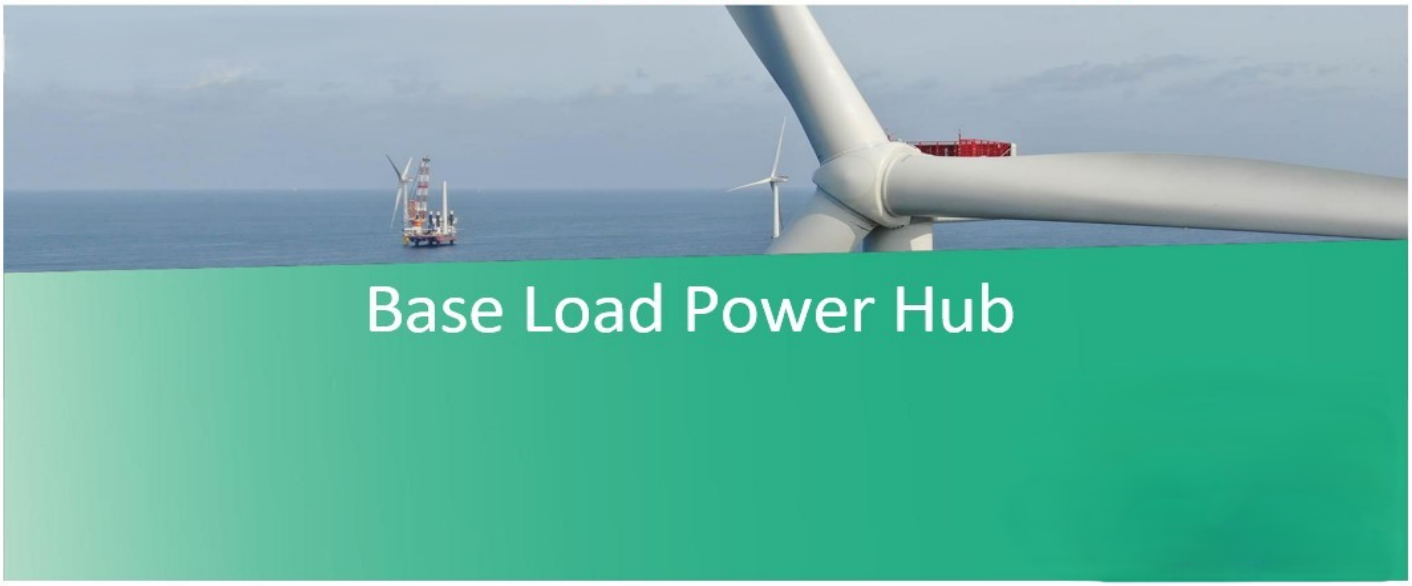
CROSSWIND

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	83-42 Normal Lighting Stairs/Transition Piece

CROSSWIND

123A90 - HOLLANDSE KUST NOORD WIND PARK
BLPH Project

MECHANICAL COMPLETION DOSSIER INDEX

ROSETTI MARINO

Sub System N°:	83-42	**Tick as appropriate**	ONSHORE	O
Description:	Normal Lighting Stairs/Transition Piece		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:	2025-03-14	
System:	83	/	Main Power Distribution Low Voltage 440 V		
SubSystem:	83-42	/	Normal Lighting Stairs/Transition Piece		

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 4

REMARKS:

	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	2025-03-17	2025-03-17	2025-03-17	2025-03-17
Signature	PROVERLIS Digitaly signed by Wolmer Borghi 2025-03-17T08:32:06.472Z	PROVERLIS Digitaly signed by Anthony Iveson 2025-03-17T15:05:52.826Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2025-03-17T16:23:42.490Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2025-03-17T16:23:47.146Z

CROSSWIND

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Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 83-42 & process: MC

Electrical	83-42 Normal Lighting Stairs/Transition Piece						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
EJB-200N1-04-L3-01	Normal Lighting stairs	ONSHORE	C10001289	CPX31	100	2025-01-21	RFC 1
EJB-200N1-04-L3-02	JB - NORMAL LIGHTING	ONSHORE	C10001219	CPX31	100	2025-01-21	RFC 1
ELF-200N1-04-L3-01	NORMAL LIGHT	ONSHORE	C10001315	CPX00	100	2025-01-20	RFC 1
ELF-200N1-04-L3-02	NORMAL LIGHT	ONSHORE	C10001314	CPX00	100	2025-01-23	RFC 1
EPH-200N1-01	Twilight Relay Sensor	ONSHORE	C10002371	CPX00	100	2025-03-13	RFC 2
P-EJB-200N1-04-L3-01	Lighting & Small Power DB BoP / Normal Lighting - Stairs	ONSHORE	C10000600	CPX09	100	2024-12-03	RFC 1
P-EJB-200N1-04-L3-02	Stair Normal Lighting JB / Stair Normal Lighting JB	ONSHORE	C10000814	CPX09	100	2025-01-21	RFC 1
P-ELF-200N1-04-L3-01	Stair Normal Lighting JB / Stair Normal Lighting Fixture	ONSHORE	C10000812	CPX09	100	2025-01-21	RFC 1
P-ELF-200N1-04-L3-02	Stair Normal Lighting Fixture / Stair Normal Lighting Fixture	ONSHORE	C10000813	CPX09	100	2025-01-21	RFC 1
P-EPH-200N1-01	LV 0,4 / 0,23 kV Distribution Switchgear / Twilight Relay Sensor	ONSHORE	C10002347	CPX09	100	2025-03-13	RFC 2

CROSSWIND

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Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-42	Normal Lighting Stairs/Transition Piece

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003109	A	ELF-200N1-04-L3-01 C10001315	Missing earthing cable outside the (ELF-200N1-04-L3-01).See attached photo.	.		Gtangianu 2025-01-20	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30003121	A	P-ELF-200N1-04-L3-01 C10000812	Missing earthing cable on the secondary cabletray. See attached photo.	.		Gtangianu 2025-01-21	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30003128	A	P-ELF-200N1-04-L3-02 C10000813	Not enought threads are thightened between the lock nut and the cable gland body on JB side. See attached photo.	.		Gtangianu 2025-01-21	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30003130	A	P-ELF-200N1-04-L3-02 C10000813	Missing earthing cable on the cabletray. See attached photo.	.		Gtangianu 2025-01-21	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30001146	B	P-EJB-200N1-04-L3-01 C10000600	Missing SS cable tag	.		Pschintu 2024-12-03	2025-02-04	Pschintu 2025-02-04	2025-02-04
C30003110	B	ELF-200N1-04-L3-01 C10001315	Not installed certificate plug on the lamp. See attached photo.	.		Gtangianu 2025-01-20	2025-02-06	GBertuccelli 2025-02-06	2025-02-06
C30003122	B	P-ELF-200N1-04-L3-01 C10000812	Missing cable tag side the (EJB-200N1-04-L3-01.)See attached photo.	.		Gtangianu 2025-01-21	2025-01-31	GBertuccelli 2025-01-31	2025-01-31
C30003132	B	P-ELF-200N1-04-L3-02 C10000813	Cable needs to be better dressed side rack JB. See attached photo.	.		Gtangianu 2025-01-21	2025-02-04	Gtangianu 2025-02-04	2025-02-04
C30003135	B	EJB-200N1-04-L3-02 C10001219	Not enought threads are thightened on plug	.		Gtangianu 2025-01-21	2025-02-21	Gtangianu 2025-02-21	2025-02-21

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-42	Normal Lighting Stairs/Transition Piece

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003136	B	P-EJB-200N1-04-L3-02 C10000814	Missing identification cable tags both side the cable	.		Gtangianu 2025-01-21	2025-01-31	GBertuccelli 2025-01-31	2025-01-31
C30003174	B	ELF-200N1-04-L3-02 C10001314	Not installed trafolite tag.	.		Gtangianu 2025-01-23	2025-01-31	GBertuccelli 2025-01-31	2025-01-31
C30004244	B	EPH-200N1-01 C10002371	Missing trafolite tag on the EPH-200N1-01.	.		Gtangianu 2025-03-13			
C30004245	B	EPH-200N1-01 C10002371	THE DOCUMENT 123A90-DDL-EL-DG-20149 sheet_047 Rev2_k need to be update. See attached photo to reference field installation.	.		Gtangianu 2025-03-13			
C30004246	B	P-EPH-200N1-01 C10002347	Missing cable tag side the EPH-200N1-01.See attached photo.	.		Gtangianu 2025-03-13			
C30004247	B	P-EPH-200N1-01 C10002347	Missing identification wire inside the EPH-200N1-01.See attached photo.	.		Gtangianu 2025-03-13			

Section 2 CONSOLIDATED PUNCH LISTS

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-42	Normal Lighting Stairs/Transition Piece

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003109	A	ELF-200N1-04-L3-01 C10001315	Missing earthing cable outside the (ELF-200N1-04-L3-01).See attached photo.	.		Gtangianu 2025-01-20	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30003121	A	P-ELF-200N1-04-L3-01 C10000812	Missing earthing cable on the secondary cabletray. See attached photo.	.		Gtangianu 2025-01-21	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30003128	A	P-ELF-200N1-04-L3-02 C10000813	Not enought threads are thightened between the lock nut and the cable gland body on JB side. See attached photo.	.		Gtangianu 2025-01-21	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30003130	A	P-ELF-200N1-04-L3-02 C10000813	Missing earthing cable on the cabletray. See attached photo.	.		Gtangianu 2025-01-21	2025-01-24	GBertuccelli 2025-01-24	2025-01-24
C30001146	B	P-EJB-200N1-04-L3-01 C10000600	Missing SS cable tag	.		Pschintu 2024-12-03	2025-02-04	Pschintu 2025-02-04	2025-02-04
C30003110	B	ELF-200N1-04-L3-01 C10001315	Not installed certificate plug on the lamp. See attached photo.	.		Gtangianu 2025-01-20	2025-02-06	GBertuccelli 2025-02-06	2025-02-06
C30003122	B	P-ELF-200N1-04-L3-01 C10000812	Missing cable tag side the (EJB-200N1-04-L3-01.)See attached photo.	.		Gtangianu 2025-01-21	2025-01-31	GBertuccelli 2025-01-31	2025-01-31
C30003132	B	P-ELF-200N1-04-L3-02 C10000813	Cable needs to be better dressed side rack JB. See attached photo.	.		Gtangianu 2025-01-21	2025-02-04	Gtangianu 2025-02-04	2025-02-04
C30003135	B	EJB-200N1-04-L3-02 C10001219	Not enought threads are thightened on plug	.		Gtangianu 2025-01-21	2025-02-21	Gtangianu 2025-02-21	2025-02-21

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	83	Main Power Distribution Low Voltage 440 V
SUBSYSTEM	83-42	Normal Lighting Stairs/Transition Piece

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30003136	B	P-EJB-200N1-04-L3-02 C10000814	Missing identification cable tags both side the cable	.		Gtangianu 2025-01-21	2025-01-31	GBertuccelli 2025-01-31	2025-01-31
C30003174	B	ELF-200N1-04-L3-02 C10001314	Not installed trafolite tag.	.		Gtangianu 2025-01-23	2025-01-31	GBertuccelli 2025-01-31	2025-01-31
C30004244	B	EPH-200N1-01 C10002371	Missing trafolite tag on the EPH-200N1-01.	.		Gtangianu 2025-03-13	2025-03-26	Gtangianu 2025-03-26	2025-03-26
C30004245	B	EPH-200N1-01 C10002371	THE DOCUMENT 123A90-DDL-EL-DG-20149 sheet_047 Rev2_k need to be update. See attached photo to reference field installation.	.		Gtangianu 2025-03-13	2025-03-26	Gtangianu 2025-03-26	2025-03-26
C30004246	B	P-EPH-200N1-01 C10002347	Missing cable tag side the EPH-200N1-01.See attached photo.	.		Gtangianu 2025-03-13	2025-04-04	Gtangianu 2025-04-04	2025-04-04
C30004247	B	P-EPH-200N1-01 C10002347	Missing identification wire inside the EPH-200N1-01.See attached photo.	.		Gtangianu 2025-03-13	2025-04-08	Gtangianu 2025-04-08	2025-04-08

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004244

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002371	1.4 Discipline	Electrical
1.2 Item	EPH-200N1-01	Twilight Relay Sensor	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Missing trafolite tag on the EPH-200N1-01.

Name: Giovanni Tangianu

Date: 2025-03-13

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-03-13
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Giovanni Tangianu

Date: 2025-03-26

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004245

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002371	1.4 Discipline	Electrical
1.2 Item	EPH-200N1-01	Twilight Relay Sensor	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

THE DOCUMENT 123A90-DDL-EL-DG-20149 sheet_047 Rev2_k need to be update. See attached photo to reference field installation.

Name: Giovanni Tangianu

Date: 2025-03-13

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-03-13
3.5 Action by	ENG Engineering	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done.

Name: Giovanni Tangianu

Date: 2025-03-26

Signature:

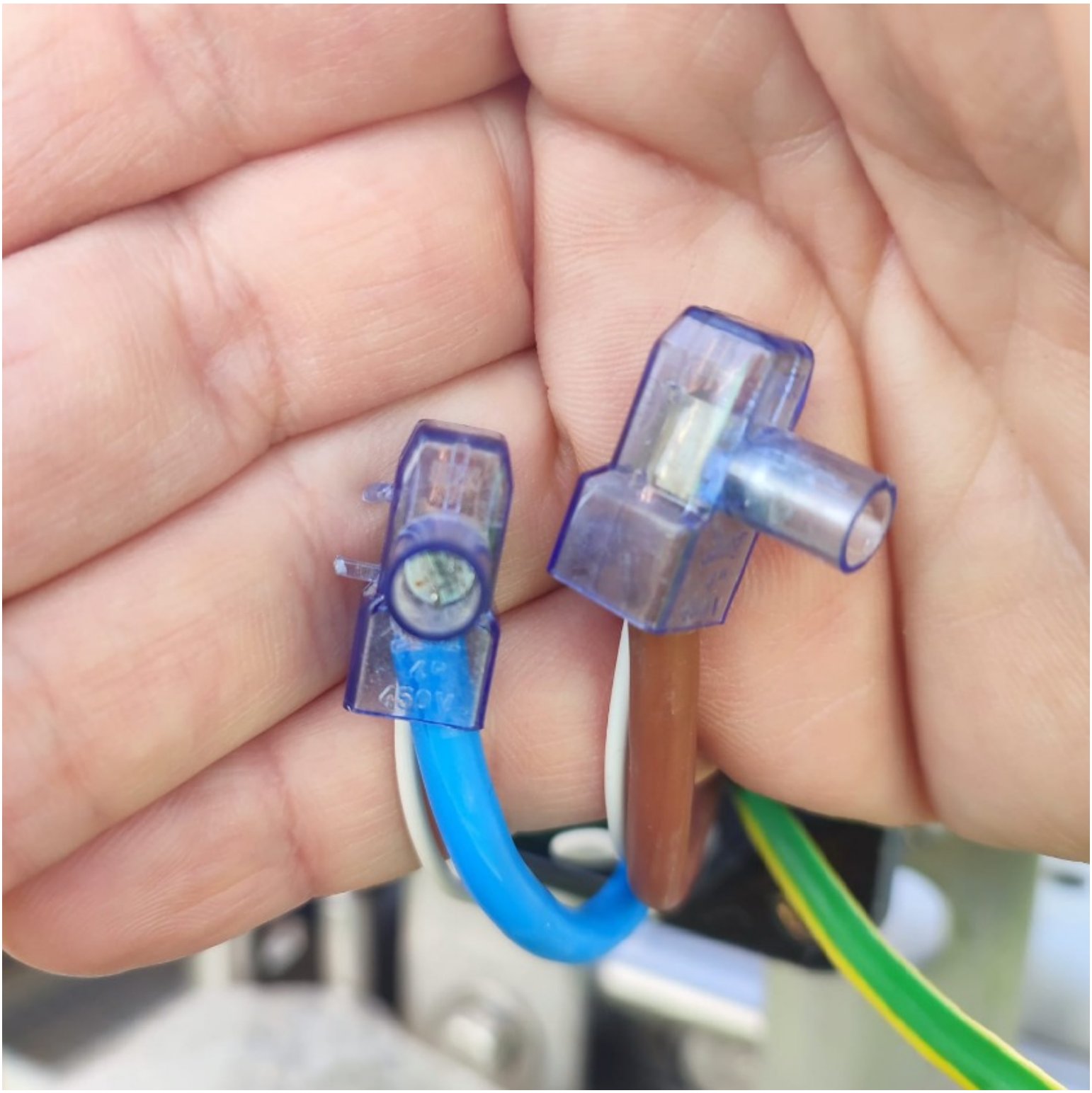
6- CLEARANCE APPROVAL

Name:

Date:

Signature:


Palazzoli
via Palazzoli 31, 25128 Brescia Italy
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II 2D
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Ex tb IIIC Db
IECEx EXA 15.0009U




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Palazzoli
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Made in Italy
via Palazzoli, 31 - 25128 - Brescia Italy
532035EX


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marzo 13, 2025
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EJB-200N1-10-L3-03

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004246

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002347	1.4 Discipline	Electrical
1.2 Item	P-EPH-200N1-01		LV 0,4 / 0,23 kV Distribution Switchgear / Twilight Relay Sensor
1.3 Subsystem	83-42		Normal Lighting Stairs/Transition Piece

2 - OBSERVATION

Missing cable tag side the EPH-200N1-01.See attached photo.

Name: Giovanni Tangianu

Date: 2025-03-13

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-03-13
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Giovanni Tangianu

Date: 2025-04-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


ELF-200N1-10-L3-
REDMI NOTE 13
13/03/2025 10:51

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004247

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10002347	1.4 Discipline	Electrical
1.2 Item	P-EPH-200N1-01		LV 0,4 / 0,23 kV Distribution Switchgear / Twilight Relay Sensor
1.3 Subsystem	83-42		Normal Lighting Stairs/Transition Piece

2 - OBSERVATION

Missing identification wire inside the EPH-200N1-01.See attached photo.

Name: Giovanni Tangianu

Date: 2025-03-13

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-03-13
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date: 2025-04-08

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Giovanni Tangianu

Date: 2025-04-08

Signature:

6- CLEARANCE APPROVAL

Name:

Date: 2025-04-08

Signature:


ELF-200N1-10-L3-
REDMI NOTE 13
13/03/2025 10:51

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001146

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000600	1.4 Discipline	Electrical
1.2 Item	P-EJB-200N1-04-L3-01		Lighting & Small Power DB BoP / Normal Lighting - Stairs
1.3 Subsystem	83-42		Normal Lighting Stairs/Transition Piece

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

C30003109

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001315	1.4 Discipline	Electrical
1.2 Item	ELF-200N1-04-L3-01	NORMAL LIGHT	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Missing earthing cable outside the (ELF-200N1-04-L3-01).See attached photo.

Name: Giovanni Tangianu

Date: 2025-01-20

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-01-20
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-24

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003110

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001315	1.4 Discipline	Electrical
1.2 Item	ELF-200N1-04-L3-01	NORMAL LIGHT	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Not installed certificate plug on the lamp. See attached photo.

Name: Giovanni Tangianu

Date: 2025-01-20

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-01-20
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-02-06

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003121

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000812	1.4 Discipline	Electrical
1.2 Item	P-ELF-200N1-04-L3-01	Stair Normal Lighting JB / Stair Normal Lighting Fixture	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Missing earthing cable on the secondary cabletray. See attached photo.

Name: Giovanni Tangianu

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-01-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-24

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003122

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000812	1.4 Discipline	Electrical
1.2 Item	P-ELF-200N1-04-L3-01	Stair Normal Lighting JB / Stair Normal Lighting Fixture	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Missing cable tag side the (EJB-200N1-04-L3-01.)See attached photo.

Name: Giovanni Tangianu

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

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3.1 Corrective action proposal

3.2 Material required

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

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-31

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003128

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000813	1.4 Discipline	Electrical
1.2 Item	P-ELF-200N1-04-L3-02	Stair Normal Lighting Fixture / Stair Normal Lighting Fixture	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Not enought threads are thightened between the lock nut and the cable gland body on JB side.
See attached photo.

Name: Giovanni Tangianu
Date: 2025-01-21
Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-01-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

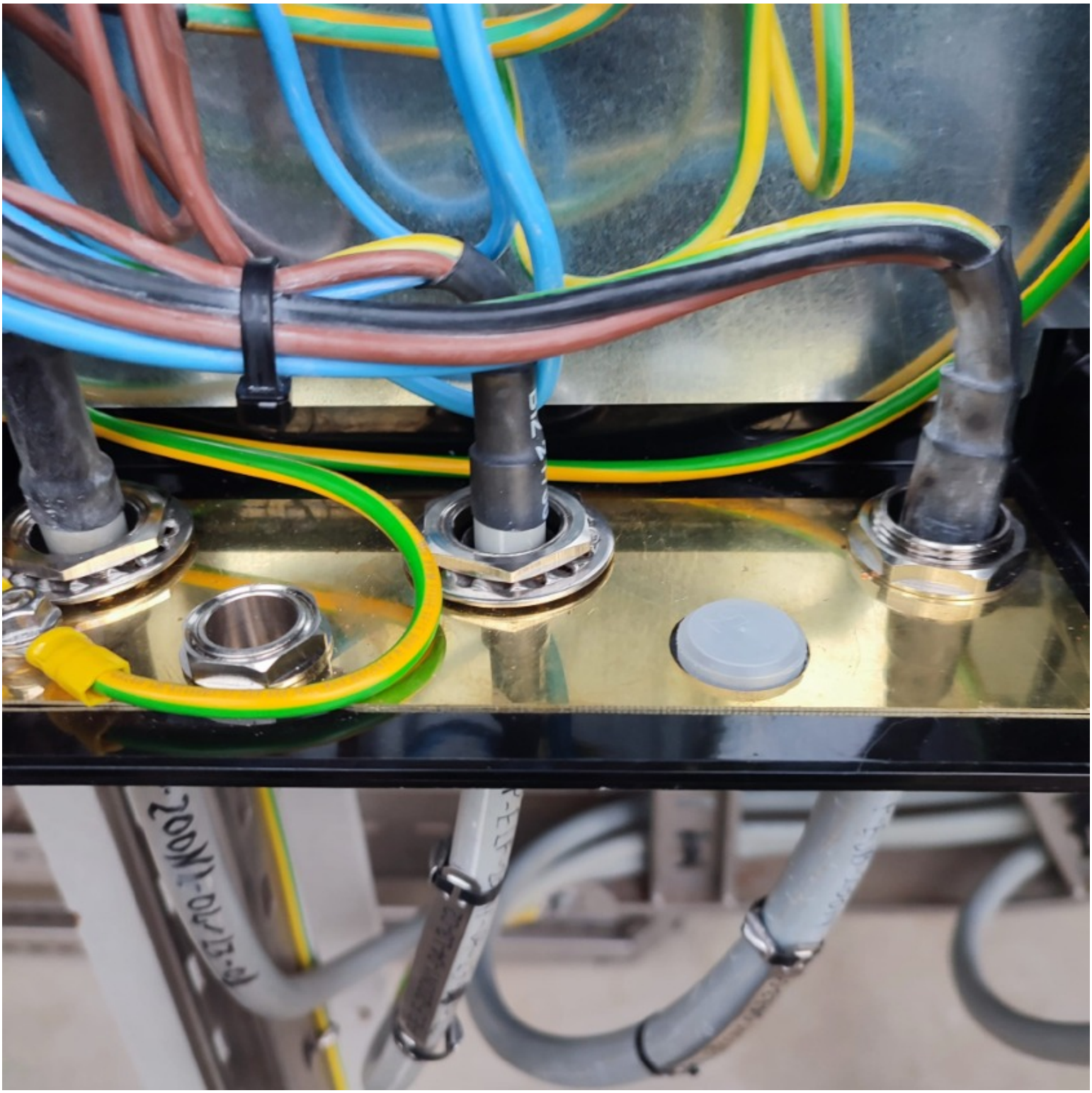
5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli
Date: 2025-01-24
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003130

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000813	1.4 Discipline	Electrical
1.2 Item	P-ELF-200N1-04-L3-02	Stair Normal Lighting Fixture / Stair Normal Lighting Fixture	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Missing earthing cable on the cabletray. See attached photo.

Name: Giovanni Tangianu

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-01-21
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-24

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

P-63B-200N-04-23-02

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003132

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000813	1.4 Discipline	Electrical
1.2 Item	P-ELF-200N1-04-L3-02	Stair Normal Lighting Fixture / Stair Normal Lighting Fixture	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Cable needs to be better dressed side rack JB. See attached photo.

Name: Giovanni Tangianu

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

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

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

cable is properly dressed.

Name: Giovanni Tangianu

Date: 2025-02-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003135

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001219	1.4 Discipline	Electrical
1.2 Item	EJB-200N1-04-L3-02	JB - NORMAL LIGHTING	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Not enought threads are thightened on plug

Name: Giovanni Tangianu

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

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

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Giovanni Tangianu

Date: 2025-02-21

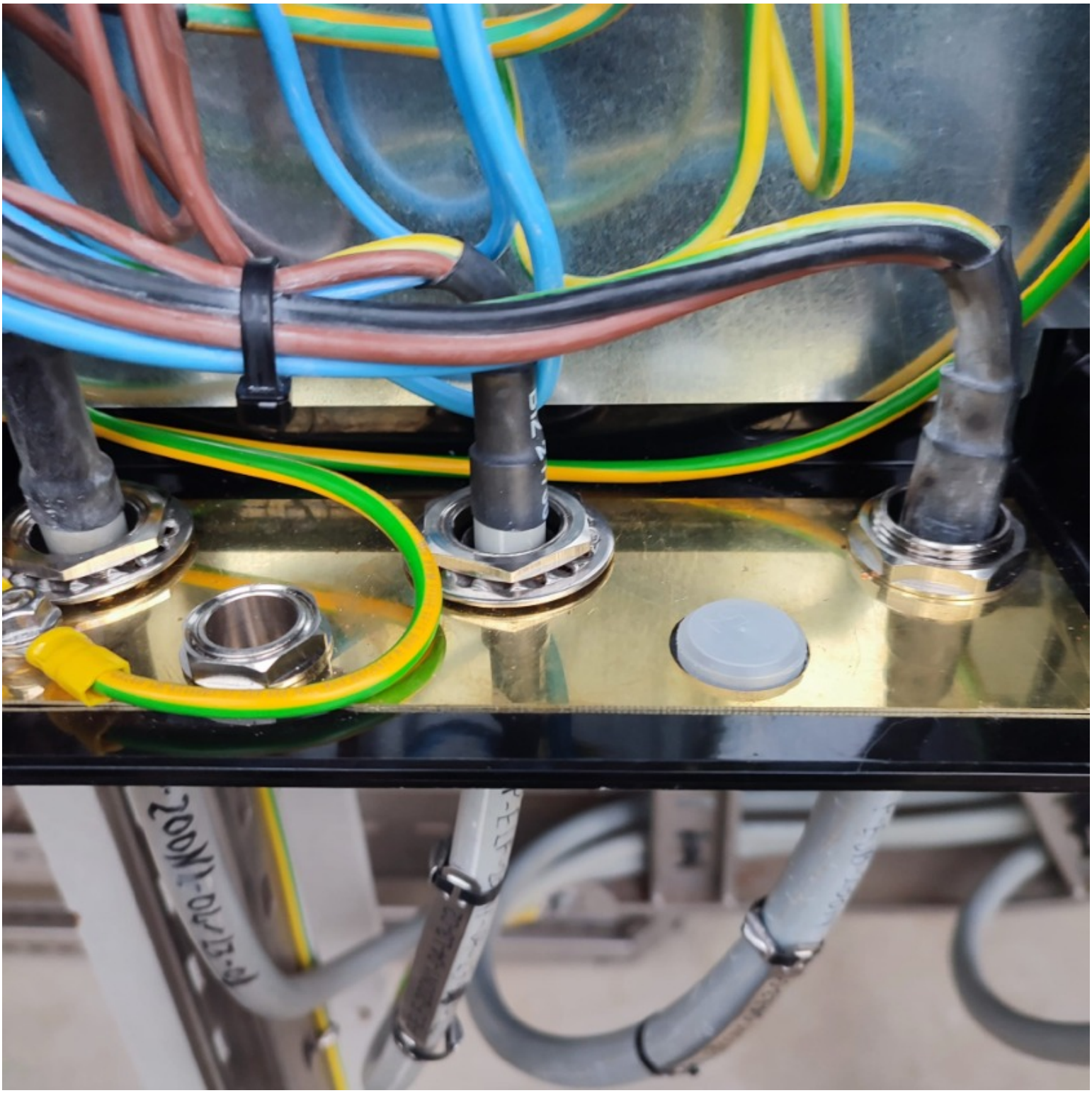
Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003136

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000814	1.4 Discipline	Electrical
1.2 Item	P-EJB-200N1-04-L3-02	Stair Normal Lighting JB / Stair Normal Lighting JB	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Missing identification cable tags both side the cable

Name: Giovanni Tangianu

Date: 2025-01-21

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

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

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-31

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

P-63B-200N-04-23-02

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30003174

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001314	1.4 Discipline	Electrical
1.2 Item	ELF-200N1-04-L3-02	NORMAL LIGHT	
1.3 Subsystem	83-42	Normal Lighting Stairs/Transition Piece	

2 - OBSERVATION

Not installed trafolite tag.

