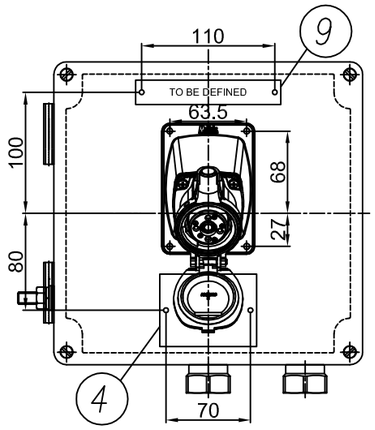


MATERIAL: LAMINATED PLASTIC
BACKGROUND: WHITE
LETTERS: BLACK

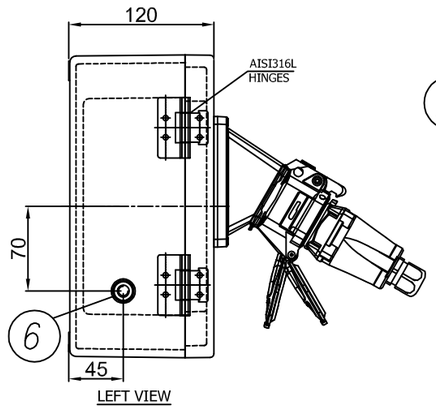
7 TERMINALS NUMBERED
L-L,N-N,PE-PE
BRIDGED



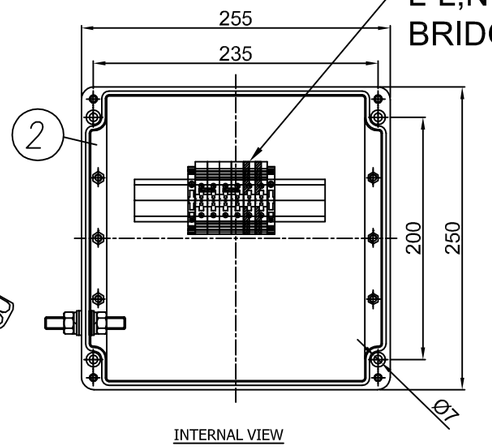
RIGHT VIEW



FRONT VIEW

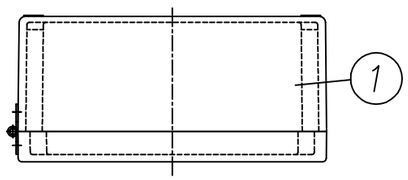


LEFT VIEW



INTERNAL VIEW

ENCLOSURE N°	TAG LIST
1	ESO-200N1-06-L2-03
2	ESO-200N1-06-L2-01
3	ESO-200N1-06-L2-02
4	ESO-200N1-05-L1-01
5	ESO-200N1-05-L1-02
6	SPARE (TO BE PROVIDED BLANK)



TOP VIEW

ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
10	DSN1 SOCKET 1P+N+E 230VAC 16A	1	511M3+6114015 6118015+511P0D18	.	MARECHAL
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	DUSTPROOF PVC PLUG Ø25	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 10 SQMM EARTH TERMINAL BLOCK SIZE 10 SQMM	4 2	WDU–10 WPE–10	.	WEIDMULLER
6	AISI316L INT/EXT EARTH BOLT M10	1	BTP–10	.	TECHNOR ITALSMEA
5	BRASS CONTINUITY PLATE THK. 0.8 MM	1	–	.	TECHNOR ITALSMEA
4	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	2	T25	.	TECHNOR ITALSMEA
2	INTERNAL MOUNTING PLATE	1	PS–2526	.	TECHNOR ITALSMEA
1	GRP ENCLOSURE	1	AQ–252612P	.	TECHNOR ITALSMEA

-UNPAINTED (BLACK NATURAL)
Q.TY 6, ITEM 50: 1EQP155,
ELEJB-SOCK01

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets

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

SCALE : NTS

A3

DRAWING NO. 1724001481-EL-DA-00003

SHEET 008

REV. 04

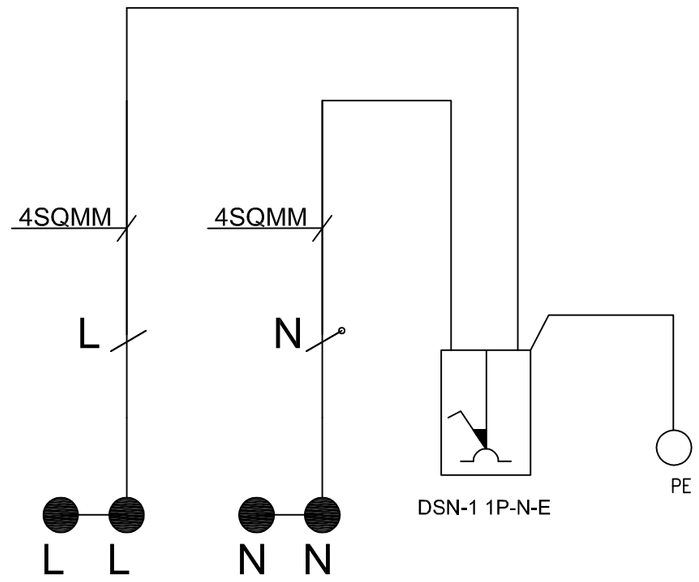
F.to UNI A3: 420mmx297mm

File Name : 1724001481-EL-DA-00003 Rev. 01

	01	02	03	04	05	06	07	08	09

CABLES TRI-RATED 0,6/1kV
COLOR CODE:
-L=BLACK
-N=BLUE

230Vac 1Ph+N+PE



LEGEND

- TERMINAL
- BRIDGED TERMINALS
- SOCKET
- CABLE

DESCRIPTION			.		DSN-1 SOCKET 1P+N+E 16A	. .	. .	. .	. .	. .	. .
CIRCUIT N°			.	.	.	.	.	.	.	.	.
FEEDER	TYPE					.	.	.	.	.	.
	CODE		.	.	.	.	.	.	.	.	.
TOTAL POWER		kW	.	.	.	.	.	.	.	.	.
CONTEMPORANEITY FACTOR			.	.	.	.	.	.	.	.	.
ABSORBED POWER		kW	.	.	.	.	.	.	.	.	.
ABSORBED CURRENT		A	.	.	.	.	.	.	.	.	.
CIRCUIT BREAKER or ON-LOAD SWITCH	TYPE					.	.	.	.	.	.
	POLES NUMBER x CURRENT					.	.	.	.	.	.
FUSES	TYPE		.	.	.	.	.	.	.	.	.
	RATING	A	.	.	.	.	.	.	.	.	.
CONTACTOR	MANUFACTURER		.	.	.	.	.	.	.	.	.
	MODEL		.	.	.	.	.	.	.	.	.
	POLES NUMBER x CURRENT		.	.	.	.	.	.	.	.	.
	NOMINAL POWER	kW	.	.	.	.	.	.	.	.	.
EARTH LEAKAGE	TYPE			.	.	.	.	.	.	.	.
	NOMINAL RANGE	mA		.	.	.	.	.	.	.	.
POWER LINE DATA	CABLE TYPE		.	.	.	.	.	.	.	.	.
	FORMATION / SIZE		.	.	.	.	.	.	.	.	.
	LENGHT	m	.	.	.	.	.	.	.	.	.
	VOLTAGE DROP	%	.	.	.	.	.	.	.	.	.
TERMINALS	SECTION	sqmm	2XWDU-10	2XWDU-10		2XWPE-10	.	.	.	.	.
	MARKING	-X	L-L	N-N		PE-PE	.	.	.	.	.

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets-Wiring Diagram

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

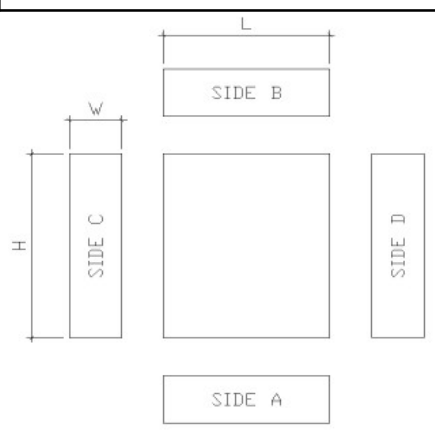
A3 | DRAWING NO. 1724001481-EL-DA-00003 | SHEET 009 | REV. 04

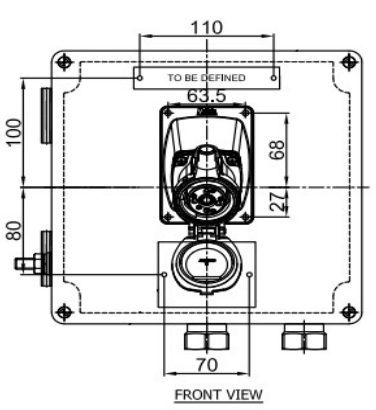
F.to UNI A3: 420mmx297mm

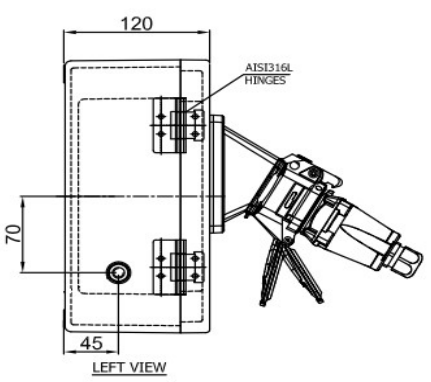
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	16A Power Socket and Plug with Integrated JB				01
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by Vendor	MXBS-252612P		01
4	Serial Number	by Vendor			00
5	Quantity	5+1(spare)		(6+0 Spare)	01
6	Application	Power Socket			00
7	Safe Area/Hazardous Area	Safe Area			00
8	**Rating**				
9	Current Rating [A]	16A	16A		01
10	Poles	1ph+N+PE	1ph+N+PE		01
11	Voltage [V]	230	230 V ac		01
12	**Material**				
13	Body	GRP	GRP		01
14	Execution	Normal			00
15	Protection Degree	IP56	IP 66		01
16	Temperature Class	Normal			00
17	**Cable Entry**				
18	Thread	Metric			00
19	Cable Gland Size/Qty.	M25/3	M25/3		01
17	**Interlocked Switching Device**				
18	Interlocked Switching device	Required			00
19	Padlocakable Position	Required			00
20	Plug	Required			00
21	**Accessories**				
22	Hinged Cover	Required	AISI316L Hinges		01
23	Gasket	Required			00
24	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
25	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
26	Internal Ground Bar	Required		connected to earth stud	00
27	Earth Stud	Required			00
28	Drainage Valve	Required			00
29	Pad lockable Cover	Required			00
30	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
31	**Side 'A'**				
32	Hubs Qty.	3	3		01
33	Size	M25	Ø 25.2 mm		01
34	Thread	ISO-M			00
35	Plug	No.2 M25	No.2 M25	nickel-plated brass	01
36	**Side 'B'**				
37	Hubs Qty.	Not Required			00
38	Size	NA			00
39	Thread	NA			00
40	**Side 'C'**				
41	Hubs Qty.	Not Required			00
42	Size	NA			00
43	Thread	NA			00
44	**Side 'D'**				
45	Hubs Qty.	Not Required			00
46	Size	NA			00
47	Thread	NA			00
48	**Terminals**				
49	Size [mm^2]	Suitable for 10 Sq.mm Cable	M25	suitable with wire-end ferrules DIN 46228	01
50	Qty.	n°4 for Ph // n°4 for N // n°4 for PE	n°2 for Ph // n°2 for N // n°2 for PE	jumpered	01
51	**Bonding Cable (yellow/Green)**				
52	Size [mm^2]	by vendor		6 mm^2	01
53	Qty.	Min. 0.15m			00
54	**Dimension**				
55	Height 'H' [mm]	by vendor	255 mm		01
56	Width 'W' [mm]	by vendor	250 mm		01
57	Length 'L' [mm]	by vendor	120 mm		01
58	Weight [Kg]	by vendor			00
59	**Code**	**Remarks**			
60					

NOTES:







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Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

ITEM	Tag	ESO-200N1-05-L1-02	: Small Power Socket (Upper Deck)			Dwg	123A90-DDL-EL-DL-20118
	S/Sys	83-55	: Power Sockets			Module	UD
TASK	code	C10001853		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

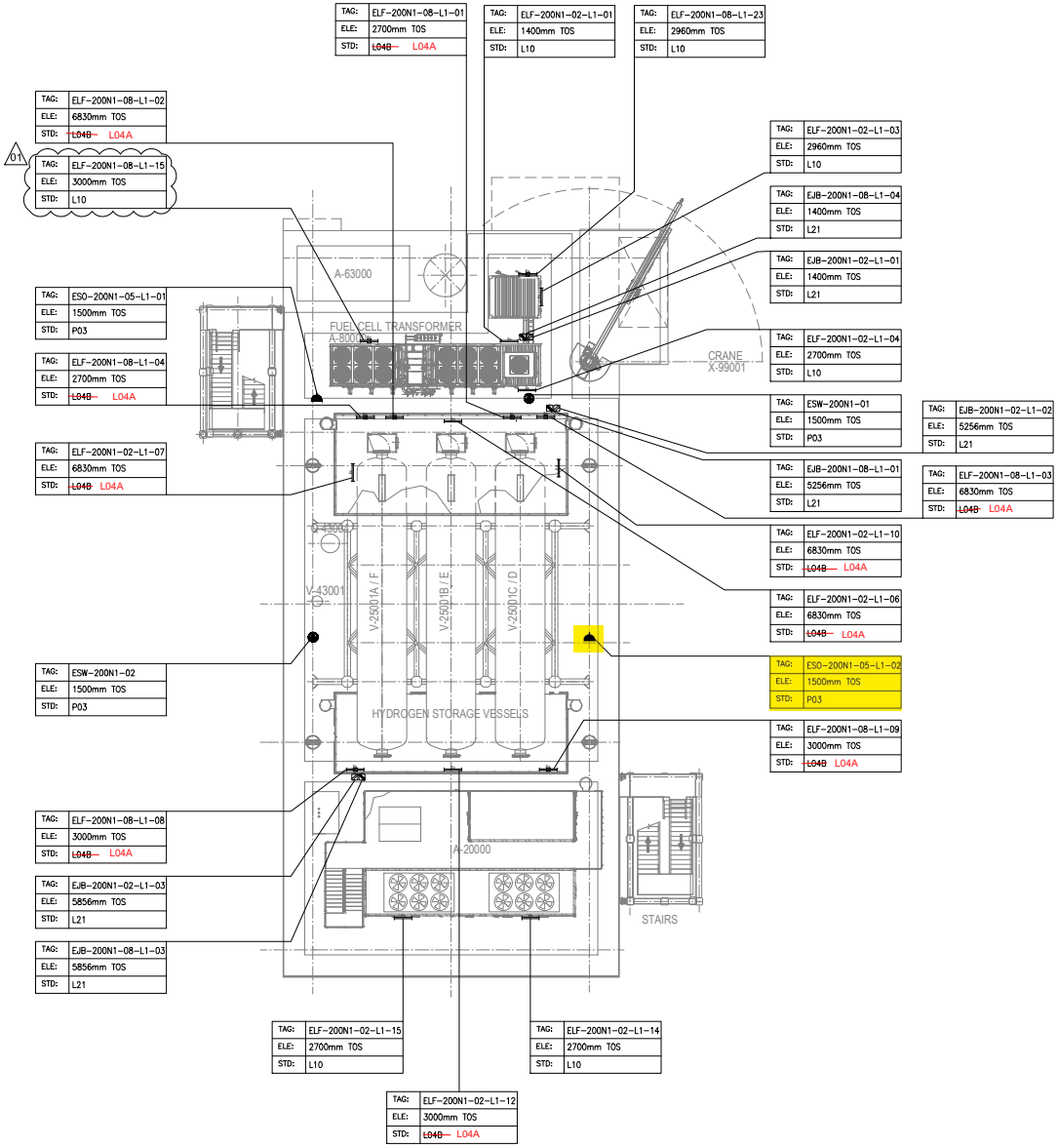
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	OK
4	Check nameplate data is correct.	OK
5	Check all bolts are fitted and all unused entries are suitably plugged.	PL
6	Check terminals for proper size and installation crimps	OK
7	Check earthing and bonding against drawings.	PL
8	Check items are properly fixed on support.	OK
9	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

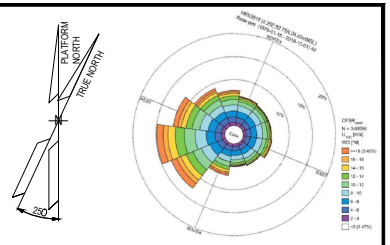
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Francesco Zucca	Luca Mussi	
Date	2024-12-16	2024-12-17	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-12-16T12:11:16.680Z	PROVERLIS Digitaly signed by Luca Mussi 2024-12-17T16:46:30.677Z	

DRAWING NO. 123A90-DDL-EL-DL-20118

REV. 01



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



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

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-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT
123A90-DDL-ST-DD-90076	IDENTIFICATION PANELS ASSEMBLY AND DETAILS

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	28/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20118**

REV.:	DATE:	SIGNATURE:
1_F	26/11/24	G.Randi

ROSETTI MARINO SpA

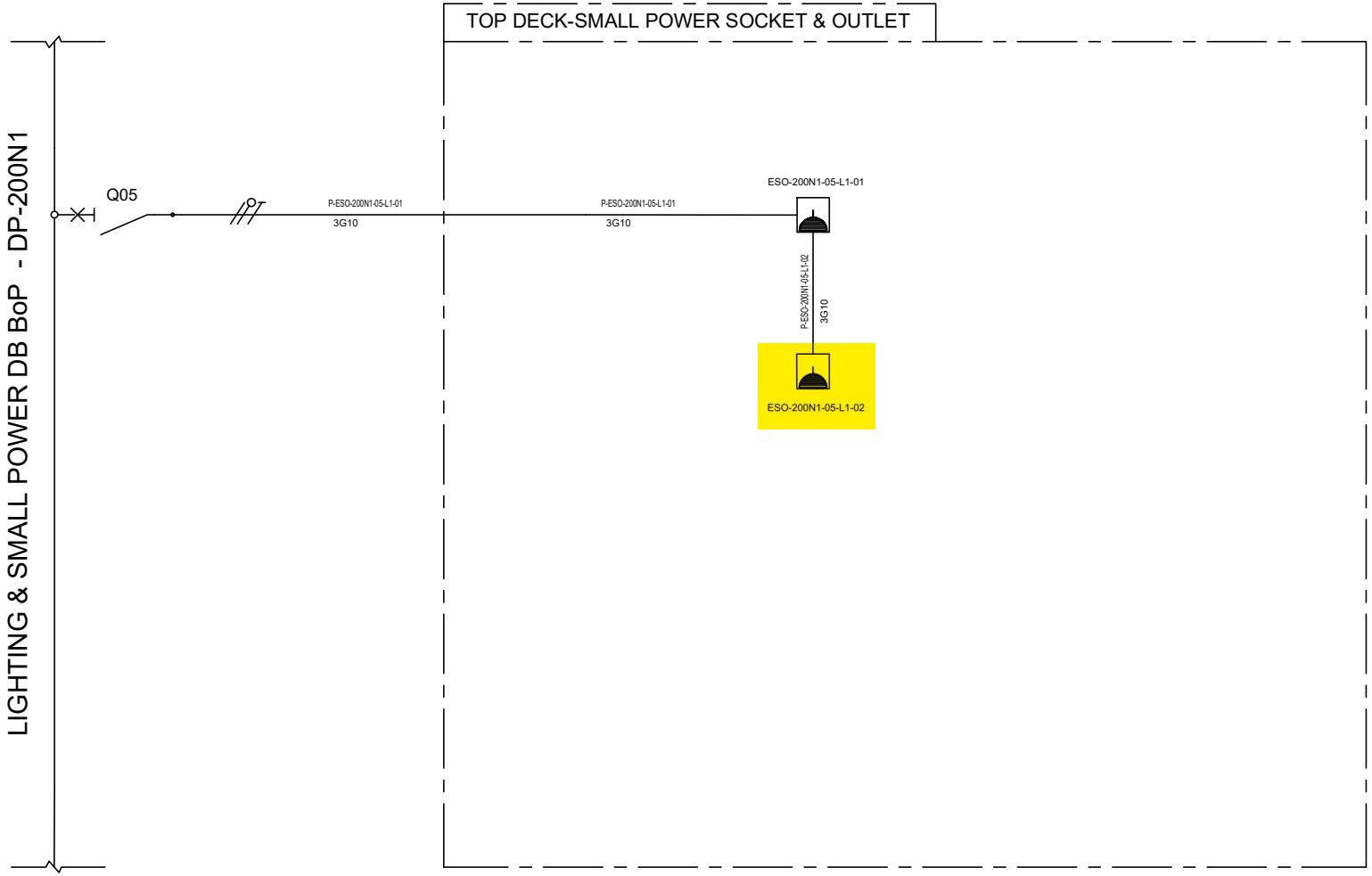
CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – TOP DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 01/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20118	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20118



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_B	20/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
TOP DECK-SMALL POWER SOCKET

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

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	012	01

CROSSWIND

ROSETTI MARINO

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20125

FROM	TO

DESCRIPTION:LIGHTING & SMALL POWER DB BOP
TAG NUMBER:DP-200N1

CUBICLE/CB: +01/Q2
-X1
L1/2 10 BN
BU
N/2 11 Y/G
PE
P.E. BUS BAR
P-EJB-200N1-02-L1-01
3G4 mm²

CUBICLE/CB: +02/Q3
-X1
L2/3 12 BN
BU
N/3 13 Y/G
PE
P.E. BUS BAR
P-EJB-200N1-03-L2-01
3G4 mm²

CUBICLE/CB: +02/Q4
-X1
L3/4 14 BN
BU
N/4 15 Y/G
PE
P.E. BUS BAR
P-EJB-200N1-04-L3-01
3G4 mm²

CUBICLE/CB: +03/Q5
-X1
L1/5 80 BN
BU
N/5 81 Y/G
PE
P.E. BUS BAR
P-ESO-200N1-05-L1-01
3G10 mm²

DESCRIPTION:NORMAL LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER:EJB-200N1-02-L1-01
BN L
BU N
Y/G PE

DESCRIPTION:NORMAL LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER:EJB-200N1-03-L2-01
BN L
BU N
Y/G PE

DESCRIPTION:NORMAL LIGHTING - STAIRS
TAG NUMBER:EJB-200N1-04-L3-01
BN L
BU N
Y/G PE

DESCRIPTION:SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER:ESO-200N1-05-L1-01
BN L
BU N
Y/G PE
P-ESO-200N1-05-L1-02
3G10 mm²

DESCRIPTION:SMALL POWER SOCKET JB(UPPER DECK)
TAG NUMBER:ESO-200N1-05-L1-02
BN L
BU N
Y/G PE

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20149**

REV.:	DATE:	SIGNATURE:
2_C	02/12/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

