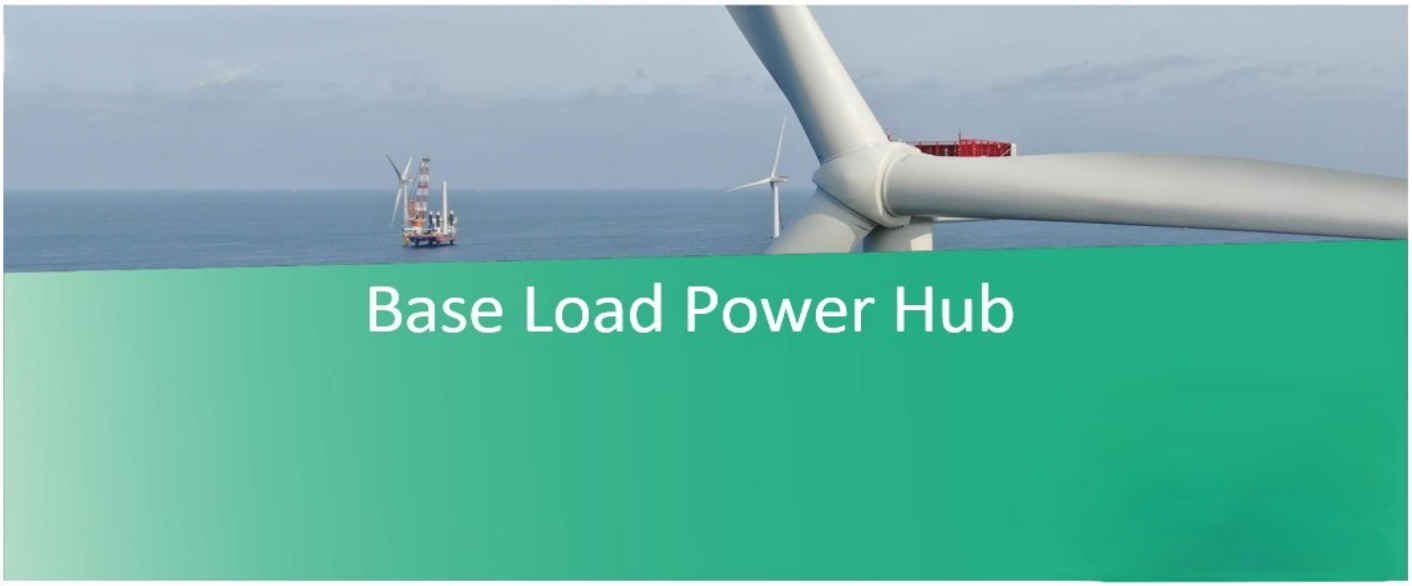
CROSSWIND

ROSETTI MARINO

PROVERLIS

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



MECHANICAL COMPLETION DOSSIER (ONSHORE)

SYSTEM	79 Emergency Shutdown systems
SUBSYSTEM	79-00 Emergency Shutdown Systems (SIS)

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

Sub System N°:	79-00	Tick as appropriate	ONSHORE	O
Description:	Emergency Shutdown Systems (SIS)		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*	O
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*	OK
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:	1		Issued on:	2024-11-29	
System:	79	/	Emergency Shutdown systems		
SubSystem:	79-00	/	Emergency Shutdown Systems (SIS)		

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	B
	'0	13

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	2024-11-30	2024-11-30	2024-11-30	2024-11-30
Signature	PROVERLIS Digitaly signed by Wolmer Borghi 2024-11-30T09:40:32.106Z	PROVERLIS Digitaly signed by Anthony Iveson 2024-11-30T09:45:52.087Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2024-11-30T09:56:50.788Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2024-11-30T09:56:57.324Z

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 79-00 & process: MC

Electrical	79-00 Emergency Shutdown Systems (SIS)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
83104-CEL	Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary	ONSHORE	C10000623	CPX09	100	2024-11-09	RFC 1
84301-CEL	AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line A	ONSHORE	C10000579	CPX09	100	2024-11-08	RFC 1
84302-CEL	AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line B	ONSHORE	C10000580	CPX09	100	2024-11-08	RFC 1

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 79-00 & process: MC

Instrumental	79-00 Emergency Shutdown Systems (SIS)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
B400-SIS-001	SIS -Controller and I/O Cabinet	ONSHORE	C10000844	CJX48	100	2024-11-29	RFC 1

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	79	Emergency Shutdown systems
SUBSYSTEM	79-00	Emergency Shutdown Systems (SIS)

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30000329	A	84301-CEL C10000579	Armour of the cable is not connected to BTM.	.		Gtangianu 2024-11-08	2024-11-29	Ecarotenuto 2024-11-29	2024-11-29
C30000330	A	84302-CEL C10000580	Armour of the cable is not connected to BTM.	.		Gtangianu 2024-11-08	2024-11-29	Ecarotenuto 2024-11-29	2024-11-29
C30000392	A	83104-CEL C10000623	multiple earthing cables connected to one earthing connection. (See attachment photo) .	.		Gtangianu 2024-11-08	2024-11-29	Ecarotenuto 2024-11-29	2024-11-29
C30000333	B	84301-CEL C10000579	Plastic cable ties to be replaced on external routing. Cable needs to be fixed also on cable trays inside B-400.	.		Gtangianu 2024-11-08			
C30000334	B	84302-CEL C10000580	Plastic cable ties to be replaced on external routing. Cable needs to be fixed also on cable trays inside B-400.	.		Gtangianu 2024-11-08			
C30000391	B	83104-CEL C10000623	Missing plastic cable tag outside the panel (DP-200N1) and on MCT inside and outside.	.		Gtangianu 2024-11-08			
C30000405	B	83104-CEL C10000623	Plastic cable ties to be replaced on external routing	.		Ecarotenuto 2024-11-09			

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	79	Emergency Shutdown systems
SUBSYSTEM	79-00	Emergency Shutdown Systems (SIS)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30000228	B	B400-SIS-001	Replace disconnector switches Q22 and Q23 with the right rating 32A, with NO auxiliary contact. Replace CB Q65 and Q66 with rating 10A curve			SLinari 2024-10-14			
C30000229	B	B400-SIS-001	N. 2 AI modules type SAI143-H63 must be installed in Node 1, Slots 1 and 2.			SLinari 2024-10-14			
C30000230	B	B400-SIS-001	Install and connect system cables (N. 2 type KS1-5/HF, N. 16 AKB331-M005/HF).			SLinari 2024-10-14			
C30000381	B	B400-SIS-001	Replace disconnector switches Q22 and Q23 with the right rating 32A, with NO auxiliary contact. Replace CB Q65 and Q66 with rating 10A curve			SLinari 2024-10-14			
C30000382	B	B400-SIS-001	N.2 AI modules type SAI143-H63 must be installed in Node 1, Slots 1 and 2.			SLinari 2024-10-14			
C30000383	B	B400-SIS-001	Install and connect system cables. (N.2 type KS1-5/HF, N. 16 AKB331-M005/HF			SLinari 2024-10-14			
C30001033	B	B400-SIS-001 C10000844	Cleaning is required inside the panels. See attcached photo.	.		Gtangianu 2024-11-29			
C30001040	B	B400-SIS-001 C10000844	All documentation listed in the SMIR, shall be re-issued in final revision and approved by RM and CW.	.		Gtangianu 2024-11-29			
C30001044	B	B400-SIS-001 C10000844	Earthing Internal base plate will be installed after commissioning.	.		Gtangianu 2024-11-29			

Section 2 CONSOLIDATED PUNCH LISTS

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	79	Emergency Shutdown systems
SUBSYSTEM	79-00	Emergency Shutdown Systems (SIS)

Electrical

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30000329	A	84301-CEL C10000579	Armour of the cable is not connected to BTM.	.		Gtangianu 2024-11-08	2024-11-29	Ecarotenuto 2024-11-29	2024-11-29
C30000330	A	84302-CEL C10000580	Armour of the cable is not connected to BTM.	.		Gtangianu 2024-11-08	2024-11-29	Ecarotenuto 2024-11-29	2024-11-29
C30000392	A	83104-CEL C10000623	multiple earthing cables connected to one earthing connection. (See attachment photo) .	.		Gtangianu 2024-11-08	2024-11-29	Ecarotenuto 2024-11-29	2024-11-29
C30000333	B	84301-CEL C10000579	Plastic cable ties to be replaced on external routing. Cable needs to be fixed also on cable trays inside B-400.	.		Gtangianu 2024-11-08	2025-02-26	Pschintu 2025-02-26	2025-02-26
C30000334	B	84302-CEL C10000580	Plastic cable ties to be replaced on external routing. Cable needs to be fixed also on cable trays inside B-400.	.		Gtangianu 2024-11-08	2025-02-26	Pschintu 2025-02-26	2025-02-26
C30000391	B	83104-CEL C10000623	Missing plastic cable tag outside the panel (DP-200N1) and on MCT inside and outside.	.		Gtangianu 2024-11-08	2025-04-09	Gtangianu 2025-04-09	2025-04-09
C30000405	B	83104-CEL C10000623	Plastic cable ties to be replaced on external routing	.		Ecarotenuto 2024-11-09	2025-02-26	Pschintu 2025-02-26	2025-02-26

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 79 Emergency Shutdown systems

SUBSYSTEM 79-00 Emergency Shutdown Systems (SIS)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30000228	B	B400-SIS-001	Replace disconnector switches Q22 and Q23 with the right rating 32A, with NO auxiliary contact. Replace CB Q65 and Q66 with rating 10A curve		DONE	SLinari 2024-10-14	SLinari 2024-12-10	SLinari 2024-12-10	2024-12-10
C30000229	B	B400-SIS-001	N. 2 AI modules type SAI143-H63 must be installed in Node 1, Slots 1 and 2.		INSTALLED	SLinari 2024-10-14	SLinari 2024-12-10	SLinari 2024-12-10	2024-12-10
C30000230	B	B400-SIS-001	Install and connect system cables (N. 2 type KS1-5/HF, N. 16 AKB331-M005/HF).		INSTALLED	SLinari 2024-10-14	SLinari 2024-12-10	SLinari 2024-12-10	2024-12-10
C30000381	B	B400-SIS-001	Replace disconnector switches Q22 and Q23 with the right rating 32A, with NO auxiliary contact. Replace CB Q65 and Q66 with rating 10A curve			SLinari 2024-10-14	2024-12-07	LNovaga 2024-12-07	2024-12-07
C30000382	B	B400-SIS-001	N.2 AI modules type SAI143-H63 must be installed in Node 1, Slots 1 and 2.			SLinari 2024-10-14	2024-12-07	LNovaga 2024-12-07	2024-12-07
C30000383	B	B400-SIS-001	Install and connect system cables. (N.2 type KS1-5/HF, N. 16 AKB331-M005/HF			SLinari 2024-10-14	2024-12-07	LNovaga 2024-12-07	2024-12-07
C30001033	B	B400-SIS-001 C10000844	Cleaning is required inside the panels. See attcached photo.	.		Gtangianu 2024-11-29	2025-01-03	Gtangianu 2025-01-03	2025-01-03
C30001040	B	B400-SIS-001 C10000844	All documentation listed in the SMIR, shall be re-issued in final revision and approved by RM and CW.	.		Gtangianu 2024-11-29	RDegliEsposti 2025-06-16	RDegliEsposti 2025-06-16	2025-06-16
C30001044	B	B400-SIS-001 C10000844	Earthing Internal base plate will be installed after commissioning.	.		Gtangianu 2024-11-29	2025-04-11	Gtangianu 2025-04-11	2025-04-11

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001044

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000844	1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001	SIS -Controller and I/O Cabinet	
1.3 Subsystem	79-00	Emergency Shutdown Systems (SIS)	

2 - OBSERVATION

Earthing Internal base plate will be installed after commissioning.

Name: Giovanni Tangianu

Date: 2024-11-29

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	2024-11-29
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Installed.

Name: Giovanni Tangianu

Date: 2025-04-11

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000228

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task		1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001		SIS -Controller and I/O Cabinet
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Replace disconnector switches Q22 and Q23 with the right rating 32A, with NO auxiliary contact. Replace CB Q65 and Q66 with rating 10A curve C, with NO auxiliary contact

Name

Date

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Stefano Linari
3.4 Activity code	FAT factory acceptance test	Date	2024-10-14
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

DONE

Name VENDOR YOKOGAWA

Date 2024-12-10

Signature

5 - CLEARANCE CHECK

DONE

Name Stefano Linari

Date 2024-12-10

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature


Q41
Q42

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000229

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task		1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001		SIS -Controller and I/O Cabinet
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

N. 2 AI modules type SAI143-H63 must be installed in Node 1, Slots 1 and 2.

Name

Date

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Stefano Linari
3.4 Activity code	FAT factory acceptance test	Date	2024-10-14
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

INSTALLED

Name VENDOR YOKOGAWA

Date 2024-12-10

Signature

5 - CLEARANCE CHECK

INSTALLED

Name Stefano Linari

Date 2024-12-10

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000230

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task		1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001		SIS -Controller and I/O Cabinet
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Install and connect system cables (N. 2 type KS1-5/HF, N. 16 AKB331-M005/HF).

Name

Date

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Stefano Linari
3.4 Activity code	FAT factory acceptance test	Date	2024-10-14
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

INSTALLED

Name VENDOR YOKOGAWA

Date 2024-12-10

Signature

5 - CLEARANCE CHECK

INSTALLED

Name Stefano Linari

Date 2024-12-10

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000329

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000579	1.4 Discipline	Electrical
1.2 Item	84301-CEL		AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line A
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Armour of the cable is not connected to BTM.

Name: Giovanni Tangianu

Date: 2024-11-08

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	2024-11-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Eleonora Carotenuto

Date: 2024-11-29

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000330

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000580	1.4 Discipline	Electrical
1.2 Item	84302-CEL		AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line B
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Armour of the cable is not connected to BTM.

Name: Giovanni Tangianu

Date: 2024-11-08

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	2024-11-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Eleonora Carotenuto

Date: 2024-11-29

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000333

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000579	1.4 Discipline	Electrical
1.2 Item	84301-CEL		AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line A
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Plastic cable ties to be replaced on external routing. Cable needs to be fixed also on cable trays inside B-400.

Name: Giovanni Tangianu

Date: 2024-11-08

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	2024-11-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Paolo Schintu

Date: 2025-02-26

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000334

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000580	1.4 Discipline	Electrical
1.2 Item	84302-CEL		AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line B
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Plastic cable ties to be replaced on external routing. Cable needs to be fixed also on cable trays inside B-400.

Name: Giovanni Tangianu
Date: 2024-11-08
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	2024-11-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Paolo Schintu
Date: 2025-02-26
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000381

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task		1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001		SIS -Controller and I/O Cabinet
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Replace disconnector switches Q22 and Q23 with the right rating 32A, with NO auxiliary contact. Replace CB Q65 and Q66 with rating 10A curve C, with NO auxiliary contact

Name

Date

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Stefano Linari
3.4 Activity code	FAT factory acceptance test	Date	2024-10-14
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

Name

Date

Signature

5 - CLEARANCE CHECK

Refer to punch number: C30000228

Name Lorenzo Novaga

Date 2024-12-07

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000382

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task		1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001		SIS -Controller and I/O Cabinet
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

N.2 AI modules type SAI143-H63 must be installed in Node 1, Slots 1 and 2.

Name

Date

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Stefano Linari
3.4 Activity code	FAT factory acceptance test	Date	2024-10-14
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

Name

Date

Signature

5 - CLEARANCE CHECK

Refer to punch number: C30000229

Name Lorenzo Novaga

Date 2024-12-07

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000383

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task		1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001		SIS -Controller and I/O Cabinet
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Install and connect system cables. (N.2 type KS1-5/HF, N. 16 AKB331-M005/HF

Name

Date

Signature

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Stefano Linari
3.4 Activity code	FAT factory acceptance test	Date	2024-10-14
3.5 Action by		Signature	--- Proverlis --- Duplicata issued from database information Signature is on original form

4 - PERFORMED ACTION

Name

Date

Signature

5 - CLEARANCE CHECK

Refer to punch number: C30000230

Name Lorenzo Novaga

Date 2024-12-07

Signature

6- CLEARANCE APPROVAL

Name

Date

Signature

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000391

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000623	CPX09	1.4 Discipline	Electrical
1.2 Item	83104-CEL			Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary
1.3 Subsystem	79-00			Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Missing plastic cable tag outside the panel (DP-200N1) and on MCT inside and outside.

Name: Giovanni Tangianu
Date: 2024-11-08
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	2024-11-08
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

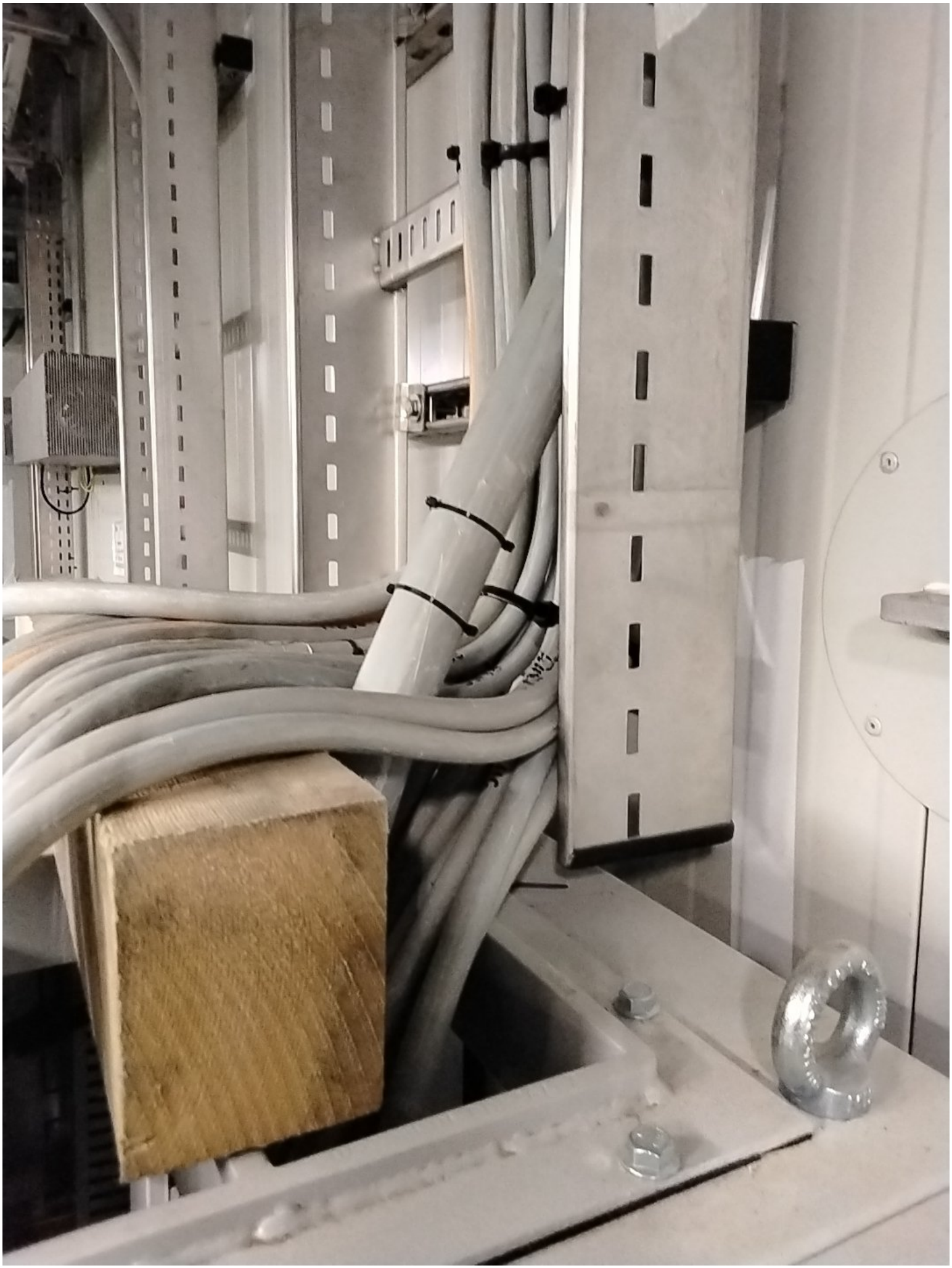
Installed.

Name: Giovanni Tangianu
Date: 2025-04-09
Signature:

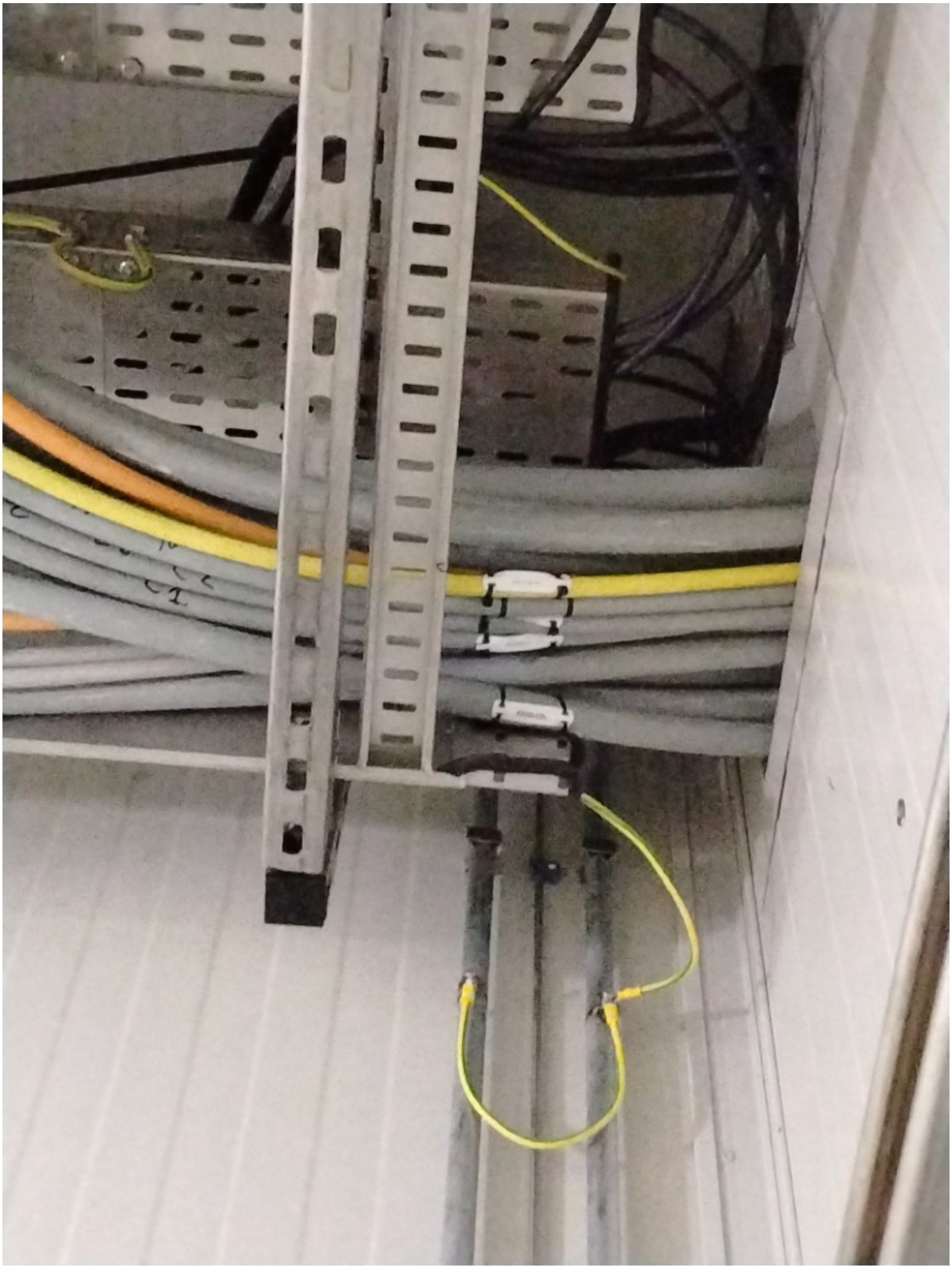
6- CLEARANCE APPROVAL

Name:
Date:
Signature:

2024-11-08 09:18 By Giovanni Tangianu



2024-11-08 09:21 By Giovanni Tangianu



ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000392

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000623	1.4 Discipline	Electrical
1.2 Item	83104-CEL		Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary
1.3 Subsystem	79-00		Emergency Shutdown Systems (SIS)

2 - OBSERVATION

multiple earthing cables connected to one earthing connection. (See attachment photo) .

Name: Giovanni Tangianu
Date: 2024-11-08
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	2024-11-08
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

DONE

Name: Eleonora Carotenuto
Date: 2024-11-29
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:


PE-83124-CEL
PE-83108-CEL

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30000405

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000623	CPX09	1.4 Discipline	Electrical
1.2 Item	83104-CEL			Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary
1.3 Subsystem	79-00			Emergency Shutdown Systems (SIS)

2 - OBSERVATION

Plastic cable ties to be replaced on external routing

Name: Giovanni Tangianu

Date: 2024-11-08

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Eleonora Carotenuto
3.4 Activity code	MC Mechanical Completion	Date	2024-11-09
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Paolo Schintu

Date: 2025-02-26

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001033

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000844	1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001	SIS -Controller and I/O Cabinet	
1.3 Subsystem	79-00	Emergency Shutdown Systems (SIS)	

2 - OBSERVATION

Cleaning is required inside the panels.
See attcached photo.

Name: Giovanni Tangianu
Date: 2024-11-29
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	2024-11-29
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:
Date:
Signature:

5 - CLEARANCE CHECK

Done.

Name: Giovanni Tangianu
Date: 2025-01-03
Signature:

6- CLEARANCE APPROVAL

Name:
Date:
Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30001040

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000844	1.4 Discipline	Instrumental
1.2 Item	B400-SIS-001	SIS -Controller and I/O Cabinet	
1.3 Subsystem	79-00	Emergency Shutdown Systems (SIS)	

2 - OBSERVATION

All documentation listed in the SMIR, shall be re-issued in final revision and approved by RM and CW.

Name: Giovanni Tangianu

Date: 2024-11-29

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	2024-11-29
3.5 Action by	VND Vendor	Signature	

4 - PERFORMED ACTION

Name: Raffaele Degli Esposti

Date: 2025-06-16

Signature:

5 - CLEARANCE CHECK

The issuance of the as-built documentation is part of the vendor's contractual obligations. This punch item is essentially a warning/reminder. All documentation listed in the SMIR must be approved with code 1 by RM and CW. The final vendor dossier is subject to approval.

Strictly speaking, this punch should not have been raised, as the requirement to issue final documentation was already implicit in the vendor scope. In principle, the same punch would have applied to all vendor packages.