Name: Giovanni Tangianu

Date: 2025-01-23

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Giovanni Tangianu
3.4 Activity code	MC Mechanical Completion	Date	2025-01-23
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Done

Name: Gabriele Bertuccelli

Date: 2025-01-31

Signature:

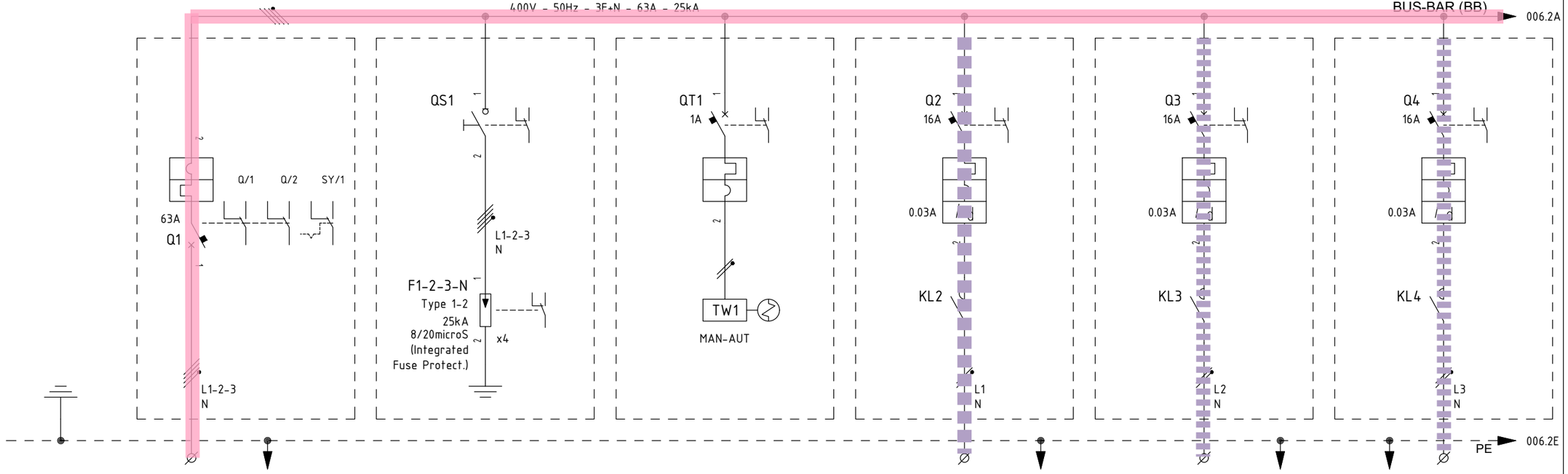
6- CLEARANCE APPROVAL

Name:

Date:

Signature:

Section 3 SYSTEM,SUB-SYSTEM LIMIT DRAWINGS



ITEM			1	-				EJB-200N1-02-L1-01		EJB-200N1-03-L2-01		EJB-200N1-04-L3-01	
UTILITY			2	GENERAL INCOMING		SURGE ARRESTER		TWILIGHT SWICTH AND AUXILIARY		NORMAL LIGHTING UPPER DECK		NORMAL LIGHTING LOWER DECK		NORMAL LIGHTING STAIRS	
CUBICLE			3	+01		+01		+01		+01		+02		+02	
RATED POWER	RATED CURRENT		4/5	34.8 KW	63 A	/	/	/	/	1.5 KW	6.86 A	1 KW	4.58 A	0.2 KW	0.92 A
TYPICAL FUNCTIONAL			6	-		-		-		-		-		-	
CIRCUIT BREAKER (ABB)	TYPE		7	XT2N-160 4P		E204/100R		S302P-C1		S302P-C16 + DDA202 AC-25/0.03		S302P-C16 + DDA202 AC-25/0.03		S302P-C16 + DDA202 AC-25/0.03	
	VERSION		8	FIXED		4P / MINIATURE		2P / MINIATURE		2P / MINIATURE		2P / MINIATURE		2P / MINIAUTURE	
	TRIP UNITS		9	Ekip Dip LSI = 63A		In=100A		In=1A - Curve C		In=16A - Curve C / Id=0.03A Class AC		In=16A - Curve C / Id=0.03A Class AC		In=16A - Curve C / Id=0.03A Class AC	
	Icu	KA	10	36KA		-		25kA		25kA		25kA		25kA	
OVERLOAD	L	Range A	11	0,4 ÷1 In		-		-		-		-		-	
		Range t	12	t=k/I^2		-		-		-		-		-	
SEL. SHORT-CIRCUIT	S	Range A	13	1 ÷10 In		-		-		-		-		-	
		Range t	14	t=k / t=k/I^2		-		-		-		-		-	
INST. SHORT-CIRCUIT	I	Range A	15	1 ÷10 In		-		-		SUBSYSTEM 83-40		SUBSYSTEM 83-41		SUBSYSTEM 83-42	
		Range t	16	instantaneous		-		-							
EARTH FAULT PROTECTION	G	Range A	17	-		-		-		-		-		-	
		Range t	18	-		-		-		-		-		-	
CONTACTOR (ABB)			19	-		-		-		ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac		ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac		ESB40-20N-06; 2x22A AC3; Vaux=230Vdc/ac	
THERMAL OVERLOAD RELAY (ABB)			20	-		-		-		-		-		-	
SURGE ARRESTERS (DHENN)			21	-		DVCI 1 255 FM (961 205)		-		-		-		-	
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-		-		-		-		-		-	
FUSE HOLDER (ABB)			23	-		-		-		-		-		-	
TWILIGHT SWITCH (ABB)			24	-		-		TL1 (2-200 LUX); Vaux=110-230Vac		-		-		-	
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 / 16		-		-		SCREW / 4		SCREW / 4		SCREW / 4	
POWER CONDUCTOR		mm²	31	5G16		-		-		3G4		3G4		3G4	

CROSSWIND

IMESA ELECTRICAL ENGINEERING

ROSETTI MARINO

DWG n° : 231298/SD/13

Item n° : PF1002888/101

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)

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 005

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: 83-42 & process: MC & discipline : E

Electrical	83-42 Normal Lighting Stairs/Transition Piece						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
EJB-200N1-04-L3-01	Normal Lighting stairs	ONSHORE	C10001289	CPX31	100	2025-01-21	RFC 1
EJB-200N1-04-L3-02	JB - NORMAL LIGHTING	ONSHORE	C10001219	CPX31	100	2025-01-21	RFC 1
ELF-200N1-04-L3-01	NORMAL LIGHT	ONSHORE	C10001315	CPX00	100	2025-01-20	RFC 1
ELF-200N1-04-L3-02	NORMAL LIGHT	ONSHORE	C10001314	CPX00	100	2025-01-23	RFC 1
EPH-200N1-01	Twilight Relay Sensor	ONSHORE	C10002371	CPX00	100	2025-03-13	RFC 2
P-EJB-200N1-04-L3-01	Lighting & Small Power DB BoP / Normal Lighting - Stairs	ONSHORE	C10000600	CPX09	100	2024-12-03	RFC 1
P-EJB-200N1-04-L3-02	Stair Normal Lighting JB / Stair Normal Lighting JB	ONSHORE	C10000814	CPX09	100	2025-01-21	RFC 1
P-ELF-200N1-04-L3-01	Stair Normal Lighting JB / Stair Normal Lighting Fixture	ONSHORE	C10000812	CPX09	100	2025-01-21	RFC 1
P-ELF-200N1-04-L3-02	Stair Normal Lighting Fixture / Stair Normal Lighting Fixture	ONSHORE	C10000813	CPX09	100	2025-01-21	RFC 1
P-EPH-200N1-01	LV 0,4 / 0,23 kV Distribution Switchgear / Twilight Relay Sensor	ONSHORE	C10002347	CPX09	100	2025-03-13	RFC 2

ITEM	Tag	P-EJB-200N1-04-L3-01	: Lighting & Small Power DB BoP / Normal Lighting - Stairs		Dwg	123A90-DDL-EL-LIS-20148	
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece		Module	LD_B-200/LD	
TASK	code	C10000600	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 3G4 mm2 Color GREY

From DP-200N1 To EJB-200N1-04-L3-01

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	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-EJB-200N1-04-L3-01	: Lighting & Small Power DB BoP / Normal Lighting - Stairs			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD_B-200/LD
TASK	code	C10000600		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

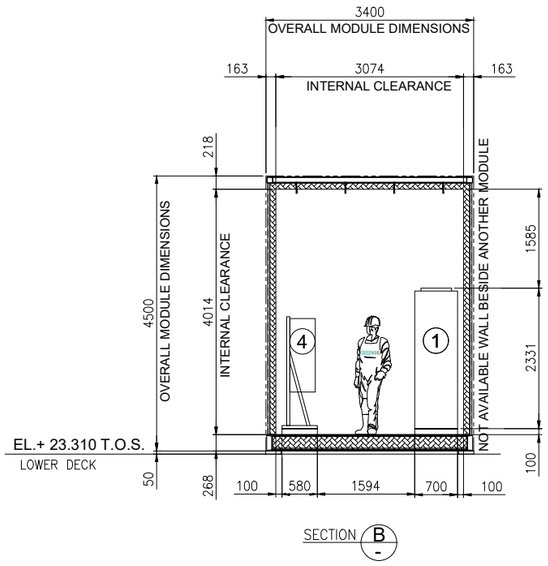
CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0,6	
6		PH 2	0,6	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,6	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

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

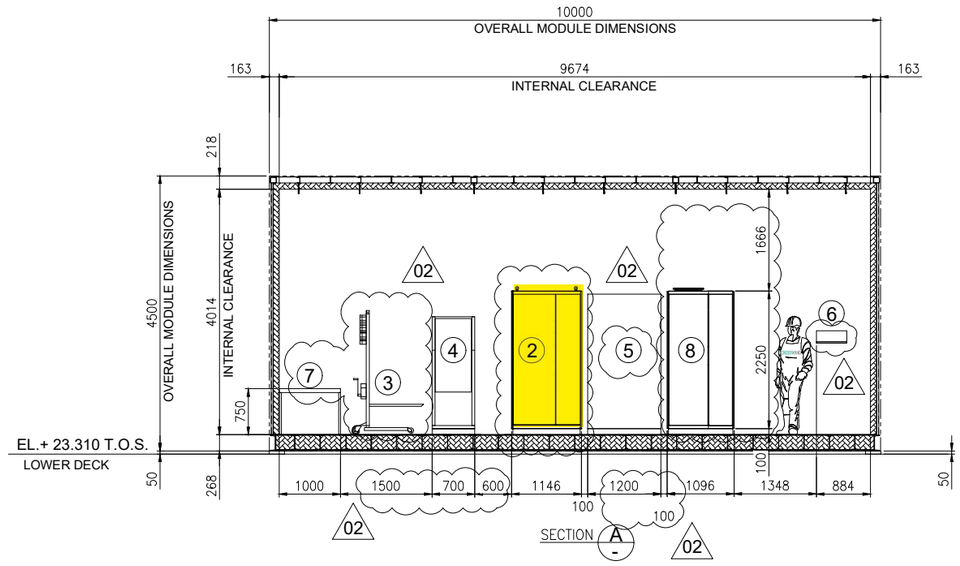
Comments: Nota 4: refer to PL C30000679

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM8ROSETTI MARINO)	
Name	Francesco Zucca	Paolo Schintu	
Date	2024-12-02	2024-12-03	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-12-02T13:00:03.627Z	PROVERLIS Digitaly signed by Paolo Schintu 2024-12-03T10:13:30.237Z	

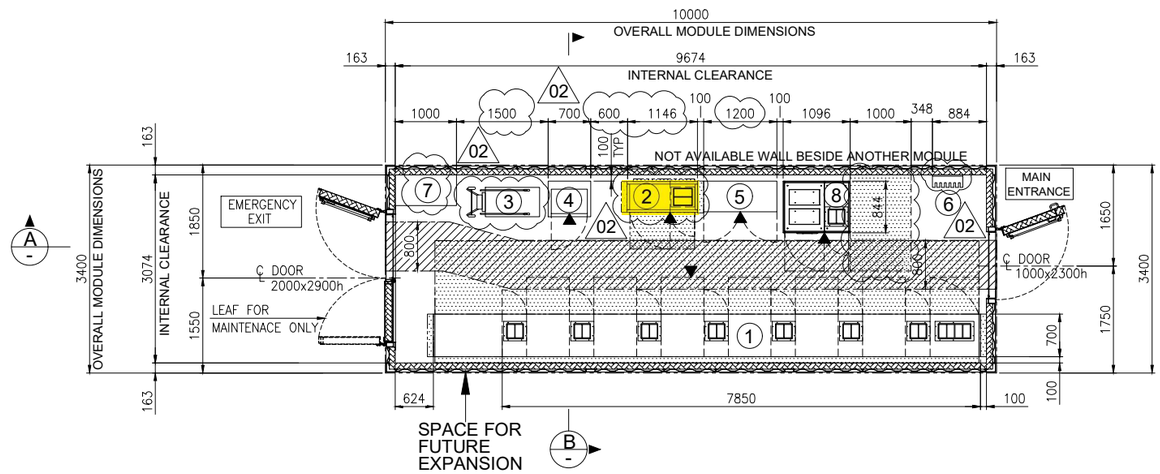
DRAWING NO. 123A90-DDL-EL-DL-20105 | REV. 02



SECTION B



SECTION A

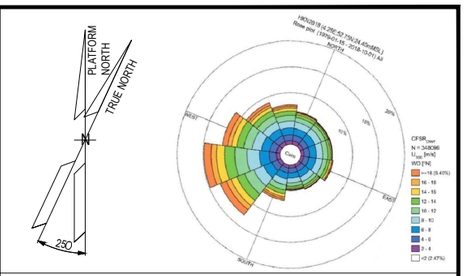


EQUIPMENT LAYOUT
"B-200" LV (400V) SWITCHGEAR ROOM
BOTTOM PLAN

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

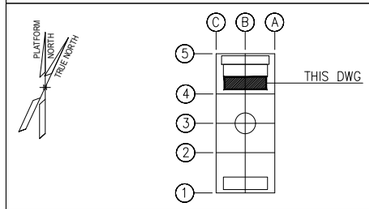
U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR - WIDTH 800mm.
_____ MAINTENANCE AREA - VENDOR REQUIREMENT
_____ SWITCHGEAR ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

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.: 2_A | DATE: 08/08/24 | SIGNATURE: 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

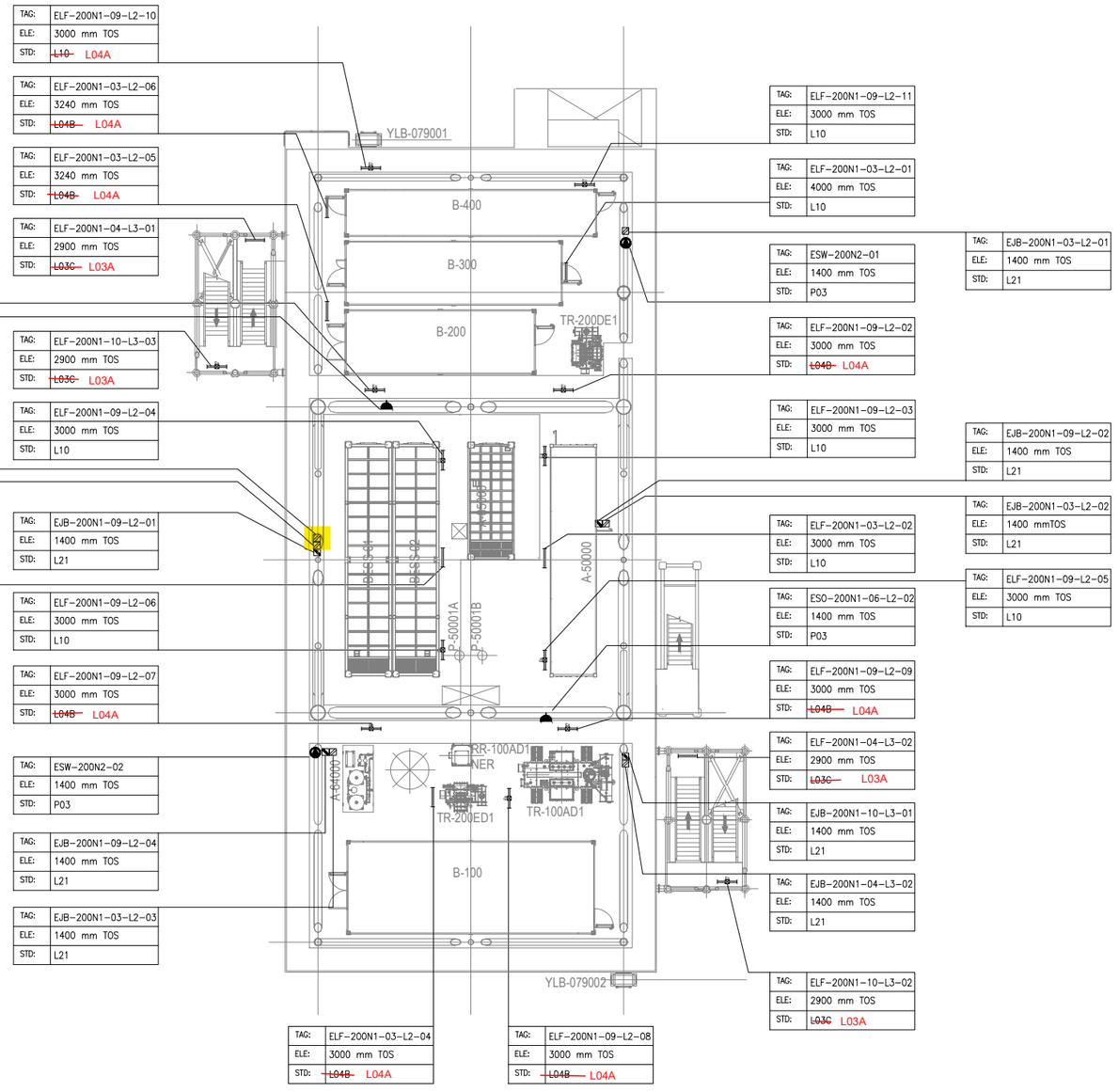
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL EQUIPMENT LAYOUT
LV SWITCHROOM

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

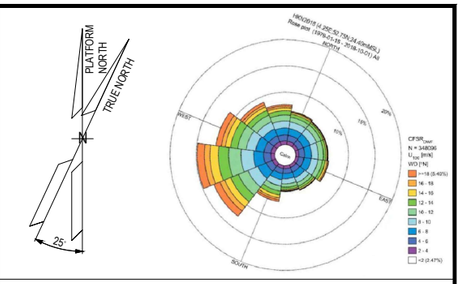
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DRAWING NO. 123A90-DDL-EL-DL-20119

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

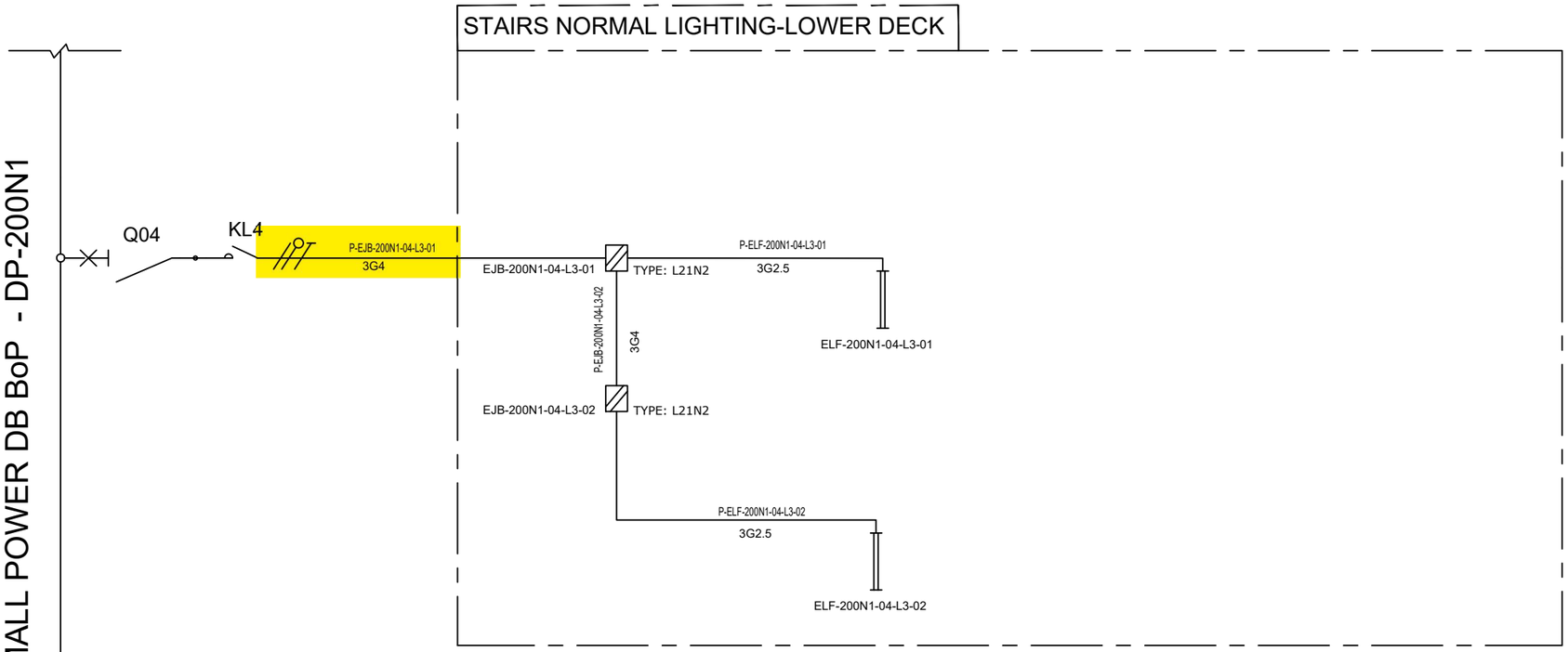
TITLE :
BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

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

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

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

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	006	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
N/2	11	BU
		Y/G
		PE

P.E. BUS BAR

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

CUBICLE/CB: +02/Q3

-X1

L2/3	12	BN
N/3	13	BU
		Y/G
		PE

P.E. BUS BAR

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

CUBICLE/CB: +02/Q4

-X1

L3/4	14	BN
N/4	15	BU
		Y/G
		PE

P.E. BUS BAR

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

CUBICLE/CB: +03/Q5

-X1

L1/5	80	BN
N/5	81	BU
		Y/G
		PE

P.E. BUS BAR

P-ESO-200N1-05-L1-01
3G10 mm²

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

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

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

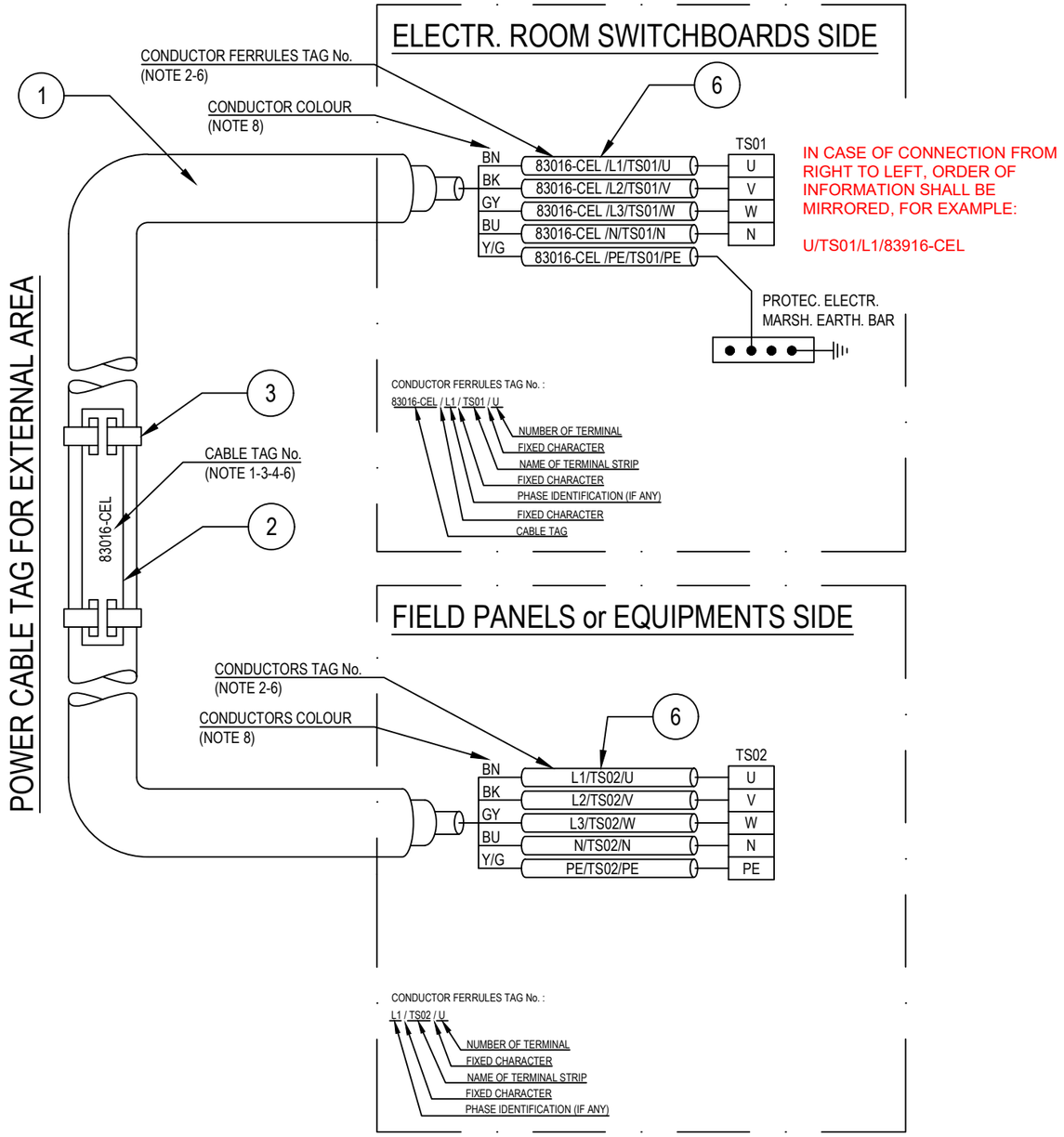
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

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.

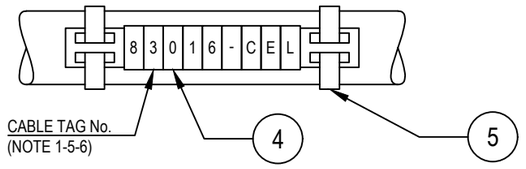
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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

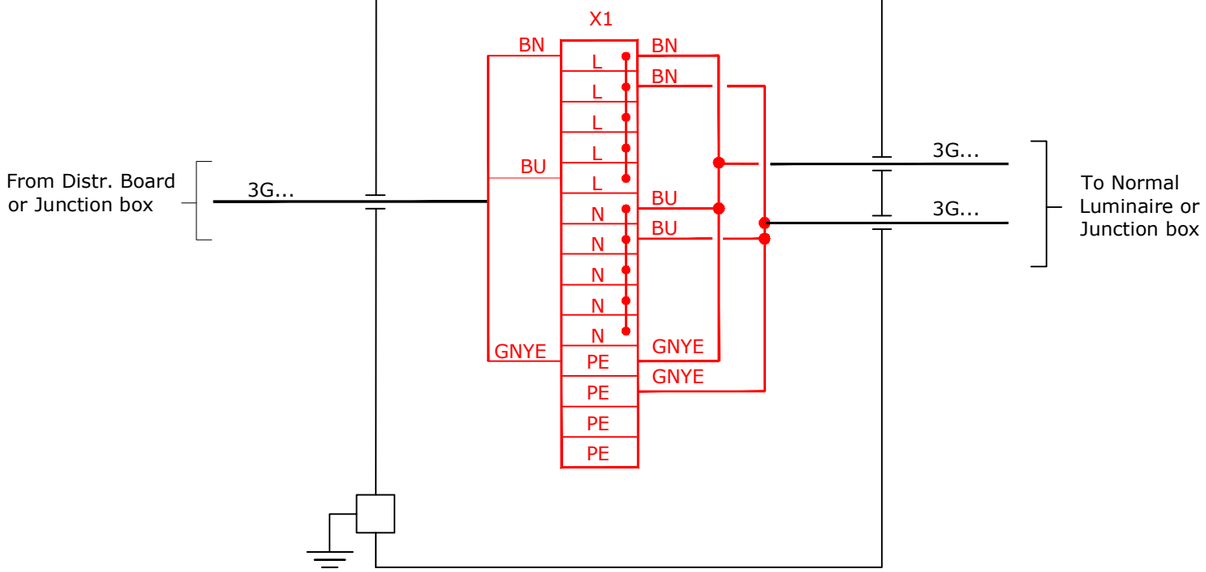
F.to UNI A3: 420mmx297mm

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

TYPE : L21N1 & L21N2

ITEM: NORMAL LIGHTING JUNCTION BOX

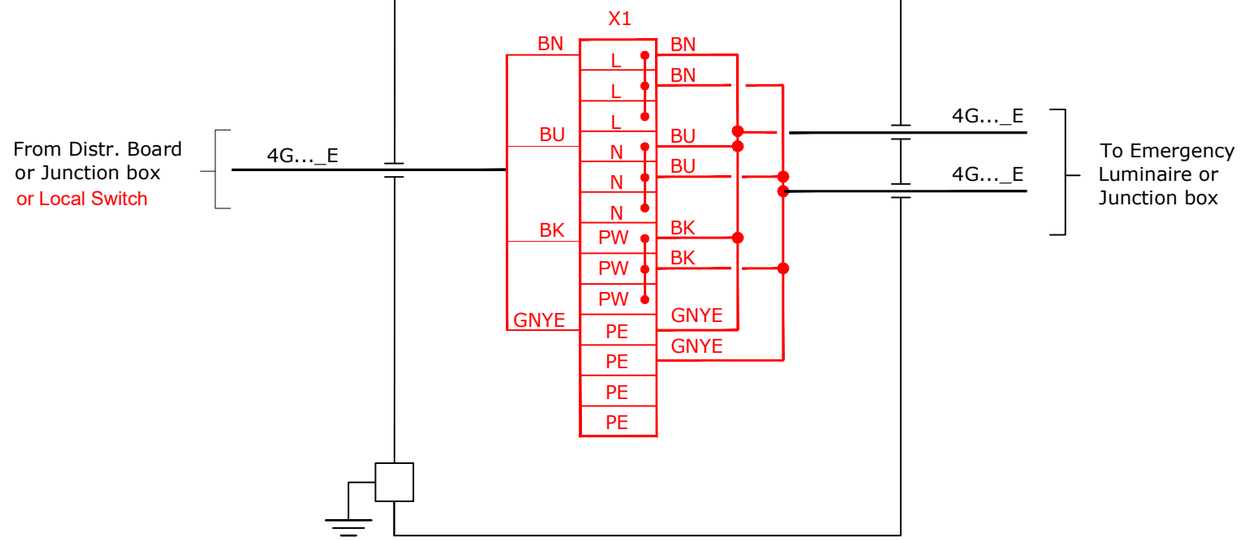
TAG : Typical



TYPE : L21E1 & L21E2

ITEM: EMERGENCY LIGHTING JUNCTION BOX

TAG : Typical



VALID FOR CONSTRUCTION

FDL DWG: **123A90-FDL-EL-DG-20125**

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

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)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
TYPICAL JB INTERCONNECTING DIAGRAM

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

SCALE : NTS

A3

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

SHEET 016

REV. 01

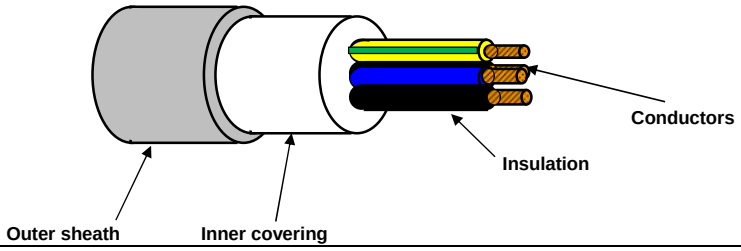
File Name : 123A90-DDL-EL-DG-20125

F.to UNI A3: 420mmx297mm

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Fun	Area	From Tag	From Main Function	From Area	From Tag Sectio	To Tag	To Main Function	To Area	To Tag Sectio	Material ID	Material Desc.	Gland Sta	From Gl	From Entr	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-EJB-200N1-04-L3-01	Cable	EL	VFC	123A90-DDL-EL-LIS-20148						DP-200N1	LV 0,4 / 0,23 kV Distribution Switchgear	Lower Deck (B-200)	02/Q4	EJB-200N1-04-L3-01	Normal Lighting JB	Lower Deck Stairs	Junction Box	ELECV07-3G4	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G4mm² - 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-099