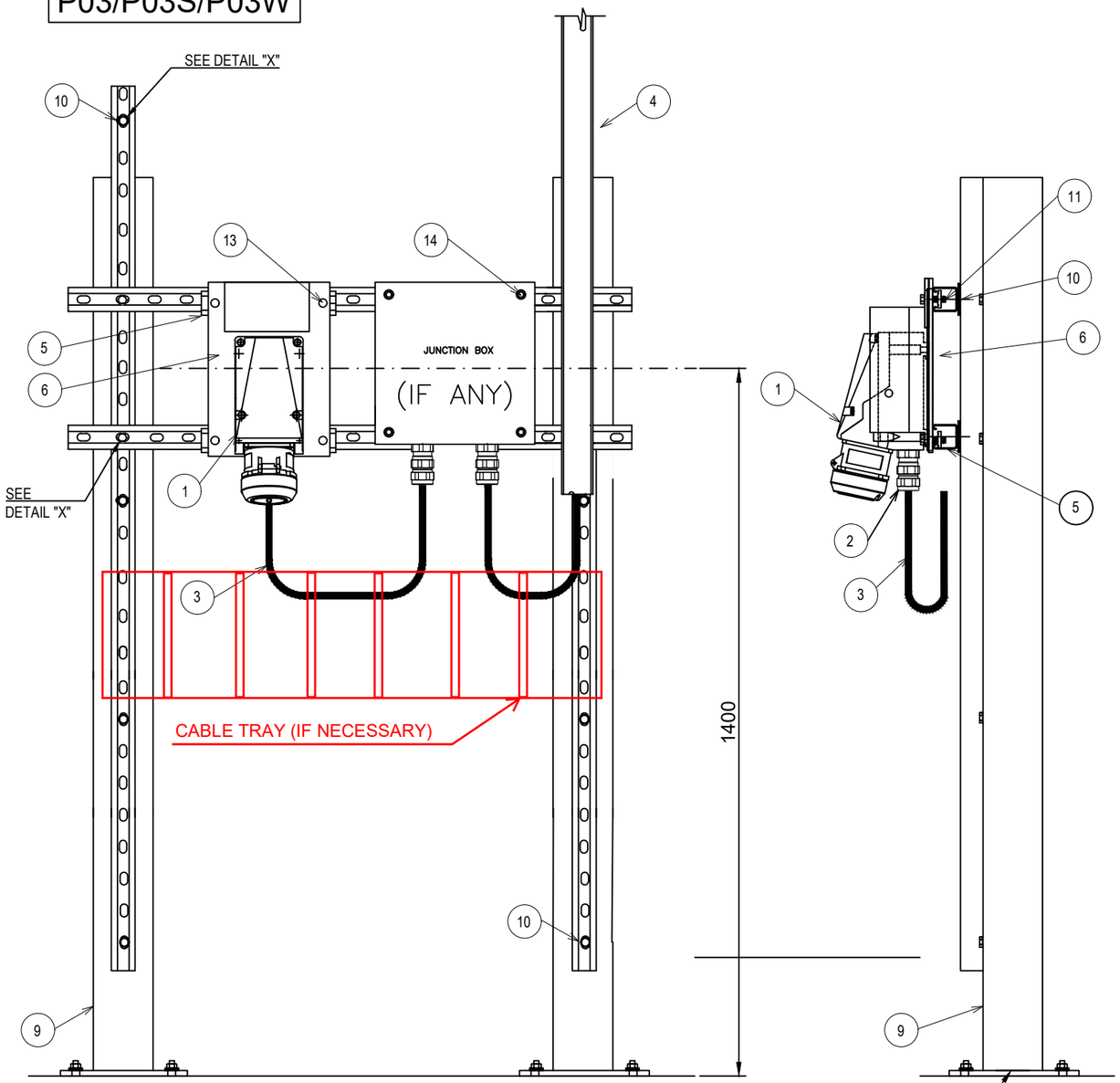
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 045 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02

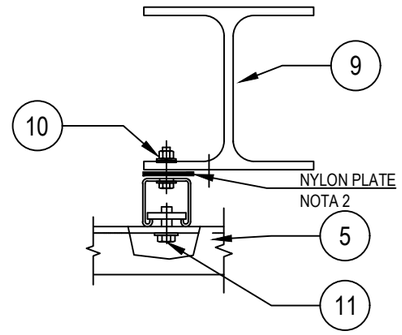
P03/P03S/P03W



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	POWER SOCKET			1	
2	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE	NICK.PL.BRASS		3	NOTE 3
3	UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
5	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L	41x41x2	AS R.	NOTE 1
6	PLATE SUPPORT FOR POWER SOCKET	AISI 316L		1	
9	PROFILE SUPPORT	PAINTED C.S.		2	
10	HEXAGONAL BOLT WITH NYLON WASHER, PLANE WASHERS, GROWER AND NUT.	AISI 316L	M10x40	AS R.	
11	HEXAGONAL BOLT WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M12x30	AS R.	
12	DOUBLE SLOT CROWNED HEAD SCREW WITH NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M6x20	AS R.	
13	HEXAGONAL BOLT WITH PALNE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M8x30	4	
14	SCREW WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x40	4	

02

DETAIL "X"



NOTE :
1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY FASE.
2) INTERPOSING TEFLON OR NYLON PLATE BETWEEN DISSIMILAR CONDUCTIIN MATERIAL.
3) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).

02 SUPPORT BOLTED ON HILTI S-BT INSTALLED ON BEAM OR DECK

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

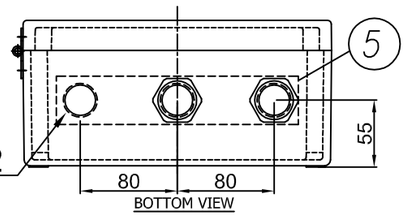
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS POWER SOCKET FLOOR MOUNTED

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 004 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG



8 3 N°3 PASSING HOLES Ø25.2
C/W N°2 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

4 I2400722-B040I00029801

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC
Via Italia 33 - 20060 Gessate (MI) ITALY

MADE IN ITALY

Serial Nr.:
Year of construction:

Type: MXBS-252612P

230VAC 50Hz 16A

T.amb -20/+50°C

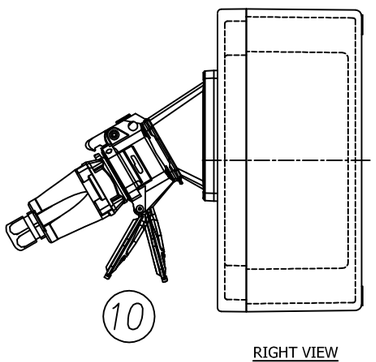
IP66

9 PLATE DETAIL

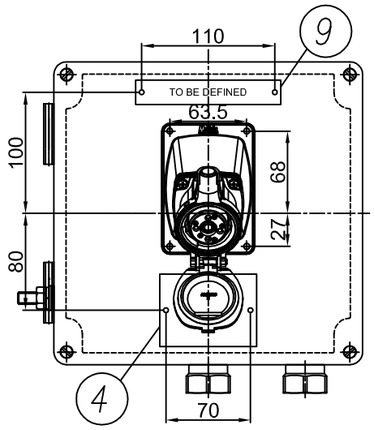


MATERIAL: LAMINATED PLASTIC
BACKGROUND: WHITE
LETTERS: BLACK

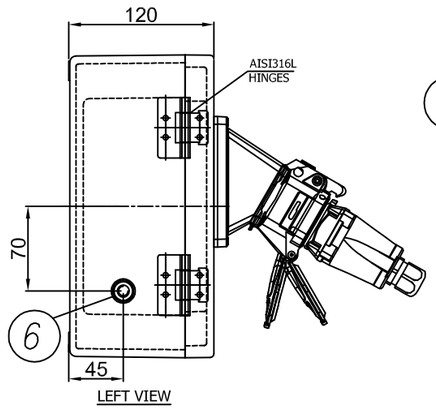
7 TERMINALS NUMBERED
L-L,N-N,PE-PE
BRIDGED



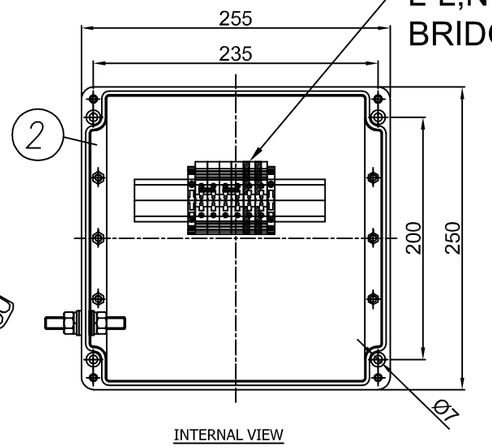
RIGHT VIEW



FRONT VIEW

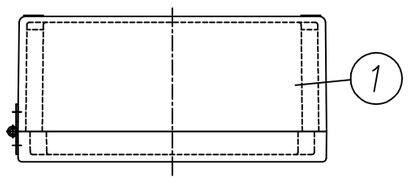


LEFT VIEW



INTERNAL VIEW

ENCLOSURE N°	TAG LIST
1	ESO-200N1-06-L2-03
2	ESO-200N1-06-L2-01
3	ESO-200N1-06-L2-02
4	ESO-200N1-05-L1-01
5	ESO-200N1-05-L1-02
6	SPARE (TO BE PROVIDED BLANK)



TOP VIEW

ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
10	DSN1 SOCKET 1P+N+E 230VAC 16A	1	511M3+6114015 6118015+511P0D18	.	MARECHAL
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	DUSTPROOF PVC PLUG Ø25	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 10 SQMM EARTH TERMINAL BLOCK SIZE 10 SQMM	4 2	WDU–10 WPE–10	.	WEIDMULLER
6	AISI316L INT/EXT EARTH BOLT M10	1	BTP–10	.	TECHNOR ITALSMEA
5	BRASS CONTINUITY PLATE THK. 0.8 MM	1	–	.	TECHNOR ITALSMEA
4	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	2	T25	.	TECHNOR ITALSMEA
2	INTERNAL MOUNTING PLATE	1	PS–2526	.	TECHNOR ITALSMEA
1	GRP ENCLOSURE	1	AQ–252612P	.	TECHNOR ITALSMEA

-UNPAINTED (BLACK NATURAL)
Q.TY 6, ITEM 50: 1EQP155,
ELEJB-SOCK01

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets

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

SCALE : NTS

A3

DRAWING NO. 1724001481-EL-DA-00003

SHEET 008

REV. 04

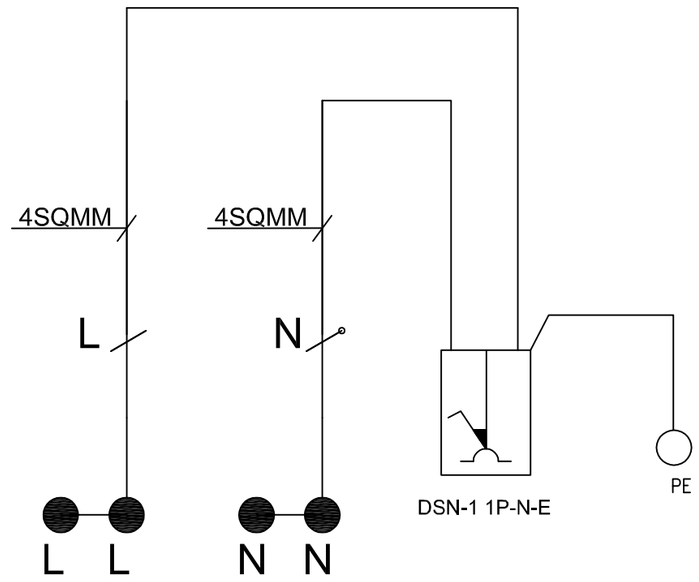
F.to UNI A3: 420mmx297mm

File Name : 1724001481-EL-DA-00003 Rev. 01

	01	02	03	04	05	06	07	08	09

CABLES TRI-RATED 0,6/1kV
COLOR CODE:
-L=BLACK
-N=BLUE

230Vac 1Ph+N+PE



LEGEND

- TERMINAL
- BRIDGED TERMINALS
- SOCKET
- CABLE

DESCRIPTION			.		DSN-1 SOCKET 1P+N+E 16A	. .	. .	. .	. .	. .	. .
CIRCUIT N°			.	.	.	.	.	.	.	.	.
FEEDER	TYPE					.	.	.	.	.	.
	CODE		.	.	.	.	.	.	.	.	.
TOTAL POWER		kW	.	.	.	.	.	.	.	.	.
CONTEMPORANEITY FACTOR			.	.	.	.	.	.	.	.	.
ABSORBED POWER		kW	.	.	.	.	.	.	.	.	.
ABSORBED CURRENT		A	.	.	.	.	.	.	.	.	.
CIRCUIT BREAKER or ON-LOAD SWITCH	TYPE					.	.	.	.	.	.
	POLES NUMBER x CURRENT					.	.	.	.	.	.
FUSES	TYPE		.	.	.	.	.	.	.	.	.
	RATING	A	.	.	.	.	.	.	.	.	.
CONTACTOR	MANUFACTURER		.	.	.	.	.	.	.	.	.
	MODEL		.	.	.	.	.	.	.	.	.
	POLES NUMBER x CURRENT		.	.	.	.	.	.	.	.	.
	NOMINAL POWER	kW	.	.	.	.	.	.	.	.	.
EARTH LEAKAGE	TYPE			.	.	.	.	.	.	.	.
	NOMINAL RANGE	mA		.	.	.	.	.	.	.	.
POWER LINE DATA	CABLE TYPE		.	.	.	.	.	.	.	.	.
	FORMATION / SIZE		.	.	.	.	.	.	.	.	.
	LENGHT	m	.	.	.	.	.	.	.	.	.
	VOLTAGE DROP	%	.	.	.	.	.	.	.	.	.
TERMINALS	SECTION	sqmm	2XWDU-10	2XWDU-10		2XWPE-10	.	.	.	.	.
	MARKING	-X	L-L	N-N		PE-PE	.	.	.	.	.

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets-Wiring Diagram

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

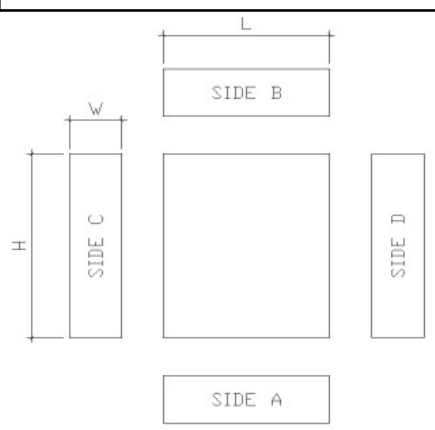
A3 | DRAWING NO. 1724001481-EL-DA-00003 | SHEET 009 | REV. 04

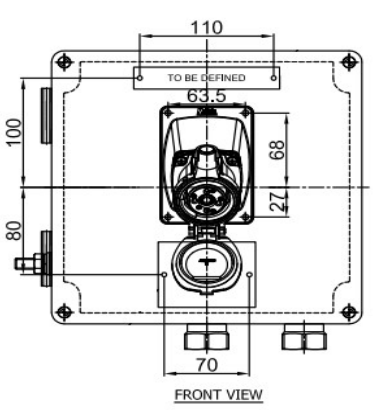
F.to UNI A3: 420mmx297mm

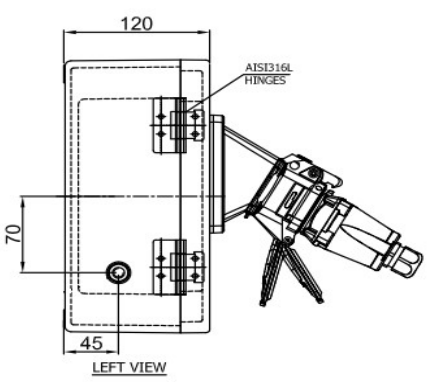
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	16A Power Socket and Plug with Integrated JB				01
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by Vendor	MXBS-252612P		01
4	Serial Number	by Vendor			00
5	Quantity	5+1(spare)		(6+0 Spare)	01
6	Application	Power Socket			00
7	Safe Area/Hazardous Area	Safe Area			00
8	**Rating**				
9	Current Rating [A]	16A	16A		01
10	Poles	1ph+N+PE	1ph+N+PE		01
11	Voltage [V]	230	230 V ac		01
12	**Material**				
13	Body	GRP	GRP		01
14	Execution	Normal			00
15	Protection Degree	IP56	IP 66		01
16	Temperature Class	Normal			00
17	**Cable Entry**				
18	Thread	Metric			00
19	Cable Gland Size/Qty.	M25/3	M25/3		01
17	**Interlocked Switching Device**				
18	Interlocked Switching device	Required			00
19	Padlocakable Position	Required			00
20	Plug	Required			00
21	**Accessories**				
22	Hinged Cover	Required	AISI316L Hinges		01
23	Gasket	Required			00
24	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
25	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
26	Internal Ground Bar	Required		connected to earth stud	00
27	Earth Stud	Required			00
28	Drainage Valve	Required			00
29	Pad lockable Cover	Required			00
30	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
31	**Side 'A'**				
32	Hubs Qty.	3	3		01
33	Size	M25	Ø 25.2 mm		01
34	Thread	ISO-M			00
35	Plug	No.2 M25	No.2 M25	nickel-plated brass	01
36	**Side 'B'**				
37	Hubs Qty.	Not Required			00
38	Size	NA			00
39	Thread	NA			00
40	**Side 'C'**				
41	Hubs Qty.	Not Required			00
42	Size	NA			00
43	Thread	NA			00
44	**Side 'D'**				
45	Hubs Qty.	Not Required			00
46	Size	NA			00
47	Thread	NA			00
48	**Terminals**				
49	Size [mm^2]	Suitable for 10 Sq.mm Cable	M25	suitable with wire-end ferrules DIN 46228	01
50	Qty.	n°4 for Ph // n°4 for N // n°4 for PE	n°2 for Ph // n°2 for N // n°2 for PE	jumpered	01
51	**Bonding Cable (yellow/Green)**				
52	Size [mm^2]	by vendor		6 mm^2	01
53	Qty.	Min. 0.15m			00
54	**Dimension**				
55	Height 'H' [mm]	by vendor	255 mm		01
56	Width 'W' [mm]	by vendor	250 mm		01
57	Length 'L' [mm]	by vendor	120 mm		01
58	Weight [Kg]	by vendor			00
59	**Code**	**Remarks**			
60					

NOTES:







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Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

ITEM	Tag	ESO-200N1-06-L2-01	: Small Power Socket (Lower Deck)			Dwg	123A90-DDL-EL-DL-20119
	S/Sys	83-55	: Power Sockets			Module	LD
TASK	code	C10001854		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

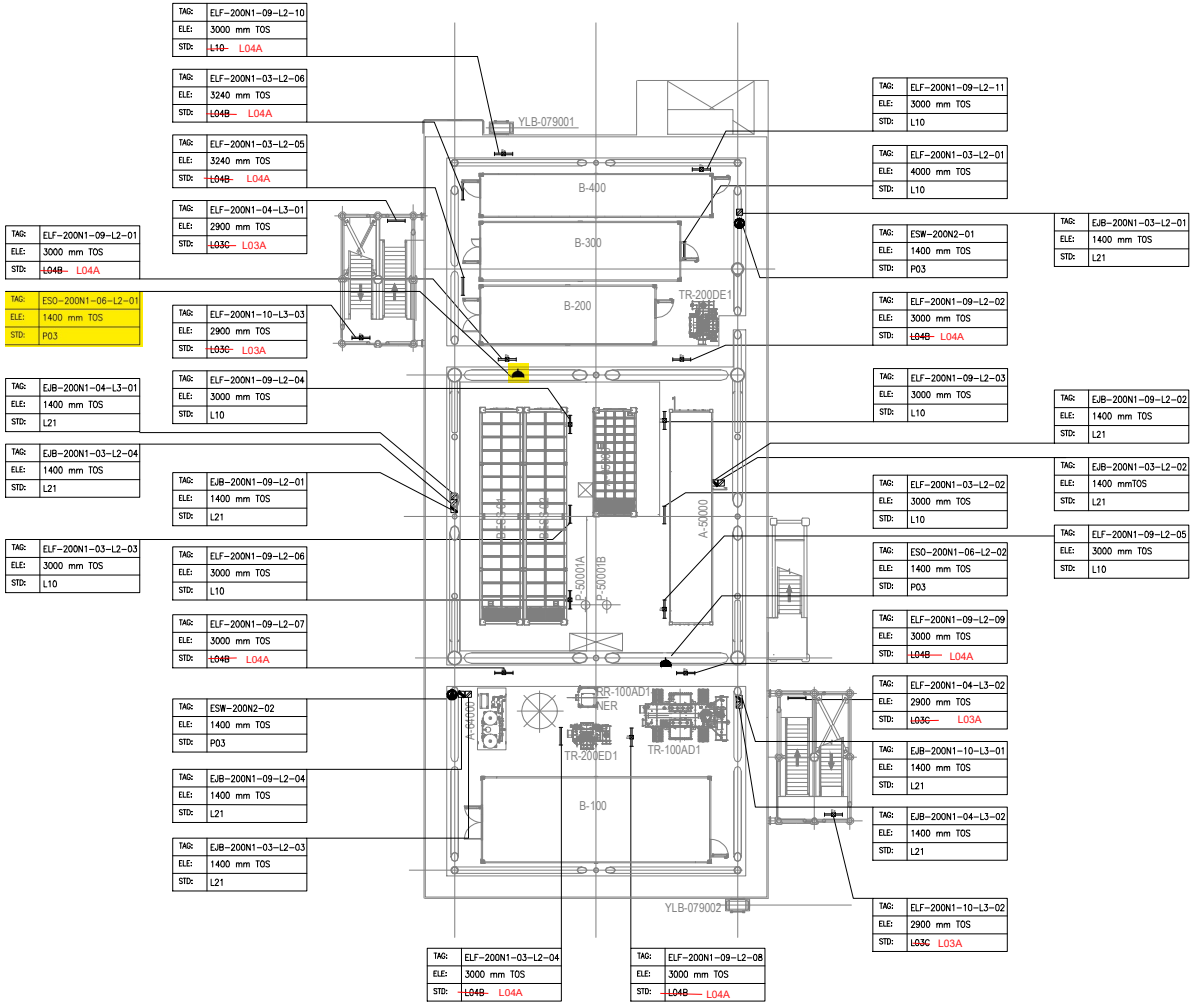
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	OK
4	Check nameplate data is correct.	OK
5	Check all bolts are fitted and all unused entries are suitably plugged.	OK
6	Check terminals for proper size and installation crimps	OK
7	Check earthing and bonding against drawings.	OK
8	Check items are properly fixed on support.	OK
9	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

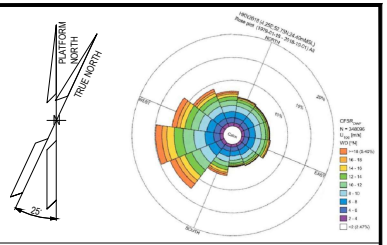
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Francesco Zucca	Luca Mussi	
Date	2024-12-09	2024-12-12	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-12-09T13:28:12.582Z	PROVERLIS Digitaly signed by Luca Mussi 2024-12-12T15:51:34.138Z	

DRAWING NO. 123A90-DDL-EL-DL-20119

REV. 01



PLAN ON LOWER DECK
EL+23.310 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.
5. SHEET 1 OF 2 SHOWS ONLY POLE MOUNTED TYPE LIGHTING FIXTURES, SHEET 2 OF 2 SHOWS ONLY SUSPENDED TYPE LIGHTING FIXTURES.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20119**

REV.:	DATE:	SIGNATURE:
1_D	20/11/24	G.Randi

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20101	ELECTRICAL EQUIPMENT LAYOUT - LOWER DECK
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	29/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

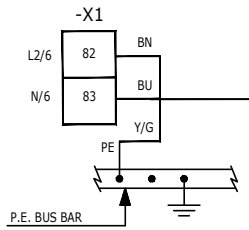
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 06/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20119	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20119