Name: Raffaele Degli Esposti

Date: 2025-06-16

Signature:

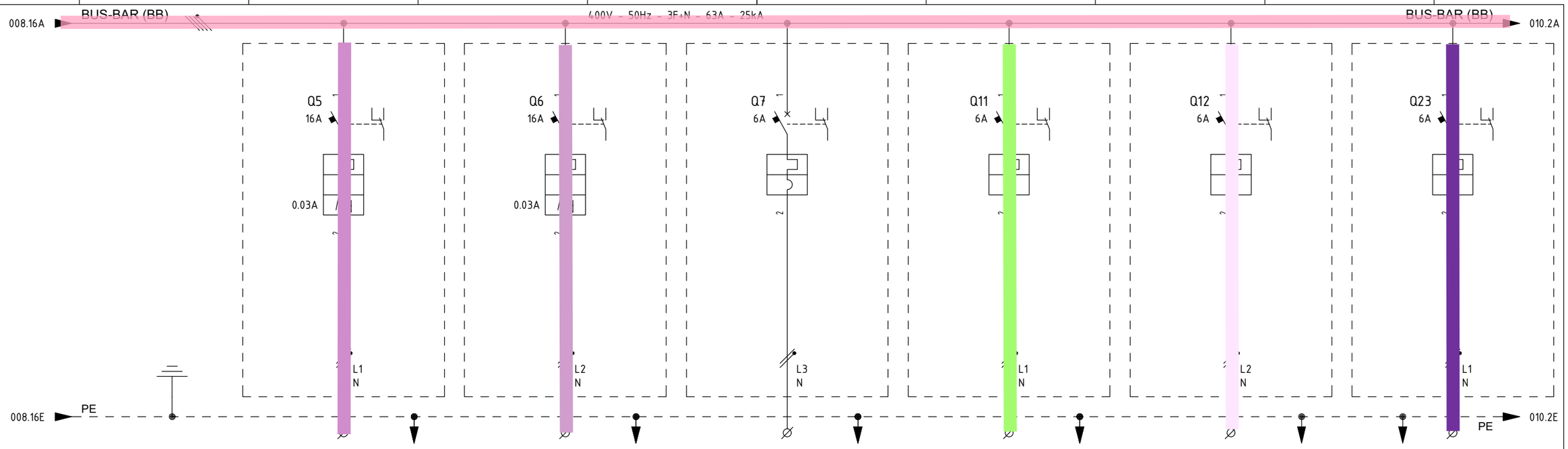
6- CLEARANCE APPROVAL

Name:

Date:

Signature:

Section 3 SYSTEM,SUB-SYSTEM LIMIT DRAWINGS



ITEM			1	ESO-200N1-05-L1-01		ESO-200N1-06-L2-01		-		ESH-200N1-11-L1-01		ESH-200N1-12-L2-01		B400-SIS-001	
UTILITY			2	SMALL POWER SOCKET (UPPER DECK)		SMALL POWER SOCKET (LOWER DECK)		SPARE		SPACE HEATERS JB - WIND FARM SUBSEA CABLE		SPACE HEATERS JB - SOLAR SUBSEA CABLE		SIS-CONTROLLER AND I/O CABINET - AUXILIARY	
CUBICLE			3	+03		+03		+03		+03		+03		+03	
RATED POWER | RATED CURRENT			4/5	3 KW	14.49 A	3 KW	14.49 A	0.726 KW	3.95 A	0.25 KW	1.14 A	0.25 KW	1.14 A	0.5 KW	2.72 A
TYPICAL FUNCTIONAL			6	-		-		-		-		-		-	
CIRCUIT BREAKER (ABB)	TYPE		7	S302P-C16 + DDA202 AC-25/0.03		S302P-C16 + DDA202 AC-25/0.03		S302P-C6		S302P-C6		S302P-C6		S302P-C6	
	VERSION		8	2P / MINIATURE		2P / MINIATURE		2P / MINIATURE		2P / MINIATURE		2P / MINIATURE		2P / MINIATURE	
	TRIP UNITS		9	In=16A - Curve C / Id=0.03A Class AC		In=16A - Curve C / Id=0.03A Class AC		In=6A - Curve C		In=6A - Curve C		In=6A - Curve C		In=6A - Curve C	
	Icu	KA	10	25kA		25kA		25kA		25kA		25kA		25kA	
OVERLOAD	L	Range A	11	-		-		-		-		-		-	
		Range t	12	-		-		-		-		-		-	
SEL. SHORT-CIRCUIT	S	Range A	13	-		-		-		-		-		-	
		Range t	14	-		-		-		-		-		-	
INST. SHORT-CIRCUIT	I	Range A	15	SUBSYSTEM 83-55		SUBSYSTEM 83-55		-		SUBSYSTEM 81-00		SUBSYSTEM 83-10		SUBSYSTEM 79-00	
		Range t	16	-		-		-		-		-		-	
EARTH FAULT PROTECTION	G	Range A	17	-		-		-		-		-		-	
		Range t	18	-		-		-		-		-		-	
CONTACTOR (ABB)			19	-		-		-		-		-		-	
THERMAL OVERLOAD RELAY (ABB)			20	-		-		-		-		-		-	
SURGE ARRESTERS (DHENN)			21	-		-		-		-		-		-	
TOROIDAL CURRENT TRANSFORMER (FRER)			22	-		-		-		-		-		-	
FUSE HOLDER (ABB)			23	-		-		-		-		-		-	
TWILIGHT SWITCH (ABB)			24	-		-		-		-		-		-	
VOLTMETER (FRER)			25	-		-		-		-		-		-	
CURRENT TRANSFORMER FOR MEASURE (FRER)	TYPE		26	-		-		-		-		-		-	
	PERFORMANCE/CLASS		27	-		-		-		-		-		-	
VOLTAGE TRANSFORMER FOR MEASURE (FRER)	TYPE		28	-		-		-		-		-		-	
	PERFORMANCE/CLASS		29	-		-		-		-		-		-	
POWER TERM. BLOCK (CABUR)		Type/mm²	30	SCREW / 10		SCREW / 10		SCREW / 4		SCREW / 4		SCREW / 4		SCREW / 4	
POWER CONDUCTOR		mm²	31	3G10		3G10		3G2.5		3G2.5		3G2.5		3G2.5	

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)

IMESA ELECTRICAL ENGINEERING

DWG n° : 231298/SD/13

Item n° : PF1002888/101

CROSSWIND

ROSETTI MARINO

TITLE : "DP-200N1"

SINGLE LINE DIAGRAM

Single Line Drawing

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

SCALE : NTS

A3

DRAWING NO. 1723002197-EL-DG-00013

SHEET 009

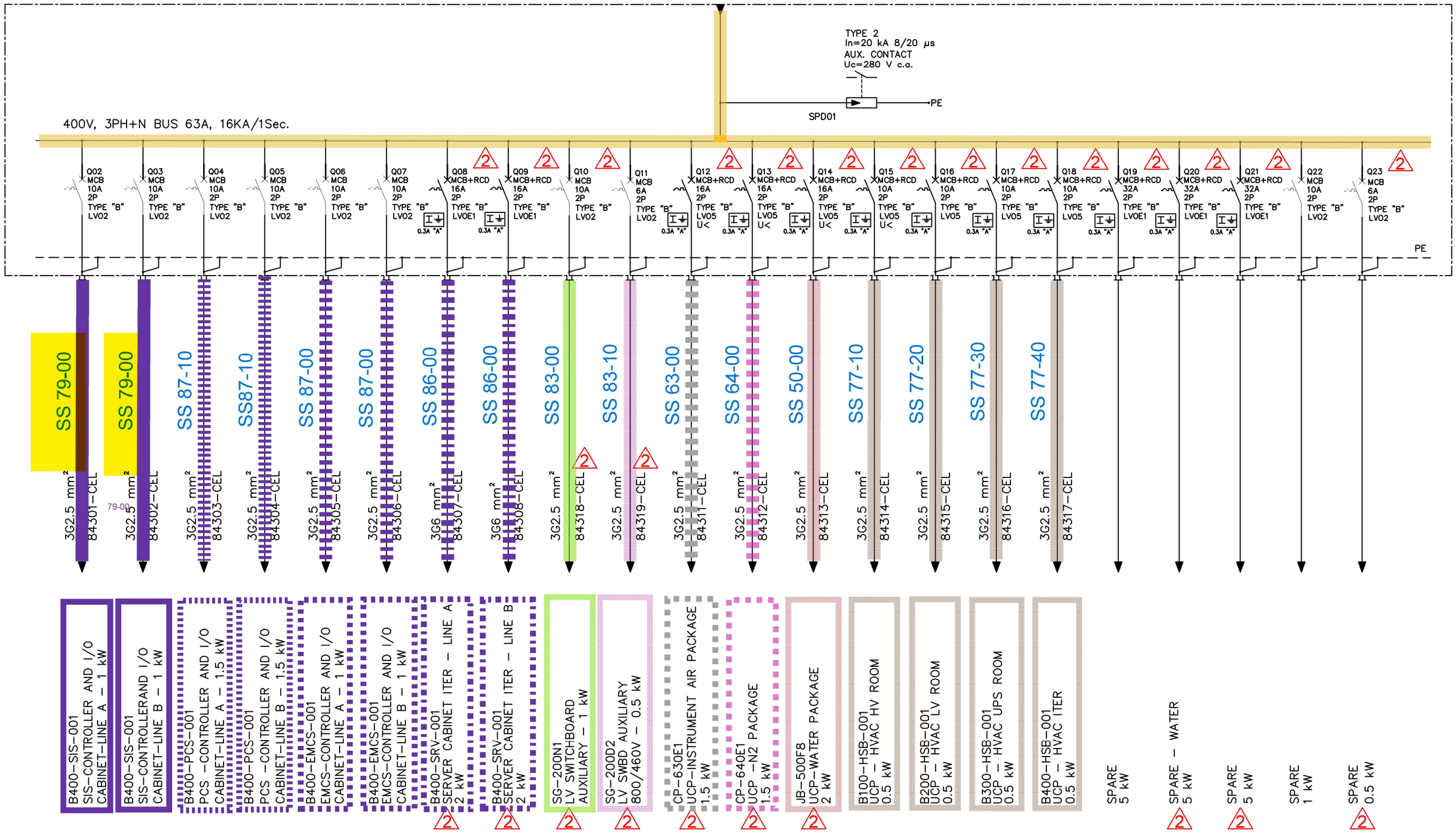
REV. 03

F.to UNI A3: 420mmx297mm

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

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

AC UPS DISTRIBUTION BOARD–PAS
DP–200F3



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

CROSSWIND

ROSETTI MARINO

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

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

SCALE : 1:X

A3

DRAWING NO. 123A90–DDL–EL–DG–20160

SHEET 005

REV. 02

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

F.to UNI A3: 420mmx297mm

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: 79-00 & process: MC & discipline : E

Electrical	79-00 Emergency Shutdown Systems (SIS)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
83104-CEL	Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary	ONSHORE	C10000623	CPX09	100	2024-11-09	RFC 1
84301-CEL	AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line A	ONSHORE	C10000579	CPX09	100	2024-11-08	RFC 1
84302-CEL	AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line B	ONSHORE	C10000580	CPX09	100	2024-11-08	RFC 1

ITEM	Tag	84301-CEL	: AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line A			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)			Module	LD_B-300 / LD_B-400
TASK	code	C10000579	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 3G2.5 Color Orange

From DP-200F3 To B400-SIS-001

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	84301-CEL	: AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line A			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)			Module	LD_B-300 / LD_B-400
TASK	code	C10000579		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

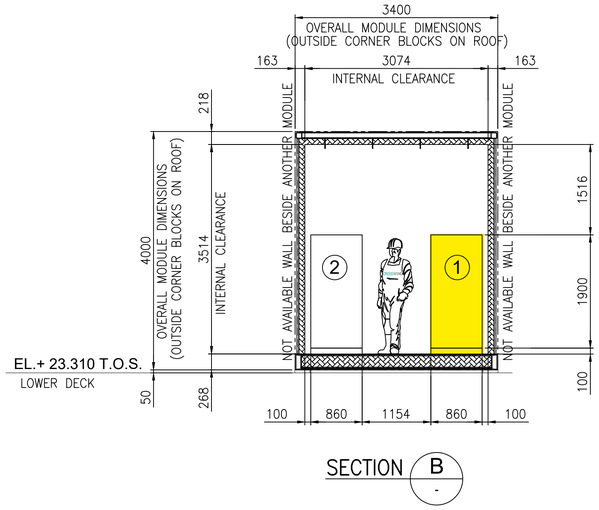
CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0.4	
6		PH 2	0.4	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		0.4	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0.5	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

TESTING INSTRUMENTS USED

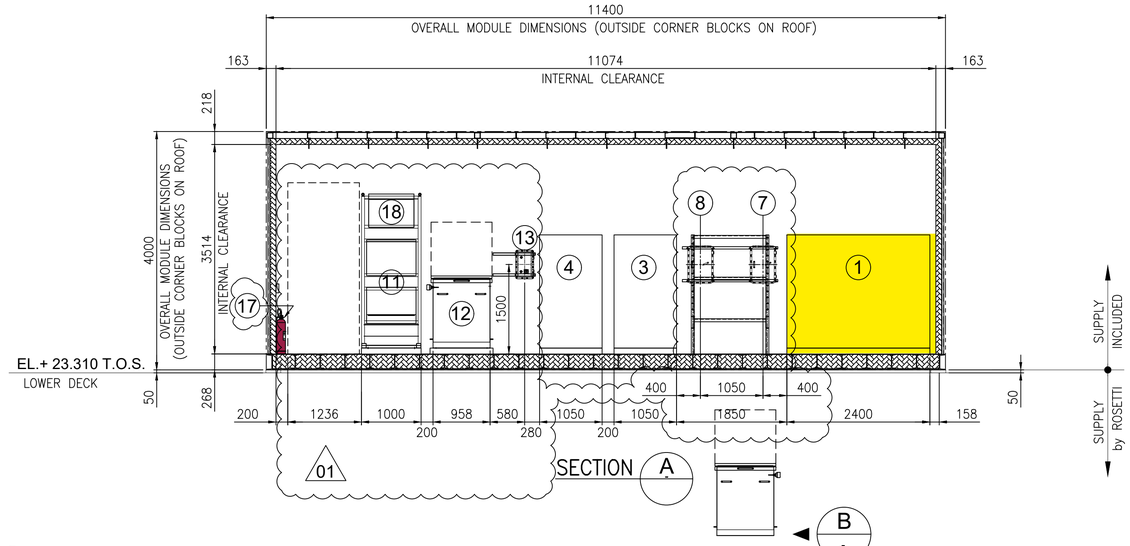
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

Comments:

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (Rosetti Marino)	
Name	Carmelo Bongiovanni	Giovanni Tangianu	
Date	2024-11-06	2024-11-08	
Signature	PROVERLIS Digitaly signed by Carmelo Bongiovanni 2024-11-06T17:10:41.357Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2024-11-08T10:27:22.304Z	



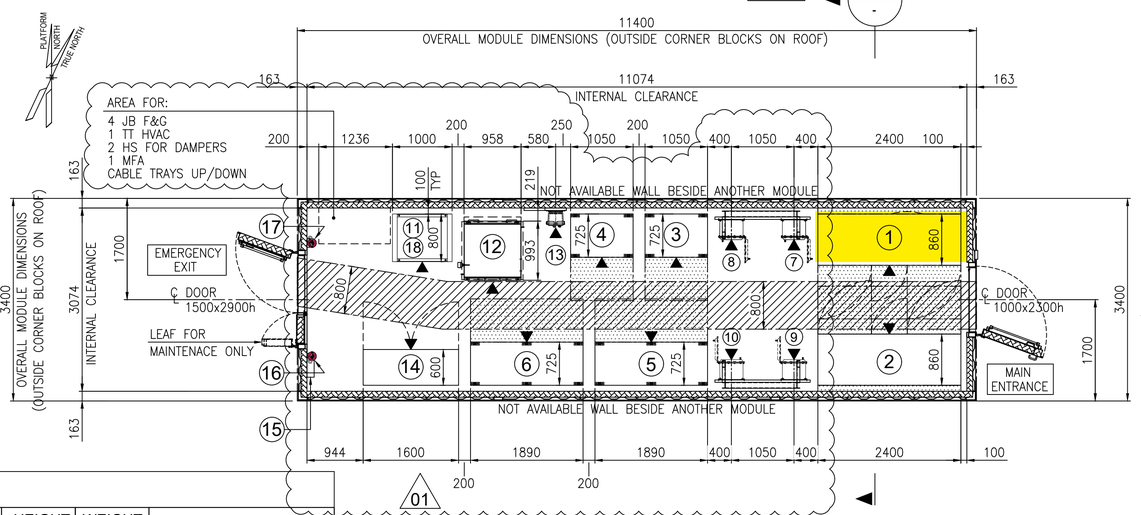
SECTION B



01

SECTION A

B



A

01

EQUIPMENT LAYOUT
"B-300" UPSs & BATTERIES SWITCHROOM
BOTTOM PLAN

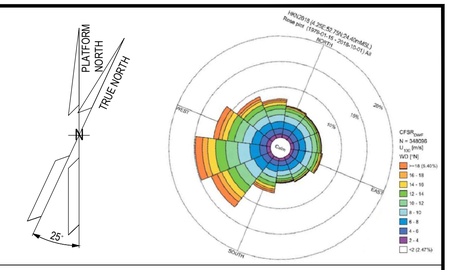
EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	WEIGHT (Kg)	NOTES
1	UP-200F3	AC UPS 35kVA	2400	860	1915	2258	
2	UP-200F4	AC UPS 15kVA	2400	860	1915	2258	
3	BA-200F3A	BATTERY RACK GEL VRLA 7y AC UPS 35kVA	1050	725	1272	914	
4	BA-200F3B	BATTERY RACK GEL VRLA 7y AC UPS 35kVA	1050	725	1272	914	
5	BA-200F4A	BATTERY RACK GEL VRLA 7y AC UPS 15kVA	1890	725	1761	3429	
6	BA-200F4B	BATTERY RACK GEL VRLA 7y AC UPS 15kVA 01	1890	725	1761	3429	
7	CB-200F3A	ISOLATOR BOX AC UPS 35kVA	450	341	632	100	
8	CB-200F3B	ISOLATOR BOX AC UPS 35kVA	450	341	632	100	
9	CB-200F4A	ISOLATOR BOX AC UPS 15kVA	450	341	632	100	
10	CB-200F4B	ISOLATOR BOX AC UPS 15kVA	450	341	632	100	
11	NC-200F2	NAVAID PANEL 01	1000	800	2600	535	
12	BA-200F2	BATTERY BOX NAVAID	958	993	1210	1552	
13	CB-200F2	ISOLATOR BOX NAVAID	500	400	765	70	
14	B3000-HSB-001	DISTRIBUTION & HVAC PANEL - AC/UPS ROOM	1600	600	2300	1150	
15	-	EYE WASH STATION	228	80	290	5	
16	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	20	
17	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	20	
18	BC-200F2	BATTERY CHARGER NAVAID 01	-	-	-	-	INCLUDED IN THE RACK OF NC-200F2

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DL-20106

REV.:	DATE:	SIGNATURE:
1_A	08/08/24	G.Randi

ROSETTI MARINO SpA



NOTES

01

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. EQUIPMENT DIMENSION ARE DEFINED ACCORDING TO THE LATEST DRAWING AND INFORMATION FROM THE VENDOR
3. DOCUMENT VALID ONLY FOR ELECTRICAL COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.
   - "B-300" – GENERAL ARRANGEMENT DRAWING DOC. N. 1724000049-AR-DA-00016
   - "B-300" – DETAILED DRAWINGS DOC. N. 1724000049-AR-DD-00020

LEGEND

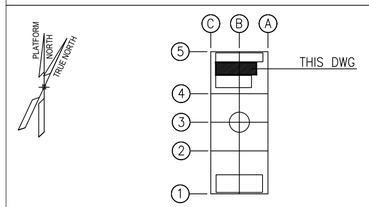
U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR – WIDTH 800mm.
_____ MAINTENANCE AREA – VENDOR REQUIREMENT
_____ SWITCHGEAR ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

HOLDS

REFERENCE

DOCUMENT TITLE	DOCUMENT NUMBER
"B-300" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DA-00016
"B-300" DETAILED DRAWINGS	1724000049-AR-DD-00020
"B-300" ARCHITECTURAL GENERAL LAYOUT PLAN, WIEW, SECTIONS & TYP. DETAILS	123A90-DDL-AR-DL-10022
PLOT PLAN – LOWER & UPPER DECK	123A90-DDL-PP-DL-70070

KEY PLAN



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	23/07/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	28/03/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND
ROSETTI MARINO

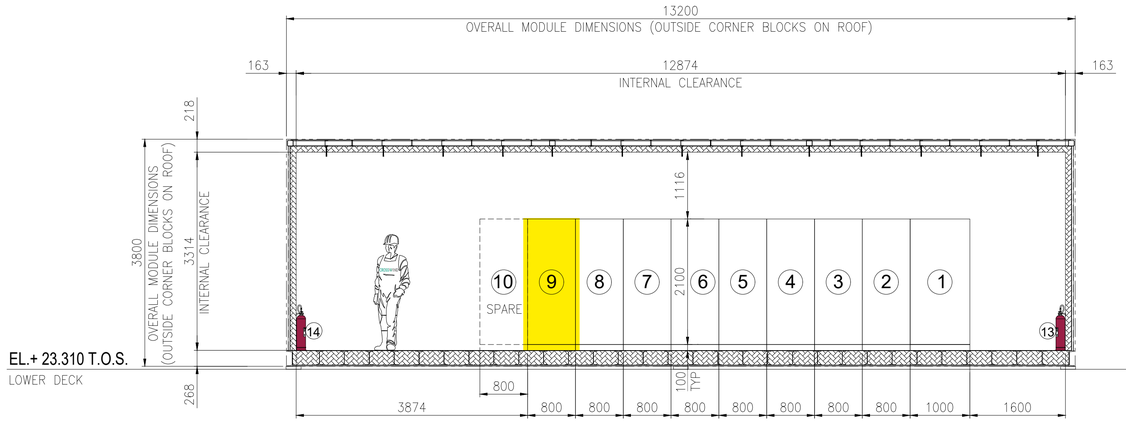
TITLE :
BASE LOAD POWER HUB (BLPH)
ELECTRICAL EQUIPMENT LAYOUT
UPSs & BATTERIES SWITCHROOM

CONTRACT NO./TITLE	CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK		SCALE 1:50
DRAWN SAM	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 23/07/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20106	SHEET 001	REV. 01

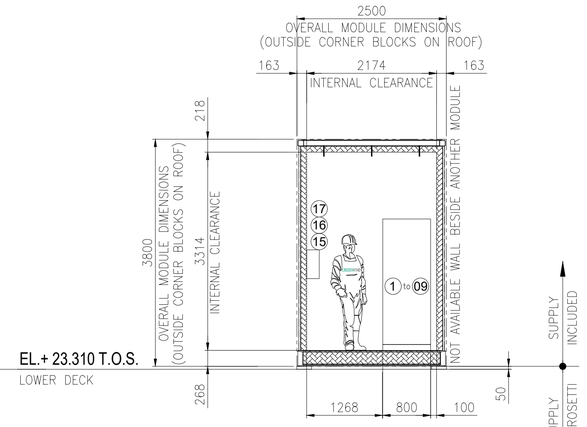
DRAWING NO. 123A90-DDL-EL-DL-20106 REV. 01

File Name : 123A90-DDL-EL-DL-20106 Rev.00.dwg

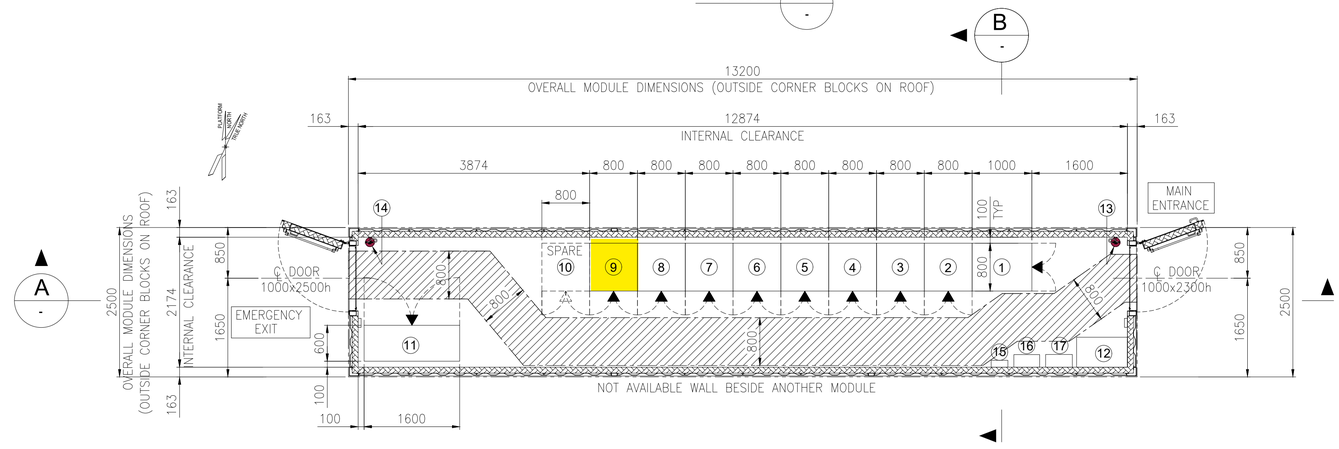
DRAWING NO. 123A90-DDL-IN-DL-40012 REV. 03



SECTION A -



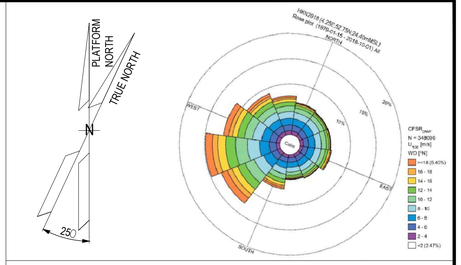
SECTION B -



EQUIPMENT LAYOUT
"B-400" I&T EQUIPMENT ROOM
BOTTOM PLAN

EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	NOTE
1	B400-SRV-001	SERVER CABINET	1000	800	2100	
2	B400-NET-001	NETWORK CABINET	800	800	2100	
3	B400-EMCS-001	EMCS SYSTEM CABINET	800	800	2100	
4	B400-PCS-002	PCS MARSHALLING CABINET	800	800	2100	
5	B400-PCS-001	PCS SYSTEM CABINET 03	800	800	2100	
6	B400-FGS-003	FGS MARSHALLING CABINET 2	800	800	2100	
7	B400-FGS-002	FGS MARSHALLING CABINET 1	800	800	2100	
8	B400-FGS-001	FGS SYSTEM CABINET	800	800	2100	
9	B400-SIS-001	SIS SYSTEM/MARSHALLING CABINET	800	800	2100	
10	-	SPARE				
11	B400-HSB-001	DISTRIBUTION & HVAC PANEL - I&T ROOM	1600	600	2300	
12	-	TABLE	850	500	750	
13	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
14	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
15	-	FIRST AID KIT	280	115	200	
16	-	RESUSCITATION UNIT	430	210	480	
17	-	CABINET INCLUDED N.10 ESCAPE MASK	448	213	422	



NOTES

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DOCUMENT VALID ONLY FOR INSTRUMENT COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.

LEGEND

U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR – WIDTH 800mm.
_____ EQUIPMENT ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

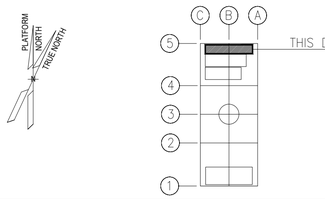
HOLDS

.