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

3G4 - 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 1,2 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G4 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(14,3 ± 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 :	≥ 1100 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 :	30/05/2024	Messa			
Checked :	30/05/2024	Spaccasassi			
Approved :	30/05/2024	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-ELF-200N1-04-L3-01	: Stair Normal Lighting JB / Stair Normal Lighting Fixture		Dwg	123A90-DDL-EL-LIS-20148	
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece		Module	LD	
TASK	code	C10000812	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 3G2,5 mm2 Color GREY

From EJB-200N1-04-L3-01 To ELF-200N1-04-L3-01

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.	PL
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"	

REFER TO FINAL SHEET FOR ACCEPTANCE

ITEM	Tag	P-ELF-200N1-04-L3-01	: Stair Normal Lighting JB / Stair Normal Lighting Fixture			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10000812		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	>999	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

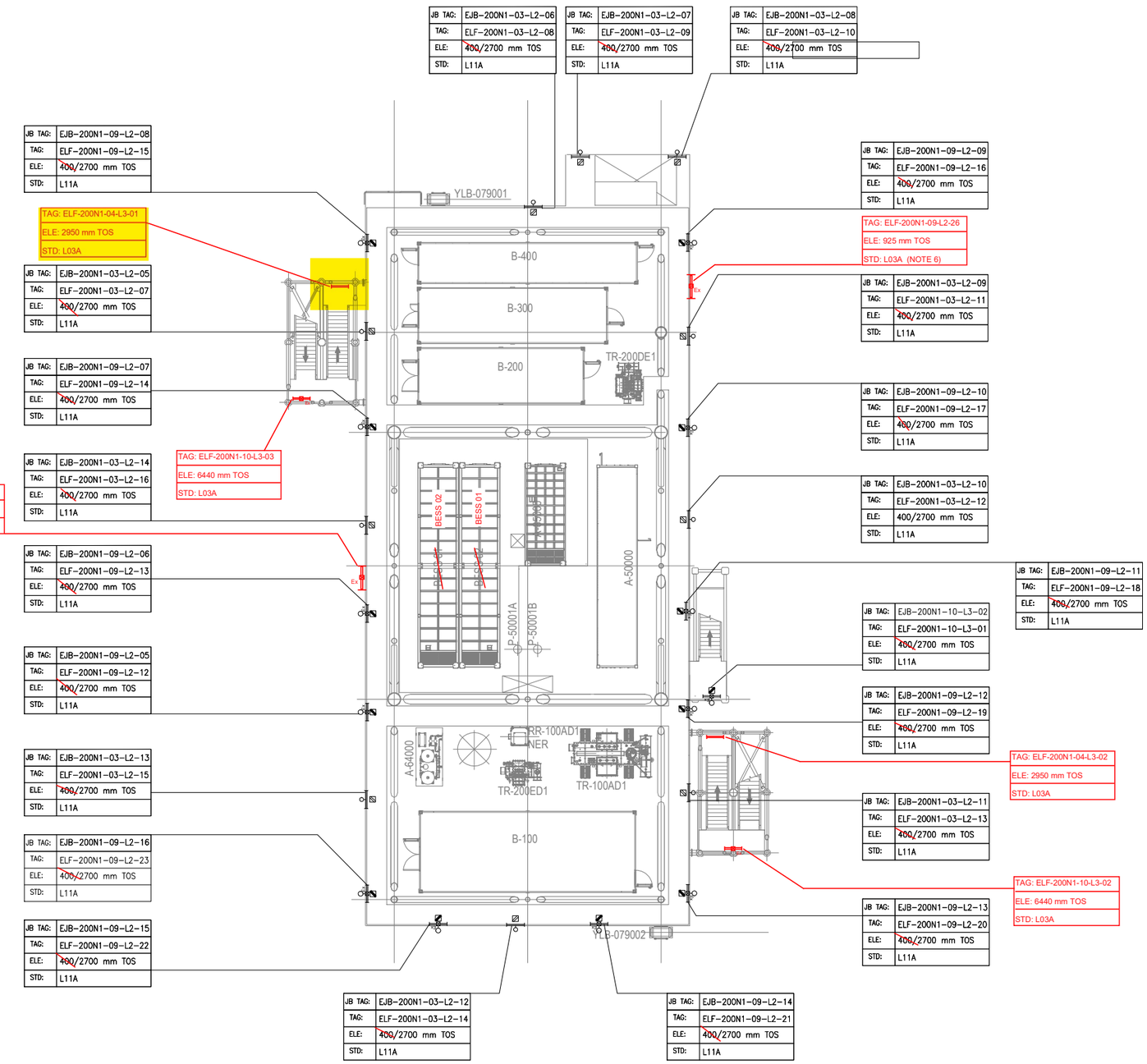
TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	VOLCRAFT 1000V - ET-200 S/N:H240103023	TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207
Calibration certificate N° and date:		Calibration certificate N° and date:	N°7722/24 _ 10/07/2024

Comments: Nota 4: refer to PL C30000679

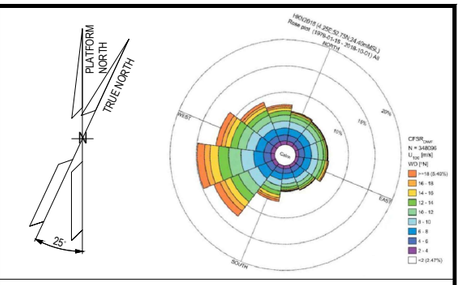
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-20	2025-01-21	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-20T08:47:03.367Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-21T13:53:24.430Z	

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.
6. FOR ELF-200N1-09-L2-26 AND ELF-200N1-09-L2-27 CONSTRUCTION DETAILS REFER TO DOC. 123A90-DDL-ST-DD-90076

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
123A90-DDL-ST-DD-90076	IDENTIFICATION PANELS ASSEMBLY AND DETAILS

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

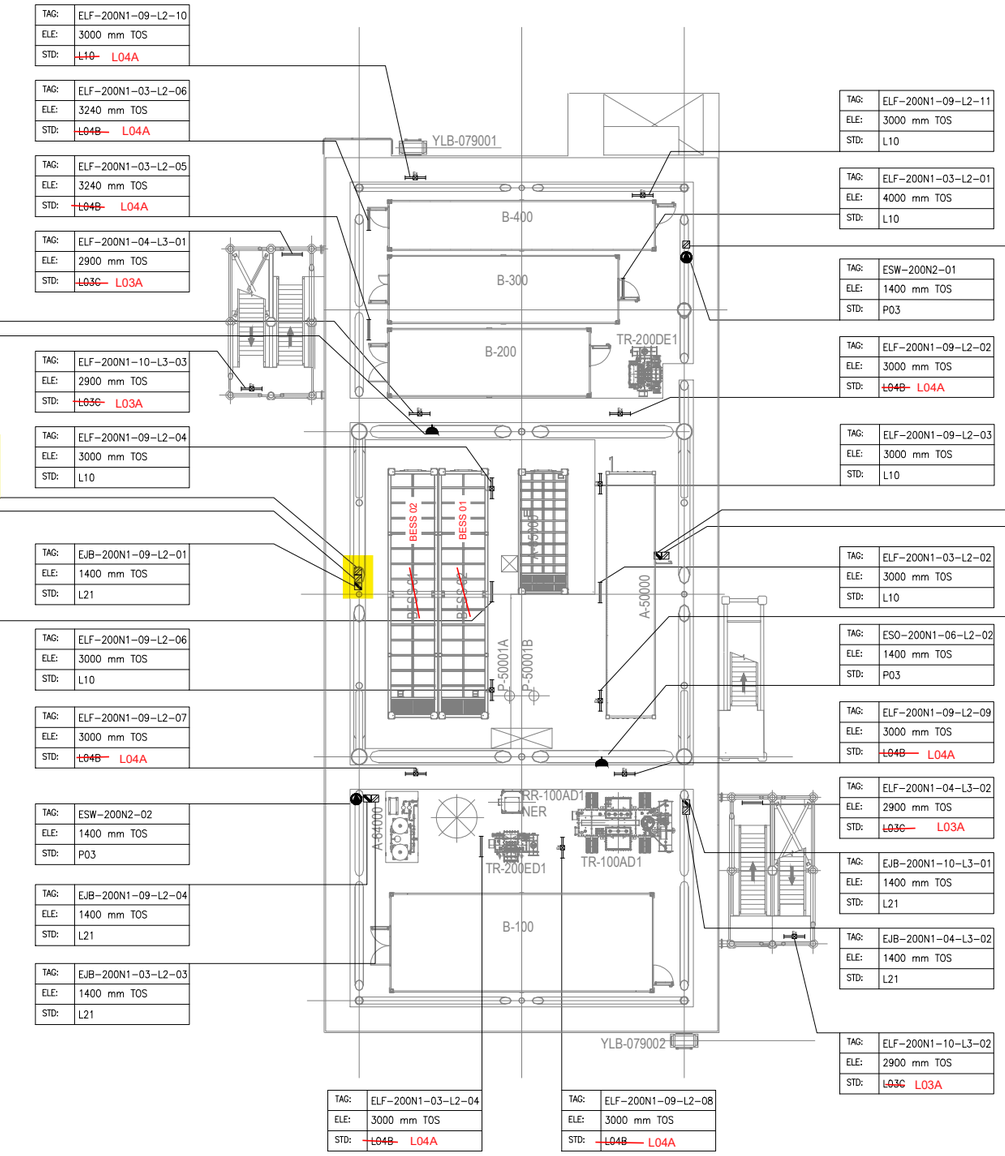
TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – LOWER DECK

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 1of2	REV. 01

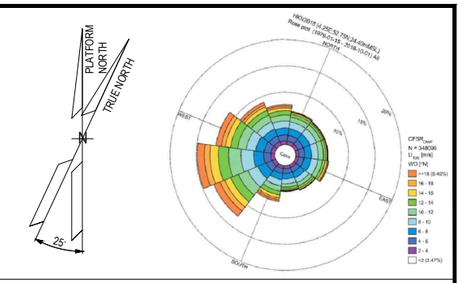
File Name : 123A90-DDL-EL-DL-20119

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

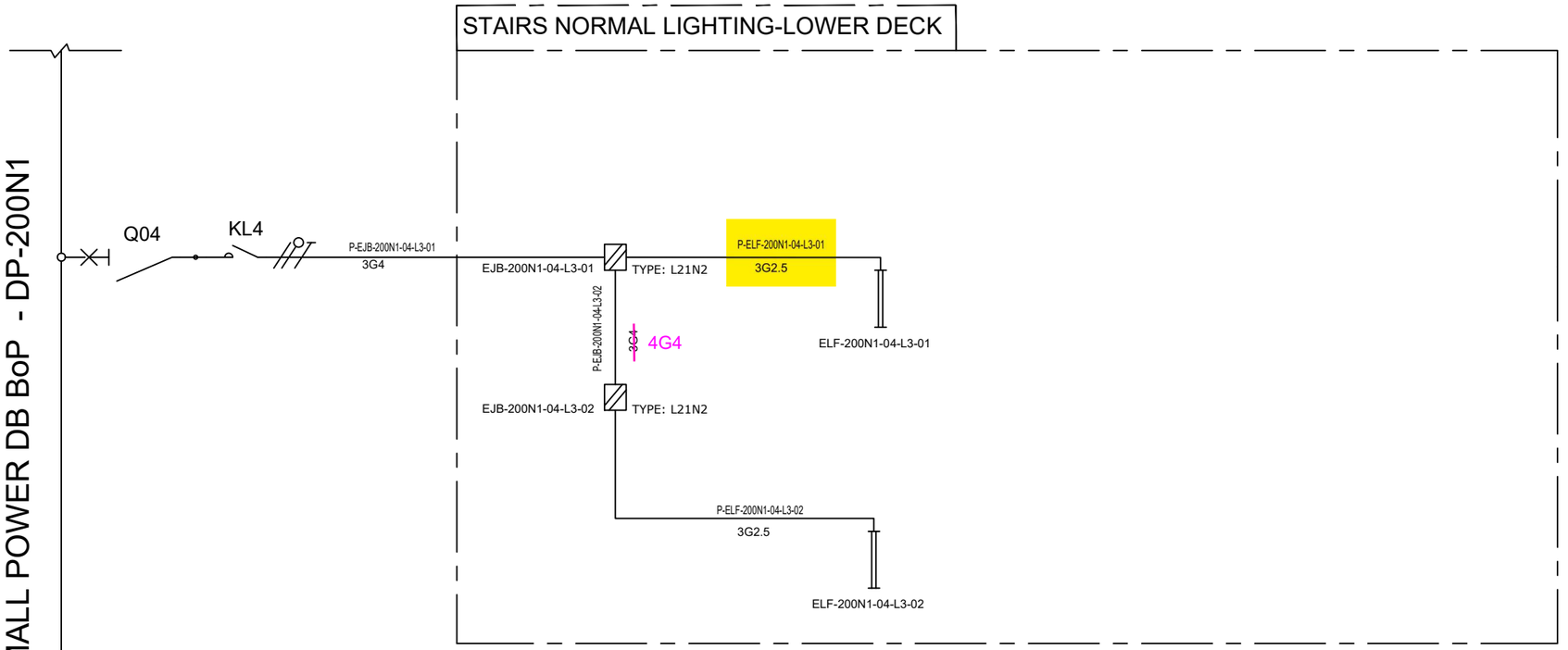
CROSSWIND

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



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

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

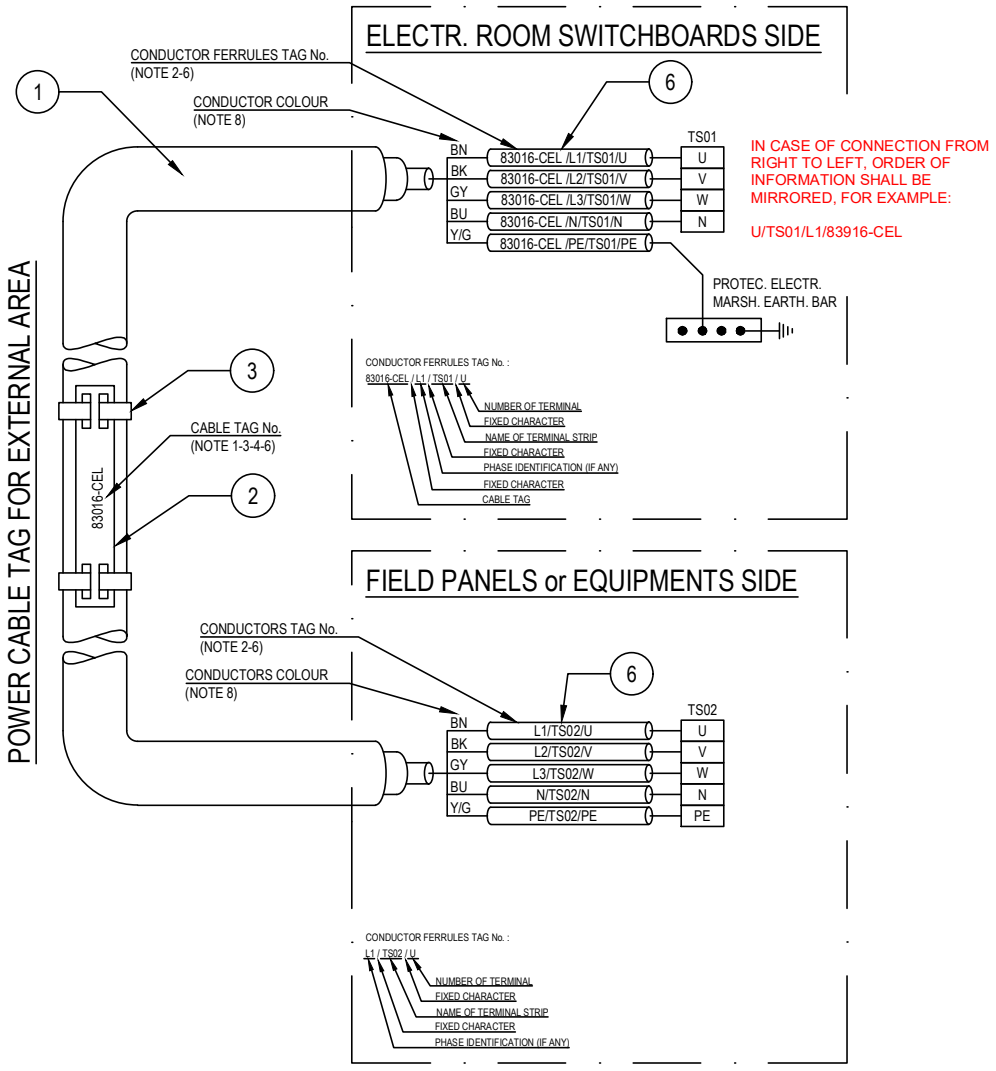
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	006	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.

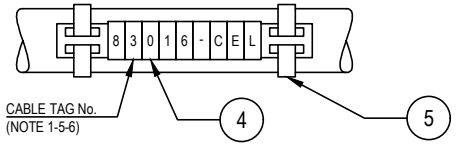
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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

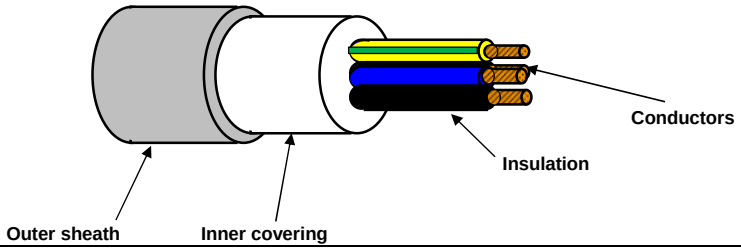
F.to UNI A3: 420mmx297mm

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	From Tag Section	To Tag	To Main Function	To Area	To Tag Section	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ELF-200N1-04-L3-01	Cable	LSP	VFC	123A90-DDL-EL-LIS-20148						EJB-200N1-04-L3-01	Normal Lighting JB	Lower Deck Stairs		ELF-200N1-04-L3-01	Normal Lighting Fixture	Lower Deck Stairs		ELECV06-3G2.5	Cable Cu CI.2/EPR/LSZH 0.6/1kV 3G2.5mm² - Grey	M20	T1_M20_Single			T1_M20_Single				L-150-101-LVT-099 / L-600-101-LVT-012 / L-300-101-LVT-084 / L-150-101-LVT-086 / L-50-101-LVT-136

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

3G2,5 - 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 1,2 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G2,5 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(13,0 ± 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 :	≥ 1100 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-ELF-200N1-04-L3-02	: Stair Normal Lighting Fixture / Stair Normal Lighting Fixture		Dwg	123A90-DDL-EL-LIS-20148	
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece		Module	LD	
TASK	code	C10000813	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 3G2,5 mm2 Color GREY

From EJB-200N1-04-L3-02 To ELF-200N1-04-L3-02

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.	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.	PL
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-ELF-200N1-04-L3-02	: Stair Normal Lighting Fixture / Stair Normal Lighting Fixture			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10000813		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		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,2	
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	>999	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

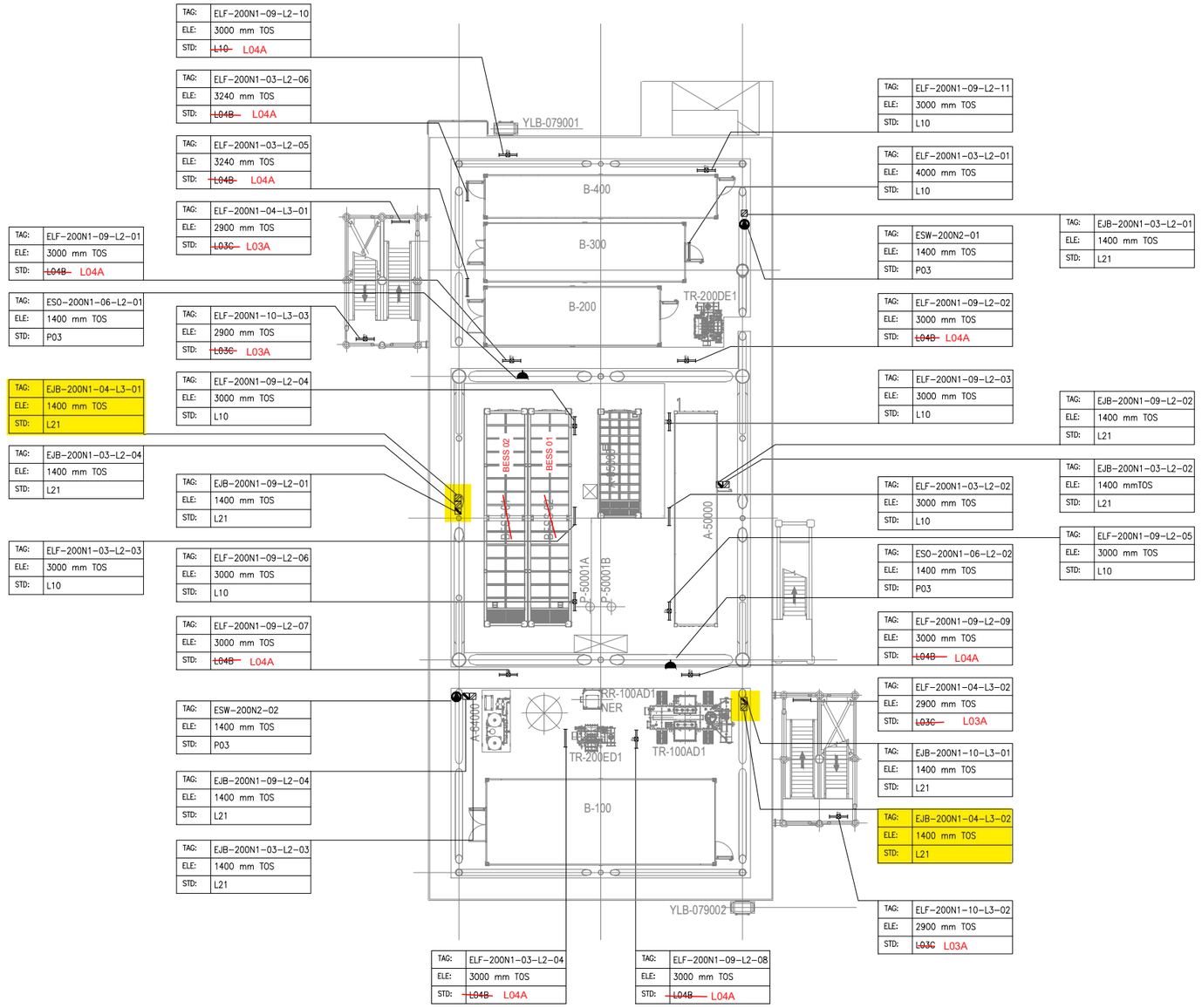
TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	VOLCRAFT 1000V - ET-200	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769
Calibration certificate N° and date:	S/N:H240103023	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

Comments: Nota 4: refer to PL C30000679

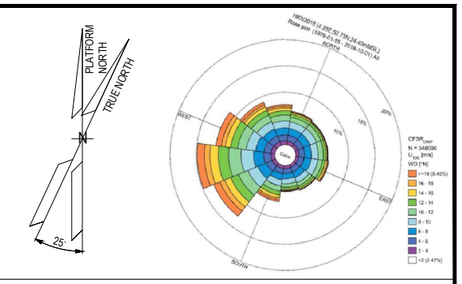
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-20	2025-01-21	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-20T08:47:18.040Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-21T14:20:31.820Z	

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

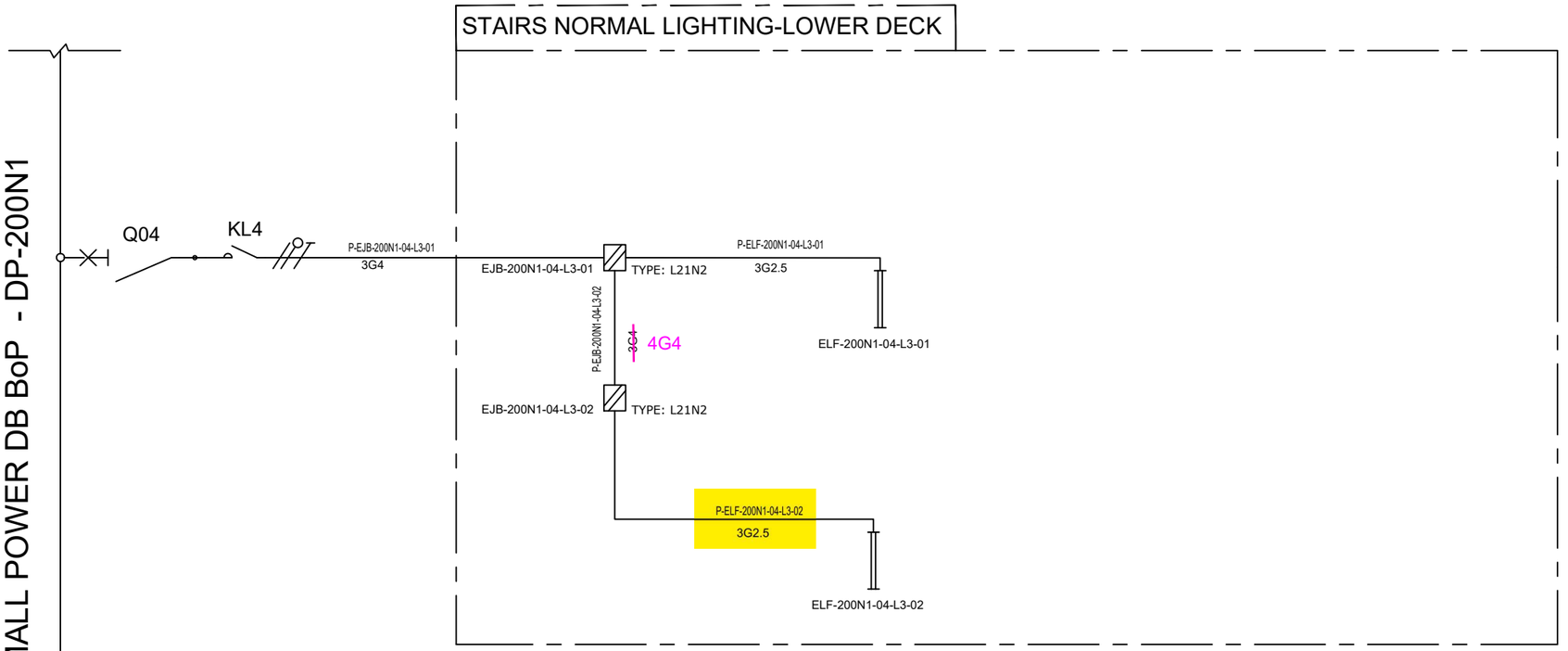
ROSETTI MARINO

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

LIGHTING & SMALL POWER DB BoP - DP-200N1



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

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

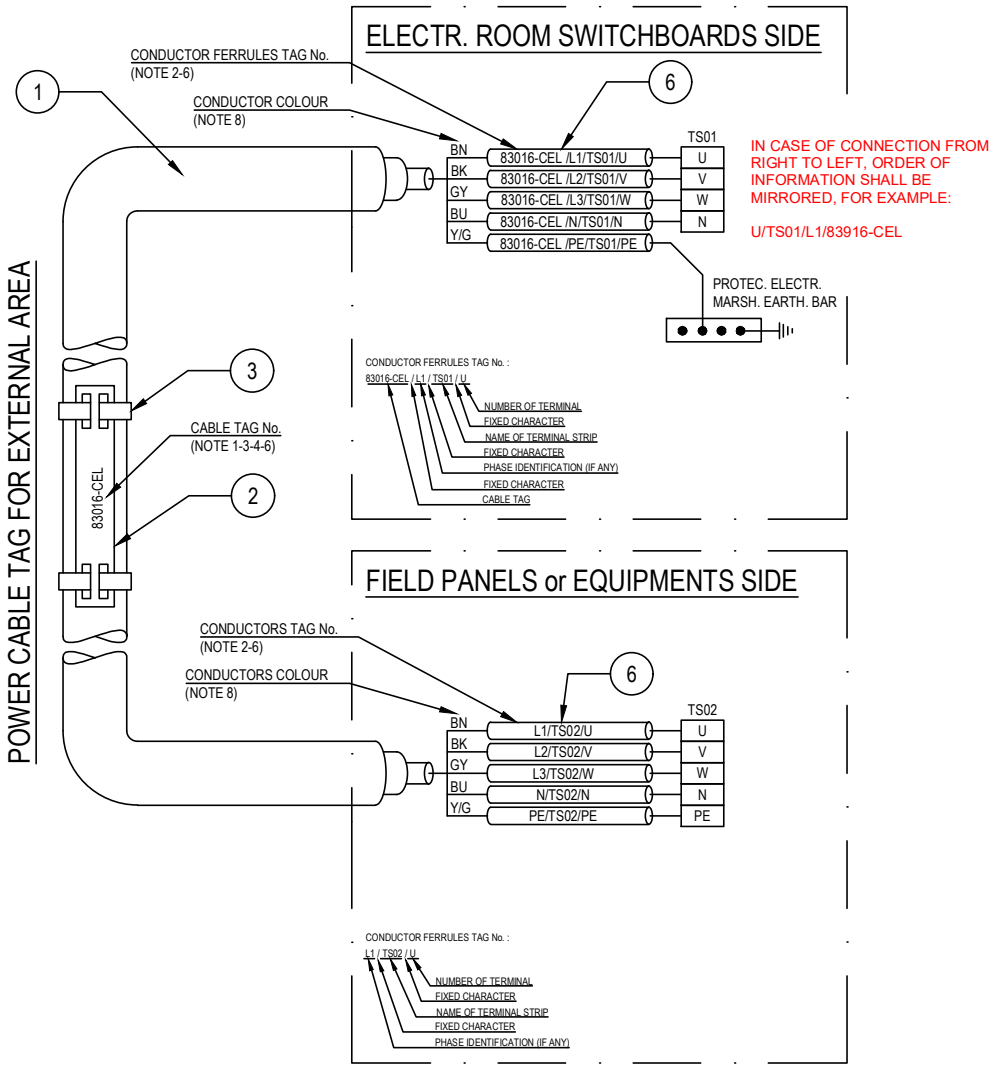
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	006	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.