FROM	TO

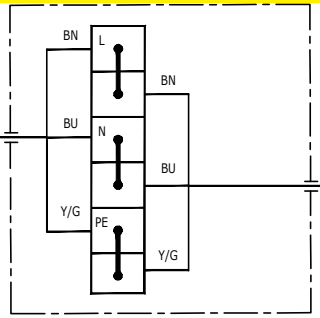
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +03/Q6



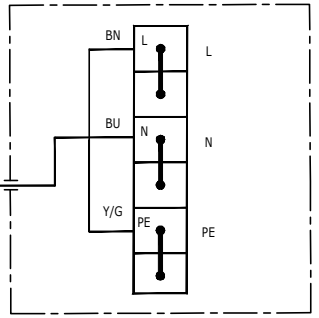
P-ESO-200N1-06-L2-01
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER: ESO-200N1-06-L2-01

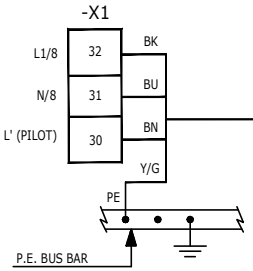


P-ESO-200N1-06-L2-02
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER: ESO-200N1-06-L2-02

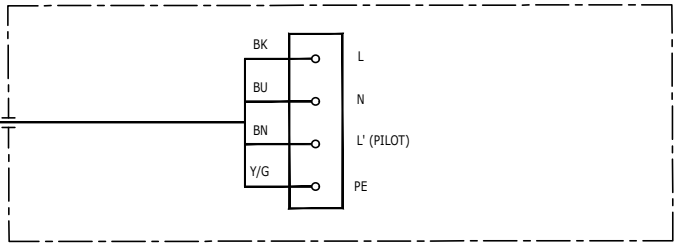


CUBICLE/CB: +01/Q8

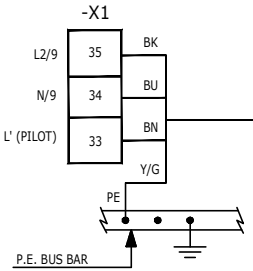


P-EJB-200N1-08-L1-04
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-08-L1-04

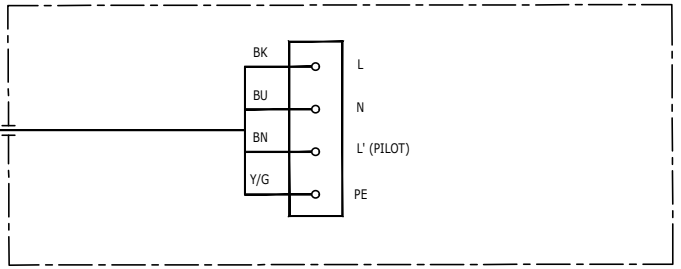


CUBICLE/CB: +01/Q9



P-EJB-200N1-09-L2-01
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-09-L2-01



VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DG-20149
REV.: 2_C | DATE: 02/12/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

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

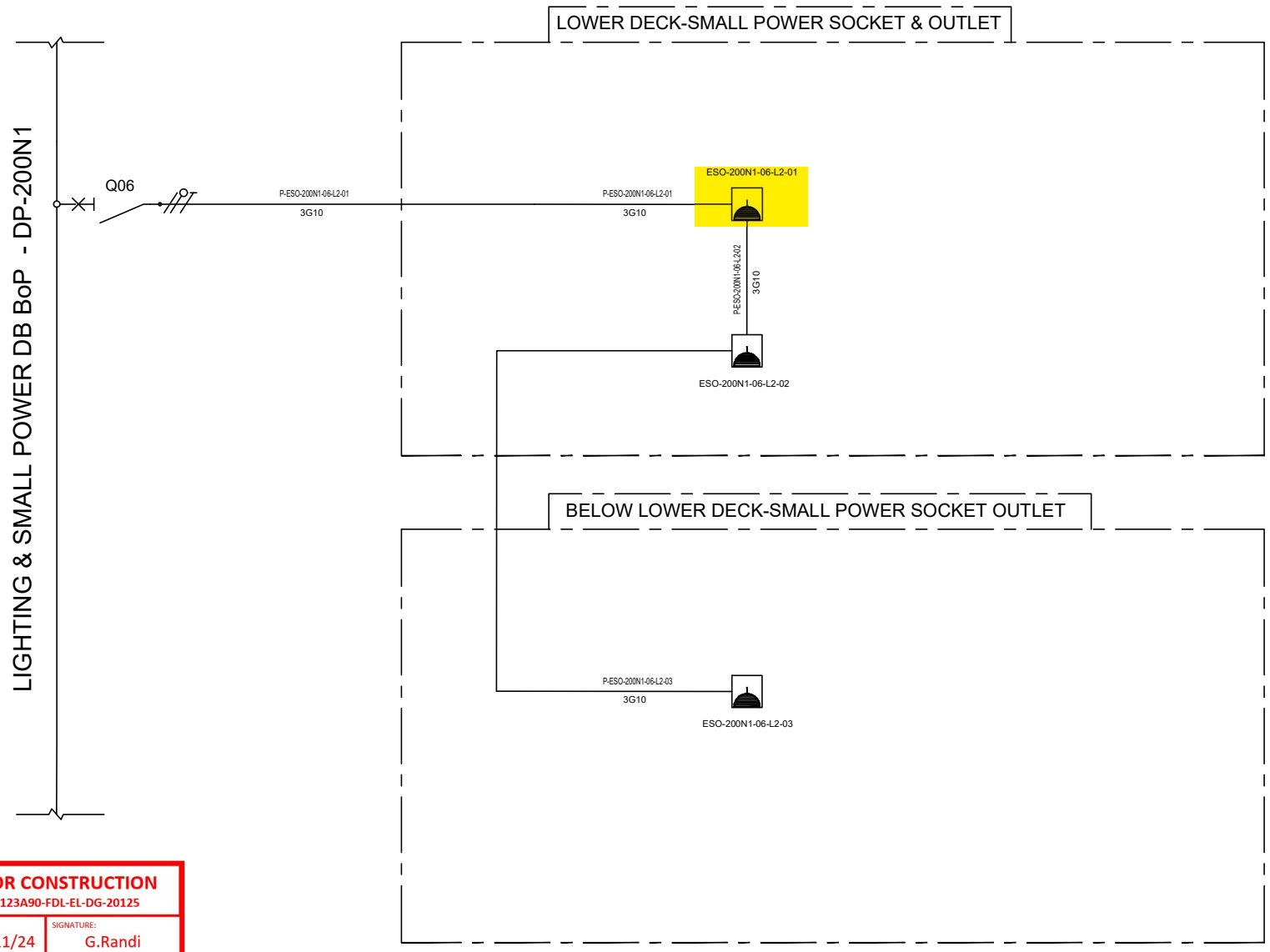
A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 046 | REV. 02

CROSSWIND

ROSETTI MARINO

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_B	20/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
LOWER DECK & BELOW LOWER DECK-SMALL POWER SOCKET

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

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	008	01

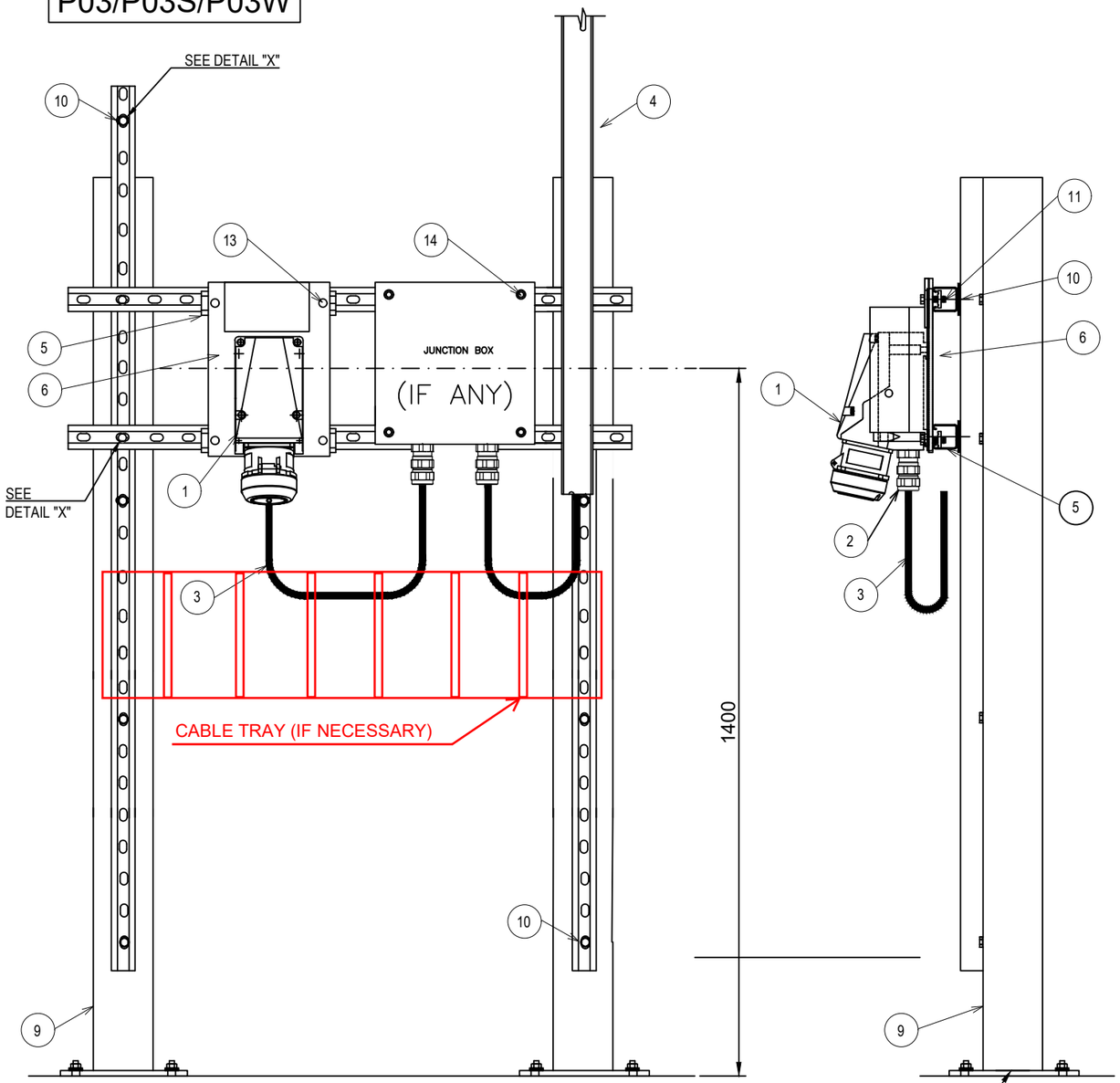
CROSSWIND

ROSETTI MARINO

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20125

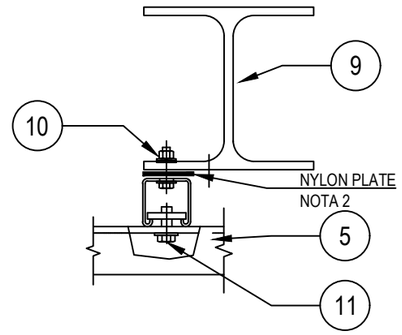
P03/P03S/P03W



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	POWER SOCKET			1	
2	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE	NICK.PL.BRASS		3	NOTE 3
3	UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
5	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L	41x41x2	AS R.	NOTE 1
6	PLATE SUPPORT FOR POWER SOCKET	AISI 316L		1	
9	PROFILE SUPPORT	PAINTED C.S.		2	
10	HEXAGONAL BOLT WITH NYLON WASHER, PLANE WASHERS, GROWER AND NUT.	AISI 316L	M10x40	AS R.	
11	HEXAGONAL BOLT WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M12x30	AS R.	
12	DOUBLE SLOT CROWNED HEAD SCREW WITH NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M6x20	AS R.	
13	HEXAGONAL BOLT WITH PALNE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M8x30	4	
14	SCREW WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x40	4	

02

DETAIL "X"



NOTE :
1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY FASE.
2) INTERPOSING TEFLON OR NYLON PLATE BETWEEN DISSIMILAR CONDUCTIIN MATERIAL.
3) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).

02 SUPPORT BOLTED ON HILTI S-BT INSTALLED ON BEAM OR DECK

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

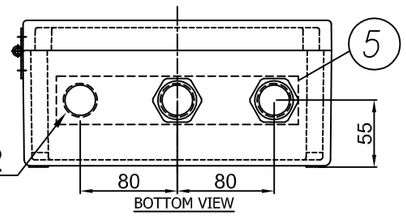
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS POWER SOCKET FLOOR MOUNTED

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 004 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG



8 3 N°3 PASSING HOLES Ø25.2
C/W N°2 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

4 I2400722-B040I00029801

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC
Via Italia 33 - 20060 Gessate (MI) ITALY

MADE IN ITALY

Serial Nr.:
Year of construction:

Type: MXBS-252612P

230VAC 50Hz 16A

T.amb -20/+50°C

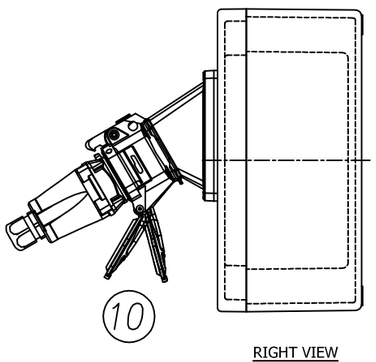
IP66

9 PLATE DETAIL

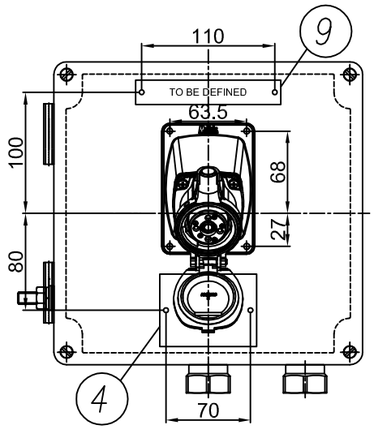


MATERIAL: LAMINATED PLASTIC
BACKGROUND: WHITE
LETTERS: BLACK

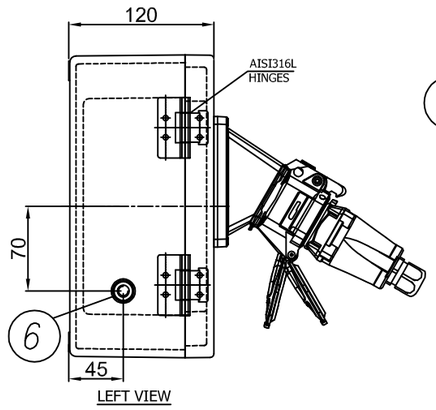
7 TERMINALS NUMBERED
L-L,N-N,PE-PE
BRIDGED



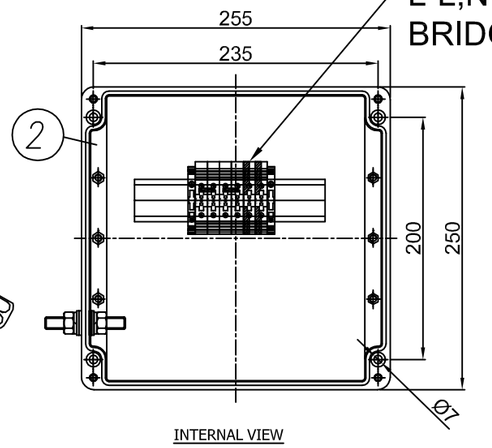
RIGHT VIEW



FRONT VIEW

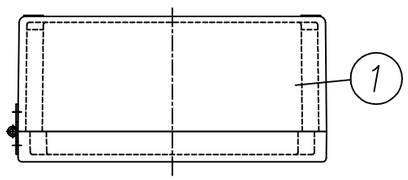


LEFT VIEW



INTERNAL VIEW

ENCLOSURE N°	TAG LIST
1	ESO-200N1-06-L2-03
2	ESO-200N1-06-L2-01
3	ESO-200N1-06-L2-02
4	ESO-200N1-05-L1-01
5	ESO-200N1-05-L1-02
6	SPARE (TO BE PROVIDED BLANK)



TOP VIEW

ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
10	DSN1 SOCKET 1P+N+E 230VAC 16A	1	511M3+6114015 6118015+511P0D18	.	MARECHAL
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	DUSTPROOF PVC PLUG Ø25	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 10 SQMM EARTH TERMINAL BLOCK SIZE 10 SQMM	4 2	WDU–10 WPE–10	.	WEIDMULLER
6	AISI316L INT/EXT EARTH BOLT M10	1	BTP–10	.	TECHNOR ITALSMEA
5	BRASS CONTINUITY PLATE THK. 0.8 MM	1	–	.	TECHNOR ITALSMEA
4	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	2	T25	.	TECHNOR ITALSMEA
2	INTERNAL MOUNTING PLATE	1	PS–2526	.	TECHNOR ITALSMEA
1	GRP ENCLOSURE	1	AQ–252612P	.	TECHNOR ITALSMEA

-UNPAINTED (BLACK NATURAL)
Q.TY 6, ITEM 50: 1EQP155,
ELEJB-SOCK01

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets

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

SCALE : NTS

A3

DRAWING NO. 1724001481-EL-DA-00003

SHEET 008

REV. 04

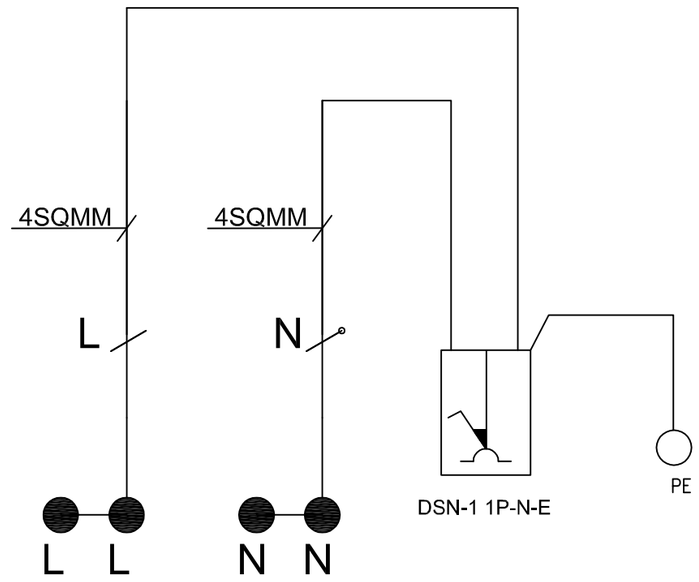
F.to UNI A3: 420mmx297mm

File Name : 1724001481-EL-DA-00003 Rev. 01

	01	02	03	04	05	06	07	08	09

CABLES TRI-RATED 0,6/1kV
COLOR CODE:
-L=BLACK
-N=BLUE

230Vac 1Ph+N+PE



LEGEND

- TERMINAL
- BRIDGED TERMINALS
- SOCKET
- CABLE

DESCRIPTION			.		DSN-1 SOCKET 1P+N+E 16A	. .	. .	. .	. .	. .	. .
CIRCUIT N°			.	.	.	.	.	.	.	.	.
FEEDER	TYPE					.	.	.	.	.	.
	CODE		.	.	.	.	.	.	.	.	.
TOTAL POWER		kW	.	.	.	.	.	.	.	.	.
CONTEMPORANEITY FACTOR			.	.	.	.	.	.	.	.	.
ABSORBED POWER		kW	.	.	.	.	.	.	.	.	.
ABSORBED CURRENT		A	.	.	.	.	.	.	.	.	.
CIRCUIT BREAKER or ON-LOAD SWITCH	TYPE					.	.	.	.	.	.
	POLES NUMBER x CURRENT					.	.	.	.	.	.
FUSES	TYPE		.	.	.	.	.	.	.	.	.
	RATING	A	.	.	.	.	.	.	.	.	.
CONTACTOR	MANUFACTURER		.	.	.	.	.	.	.	.	.
	MODEL		.	.	.	.	.	.	.	.	.
	POLES NUMBER x CURRENT		.	.	.	.	.	.	.	.	.
	NOMINAL POWER	kW	.	.	.	.	.	.	.	.	.
EARTH LEAKAGE	TYPE			.	.	.	.	.	.	.	.
	NOMINAL RANGE	mA		.	.	.	.	.	.	.	.
POWER LINE DATA	CABLE TYPE		.	.	.	.	.	.	.	.	.
	FORMATION / SIZE		.	.	.	.	.	.	.	.	.
	LENGHT	m	.	.	.	.	.	.	.	.	.
	VOLTAGE DROP	%	.	.	.	.	.	.	.	.	.
TERMINALS	SECTION	sqmm	2XWDU-10	2XWDU-10		2XWPE-10	.	.	.	.	.
	MARKING	-X	L-L	N-N		PE-PE	.	.	.	.	.

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

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REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets-Wiring Diagram

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

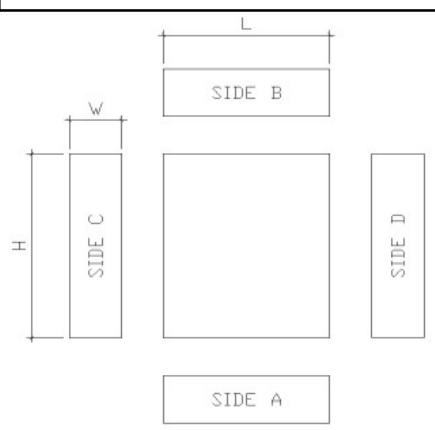
A3 | DRAWING NO. 1724001481-EL-DA-00003 | SHEET 009 | REV. 04

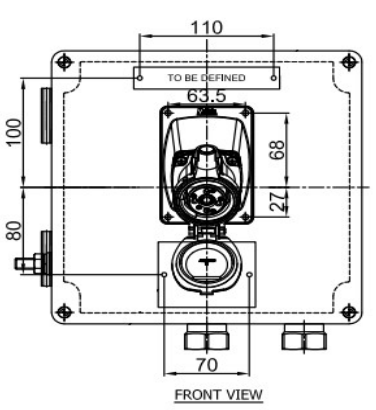
F.to UNI A3: 420mmx297mm

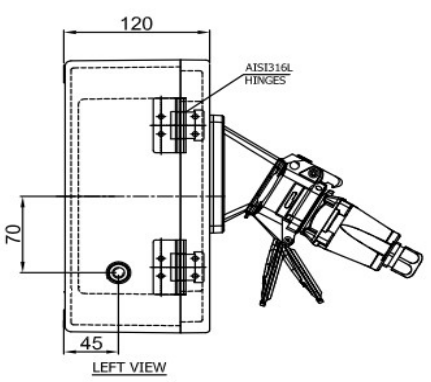
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	16A Power Socket and Plug with Integrated JB				01
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by Vendor	MXBS-252612P		01
4	Serial Number	by Vendor			00
5	Quantity	5+1(spare)		(6+0 Spare)	01
6	Application	Power Socket			00
7	Safe Area/Hazardous Area	Safe Area			00
8	**Rating**				
9	Current Rating [A]	16A	16A		01
10	Poles	1ph+N+PE	1ph+N+PE		01
11	Voltage [V]	230	230 V ac		01
12	**Material**				
13	Body	GRP	GRP		01
14	Execution	Normal			00
15	Protection Degree	IP56	IP 66		01
16	Temperature Class	Normal			00
17	**Cable Entry**				
18	Thread	Metric			00
19	Cable Gland Size/Qty.	M25/3	M25/3		01
17	**Interlocked Switching Device**				
18	Interlocked Switching device	Required			00
19	Padlocakable Position	Required			00
20	Plug	Required			00
21	**Accessories**				
22	Hinged Cover	Required	AISI316L Hinges		01
23	Gasket	Required			00
24	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
25	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
26	Internal Ground Bar	Required		connected to earth stud	00
27	Earth Stud	Required			00
28	Drainage Valve	Required			00
29	Pad lockable Cover	Required			00
30	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
31	**Side 'A'**				
32	Hubs Qty.	3	3		01
33	Size	M25	Ø 25.2 mm		01
34	Thread	ISO-M			00
35	Plug	No.2 M25	No.2 M25	nickel-plated brass	01
36	**Side 'B'**				
37	Hubs Qty.	Not Required			00
38	Size	NA			00
39	Thread	NA			00
40	**Side 'C'**				
41	Hubs Qty.	Not Required			00
42	Size	NA			00
43	Thread	NA			00
44	**Side 'D'**				
45	Hubs Qty.	Not Required			00
46	Size	NA			00
47	Thread	NA			00
48	**Terminals**				
49	Size [mm^2]	Suitable for 10 Sq.mm Cable	M25	suitable with wire-end ferrules DIN 46228	01
50	Qty.	n°4 for Ph // n°4 for N // n°4 for PE	n°2 for Ph // n°2 for N // n°2 for PE	jumpered	01
51	**Bonding Cable (yellow/Green)**				
52	Size [mm^2]	by vendor		6 mm^2	01
53	Qty.	Min. 0.15m			00
54	**Dimension**				
55	Height 'H' [mm]	by vendor	255 mm		01
56	Width 'W' [mm]	by vendor	250 mm		01
57	Length 'L' [mm]	by vendor	120 mm		01
58	Weight [Kg]	by vendor			00
59	**Code**	**Remarks**			
60					

NOTES:







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Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

PLUGS & SOCKET-OUTLETS

MXBS - Socket outlet combination boxes



These socket outlet combination boxes, available in different materials and sizes, are designed for making electrical connections in hazardous areas.
They can be equipped with 5 to 680A Marechal decontactors and/or 10 A Marechal multicontact connectors, offering from 12 to 37 contacts.
They provide increased and intrinsic safety, allowing them to be used in zones 1 & 2 (gas), 21 & 22 (dust).