REFERENCE

DOCUMENT TITLE	DOCUMENT NUMBER
Control System Architecture Detailed Drawings	123A90-DDL-IN-DD-40096
Data Network Architecture Drawings	123A90-DDL-IN-DD-40019
Earthing layouts drawings (CCR, ITER)	123A90-DDL-IN-DL-40013
Instrument and Telecom MCT Layout – Lower Deck	123A90-DDL-IN-DL-40086
"B-400" I&T Equipment Room – Architectural Layout	123A90-DDL-AR-DL-10015
"B-400" ARCHITECTURAL GENERAL LAYOUT PLAN, WIEW, SECTIONS & TYP. DETAILS	123A90-DDL-AR-DL-10015
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DA-00017
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DD-00021
"B-400" HVAC SYSTEM G.A. and DETAILS	1724000049-HV-DA-00067

KEY PLAN



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
02	27/05/24	MGA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	22/01/24	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)
00	07/11/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND — ROSETTI MARINO

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DL-40012
REV.: 3_A | DATE: 07/10/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

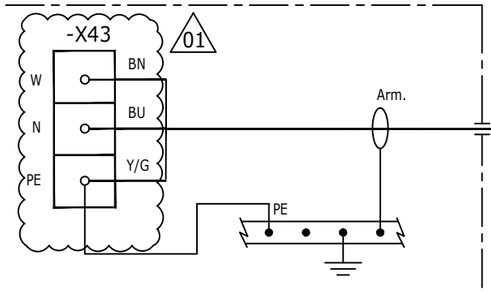
TITLE : BASE LOAD POWER HUB (BLPH) OFF-SHORE ITER EQUIPMENT LAYOUT

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE 1:33,3
DRAWN MGA | CHECKED LCA | APPROVED DLO | DATE 27/05/24
A1 | DRAWING NO. 123A90-DDL-IN-DL-40012 | SHEET 001 | REV. 03

File Name : 123A90-DDL-IN-DL-40012 Rev.03.dwg

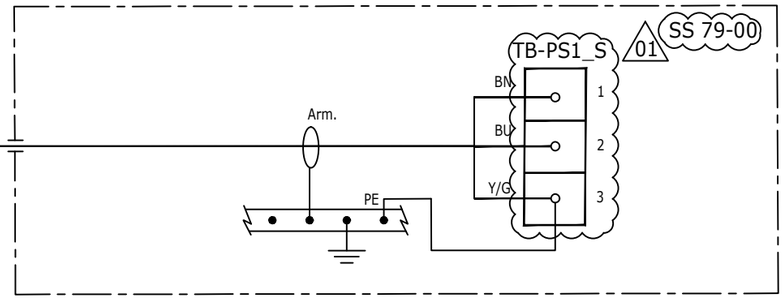
FROM	TO

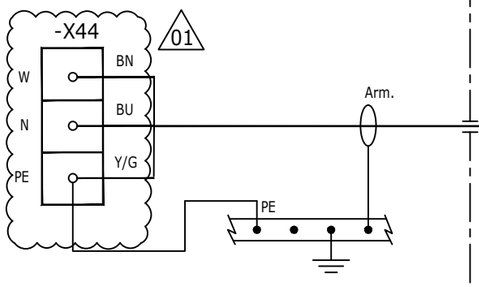
DESCRIPTION: AC UPS - PAS DB
TAG NUMBER: DP-200F3



84301-CEL
3G2.5 mm²

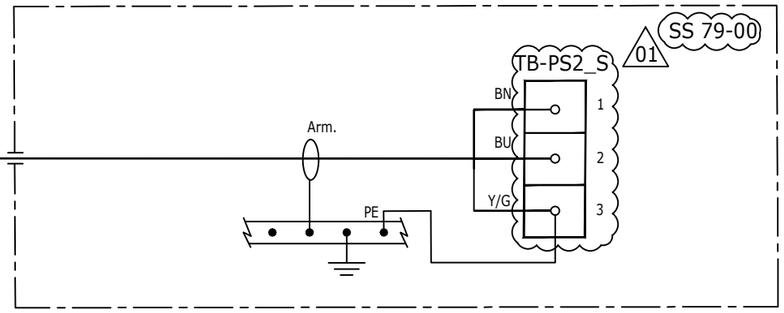
DESCRIPTION: SIS -CONTROLLER AND I/O CABINET - LINE A
TAG NUMBER: B400-SIS-001

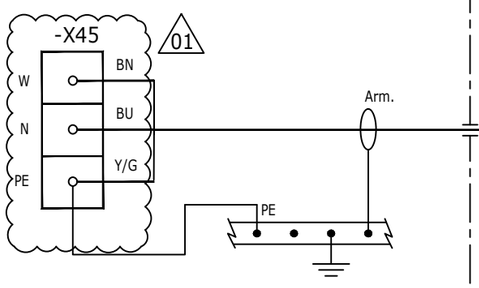




84302-CEL
3G2.5 mm²

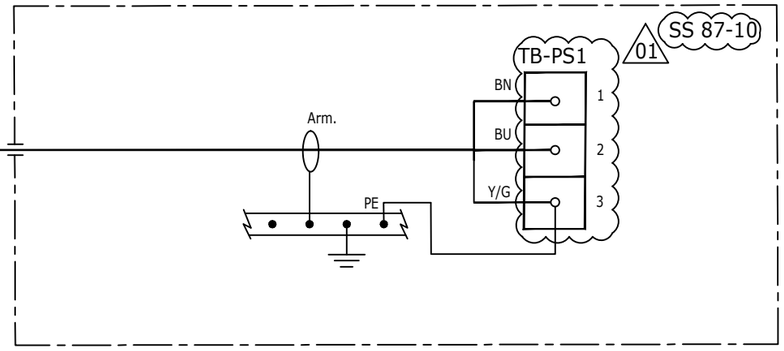
DESCRIPTION: SIS -CONTROLLER AND I/O CABINET - LINE B
TAG NUMBER: B400-SIS-001





84303-CEL
3G2.5 mm²

DESCRIPTION: PCS -CONTROLLER AND I/O CABINET - LINE A
TAG NUMBER: B400-PCS-001



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

REV.:	DATE:	SIGNATURE:
1_A	17/10/24	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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
DC UPS NAVAID SYSTEM & AC UPS – PAS DB

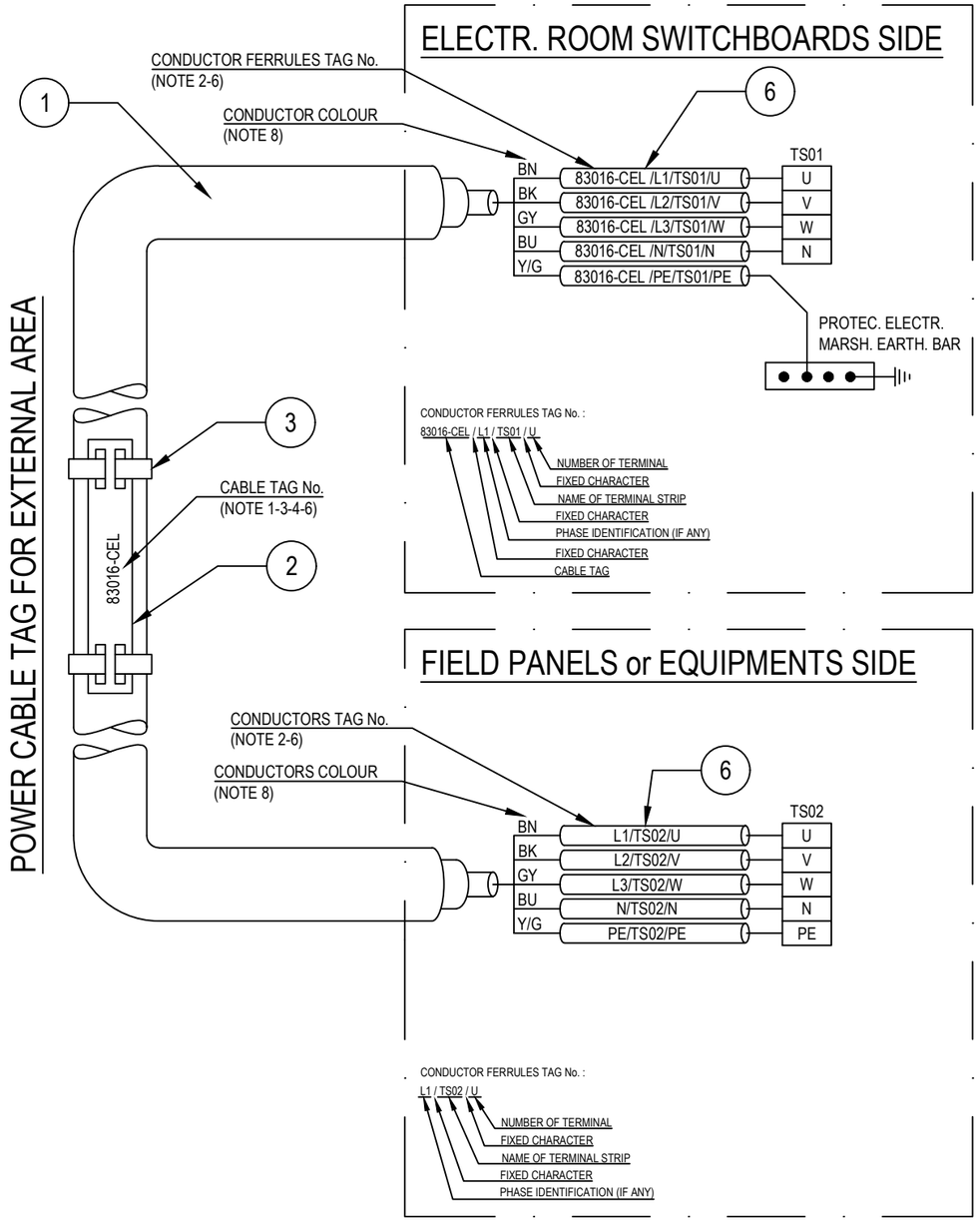
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 038 | REV. 01

F.to UNI A3: 420mmx297mm

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

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.

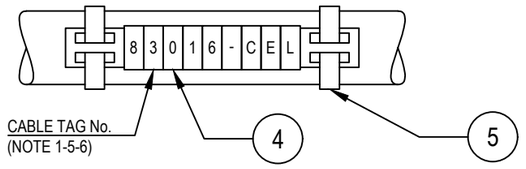
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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.: 2_A | DATE: 28/08/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

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

CROSSWIND

ROSETTI MARINO

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

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

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

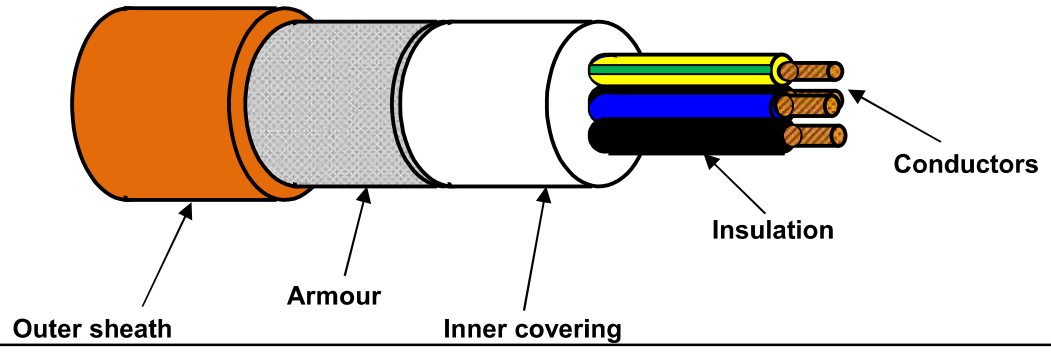
F.to UNI A3: 420mmx297mm

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

Tag Number	Category	Discipline	Eng Status	NativeDoc	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standar	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
84301-CEL	Cable	EL	VFC	123A90-DDL-EL-LIS-20148					DP-200F3	AC UPS 35 kVA Distribution Board	Lower Deck (B-300)	B400-SIS-001	Marshalling SIS	Lower Deck (B-400)	ELECV19-3G2,5	Cable Cu Cl.2/MGT/EPR/LSZH/GSWB/LSZH 0,6/1kV 3G2,5mm² - Orange	M20	T2_M20_D ouble			n.a.				L-450-101-LVT-040 / L-600-101 LVT-036 / L-600-101-LVT-038 / L-600-101-LVT-035 / E-MCT-302 / L-450-101-LVT-005 / L-600-101-LVT-010 / L-750-101-LVT-015 / L-300-101-LVT-007 / E-MCT-402 / L-300-101-LVT-065 / L-300-101-LVT-066 / L-300-101-LVT-067 / L-150-101-LVT-155

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

3G2,5 - 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 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G2,5 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 :	(11,7 ± 10%) mm	
Over Armour diameter :	(12,9 ± 10%) mm	
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 - Armour)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 940 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%)	
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	84302-CEL	: AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line B		Dwg	123A90-DDL-EL-LIS-20148	
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)		Module	LD_B-300 / LD_B-400	
TASK	code	C10000580	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: 3G2.5 Color: Orange

From: DP-200F3 To: B400-SIS-001

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"	

REFER TO FINAL SHEET FOR ACCEPTANCE

ROSETTI MARINO PROVERLIS CROSSWIND

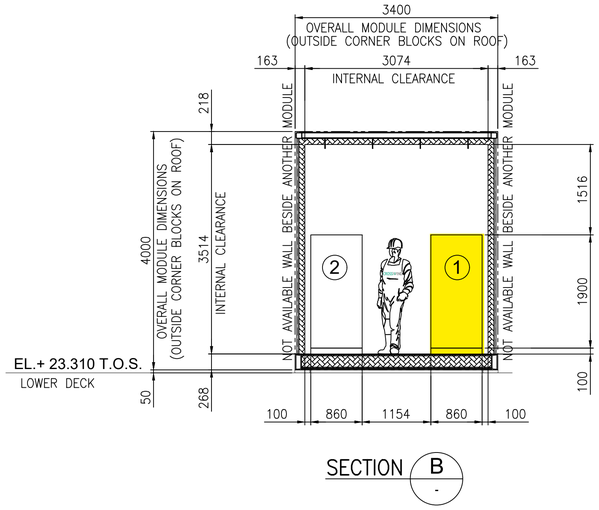
ITEM	Tag	84302-CEL	: AC UPS - PAS DB / SIS -Controller and I/O Cabinet - Line B			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)			Module	LD_B-300 / LD_B-400
TASK	code	C10000580		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Electrical	Form	CPX09 LV Power Cable

CONTINUITY				
5	CORE CONTINUITY Ω	PH 1	0.4	
6		PH 2	0.4	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		0.4	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0.5	
INSULATION				
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

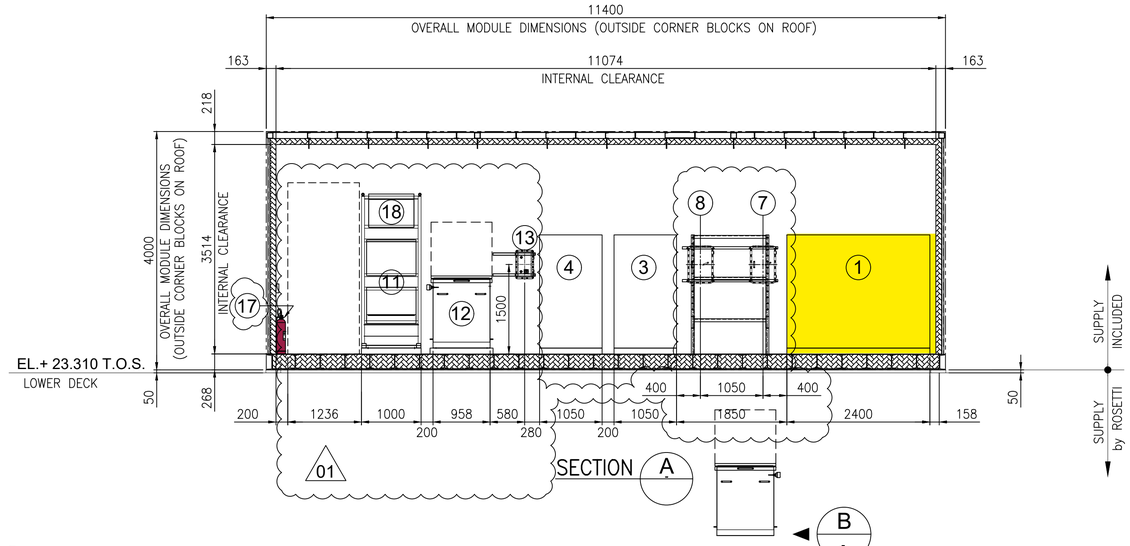
TESTING INSTRUMENTS USED			
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

Comments:

	Performed by	☉ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (Rosetti Marino)	
Name	Carmelo Bongiovanni	Giovanni Tangianu	
Date	2024-11-06	2024-11-08	
Signature	PROVERLIS Digitaly signed by Carmelo Bongiovanni 2024-11-06T17:11:41.249Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2024-11-08T10:34:16.845Z	



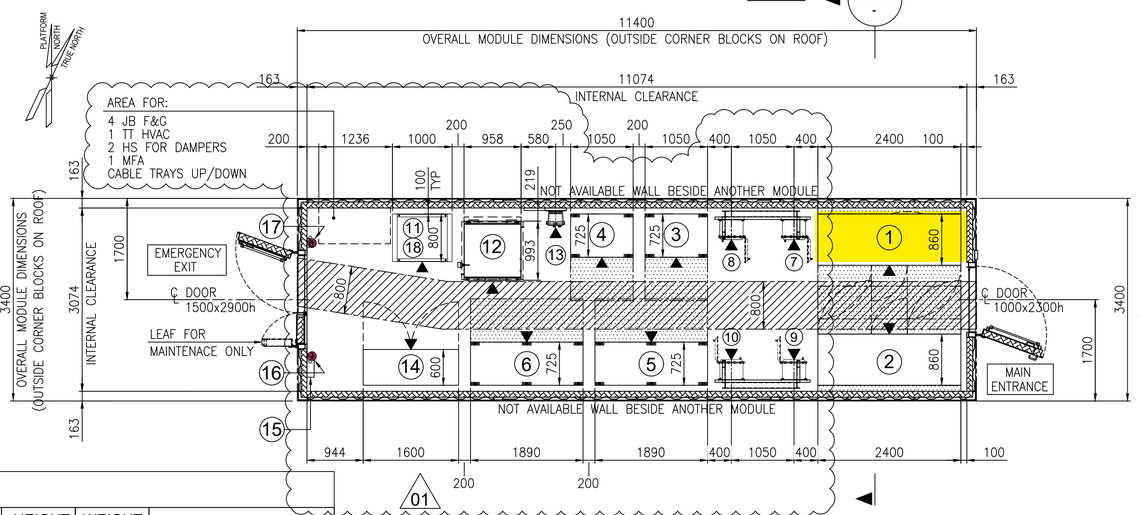
SECTION B



01

SECTION A

B



A

01

EQUIPMENT LAYOUT
"B-300" UPSs & BATTERIES SWITCHROOM
BOTTOM PLAN

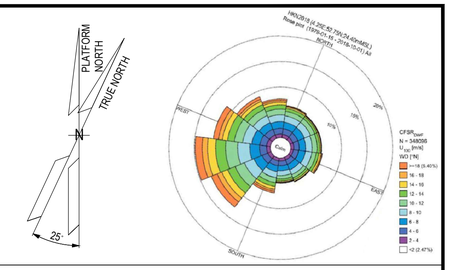
EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	WEIGHT (Kg)	NOTES
1	UP-200F3	AC UPS 35kVA	2400	860	1915	2258	
2	UP-200F4	AC UPS 15kVA	2400	860	1915	2258	
3	BA-200F3A	BATTERY RACK GEL VRLA 7y AC UPS 35kVA	1050	725	1272	914	
4	BA-200F3B	BATTERY RACK GEL VRLA 7y AC UPS 35kVA	1050	725	1272	914	
5	BA-200F4A	BATTERY RACK GEL VRLA 7y AC UPS 15kVA	1890	725	1761	3429	
6	BA-200F4B	BATTERY RACK GEL VRLA 7y AC UPS 15kVA 01	1890	725	1761	3429	
7	CB-200F3A	ISOLATOR BOX AC UPS 35kVA	450	341	632	100	
8	CB-200F3B	ISOLATOR BOX AC UPS 35kVA	450	341	632	100	
9	CB-200F4A	ISOLATOR BOX AC UPS 15kVA	450	341	632	100	
10	CB-200F4B	ISOLATOR BOX AC UPS 15kVA	450	341	632	100	
11	NC-200F2	NAVAID PANEL 01	1000	800	2600	535	
12	BA-200F2	BATTERY BOX NAVAID	958	993	1210	1552	
13	CB-200F2	ISOLATOR BOX NAVAID	500	400	765	70	
14	B3000-HSB-001	DISTRIBUTION & HVAC PANEL - AC/UPS ROOM	1600	600	2300	1150	
15	-	EYE WASH STATION	228	80	290	5	
16	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	20	
17	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	20	
18	BC-200F2	BATTERY CHARGER NAVAID 01	-	-	-	-	INCLUDED IN THE RACK OF NC-200F2

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-EL-DL-20106

REV.:	DATE:	SIGNATURE:
1_A	08/08/24	G.Randi

ROSETTI MARINO SpA



NOTES

01

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. EQUIPMENT DIMENSION ARE DEFINED ACCORDING TO THE LATEST DRAWING AND INFORMATION FROM THE VENDOR
3. DOCUMENT VALID ONLY FOR ELECTRICAL COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.
   - "B-300" – GENERAL ARRANGEMENT DRAWING DOC. N. 1724000049-AR-DA-00016
   - "B-300" – DETAILED DRAWINGS DOC. N. 1724000049-AR-DD-00020

LEGEND

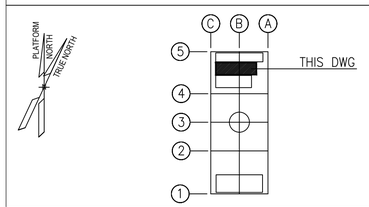
U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR – WIDTH 800mm.
_____ MAINTENANCE AREA – VENDOR REQUIREMENT
_____ SWITCHGEAR ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

HOLDS

REFERENCE

DOCUMENT TITLE	DOCUMENT NUMBER
"B-300" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DA-00016
"B-300" DETAILED DRAWINGS	1724000049-AR-DD-00020
"B-300" ARCHITECTURAL GENERAL LAYOUT PLAN, WIEW, SECTIONS & TYP. DETAILS	123A90-DDL-AR-DL-10022
PLOT PLAN – LOWER & UPPER DECK	123A90-DDL-PP-DL-70070

KEY PLAN



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	23/07/24	SAM	FMA/AMA	FPA/DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	28/03/24	SAM	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND
ROSETTI MARINO

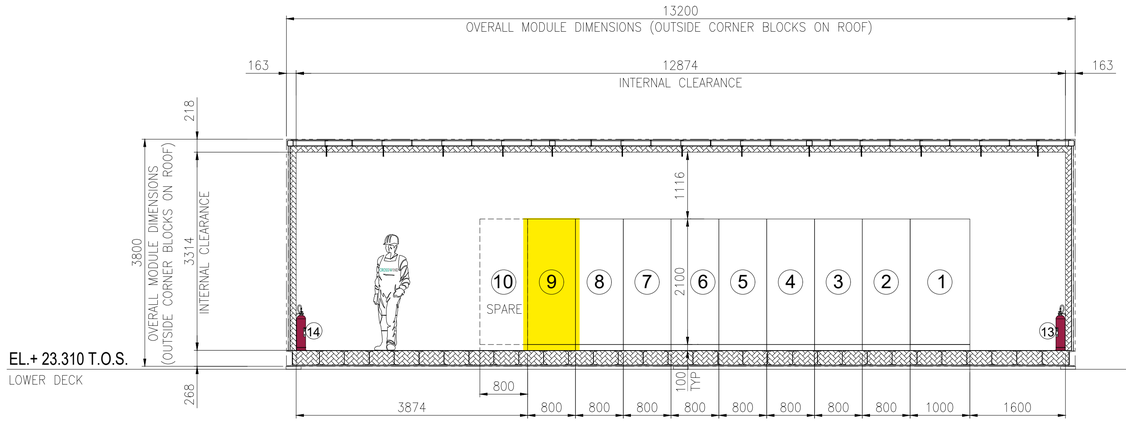
TITLE :
BASE LOAD POWER HUB (BLPH)
ELECTRICAL EQUIPMENT LAYOUT
UPSs & BATTERIES SWITCHROOM

CONTRACT NO./TITLE	CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK		SCALE 1:50
DRAWN SAM	CHECKED FMA/AMA	APPROVED FPA/DLO	DATE 23/07/24
A1	DRAWING NO. 123A90-DDL-EL-DL-20106	SHEET 001	REV. 01

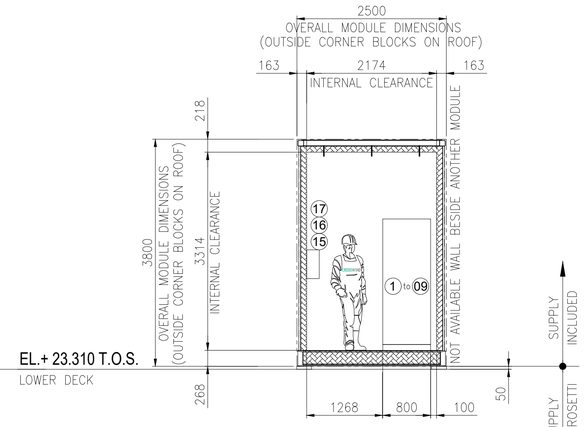
DRAWING NO. 123A90-DDL-EL-DL-20106 REV. 01

File Name : 123A90-DDL-EL-DL-20106 Rev.00.dwg

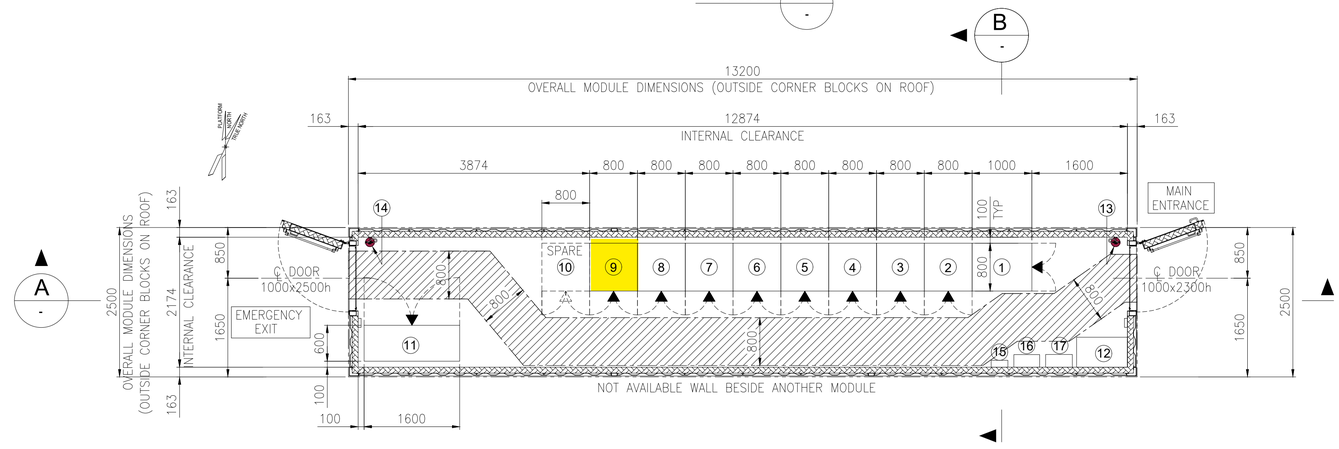
DRAWING NO. 123A90-DDL-IN-DL-40012 REV. 03



SECTION A -



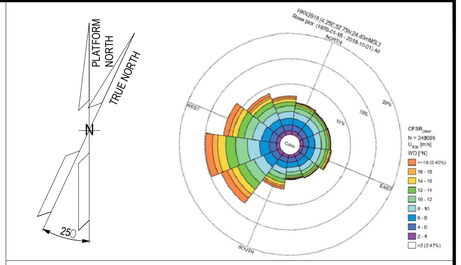
SECTION B -



EQUIPMENT LAYOUT
"B-400" I&T EQUIPMENT ROOM
BOTTOM PLAN

EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	NOTE
1	B400-SRV-001	SERVER CABINET	1000	800	2100	
2	B400-NET-001	NETWORK CABINET	800	800	2100	
3	B400-EMCS-001	EMCS SYSTEM CABINET	800	800	2100	
4	B400-PCS-002	PCS MARSHALLING CABINET	800	800	2100	
5	B400-PCS-001	PCS SYSTEM CABINET 03	800	800	2100	
6	B400-FGS-003	FGS MARSHALLING CABINET 2	800	800	2100	
7	B400-FGS-002	FGS MARSHALLING CABINET 1	800	800	2100	
8	B400-FGS-001	FGS SYSTEM CABINET	800	800	2100	
9	B400-SIS-001	SIS SYSTEM/MARSHALLING CABINET	800	800	2100	
10	-	SPARE				
11	B400-HSB-001	DISTRIBUTION & HVAC PANEL - I&T ROOM	1600	600	2300	
12	-	TABLE	850	500	750	
13	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
14	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
15	-	FIRST AID KIT	280	115	200	
16	-	RESUSCITATION UNIT	430	210	480	
17	-	CABINET INCLUDED N.10 ESCAPE MASK	448	213	422	



NOTES

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DOCUMENT VALID ONLY FOR INSTRUMENT COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.

LEGEND

U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR – WIDTH 800mm.
_____ EQUIPMENT ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

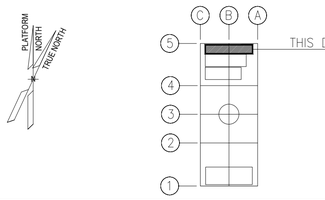
HOLDS

.