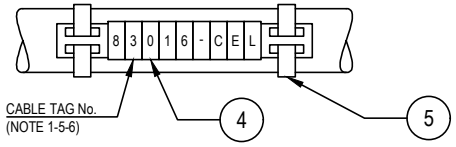
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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

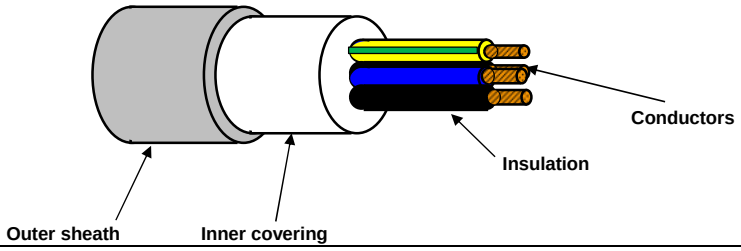
F.to UNI A3: 420mmx297mm

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	From Tag Section	To Tag	To Main Function	To Area	To Tag Section	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-ELF-200N1-04-L3-02	Cable	LSP	VFC	123A90-DDL-EL-LIS-20148						EJB-200N1-04-L3-02	Normal Lighting JB	Lower Deck Stairs		ELF-200N1-04-L3-02	Normal Lighting Fixture	Lower Deck Stairs		ELECV06-3G2.5	Cable Cu CI.2/EPR/LSZH 0.6/1kV 3G2.5mm² - Grey	M20	T1_M20_Single			T1_M20_Single				L-150-101-LVT-100 / L-300-101-LVT-079 / L-S0-101-LVT-137

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

3G2,5 - 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 1,2 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G2,5 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 -**	
	Year of Manufacture - CE + Meter Marking	
Outer diameter :	(13,0 ± 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 :	≥ 1100 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-EJB-200N1-04-L3-02	: Stair Normal Lighting JB / Stair Normal Lighting JB			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10000814		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 4G4 mm2 Color GREY

From EJB-200N1-04-L3-01 To EJB-200N1-04-L3-02

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-EJB-200N1-04-L3-02	: Stair Normal Lighting JB / Stair Normal Lighting JB			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10000814		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	0,36	
6		PH 2	0,36	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,36	
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	>999	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

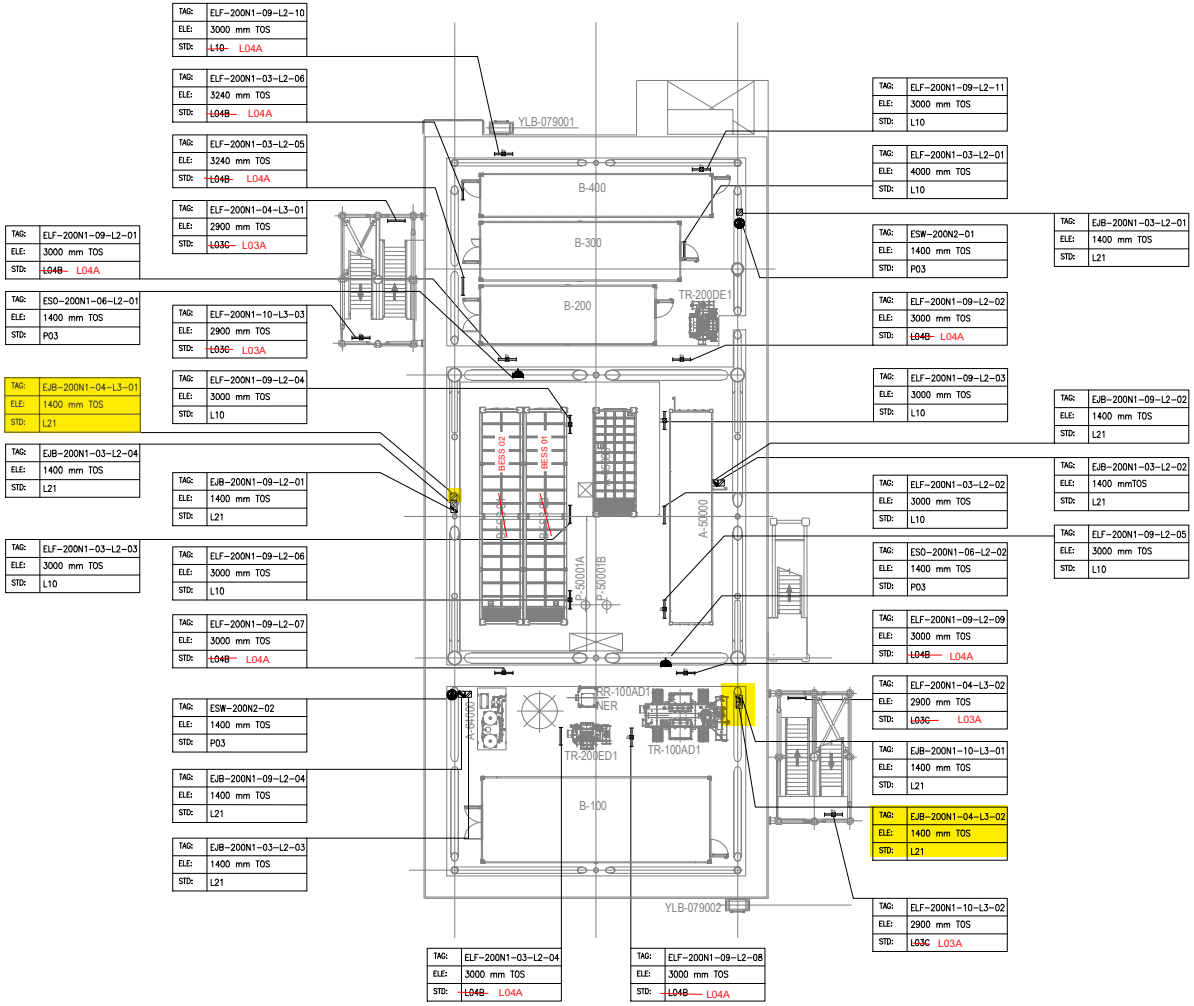
TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	VOLCRAFT 1000V - ET-200 S/N:H240103023	TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207
Calibration certificate N° and date:	N°LAT 042 00768/24 _ 12/10/2024	Calibration certificate N° and date:	N°7722/24 _ 10/07/2024

Comments: Nota 4: refer to PL C30000679

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-20	2025-01-21	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-20T08:47:31.809Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-21T14:27:55.619Z	

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

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:	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

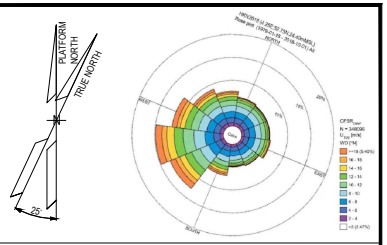
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ELE:	2900 mm TOS
STD:	~~L03C~~ L03A

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

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

VALID FOR CONSTRUCTION

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

ROSETTI MARINO SpA

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

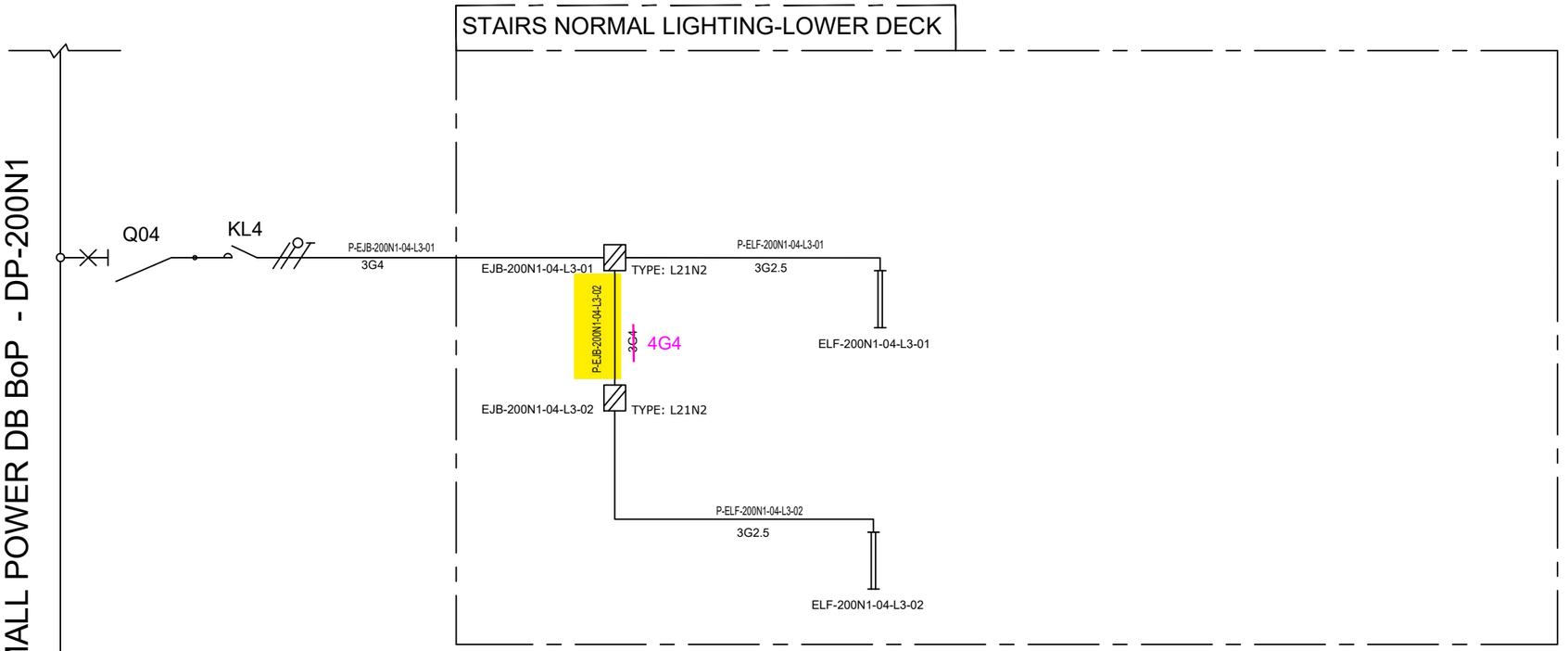
ROSETTI MARINO

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

LIGHTING & SMALL POWER DB BoP - DP-200N1



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

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

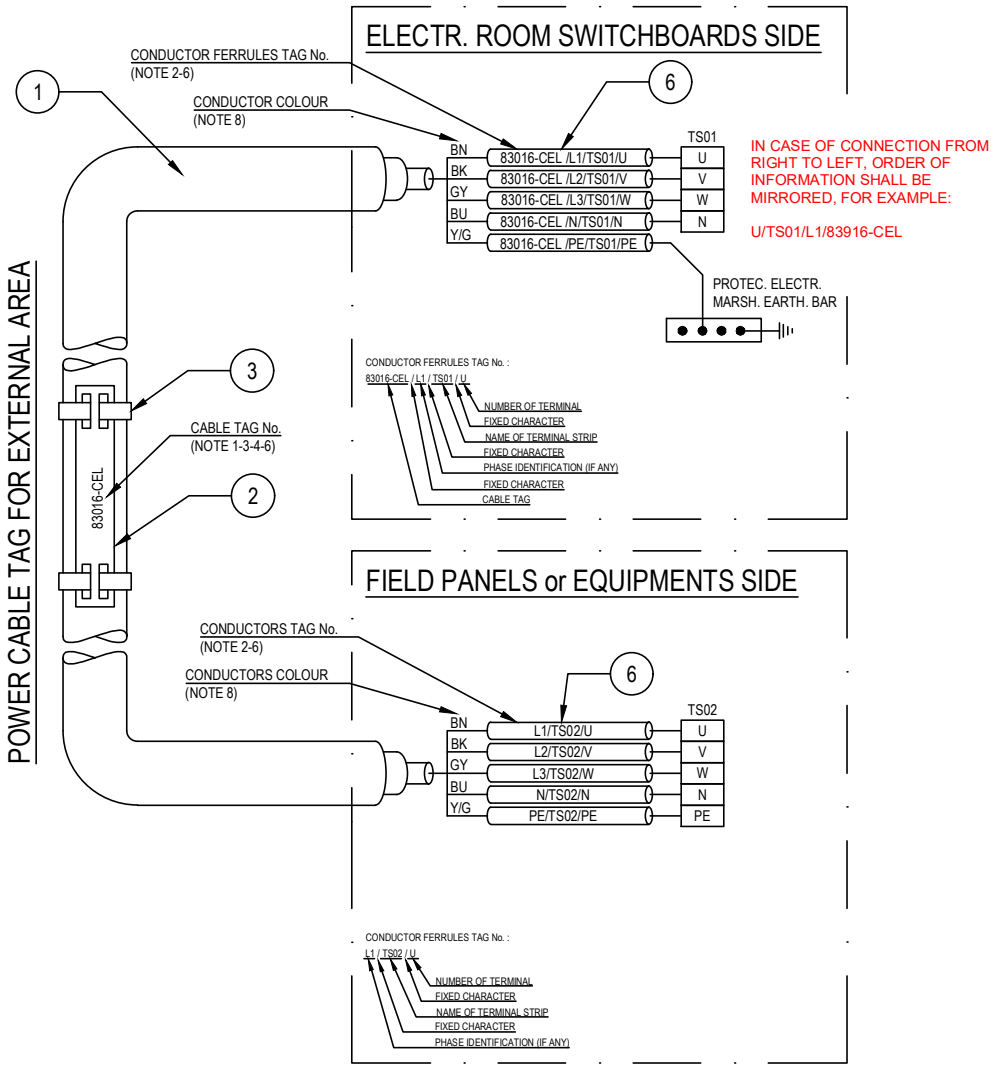
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	006	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.

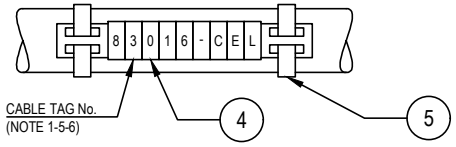
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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

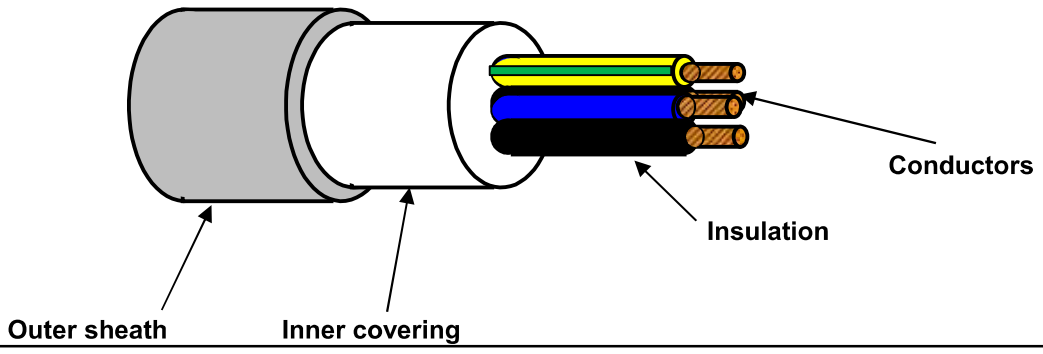
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Info	Category	Discipl	Eng Status	NativeDoc	Service	Entity Type	Main Function	Module	Area	From Tag	From Main Fun	From Tag Section	To Tag	To Main Func	To Tag Sectic	Material ID	Material Desc.	Gland St	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-EJB-200N1-04-L3-02		Cable	LSP	VFC	123A90-DDL-EL-LIS-20148						EJB-200N1-04-L3-01	Normal Lighting JB		EJB-200N1-04-L3-02	Normal Lighting JB		ELECV10-4G4	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 4G4mm^2 - Grey	M25	T1_M25_Single			T1_M25_Single				L-150-101-LVT-099 / L-600-101-LVT-012 / L-600-101-LVT-094 / L-750-101-LVT-014 / L-150-101-LVT-100

FLEI s.r.l.

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

4G4 - 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 :	**Black - Brown - Grey - 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 60092.360, Average Thickness 1,2 mm	
Outer sheath color code:	**Grey**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 4G4 SQMM - EPR/LSZH - 0,6/1 KV - IEC 60332.1.2 - IEC 60332.3.22 - Year of Manufacture - CE + Meter Marking**	
Outer diameter :	(15,5 ± 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 :	≥ 1100 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%)	
Hazardous Areas :	IEC 60079.14:2013 par.9.3.2a	
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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ROSETTI MARINO

CROSSWIND

ITEM	Tag	EJB-200N1-04-L3-02	: JB - NORMAL LIGHTING			Dwg	123A90-DDL-EL-DL-20119
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10001219		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX31 Junction and Marshalling Box

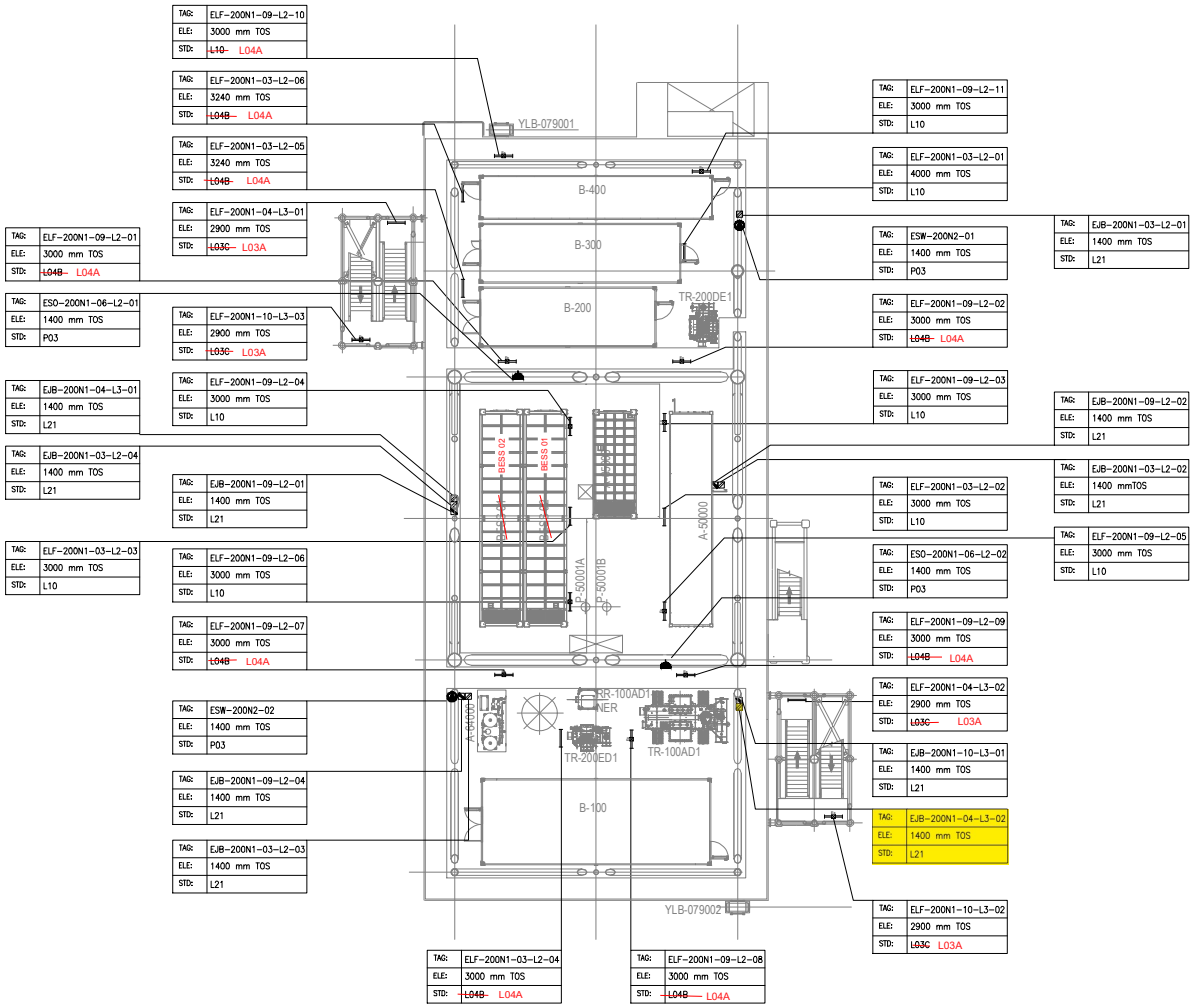
1	Check box is de-energized and safe.	OK
2	Check box is correctly mounted and easily accessible.	OK
3	Check box tagging against drawing.	OK
4	Check nameplate data is correct.	OK
5	Check flameproof joints are clean and greased with approved lubricants (if required).	NA
6	Check for damaging gaskets.	OK
7	Check all bolts are fitted and correcly tighted .	OK
8	Check all unused entries are suitably plugged.	OK
9	Check earthing and bonding against drawings.	OK
10	Check terminal blocks segregation barriers are fitted where necessary.	NA
11	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

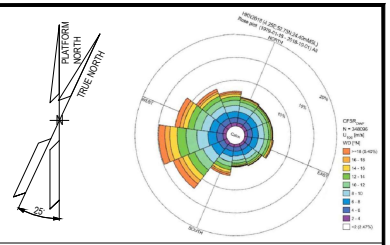
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-20	2025-01-21	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-20T08:48:15.927Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-21T14:24:59.049Z	

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

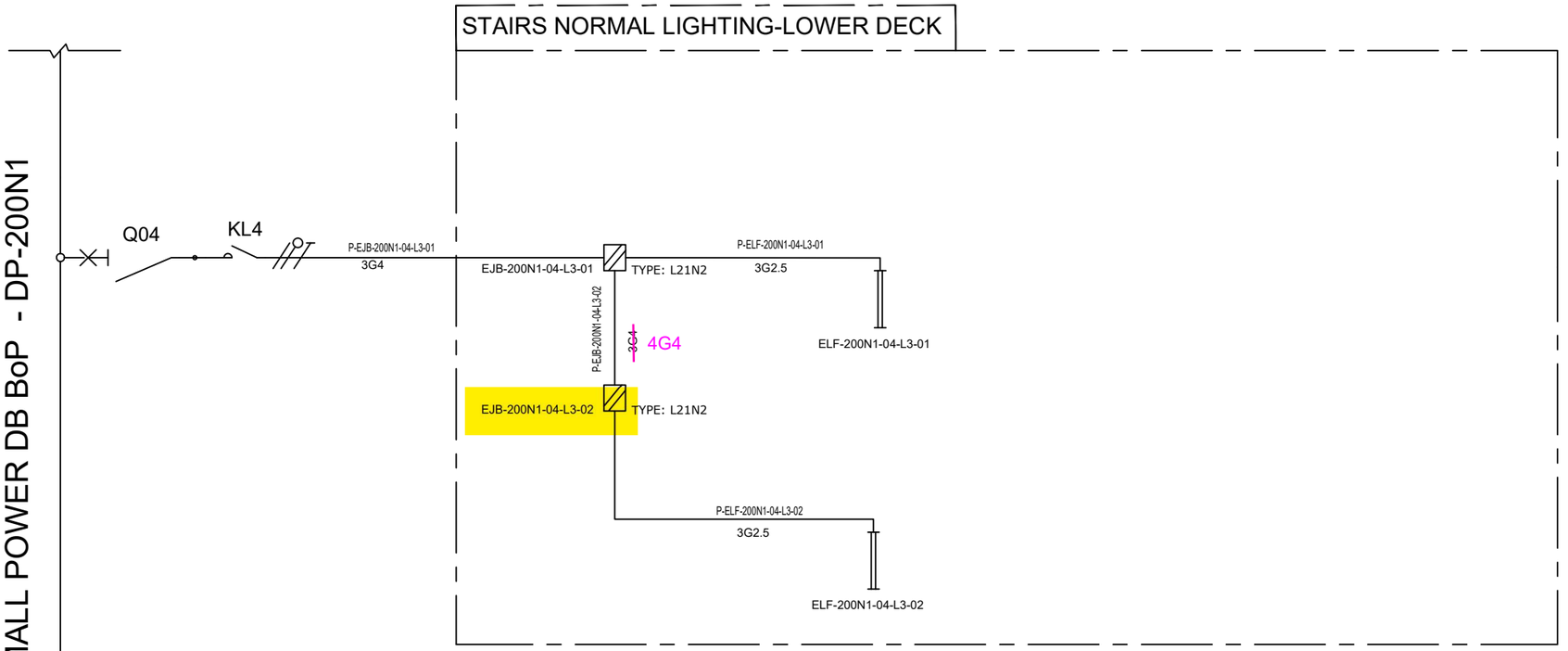
ROSETTI MARINO

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

LIGHTING & SMALL POWER DB BoP - DP-200N1



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

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

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	006	01

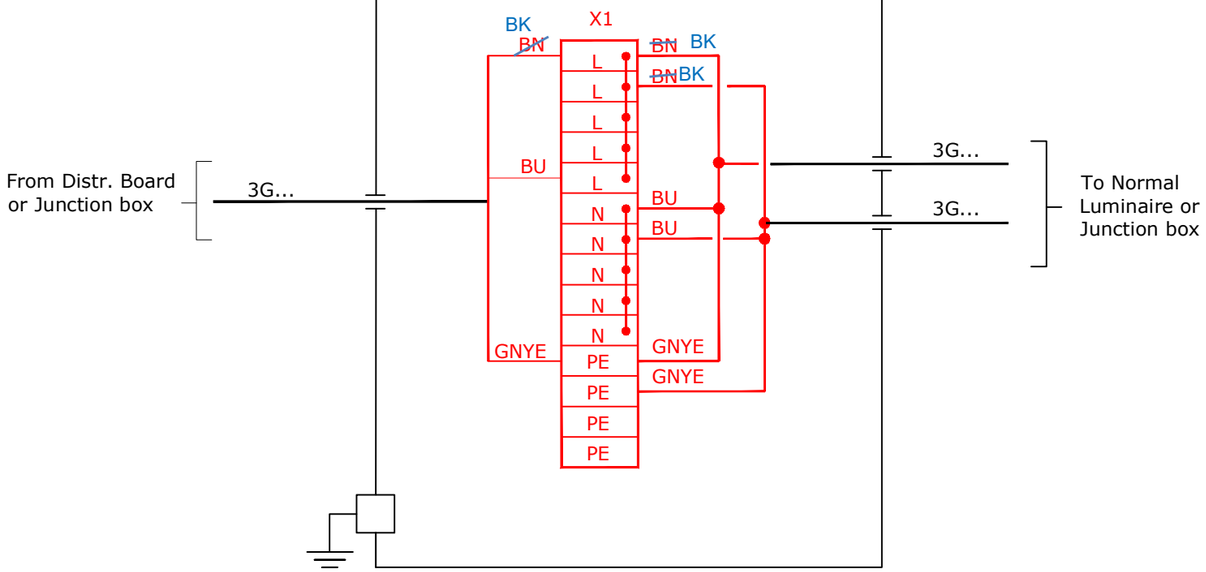
F.to UNI A3: 420mmx297mm

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

TYPE : L21N1 & L21N2

ITEM: NORMAL LIGHTING JUNCTION BOX

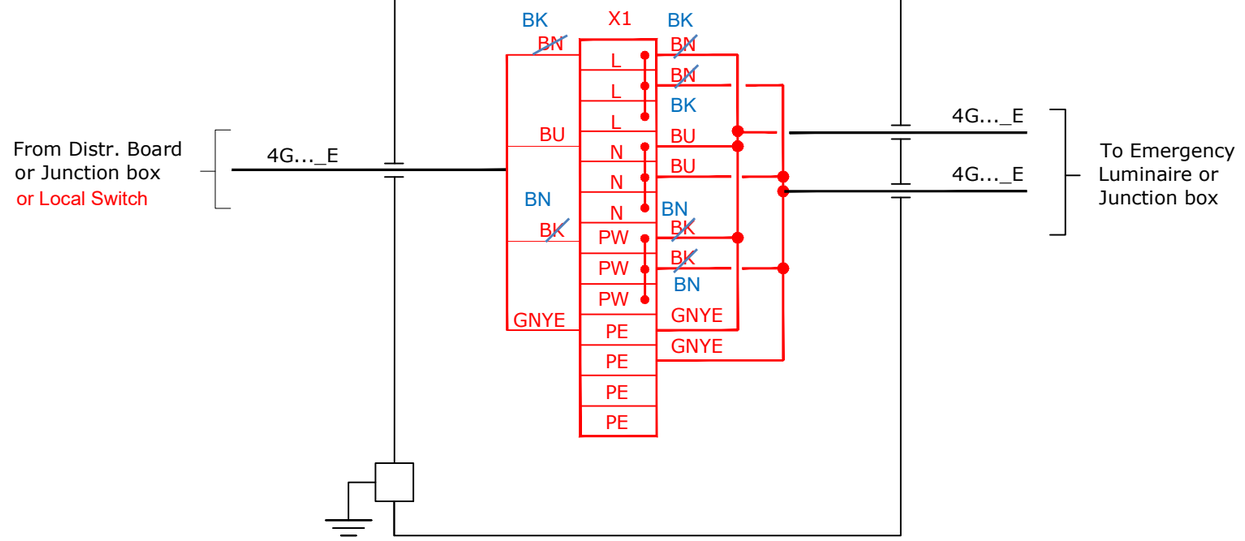
TAG : Typical



TYPE : L21E1 & L21E2

ITEM: EMERGENCY LIGHTING JUNCTION BOX

TAG : Typical



VALID FOR CONSTRUCTION

FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
TYPICAL JB INTERCONNECTING DIAGRAM

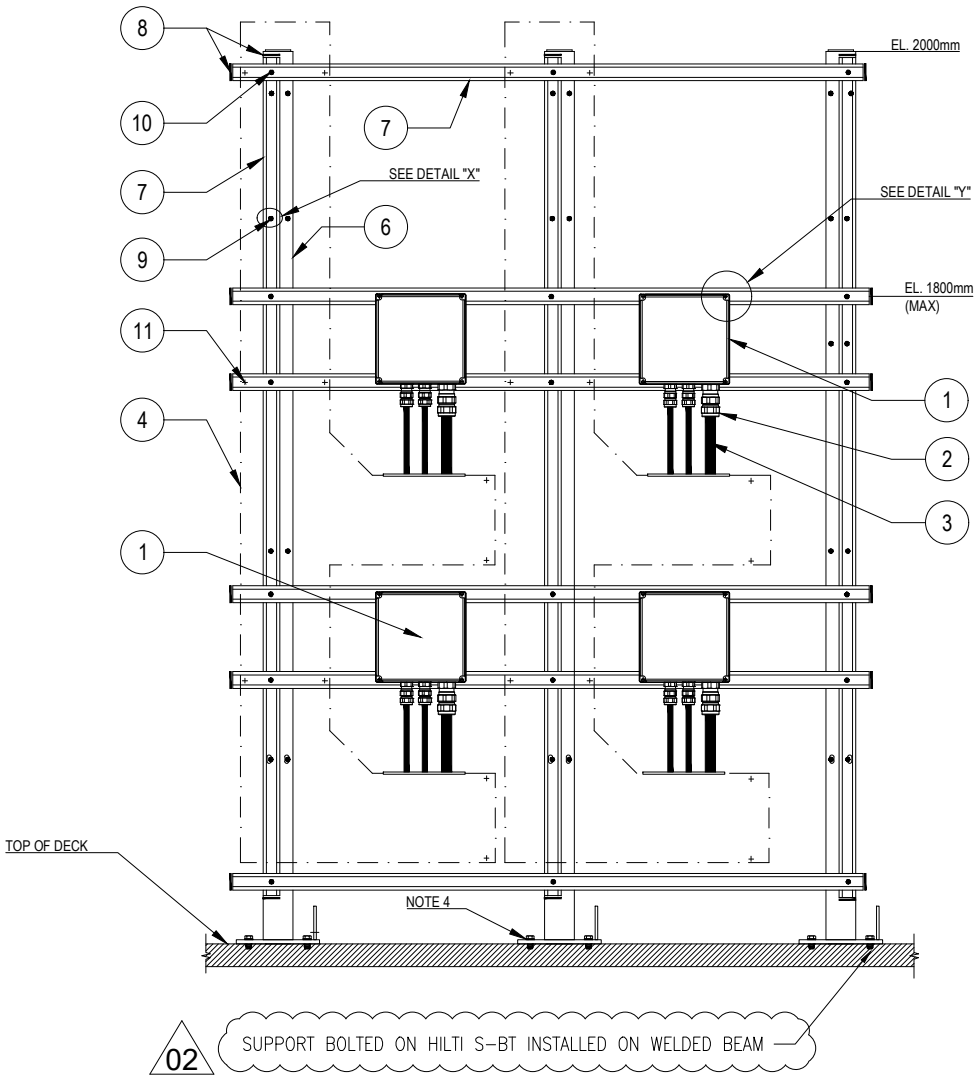
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	016	01