This comprehensive range is perfect for wet and corrosive environments, such as food and beverage or chemical industries, thanks to its specific and high quality materials. It is possible to mount both socket-outlets and multicontact connectors on the same box: DXN1, DXN3, DXN6, PXN12C, DXN25C, DXN37C, SPeX, DXA1 and PNCX.

TECHNICAL FEATURES

Material	Enclosure: Stainless steel AISI316L, GRP or Aluminium Socket: GRP and/or Aluminium
IP rating	IP66
Ambient temperature range	-55°C to +60°C
Approvals	LCIE 17 ATEX 3005 X (Standard) IECEx LCIE 17.0003X (marking upon request) EAC (available for certificate INERIS 06 ATEX 0015)
Marking	II 2 GD Ex eb IIC T(**) Gb or Ex ia or ib IIC T(**) Gb or Ex eb ia or eb ib IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T6/T80°C, T5/T95°C, T4/T105°C, T127°C, T130°C
Frequency	50 and/or 60Hz in AC
Electrical parameters	Ex eb: Umax=1000 V AC/DC; Imax=376A* (wiring with terminals); Imax=680A* (direct wiring) Ex ia/Ex ib: Ui<=≤750 V; Ii<=400A* Ex eb ia/Ex eb ib: Ui<=750 V; Um<=750 V; Ii<=400A* * The electrical parameters must be reduced, if relevant, according to the limitations of certified equipments used.
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Drain/breather valve Traffolyte/Stainless steel certificate label Cable glands Terminals Plug

MARECHAL ELECTRIC
BEYOND CONNECTIONS
5 avenue du chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

TECHNICAL DATASHEET DS DECONTACTOR™

Date: 2023-02-16
Revision: 05

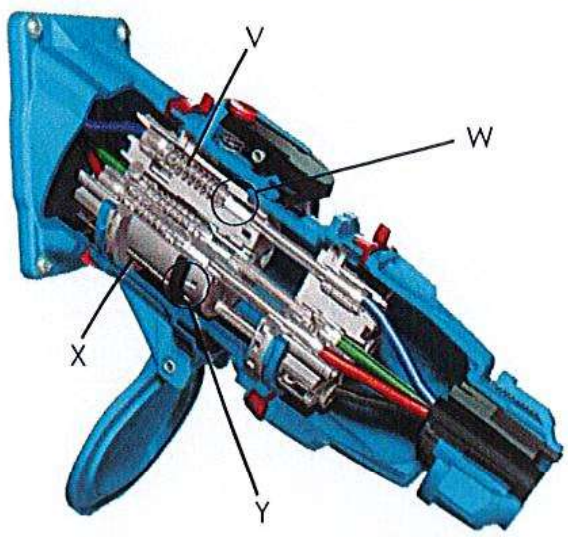
DS DECONTACTOR is a compact and waterproof plug and socket-outlet with integral switch for industrial purposes.

DS DECONTACTOR complies with the following regulations and standards(a) :
European Directives Low Voltage and RoHS (affixing of CE marking), REACH European Regulation,
standards IEC/EN 60309-1, IEC/EN 60309-4, IEC/EN 60947-3 (dealing with the load breaking capacities AC-22 and AC-23), UL 1682, UL 2682 (USA), CSA C22.2 N° 182.1-07 (Canada), GB/T 11918.1 (China).

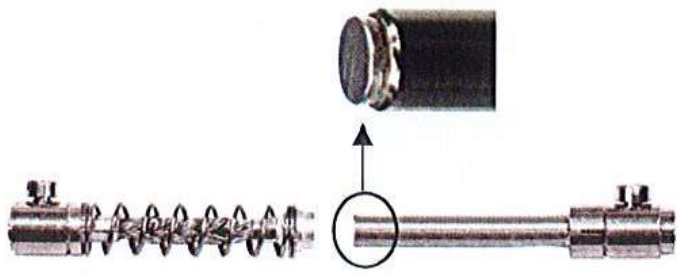
DS DECONTACTOR is certified by the following certification bodies:
LCIE (France), UL (USA), SAA (Australia), VDE (Germany), TR CU (Russia), CSA (Canada), CQC (China), Bureau Veritas Marine (DS9 only).

The use of DS DECONTACTOR facilitates the compliance with:
- electrical machinery to the "Machinery" European Directive on isolating device, and to standard EN 60204-1 : Safety of machinery-electrical equipment of machines
- electrical installation:
  * to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,
  * to installation standards : IEC 60364 (international), HD 60364 (European), NFPA 70 (USA) and NF C 15-100 (French) or other national transposition of IEC/HD 60364.

General information		DS6	DS9
(b)	I_n	90 A	150 A
	U_{max} (V AC/V DC)	1 000/1 500	1 000/1 500
(c)	Frequency (Hz)	≤ 500	≤ 500
(d)	Number of contacts	4P+E	4P+E
(e)	Number of keying positions	24	24
	Connection (min - max): mm²		
	Flexible conductors (Cu): main contacts	10 - 25	25 - 70
	Rigid/stranded conductors (Cu): main contacts	10 - 35	25 - 95
	Tightening torque - main contacts	4 Nm	9 Nm
	Wiring lugs	Option	Option
	Icc: conditional short circuit current (kA)		
	with gG fuse	10 kA	10 kA
	with RK1 NTD fuse	100 kA	100 kA
Auxiliaries / pilots contacts			
	I_n	5 A	10 A
	U_{max} (V AC/V DC)	500 V	400 V
(f)	Number of auxiliaries / pilots contacts	4 aux	6 aux
	Connection (min - max): mm²		
	Flexible wiring	2.2	2.2
	Tightening torque	Pre-wired	
Used as connector according to IEC/EN 61984: In		90 A	150 A
	U_{max}	1000 V AC	1000 V AC
		1500 V DC	1500 VDC
Breaking as plug and socket-outlet according to IEC/EN 60309-1		63 - 1 000	125 - 1 000
(g)	In (A) / Umax (V AC)	90 - 690	150 - 690
Breaking as switch according to IEC/EN 60947-3			
(g)	Category AC-22A: Ie (A) - Ue (V AC)	63 - 690	150 - 600
(g)	Category AC-23A: Ie (A) - Ue (V AC)	90 - 400	100 - 440
Breaking as plug and socket-outlet according to UL 2682			
	Power: HP	50	75
Increase of DC load-breaking capacity (contacts in series)		Option	Option
Number of operations			
	According to IEC/EN 60309-1 : Cos(Φ) 0,7	2 000	500
	According to UL 2682 : Cos(Φ) 0,75	6 000	6 000
Isolating distance		17 mm	18 mm
Thermal features			
	Temperature of use mini/maxi (°C)	-40/+60 °C	-40/+60 °C
	Storage temperature mini/max: (°C)	-40/+80 °C	-40/+80 °C
	Maximal temperature rise (Kmax)	37 K	33 K
	Time constant (to reach 63 % of Kmax)	26 mn	42 mn



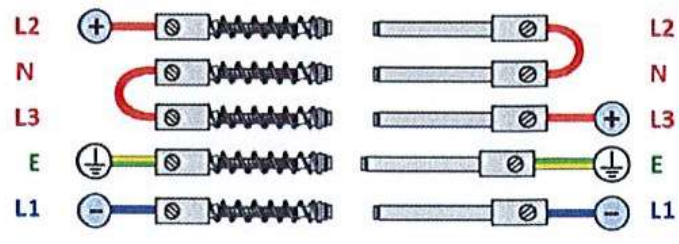
V : Contact spring
W : Arc chamber
X : Ejection spring
Y : Ejection ring



Contacts with silver nickel alloy tips (Ag/Ni : 85/15)



Spring assisted terminal:
Stainless steel ring



Contacts in series

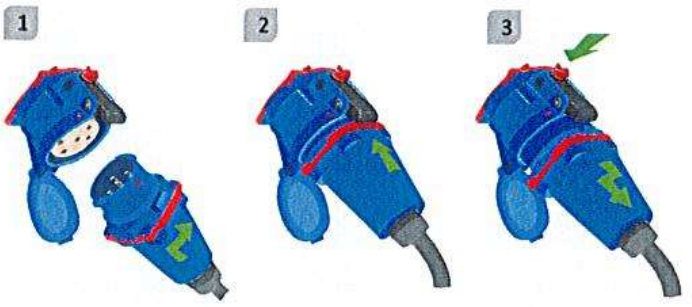
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MARECHAL ELECTRIC
BEYOND CONNECTIONS
5 avenue du chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

TECHNICAL DATASHEET DS DECONTACTOR™

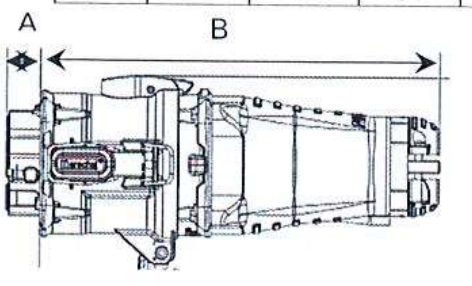
Date: 2023-02-16
Revision: 05

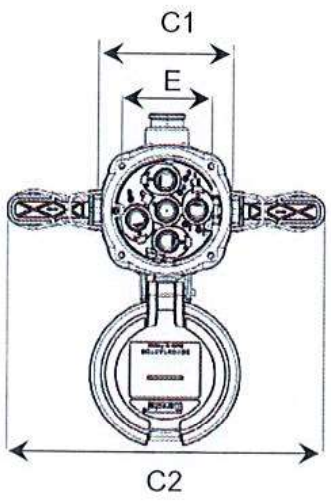
		DS6	DS9
Mechanical features			
(h) IP: connected device			
	Metal enclosure	IP66/IP67/IP69	
	Insulating enclosure	IP66/IP67/IP69	
(h) IP: lid/cap closed			
	Metal enclosure	IP66/IP67/IP69	
	Insulating enclosure	IP66/IP67/IP69	
(h) IP: socket-outlet with lid/cap opened		IP4X - Safety shutter	
(i) IK			
	Metal enclosure	IK09	IK10
	Insulating enclosure	IK09	IK09
Retaining/releasing device		Red release button	
(j) Casing			
	Metallic	Aluminium alloy	
	Insulating	GRP (poly)	
	Standard color	MARECHAL® Blue	
	Other colors	On request	
Vibrations resistance		✓	✓
Resistance to chemical agents			
	Metal enclosure	✓	✓
	Insulating enclosure	Contact us	
Protection against UV (according to UL 746C or equivalent)		f1	f1
Salt mist resistance			
	Metal enclosure	Contact us	
	Insulating enclosure	> 50 000 h	
Screws and bolts		Stainless steel	
Weight of inlet without accessory (≈)		0.7 kg	1.4 kg
Weight of socket-outlet without accessory (≈)		1.2 kg	2.3 kg
Main options			
Socket-outlet opening up to 180°		Included	Included
Self-returning lid		IP40	IP40
Inlet cap		IP66/IP67	IP66/IP67
Self-returning inlet lid		IP55	
Locking / padlocking		✓	✓
Screw locking			✓
Automatic self-ejection		✓	✓ (k)
Larger release button ("STOP")			
	Metal enclosure	✓	Included
	Insulating enclosure	✓	✓
Finger draw plates		✓	
(l) Electromagnetic compatibility (EMC)		✓	✓
Mounting accessories			
Poly sleeve: angle (°)		30/70	30
Metal sleeve: angle (°)		0/30/70	0/30/70
Poly box: angle (°)		30	
Metal box: angle (°)		20	
Poly box + poly sleeve: angle (°)		70	
Metal box + poly sleeve: angle (°)		30	30
Metal box + metal sleeve: angle (°)		0/30/70	0/30/70
Poly straight handle with built-in cable gland: range take (mm)		13 - 35	
Elastomer straight handle with built-in cable gland: range take (mm)			18 - 49
Threaded poly straight handle		M32 - M50	M50 - M63
Threaded metal straight handle		M25 - M50	M32 - M63
Poly straight handle + separated poly cable gland: range take (mm)		14 - 38	14 - 48
Metal straight handle + separated metal cable gland: range take (mm)		8 - 44	15 - 48
Spare parts			
Inlet or socket-outlet interior moulding		✓	✓
Inlet or socket-outlet contacts		✓	✓
Inlet or socket-outlet colored gasket		✓	✓
Inlet or socket-outlet casing		✓	✓
Socket-outlet casing gasket		✓	✓
Catalog: Web link		Click !	Click !



Dimensions

	DS6		DS9	
mm	GRP	Metal	GRP	Metal
A	25	25	27	27
B	207	241	313	299
C1	98	98	126	140
C2			322	322
E	66	66	81	81





Finger draw plate





Poly straight handle with built-in cable gland



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+33 (0) 145 116 000
contact@marechal.com

(a) European Regulation REACH: registration, evaluation, authorisation and restriction of chemicals
IEC/EN 60309-1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"
IEC/EN 60309-4 : "Plugs, socket-outlets and couplers for industrial purposes – Part 4: Switched socket-outlets and connectors with or without interlock"
IEC/EN 60947-3 : "Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units"
IEC/EN 61984 : "Connectors – Safety requirements and tests"
UL 1682 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
UL 2682 : "Outline of Investigation for Switch-Rated Plugs and Receptacles"
CSA C22,2 No 182,1-07 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
GB/T 11918.1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"

(b) In : Rated current as defined by the manufacturer
(c) Other frequency: contact us
(d) Contacts with silver-nickel tips (Ag/Ni 85/15)
(e) Number of voltage / frequency / grid, keying positions
(f) Auxiliaries contacts are located on the plug and socket-outlet sides. Pilot contacts are only located on the socket-outlet side.
(g) For direct current applications : contact us
(h) IP : Degrees of protection provided by enclosures (IEC/EN 60529)
(i) IK : Degrees of protection provided by enclosures against mechanical impacts (IEC/EN 62262)
(j) GRP : Glass-reinforced technical plastic
(k) Option available for metal version only
(l) Suitable for EMC environments: use of metallic housings and accessories, and cable gland with shielding recovery.

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TECHNICAL DATASHEET DS DECONTACTOR™

Date: 2021-08-31
Revision: 02

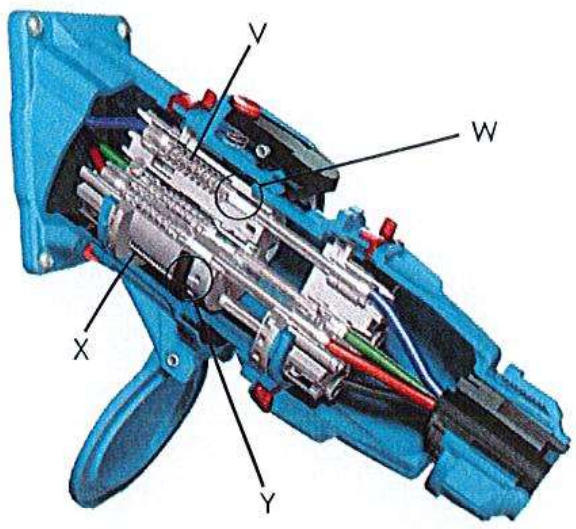
DS DECONTACTOR is a compact and waterproof plug and socket-outlet with integrated switch for industrial purposes.

DS DECONTACTOR complies with the following regulations and standards(a):
European Directives Low Voltage and RoHS (affixing of CE marking), REACH European Regulation,
standards IEC/EN 60309-1, IEC/EN 60309-4, IEC/EN 60947-3 (dealing with the load breaking capacities AC-22 and AC-23), UL 1682, UL 2682 (USA), CSA C22.2 N° 182.1-07 (Canada), GB/T 11918.1 (China).

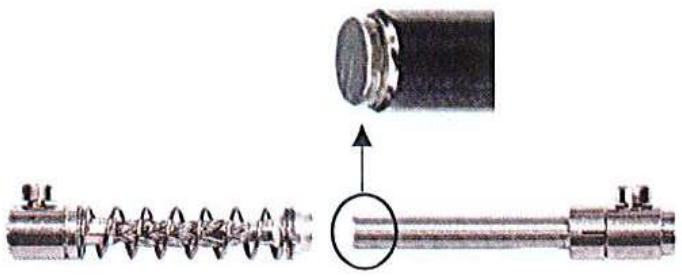
DS DECONTACTOR is certified by the following certification bodies:
LCIE (France), UL (USA), SAA (Australia), VDE (Germany), TR CU (Russia), CSA (Canada), CQC (China).

The use of DS DECONTACTOR facilitates the compliance with:
- electrical machinery to the "Machinery" European Directive on isolating device, and to standard EN 60204-1 : Safety of machinery-electrical equipment of machines
- electrical installation:
  * to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,
  * to installation standards : IEC 60364 (international), HD 60364 (European), NFPA 70 (USA) and NF C 15-100 (French) or other national transposition of IEC/HD 60364.

General information		DS1	DS3
(b)	I_n	30 A	50 A
	U_{max} (V AC/V DC)	690/1 000	1 000/1 500
(c)	Frequency (Hz)	≤ 500	≤ 500
(d)	Number of contacts	4P+E	4P+E
(e)	Number of keying positions	24	24
	Connection (min - max): mm²		
	Flexible conductors (Cu): main contacts	2.5 - 6	6 - 16
	Rigid/stranded conductors (Cu): main contacts	2.5 - 10	10 - 25
	Tightening torque - main contacts	1.5 Nm	1.8 Nm
	Wiring lugs	Option	Option
	Icc: conditional short circuit current (kA)		
	with gG fuse	10 kA	10 kA
	with RK1 NTD fuse	100 kA	100 kA
Auxiliaries / pilots contacts			
	I_n	30 A	16 A
	U_{max} (V AC/V DC)	500 V	400 V
(f)	Number of auxiliaries / pilots contacts	2 aux	4 aux
	Connection (min - max): mm²		
	Flexible wiring	2.5 - 6	1 - 2.5
	Stranded wiring	2.5 - 10	1.5 - 4
	Tightening torque	1.5 Nm	0.8 Nm
Used as connector according to IEC/EN 61984: In		30 A	50 A
	U_{max}	690 V AC	1000 V AC
		1000 V DC	1500 V DC
Breaking as plug and socket-outlet according to IEC/EN 60309-1			
(g)	In (A) / Umax (V AC)	30 - 690	50 - 690
Breaking as switch according to IEC/EN 60947-3			
(g)	Category AC-22A: In (A) - Umax (V AC)	32 - 690	40 - 690
(g)	Category AC-23A: In (A) - Umax (V AC)	32 - 480	50 - 400
Breaking as plug and socket-outlet according to UL 2682			
	Power: HP	15	25
Increase of DC load-breaking capacity (contacts in series)		Option	Option
Number of operations			
	According to IEC/EN 60309-1 : Cos(Φ) 0,6	2 000	2 000
	According to UL 2682 : Cos(Φ) 0,75	6 000	6 000
Isolating distance		8 mm	13 mm
Thermal features			
	Temperature of use mini/maxi (°C)	-40/+60 °C	-40/+60 °C
	Storage temperature mini/max: (°C)	-40/+80 °C	-40/+80 °C
	Maximal temperature rise (Kmax):	38 K	30 K
	Time constant (to reach 63 % of Kmax)	21mn	23 mn



V : Contact spring
W : Arc chamber
X : Ejection spring
Y : Ejection ring



Contacts with silver nickel alloy tips (Ag/Ni : 85/15)



Spring assisted terminal:
Stainless steel ring



Contacts in series

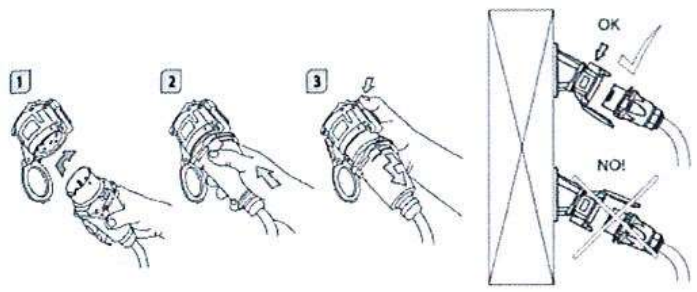
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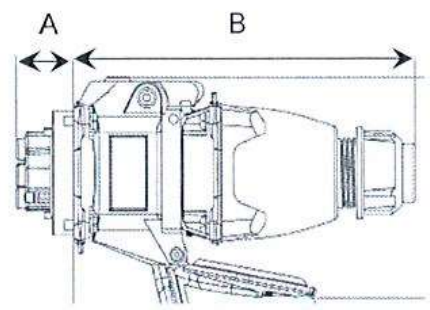
TECHNICAL DATASHEET
DS DECONTACTOR™