REFERENCE

DOCUMENT TITLE	DOCUMENT NUMBER
Control System Architecture Detailed Drawings	123A90-DDL-IN-DD-40096
Data Network Architecture Drawings	123A90-DDL-IN-DD-40019
Earthing layouts drawings (CCR, ITER)	123A90-DDL-IN-DL-40013
Instrument and Telecom MCT Layout – Lower Deck	123A90-DDL-IN-DL-40086
"B-400" I&T Equipment Room – Architectural Layout	123A90-DDL-AR-DL-10015
"B-400" ARCHITECTURAL GENERAL LAYOUT PLAN, WIEW, SECTIONS & TYP. DETAILS	123A90-DDL-AR-DL-10015
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DA-00017
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DD-00021
"B-400" HVAC SYSTEM G.A. and DETAILS	1724000049-HV-DA-00067

KEY PLAN



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
02	27/05/24	MGA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	22/01/24	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)
00	07/11/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND — ROSETTI MARINO

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DL-40012
REV.: 3_A | DATE: 07/10/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

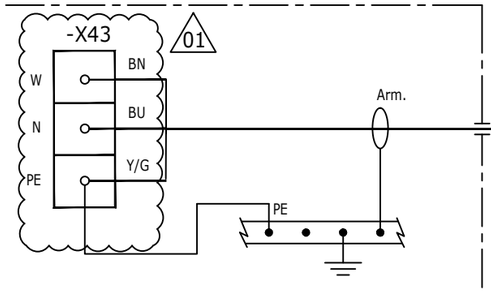
TITLE : BASE LOAD POWER HUB (BLPH) OFF-SHORE ITER EQUIPMENT LAYOUT

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE 1:33,3
DRAWN MGA | CHECKED LCA | APPROVED DLO | DATE 27/05/24
A1 | DRAWING NO. 123A90-DDL-IN-DL-40012 | SHEET 001 | REV. 03

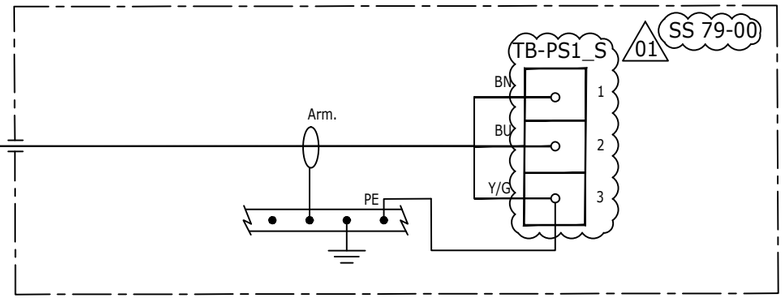
File Name : 123A90-DDL-IN-DL-40012 Rev.03.dwg

FROM	TO

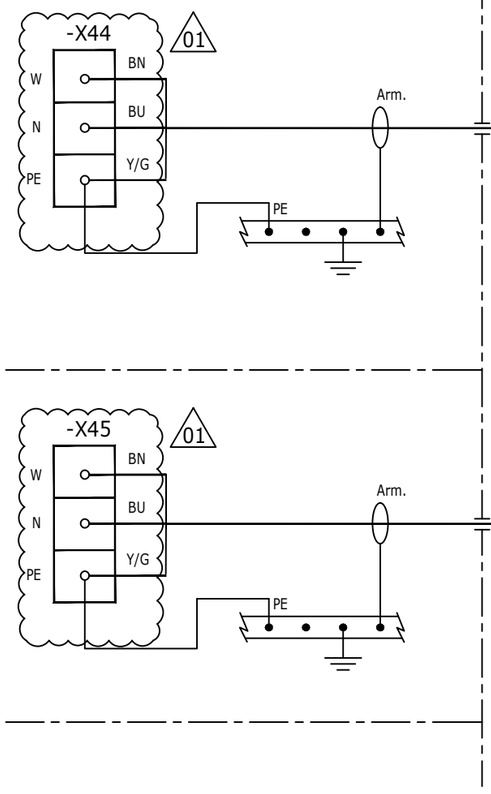
DESCRIPTION: AC UPS - PAS DB
TAG NUMBER: DP-200F3



84301-CEL
3G2.5 mm²

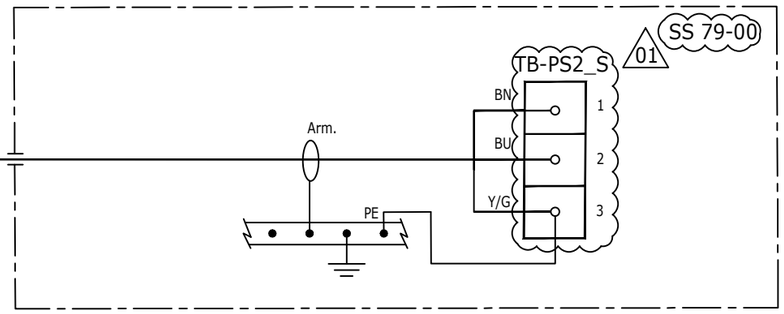


DESCRIPTION: SIS -CONTROLLER AND I/O CABINET - LINE A
TAG NUMBER: B400-SIS-001



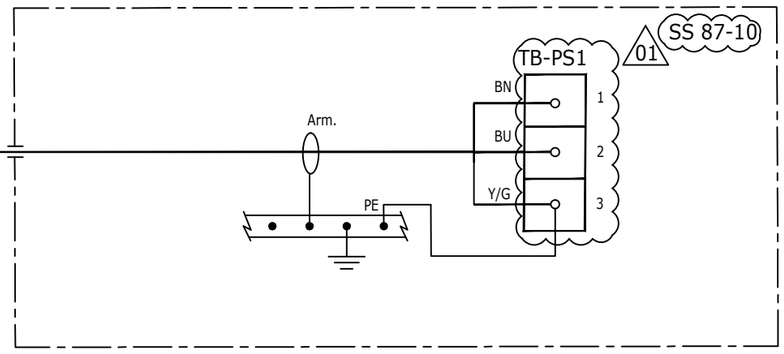
84302-CEL
3G2.5 mm²

84303-CEL
3G2.5 mm²



DESCRIPTION: SIS -CONTROLLER AND I/O CABINET - LINE B
TAG NUMBER: B400-SIS-001

DESCRIPTION: PCS -CONTROLLER AND I/O CABINET - LINE A
TAG NUMBER: B400-PCS-001



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

REV.:	DATE:	SIGNATURE:
1_A	17/10/24	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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
DC UPS NAVAID SYSTEM & AC UPS – PAS DB

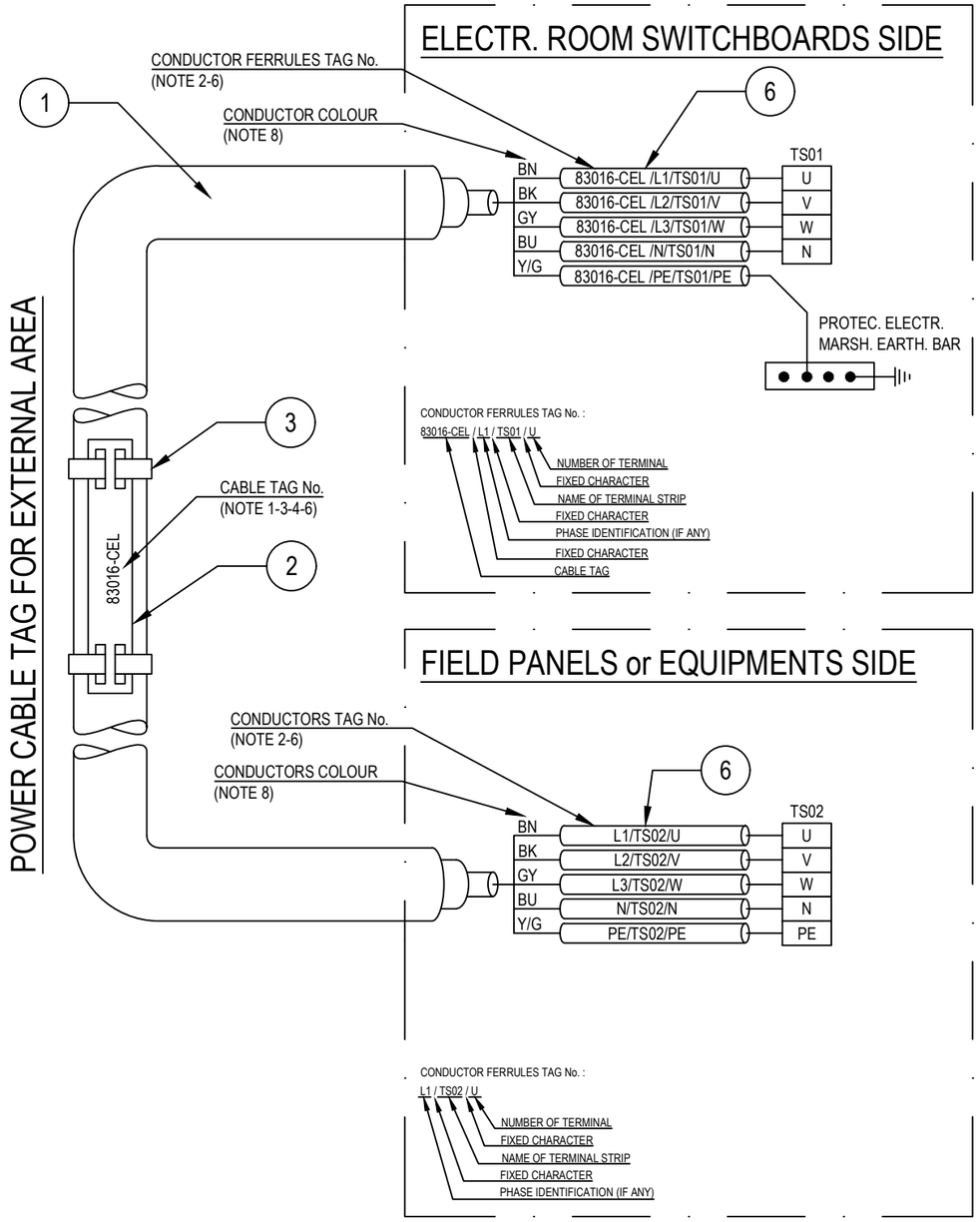
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : 1:X

A3 | DRAWING NO. 123A90-DDL-EL-DG-20149 | SHEET 038 | REV. 01

F.to UNI A3: 420mmx297mm

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

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.

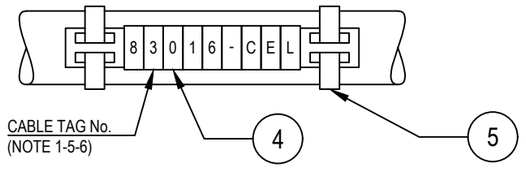
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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.: 2_A | DATE: 28/08/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

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

CROSSWIND

ROSETTI MARINO

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

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

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

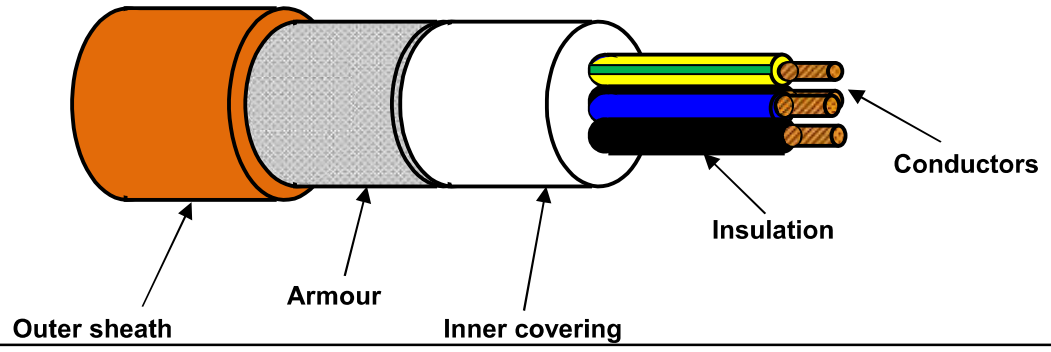
F.to UNI A3: 420mmx297mm

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

Tag Number	Category	Discipline	Eng Status	NativeDoc	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standar	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
84302-CEL	Cable	EL	VFC	123A90-DDL-EL-LIS-20148					DP-200F3	AC UPS 35 kVA Distribution Board	Lower Deck (B-300)	B400-SIS-001	Marshalling SIS	Lower Deck (B-400)	ELECV19-3G2,5	Cable Cu Cl.2/MGT/EPR/LSZH/GSWB/LSZH 0,6/1kV 3G2,5mm² - Orange	M20	T2_M20_D ouble			n.a.				L-450-101-LVT-040 / L-600-101 LVT-036 / L-600-101-LVT-038 / L-600-101-LVT-035 / E-MCT-302 / L-450-101-LVT-005 / L-600-101-LVT-010 / L-750-101-LVT-015 / L-300-101-LVT-007 / E-MCT-402 / L-300-101-LVT-065 / L-300-101-LVT-066 / L-300-101-LVT-067 / L-150-101-LVT-155

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

3G2,5 - 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 60093.360, Average Thickness 1,3 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - ELECTRIC CABLE - 1000V - 3G2,5 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 :	(11,7 ± 10%) mm	
Over Armour diameter :	(12,9 ± 10%) mm	
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 - Armour)	
Conductors DC Resistance :		IEC 60228 Class 2
Insulation Resistance :	≥ 940 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%)	
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	83104-CEL	: Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)			Module	LD_B-200/LD_B-400
TASK	code	C10000623		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 Color: Grey

From: DP-200N1 To: B400-SIS-001

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.	NA
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

ROSETTI MARINO PROVERLIS CROSSWIND

ITEM	Tag	83104-CEL	: Lighting & Small Power DB BoP / SIS -Controller and I/O Cabinet - Auxiliary			Dwg	123A90-DDL-EL-LIS-20148
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)			Module	LD_B-200/LD_B-400
TASK	code	C10000623		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	0,4	
6		PH 2	0,4	
7		PH 3	NA	
8	ARMOUR CONTINUITY Ω		NA	
9	PROTECTIVE CONDUCTOR CONTINUITY Ω		0,5	
	INSULATION			
10	CORES / ARMOUR+EARTH MΩ	PH1 / PH2-PH3-A-E	>999	
11		PH2 / PH1-PH3-A-E	>999	
12		PH3 / PH1-PH2-A-E	NA	
13	CABLE IS CORRECTLY RE-CONNECTED.		Yes	

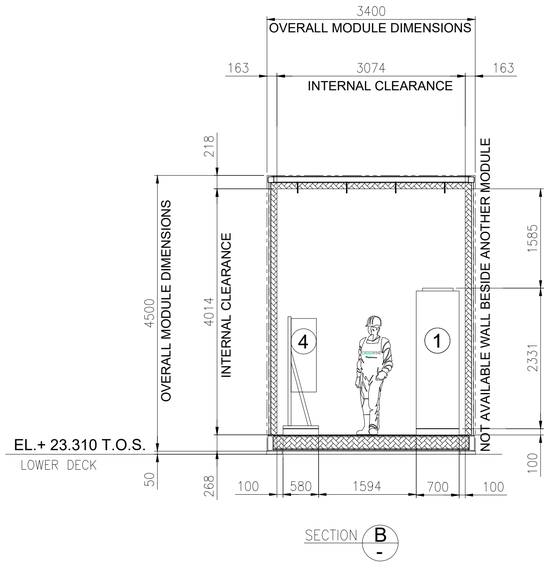
TESTING INSTRUMENTS USED

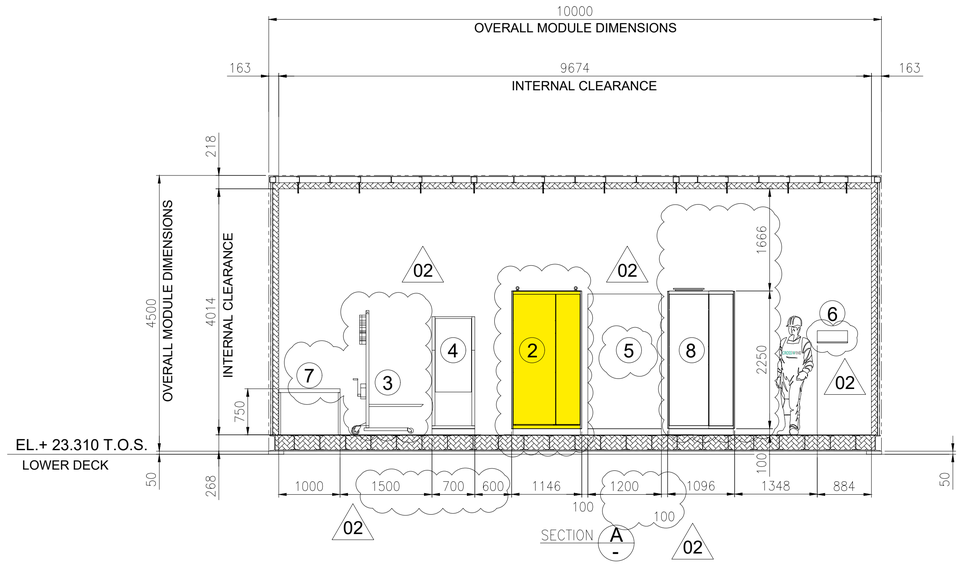
TYPE / SERIAL N° :	MEGGER : KEW3125A SERIAL: W8330207	TYPE / SERIAL N° :	MULTIMETER: FLUKE 175 SERIAL:AW1/018(17140769)
Calibration certificate N° and date:	N°7722/24 _ 10/07/2024	Calibration certificate N° and date:	N°7715/24 _ 10/07/2024

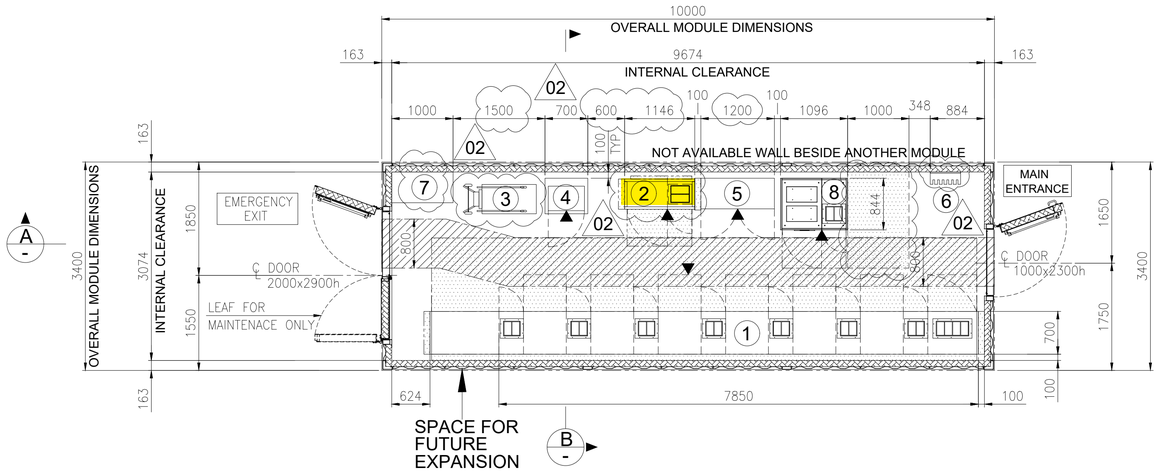
Comments:

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (Rosetti Marino)	
Name	Carmelo Bongiovanni	Giovanni Tangianu	
Date	2024-11-06	2024-11-09	
Signature	PROVERLIS Digitaly signed by Carmelo Bongiovanni 2024-11-06T17:15:57.592Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2024-11-09T09:57:43.711Z	

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





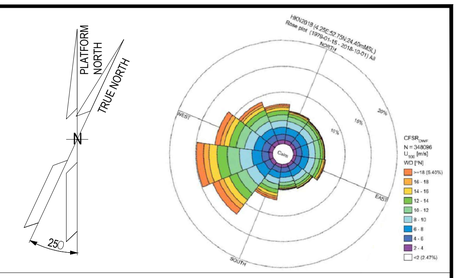


EQUIPMENT LAYOUT
"B-200" LV (400V) SWITCHGEAR ROOM
BOTTOM PLAN

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

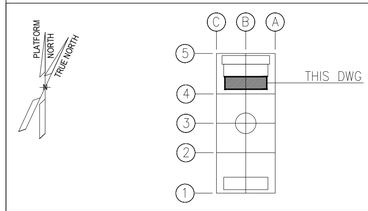
U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR - WIDTH 800mm.
_____ MAINTENANCE AREA - VENDOR REQUIREMENT
_____ SWITCHGEAR ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

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	DYFO/MDO	ISSUE FOR REVIEW (IFR)

CROSSWIND

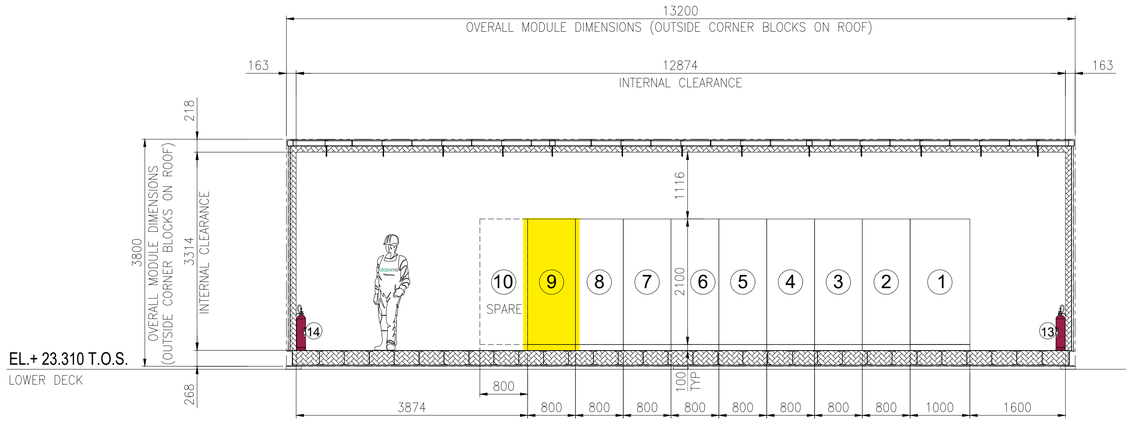
ROSETTI MARINO

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

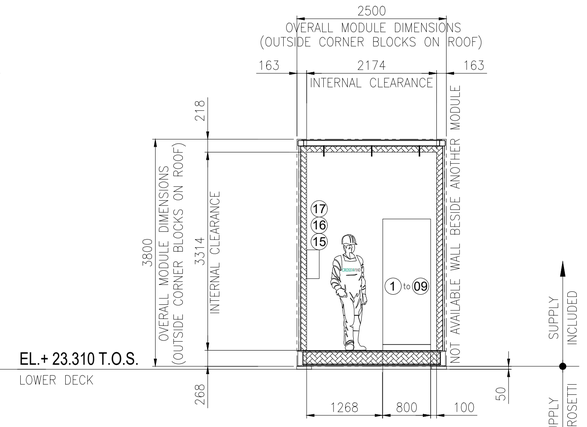
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:50
DRAWN FMO	CHECKED LMA/AMA	APPROVED LMA/MDO	DATE 27/05/2024
A1	DRAWING NO. 123A90-DDL-EL-DL-20105	SHEET 001	REV. 02

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

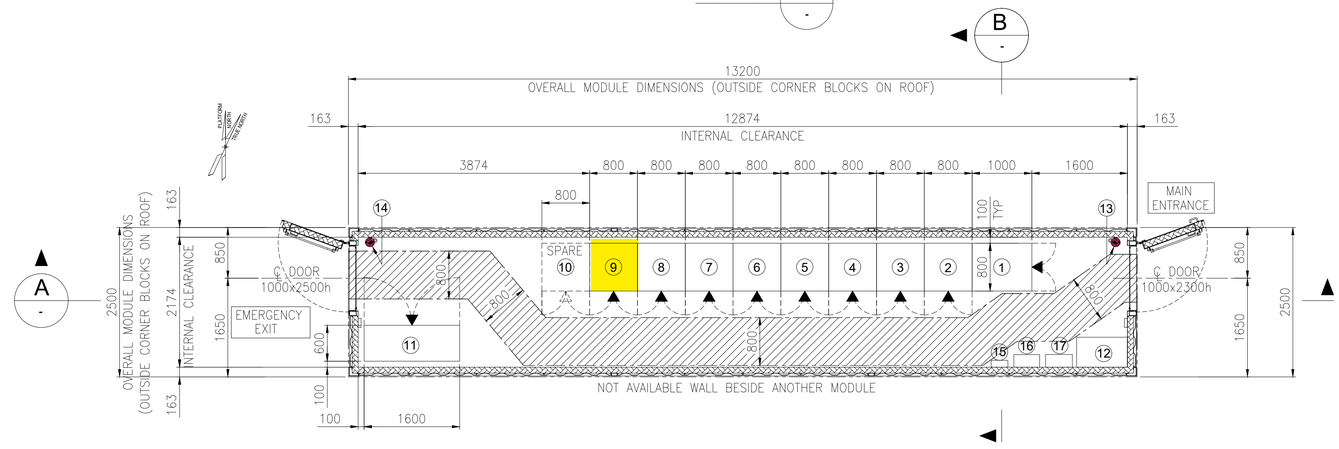
DRAWING NO. 123A90-DDL-IN-DL-40012 REV. 03



SECTION A -



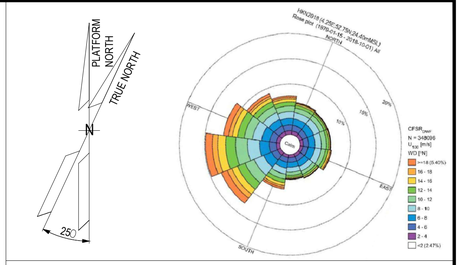
SECTION B -



EQUIPMENT LAYOUT
"B-400" I&T EQUIPMENT ROOM
BOTTOM PLAN

EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	NOTE
1	B400-SRV-001	SERVER CABINET	1000	800	2100	
2	B400-NET-001	NETWORK CABINET	800	800	2100	
3	B400-EMCS-001	EMCS SYSTEM CABINET	800	800	2100	
4	B400-PCS-002	PCS MARSHALLING CABINET	800	800	2100	
5	B400-PCS-001	PCS SYSTEM CABINET 03	800	800	2100	
6	B400-FGS-003	FGS MARSHALLING CABINET 2	800	800	2100	
7	B400-FGS-002	FGS MARSHALLING CABINET 1	800	800	2100	
8	B400-FGS-001	FGS SYSTEM CABINET	800	800	2100	
9	B400-SIS-001	SIS SYSTEM/MARSHALLING CABINET	800	800	2100	
10	-	SPARE				
11	B400-HSB-001	DISTRIBUTION & HVAC PANEL - I&T ROOM	1600	600	2300	
12	-	TABLE	850	500	750	
13	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
14	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
15	-	FIRST AID KIT	280	115	200	
16	-	RESUSCITATION UNIT	430	210	480	
17	-	CABINET INCLUDED N.10 ESCAPE MASK	448	213	422	



NOTES

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DOCUMENT VALID ONLY FOR INSTRUMENT COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.

LEGEND

U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR – WIDTH 800mm.
_____ EQUIPMENT ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

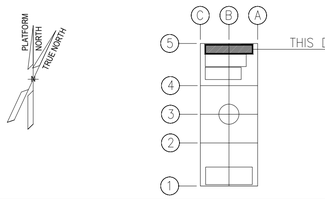
HOLDS

.