F.to UNI A3: 420mmx297mm

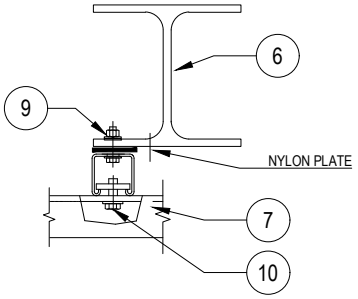
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L21

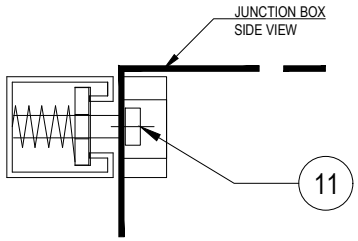


02

POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	JUNCTION BOX (Ex)	GRP			
2	CABLE GLAND (Ex) FOR ARMOURED/UNARMOURED CABLE	NICK.PL.BRASS			NOTE 2
3	ARMOURED/UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
6	PROFILE SUPPORT	PAINTED C.S			
7	SINGLE U-CHANNEL PERFORATED ON NO. 3 SIDE	AISI 316L	41x41x2		NOTE 1
8	PLUG FOR U-CHANNEL	LPDE			
9	HEXAGONAL BOLT M10X40 WITH LARGE PLANE WASHER, NYLON PLANE WASHER, PLANE WASHERS, GROWER SPRING WASHER AND NUT	AISI 316L	M10x40		
10	HEXAGONAL BOLT M12X30 COMPLETE WITH LARGE PLANE WASHER, PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M12x30		
11	ALLEN KEY BOLT COMPLETE WITH PLANE WASHER, NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x30		NOTE 3



DETAIL "X"



DETAIL "Y"

NOTES:

1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY PHASE.
2) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).
3) FOR INSTRUMENT JUNCTION BOX USE HEXAGONAL BOLT M10X30 COMPLETE WITH PLANE WASHER, GROWER AND NUT FOR U-CHANNEL WITH SPRING
4) SUPPORT BOLTED ON HILTI S-BT INSTALLED ON THE DECK

VALID FOR CONSTRUCTION

REV.:	DATE:	SIGNATURE:
2_B	12/12/24	C.Pilato

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	30/09/24	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-LIGHTING SYSTEM
JUNCTION BOXES MOUNTED RACK SUPPORT

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

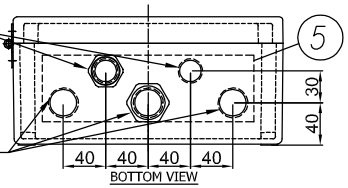
A3 | DRAWING NO. 123A90-DDL-EL-DD-20091 | SHEET 005 | REV. 02

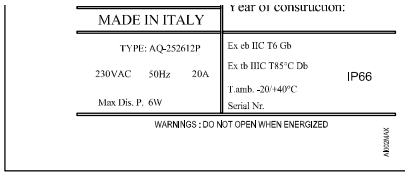
F.to UNI A3: 420mmx297mm

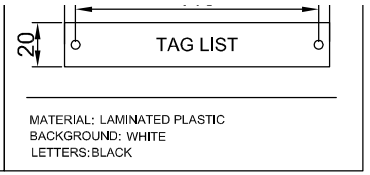
File Name : 123A90-DDL-EL-DD-20091 REV.02.DWG

(10)(4) N°2 PASSING HOLES Ø20.2
C/W N°1 BNK PLUG M20 +
N°1 DUSTPROOF PVC PLUG

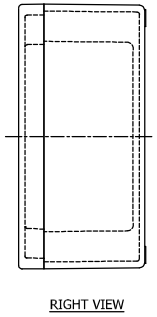
(3)(3) N°3 PASSING HOLES Ø25.2
C/W N°1 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

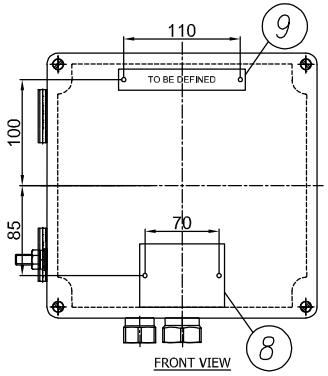


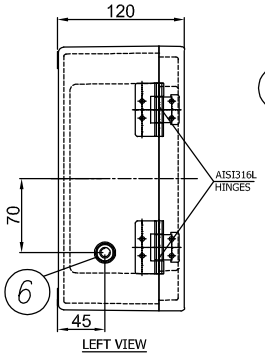


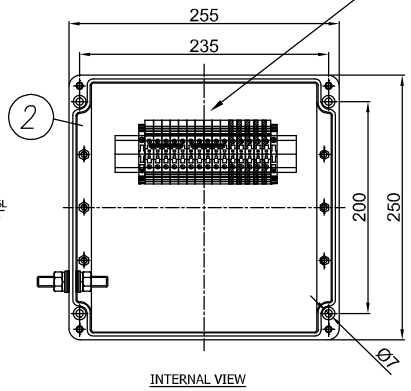


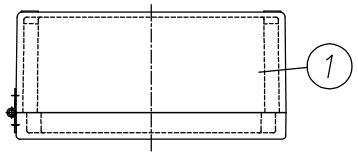
(7) JB for Normal Lighting have terminals bridge: L-L-L-L-L, N-N-N-N-N, PE-PE-PE-PE-PE - JB for Emergency Lighting have terminals bridge: L-L-L, N-N-N, PW-PW-PW, PE-PE-PE-PE-PE











ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
11	DUSTPROOF PVC PLUG Ø25	2	–	.	TECHNOR ITALSMEA
10	DUSTPROOF PVC PLUG Ø20	1	–	.	TECHNOR ITALSMEA
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 6 SQMM EARTH TERMINAL BLOCK SIZE 6 SQMM	10 5	WDU–6 WPE–6	.	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	NICKEL PLATED BRASS PLUG M20	1	T20	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	1	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 92, ITEM 20: 2JBXXGPEE, ELEJB02

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)

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti
TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box for Normal & Emergency Lighting

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

SCALE : NTS

A3

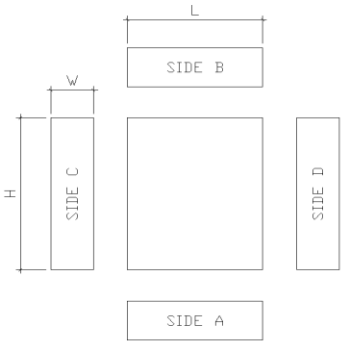
DRAWING NO. 1724001481-EL-DA-00003

SHEET 004

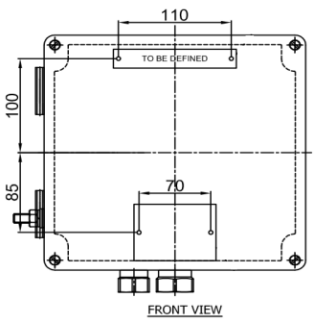
REV. 04

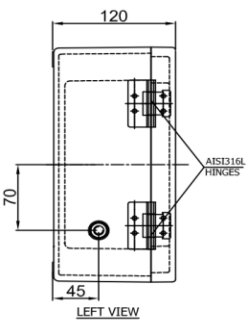
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	Junction Box for Normal & Emergency Lighting				
2	**Item**	**Required**	**Manufacturer Proposal**	**Comments**	
3	Model Number	by Vendor	AQ-252612P		01
4	Serial Number	by Vendor	B011041010004		01
5	Quantity	40+4(Spare)		(39+5 Spare)	01
6	Application	Lighting pole JB/Lighting JB			00
7	**Installation area**				
8	Indoor/Outdoor	Outdoor			00
9	Safe Area/Hazardous Area	Safe area			00
10	Zone 1/Zone 2	NA			00
11	Temp. Class	NA	Ex eb IIC, T6 Gb		01
12	**Electrical input data**				
13	Voltage	230 V ac	230 V ac		00
14	Number of Phases	1ph + N + PE			00
15	**Material**				
16	Body	GRP	GRP		01
17	Execution	Normal	Ex eb	Will be used ATEX even in safe area	01
18	Protection Degree	IP56	IP 66		01
19	**Accessories**				
20	Hinged Cover	Required	AISI316L Hinges		01
21	Gasket	Required			00
22	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
23	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
24	Internal Ground Bar	Required		connected to earth stud	00
25	Earth Stud	Required			00
26	Drainage Valve	Required			00
27	Pad lockable Cover	Required			00
28	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
29	**Side 'A'**				
30	Hubs Qty.	5	5		01
31	Size	No.3 M25, No.2 M20	No.3 Ø 25.2 mm, No.2 Ø 20.2 mm		01
32	Thread	ISO-M			00
33	Plug	No. 1 M20, No.1 M25	No. 1 Ø 20.2 mm, No.1 Ø 25.2 mm	nickel-plated brass	01
34	**Side 'B'**				
35	Hubs Qty.	Not Required			00
36	Size	NA			00
37	Thread	NA			00
38	**Side 'C'**				
39	Hubs Qty.	Not Required			00
40	Size	NA			00
41	Thread	NA			00
42	**Side 'D'**				
43	Hubs Qty.	Not Required			00
44	Size	NA			
45	Thread	NA			
46	**Terminals**				
47	Size [mm^2]	Suitable for 6 Sq.mm & 2.5 Sq.mm Cable	M25 & M20	suitable with wire-end ferrules DIN 46228	01
48	Qty.	n°5 for Ph // n°5 for N // n°5 for PE	n°5 for Ph // n°5 for N // n°5 for PE	jumpered	01
49	**Bonding Cable (yellow/Green)**				
50	Size [mm^2]	by vendor		6 mm^2	01
51	Qty.	Min. 0.15m			00
52	**Dimension**				
53	Height 'H' [mm]	by vendor	120 mm		01
54	Width 'W' [mm]	by vendor	250 mm		01
55	Length 'L' [mm]	by vendor	255 mm		01
56	Weight [Kg]	by vendor	2.65 Kg		01
57	**JB Code (*)**	**Remarks**			
58					



NOTES:
(*) Filled by Vendor





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ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	EJB-200N1-04-L3-01	: Normal Lighting stairs			Dwg	123A90-DDL-EL-DL-20119
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10001289		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX31 Junction and Marshalling Box

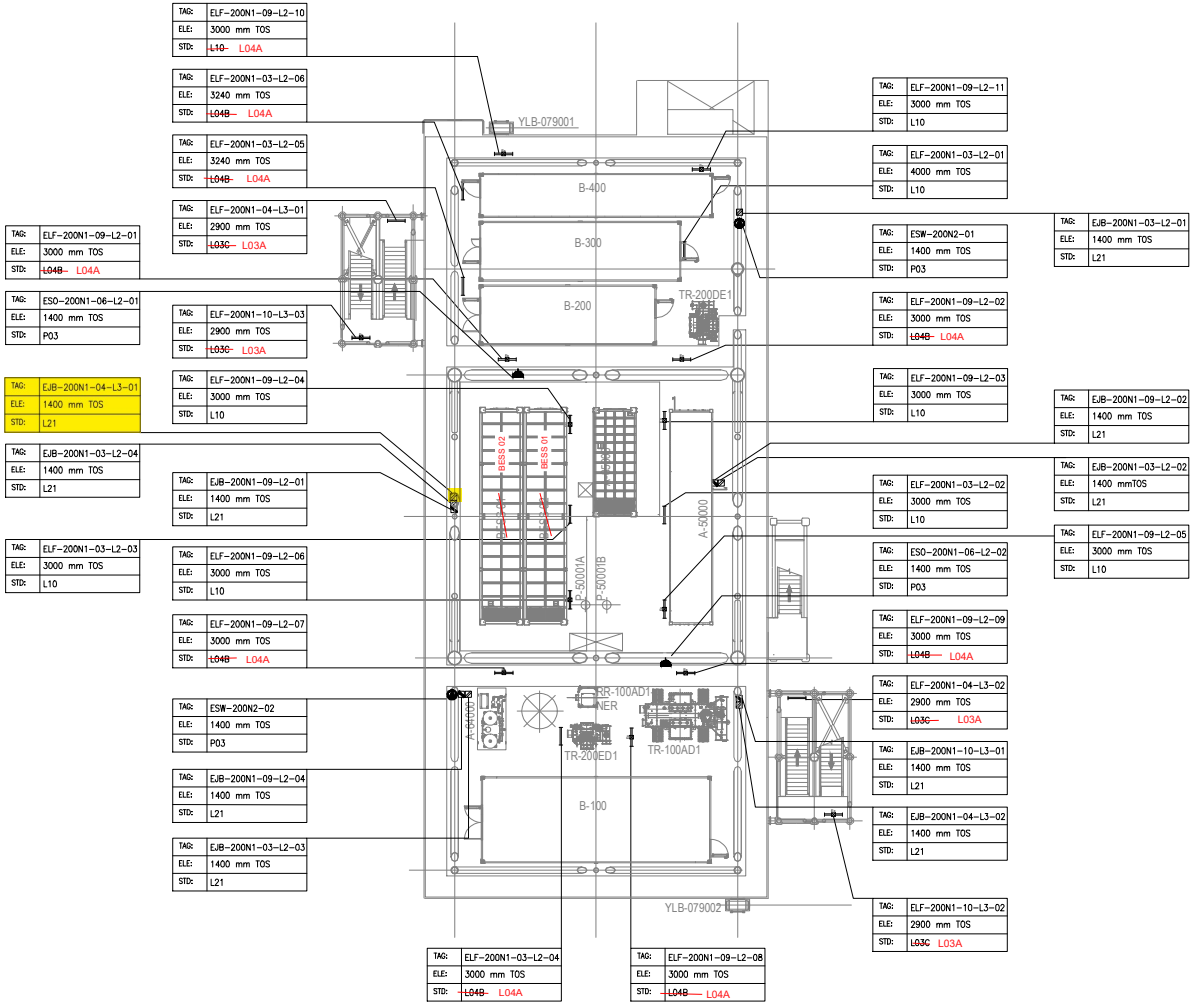
1	Check box is de-energized and safe.	OK
2	Check box is correctly mounted and easily accessible.	OK
3	Check box tagging against drawing.	OK
4	Check nameplate data is correct.	OK
5	Check flameproof joints are clean and greased with approved lubricants (if required).	NA
6	Check for damaging gaskets.	OK
7	Check all bolts are fitted and correcly tighted .	OK
8	Check all unused entries are suitably plugged.	OK
9	Check earthing and bonding against drawings.	OK
10	Check terminal blocks segregation barriers are fitted where necessary.	NA
11	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

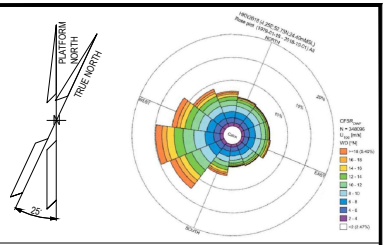
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-20	2025-01-21	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-20T08:49:07.824Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-21T14:04:26.551Z	

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

REV. 01



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



NOTES

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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.

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- NORMAL LIGHTING JB
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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

FROM	TO

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

CUBICLE/CB: +01/Q2

-X1

L1/2	10	BN
N/2	11	BU
		Y/G
		PE

P.E. BUS BAR

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

CUBICLE/CB: +02/Q3

-X1

L2/3	12	BN
N/3	13	BU
		Y/G
		PE

P.E. BUS BAR

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

CUBICLE/CB: +02/Q4

-X1

L3/4	14	BN
N/4	15	BU
		Y/G
		PE

P.E. BUS BAR

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

CUBICLE/CB: +03/Q5

-X1

L1/5	80	BN
N/5	81	BU
		Y/G
		PE

P.E. BUS BAR

P-ESO-200N1-05-L1-01
3G10 mm²

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

BN: L → BN
BU: N → BU
Y/G: PE → 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 → L
BU: N → N
Y/G: PE → PE

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

REV.:	DATE:	SIGNATURE:
2_H	16/01/25	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

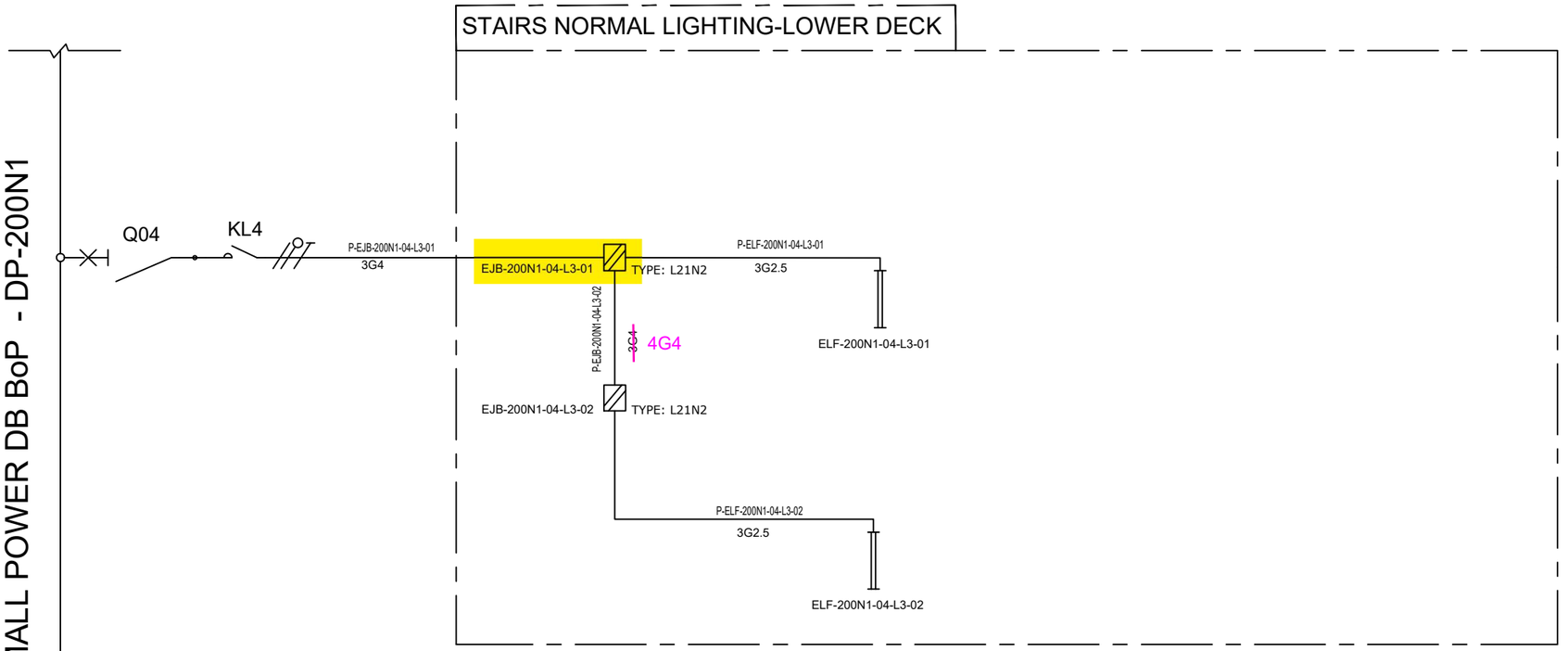
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

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

LIGHTING & SMALL POWER DB BoP - DP-200N1



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

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

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	006	01

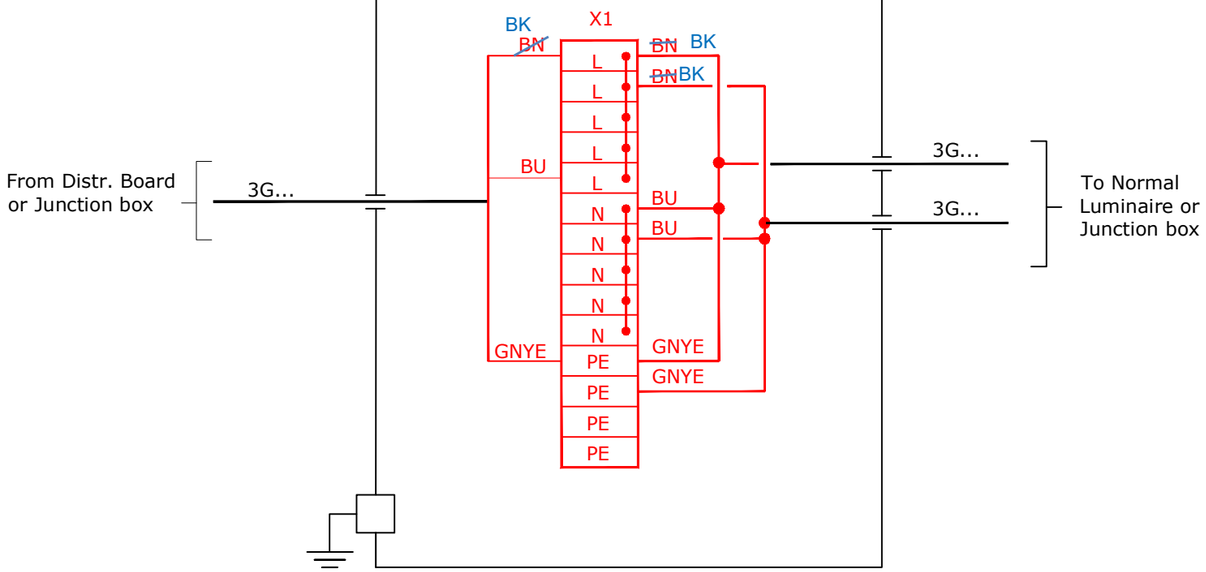
F.to UNI A3: 420mmx297mm

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

TYPE : L21N1 & L21N2

ITEM: NORMAL LIGHTING JUNCTION BOX

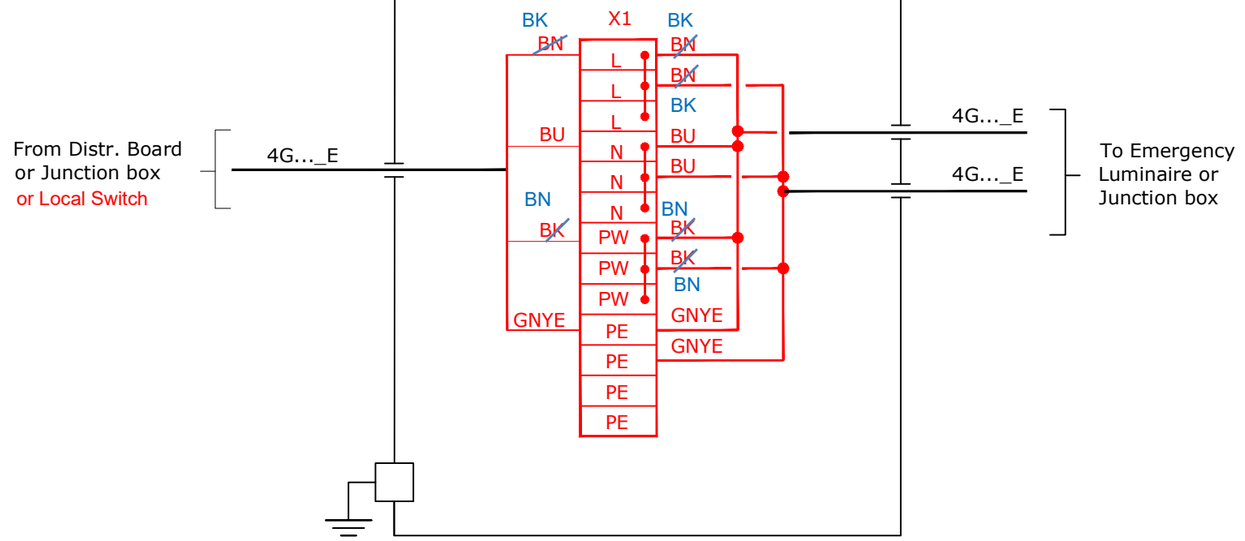
TAG : Typical



TYPE : L21E1 & L21E2

ITEM: EMERGENCY LIGHTING JUNCTION BOX

TAG : Typical



VALID FOR CONSTRUCTION

FDL DWG: **123A90-FDL-EL-DG-20125**

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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)

TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET CIRCUIT DIAGRAM
TYPICAL JB INTERCONNECTING DIAGRAM

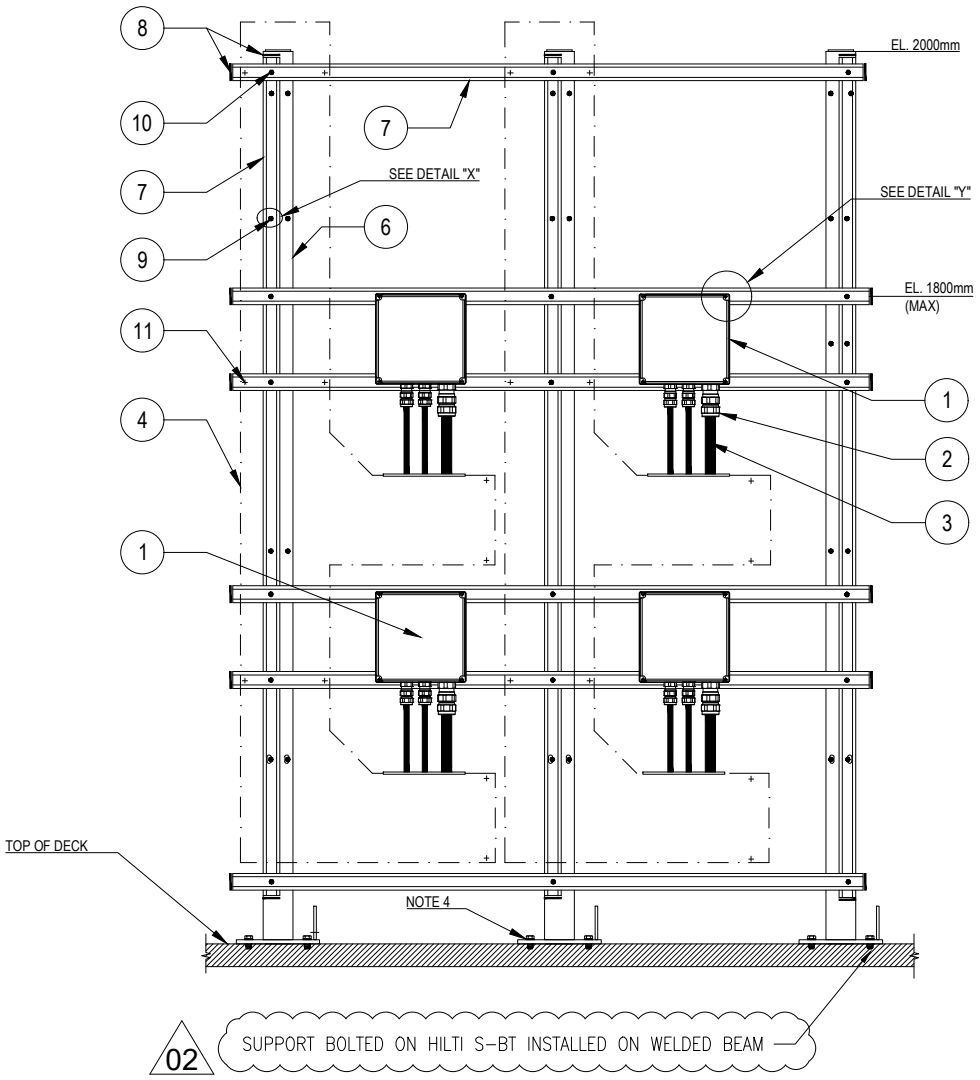
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	016	01

F.to UNI A3: 420mmx297mm

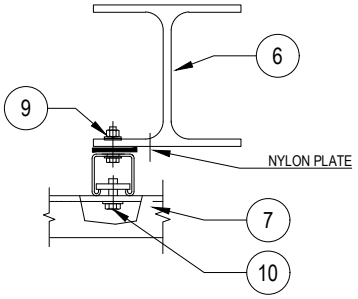
File Name : 123A90-DDL-EL-DG-20125

L21

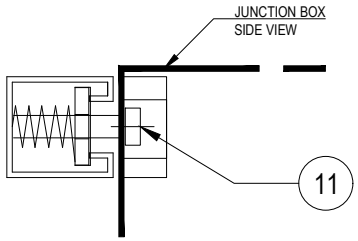


02

POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	JUNCTION BOX (Ex)	GRP			
2	CABLE GLAND (Ex) FOR ARMOURED/UNARMOURED CABLE	NICK.PL.BRASS			NOTE 2
3	ARMOURED/UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
6	PROFILE SUPPORT	PAINTED C.S			
7	SINGLE U-CHANNEL PERFORATED ON NO. 3 SIDE	AISI 316L	41x41x2		NOTE 1
8	PLUG FOR U-CHANNEL	LPDE			
9	HEXAGONAL BOLT M10X40 WITH LARGE PLANE WASHER, NYLON PLANE WASHER, PLANE WASHERS, GROWER SPRING WASHER AND NUT	AISI 316L	M10x40		
10	HEXAGONAL BOLT M12X30 COMPLETE WITH LARGE PLANE WASHER, PLANE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M12x30		
11	ALLEN KEY BOLT COMPLETE WITH PLANE WASHER, NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M6x30		NOTE 3



DETAIL "X"



DETAIL "Y"

NOTES:

1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY PHASE.
2) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).
3) FOR INSTRUMENT JUNCTION BOX USE HEXAGONAL BOLT M10X30 COMPLETE WITH PLANE WASHER, GROWER AND NUT FOR U-CHANNEL WITH SPRING
4) SUPPORT BOLTED ON HILTI S-BT INSTALLED ON THE DECK

VALID FOR CONSTRUCTION

REV.:	DATE:	SIGNATURE:
2_B	12/12/24	C.Pilato

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	30/09/24	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-LIGHTING SYSTEM
JUNCTION BOXES MOUNTED RACK SUPPORT

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

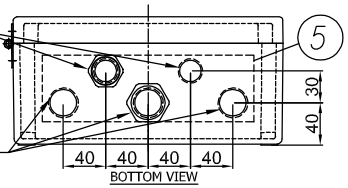
A3 | DRAWING NO. 123A90-DDL-EL-DD-20091 | SHEET 005 | REV. 02