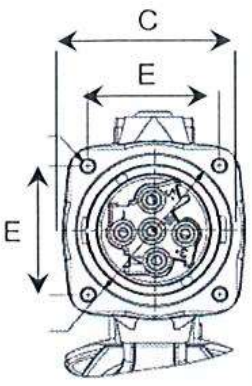
Date: 2021-08-31
Revision: 02

	DS1	DS3
Mechanical features		
(h) IP: connected device	IP54	IP54
IP: lid/cap closed	IP55	IP55
IP: socket-outlet with lid/cap opened	IP4X - Safety shutter	
(i) IK	IK09	IK09
Retaining/releasing device	Red release button	
(j) Casing	GRP (poly)	
Standard color	MARECHAL® Blue	
Other colors	On request	
Vibrations resistance	✓	✓
Resistance to chemical agents	Contact us	
Protection against UV (according to UL 746C or equivalent)	f1	f1
Salt mist resistance	> 50 000 h	
Screws and bolts	Stainless steel	
Weight of inlet without accessory (≈)	0.15 kg	0.20 kg
Weight of socket-outlet without accessory (≈)	0.26 kg	0.35 kg
Main options		
Socket-outlet opening up to 180°	Included	Included
Self-returning lid	IP55	IP55
Inlet cap	IP66/IP67	IP66/IP67
Self-returning inlet lid	IP55	IP55
Locking / padlocking	✓	✓
Automatic self-ejection	✓	✓
Larger release button ("STOP")	✓	✓
Finger draw plates	✓	✓
Industrial-domestic adapter	✓	
Mounting accessories		
Poly sleeve: angle (°)	30/70	30/70
Metal sleeve: angle (°)	0/30	0/30/70
Poly box: angle (°)	30	30
Metal box: angle (°)	20	20
Poly box + poly sleeve: angle (°)	70	70
Metal box + poly sleeve: angle (°)	30	30
Metal box + metal sleeve: angle (°)	0/30	0/30/70
Poly straight handle with built-in cable gland: range take (mm)	5 - 21	10 - 30
Threaded poly straight handle	M20 - M40	M20 - M40
Threaded metal straight handle	M20 - M32	M20 - M40
Poly straight handle + separated poly cable gland: range take (mm)	5 - 32	9 - 32
Metal straight handle + separated metal cable gland: range take (m	7 - 23	7 - 32
Spare parts		
Inlet or socket-outlet interior moulding	✓	✓
Inlet or socket-outlet contacts	✓	✓
Inlet or socket-outlet colored gasket	✓	✓
Inlet or socket-outlet casing	✓	✓
Socket-outlet casing gasket	✓	✓
Catalog: Web link	**Click !**	**Click !**



Dimensions





mm	DS1	DS3
A	15	17
B	166	179
C	69	80
E	48	55

Finger draw plates

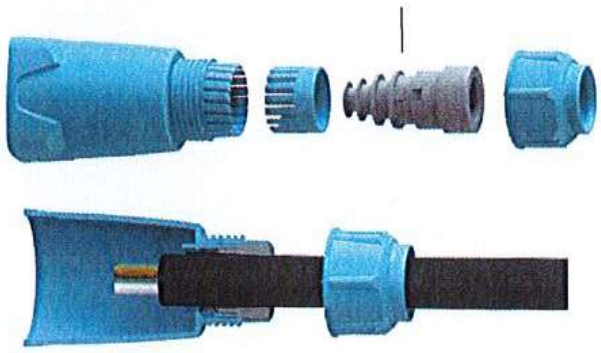




Locking pin for 2 padlocks

Poly straight handle with built-in cable gland

5 sizes gasket



(a) European Regulation REACH: registration, evaluation, authorisation and restriction of chemicals
IEC/EN 60309-1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"
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(j) GRP : Glass-reinforced technical plastic

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ROSETTI MARINO

CROSSWIND

ITEM	Tag	ESO-200N1-06-L2-02	: SMALL POWER SOCKET			Dwg	123A90-DDL-EL-DL-20119
	S/Sys	83-55	: Power Sockets			Module	LD
TASK	code	C10001855		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

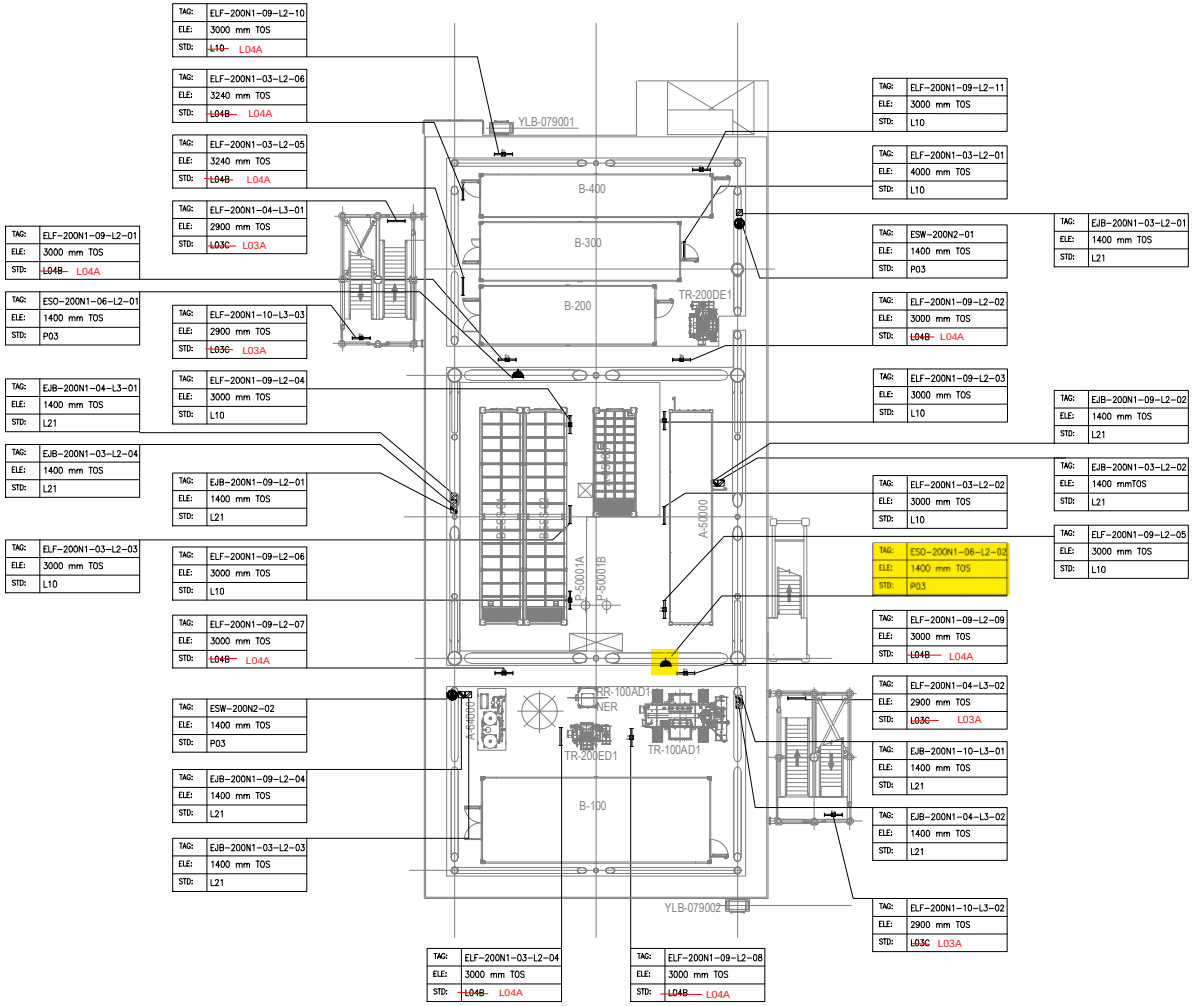
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	OK
4	Check nameplate data is correct.	OK
5	Check all bolts are fitted and all unused entries are suitably plugged.	OK
6	Check terminals for proper size and installation crimps	OK
7	Check earthing and bonding against drawings.	OK
8	Check items are properly fixed on support.	OK
9	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Carmelo Bongiovanni	Giovanni Tangianu	
Date	2024-11-22	2024-12-05	
Signature	Digitaly signed by Carmelo Bongiovanni 2024-11-22T17:33:14.587Z	Digitaly signed by Giovanni Tangianu 2024-12-05T16:22:45.178Z	

DRAWING NO. 123A90-DDL-EL-DL-20119

REV. 01



TAG:	ELF-200N1-09-L2-10
ELE:	3000 mm TOS
STD:	~~L10~~ L04A

TAG:	ELF-200N1-03-L2-06
ELE:	3240 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-03-L2-05
ELE:	3240 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-04-L3-01
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

TAG:	ELF-200N1-09-L2-01
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ESO-200N1-06-L2-01
ELE:	1400 mm TOS
STD:	P03

TAG:	ELF-200N1-10-L3-03
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

TAG:	EJB-200N1-04-L3-01
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-09-L2-04
ELE:	3000 mm TOS
STD:	L10

TAG:	EJB-200N1-03-L2-04
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-09-L2-01
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-03-L2-03
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-09-L2-06
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-09-L2-07
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ESW-200N2-02
ELE:	1400 mm TOS
STD:	P03

TAG:	EJB-200N1-09-L2-04
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-03-L2-03
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-03-L2-04
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-09-L2-08
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-09-L2-11
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-03-L2-01
ELE:	4000 mm TOS
STD:	L10

TAG:	ESW-200N2-01
ELE:	1400 mm TOS
STD:	P03

TAG:	ELF-200N1-09-L2-02
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-09-L2-03
ELE:	3000 mm TOS
STD:	L10

TAG:	ELF-200N1-03-L2-02
ELE:	3000 mm TOS
STD:	L10

TAG:	ESO-200N1-06-L2-02
ELE:	1400 mm TOS
STD:	P03

TAG:	ELF-200N1-09-L2-09
ELE:	3000 mm TOS
STD:	~~L04B~~ L04A

TAG:	ELF-200N1-04-L3-02
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

TAG:	EJB-200N1-10-L3-01
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-04-L3-02
ELE:	1400 mm TOS
STD:	L21

TAG:	ELF-200N1-10-L3-02
ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

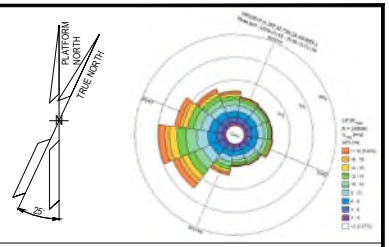
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STD:	L21

TAG:	EJB-200N1-09-L2-02
ELE:	1400 mm TOS
STD:	L21

TAG:	EJB-200N1-03-L2-02
ELE:	1400 mmTOS
STD:	L21

TAG:	ELF-200N1-09-L2-05
ELE:	3000 mm TOS
STD:	L10

PLAN ON LOWER DECK
EL+23.310 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. FOR THE ELEVATION OF JB, REFER TO THE TYPICAL INSTALLATION.
5. SHEET 1 OF 2 SHOWS ONLY POLE MOUNTED TYPE LIGHTING FIXTURES, SHEET 2 OF 2 SHOWS ONLY SUSPENDED TYPE LIGHTING FIXTURES.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- NORMAL LIGHTING JB
- 45W LED NORMAL LUMINARIES
- 45W LED NORMAL LUMINARIES FIXTURE POLE MOUNTED
- WELDING SOCKET WITH INTEGRATED JB
- SMALL POWER SOCKET WITH INTEGRATED JB

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DL-20119

REV:	DATE:	SIGNATURE:
1_D	20/11/24	G.Randi

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-EL-DL-20101	ELECTRICAL EQUIPMENT LAYOUT - LOWER DECK
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	29/05/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

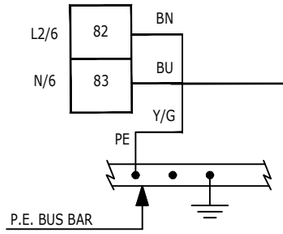
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 06/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20119	SHEET 2of2	REV. 01

File Name : 123A90-DDL-EL-DL-20119

FROM	TO

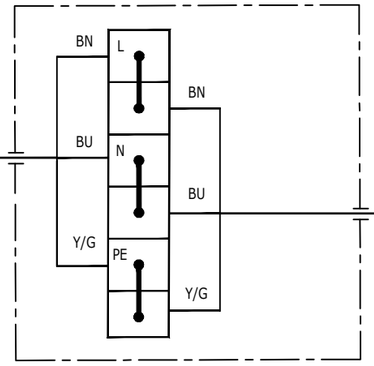
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +03/Q6



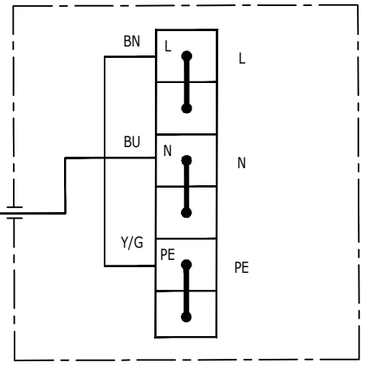
P-ESO-200N1-06-L2-01
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER: ESO-200N1-06-L2-01

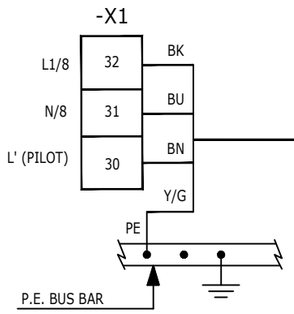


P-ESO-200N1-06-L2-02
3G10 mm²

DESCRIPTION: SMALL POWER SOCKET JB(LOWER DECK)
TAG NUMBER: ESO-200N1-06-L2-02

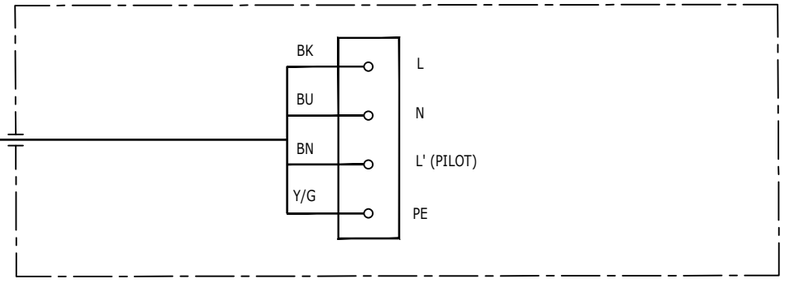


CUBICLE/CB: +01/Q8

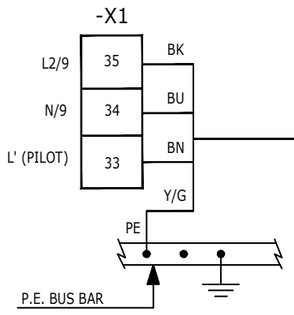


P-EJB-200N1-08-L1-04
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING UPPER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-08-L1-04

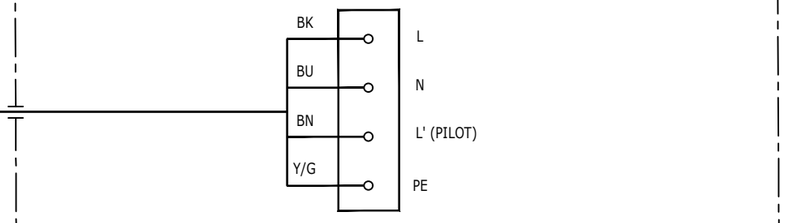


CUBICLE/CB: +01/Q9



P-EJB-200N1-09-L2-01
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING LOWER DECK - CIRCUIT NO. 1
TAG NUMBER: EJB-200N1-09-L2-01



VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DG-20149

REV.:	DATE:	SIGNATURE:
2_C	02/12/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	19/11/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	16/10/24	SAI	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	SAI	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

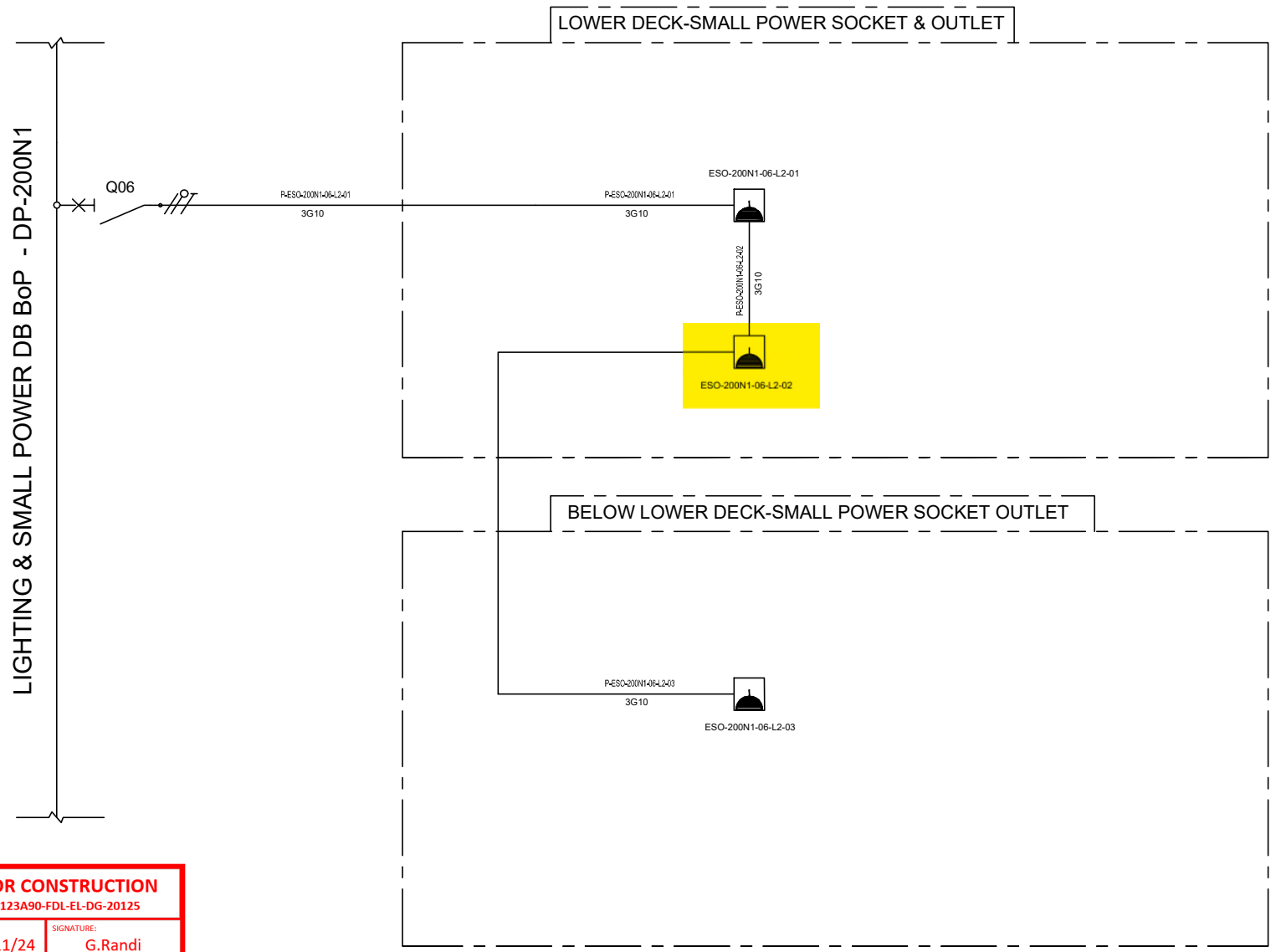
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL INTERCONNECTING WIRING DIAGRAM
LIGHTING & SMALL POWER DB BOP

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

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 046 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20149 Rev. 02



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_B	20/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
LOWER DECK & BELOW LOWER DECK-SMALL POWER SOCKET

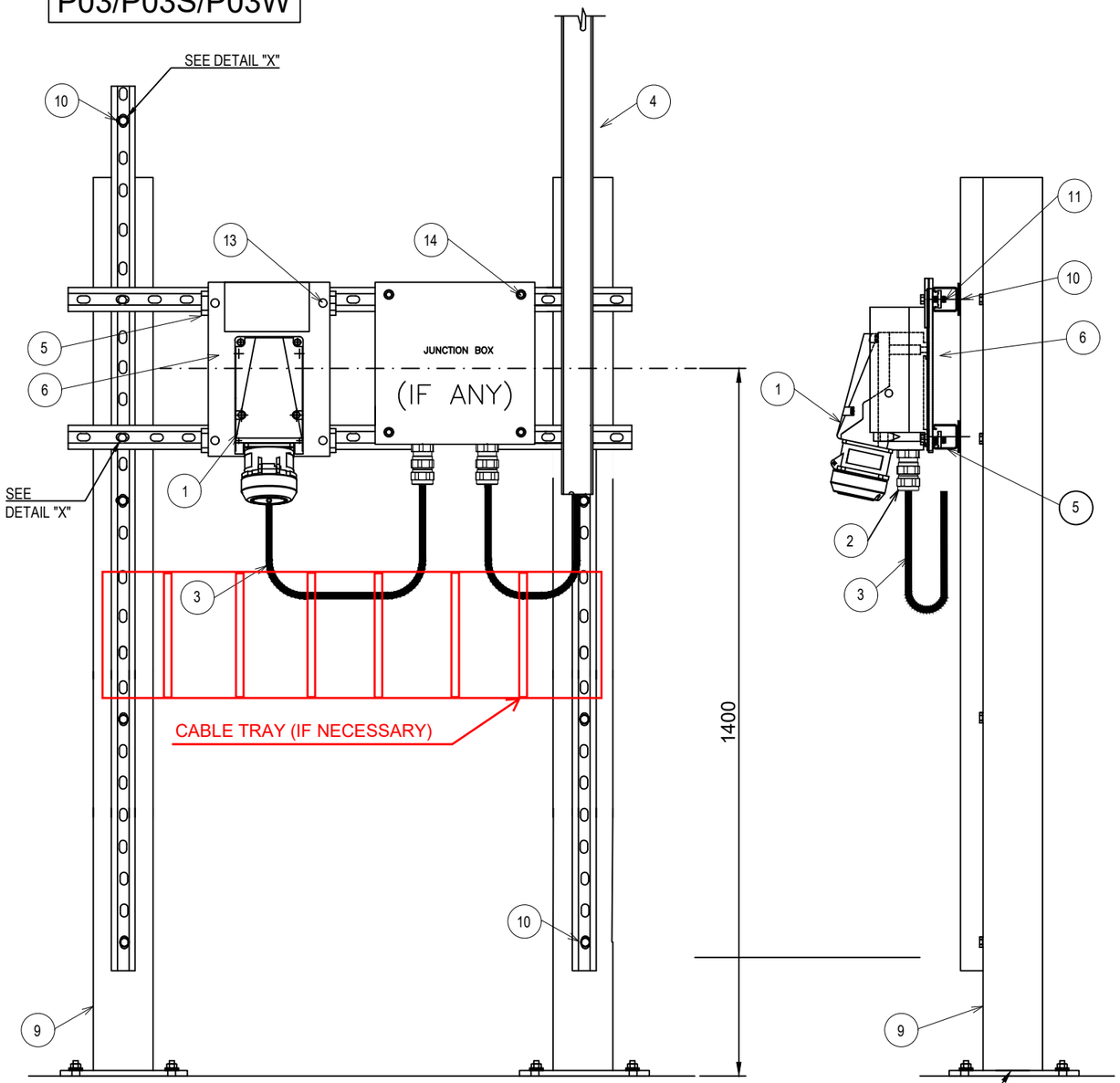
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	008	01

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DG-20125

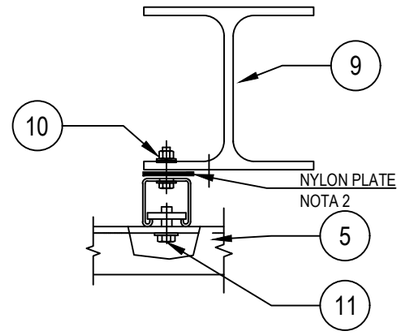
P03/P03S/P03W



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	POWER SOCKET			1	
2	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE	NICK.PL.BRASS		3	NOTE 3
3	UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
5	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L	41x41x2	AS R.	NOTE 1
6	PLATE SUPPORT FOR POWER SOCKET	AISI 316L		1	
9	PROFILE SUPPORT	PAINTED C.S.		2	
10	HEXAGONAL BOLT WITH NYLON WASHER, PLANE WASHERS, GROWER AND NUT.	AISI 316L	M10x40	AS R.	
11	HEXAGONAL BOLT WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M12x30	AS R.	
12	DOUBLE SLOT CROWNED HEAD SCREW WITH NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M6x20	AS R.	
13	HEXAGONAL BOLT WITH PALNE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M8x30	4	
14	SCREW WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x40	4	

02

DETAIL "X"



NOTE :
1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY FASE.
2) INTERPOSING TEFLON OR NYLON PLATE BETWEEN DISSIMILAR CONDUCTIIN MATERIAL.
3) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).