REFERENCE

DOCUMENT TITLE	DOCUMENT NUMBER
Control System Architecture Detailed Drawings	123A90-DDL-IN-DD-40096
Data Network Architecture Drawings	123A90-DDL-IN-DD-40019
Earthing layouts drawings (CCR, ITER)	123A90-DDL-IN-DL-40013
Instrument and Telecom MCT Layout – Lower Deck	123A90-DDL-IN-DL-40086
"B-400" I&T Equipment Room – Architectural Layout	123A90-DDL-AR-DL-10015
"B-400" ARCHITECTURAL GENERAL LAYOUT PLAN, WIEW, SECTIONS & TYP. DETAILS	123A90-DDL-AR-DL-10015
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DA-00017
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DD-00021
"B-400" HVAC SYSTEM G.A. and DETAILS	1724000049-HV-DA-00067

KEY PLAN



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
02	27/05/24	MGA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	22/01/24	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)
00	07/11/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND — ROSETTI MARINO

VALID FOR CONSTRUCTION
FDL DWG: 123A90-FDL-IN-DL-40012
REV.: 3_A | DATE: 07/10/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

TITLE : BASE LOAD POWER HUB (BLPH) OFF-SHORE ITER EQUIPMENT LAYOUT

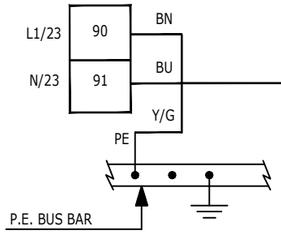
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE 1:33,3
DRAWN MGA | CHECKED LCA | APPROVED DLO | DATE 27/05/24
A1 | DRAWING NO. 123A90-DDL-IN-DL-40012 | SHEET 001 | REV. 03

File Name : 123A90-DDL-IN-DL-40012 Rev.03.dwg

FROM	TO

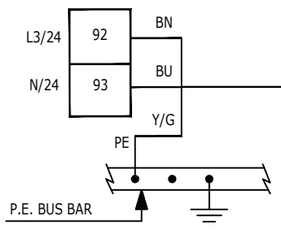
DESCRIPTION: LIGHTING & SMALL POWER DB BOP
TAG NUMBER: DP-200N1

CUBICLE/CB: +03/Q23



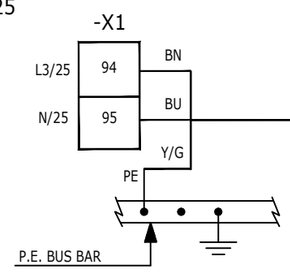
83104-CEL
3G2.5 mm²

CUBICLE/CB: +03/Q24



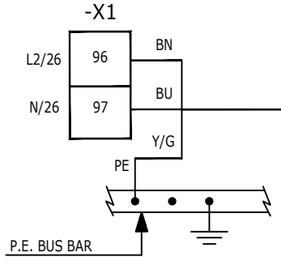
83105-CEL
3G2.5 mm²

CUBICLE/CB: +03/Q25



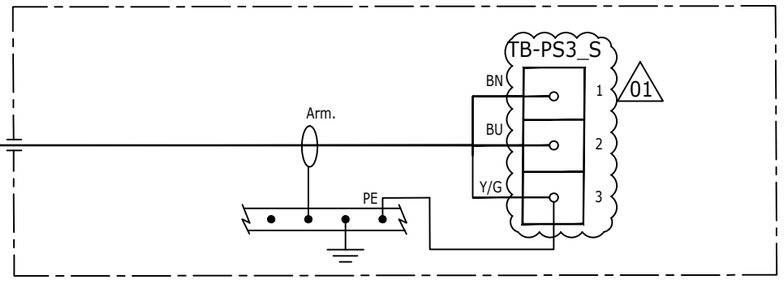
83106-CEL
3G2.5 mm²

CUBICLE/CB: +03/Q26

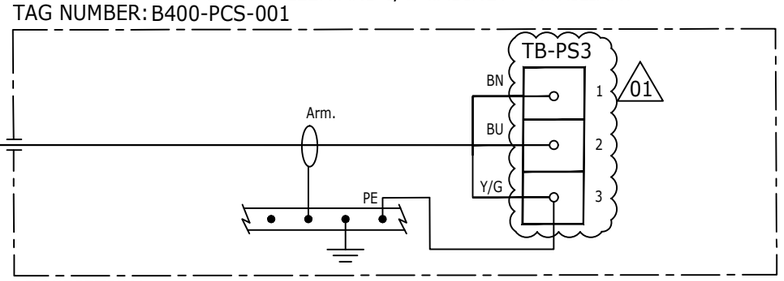


83107-CEL
3G2.5 mm²

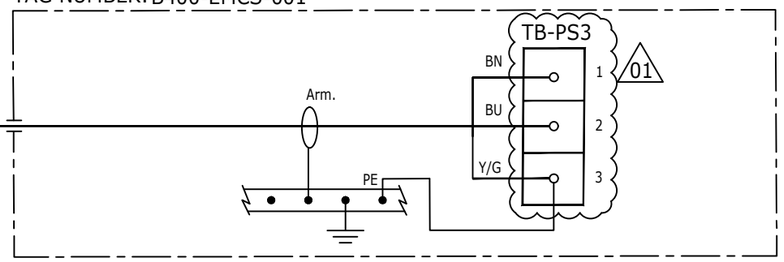
DESCRIPTION: SIS -CONTROLLER AND I/O CABINET - AUXILIARY
TAG NUMBER: B400-SIS-001



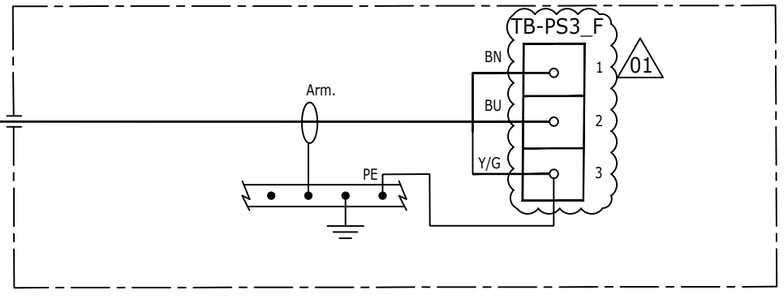
DESCRIPTION: PCS -CONTROLLER AND I/O CABINET - AUXILIARY
TAG NUMBER: B400-PCS-001



DESCRIPTION: EMCS -CONTROLLER AND I/O CABINET - AUXILIARY
TAG NUMBER: B400-EMCS-001



DESCRIPTION: FGS FIRE & GAS PANEL - AUXILIARY
TAG NUMBER: B400-FGS-001



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

REV.:	DATE:	SIGNATURE:
1_A	17/10/24	G.Randi

ROSETTI MARINO SpA

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

CROSSWIND

ROSETTI MARINO

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

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

SCALE : 1:X

A3

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

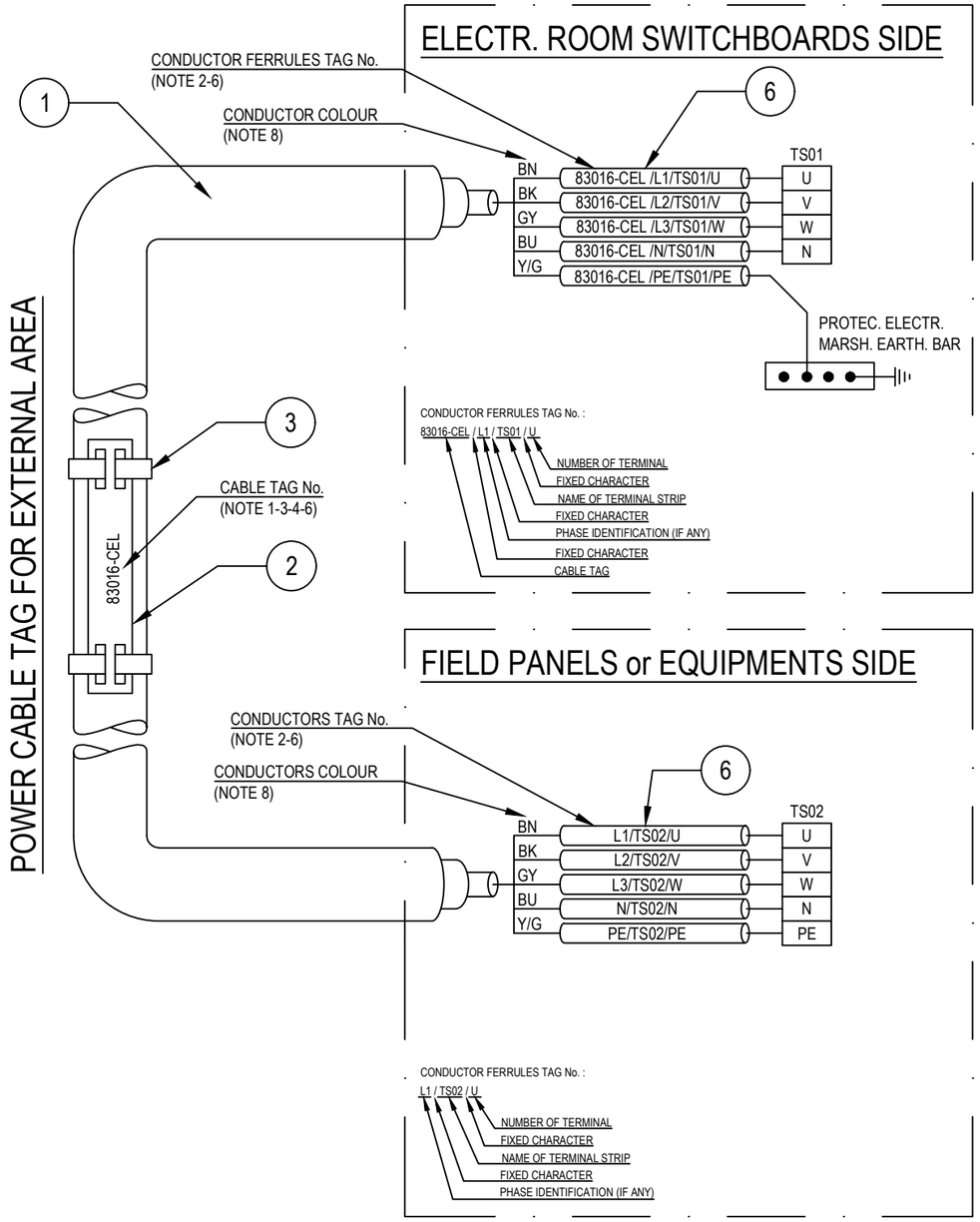
SHEET 052

REV. 01

F.to UNI A3: 420mmx297mm

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

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.

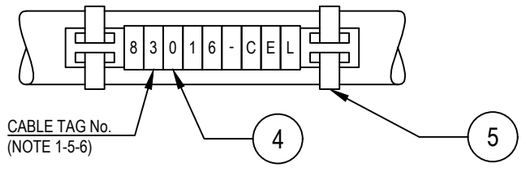
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

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.: 2_A | DATE: 28/08/24 | SIGNATURE: G.Randi
ROSETTI MARINO SpA

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

CROSSWIND

ROSETTI MARINO

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

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

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

F.to UNI A3: 420mmx297mm

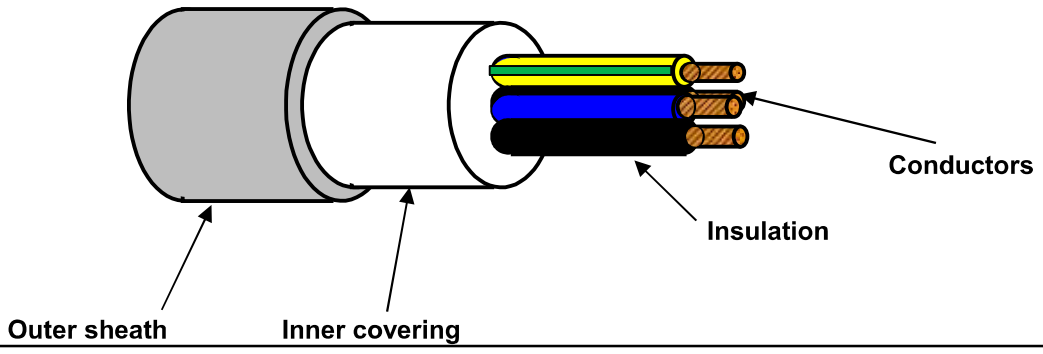
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

Tag Number	Category	Discipline	Eng Status	NativeDoc	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standar	From Gland	From Entry	From Fitting	To Gland	To Entry	To Fitting	Routing	Routing Manual
83104-CEL	Cable	EL	VFC	123A90-DDL-EL-LIS-20148					DP-200N1	LV 0,4 / 0,23 kV Distribution Switchgear	Lower Deck (B-200)	B400-SIS-001	Marshalling SIS	Lower Deck (B-400)	ELECV06-3G2,5	Cable Cu Cl.2/EPR/LSZH 0,6/1kV 3G2,5mm² - Grey	M20	n.a.			n.a.				L-450-101-LVT-030 / L-600-101-LVT-020 / L-600-101-LVT-018 / L-600-101-LVT-017 / E-MCT-201 / L-750-101-LVT-011 / L-450-101-LVT-008 / L-300-101-LVT-009 / E-MCT-401 / L-300-101-LVT-065 / L-300-101-LVT-066 / L-300-101-LVT-067 / L-150-101-LVT-155

FLEI s.r.l.

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.

Section 6 MECHANICAL COMPLETION STATUS INDEX - INSTRUMENTAL DISCIPLINE

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 79-00 & process: MC & discipline : I

Instrumental	79-00 Emergency Shutdown Systems (SIS)						
ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
B400-SIS-001	SIS -Controller and I/O Cabinet	ONSHORE	C10000844	CJX48	100	2024-11-29	RFC 1

ITEM	Tag	B400-SIS-001	: SIS -Controller and I/O Cabinet		Dwg	123A90-DDL-IN-DL-40012	
	S/Sys	79-00	: Emergency Shutdown Systems (SIS)		Module	LD_B-400	
TASK	code	C10000844		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Instrumental	Form CJX48	Indoor Cabinet/Panel

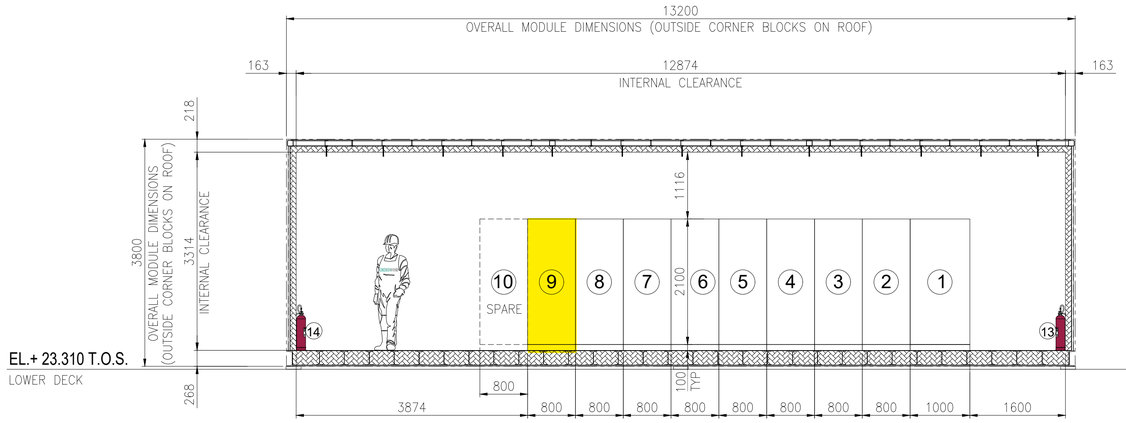
1	Check for mechanical damage (Panel and internal items).	OK
2	Check that the Panel is de-energized and safe.	OK
3	Check identification (tag number, tag plates).	OK
4	Check supporting and protection against vibrations.	OK
5	Check door handles (type, locking, …).	OK
6	Check data sheet and general arrangement are conforms to drawings.	Note
7	Check internal layout conforms to drawings.	PL
8	Check signals segregation conforms to specifications.	OK
9	Check that anti-condensation heaters are ready to be energized.	OK
10	Check earthing connections are properly fixed and tightened.	PL
11	Check incoming cables identification .	OK
12	Check if accessibility and maintenance are possible and safe.	OK
13	If required produce Red Line Mark Up for "AS BUILT"	

Comments: Note refer to punch list raised during FAT

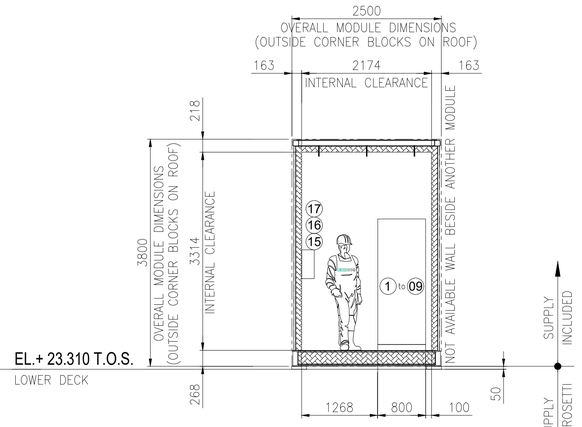
Note 6 : C30000228/C30000229/C30000230/C30000381/C30000382/C30000383.

	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM(ROSETTI MARINO)	
Name	Francesco Zucca	Giovanni Tangianu	
Date	2024-11-29	2024-11-29	
Signature	PROVERLIS Digitaly signed by Francesco Zucca 2024-11-29T07:54:39.109Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2024-11-29T13:12:59.208Z	

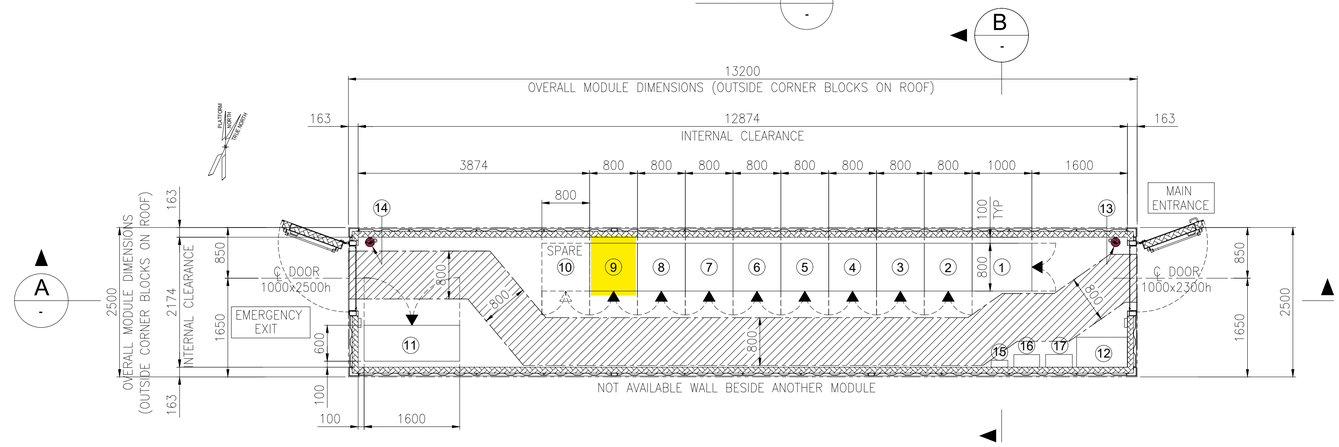
DRAWING NO. 123A90-DDL-IN-DL-40012 REV. 03



SECTION A -



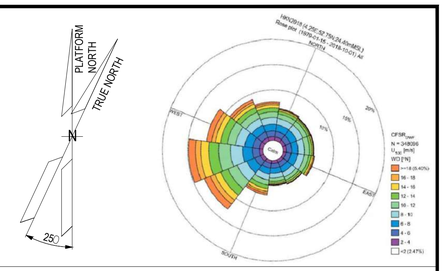
SECTION B -



EQUIPMENT LAYOUT
"B-400" I&T EQUIPMENT ROOM
BOTTOM PLAN

EQUIPMENT LIST

REF.	TAG No.	DESCRIPTION	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	NOTE
1	B400-SRV-001	SERVER CABINET	1000	800	2100	
2	B400-NET-001	NETWORK CABINET	800	800	2100	
3	B400-EMCS-001	EMCS SYSTEM CABINET	800	800	2100	
4	B400-PCS-002	PCS MARSHALLING CABINET	800	800	2100	
5	B400-PCS-001	PCS SYSTEM CABINET 03	800	800	2100	
6	B400-FGS-003	FGS MARSHALLING CABINET 2	800	800	2100	
7	B400-FGS-002	FGS MARSHALLING CABINET 1	800	800	2100	
8	B400-FGS-001	FGS SYSTEM CABINET	800	800	2100	
9	B400-SIS-001	SIS SYSTEM/MARSHALLING CABINET	800	800	2100	
10	-	SPARE				
11	B400-HSB-001	DISTRIBUTION & HVAC PANEL - I&T ROOM	1600	600	2300	
12	-	TABLE	850	500	750	
13	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
14	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.	150	150	750	
15	-	FIRST AID KIT	280	115	200	
16	-	RESUSCITATION UNIT	430	210	480	
17	-	CABINET INCLUDED N.10 ESCAPE MASK	448	213	422	



NOTES

1. U.N.O. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DOCUMENT VALID ONLY FOR INSTRUMENT COMPONENT, FOR OTHER SCOPE LOCATION AND INFORMATION, PLEASE REFER TO VENDORS AND PROJECT DOCUMENTS.

LEGEND

U.N.O. _____ UNLESS NOTED OTHERWISE
T.O.S. _____ TOP OF STEEL
_____ ESCAPE CORRIDOR – WIDTH 800mm.
_____ EQUIPMENT ROOM ENCLOUSURE
_____ FRONT OF EQUIPMENT

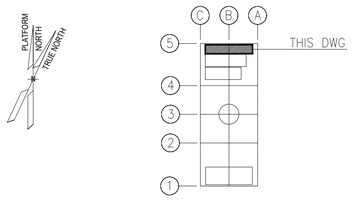
HOLDS

.

REFERENCE

DOCUMENT TITLE	DOCUMENT NUMBER
Control System Architecture Detailed Drawings	123A90-DDL-IN-DD-40096
Data Network Architecture Drawings	123A90-DDL-IN-DD-40019
Earthing layouts drawings (CCR, ITER)	123A90-DDL-IN-DL-40013
Instrument and Telecom MCT Layout – Lower Deck	123A90-DDL-IN-DL-40086
"B-400" I&T Equipment Room – Architectural Layout	123A90-DDL-AR-DL-10015
"B-400" ARCHITECTURAL GENERAL LAYOUT PLAN, WIEW, SECTIONS & TYP. DETAILS	123A90-DDL-AR-DL-10015
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DA-00017
"B-400" GENERAL ARRANGEMENT DRAWING	1724000049-AR-DD-00021
"B-400" HVAC SYSTEM G.A. and DETAILS	1724000049-HV-DA-00067

KEY PLAN



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
02	27/05/24	MGA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	22/01/24	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)
00	07/11/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND — ROSETTI MARINO

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DL-40012**

REV.:	DATE:	SIGNATURE:
3_A	07/10/24	G.Randi

ROSETTI MARINO SpA

TITLE : BASE LOAD POWER HUB (BLPH)
OFF-SHORE ITER
EQUIPMENT LAYOUT

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE 1:33,3
DRAWN MGA | CHECKED LCA | APPROVED DLO | DATE 27/05/24
A1 | DRAWING NO. 123A90-DDL-IN-DL-40012 | SHEET 001 | REV. 03

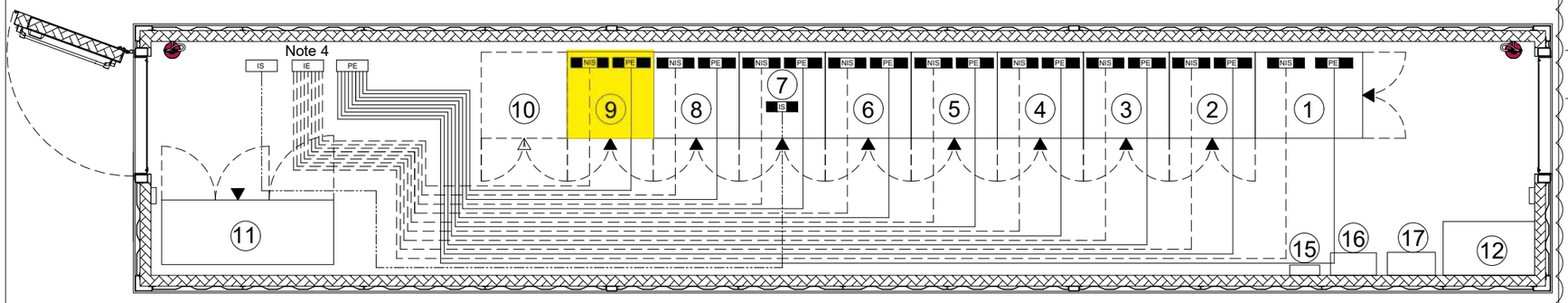
File Name : 123A90-DDL-IN-DL-40012 Rev.03.dwg

INSTRUMENT EQUIPMENT LIST		
REF.	TAG No.	DESCRIPTION
1	B400-SRV-001	SERVER CABINET
2	B400-NET-001	NETWORK CABINET
3	B400-EMCS-001	EMCS SYSTEM CABINET
4	B400-PCS-001	PCS SYSTEM CABINET
5	B400-PCS-002	PCS MARSHALLING CABINET
6	B400-FGS-001	FGS SYSTEM CABINET
7	B400-FGS-002	FGS MARSHALLING CABINET 1
8	B400-FGS-003	FGS MARSHALLING CABINET 2
9	B400-SIS-001	SIS SYSTEM/MARSHALLING CABINET
10	-	SPARE
11	B400-HSB-001	DISTRIBUTION & HVAC PANEL - I&T ROOM
12	-	TABLE
13	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.
14	-	PORTABLE EXTINGUISHER (CO2) 5 Kg.
15	-	FIRST AID KIT
16	-	RESUSCITATION UNIT
17	-	CABINET INCLUDED N.10 ESCAPE MASK

NOTES

1 - THIS DOCUMENT IS VALID ONLY FOR EARTHING LAYOUT.
2 - THE CABLE SIZE SHALL BE CONFIRMED
3 - THE EXACT POSITION OF EARTHING/MARSHALLING BUS BAR SHALL BE DEFINED IN FIELD.
4 - THE EARTHING BUS BARS INSTALLATION SHALL BE PREFERABLY IN VERTICAL MODE.
5 - FOR EARTHING TYPICAL DETAILS AND Y/G CONDUCTOR CROSS SECTION SEE DOC. 123A90-DDL-EL-DD-20090 "ELECTRICAL TYPICAL INSTALLATION DETAILS - EARTHING SYSTEM".
6 - DUE TO THE TOP CABLE ENTRIES THE EARTHING BUS BAR INSIDE THE CABINETS SHALL BE INSTALLED AT THE TOP OF THE CABINETS THEMSELVES.
7 - IN CASE OF CABLE CONNECTIONS BETWEEN TWO CABINETS, THE CABLE SCREEN SHALL BE CONNECTED TO IE AT MARSHALLING SIDE ONLY.