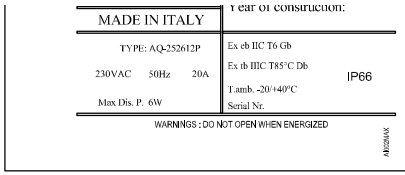
F.to UNI A3: 420mmx297mm

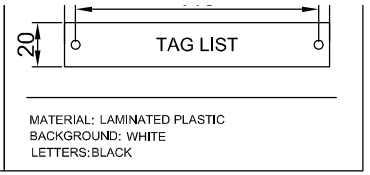
File Name : 123A90-DDL-EL-DD-20091 REV.02.DWG

(10)(4) N°2 PASSING HOLES Ø20.2
C/W N°1 BNK PLUG M20 +
N°1 DUSTPROOF PVC PLUG

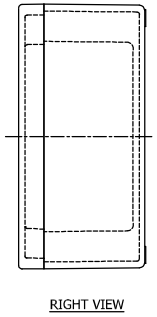
(3)(3) N°3 PASSING HOLES Ø25.2
C/W N°1 BNK PLUG M25 +
N°1 DUSTPROOF PVC PLUG

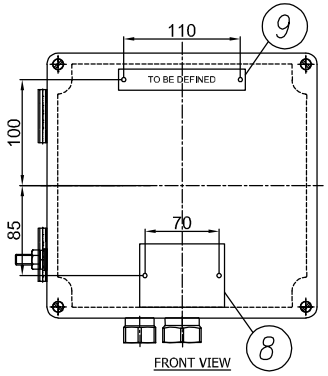


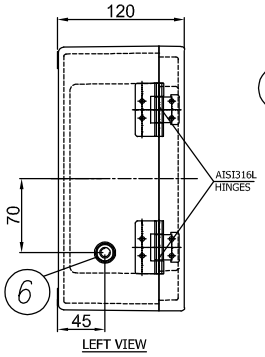


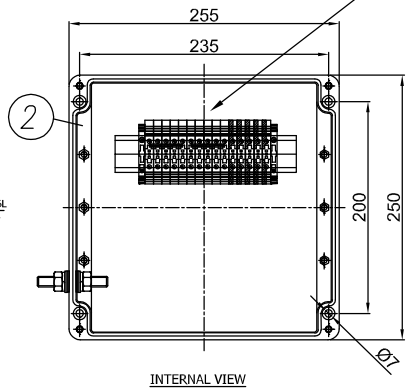


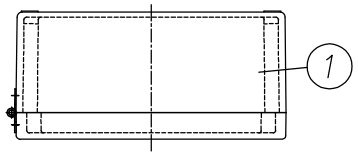
(7) JB for Normal Lighting have terminals bridge: L-L-L-L-L, N-N-N-N-N, PE-PE-PE-PE-PE - JB for Emergency Lighting have terminals bridge: L-L-L, N-N-N, PW-PW-PW, PE-PE-PE-PE-PE











ITEM	DESCRIPTION	Pcs Q.TY	NOTE/MAT.	CODE	MANUFACTURER
11	DUSTPROOF PVC PLUG Ø25	2	–	.	TECHNOR ITALSMEA
10	DUSTPROOF PVC PLUG Ø20	1	–	.	TECHNOR ITALSMEA
9	LAMINATED PLASTIC TAG 120X20	1	–	.	TECHNOR ITALSMEA
8	AISI316L CERTIFICATE PLATE 80X60	1	–	.	TECHNOR ITALSMEA
7	BEIGE TERMINAL BLOCK SIZE 6 SQMM EARTH TERMINAL BLOCK SIZE 6 SQMM	10 5	WDU–6 WPE–6	.	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	NICKEL PLATED BRASS PLUG M20	1	T20	.	TECHNOR ITALSMEA
3	NICKEL PLATED BRASS PLUG M25	1	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 92, ITEM 20: 2JBXXGPEE, ELEJB02

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)

Explosion Proof
Electrical Equipment
Materiali Elettrici Antideflagranti
TECHNOR ITALSMEA
A COMPANY OF MARECHAL ELECTRIC

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)

Junction Box for Normal & Emergency Lighting

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

SCALE : NTS

A3

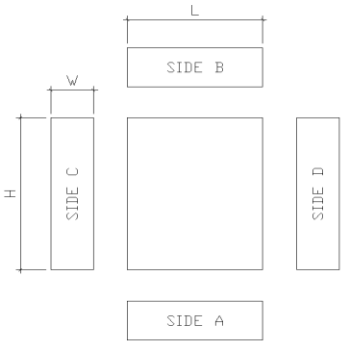
DRAWING NO. 1724001481-EL-DA-00003

SHEET 004

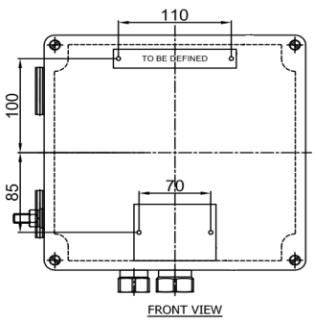
REV. 04

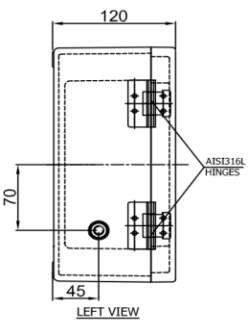
File Name : 1724001481-EL-DA-00003 Rev. 01

Row	Data Sheet for Control Stations, Junction Boxes and Sockets				Rev.
1	Junction Box for Normal & Emergency Lighting				
2	**Item**	**Required**	**Manufacturer Proposal**	**Comments**	
3	Model Number	by Vendor	AQ-252612P		01
4	Serial Number	by Vendor	B011041010004		01
5	Quantity	40+4(Spare)		(39+5 Spare)	01
6	Application	Lighting pole JB/Lighting JB			00
7	**Installation area**				
8	Indoor/Outdoor	Outdoor			00
9	Safe Area/Hazardous Area	Safe area			00
10	Zone 1/Zone 2	NA			00
11	Temp. Class	NA	Ex eb IIC, T6 Gb		01
12	**Electrical input data**				
13	Voltage	230 V ac	230 V ac		00
14	Number of Phases	1ph + N + PE			00
15	**Material**				
16	Body	GRP	GRP		01
17	Execution	Normal	Ex eb	Will be used ATEX even in safe area	01
18	Protection Degree	IP56	IP 66		01
19	**Accessories**				
20	Hinged Cover	Required	AISI316L Hinges		01
21	Gasket	Required			00
22	Removable Gland Plates	Required	Brass Continuity plate 0.8mm thick		01
23	Internal Mounting Plate	Thickness 3mm threaded		connected to Internal ground bar	00
24	Internal Ground Bar	Required		connected to earth stud	00
25	Earth Stud	Required			00
26	Drainage Valve	Required			00
27	Pad lockable Cover	Required			00
28	Identification Label	Trafolite/ Stainless Steel	Laminated Plastic	for all label	01
29	**Side 'A'**				
30	Hubs Qty.	5	5		01
31	Size	No.3 M25, No.2 M20	No.3 Ø 25.2 mm, No.2 Ø 20.2 mm		01
32	Thread	ISO-M			00
33	Plug	No. 1 M20, No.1 M25	No. 1 Ø 20.2 mm, No.1 Ø 25.2 mm	nickel-plated brass	01
34	**Side 'B'**				
35	Hubs Qty.	Not Required			00
36	Size	NA			00
37	Thread	NA			00
38	**Side 'C'**				
39	Hubs Qty.	Not Required			00
40	Size	NA			00
41	Thread	NA			00
42	**Side 'D'**				
43	Hubs Qty.	Not Required			00
44	Size	NA			
45	Thread	NA			
46	**Terminals**				
47	Size [mm^2]	Suitable for 6 Sq.mm & 2.5 Sq.mm Cable	M25 & M20	suitable with wire-end ferrules DIN 46228	01
48	Qty.	n°5 for Ph // n°5 for N // n°5 for PE	n°5 for Ph // n°5 for N // n°5 for PE	jumpered	01
49	**Bonding Cable (yellow/Green)**				
50	Size [mm^2]	by vendor		6 mm^2	01
51	Qty.	Min. 0.15m			00
52	**Dimension**				
53	Height 'H' [mm]	by vendor	120 mm		01
54	Width 'W' [mm]	by vendor	250 mm		01
55	Length 'L' [mm]	by vendor	255 mm		01
56	Weight [Kg]	by vendor	2.65 Kg		01
57	**JB Code (*)**	**Remarks**			
58					



NOTES:
(*) Filled by Vendor





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

ITEM	Tag	ELF-200N1-04-L3-02	: NORMAL LIGHT			Dwg	123A90-DDL-EL-DL-20119
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10001314		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

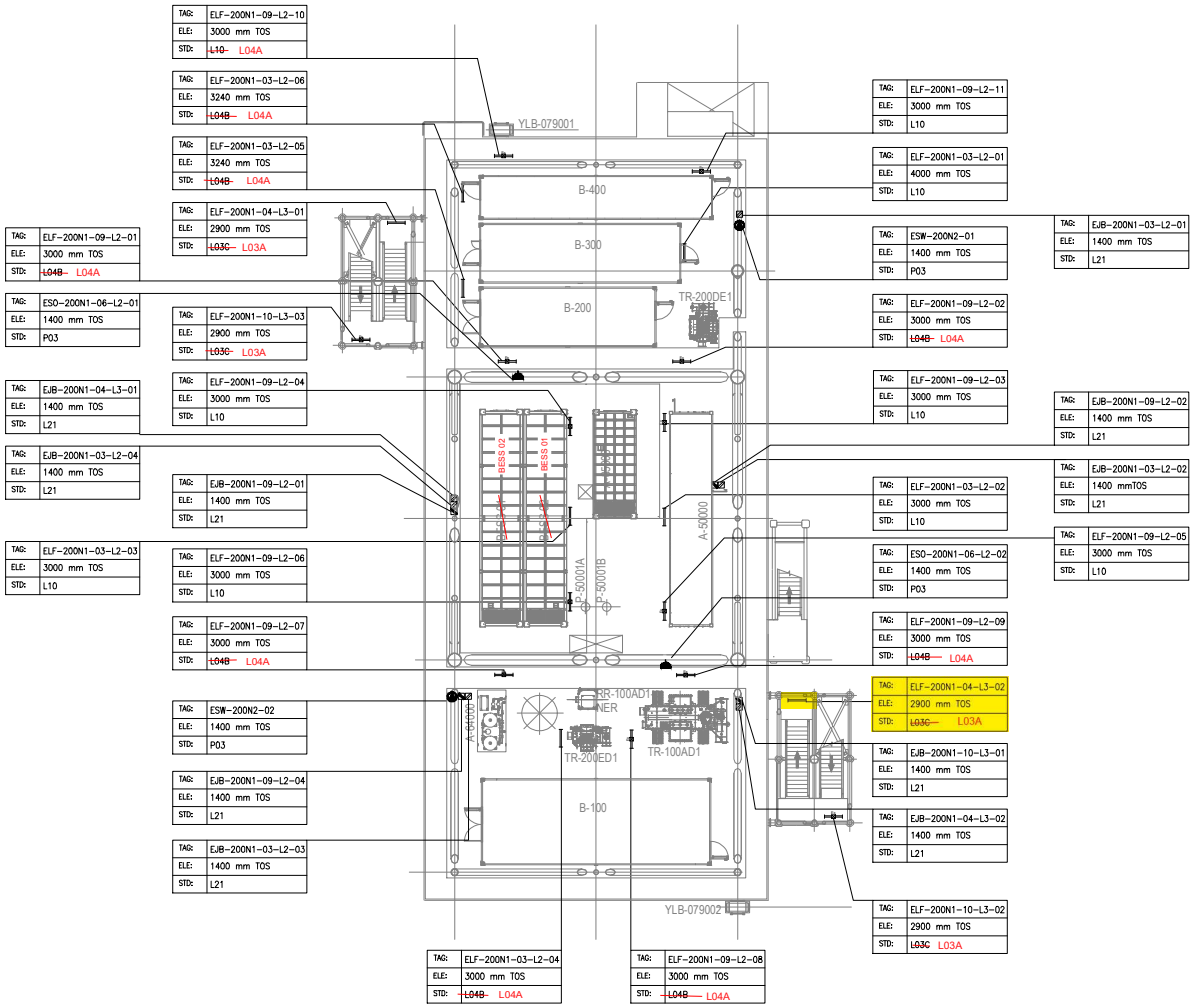
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	OK
4	Check nameplate data is correct.	NA
5	Check all bolts are fitted and all unused entries are suitably plugged.	OK
6	Check terminals 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:

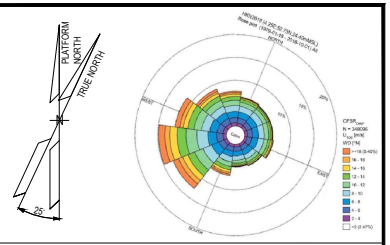
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-23	2025-01-23	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-23T15:36:41.016Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-23T16:54:40.070Z	

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

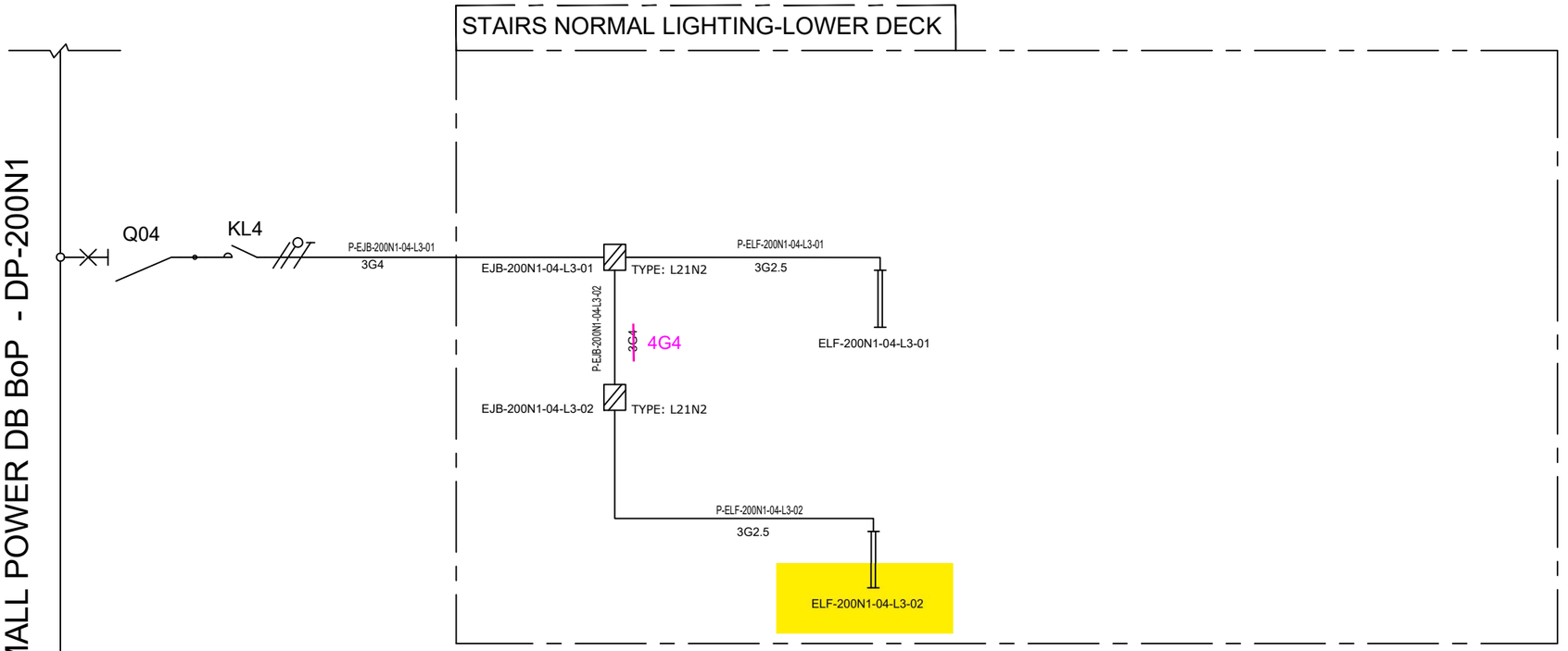
ROSETTI MARINO

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

LIGHTING & SMALL POWER DB BoP - DP-200N1



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

REV.:	DATE:	SIGNATURE:
2_G	16/01/25	G.Randi

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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

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

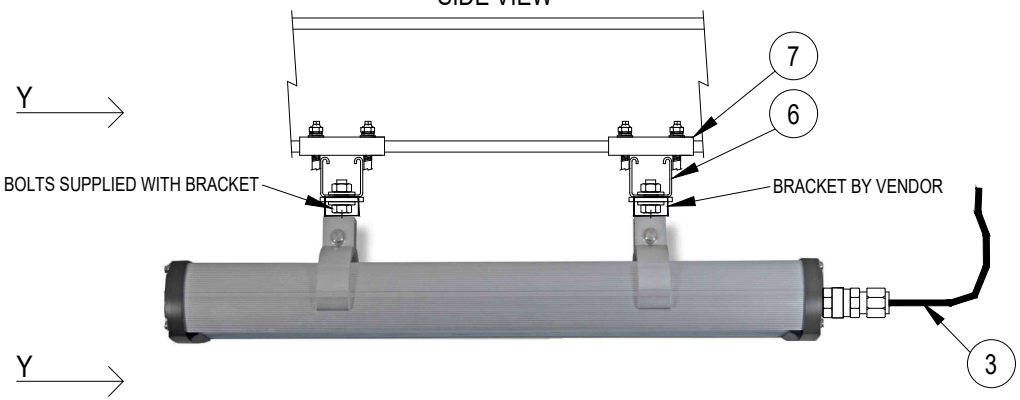
A3	DRAWING NO.	SHEET	REV.
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F.to UNI A3: 420mmx297mm

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

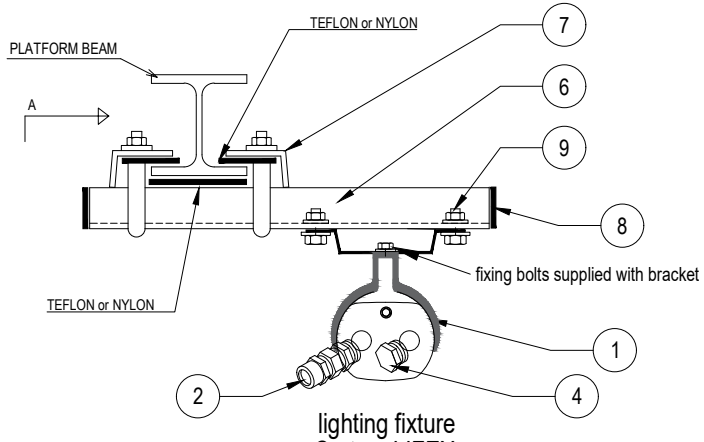
L03A

SIDE VIEW

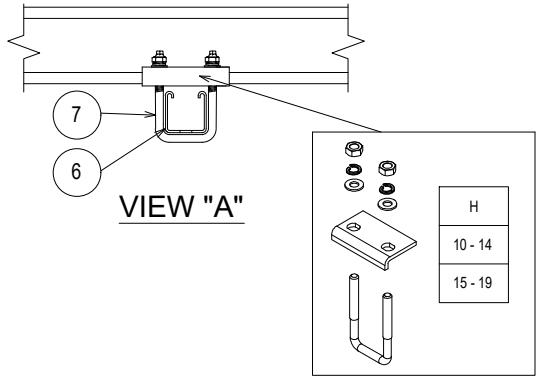


POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	LIGHITNG FIXTURE (Ex e) WITH LED LAMP	ALUMINIUM ALLOY		1	
2	CABLE GLAND (Ex) FOR ARMOURED/UNARMOURED CABLE	NICK.PL.BRASS		1	NOTE 2 NOTE 5
3	ARMOURED/UNARMOURED CABLE				NOTE 5
4	PLUG	NICK.PL.BRASS		AS REQ.	NOTE 3
6	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L		AS REQ.	NOTE 1
7	SINGLE U-CHANNEL BEAM ATTACHMENT (10-14) OR (15-19) WITH COLLAR COMPLETE WITH HARDWARE	AISI 316L		4	NOTE 4
8	PLUG FOR U-CHANNEL	LPDE		4	
9	HEX. BOLT M8X16 WITH LARGE PLANE WASHER		M8x16	4	

SECTION "Y-Y"



lighting fixture
Cortem LIFEX



NOTES:

1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY PHASE.
2) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).
3) UNUSED CABLE ENTRIES MUST BE CLOSED WITH NICKEL PLATED BRASS PLUG.
4) SINGLE U-CHANNEL BEAM ATTACHMENT (CLAMP) IS PRODUCED IN NO. 2 DIFFERENT SIZES (10-14 OR 15-19) SIZE REFERS TO THE THICKNESS OF THE BEAM WHERE THE CLAMP IS INSTALLED.
5) FOR LAMPS IN HAZARDOUS AREA, USE ARMOURED CABLE, DOUBLE SEAL CABLE GLAND AND EX JUNCTION BOX.

VALID FOR CONSTRUCTION

REV.:	DATE:	SIGNATURE:
2_B	12/12/24	C.Pilato

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	30/09/24	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–LIGHTING SYSTEM
FIXTURE SUSPENSION MOUNTED WITH CLAMPED SUPPORT

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

A3 | DRAWING NO. 123A90–DDL–EL–DD–20091 | SHEET 008 | REV. 02

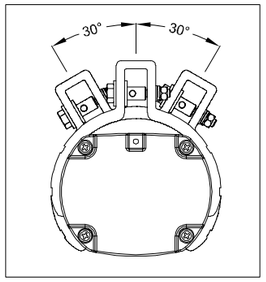
F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20091 REV.02.DWG

MODEL C-225 REV.1

GENERAL NOTE:
- PO: 1724001290 DD 26/06/2024
- ITEM.: 1
- Q.TY: 57
- EXTERNAL PAINTING: RAL 7022 (END CAPS)
- INTERNAL PAINTING: NOT PAINTED
- ALL DIMENSIONS ARE IN mm

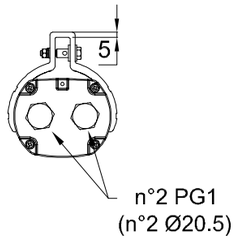
STANDARD FIXING BRACKET
FASTENING WITH 2 THREADED M8
HOLES, ADJUSTABLE FROM 0° TO ±30°



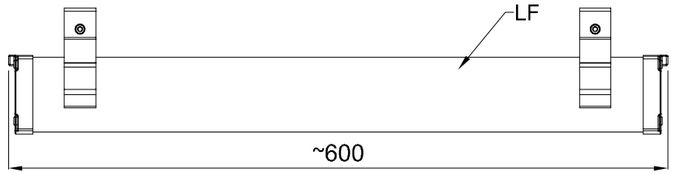
LF INFORMATION	
NOMINAL POWER	45W
CONSUMED POWER	43,5W
POWER FACTOR	>0,93
RATED CURRENT	200 mA
VIEWING ANGLE	120°
COLOUR TEMP.	5000 K
CRI	>80
INSTANT RESTRIKE	YES
LUMEN	6200 lm
LIGHT INTENSITY	2248 cd
EFFICIENCY	143 lm/W
WEIGHT	2,5 Kg
IP PROTECTION	IP66

N°	Q.TY	CODE	DESCRIPTION
LF	1	LIFEX-ME-0645-BB	110-277Vac 50-60Hz 45W LED LINEAR LIGHTING FIXTURE BODY: ALUMINUM ALLOY EXTRUSION AND ALUMINUM END CAPS TRANSPARENT PART: GLASS RESISTANT TO SHOCKS, UV RAYS AND IMPACT RESISTANCE IK09 GASKETS: ACID AND HYDROCARBON RESISTANT SILICONE ASSEMBLY: FASTENING BRACKETS FOR M8 HOLES, ADJUSTABLE 0° TO ±30° MADE IN ANODIZED ALUMINUM CONNECTION: TERMINAL BLOCK ON SIDE (IN) L, N, PE CROSS SEC. MAX. 4mmq SUITABLE FOR LOOP-IN LOOP-OUT SCREWS, BOLTS AND NUTS: STAINLESS STEEL 304
PG1	4	PLG1IB +DL1IB +RDI1IS/A4	IP66 Ex db IIC Gb - Ex eb IIC Gb NICKEL PLATED BRASS PLUG ISO M20x1,5 WITH RELEVANT LOCKNUT AND SERRATED WASHER MADE IN STAINLESS STEEL

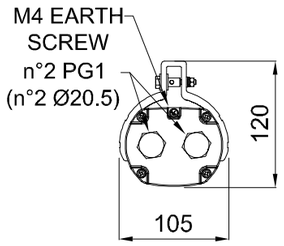
LEFT SIDE (OUT)



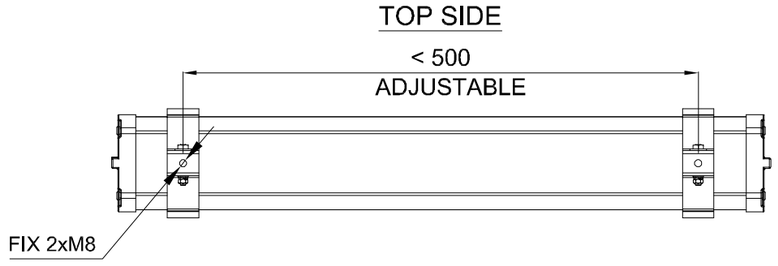
FRONT SIDE



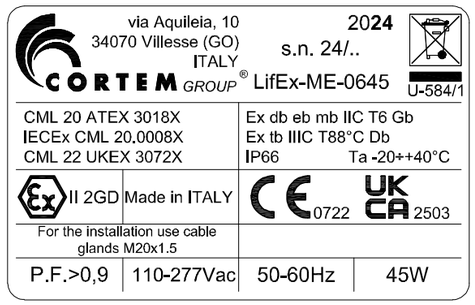
RIGHT SIDE (IN)



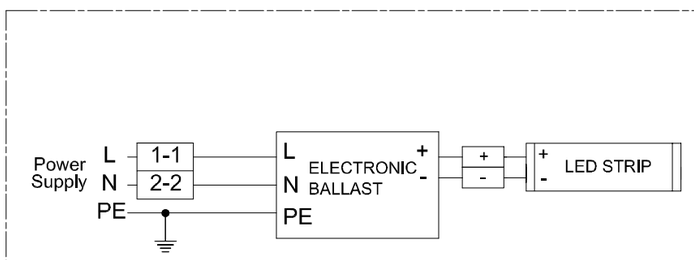
TOP SIDE



CERTIFICATE NAMEPLATE



WIRING DIAGRAM



REV.	DATE	PREP'D	CHK'D	APP'D	DESCRIPTION
2	09/07/2024	FRATTAROLO	GIUSTI	GRATTON	REISSUED FOR APPROVAL
1	05/07/2024	FRATTAROLO	GIUSTI	GRATTON	REISSUED FOR APPROVAL
0	28/06/2024	FRATTAROLO	GIUSTI	GRATTON	ISSUED FOR APPROVAL

DRAWING TITLE: ROSETTI MARINO S.P.A.

CORTEM S.p.a.
GENERAL LAYOUT
001 LIFEX-ME-0645-BB/C2402693/10.