02 SUPPORT BOLTED ON HILTI S-BT INSTALLED ON BEAM OR DECK

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

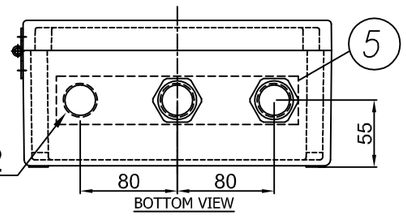
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS POWER SOCKET FLOOR MOUNTED

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 004 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG



8 3 N°3 PASSING HOLES Ø25.2
C/W N°2 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

4 I2400722-B040I00029801

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC
Via Italia 33 - 20060 Gessate (MI) ITALY

MADE IN ITALY

Serial Nr.:
Year of construction:

Type: MXBS-252612P

230VAC 50Hz 16A

T.amb -20/+50°C

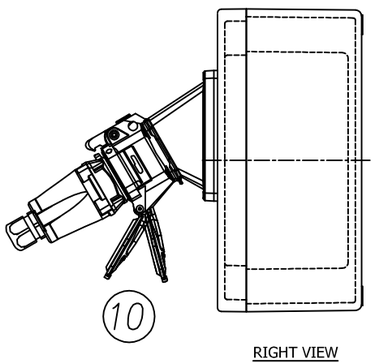
IP66

9 PLATE DETAIL

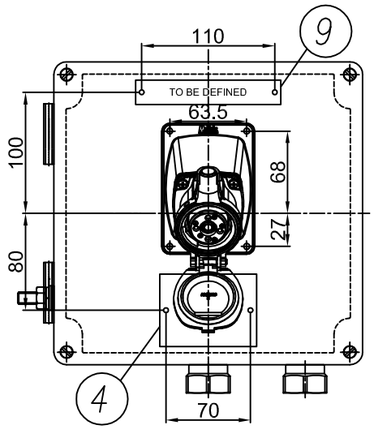


MATERIAL: LAMINATED PLASTIC
BACKGROUND: WHITE
LETTERS: BLACK

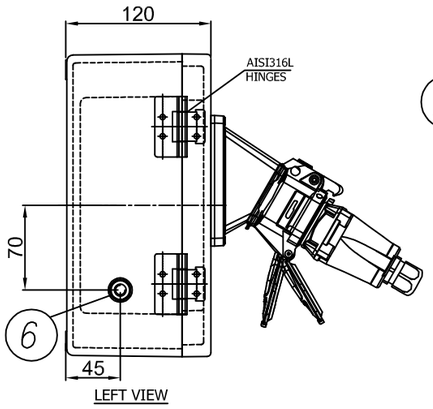
7 TERMINALS NUMBERED
L-L,N-N,PE-PE
BRIDGED



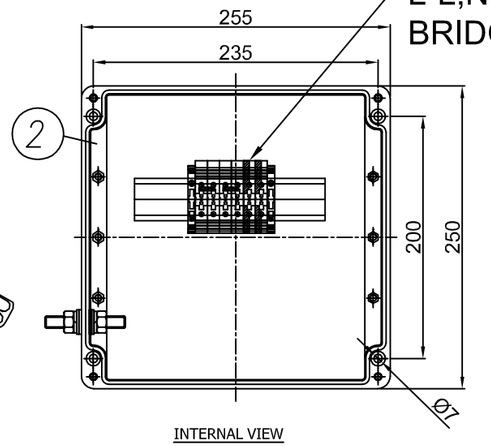
RIGHT VIEW



FRONT VIEW

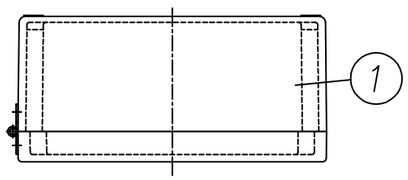


LEFT VIEW



INTERNAL VIEW

ENCLOSURE N°	TAG LIST
1	ESO-200N1-06-L2-03
2	ESO-200N1-06-L2-01
3	ESO-200N1-06-L2-02
4	ESO-200N1-05-L1-01
5	ESO-200N1-05-L1-02
6	SPARE (TO BE PROVIDED BLANK)



TOP VIEW

ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
10	DSN1 SOCKET 1P+N+E 230VAC 16A	1	511M3+6114015 6118015+511P0D18	.	MARECHAL
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	DUSTPROOF PVC PLUG Ø25	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 10 SQMM EARTH TERMINAL BLOCK SIZE 10 SQMM	4 2	WDU–10 WPE–10	.	WEIDMULLER
6	AISI316L INT/EXT EARTH BOLT M10	1	BTP–10	.	TECHNOR ITALSMEA
5	BRASS CONTINUITY PLATE THK. 0.8 MM	1	–	.	TECHNOR ITALSMEA
4	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	2	T25	.	TECHNOR ITALSMEA
2	INTERNAL MOUNTING PLATE	1	PS–2526	.	TECHNOR ITALSMEA
1	GRP ENCLOSURE	1	AQ–252612P	.	TECHNOR ITALSMEA

-UNPAINTED (BLACK NATURAL)
Q.TY 6, ITEM 50: 1EQP155,
ELEJB-SOCK01

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets

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

SCALE : NTS

A3

DRAWING NO. 1724001481-EL-DA-00003

SHEET 008

REV. 04

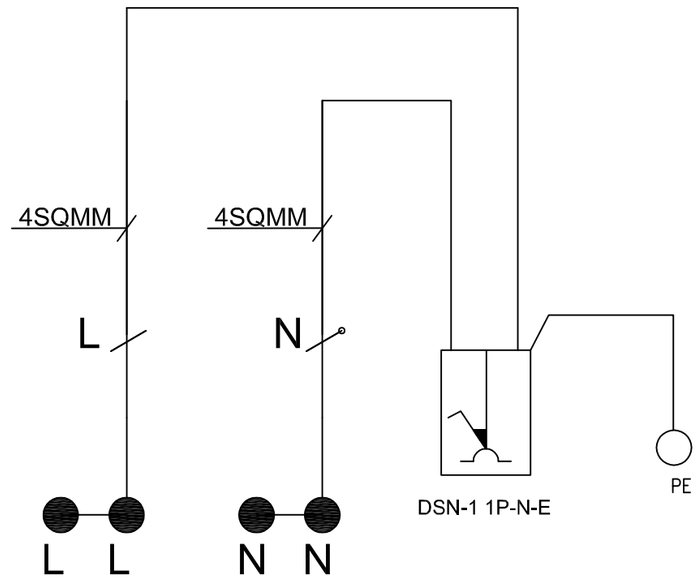
F.to UNI A3: 420mmx297mm

File Name : 1724001481-EL-DA-00003 Rev. 01

	01	02	03	04	05	06	07	08	09

CABLES TRI-RATED 0,6/1kV
COLOR CODE:
-L=BLACK
-N=BLUE

230Vac 1Ph+N+PE



LEGEND

- TERMINAL
- BRIDGED TERMINALS
- SOCKET
- CABLE

DESCRIPTION			.		DSN-1 SOCKET 1P+N+E 16A	. .	. .	. .	. .	. .	. .
CIRCUIT N°			.	.	.	.	.	.	.	.	.
FEEDER	TYPE					.	.	.	.	.	.
	CODE		.	.	.	.	.	.	.	.	.
TOTAL POWER		kW	.	.	.	.	.	.	.	.	.
CONTEMPORANEITY FACTOR			.	.	.	.	.	.	.	.	.
ABSORBED POWER		kW	.	.	.	.	.	.	.	.	.
ABSORBED CURRENT		A	.	.	.	.	.	.	.	.	.
CIRCUIT BREAKER or ON-LOAD SWITCH	TYPE					.	.	.	.	.	.
	POLES NUMBER x CURRENT					.	.	.	.	.	.
FUSES	TYPE		.	.	.	.	.	.	.	.	.
	RATING	A	.	.	.	.	.	.	.	.	.
CONTACTOR	MANUFACTURER		.	.	.	.	.	.	.	.	.
	MODEL		.	.	.	.	.	.	.	.	.
	POLES NUMBER x CURRENT		.	.	.	.	.	.	.	.	.
	NOMINAL POWER	kW	.	.	.	.	.	.	.	.	.
EARTH LEAKAGE	TYPE			.	.	.	.	.	.	.	.
	NOMINAL RANGE	mA		.	.	.	.	.	.	.	.
POWER LINE DATA	CABLE TYPE		.	.	.	.	.	.	.	.	.
	FORMATION / SIZE		.	.	.	.	.	.	.	.	.
	LENGHT	m	.	.	.	.	.	.	.	.	.
	VOLTAGE DROP	%	.	.	.	.	.	.	.	.	.
TERMINALS	SECTION	sqmm	2XWDU-10	2XWDU-10		2XWPE-10	.	.	.	.	.
	MARKING	-X	L-L	N-N		PE-PE	.	.	.	.	.

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets-Wiring Diagram

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

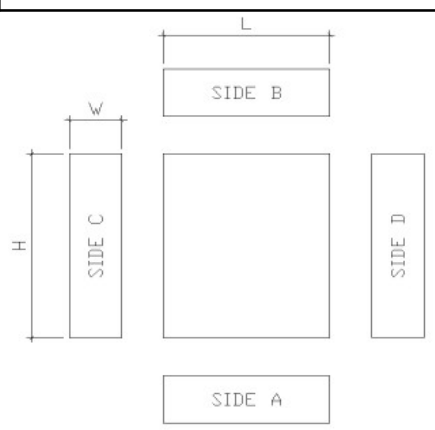
A3 | DRAWING NO. 1724001481-EL-DA-00003 | SHEET 009 | REV. 04

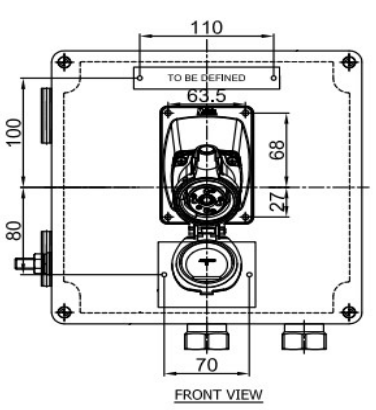
F.to UNI A3: 420mmx297mm

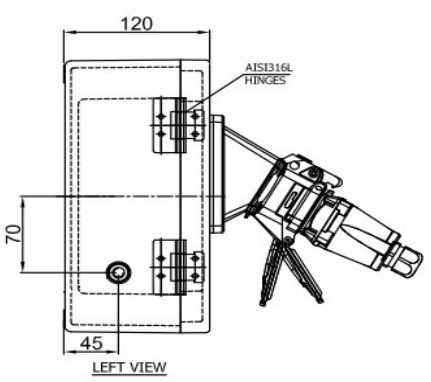
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	16A Power Socket and Plug with Integrated JB				01
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by Vendor	MXBS-252612P		01
4	Serial Number	by Vendor			00
5	Quantity	5+1(spare)		(6+0 Spare)	01
6	Application	Power Socket			00
7	Safe Area/Hazardous Area	Safe Area			00
8	**Rating**				
9	Current Rating [A]	16A	16A		01
10	Poles	1ph+N+PE	1ph+N+PE		01
11	Voltage [V]	230	230 V ac		01
12	**Material**				
13	Body	GRP	GRP		01
14	Execution	Normal			00
15	Protection Degree	IP56	IP 66		01
16	Temperature Class	Normal			00
17	**Cable Entry**				
18	Thread	Metric			00
19	Cable Gland Size/Qty.	M25/3	M25/3		01
17	**Interlocked Switching Device**				
18	Interlocked Switching device	Required			00
19	Padlocakable Position	Required			00
20	Plug	Required			00
21	**Accessories**				
22	Hinged Cover	Required	AISI316L Hinges		01
23	Gasket	Required			00
24	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
25	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
26	Internal Ground Bar	Required		connected to earth stud	00
27	Earth Stud	Required			00
28	Drainage Valve	Required			00
29	Pad lockable Cover	Required			00
30	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
31	**Side 'A'**				
32	Hubs Qty.	3	3		01
33	Size	M25	Ø 25.2 mm		01
34	Thread	ISO-M			00
35	Plug	No.2 M25	No.2 M25	nickel-plated brass	01
36	**Side 'B'**				
37	Hubs Qty.	Not Required			00
38	Size	NA			00
39	Thread	NA			00
40	**Side 'C'**				
41	Hubs Qty.	Not Required			00
42	Size	NA			00
43	Thread	NA			00
44	**Side 'D'**				
45	Hubs Qty.	Not Required			00
46	Size	NA			00
47	Thread	NA			00
48	**Terminals**				
49	Size [mm^2]	Suitable for 10 Sq.mm Cable	M25	suitable with wire-end ferrules DIN 46228	01
50	Qty.	n°4 for Ph // n°4 for N // n°4 for PE	n°2 for Ph // n°2 for N // n°2 for PE	jumpered	01
51	**Bonding Cable (yellow/Green)**				
52	Size [mm^2]	by vendor		6 mm^2	01
53	Qty.	Min. 0.15m			00
54	**Dimension**				
55	Height 'H' [mm]	by vendor	255 mm		01
56	Width 'W' [mm]	by vendor	250 mm		01
57	Length 'L' [mm]	by vendor	120 mm		01
58	Weight [Kg]	by vendor			00
59	**Code**	**Remarks**			
60					

NOTES:







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Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

PLUGS & SOCKET-OUTLETS

MXBS - Socket outlet combination boxes



These socket outlet combination boxes, available in different materials and sizes, are designed for making electrical connections in hazardous areas.
They can be equipped with 5 to 680A Marechal decontactors and/or 10 A Marechal multicontact connectors, offering from 12 to 37 contacts.
They provide increased and intrinsic safety, allowing them to be used in zones 1 & 2 (gas), 21 & 22 (dust).

This comprehensive range is perfect for wet and corrosive environments, such as food and beverage or chemical industries, thanks to its specific and high quality materials. It is possible to mount both socket-outlets and multicontact connectors on the same box: DXN1, DXN3, DXN6, PXN12C, DXN25C, DXN37C, SPeX, DXA1 and PNCX.

TECHNICAL FEATURES

Material	Enclosure: Stainless steel AISI316L, GRP or Aluminium Socket: GRP and/or Aluminium
IP rating	IP66
Ambient temperature range	-55°C to +60°C
Approvals	LCIE 17 ATEX 3005 X (Standard) IECEx LCIE 17.0003X (marking upon request) EAC (available for certificate INERIS 06 ATEX 0015)
Marking	II 2 GD Ex eb IIC T(**) Gb or Ex ia or ib IIC T(**) Gb or Ex eb ia or eb ib IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T6/T80°C, T5/T95°C, T4/T105°C, T127°C, T130°C
Frequency	50 and/or 60Hz in AC
Electrical parameters	Ex eb: Umax=1000 V AC/DC; Imax=376A* (wiring with terminals); Imax=680A* (direct wiring) Ex ia/Ex ib: Ui<=≤750 V; Ii<=400A* Ex eb ia/Ex eb ib: Ui<=750 V; Um<=750 V; Ii<=400A* * The electrical parameters must be reduced, if relevant, according to the limitations of certified equipments used.
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Drain/breather valve Traffolyte/Stainless steel certificate label Cable glands Terminals Plug

MARECHAL ELECTRIC
BEYOND CONNECTIONS
5 avenue du chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

TECHNICAL DATASHEET DS DECONTACTOR™

Date: 2023-02-16
Revision: 05

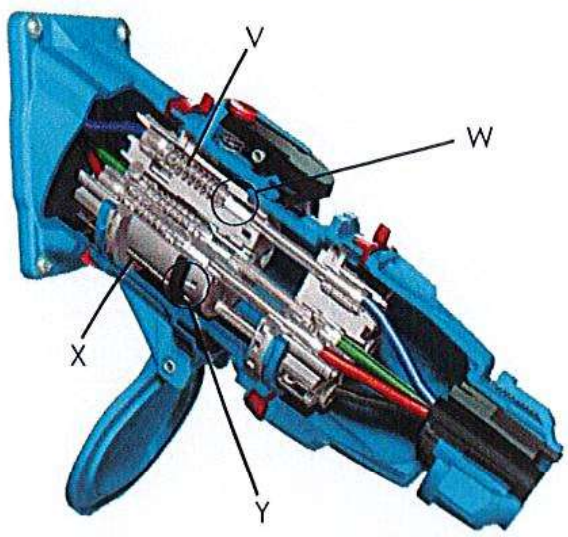
DS DECONTACTOR is a compact and waterproof plug and socket-outlet with integral switch for industrial purposes.

DS DECONTACTOR complies with the following regulations and standards(a) :
European Directives Low Voltage and RoHS (affixing of CE marking), REACH European Regulation,
standards IEC/EN 60309-1, IEC/EN 60309-4, IEC/EN 60947-3 (dealing with the load breaking capacities AC-22 and AC-23), UL 1682, UL 2682 (USA), CSA C22.2 N° 182.1-07 (Canada), GB/T 11918.1 (China).

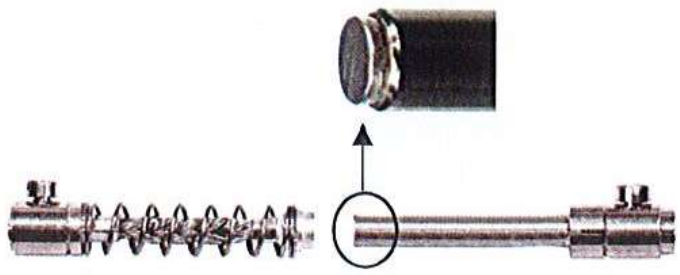
DS DECONTACTOR is certified by the following certification bodies:
LCIE (France), UL (USA), SAA (Australia), VDE (Germany), TR CU (Russia), CSA (Canada), CQC (China), Bureau Veritas Marine (DS9 only).

The use of DS DECONTACTOR facilitates the compliance with:
- electrical machinery to the "Machinery" European Directive on isolating device, and to standard EN 60204-1 : Safety of machinery-electrical equipment of machines
- electrical installation:
  * to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,
  * to installation standards : IEC 60364 (international), HD 60364 (European), NFPA 70 (USA) and NF C 15-100 (French) or other national transposition of IEC/HD 60364.

General information		DS6	DS9
(b)	I_n	90 A	150 A
	U_{max} (V AC/V DC)	1 000/1 500	1 000/1 500
(c)	Frequency (Hz)	≤ 500	≤ 500
(d)	Number of contacts	4P+E	4P+E
(e)	Number of keying positions	24	24
	Connection (min - max): mm²		
	Flexible conductors (Cu): main contacts	10 - 25	25 - 70
	Rigid/stranded conductors (Cu): main contacts	10 - 35	25 - 95
	Tightening torque - main contacts	4 Nm	9 Nm
	Wiring lugs	Option	Option
	Icc: conditional short circuit current (kA)		
	with gG fuse	10 kA	10 kA
	with RK1 NTD fuse	100 kA	100 kA
Auxiliaries / pilots contacts			
	I_n	5 A	10 A
	U_{max} (V AC/V DC)	500 V	400 V
(f)	Number of auxiliaries / pilots contacts	4 aux	6 aux
	Connection (min - max): mm²		
	Flexible wiring	2.2	2.2
	Tightening torque	Pre-wired	
Used as connector according to IEC/EN 61984: In		90 A	150 A
	U_{max}	1000 V AC	1000 V AC
		1500 V DC	1500 VDC
Breaking as plug and socket-outlet according to IEC/EN 60309-1		63 - 1 000	125 - 1 000
(g)	In (A) / Umax (V AC)	90 - 690	150 - 690
Breaking as switch according to IEC/EN 60947-3			
(g)	Category AC-22A: Ie (A) - Ue (V AC)	63 - 690	150 - 600
(g)	Category AC-23A: Ie (A) - Ue (V AC)	90 - 400	100 - 440
Breaking as plug and socket-outlet according to UL 2682			
	Power: HP	50	75
Increase of DC load-breaking capacity (contacts in series)		Option	Option
Number of operations			
	According to IEC/EN 60309-1 : Cos(Φ) 0,7	2 000	500
	According to UL 2682 : Cos(Φ) 0,75	6 000	6 000
Isolating distance		17 mm	18 mm
Thermal features			
	Temperature of use mini/maxi (°C)	-40/+60 °C	-40/+60 °C
	Storage temperature mini/max: (°C)	-40/+80 °C	-40/+80 °C
	Maximal temperature rise (Kmax)	37 K	33 K
	Time constant (to reach 63 % of Kmax)	26 mn	42 mn



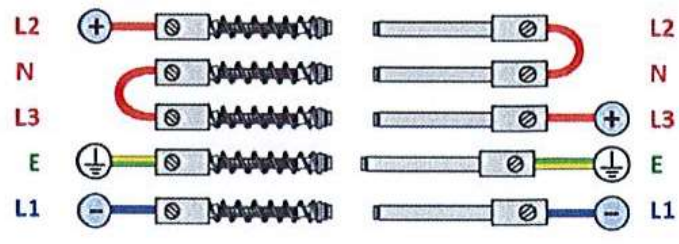
V : Contact spring
W : Arc chamber
X : Ejection spring
Y : Ejection ring



Contacts with silver nickel alloy tips (Ag/Ni : 85/15)



Spring assisted terminal:
Stainless steel ring



Contacts in series

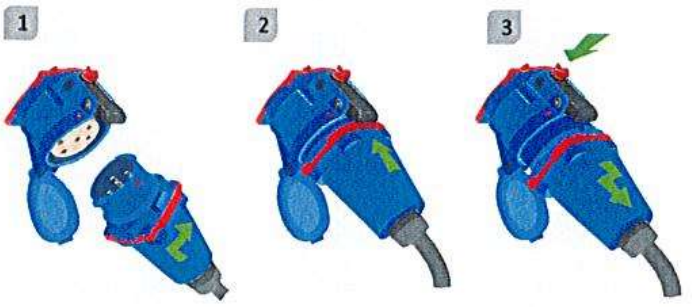
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BEYOND CONNECTIONS
5 avenue du chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

TECHNICAL DATASHEET DS DECONTACTOR™

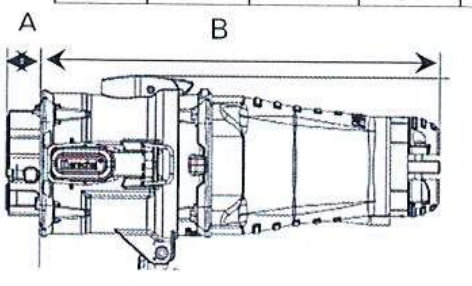
Date: 2023-02-16
Revision: 05

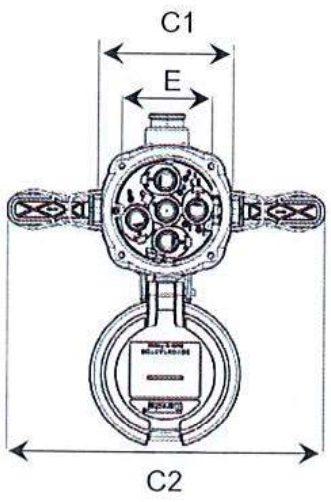
		DS6	DS9
Mechanical features			
(h) IP: connected device			
	Metal enclosure	IP66/IP67/IP69	
	Insulating enclosure	IP66/IP67/IP69	
(h) IP: lid/cap closed			
	Metal enclosure	IP66/IP67/IP69	
	Insulating enclosure	IP66/IP67/IP69	
(h) IP: socket-outlet with lid/cap opened		IP4X - Safety shutter	
(i) IK			
	Metal enclosure	IK09	IK10
	Insulating enclosure	IK09	IK09
Retaining/releasing device		Red release button	
(j) Casing			
	Metallic	Aluminium alloy	
	Insulating	GRP (poly)	
	Standard color	MARECHAL® Blue	
	Other colors	On request	
Vibrations resistance		✓	✓
Resistance to chemical agents			
	Metal enclosure	✓	✓
	Insulating enclosure	Contact us	
Protection against UV (according to UL 746C or equivalent)		f1	f1
Salt mist resistance			
	Metal enclosure	Contact us	
	Insulating enclosure	> 50 000 h	
Screws and bolts		Stainless steel	
Weight of inlet without accessory (≈)		0.7 kg	1.4 kg
Weight of socket-outlet without accessory (≈)		1.2 kg	2.3 kg
Main options			
Socket-outlet opening up to 180°		Included	Included
Self-returning lid		IP40	IP40
Inlet cap		IP66/IP67	IP66/IP67
Self-returning inlet lid		IP55	
Locking / padlocking		✓	✓
Screw locking			✓
Automatic self-ejection		✓	✓ (k)
Larger release button ("STOP")			
	Metal enclosure	✓	Included
	Insulating enclosure	✓	✓
Finger draw plates		✓	
(l) Electromagnetic compatibility (EMC)		✓	✓
Mounting accessories			
Poly sleeve: angle (°)		30/70	30
Metal sleeve: angle (°)		0/30/70	0/30/70
Poly box: angle (°)		30	
Metal box: angle (°)		20	
Poly box + poly sleeve: angle (°)		70	
Metal box + poly sleeve: angle (°)		30	30
Metal box + metal sleeve: angle (°)		0/30/70	0/30/70
Poly straight handle with built-in cable gland: range take (mm)		13 - 35	
Elastomer straight handle with built-in cable gland: range take (mm)			18 - 49
Threaded poly straight handle		M32 - M50	M50 - M63
Threaded metal straight handle		M25 - M50	M32 - M63
Poly straight handle + separated poly cable gland: range take (mm)		14 - 38	14 - 48
Metal straight handle + separated metal cable gland: range take (mm)		8 - 44	15 - 48
Spare parts			
Inlet or socket-outlet interior moulding		✓	✓
Inlet or socket-outlet contacts		✓	✓
Inlet or socket-outlet colored gasket		✓	✓
Inlet or socket-outlet casing		✓	✓
Socket-outlet casing gasket		✓	✓
Catalog: Web link		Click !	Click !