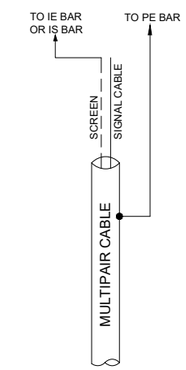
01



LEGEND

PE	EARTHING BUS BAR AISI 316L
NIS	INSULATED INSTRUMENT EARTH BUS BAR NOT INTRINSIC SAFETY DIM. 450x60x5mm AISI 316L
IS	INSULATED INSTRUMENT EARTH BUS BAR INTRINSIC SAFETY DIM. 450x60x5mm AISI 316L
— —	35sqmm Y/G INSULATED COPPER CONDUCTOR FOR PE (SEE NOTE 2)
———	35sqmm Y/G INSULATED COPPER CONDUCTOR FOR I.S. & NON I.S. (SEE NOTE 2)
▬	EARTHING BUS BAR 60x5mm AISI 316L (SEE NOTE 3)
PE	PROTECTIVE EARTH
IE	INSTRUMENT EARTH
IS	INTRINSICALLY SAFE EARTH

KEY



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DL-40013**

REV.:	DATE:	SIGNATURE:
1_A	08/08/24	G.Randi

ROSETTI MARINO SpA

01

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	14/05/24	MGA	LCA	DLO	ACCEPTED FOR CONSTRUCTION
00	19/01/24	INVIRAJ	AMBE/LCA	OYFO/MDO	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
EARTHING LAYOUT DRAWINGS(OFFSHORE ITER)
EQUIPMENT LAYOUT

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

A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-IN-DL-40013	003	01

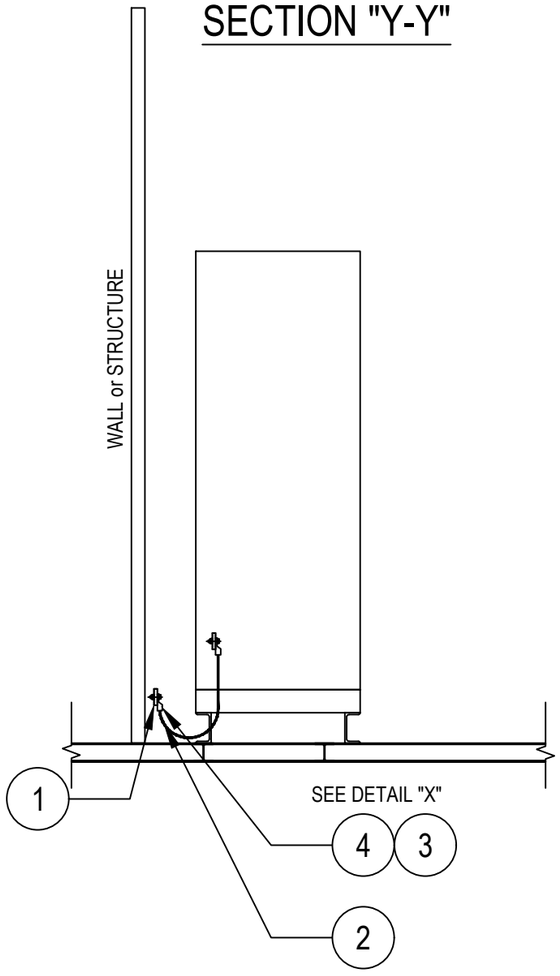
F.to UNI A3: 420mmx297mm

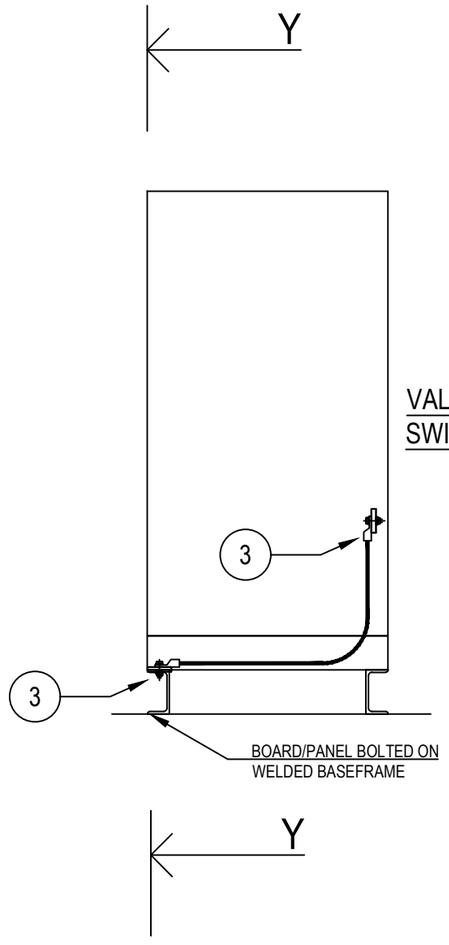
File Name : 123A90-DDL-IN-DL-430013 Rev. 01

E23

POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	MARSHALLING EARTHING BAR	TINNED COPPER	50X5		NOTE 1
2	Y/G INSULATING COPPER CONDUCTOR	COPPER	35mm² SEE NOTE 1		NOTE 1
3	COMPRESSION TYPE LUG FOR INSULATION COPPER CONDUCTOR	TINNED COPPER	35mm² SEE NOTE 1	4	NOTE 1
4	BOLT, PLANE WASHER, GROWER SPRING WASHER AND NUT	AISI 316L	M10X30	4	

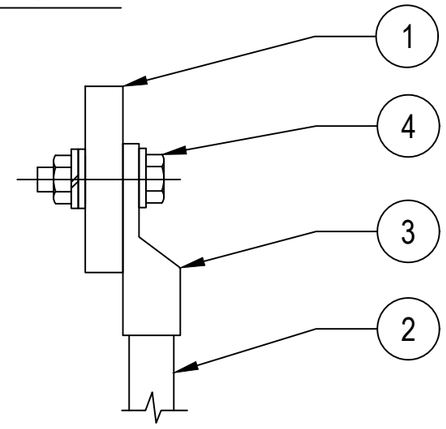
SECTION "Y-Y"





VALID FOR HV/LV SWITCHGEAR

DETAIL "X"



NOTES:

1) FOR SIZE OF THE EARTHING CABLE SEE ALSO EARTHING LAYOUT DRAWINGS OF RESPECTIVE AREAS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-EL-DD-20090**

REV.:	DATE:	SIGNATURE:
2_H	05/11/24	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	26/08/24	GRA	AMA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	10/06/24	SPS	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-EARTHING SYSTEM
EARTHING FOR PANELS/BOARDS IN TECHNICAL ROOM

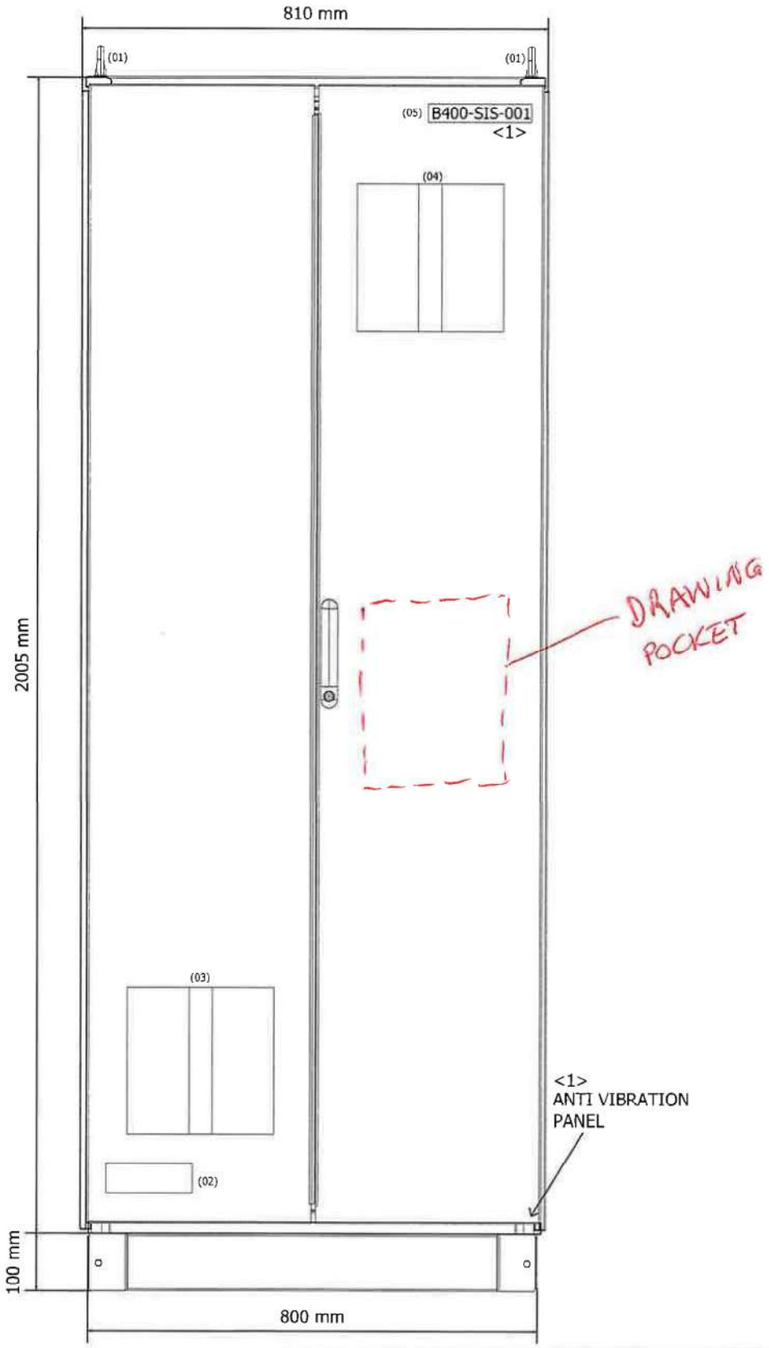
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

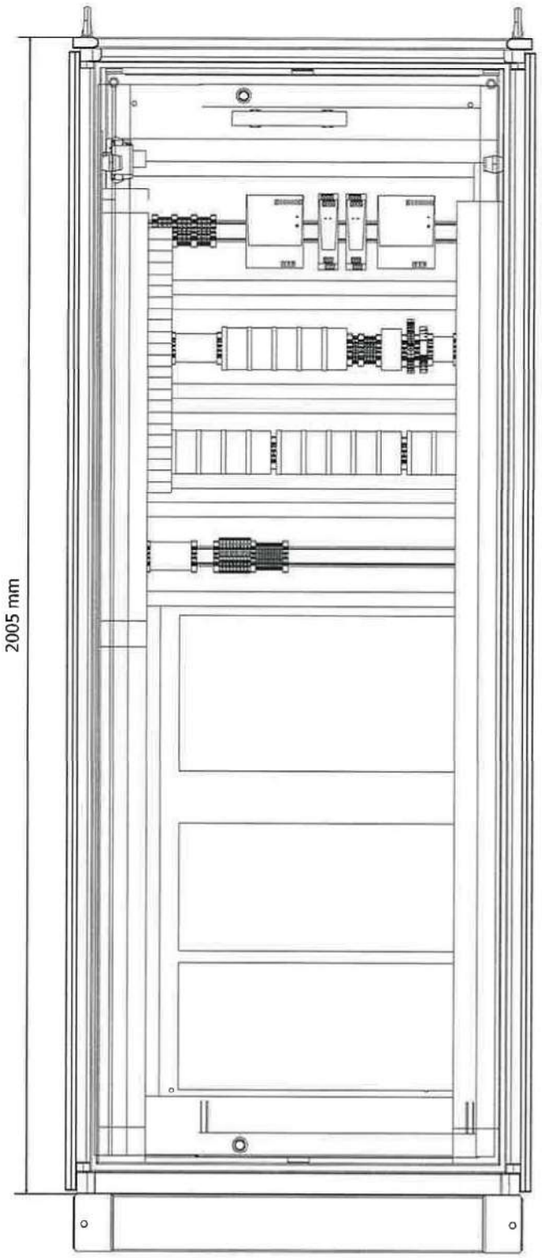
A3	DRAWING NO.	SHEET	REV.
	123A90-DDL-EL-DD-20090	011	02

F.to UNI A3: 420mmx297mm

File Name : 123A90-DDL-EL-DD-20090 REV.02.DWG

SIS PANEL - EXTERNAL FRONT VIEW & FRONT DOOR OPENED VIEW





DRAWING SCALE 1:10

1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND

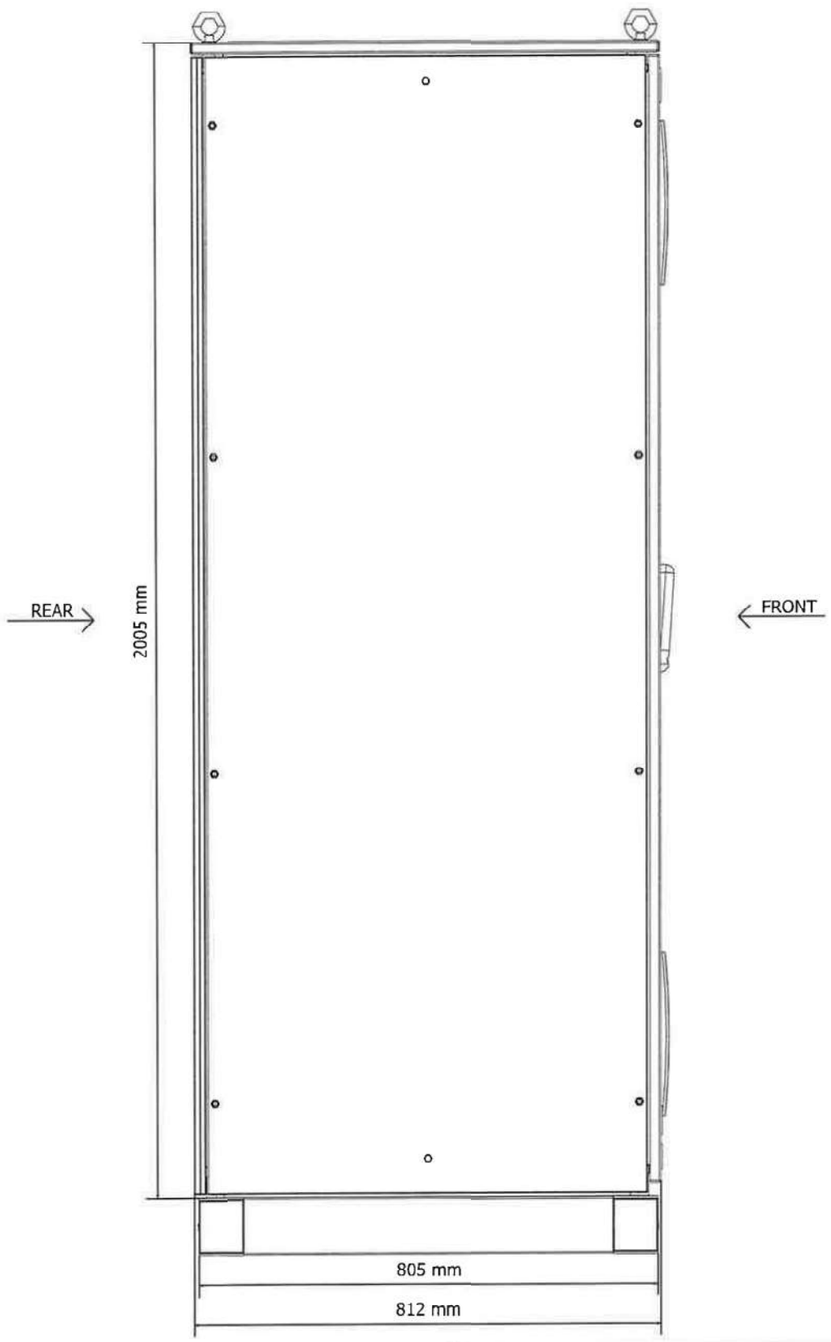
ROSETTI MARINO

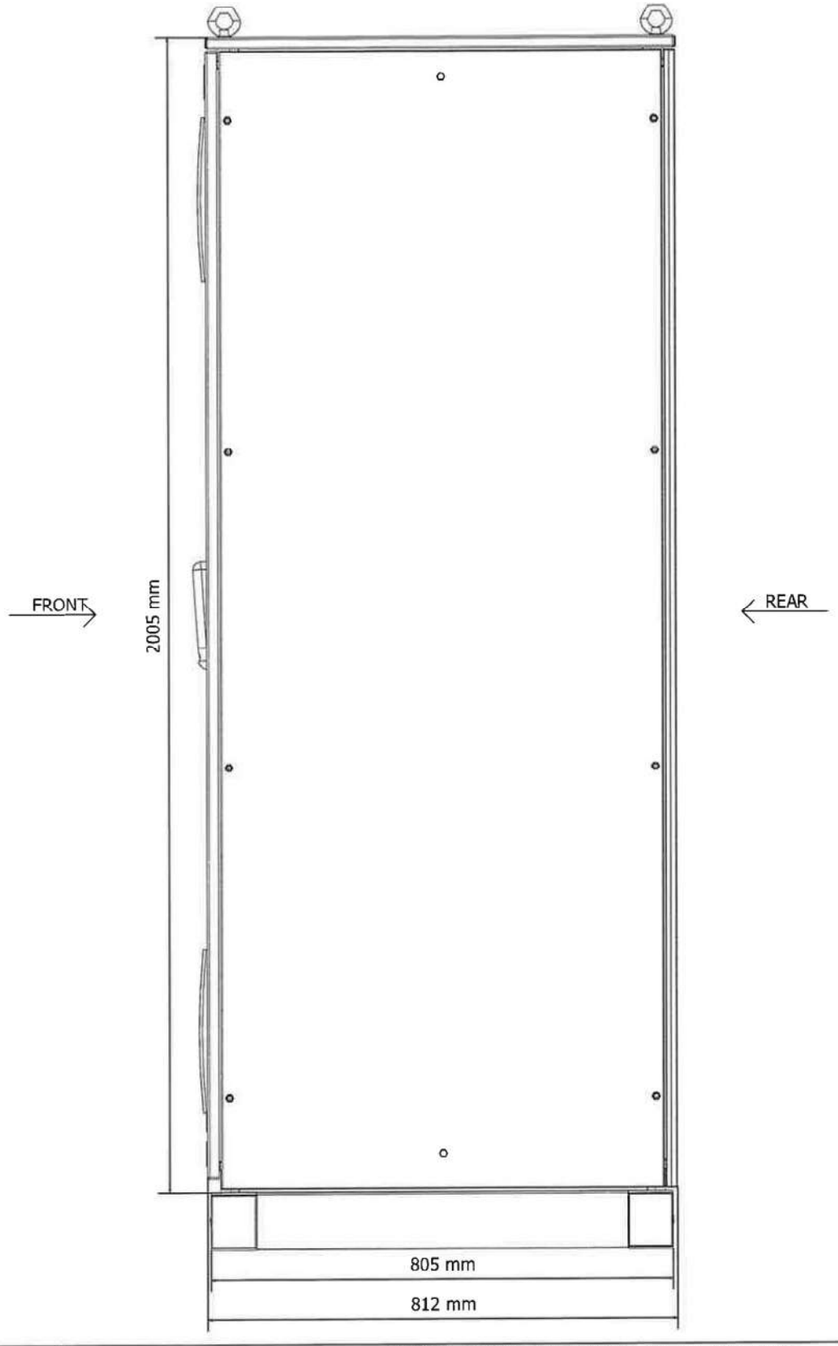
TITLE : BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - EXTERNAL FRONT VIEW & FRONT DOOR OPENED VIEW

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

A3 | DRAWING NO. 1724000594-IN-DA-00010 | SHEET 018 | REV. 1

SIS PANEL - EXTERNAL LEFT SIDE & RIGHT SIDE VIEW





DRAWING SCALE 1:10

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - EXTERNAL LEFT SIDE & RIGHT SIDE VIEW

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

SCALE : 1

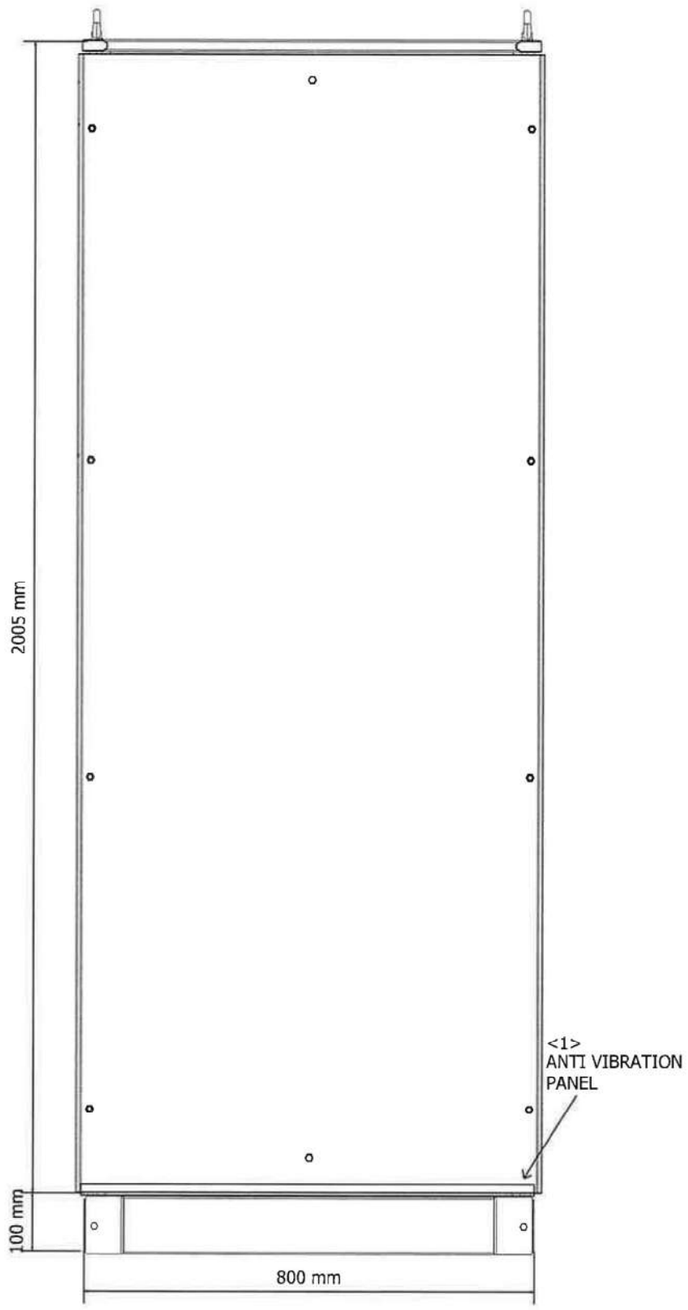
A3

DRAWING NO.
1724000594-IN-DA-00010

SHEET 019

REV. 1

SIS PANEL - EXTERNAL REAR VIEW



DRAWING SCALE 1:10

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - EXTERNAL REAR VIEW

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

SCALE : 1

A3

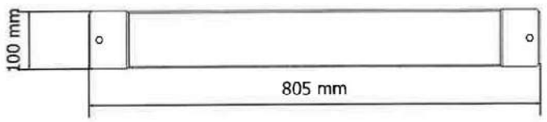
DRAWING NO.
1724000594-IN-DA-00010

SHEET 020

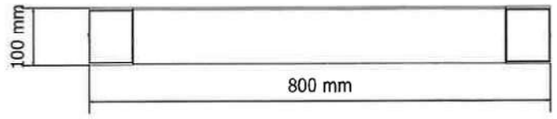
REV. 1

SIS PANEL - BASEPLATE DETAILS

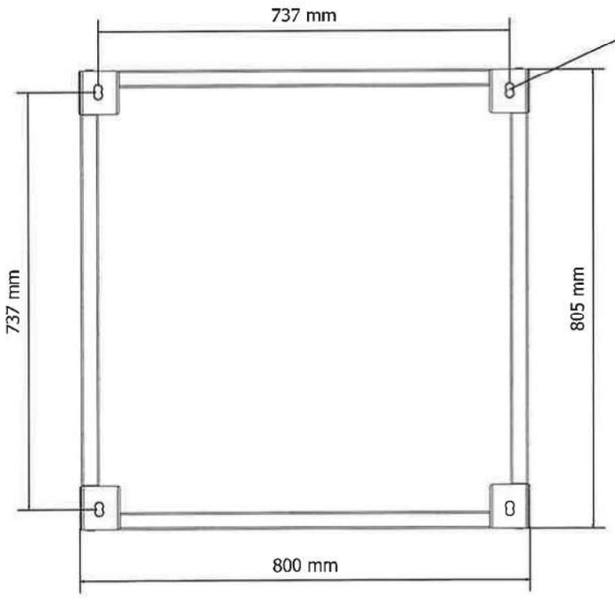
BASEPLATE SIDE VIEW



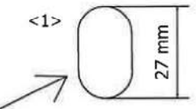
BASEPLATE FRONT VIEW



BASEPLATE BOTTOM VIEW
REAR SIDE



FRONT SIDE



DETAIL OF FIXING HOLE:
Ø 16mm

DRAWING SCALE 1:10

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND | ROSETTI MARINO

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

TITLE :
BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - BASEPLATE DETAILS

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

SCALE : 1

A3

DRAWING NO.
1724000594-IN-DA-00010

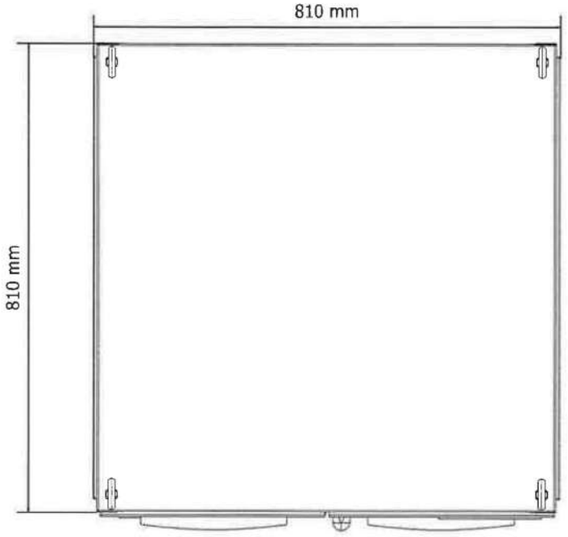
SHEET 021

REV. 1

SIS PANEL - EXTERNAL & INTERNAL TOP VIEW

<1> EXTERNAL TOP VIEW

REAR

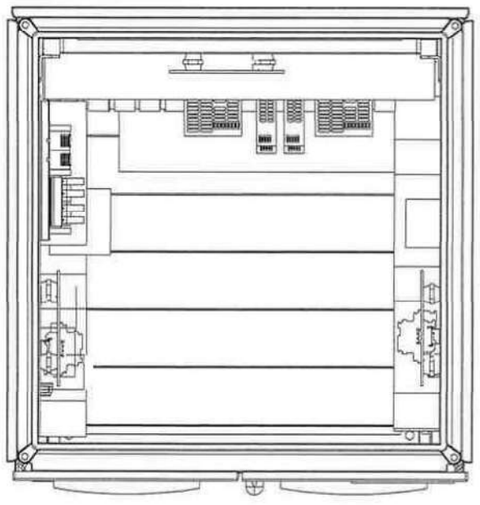


FRONT

INTERNAL TOP VIEW

<1>

REAR



FRONT

NOTE 1: DOOR LOCK AT 90°

DRAWING SCALE 1:10

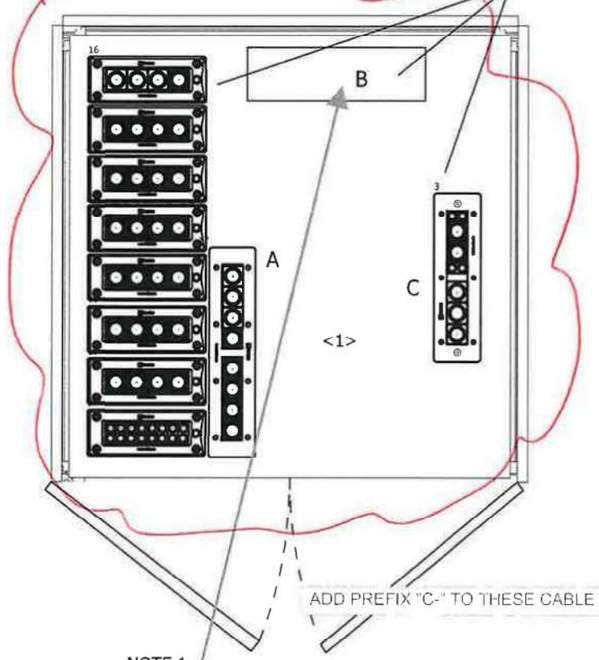
<1>

MISSING NO.1 CABLE ENTRY (PUNCH NO. S004)

EXTERNAL TOP VIEW (DOOR OPEN)

Cable Entry with MCT Roxtec <1>

REAR



FRONT

<1>

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
00-JE-21001/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	C
00-JE-21002/B400-SIS-001	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	C
C-63-PT-004/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	C
00-JE-22001_1/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-22001_2/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-22002_1/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-22002_2 / B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
P320PLC/B400-SIS-001	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	40x40	A
C-20-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-80-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-50-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-63-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-64-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-001/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-002/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-004/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-NC-200F2/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
00-JE-23001/B400-SIS-001	24x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-23002/B400-SIS-001	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	A
C-85-XS-001/B-400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-20-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-80-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-50-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-63-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-64-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-003/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-004/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
CP-100E1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
SG-100D1-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
SG-100D1-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
SG-100D1-003/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
CB-200F1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
UP-200F1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
SG-200N1-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
SG-200N1-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
UP-200F3/B400-SIS-001	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	A
CB-200F3A/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
CB-200F3B/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
CB-200F4A/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
CB-200F4B/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
UP-200F4/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A

THE DRAWING SHALL SHOW THE EXACT POSITION OF EACH CABLE INSIDE EACH MCT FRAME.
SPARE "PLUGGED" ENTRIES SHALL ALSO BE PROVIDED.