CORTEM JOB: COV2402693
DRAWING SCALE: /
DRAWING NUMBER: A3-C 27521
SHEET 1 / TOT. 2
NEXT 2

CORTEM GROUP
cortem
FONDISONZO
ELFIT

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AND IT CANNOT BE REPRODUCED WITHOUT CORTEM'S
AUTHORIZATION

Smart Professional R. 2012

Row	Data Sheet for Lighting Fixtures & Accessories				Rev.
1	42W LED Linear Luminaire-Normal Lighting-Safe Area				
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by vendor	LIFEX-ME-0645-BB		01
4	Serial Number	by vendor			00
5	Quantity	29 Nos.		(20+9 Spare)	01
6	Location / Module	Lower deck			01
7	**LED Lamp**				
8	Nominal power	42 watts	45 watts		01
9	No. of linear	1	1		01
10	Luminous flux	5810 lm	6200 lm		01
11	Colour Temperature	5000 K	5000 K		01
12	**Protection**				
13	Hazardous Area Certification (Ex)	Safe area	Ex II 2GD Ex db eb mb IIC Gb Ex tb IIIC Db		01
14	Degree of Protection (IP)	IP 56	IP 66		01
15	ATEX certified	Not required	ATEX CML 20 ATEX 3018X	Will be used ATEX even in safe area	01
16	**Material**				
17	Body	GRP/Aluminium alloy	Aluminium alloy		01
18	Reflector	GRP/Aluminium	Aluminium		01
19	Diffuser	Polycarbonate/temperate glass	Tempered glass		01
20	**Cable Entry**				
21	No. of cable entry	4 Nos.	4 Entries, 2 per side		01
22	Size	M20	Ø20.5mm		01
23	**Emergency Battery Pack**				
24	Requirement	Not required			00
25	Battery type	Not required			00
26	Autonomy	Not required			00
27	Emergency luminous flux	Not required			00
28	**Mechanical parameters**				
29	Dimension	by vendor	600x105x120(mm)		01
30	Weight	by vendor	2.5kg		01

Note:

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

ITEM	Tag	ELF-200N1-04-L3-01	: NORMAL LIGHT			Dwg	123A90-DDL-EL-DL-20119
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD
TASK	code	C10001315		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

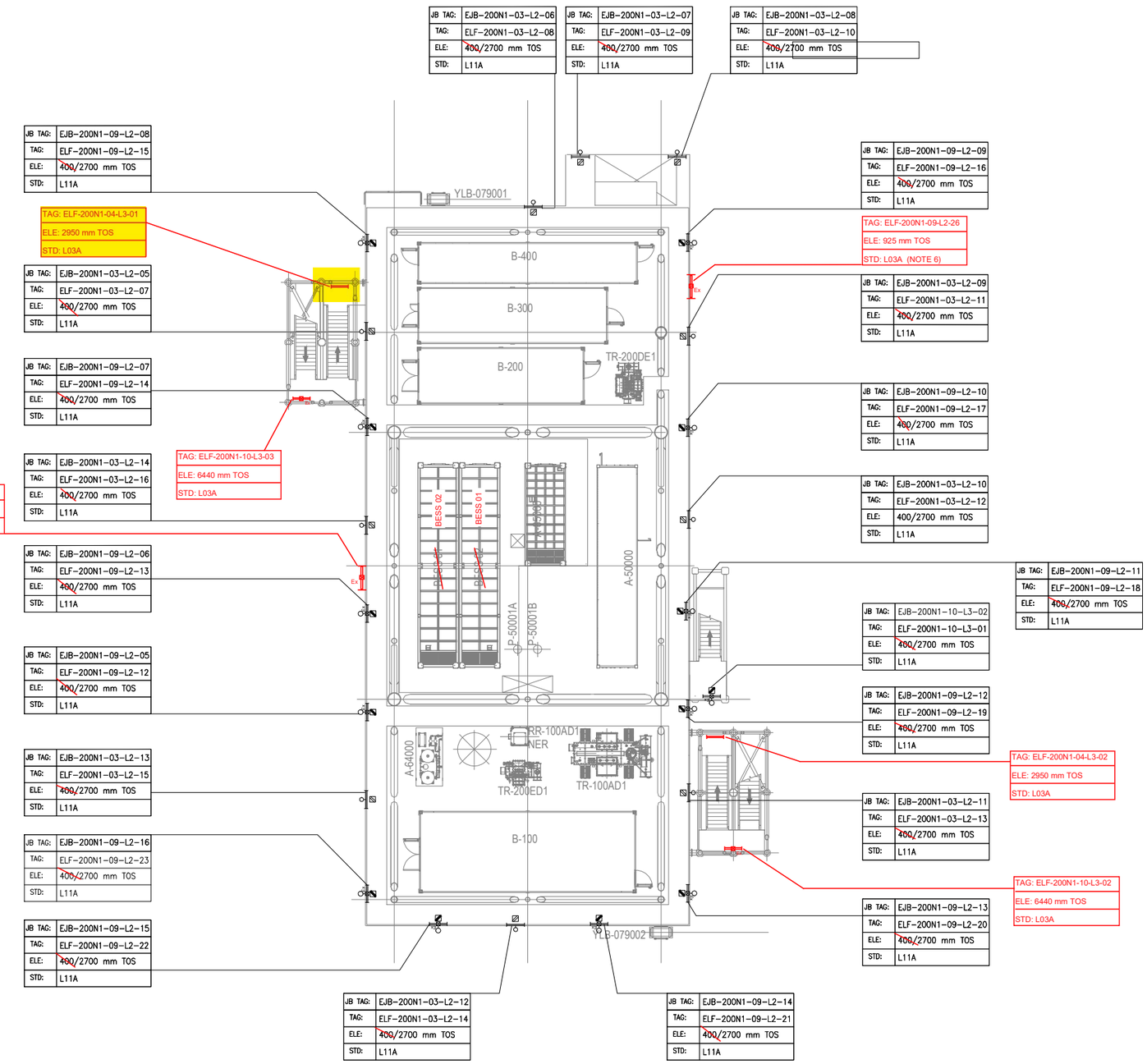
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	OK
4	Check nameplate data is correct.	NA
5	Check all bolts are fitted and all unused entries are suitably plugged.	PL
6	Check terminals 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:

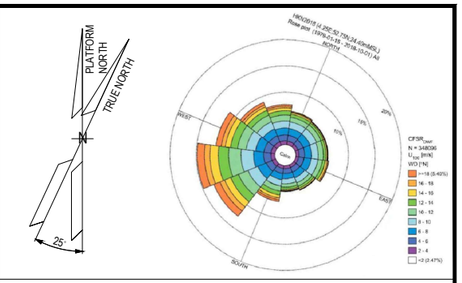
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Michele Tartaglia	Giovanni Tangianu	
Date	2025-01-20	2025-01-20	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-20T08:49:22.987Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-01-20T17:24:40.315Z	

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.
6. FOR ELF-200N1-09-L2-26 AND ELF-200N1-09-L2-27 CONSTRUCTION DETAILS REFER TO DOC. 123A90-DDL-ST-DD-90076

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
123A90-DDL-ST-DD-90076	IDENTIFICATION PANELS ASSEMBLY AND DETAILS

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

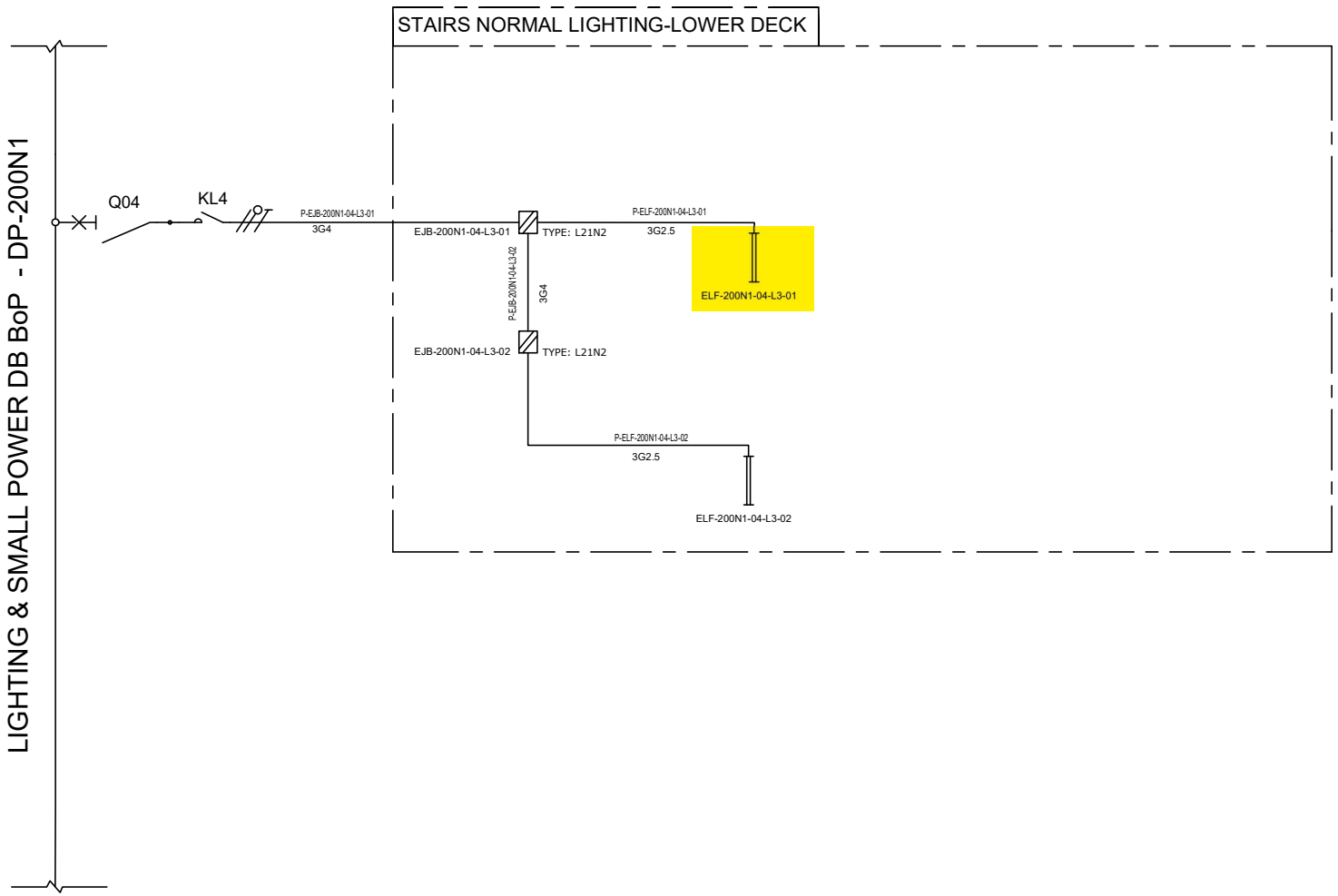
CROSSWIND

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 1of2	REV. 01

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



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
STAIRS NORMAL LIGHTING (LOWER DECK ONLY)

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

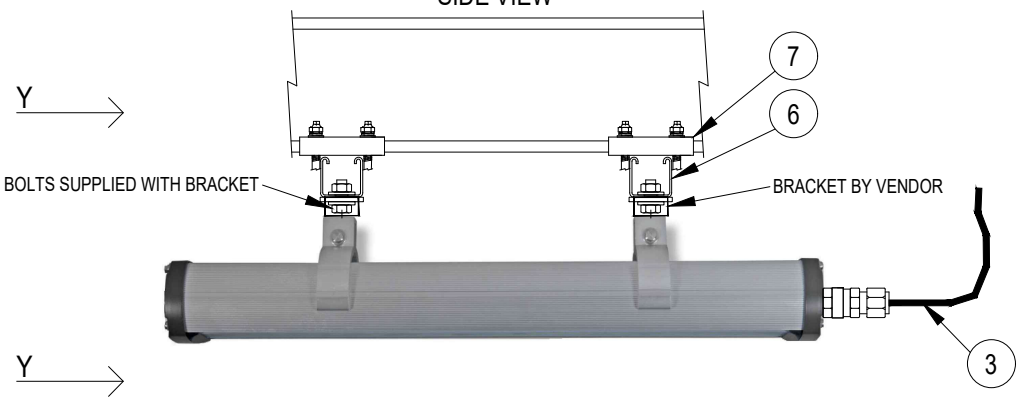
A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20125	006	01

F.to UNI A3: 420mmx297mm

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

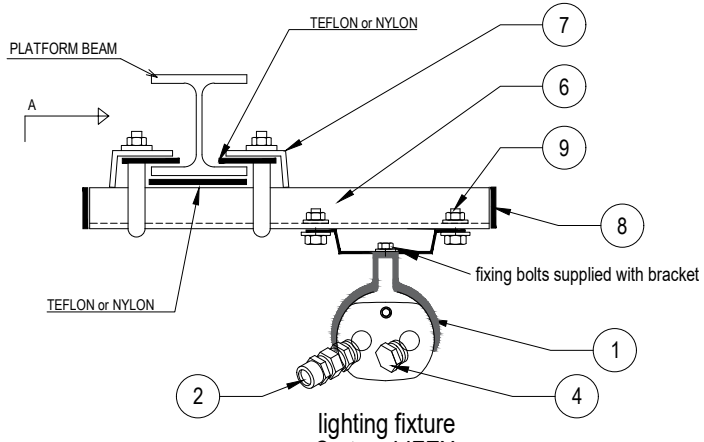
L03A

SIDE VIEW

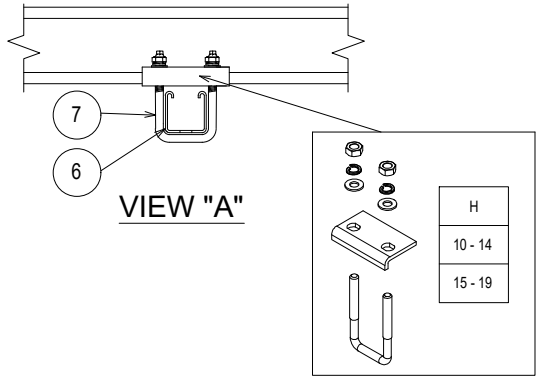


POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	LIGHITNG FIXTURE (Ex e) WITH LED LAMP	ALUMINIUM ALLOY		1	
2	CABLE GLAND (Ex) FOR ARMOURED/UNARMOURED CABLE	NICK.PL.BRASS		1	NOTE 2 NOTE 5
3	ARMOURED/UNARMOURED CABLE				NOTE 5
4	PLUG	NICK.PL.BRASS		AS REQ.	NOTE 3
6	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L		AS REQ.	NOTE 1
7	SINGLE U-CHANNEL BEAM ATTACHMENT (10-14) OR (15-19) WITH COLLAR COMPLETE WITH HARDWARE	AISI 316L		4	NOTE 4
8	PLUG FOR U-CHANNEL	LPDE		4	
9	HEX. BOLT M8X16 WITH LARGE PLANE WASHER		M8x16	4	

SECTION "Y-Y"



lighting fixture
Cortem LIFEX



NOTES:

1) THE EXACT DIMENSIONS WILL BE DEFINED DURING ASSEMBLY PHASE.
2) CABLE GLAND COMPLETE WITH LOCKNUT, NYLON WASHER, SERRATED WASHER, EXTERNAL RUBBER RING AND EARTH TAG (IF NECESSARY).
3) UNUSED CABLE ENTRIES MUST BE CLOSED WITH NICKEL PLATED BRASS PLUG.
4) SINGLE U-CHANNEL BEAM ATTACHMENT (CLAMP) IS PRODUCED IN NO. 2 DIFFERENT SIZES (10-14 OR 15-19) SIZE REFERS TO THE THICKNESS OF THE BEAM WHERE THE CLAMP IS INSTALLED.
5) FOR LAMPS IN HAZARDOUS AREA, USE ARMOURED CABLE, DOUBLE SEAL CABLE GLAND AND EX JUNCTION BOX.

VALID FOR CONSTRUCTION

REV.:	DATE:	SIGNATURE:
2_B	12/12/24	C.Pilato

ROSETTI MARINO SpA

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	30/09/24	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–LIGHTING SYSTEM
FIXTURE SUSPENSION MOUNTED WITH CLAMPED SUPPORT

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

A3 | DRAWING NO. 123A90–DDL–EL–DD–20091 | SHEET 008 | REV. 02

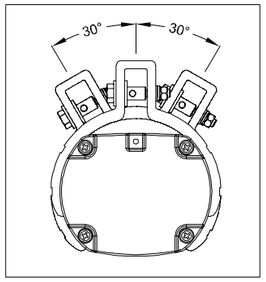
F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20091 REV.02.DWG

MODEL C-225 REV.1

GENERAL NOTE:
- PO: 1724001290 DD 26/06/2024
- ITEM.: 1
- Q.TY: 57
- EXTERNAL PAINTING: RAL 7022 (END CAPS)
- INTERNAL PAINTING: NOT PAINTED
- ALL DIMENSIONS ARE IN mm

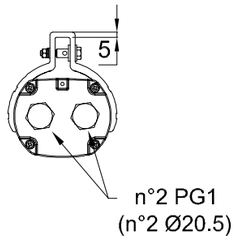
STANDARD FIXING BRACKET
FASTENING WITH 2 THREADED M8
HOLES, ADJUSTABLE FROM 0° TO ±30°



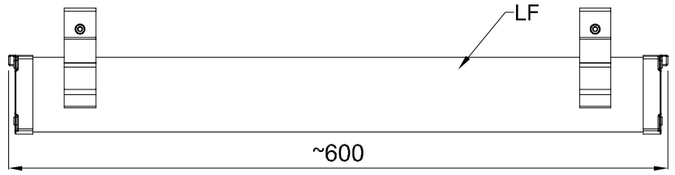
LF INFORMATION	
NOMINAL POWER	45W
CONSUMED POWER	43,5W
POWER FACTOR	>0,93
RATED CURRENT	200 mA
VIEWING ANGLE	120°
COLOUR TEMP.	5000 K
CRI	>80
INSTANT RESTRIKE	YES
LUMEN	6200 lm
LIGHT INTENSITY	2248 cd
EFFICIENCY	143 lm/W
WEIGHT	2,5 Kg
IP PROTECTION	IP66

N°	Q.TY	CODE	DESCRIPTION
LF	1	LIFEX-ME-0645-BB	110-277Vac 50-60Hz 45W LED LINEAR LIGHTING FIXTURE BODY: ALUMINUM ALLOY EXTRUSION AND ALUMINUM END CAPS TRANSPARENT PART: GLASS RESISTANT TO SHOCKS, UV RAYS AND IMPACT RESISTANCE IK09 GASKETS: ACID AND HYDROCARBON RESISTANT SILICONE ASSEMBLY: FASTENING BRACKETS FOR M8 HOLES, ADJUSTABLE 0° TO ±30° MADE IN ANODIZED ALUMINUM CONNECTION: TERMINAL BLOCK ON SIDE (IN) L, N, PE CROSS SEC. MAX. 4mmq SUITABLE FOR LOOP-IN LOOP-OUT SCREWS, BOLTS AND NUTS: STAINLESS STEEL 304
PG1	4	PLG1IB +DL1IB +RDI1IS/A4	IP66 Ex db IIC Gb - Ex eb IIC Gb NICKEL PLATED BRASS PLUG ISO M20x1,5 WITH RELEVANT LOCKNUT AND SERRATED WASHER MADE IN STAINLESS STEEL

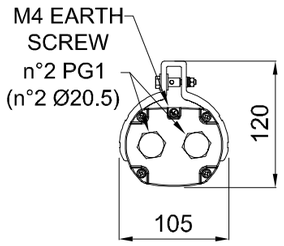
LEFT SIDE (OUT)



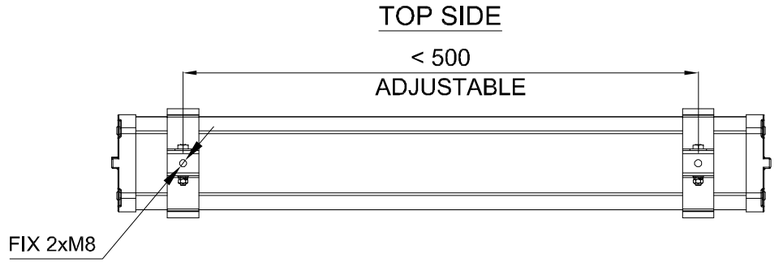
FRONT SIDE



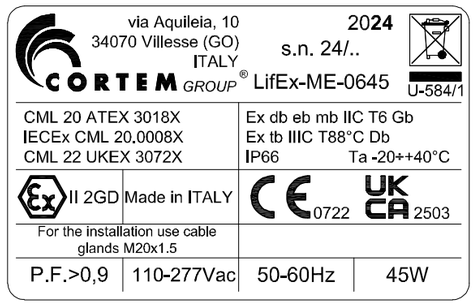
RIGHT SIDE (IN)



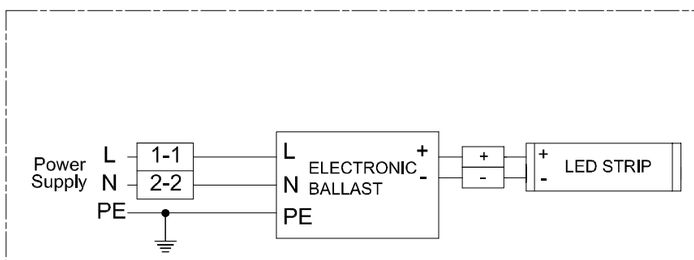
TOP SIDE



CERTIFICATE NAMEPLATE



WIRING DIAGRAM



REV.	DATE	PREP'D	CHK'D	APP'D	DESCRIPTION
2	09/07/2024	FRATTAROLO	GIUSTI	GRATTON	REISSUED FOR APPROVAL
1	05/07/2024	FRATTAROLO	GIUSTI	GRATTON	REISSUED FOR APPROVAL
0	28/06/2024	FRATTAROLO	GIUSTI	GRATTON	ISSUED FOR APPROVAL

DRAWING TITLE: ROSETTI MARINO S.P.A.

CORTEM S.p.a.
GENERAL LAYOUT
001 LIFEX-ME-0645-BB/C2402693/10.

CORTEM JOB: COV2402693
DRAWING SCALE: /
DRAWING NUMBER: A3-C 27521
SHEET 1 / TOT. 2
NEXT 2

CORTEM GROUP
cortem
FONDISONZO
ELFIT

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AUTHORIZATION

Smart Professional R. 2012

Row	Data Sheet for Lighting Fixtures & Accessories				Rev.
1	42W LED Linear Luminaire-Normal Lighting-Safe Area				
2	Item	Required	Manufacturer Proposal	Comments	
3	Model Number	by vendor	LIFEX-ME-0645-BB		01
4	Serial Number	by vendor			00
5	Quantity	29 Nos.		(20+9 Spare)	01
6	Location / Module	Lower deck			01
7	**LED Lamp**				
8	Nominal power	42 watts	45 watts		01
9	No. of linear	1	1		01
10	Luminous flux	5810 lm	6200 lm		01
11	Colour Temperature	5000 K	5000 K		01
12	**Protection**				
13	Hazardous Area Certification (Ex)	Safe area	Ex II 2GD Ex db eb mb IIC Gb Ex tb IIIC Db		01
14	Degree of Protection (IP)	IP 56	IP 66		01
15	ATEX certified	Not required	ATEX CML 20 ATEX 3018X	Will be used ATEX even in safe area	01
16	**Material**				
17	Body	GRP/Aluminium alloy	Aluminium alloy		01
18	Reflector	GRP/Aluminium	Aluminium		01
19	Diffuser	Polycarbonate/temperate glass	Tempered glass		01
20	**Cable Entry**				
21	No. of cable entry	4 Nos.	4 Entries, 2 per side		01
22	Size	M20	Ø20.5mm		01
23	**Emergency Battery Pack**				
24	Requirement	Not required			00
25	Battery type	Not required			00
26	Autonomy	Not required			00
27	Emergency luminous flux	Not required			00
28	**Mechanical parameters**				
29	Dimension	by vendor	600x105x120(mm)		01
30	Weight	by vendor	2.5kg		01

Note:

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

ITEM	Tag	P-EPH-200N1-01	: LV 0,4 / 0,23 kV Distribution Switchgear / Twilight Relay Sensor	Dwg	123A90-DDL-EL-LIS-20148		
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece	Module	LD_B-200/UD		
TASK	code	C10002347	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/MGT/EPR/LSZH/GSWB/LSZH	Cores/Size mm²	3G4 mm2	Color	ORANGE
From	DP-200N1	To	EPH-200N1-01		

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.	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.	PL
9	Check cable is correctly loomed and segregated in accordance with specification.	OK
10	Check cable earthing against lastest drawings.	Note
11	Check cores marking are in accordance with termination diagram	PL
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-EPH-200N1-01	: LV 0,4 / 0,23 kV Distribution Switchgear / Twilight Relay Sensor			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	LD_B-200/UD
TASK	code	C10002347		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		0,6	
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	

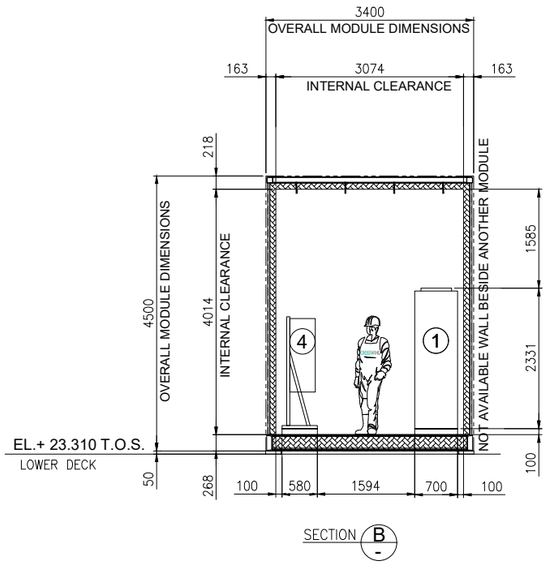
TESTING INSTRUMENTS USED

TYPE / SERIAL N° :	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

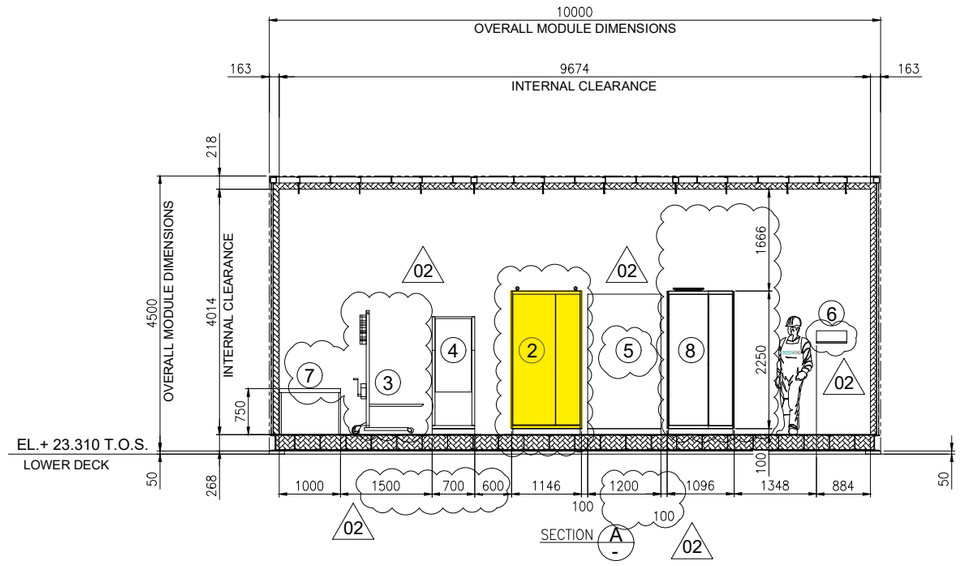
Comments: Note: 10/12: Refer PL: C30004245.

	Performed by	☉ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-03-12	2025-03-13	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-03-12T15:46:11.198Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-03-13T10:31:08.111Z	

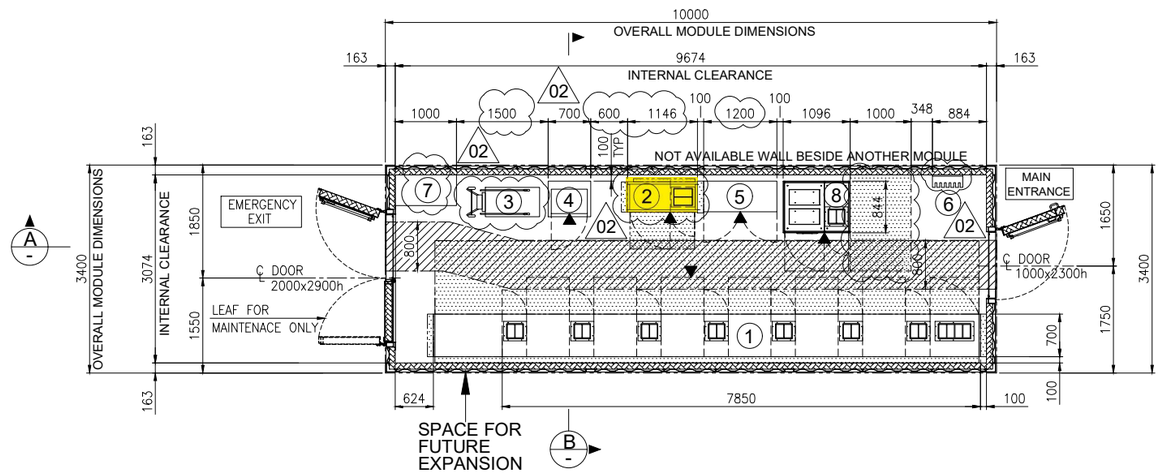
DRAWING NO. 123A90-DDL-EL-DL-20105 | REV. 02



SECTION B



SECTION A



A

B

EQUIPMENT LAYOUT

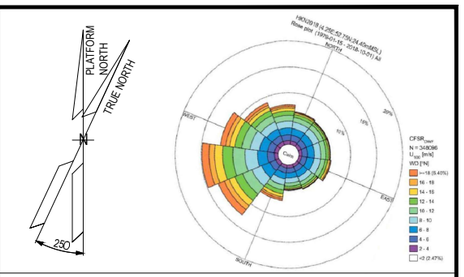
"B-200" LV (400V) SWITCHGEAR ROOM

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

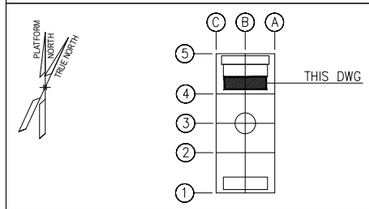
_____ FRONT OF EQUIPMENT

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

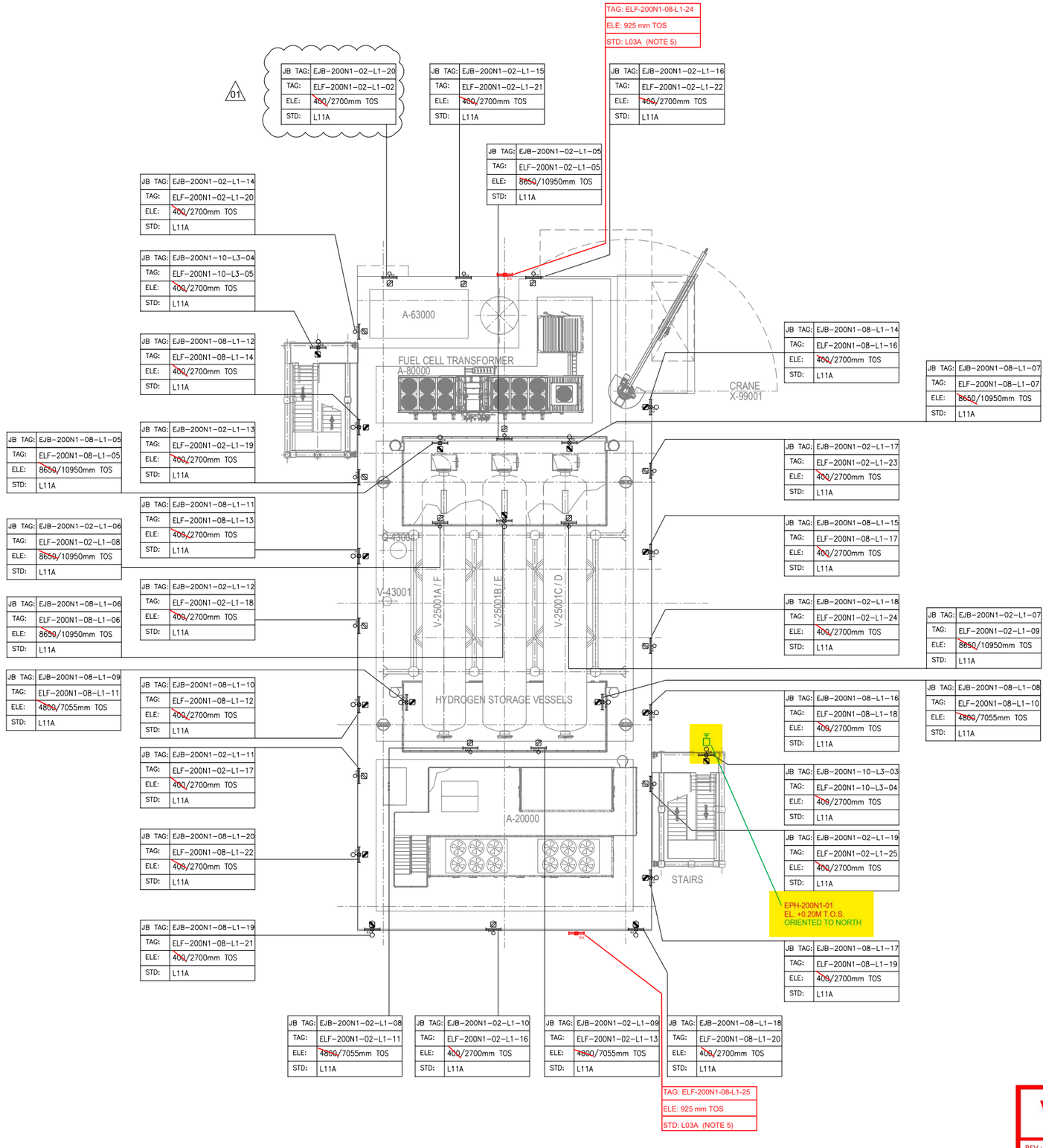
TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL EQUIPMENT LAYOUT
LV SWITCHROOM

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

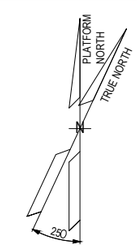
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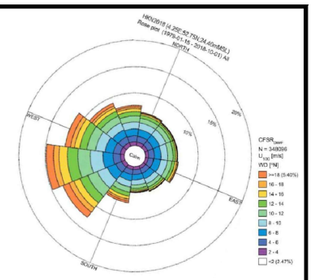
DRAWING NO. 123A90-DDL-EL-DL-20118