Dimensions

	DS6		DS9	
mm	GRP	Metal	GRP	Metal
A	25	25	27	27
B	207	241	313	299
C1	98	98	126	140
C2			322	322
E	66	66	81	81





Finger draw plate





Poly straight handle with built-in cable gland



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+33 (0) 145 116 000
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(a) European Regulation REACH: registration, evaluation, authorisation and restriction of chemicals
IEC/EN 60309-1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"
IEC/EN 60309-4 : "Plugs, socket-outlets and couplers for industrial purposes – Part 4: Switched socket-outlets and connectors with or without interlock"
IEC/EN 60947-3 : "Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units"
IEC/EN 61984 : "Connectors – Safety requirements and tests"
UL 1682 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
UL 2682 : "Outline of Investigation for Switch-Rated Plugs and Receptacles"
CSA C22,2 No 182,1-07 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
GB/T 11918.1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"

(b) In : Rated current as defined by the manufacturer
(c) Other frequency: contact us
(d) Contacts with silver-nickel tips (Ag/Ni 85/15)
(e) Number of voltage / frequency / grid, keying positions
(f) Auxiliaries contacts are located on the plug and socket-outlet sides. Pilot contacts are only located on the socket-outlet side.
(g) For direct current applications : contact us
(h) IP : Degrees of protection provided by enclosures (IEC/EN 60529)
(i) IK : Degrees of protection provided by enclosures against mechanical impacts (IEC/EN 62262)
(j) GRP : Glass-reinforced technical plastic
(k) Option available for metal version only
(l) Suitable for EMC environments: use of metallic housings and accessories, and cable gland with shielding recovery.

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5 avenue du chemin de Presles
94410 St-Maurice FRANCE
+33 (0) 145 116 000
contact@marechal.com

TECHNICAL DATASHEET DS DECONTACTOR™

Date: 2021-08-31
Revision: 02

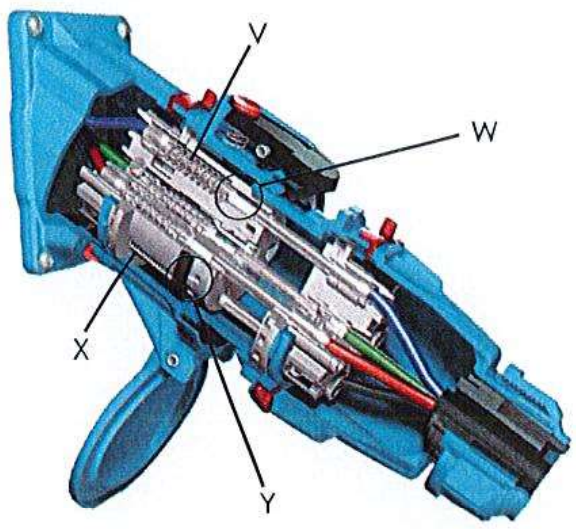
DS DECONTACTOR is a compact and waterproof plug and socket-outlet with integrated switch for industrial purposes.

DS DECONTACTOR complies with the following regulations and standards(a):
European Directives Low Voltage and RoHS (affixing of CE marking), REACH European Regulation,
standards IEC/EN 60309-1, IEC/EN 60309-4, IEC/EN 60947-3 (dealing with the load breaking capacities AC-22 and AC-23), UL 1682, UL 2682 (USA), CSA C22.2 N° 182.1-07 (Canada), GB/T 11918.1 (China).

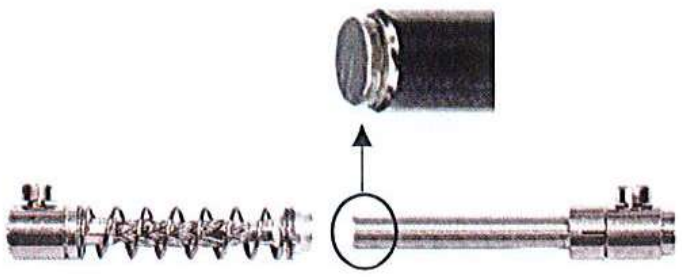
DS DECONTACTOR is certified by the following certification bodies:
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The use of DS DECONTACTOR facilitates the compliance with:
- electrical machinery to the "Machinery" European Directive on isolating device, and to standard EN 60204-1 : Safety of machinery-electrical equipment of machines
- electrical installation:
  * to national regulations relating to the improvement of the safety and health of workers at work in France, Italy, Spain, Belgium,
  * to installation standards : IEC 60364 (international), HD 60364 (European), NFPA 70 (USA) and NF C 15-100 (French) or other national transposition of IEC/HD 60364.

General information		DS1	DS3
(b)	I_n	30 A	50 A
	U_{max} (V AC/V DC)	690/1 000	1 000/1 500
(c)	Frequency (Hz)	≤ 500	≤ 500
(d)	Number of contacts	4P+E	4P+E
(e)	Number of keying positions	24	24
	Connection (min - max): mm²		
	Flexible conductors (Cu): main contacts	2.5 - 6	6 - 16
	Rigid/stranded conductors (Cu): main contacts	2.5 - 10	10 - 25
	Tightening torque - main contacts	1.5 Nm	1.8 Nm
	Wiring lugs	Option	Option
	Icc: conditional short circuit current (kA)		
	with gG fuse	10 kA	10 kA
	with RK1 NTD fuse	100 kA	100 kA
Auxiliaries / pilots contacts			
	I_n	30 A	16 A
	U_{max} (V AC/V DC)	500 V	400 V
(f)	Number of auxiliaries / pilots contacts	2 aux	4 aux
	Connection (min - max): mm²		
	Flexible wiring	2.5 - 6	1 - 2.5
	Stranded wiring	2.5 - 10	1.5 - 4
	Tightening torque	1.5 Nm	0.8 Nm
Used as connector according to IEC/EN 61984: In		30 A	50 A
	U_{max}	690 V AC	1000 V AC
		1000 V DC	1500 V DC
Breaking as plug and socket-outlet according to IEC/EN 60309-1			
(g)	In (A) / Umax (V AC)	30 - 690	50 - 690
Breaking as switch according to IEC/EN 60947-3			
(g)	Category AC-22A: In (A) - Umax (V AC)	32 - 690	40 - 690
(g)	Category AC-23A: In (A) - Umax (V AC)	32 - 480	50 - 400
Breaking as plug and socket-outlet according to UL 2682			
	Power: HP	15	25
Increase of DC load-breaking capacity (contacts in series)		Option	Option
Number of operations			
	According to IEC/EN 60309-1 : Cos(Φ) 0,6	2 000	2 000
	According to UL 2682 : Cos(Φ) 0,75	6 000	6 000
Isolating distance		8 mm	13 mm
Thermal features			
	Temperature of use mini/maxi (°C)	-40/+60 °C	-40/+60 °C
	Storage temperature mini/max: (°C)	-40/+80 °C	-40/+80 °C
	Maximal temperature rise (Kmax):	38 K	30 K
	Time constant (to reach 63 % of Kmax)	21mn	23 mn



V : Contact spring
W : Arc chamber
X : Ejection spring
Y : Ejection ring



Contacts with silver nickel alloy tips (Ag/Ni : 85/15)



Spring assisted terminal:
Stainless steel ring



Contacts in series

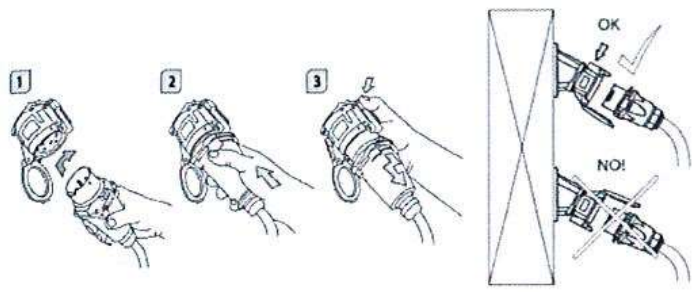
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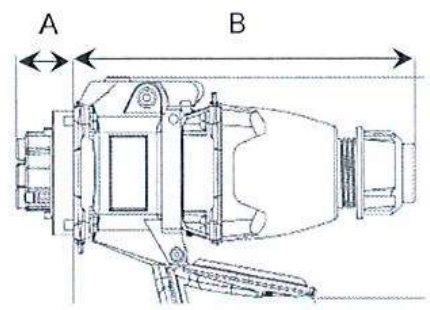
TECHNICAL DATASHEET
DS DECONTACTOR™

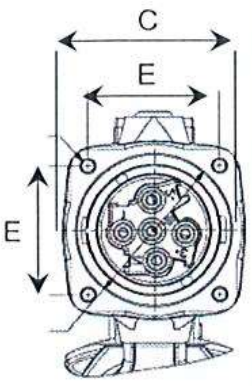
Date: 2021-08-31
Revision: 02

	DS1	DS3
Mechanical features		
(h) IP: connected device	IP54	IP54
IP: lid/cap closed	IP55	IP55
IP: socket-outlet with lid/cap opened	IP4X - Safety shutter	
(i) IK	IK09	IK09
Retaining/releasing device	Red release button	
(j) Casing	GRP (poly)	
Standard color	MARECHAL® Blue	
Other colors	On request	
Vibrations resistance	✓	✓
Resistance to chemical agents	Contact us	
Protection against UV (according to UL 746C or equivalent)	f1	f1
Salt mist resistance	> 50 000 h	
Screws and bolts	Stainless steel	
Weight of inlet without accessory (≈)	0.15 kg	0.20 kg
Weight of socket-outlet without accessory (≈)	0.26 kg	0.35 kg
Main options		
Socket-outlet opening up to 180°	Included	Included
Self-returning lid	IP55	IP55
Inlet cap	IP66/IP67	IP66/IP67
Self-returning inlet lid	IP55	IP55
Locking / padlocking	✓	✓
Automatic self-ejection	✓	✓
Larger release button ("STOP")	✓	✓
Finger draw plates	✓	✓
Industrial-domestic adapter	✓	
Mounting accessories		
Poly sleeve: angle (°)	30/70	30/70
Metal sleeve: angle (°)	0/30	0/30/70
Poly box: angle (°)	30	30
Metal box: angle (°)	20	20
Poly box + poly sleeve: angle (°)	70	70
Metal box + poly sleeve: angle (°)	30	30
Metal box + metal sleeve: angle (°)	0/30	0/30/70
Poly straight handle with built-in cable gland: range take (mm)	5 - 21	10 - 30
Threaded poly straight handle	M20 - M40	M20 - M40
Threaded metal straight handle	M20 - M32	M20 - M40
Poly straight handle + separated poly cable gland: range take (mm)	5 - 32	9 - 32
Metal straight handle + separated metal cable gland: range take (m	7 - 23	7 - 32
Spare parts		
Inlet or socket-outlet interior moulding	✓	✓
Inlet or socket-outlet contacts	✓	✓
Inlet or socket-outlet colored gasket	✓	✓
Inlet or socket-outlet casing	✓	✓
Socket-outlet casing gasket	✓	✓
Catalog: Web link	**Click !**	**Click !**



Dimensions





mm	DS1	DS3
A	15	17
B	166	179
C	69	80
E	48	55

Finger draw plates

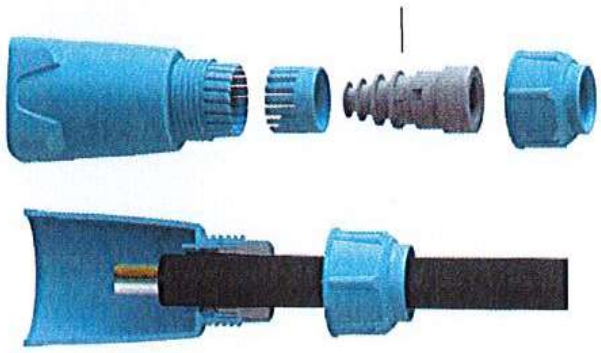




Locking pin for 2 padlocks

Poly straight handle with built-in cable gland

5 sizes gasket



(a) European Regulation REACH: registration, evaluation, authorisation and restriction of chemicals
IEC/EN 60309-1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"
IEC/EN 60309-4 : "Plugs, socket-outlets and couplers for industrial purposes – Part 4: Switched socket-outlets and connectors with or without interlock"
IEC/EN 60947-3 : "Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units"
IEC/EN 61984 : "Connectors – Safety requirements and tests"
UL 1682 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
UL 2682 : "Outline of Investigation for Switch-Rated Plugs and Receptacles"
CSA C22,2 No 182,1-07 : "Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type"
GB/T 11918.1 : "Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements"

(b) In : Rated current as defined by the manufacturer
(c) Other frequency: contact us
(d) Contacts with silver-nickel tips (Ag/Ni 85/15)
(e) Number of voltage / frequency / grid, keying positions
(f) Auxiliaries contacts are located on the plug and socket-outlet sides. Pilot contacts are only located on the socket-outlet side.
(g) For direct current applications : contact us
(h) IP : Degrees of protection provided by enclosures (IEC/EN 60529)
(i) IK : Degrees of protection provided by enclosures against mechanical impacts (IEC/EN 62262)
(j) GRP : Glass-reinforced technical plastic

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ITEM	Tag	ESO-200N1-06-L2-03	: Small Power Socket (Below lower Deck)			Dwg	123A90-DDL-EL-DL-20118
	S/Sys	83-55	: Power Sockets			Module	TP
TASK	code	C10001861		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

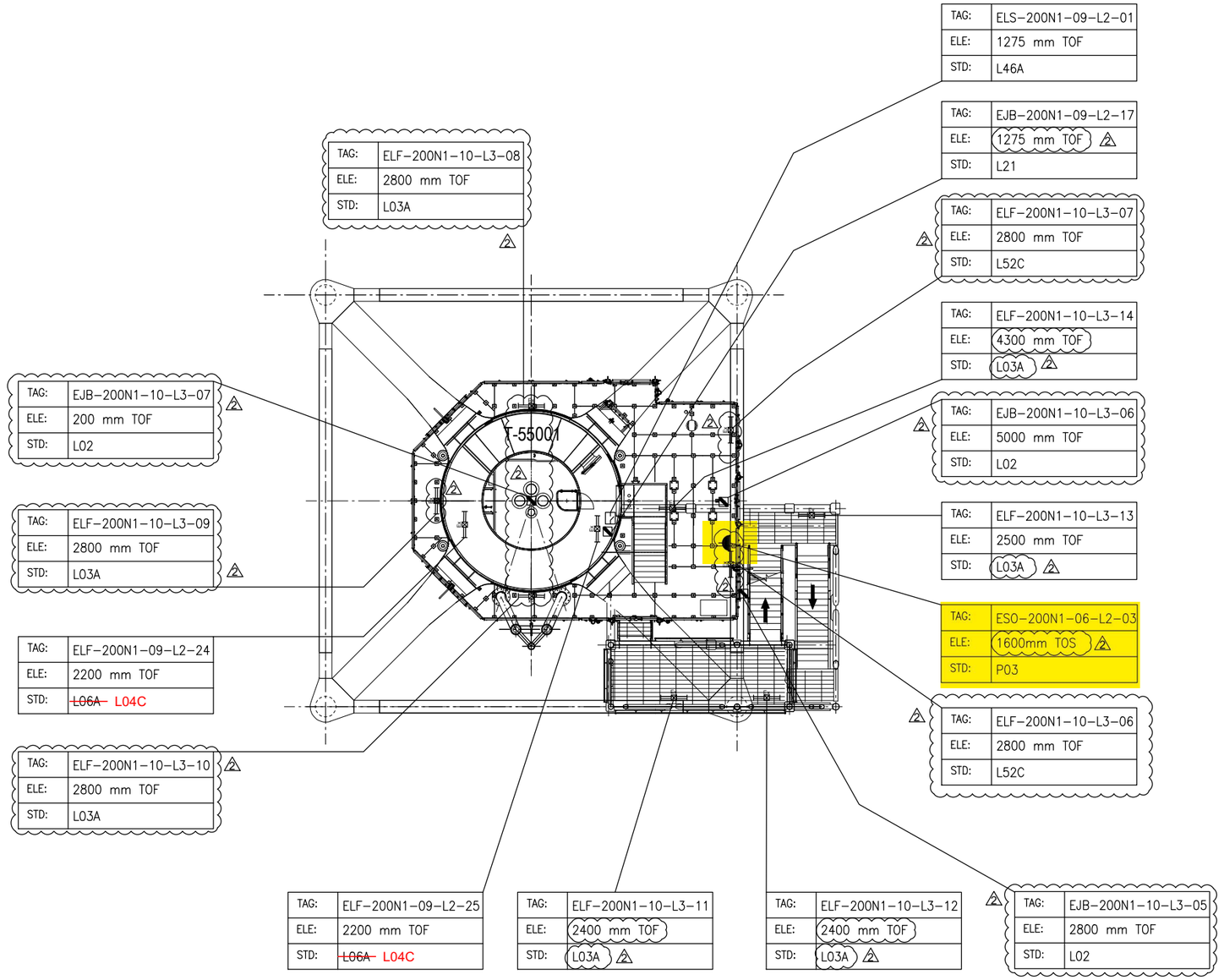
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	OK
4	Check nameplate data is correct.	OK
5	Check all bolts are fitted and all unused entries are suitably plugged.	OK
6	Check terminals for proper size and installation crimps	OK
7	Check earthing and bonding against drawings.	OK
8	Check items are properly fixed on support.	OK
9	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

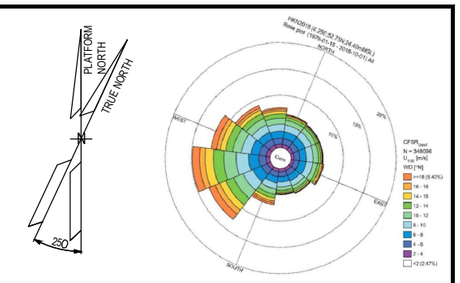
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-04-18	2025-04-30	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-04-18T06:36:55.976Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-04-30T12:38:54.181Z	

DRAWING NO. 123A90-DDL-EL-DL-20120

REV. 02



PLAN ON EXISTING PLATFORM AT EL.+16.860 T.O.S



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S / T.O.F.
3. ELEVATION OF THE LAMPS ARE REFFERED TO THE BOTTOM OF THE LAMP.
4. ELEVATION OR STANDARD PRESENT IN THE MASK, WHERE JB AND FIXTURE ARE SHOWN, ARE RELATIVE TO THE ORDER OF THE TAGS, 1°ROW JB AND 2°ROW FIXTURE = ELEVATION JB / ELEVATION FIXTURE.