NETWORK CABLES TO BE ADDED: B400-NET1-A7/B7/A8/B8

PLEASE ADD THESE CABLES TO MCT FRAME "B"

TAG NUMBER	FORMATION mm²	External Cable Colour	Core Colour	Fire Behaviour	Armour (WB/SWA/AWA/ST) (Y)	RATED VOLTAGE (V)	FROM ITEM Tag	FROM DESCRIPTION	TO Panel/Block	TO ITEM Tag	TO DESCRIPTION
84301-CEL	3G2.5	Orange	BN,BU,Y/G	LSZH, Fire Resistant	Armoured	230	DP-200F3	AC UPS - PAS DB	DB CABINET	B400-SIS-001	SIS -Controller and I/O Cabinet - Line A
84302-CEL	3G2.5	Orange	BN,BU,Y/G	LSZH, Fire Resistant	Armoured	230	DP-200F3	AC UPS - PAS DB	DB CABINET	B400-SIS-001	SIS -Controller and I/O Cabinet - Line B
83104-CEL	3G2.5	Grey	BN,BU,Y/G	LSZH, Flame Retardant	Unarmoured	230	DP-200N1	Lighting & Small Power DB BoP	[illegible]	B400-SIS-001	SIS -Controller and I/O Cabinet - Auxiliary

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND | ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - EXTERNAL & INTERNAL TOP VIEW

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DA-00010

SHEET 022

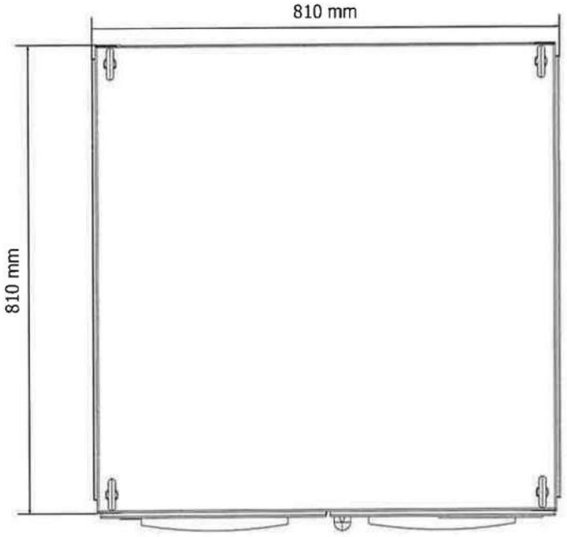
REV. 1

SIS PANEL - EXTERNAL & INTERNAL TOP VIEW

<1> EXTERNAL TOP VIEW

REAR

810 mm

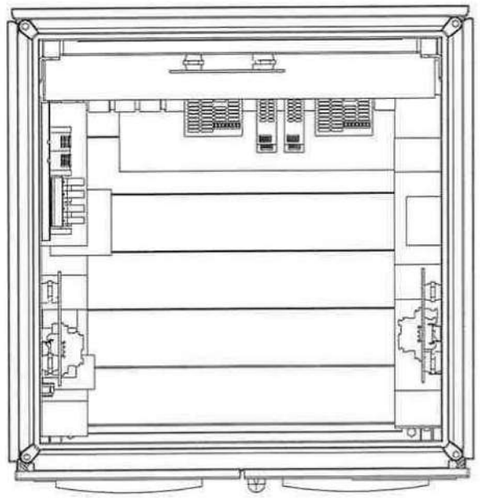


FRONT

INTERNAL TOP VIEW

<1>

REAR

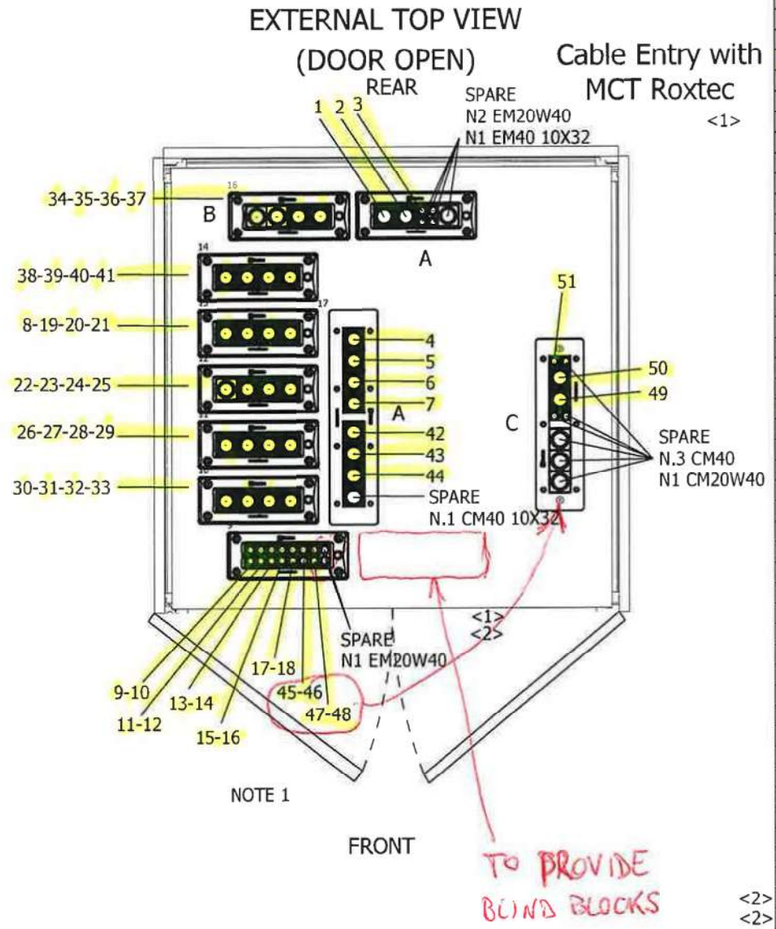


FRONT

EXTERNAL TOP VIEW

(DOOR OPEN)

REAR



Cable Entry with MCT Roxtec <1>

	CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	LOC.	POSITION
	00-JE-21001/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	CM40	C	49
	00-JE-21002/B400-SIS-001	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	CM40	C	50
	C-63-PT-004/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	CM20W40	C	51
	00-JE-22001_1/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	CM 40	A	4
	00-JE-22001_2/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	CM 40	A	5
	00-JE-22002_1/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	CM 40	A	6
	00-JE-22002_2 / B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	CM 40	A	7
	P320PLC/B400-SIS-001	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	EM40 10-32	A	8
	C-20-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	9
	C-80-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	10
	C-50-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	11
	C-63-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	12
	C-64-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	13
	C-77-XA-001/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	14
	C-77-XA-002/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	15
	C-77-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	16
	C-77-XA-004/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	17
	C-NC-200F2/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	EM20W40	A	18
	00-JE-23001/B400-SIS-001	24x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	32.9	EM40 10-32	A	19
	00-JE-23002/B400-SIS-001	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	EM40 10-32	A	20
	C-85-XS-001/B-400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	21
	C-20-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	22
	C-80-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	23
	C-50-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	24
	C-63-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	25
	C-64-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	26
	C-77-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	27
	C-77-XS-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	28
	C-77-XS-003/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	29
	C-77-XS-004/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	30
	CP-100E1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	31
	SG-100D1-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	32
	SG-100D1-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	33
	SG-100D1-003/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	34
	CB-200F1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	35
	UP-200F1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	36
	SG-200N1-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	37
	SG-200N1-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	38
	UP-200F3/B400-SIS-001	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	EM40 10-32	A	39
	CB-200F3A/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	40
	CB-200F3B/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	EM40 10-32	A	41
	CB-200F4A/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	CM40 10-32	A	42
	CB-200F4B/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	CM40 10-32	A	43
	UP-200F4/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	CM40 10-32	A	44
<2>	B100-NET1-A9	CAT.6A 4x2xAWG23, Sh+Sht+ARM, F Ret, GREY, NIS	10.7	EM20W40	A	45
<2>	B100-NET1-B9	CAT.6A 4x2xAWG23, Sh+Sht+ARM, F Ret, GREY, NIS	10.7	EM20W40	A	46
<2>	B100-NET1-A10	CAT.6A 4x2xAWG23, Sh+Sht+ARM, F Ret, GREY, NIS	10.7	EM20W40	A	47
<2>	B100-NET1-B10	CAT.6A 4x2xAWG23, Sh+Sht+ARM, F Ret, GREY, NIS	10.7	EM20W40	A	48
<2>	84301-CEL	3G2.5, ORANGE, NIS	15.5	EM40 10-32	B	1
<2>	84302-CEL	3G2.5, ORANGE, NIS	15.5	EM40 10-32	B	2
<2>	83104-CEL	3G2.5, GREY, NIS	13	EM20W40	B	3

NOTE 1: DOOR LOCK AT 90°

DRAWING SCALE 1:10

<1>

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND | ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - EXTERNAL & INTERNAL TOP VIEW

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DA-00010

SHEET 022

REV. 1

SHEET LEFT INTENTIONALLY BLANK

DRAWING SCALE 1:1

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND

ROSETTI MARINO

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

TITLE :
BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SPARE PAGE

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

SCALE : 1

A3

DRAWING NO.
1724000594-IN-DA-00010

SHEET 029

REV. 1

CERTIFICATION LABELS DETAILS

TYPICAL 05

LABEL FOR ITEM IDENTIFIER : ITEM (25)

MATERIAL	: TRAFFOLYTE
DIMENSION	: 150mm x 150mm (lxh)
BACKGROUND COLOUR	: WHITE
TEXT COLOUR	: BLACK
TEXT HEIGHT	: 4 mm
TEXT FONT	: ARIAL
FIXING	: SS316L SCREWS OR RIVETS

T.B.D.

TO BE INCLUDED IN NEXT REVISION?

TO UPDATE AS BUILT

DRAWING SCALE 1:1
ALL QUOTES SHOWN ARE IN MILLIMETERS

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

CROSSWIND | ROSETTI MARINO

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
CERTIFICATION LABEL

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

A3 | DRAWING NO. 1724000594-IN-DA-00010 | SHEET 030 | REV. 1

SIS PANEL - POWER DISTRIBUTION FROM UPS LINE 1

230Vac-50Hz
FROM UPS#1
(BY CUSTOMER)

TB-PS1_S

CUSTOMER CONNECTION POINT

CB_UPS1_S
(048-B02)

(048-C02)
(048-C02)

04701 BR 6 mm²
04703 LB 6 mm²
00611 YG 6 mm²
PE

MS1_S
230Vac
32A

04704 BR 6 mm²
04702 LB 6 mm²

04705 BR 2,5 mm²
04706 LB 2,5 mm²
Q55
Q55
230Vac
16A
"C" CURVE
(058-B02)

04707 BR 2,5 mm²
04708 LB 2,5 mm²
Q56
Q56
230Vac
6A
"D" CURVE
(058-A02)

04709 BR 2,5 mm²
04710 LB 2,5 mm²
Q57
Q57
230Vac
6A
"D" CURVE
(058-A03)

04711 BR 2,5 mm²
04712 LB 2,5 mm²
Q58
Q58
230Vac
6A
"D" CURVE
(058-B03)

04713 BR 2,5 mm²
04714 LB 2,5 mm²
Q59
Q59
230Vac
10A
"C" CURVE
(058-C03)

C4 TO BE REPLACED WITH C10 (S002)

SPARE

05601 BR 2,5 mm²
05602 LB 2,5 mm²
(056-B02)
(056-B02)
POWER SUPPLY
G1_S

06301 BR 1,5 mm²
06302 LB 1,5 mm²
(063-G02)
(063-G02)
POWER SUPPLY (1)
RACK "A"
SPW482-53
1

06401 BR 1,5 mm²
06402 LB 1,5 mm²
(064-G02)
(064-G02)
POWER SUPPLY (1)
RACK "B"
SPW482-53
2

06501 BR 1,5 mm²
06502 LB 1,5 mm²
(065-G02)
(065-G02)
POWER SUPPLY (1)
RACK "C"
SPW482-53
3

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac POWER DISTRIBUTION FROM UPS LINE 1

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 047

REV. 1

SIS PANEL - POWER DISTRIBUTION FROM UPS LINE 1



REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac POWER DISTRIBUTION FROM UPS LINE 1

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 048

REV. 1

SIS PANEL - POWER DISTRIBUTION FROM UPS LINE 2

230Vac-50Hz
FROM UPS#2
(BY CUSTOMER)

CUSTOMER CONNECTION POINT

TB-PS2_S 1 2 3

04901 BR 6 mm² | 04903 LB 6 mm² | 00611 YG 6 mm² | PE

CB_UPS2_S
(050-B02)

(050-C02)
(050-C02)

MS2_S
230Vac
32A

04904 BR 6 mm² | 04902 LB 6 mm²

	Q60	Q61	Q62	Q63	Q64
04905 BR / 04906 LB	2,5 mm²	04907 BR / 04908 LB	2,5 mm²	04909 BR / 04910 LB	2,5 mm²	04911 BR / 04912 LB	2,5 mm²	04913 BR / 04914 LB	2,5 mm²
230Vac	16A "C" CURVE	6A "D" CURVE	6A "D" CURVE	6A "D" CURVE	10A "C" CURVE
	(058-D03)	(058-E03)	(058-F03)	(058-G03)	(058-F04)
05603 BR / 05604 LB	2,5 mm²	06303 BR / 06304 LB	1,5 mm²	06403 BR / 06404 LB	1,5 mm²	06503 BR / 06504 LB	1,5 mm²		
	(056-H02)	(056-H02)	(063-H02)	(063-H02)	(064-H02)	(064-H02)	(065-H02)	(065-H02)	
	POWER SUPPLY G2_S		POWER SUPPLY (2) RACK "A" SPW482-53		POWER SUPPLY (2) RACK "B" SPW482-53		POWER SUPPLY (2) RACK "C" SPW482-53		

Q64 230Vac 10A "C" CURVE (058-F04) — CB TO BE REPLACED WITH C10 (S002)

SPARE

1 2 3

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND | ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac POWER DISTRIBUTION FROM UPS LINE 2

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 049

REV. 1

SIS PANEL - POWER DISTRIBUTION FROM UPS LINE 1



REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac POWER DISTRIBUTION FROM UPS LINE 2

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

SCALE : 1

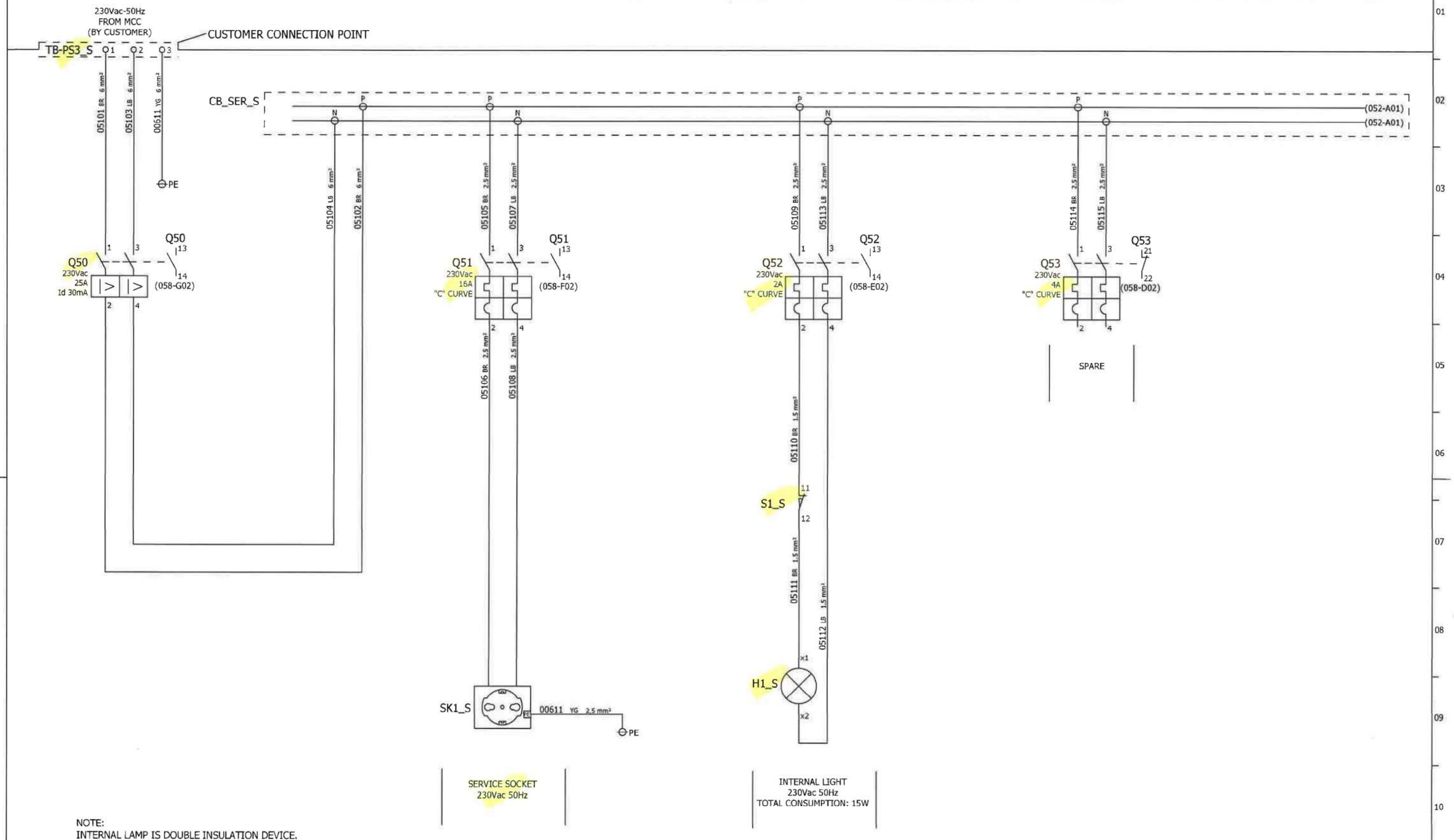
A3

DRAWING NO.
1724000594-IN-DG-00021

SHEET 050

REV. 1

SIS PANEL - POWER DISTRIBUTION FROM NON UPS



NOTE:
INTERNAL LAMP IS DOUBLE INSULATION DEVICE.
NO EARTH CONNECTION REQUIRED.

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND | ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac POWER DISTRIBUTION FROM NON-UPS

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

SCALE : 1

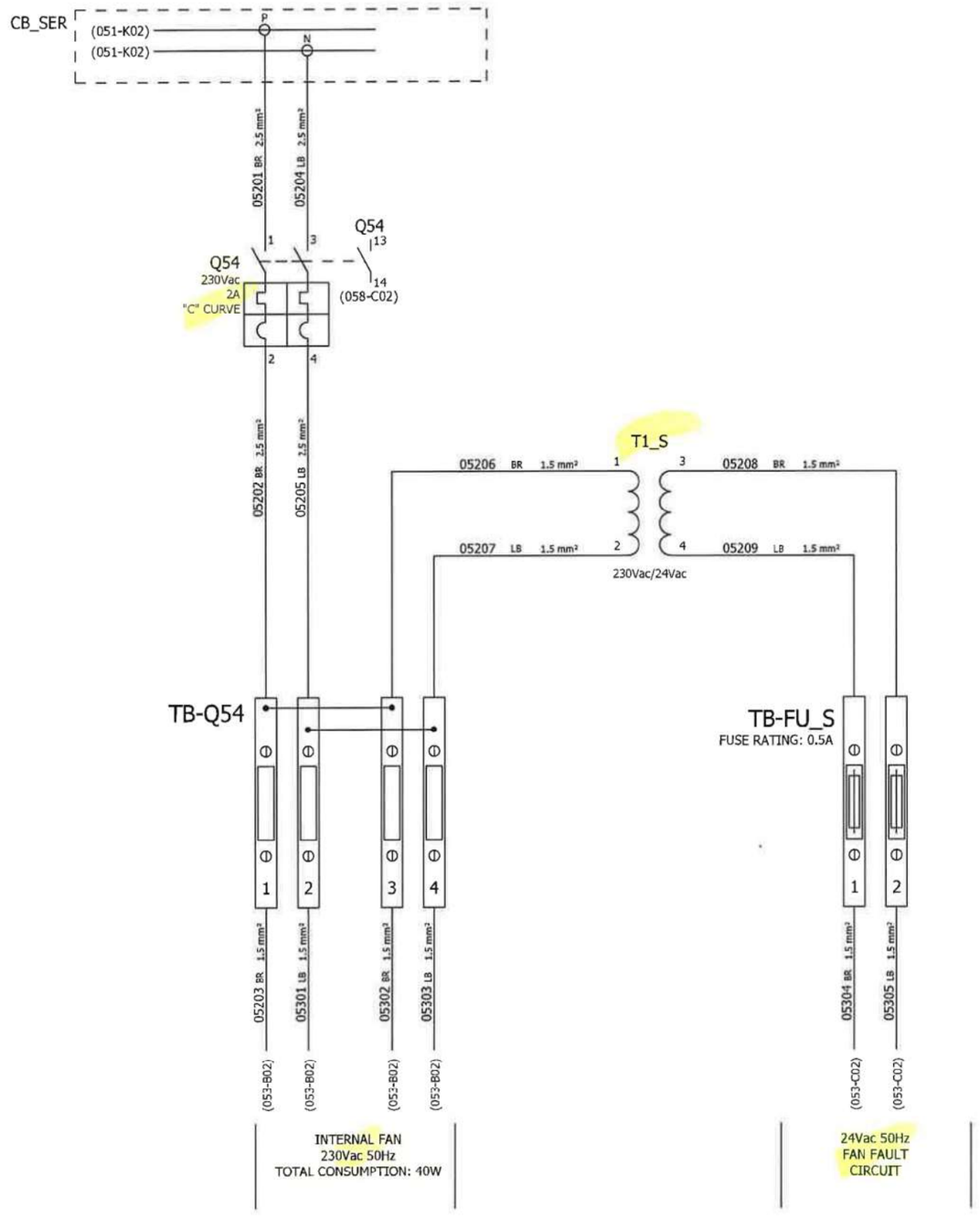
A3

DRAWING NO.
1724000594-IN-DG-00021

SHEET 051

REV. 1

SIS PANEL - POWER DISTRIBUTION FROM NON UPS



REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac POWER DISTRIBUTION FROM NON-UPS

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

SCALE : 1

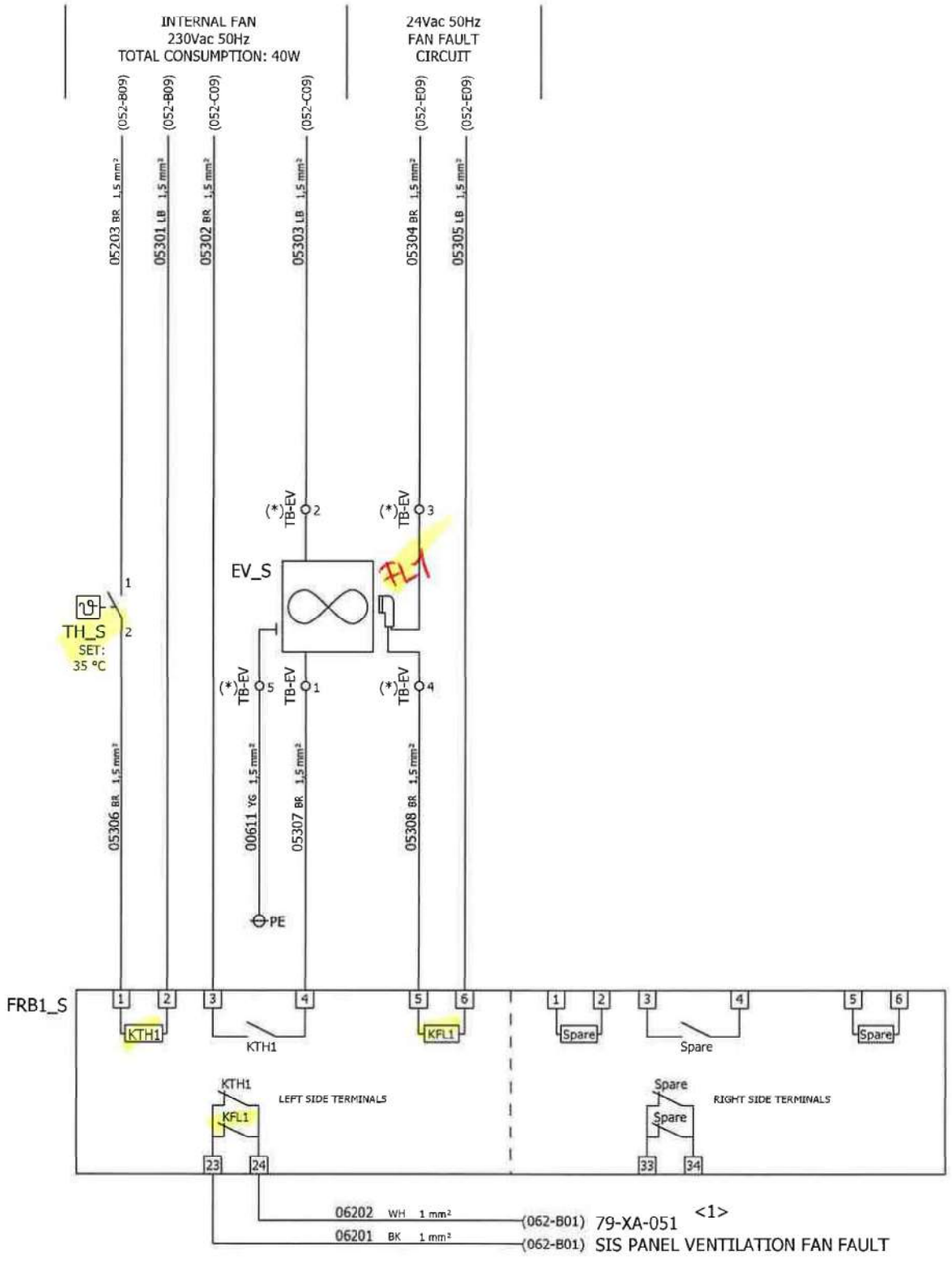
A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 052

REV. 1

SIS PANEL - 230Vac 50Hz POWER DISTRIBUTION VENTILATION FAN & HEATER



NOTE (*):
TB-EV IS A FEED THROUGH TERMINAL BOARD FOR PRE-WIRED ITEMS CONNECTION. FOR THIS REASON, WIRE NUMBERS WILL BE THE SAME ON BOTH SIDES.