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.
5. FOR ELF-200N1-08-L1-24 AND ELF-200N1-08-L1-25 CONSTRUCTION DETAILS REFER TO DOC. 123A90-DDL-ST-DD-90076

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
- TWILIGHT RELAY SENSOR

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_G	09/01/25	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND | ROSETTI MARINO

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

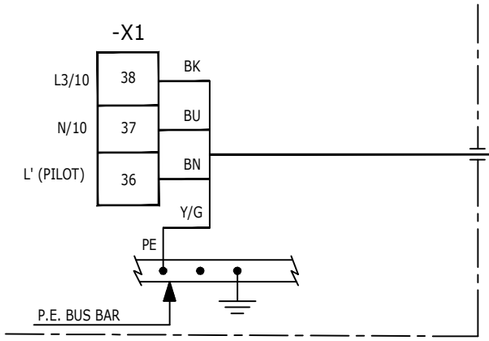
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN ASR	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 01/08/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20118	SHEET 1of2	REV. 01

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

FROM	TO

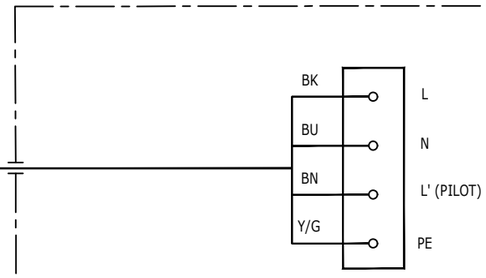
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +01/Q10



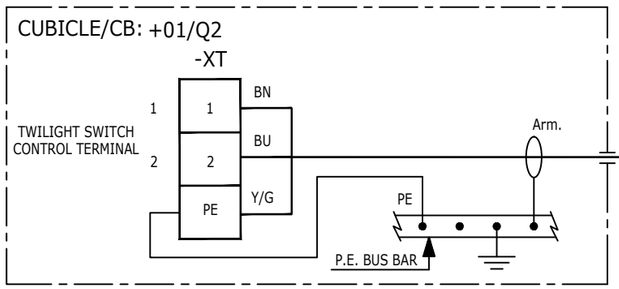
P-EJB-200N1-10-L3-01
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING STAIRS
TAG NUMBER: EJB-200N1-10-L3-01



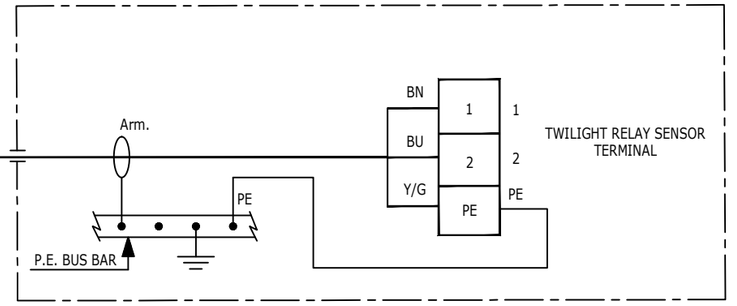
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +01/Q2



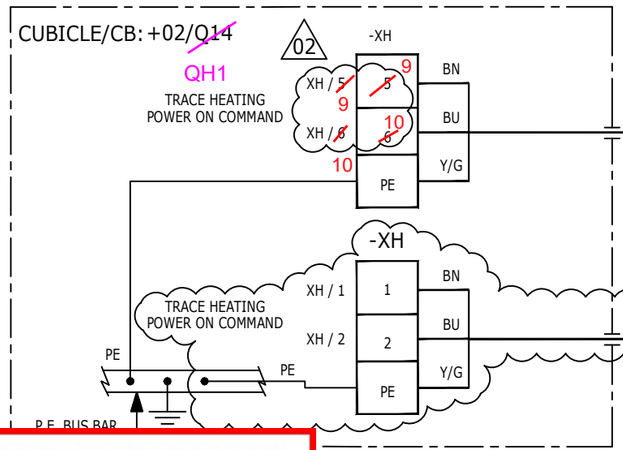
P-EPH-200N1-01
3G4 mm²

DESCRIPTION: TWILIGHT RELAY SENSOR
TAG NUMBER: EPH-200N1-01



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

CUBICLE/CB: +02/~~Q14~~ QH1

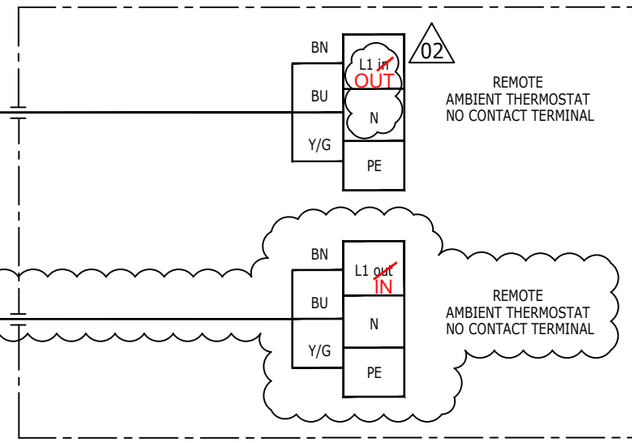


P-EAT-200N1-01
3G2.5 mm²

02

P-EAT-200N1-02
3G2.5 mm²

DESCRIPTION: REMOTE AMBIENT THERMOSTAT
TAG NUMBER: EAT-200N1-01



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

REV.:	DATE:	SIGNATURE:
2_K	12/02/25	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

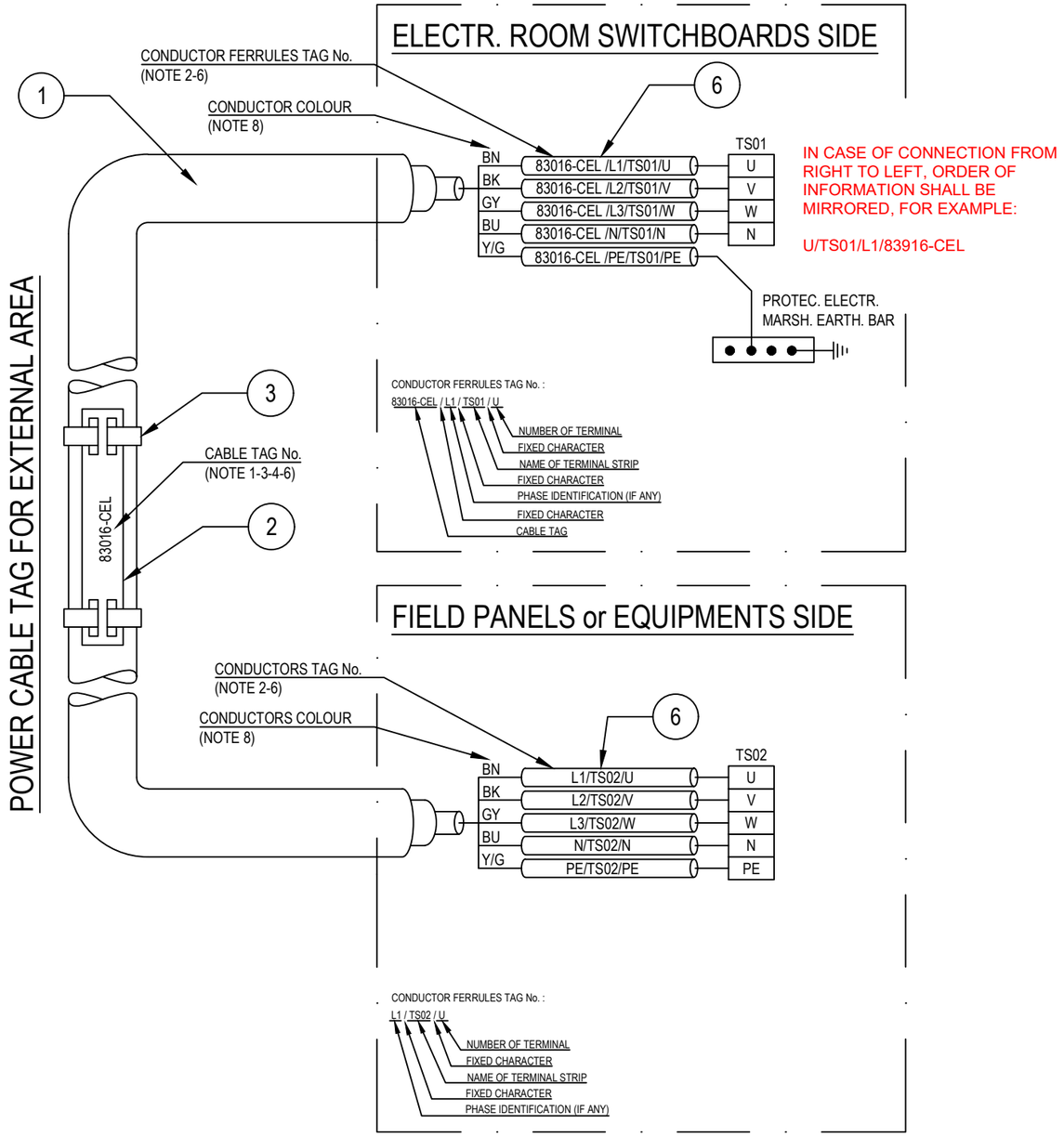
SCALE : 1:X

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DG-20149	047	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.

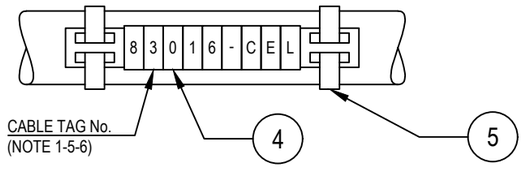
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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_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

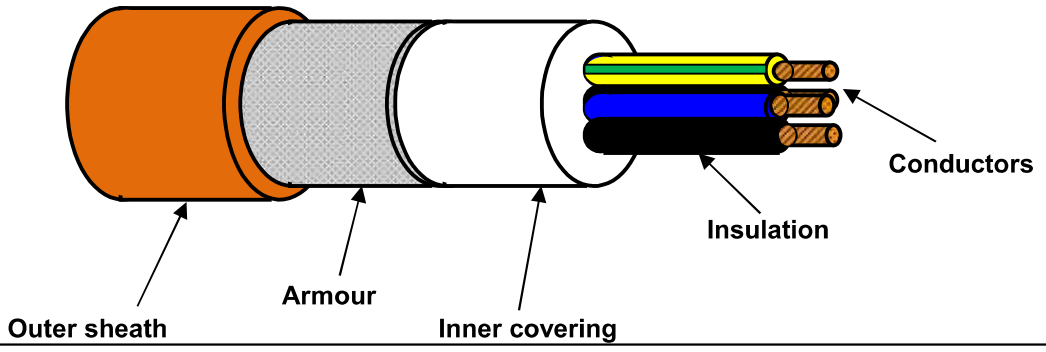
F.to UNI A3: 420mmx297mm

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

Tag Number	Info	Category	Discipl	Eng Status	NativeDoc	Service	Entity Type	Main Function	Module	Area	From Tag	From Main Fun	From Tag Secti	To Tag	To Main Func	To Tag Sectio	Material ID	Material Desc.	Gland St	From Glan	From Entry	From Fitti	To Gland	To Entry	To Fitting	Routing	Routing Manual
P-EPH-200N1-01		Cable	LSP	VFC	123A90-DDL-EL-LIS-20148						DP-200N1	LV 0,4 / 0,23 kV Distribution Switchgear	01/TW1	EPH-200N1-01	Twilight Relay	Sensor Terminal	ELECV38-3G4	Cable Cu Cl.2/MGT/EPR/LSZH/GSWB/LSZH 0,6/1kV 3G4mm² - Orange	M20	n.a.			T2_M20_ Double				L-450-101-LVT-030 / L-600-101-LVT-020 / E-MCT-204 / L-600-101-LVT-010 / L-750-101-LVT-015 / L-750-101-LVT-013 / L-750-101-LVT-014 / L-300-101-LVT-079 / L-150-102-LVT-004 / L-50-102-LVT-051

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

3G4 - L.V. POWER CABLE - Fire Resistant & Flame Retardant - ARMOURED



TECHNICAL FEATURES

Conductors :	**STRANDED** plain/bare annealed copper wires	IEC 60228 Class 2
Insulation :	Mica/Glass Tape (MGT) plus 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 :	**Galvanized Steel Wire Braid Armour (coverage ≥ 90%)**	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60092.360, Average Thickness 1,4 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G4 SQMM - MGT/EPR/LSZH/GSWB/LSZH - 0,6/1 KV - IEC 60331.21 -**	
	IEC 60332.1.2 - IEC 60332.3.22 - Year of Manufacture - CE + Meter Marking	
Under Armour diameter :	(13,0 ± 10%) mm	
Over Armour diameter :	(14,2 ± 10%) mm	
Outer diameter :	(17,0 ± 10%) mm	
Bending radius :	cable outer diameter x 10	(in fixed installation)
Voltage test :	3,5 kV a.c. for 5' (Between Cores - Armour)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 790 MΩ x Km (@ 20°C)	
Applicable Standards		
Design Guidelines :	**IEC 60092.353**	
ON COMPLETE CABLE		
Fire Resistant test :	**IEC 60331.21**	
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%)	
Hazardous Areas :	IEC 60079.14:2013 par.9.3.2a	
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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ROSETTI MARINO | PROVERLIS | CROSSWIND

ITEM	Tag	EPH-200N1-01	: Twilight Relay Sensor			Dwg	123A90-DDL-EL-DL-20105
	S/Sys	83-42	: Normal Lighting Stairs/Transition Piece			Module	UD
TASK	code	C10002371		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX00 Miscellaneous Electrical Equipment

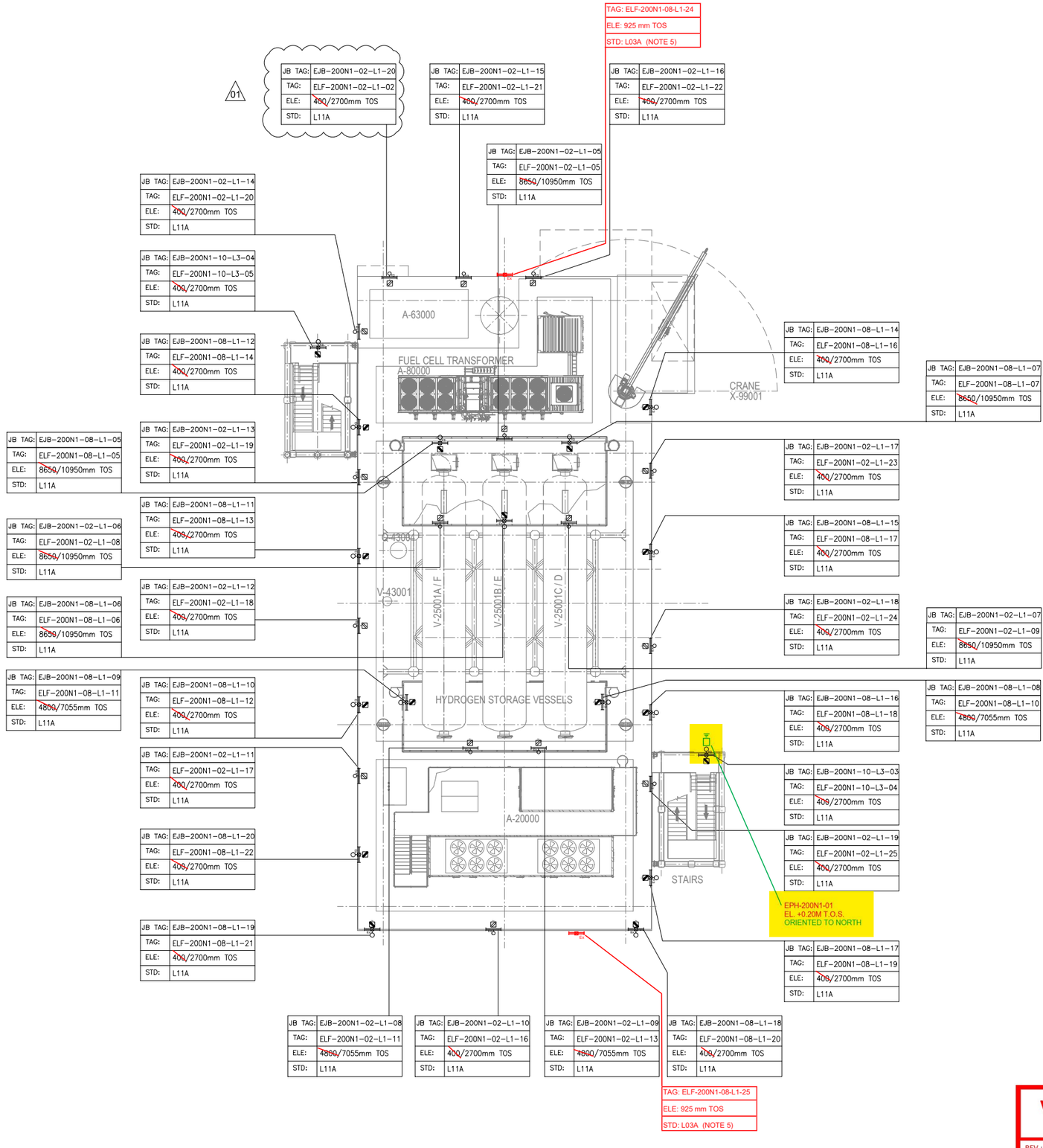
1	Check circuit is de-energized and safe.	OK
2	Check equipment is installed in accordance with layout drawing.	OK
3	Check equipment is undamaged and correcly tagged.	PL
4	Check nameplate data is correct.	OK
5	Check all bolts are fitted and all unused entries are suitably plugged.	OK
6	Check terminals 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:

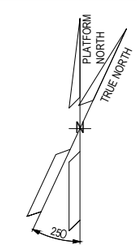
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-03-12	2025-03-13	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-03-12T15:47:21.892Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-03-13T10:22:15.502Z	

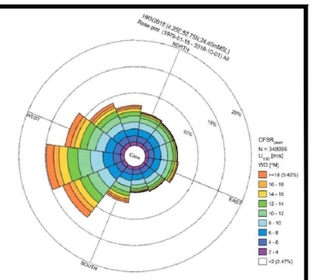
DRAWING NO. 123A90-DDL-EL-DL-20118

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.
5. FOR ELF-200N1-08-L1-24 AND ELF-200N1-08-L1-25 CONSTRUCTION DETAILS REFER TO DOC. 123A90-DDL-ST-DD-90076

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
- TWILIGHT RELAY SENSOR

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_G	09/01/25	V.Ramponi

ROSETTI MARINO SpA

CROSSWIND | ROSETTI MARINO

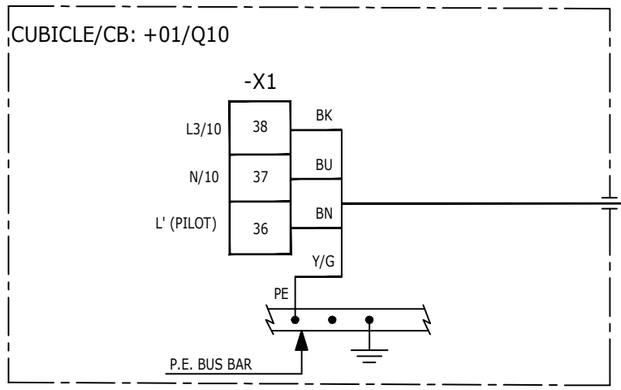
TITLE : BASE LOAD POWER HUB (BLPH)
LIGHTING & SOCKET LAYOUT – TOP DECK

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 1of2	REV. 01

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

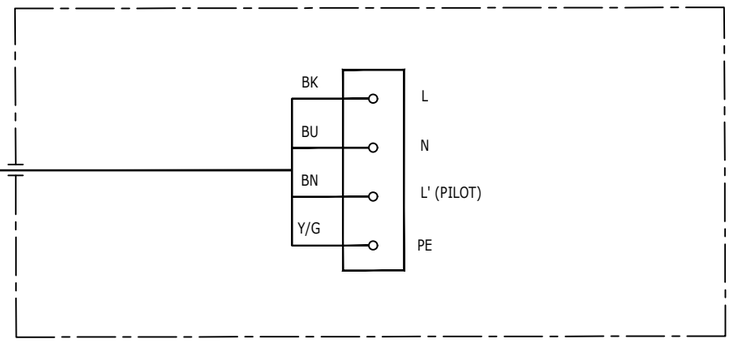
FROM	TO

DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1
CUBICLE/CB: +01/Q10

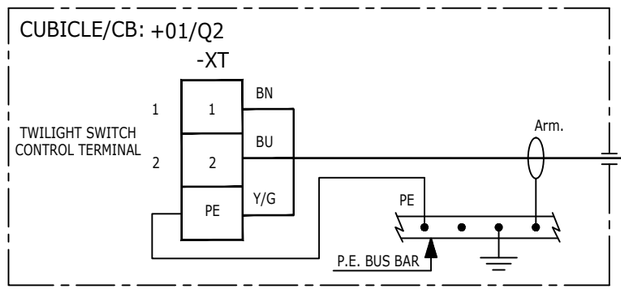


P-EJB-200N1-10-L3-01
4G4_E mm²

DESCRIPTION: EMERGENCY LIGHTING STAIRS
TAG NUMBER: EJB-200N1-10-L3-01

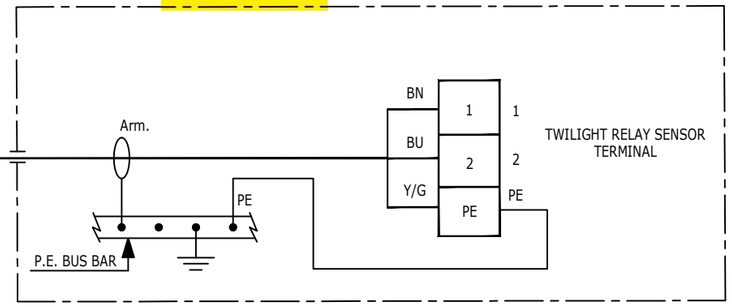


DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1
CUBICLE/CB: +01/Q2

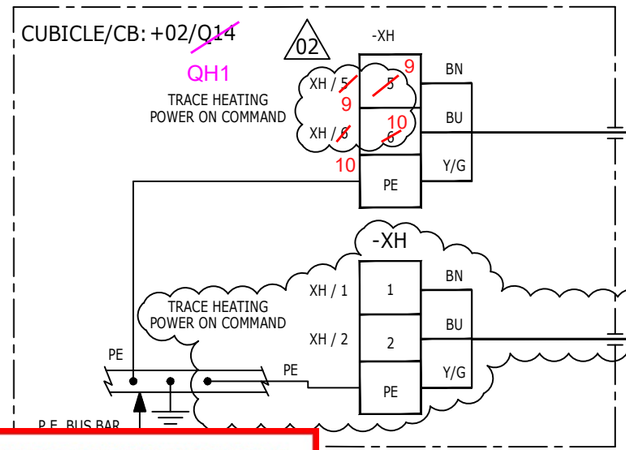


P-EPH-200N1-01
3G4 mm²

DESCRIPTION: TWILIGHT RELAY SENSOR
TAG NUMBER: EPH-200N1-01



DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1
CUBICLE/CB: +02/Q14

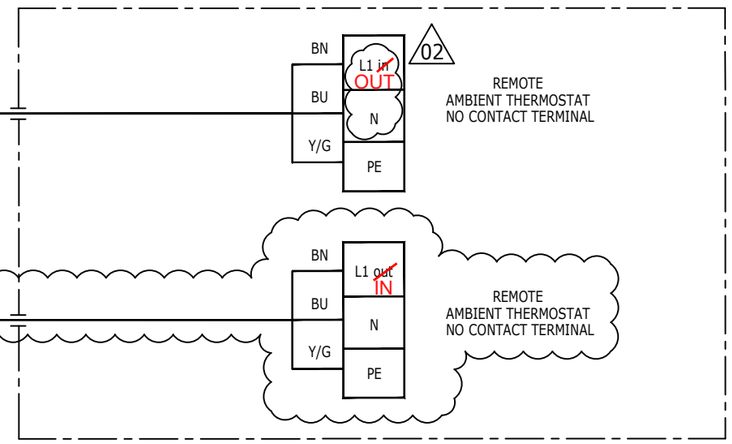


P-EAT-200N1-01
3G2.5 mm²

02

P-EAT-200N1-02
3G2.5 mm²

DESCRIPTION: REMOTE AMBIENT THERMOSTAT
TAG NUMBER: EAT-200N1-01



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

REV.:	DATE:	SIGNATURE:
2_K	12/02/25	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.	SHEET	REV.
	123A90-DDL-EL-DG-20149	047	02

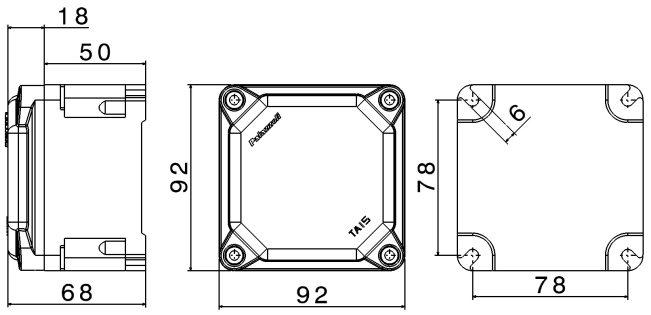
F.to UNI A3: 420mmx297mm

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

TAISBOX-EXU CUSTODIA IN TERMOINDURENTE 92x92x68 ATEX 2D2G

SERIE TAIS-Ex
Contenitore
CODICE 532035EX





Scheda Tecnica

Caratteristiche elettriche

Classe di isolamento	II
Tensione nominale isolamento	-
Tensione nominale	-
Potenza dissipabile	8W

Caratteristiche meccaniche

Materiale corpo	Resina Termoindurente Palazzoli
Trattamento superficiale	-
Finitura superficiale	-
Colore	Nero RAL 9005
Esecuzione	Da parete
Altezza cassetta	50
Altezza coperchio	18
Tipo coperchio	Cieco
N° moduli Guida DIN	-
Tipo ingressi	-
Tipo finestre	-
Grado di protezione IP	IP66
Grado protezione IP addizional	-
Resistenza agli urti	7J (IEC 60079-0)
Resistenza al Glow wire	960°C
Autoestinguenza secondo UL94	V-0
Categoria di corrosione	-
Temp. Ambiente di Esercizio	Min: -40°C ;Max: +40°C
Temp. Ambiente di Stoccaggio	Min: - ;Max: -
Dimensioni	92X92X68 mm
Dimensioni interne	-
Peso Netto	0,291 KG

Caratteristiche Atex

Zona di impiego ATEX	Zone 1 - 2 - 21 - 22
Esecuzione Atex Polveri (Tmax1)	II 2D - Ex tb IIIC Db
Esecuzione Atex Gas (Tmax1)	II 2G - Ex eb IIC Gb

Norme e Direttive

Omologazioni e Marchi	EX, IECEx, NYCE COLOMBIA, TUV EX
Direttive	2014/34/UE (ATEX), 2014/35/UE (LVD)
Norme di Riferimento	EN 60079-0/A11:2013, EN 60079-0:2012, EN 60079-31:2014, EN 60079-7:2007, EN 62208:2011

Le immagini sono puramente indicative. Palazzoli si riserva il diritto di apportare modifiche senza alcun preavviso.

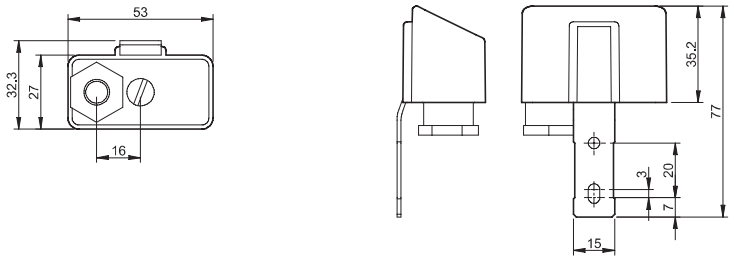
Accessori



011.02

Elemento fotosensibile (fornito con il relè crepuscolare) | 011.02

- Temperatura ambiente: –40…+70 °C
- Senza Cadmio
- Non polarizzato
- Doppio isolamento verso l'alimentazione del crepuscolare
- Non compatibile con i vecchi crepuscolari tipo 11.01 e 11.71 (con cui deve essere usato il fotosensore tipo 011.00)





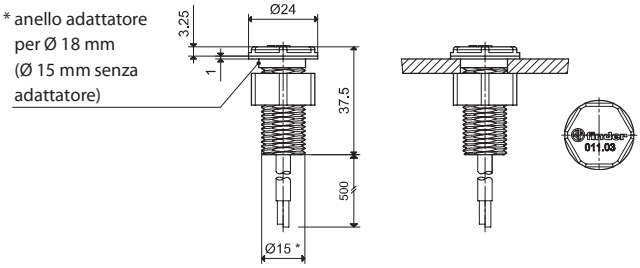
011.03

Elemento fotosensibile da incasso (grado di protezione: IP66/67) | 011.03

- Temperatura ambiente: –40…+70 °C
- Senza Cadmio
- Non polarizzato
- Doppio isolamento verso l'alimentazione del crepuscolare
- Non compatibile con i vecchi crepuscolari tipo 11.01 e 11.71
- Fornito con il crepuscolare (codice di confezionamento POA)

Cavo di uscita

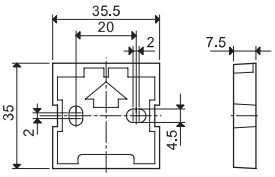
Materiale		PVC, antifiamma
Sezione	mm^2	0.5
Lunghezza del cavo	mm	500
Diametro	mm	5.0
Tensione nominale	V	300/500
Tensione nominale d'isolamento	kV	2.5
Temperatura massima	°C	+90





011.01

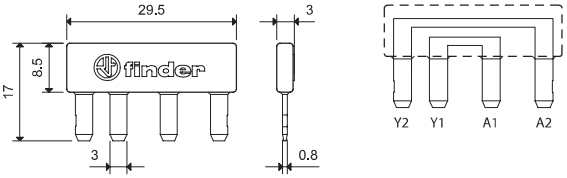
Supporto per fissaggio a pannello (fornita con il relè crepuscolare), larghezza 35 mm | 011.01



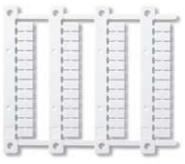


011.19

Connettore a 2 poli (per il tipo 11.91 e il Modulo di potenza 19.91) | 011.19



Per la connessione diretta dell'uscita ausiliaria del 11.91 (Y1-Y2) ai terminali di alimentazione del 19.91 (A1-A2)



060.48

Cartella tessere per stampanti a trasferimento termico "Cembre", per tipi 11.31, 11.41, 11.42, 19.91, plastica, 48 tessere, 6 x 12 mm | 060.48



019.01

Tessera d'identificazione, per tipi 11.41 e 11.42, plastica, 1 tessera, 17 x 25.5 mm | 019.01

II-2018, www.findernet.com

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