LEGEND

- EMERGENCY LIGHTING JB
- 60W LED EMERGENCY LUMINARIES
- 60W LED EMERGENCY LUMINARIES FIXTURE POLE MOUNTED
- SMALL POWER SOCKET WITH INTEGRATED JB
- LOCAL SWITCH IP66 TYPE

JB TAG:	JB-TAG
TAG:	TAG
ELE:	ELEVATION
STD:	STANDARD

T.O.S TOP OF STEEL
T.O.F TOP OF FOOTING (Walkway plan)

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DL-20120**

REV.:	DATE:	SIGNATURE:
2_B	27/01/25	G.Randi

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

123A90-DDL-EL-DL-20102	ELECTRICAL EQUIPMENT LAYOUT - TRANSITION PIECE
123A90-DDL-EL-DD-20091	ELECTRICAL TYPICAL INSTALLATION DETAILS - LIGHTING SYSTEM
123A90-DDL-PP-DL-70070	BASE LOAD POWER HUB (BLPH) - PLOT PLAN - LOWER AND UPPER DECK
123A90-DDL-EL-DD-20092	ELECTRICAL TYPICAL INSTALLATION DETAILS - POWER SYSTEM & CABLE INSTALLATION
123A90-DDL-EL-RE-20153	LIGHTING CALCULATION STUDY REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	07/10/24	AMA	CGI	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	06/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	04/06/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

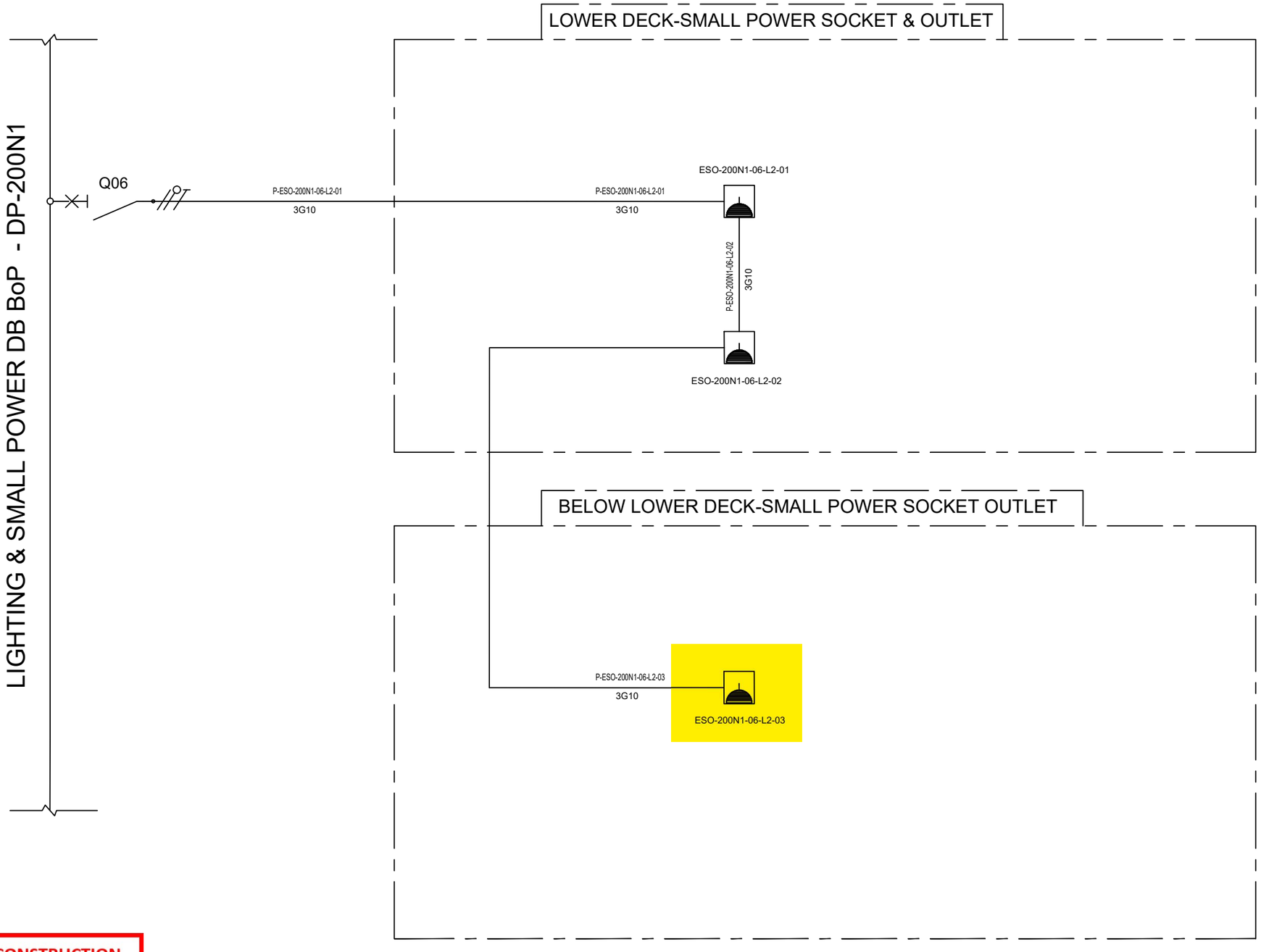
CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:100
DRAWN AMA	CHECKED CGI	APPROVED DLO	DATE 07/10/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20120	SHEET 001	REV. 02

File Name : 123A90-DDL-EL-DL-20120



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_I	26/03/25	E.Fabbri

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	08/08/24	ASR	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	01/07/24	ASR	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
LOWER DECK & BELOW LOWER DECK–SMALL POWER SOCKET

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

SCALE : NTS

A3

DRAWING NO. 123A90–DDL–EL–DG–20125

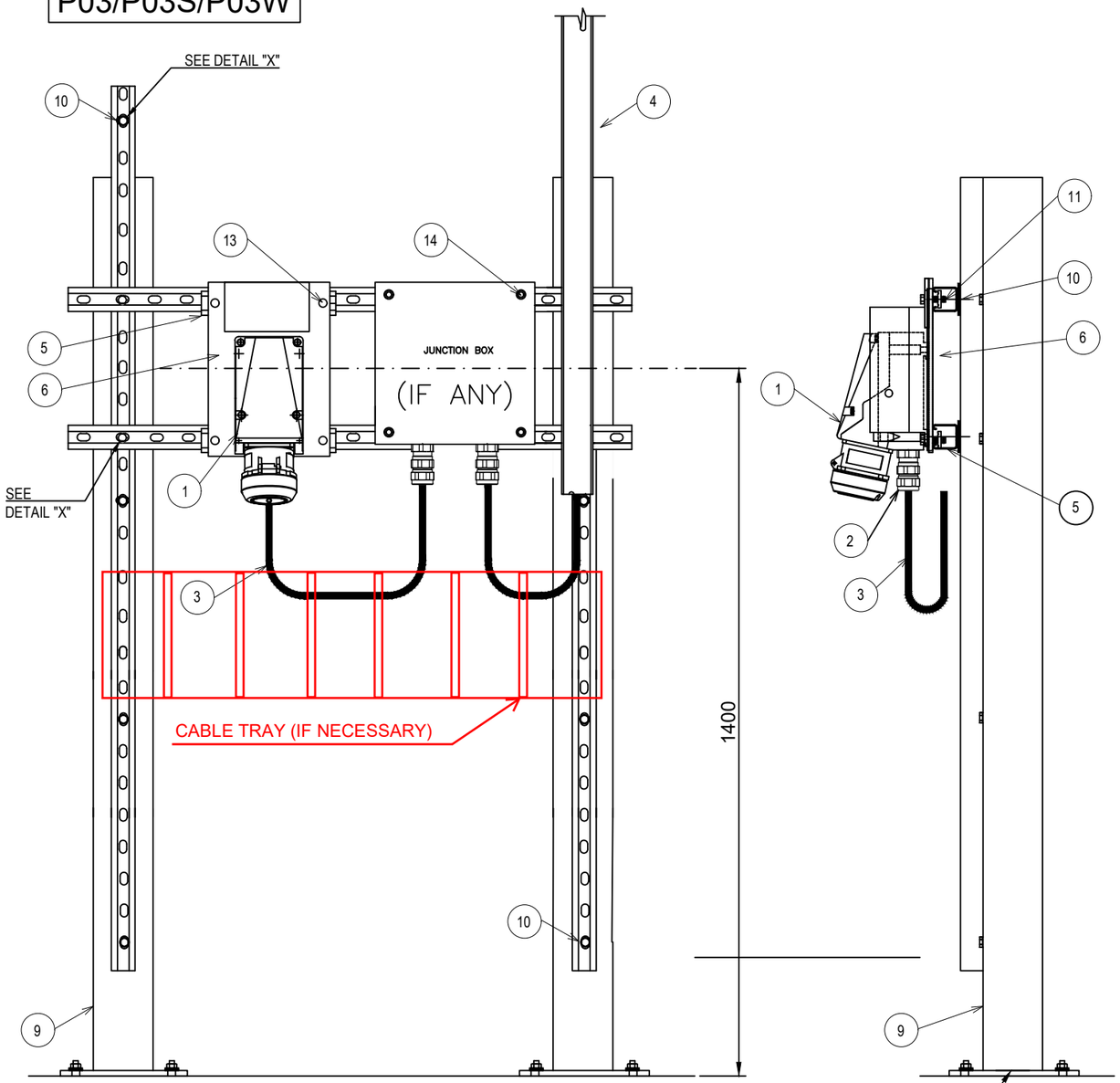
SHEET 008

REV. 01

F.to UNI A3: 420mmx297mm

File Name : 123A90–DDL–EL–DG–20125

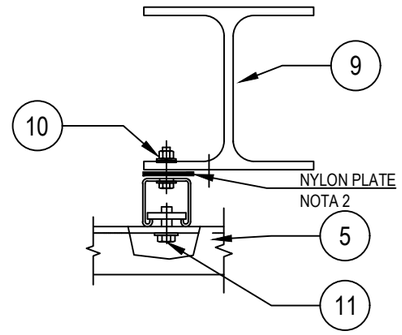
P03/P03S/P03W



POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	POWER SOCKET			1	
2	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE	NICK.PL.BRASS		3	NOTE 3
3	UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
5	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L	41x41x2	AS R.	NOTE 1
6	PLATE SUPPORT FOR POWER SOCKET	AISI 316L		1	
9	PROFILE SUPPORT	PAINTED C.S.		2	
10	HEXAGONAL BOLT WITH NYLON WASHER, PLANE WASHERS, GROWER AND NUT.	AISI 316L	M10x40	AS R.	
11	HEXAGONAL BOLT WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M12x30	AS R.	
12	DOUBLE SLOT CROWNED HEAD SCREW WITH NUT FOR U-CHANNEL WITH SPRING.	AISI 316L	M6x20	AS R.	
13	HEXAGONAL BOLT WITH PALNE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M8x30	4	
14	SCREW WITH PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x40	4	

02

DETAIL "X"



NOTE :
1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY FASE.
2) INTERPOSING TEFLON OR NYLON PLATE BETWEEN DISSIMILAR CONDUCTIIN MATERIAL.
3) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).

02 SUPPORT BOLTED ON HILTI S-BT INSTALLED ON BEAM OR DECK

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20092**

REV.:	DATE:	SIGNATURE:
2_B	28/11/24	G.Randi

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	28/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	04/07/24	NLK	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

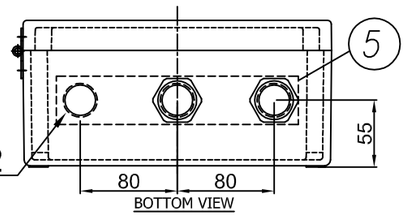
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS POWER SOCKET FLOOR MOUNTED

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 004 | REV. 02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG



8 3 N°3 PASSING HOLES Ø25.2
C/W N°2 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

4 I2400722-B040I00029801

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC
Via Italia 33 - 20060 Gessate (MI) ITALY

MADE IN ITALY

Serial Nr.:
Year of construction:

Type: MXBS-252612P

230VAC 50Hz 16A

T.amb -20/+50°C

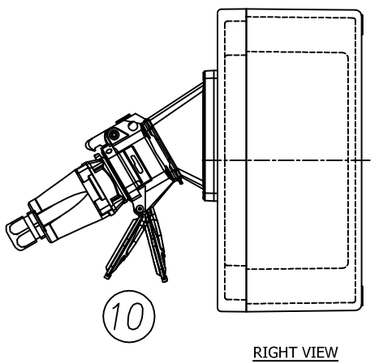
IP66

9 PLATE DETAIL

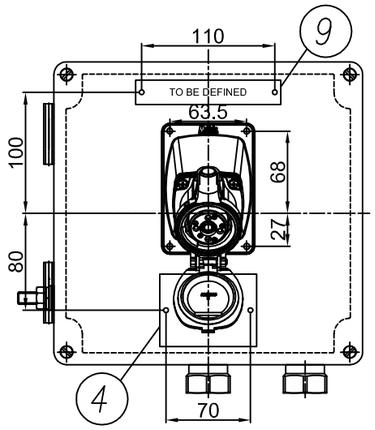


MATERIAL: LAMINATED PLASTIC
BACKGROUND: WHITE
LETTERS: BLACK

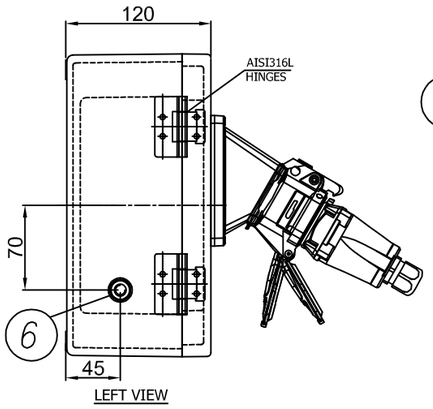
7 TERMINALS NUMBERED
L-L,N-N,PE-PE
BRIDGED



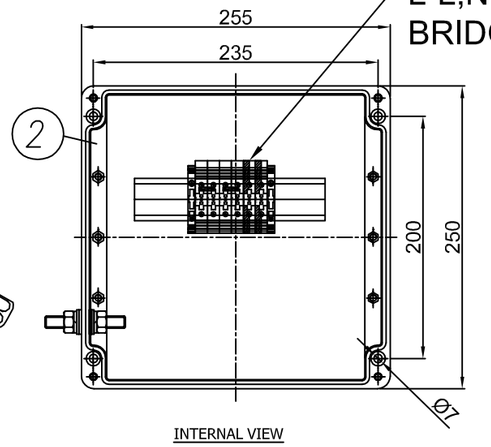
RIGHT VIEW



FRONT VIEW

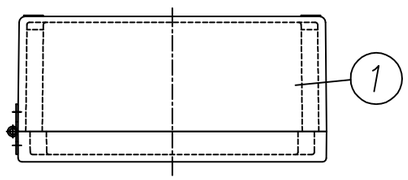


LEFT VIEW



INTERNAL VIEW

ENCLOSURE N°	TAG LIST
1	ESO-200N1-06-L2-03
2	ESO-200N1-06-L2-01
3	ESO-200N1-06-L2-02
4	ESO-200N1-05-L1-01
5	ESO-200N1-05-L1-02
6	SPARE (TO BE PROVIDED BLANK)



TOP VIEW

ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
10	DSN1 SOCKET 1P+N+E 230VAC 16A	1	511M3+6114015 6118015+511P0D18	.	MARECHAL
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	DUSTPROOF PVC PLUG Ø25	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 10 SQMM EARTH TERMINAL BLOCK SIZE 10 SQMM	4 2	WDU–10 WPE–10	.	WEIDMULLER
6	AISI316L INT/EXT EARTH BOLT M10	1	BTP–10	.	TECHNOR ITALSMEA
5	BRASS CONTINUITY PLATE THK. 0.8 MM	1	–	.	TECHNOR ITALSMEA
4	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	2	T25	.	TECHNOR ITALSMEA
2	INTERNAL MOUNTING PLATE	1	PS–2526	.	TECHNOR ITALSMEA
1	GRP ENCLOSURE	1	AQ–252612P	.	TECHNOR ITALSMEA

-UNPAINTED (BLACK NATURAL)
Q.TY 6, ITEM 50: 1EQP155,
ELEJB-SOCK01

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets

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

SCALE : NTS

A3

DRAWING NO. 1724001481-EL-DA-00003

SHEET 008

REV. 04

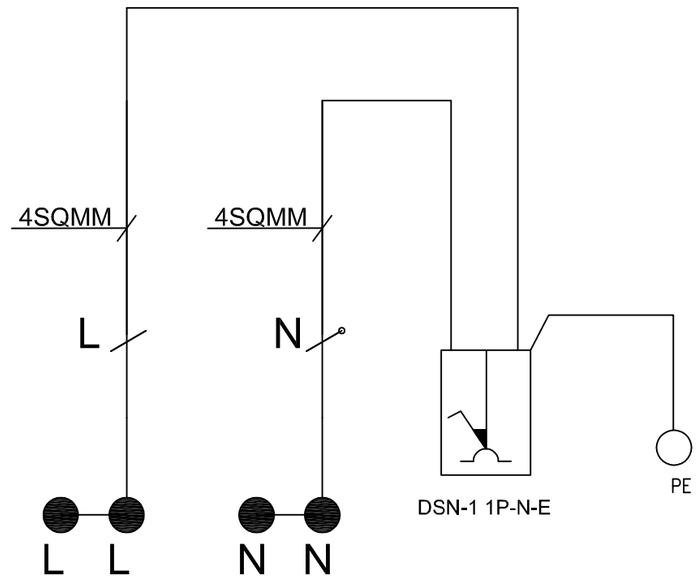
F.to UNI A3: 420mmx297mm

File Name : 1724001481-EL-DA-00003 Rev. 01

	01	02	03	04	05	06	07	08	09

CABLES TRI-RATED 0,6/1kV
COLOR CODE:
-L=BLACK
-N=BLUE

230Vac 1Ph+N+PE



LEGEND

- TERMINAL
- BRIDGED TERMINALS
- SOCKET
- CABLE

DESCRIPTION			.		DSN-1 SOCKET 1P+N+E 16A	. .	. .	. .	. .	. .	. .
CIRCUIT N°			.	.	.	.	.	.	.	.	.
FEEDER	TYPE					.	.	.	.	.	.
	CODE		.	.	.	.	.	.	.	.	.
TOTAL POWER		kW	.	.	.	.	.	.	.	.	.
CONTEMPORANEITY FACTOR			.	.	.	.	.	.	.	.	.
ABSORBED POWER		kW	.	.	.	.	.	.	.	.	.
ABSORBED CURRENT		A	.	.	.	.	.	.	.	.	.
CIRCUIT BREAKER or ON-LOAD SWITCH	TYPE					.	.	.	.	.	.
	POLES NUMBER x CURRENT					.	.	.	.	.	.
FUSES	TYPE		.	.	.	.	.	.	.	.	.
	RATING	A	.	.	.	.	.	.	.	.	.
CONTACTOR	MANUFACTURER		.	.	.	.	.	.	.	.	.
	MODEL		.	.	.	.	.	.	.	.	.
	POLES NUMBER x CURRENT		.	.	.	.	.	.	.	.	.
	NOMINAL POWER	kW	.	.	.	.	.	.	.	.	.
EARTH LEAKAGE	TYPE			.	.	.	.	.	.	.	.
	NOMINAL RANGE	mA		.	.	.	.	.	.	.	.
POWER LINE DATA	CABLE TYPE		.	.	.	.	.	.	.	.	.
	FORMATION / SIZE		.	.	.	.	.	.	.	.	.
	LENGHT	m	.	.	.	.	.	.	.	.	.
	VOLTAGE DROP	%	.	.	.	.	.	.	.	.	.
TERMINALS	SECTION	sqmm	2XWDU-10	2XWDU-10		2XWPE-10	.	.	.	.	.
	MARKING	-X	L-L	N-N		PE-PE	.	.	.	.	.

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti

TECHNOR ITALSMEA
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CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
04	26/11/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
03	25/10/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
02	12/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	FB	OB	OB	ACCEPTED FOR CONSTRUCTION (AFC)
00	30/07/24	FB	OB	OB	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box with 16A Power Sockets-Wiring Diagram

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

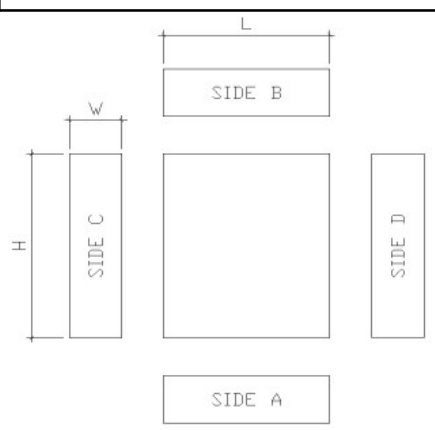
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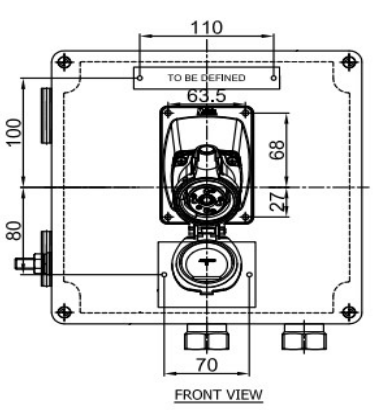
F.to UNI A3: 420mmx297mm

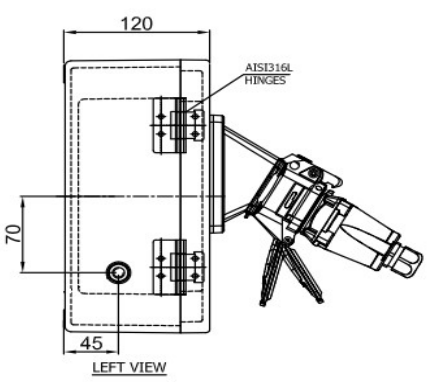
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	16A Power Socket and Plug with Integrated JB				01
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by Vendor	MXBS-252612P		01
4	Serial Number	by Vendor			00
5	Quantity	5+1(spare)		(6+0 Spare)	01
6	Application	Power Socket			00
7	Safe Area/Hazardous Area	Safe Area			00
8	**Rating**				
9	Current Rating [A]	16A	16A		01
10	Poles	1ph+N+PE	1ph+N+PE		01
11	Voltage [V]	230	230 V ac		01
12	**Material**				
13	Body	GRP	GRP		01
14	Execution	Normal			00
15	Protection Degree	IP56	IP 66		01
16	Temperature Class	Normal			00
17	**Cable Entry**				
18	Thread	Metric			00
19	Cable Gland Size/Qty.	M25/3	M25/3		01
17	**Interlocked Switching Device**				
18	Interlocked Switching device	Required			00
19	Padlocakable Position	Required			00
20	Plug	Required			00
21	**Accessories**				
22	Hinged Cover	Required	AISI316L Hinges		01
23	Gasket	Required			00
24	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
25	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
26	Internal Ground Bar	Required		connected to earth stud	00
27	Earth Stud	Required			00
28	Drainage Valve	Required			00
29	Pad lockable Cover	Required			00
30	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
31	**Side 'A'**				
32	Hubs Qty.	3	3		01
33	Size	M25	Ø 25.2 mm		01
34	Thread	ISO-M			00
35	Plug	No.2 M25	No.2 M25	nickel-plated brass	01
36	**Side 'B'**				
37	Hubs Qty.	Not Required			00
38	Size	NA			00
39	Thread	NA			00
40	**Side 'C'**				
41	Hubs Qty.	Not Required			00
42	Size	NA			00
43	Thread	NA			00
44	**Side 'D'**				
45	Hubs Qty.	Not Required			00
46	Size	NA			00
47	Thread	NA			00
48	**Terminals**				
49	Size [mm^2]	Suitable for 10 Sq.mm Cable	M25	suitable with wire-end ferrules DIN 46228	01
50	Qty.	n°4 for Ph // n°4 for N // n°4 for PE	n°2 for Ph // n°2 for N // n°2 for PE	jumpered	01
51	**Bonding Cable (yellow/Green)**				
52	Size [mm^2]	by vendor		6 mm^2	01
53	Qty.	Min. 0.15m			00
54	**Dimension**				
55	Height 'H' [mm]	by vendor	255 mm		01
56	Width 'W' [mm]	by vendor	250 mm		01
57	Length 'L' [mm]	by vendor	120 mm		01
58	Weight [Kg]	by vendor			00
59	**Code**	**Remarks**			
60					

NOTES:







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Section 6 MECHANICAL COMPLETION STATUS INDEX - INSTRUMENTAL DISCIPLINE

NOT APPLICABLE

Section 7 MECHANICAL COMPLETION STATUS INDEX - MECHANICAL DISCIPLINE

NOT APPLICABLE

Section 8 MECHANICAL COMPLETION STATUS INDEX - TELECOMMUNICATION DISCIPLINE

NOT APPLICABLE

Section 9 MECHANICAL COMPLETION STATUS INDEX - HVAC DISCIPLINE

NOT APPLICABLE

Section 10 MECHANICAL COMPLETION STATUS INDEX - PIPING DISCIPLINE

NOT APPLICABLE

Section 11 MECHANICAL COMPLETION INDEX - SAFETY DISCIPLINE

NOT APPLICABLE

Section 12 FAT / VENDOR REPORTS

NOT APPLICABLE

Section 13 MECHANICAL COMPLETION CHANGES / MARK-UPS

NOT APPLICABLE