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac 50Hz POWER DISTRIBUTION VENTILATION FAN

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

SCALE : 1

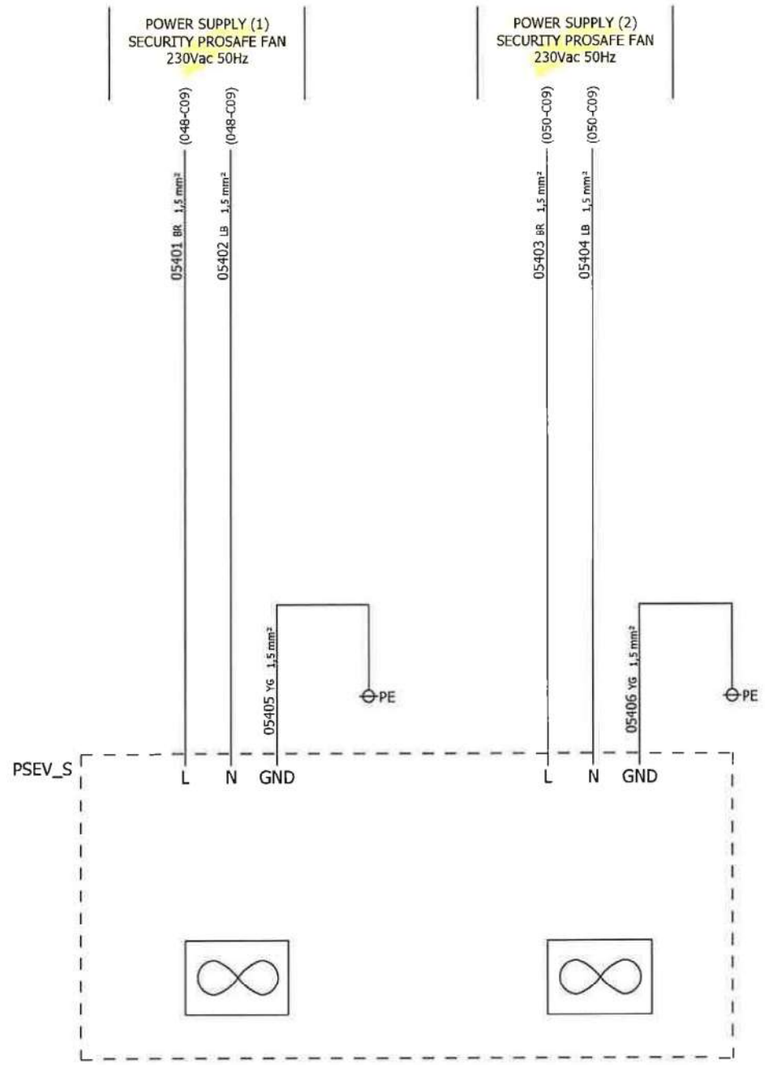
A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 053

REV. 1

SIS PANEL - 230Vac 50Hz POWER DISTRIBUTION SECURITY PROSAFE FAN



1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac 50Hz POWER DISTRIBUTION SECURITY PROSAFE FAN

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 054

REV. 1

SHEET LEFT INTENTIONALLY BLANK

1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SPARE PAGE

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 055

REV. 1

SIS PANEL - 230Vac/24Vdc POWER DISTRIBUTION

POWER SUPPLY LINE
230Vac 50Hz
FROM UPS#1

(047-D09) 05601 BR 2.5 mm² — (047-D09) 05602 LB 2.5 mm²

G1_S

G1_S
IN: 230Vac
OUT: 24Vdc
480W
20A
WEIDMULLER PRO ECO
code 1469510000

AC / DC — [-(+)] [N(-)] — 13 14 — PE

06203 WH 1 mm² — (062-B02)
05613 WH 1 mm²
00611 YG 2,5 mm² — PE

79-XA-052
SIS PANEL POWER SUPPLY
24Vdc FAILURE <1>

05605 RD 4 mm² — 05607 BU 4 mm² — 05606 RD 4 mm² — 05610 BU 4 mm²

VD1_S

VD1_S
20A
WEIDMULLER PRO DM 20
code 2486080000

IN1+ IN1- IN2+ IN2- — OUT+ OUT- <1>

05608 RD 6 mm² — 05611 BU 6 mm²

Q65
24Vdc
32A
1 2 3 4
13 14
(058-E05)

05609 RD 6 mm² — 05612 BU 6 mm²

C2
TO BE REPLACED
WITH 32A
(S002)

CB_24Vdc_S
(061-A01)
+ -

POWER SUPPLY LINE
230Vac 50Hz
FROM UPS#2

(049-D09) 05603 BR 2.5 mm² — (049-D09) 05604 LB 2.5 mm²

G2_S

G2_S
IN: 230Vac
OUT: 24Vdc
480W
20A
WEIDMULLER PRO ECO
code 1469510000

AC / DC — [-(+)] [N(-)] — 13 14 — PE

05613 WH 1 mm²
06204 BK 1 mm² — (062-B02)
00611 YG 2,5 mm² — PE

79-XA-052
SIS PANEL POWER SUPPLY
24Vdc FAILURE <1>

05614 RD 4 mm² — 05616 BU 4 mm² — 05615 RD 4 mm² — 05619 BU 4 mm²

VD2_S

VD2_S
20A
WEIDMULLER PRO DM 20
code 2486080000

IN1+ IN1- IN2+ IN1- — OUT+ OUT- <1>

05617 RD 6 mm² — 05620 BU 6 mm²

Q66
24Vdc
32A
1 2 3 4
13 14
(058-D05)

05618 RD 6 mm² — 05621 BU 6 mm²

(061-A01)
(061-A01)

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD
CROSSWIND
ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - 230Vac / 24Vdc POWER DISTRIBUTION

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK
SCALE : 1
A3
DRAWING NO. 1724000594-IN-DG-00021
SHEET 056
REV. 1

SHEET LEFT INTENTIONALLY BLANK

1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SPARE PAGE

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

SCALE : 1

A3

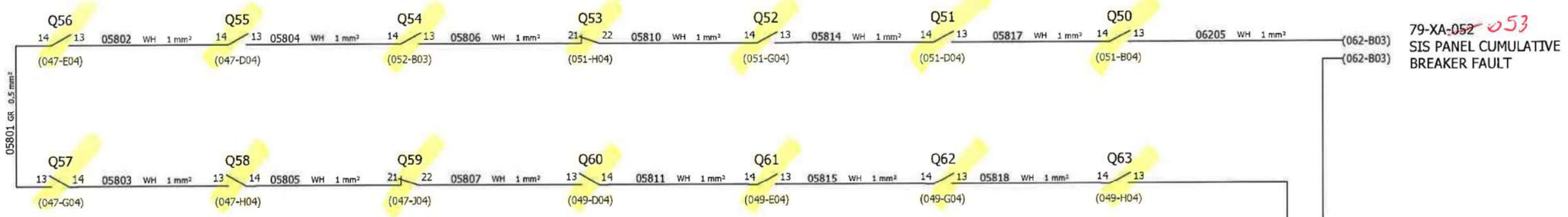
DRAWING NO. 1724000594-IN-DG-00021

SHEET 057

REV. 1

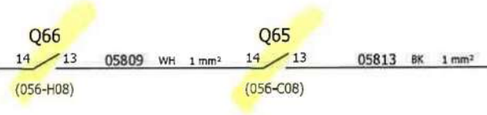
SIS PANEL - BRAKER FAULT ALARM CIRCUIT

230Vac CIRCUIT BREAKER



79-XA-052 053
SIS PANEL CUMULATIVE BREAKER FAULT

24Vdc CIRCUIT BREAKER



NOTE : SPARE CIRCUIT BREAKER FAULT CONTACT TO BE CONNECTED ON NORMALLY CLOSE CONTACT.
CHANGE CONNECTION TO NORMALLY OPEN CONTACT WHEN THE BREAKER WILL BE USED

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00 DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - BREAKER FAULT ALARM CIRCUIT

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

SCALE : 1

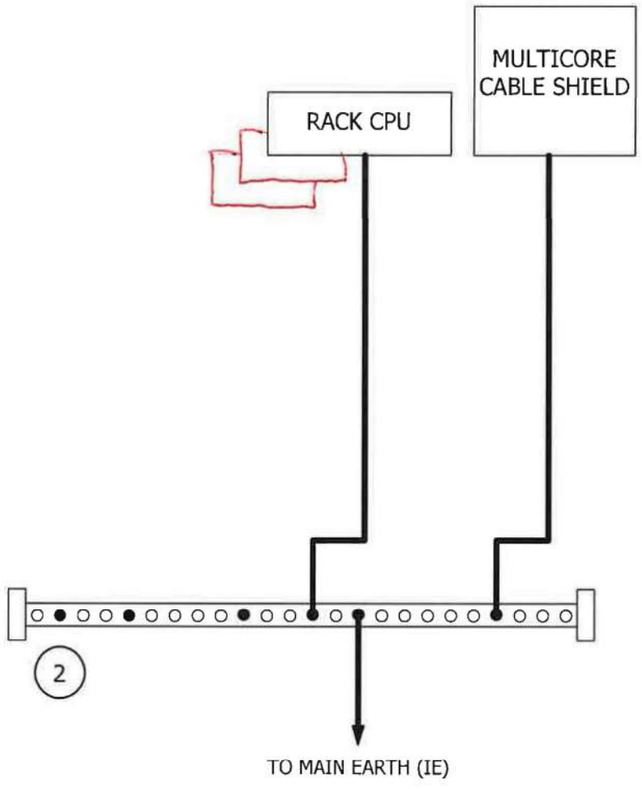
A3

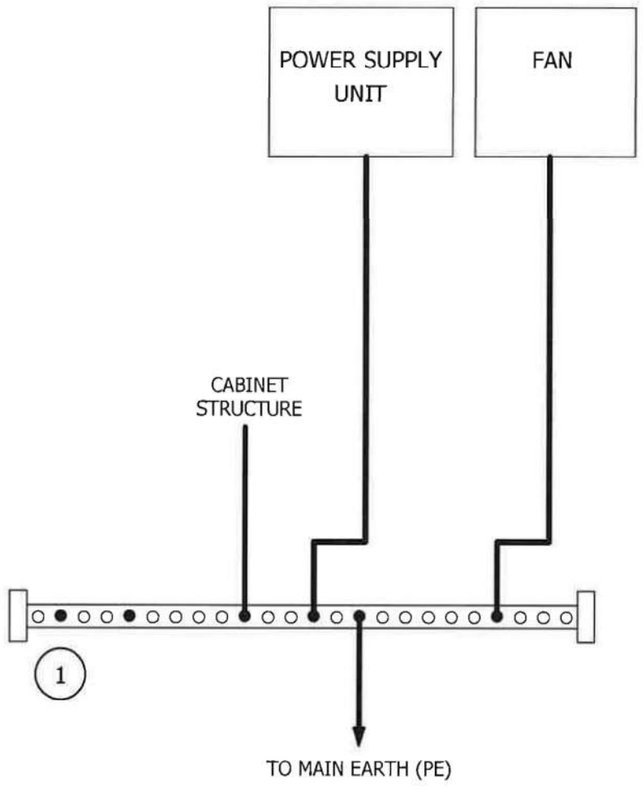
DRAWING NO. 1724000594-IN-DG-00021

SHEET 058

REV. 1

POS.	EARTH TYPE	DESCRIPTION SYSTEM EARTH
1	P.E. EARTH	PROTECTION EARTH (GROUND, FRAME CHASSIS)
2	I.E. EARTH	INSTRUMENTAL EARTH





REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - SHIELD / GROUND CONNECTION

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 059

REV. 1

SHEET LEFT INTENTIONALLY BLANK

1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SPARE PAGE

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

SCALE : 1

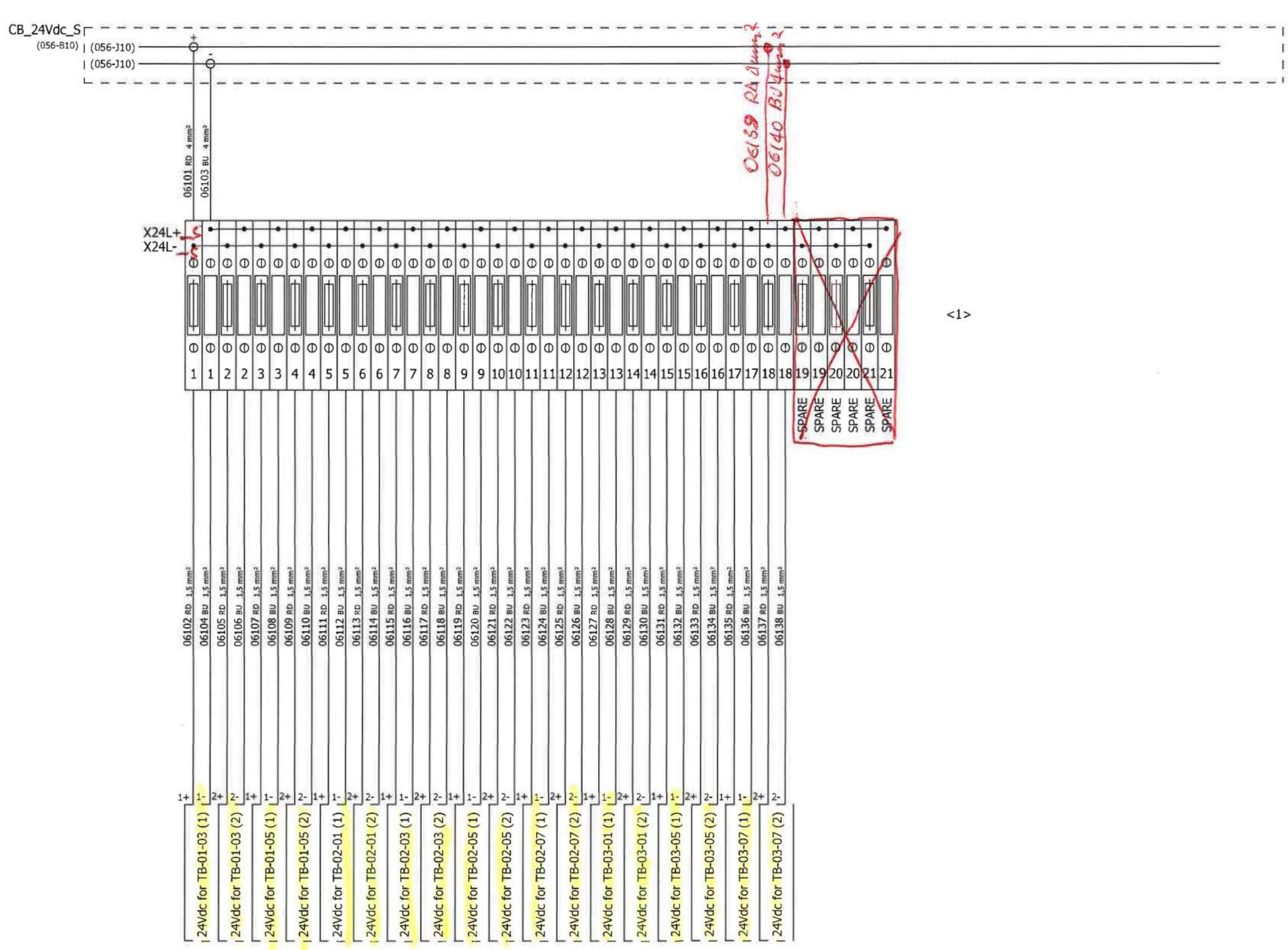
A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 060

REV. 1

SIS PANEL - 24Vdc POWER DISTRIBUTION



1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA ◆ PROJECT Nr. E36672C00 DESCRIPTION: E366772C00-SIS_WD

CROSSWIND — ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
24Vdc POWER DISTRIBUTION

CONTRACT NO./TITLE	CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK	SCALE :	1
A3	DRAWING NO. 1724000594-IN-DG-00021	SHEET 061	REV. 1

SIS PANEL - FAULT ALARM SIGNALS TO DCS

79-XA-051	(053-C10)	06202	WH	1 mm²	01A	IN 01	SLOT 7	NODE 3
-	(053-C10)	06201	BK	1 mm²	01B	IN 01	SLOT 7	NODE 3
					01C	IN 01	SLOT 7	NODE 3

79-XA-051 - <1>

79-XA-052	(056-C04)	06203	WH	1 mm²	02A	IN 02	SLOT 7	NODE 3
-	(056-J04)	06204	BK	1 mm²	02B	IN 02	SLOT 7	NODE 3
					02C	IN 02	SLOT 7	NODE 3

79-XA-052 - <1>

79-XA-053	(058-J02)	06205	WH	1 mm²	03A	IN 03	SLOT 7	NODE 3
-	(058-J02)	05813	BK	1 mm²	03B	IN 03	SLOT 7	NODE 3
					03C	IN 03	SLOT 7	NODE 3

79-XA-053 - <1>

79-XA-054	<1>	06206	WH	1 mm²	04A	IN 04	SLOT 7	NODE 3
-	THH_S SET: 40 °C	06207	BK	1 mm²	04B	IN 04	SLOT 7	NODE 3
					04C	IN 04	SLOT 7	NODE 3

79-XA-054 - <1>

DETAIL TO BE IMPLEMENTED

55A	IN 5	5.7	N.3	79-XA-055
B	IN 5	5.7	N.3	
C	IN 5	5.7	N.3	

SIS001-UA-05 AT_01_S		07533	BK	4 mm2	14A	IN 14	SLOT 03	NODE 01
		07534	WH	1 mm2.	14B	IN 14	SLOT 03	NODE 01
					14C	IN 14	SLOT 03	NODE 01

SIS001-UA-05

CUSTOMER TAG	SIGNAL DESCRIPTION FROM IO LIST
79-XA-051	SYS PANEL VENTILATION FAN FAULT
79-XA-052	SYS PANEL POWER SUPPLY & DIODES FAILURE
79-XA-053	SYS PANEL CUMULATIVE BREAKER FAULT
79-XA-054	SYS PANEL HIGH TEMPERATURE ALARM
79-XA-055	SIS PANEL DIGITAL TB CUMUL. ALARM

CUSTOMER TAG	SIGNAL DESCRIPTION FROM IO LIST
-	-
-	-
-	-
-	-
-	-

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND | ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - FAULT ALARM SIGNALS TO DCS

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

SCALE : 1

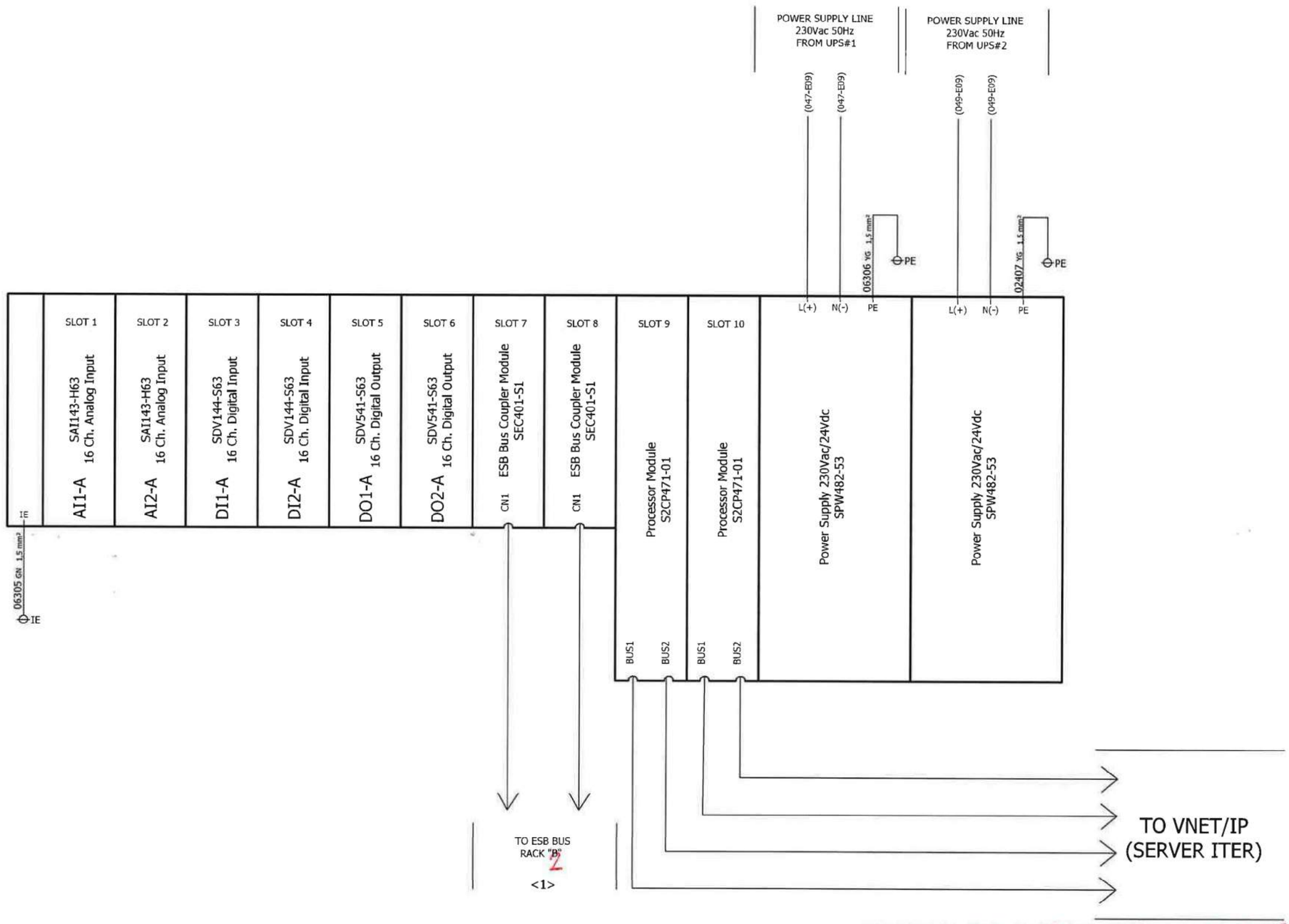
A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 062

REV. 1

SIS PANEL - RACK "A" POWER DISTRIBUTION



REFER TO DOC. N. 1724000594-IN-DG-00016
"NETWORK CONNECTION DIAGRAM)

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - RACK "A" POWER DISTRIBUTION

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

SCALE : 1

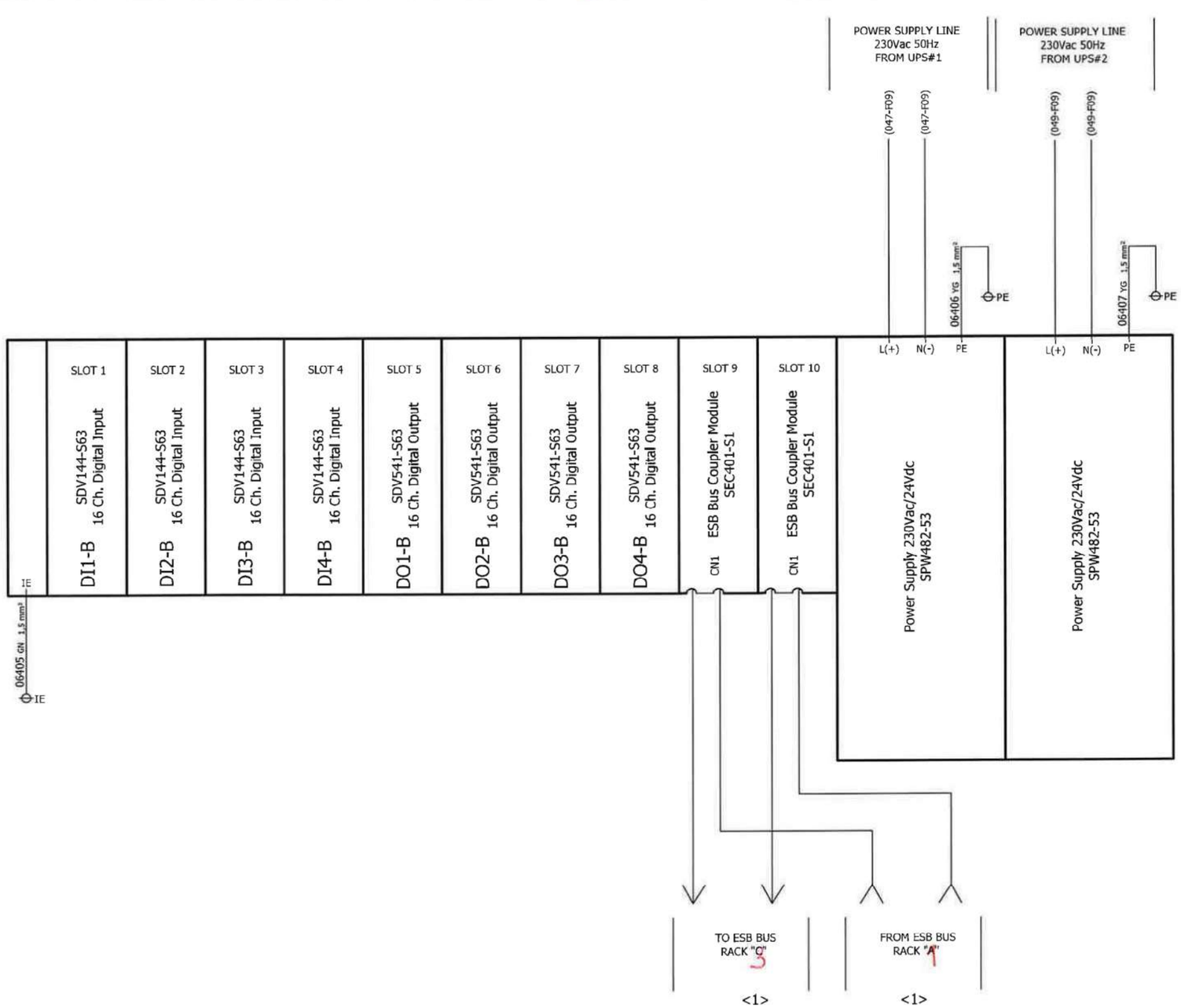
A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 063

REV. 1

SIS PANEL - RACK "B" POWER DISTRIBUTION



REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - RACK "B" POWER DISTRIBUTION

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

SCALE : 1

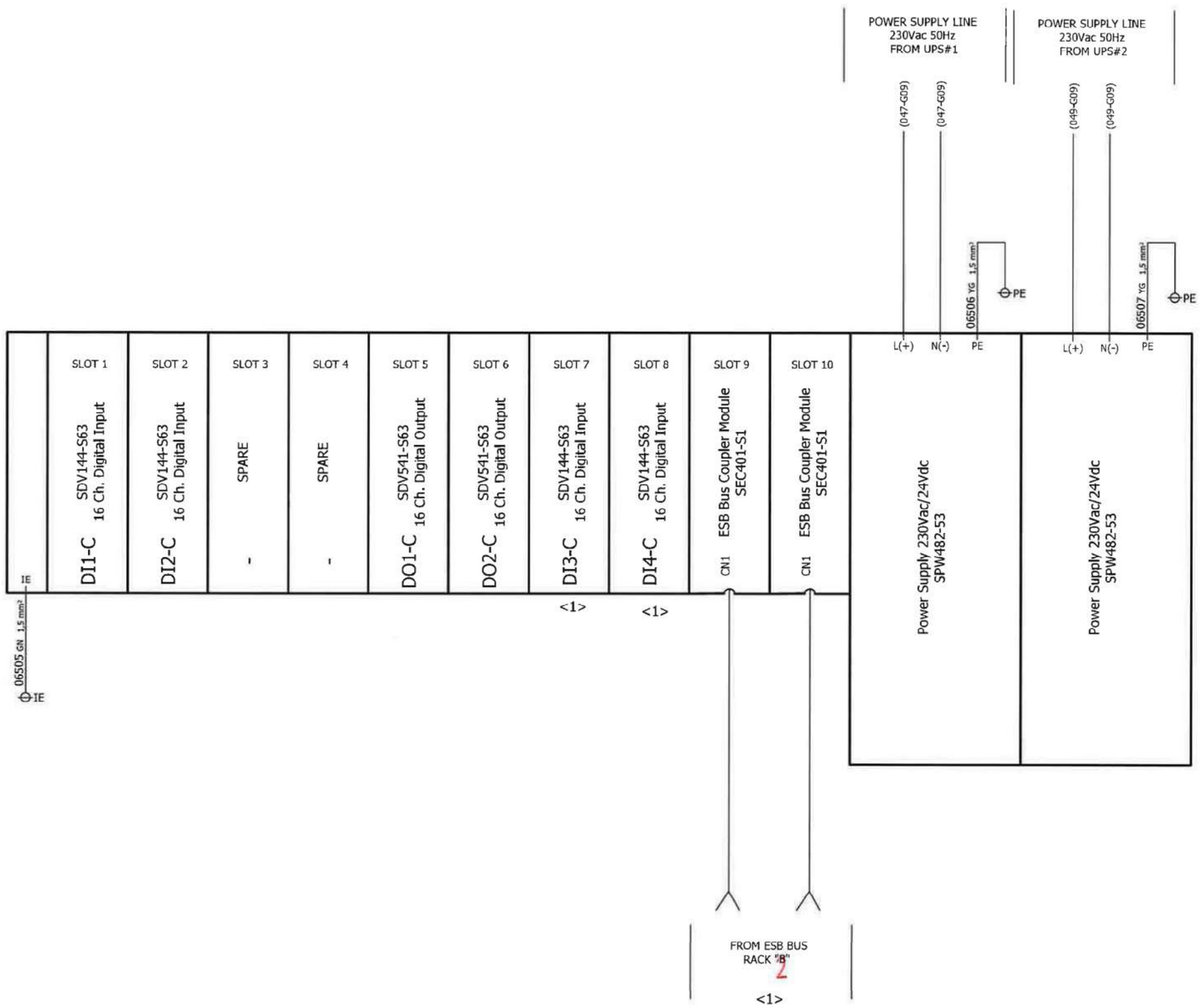
A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 064

REV. 1

SIS PANEL - RACK "3" POWER DISTRIBUTION



1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - RACK "3" POWER DISTRIBUTION

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

SCALE : 1

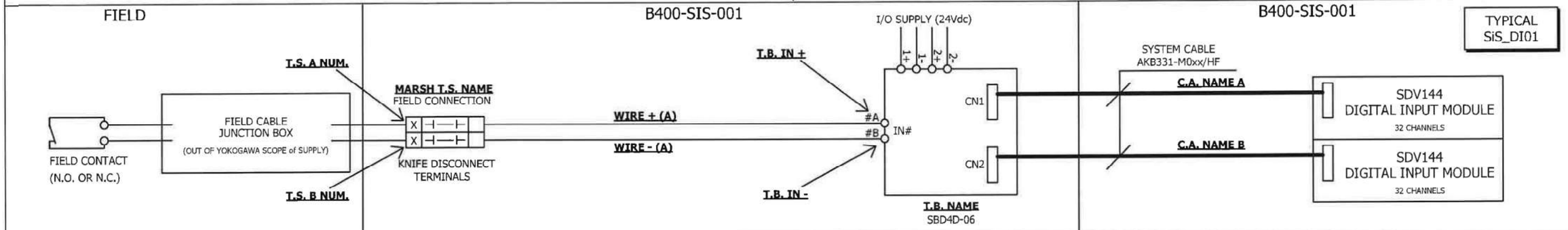
A3

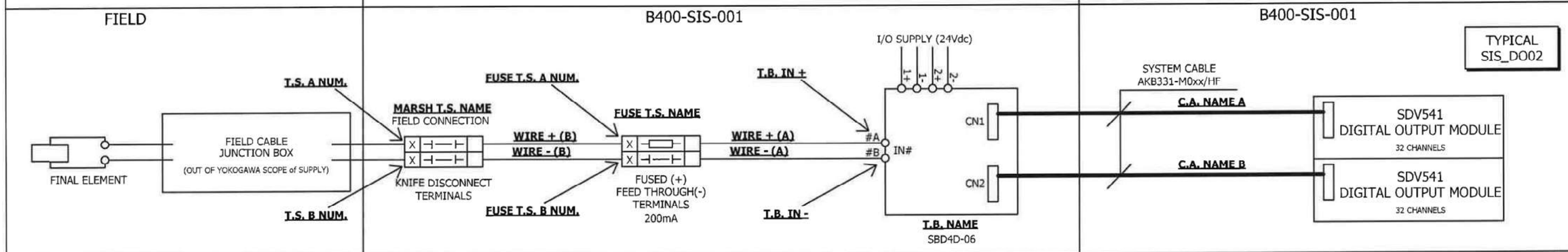
DRAWING NO. 1724000594-IN-DG-00021

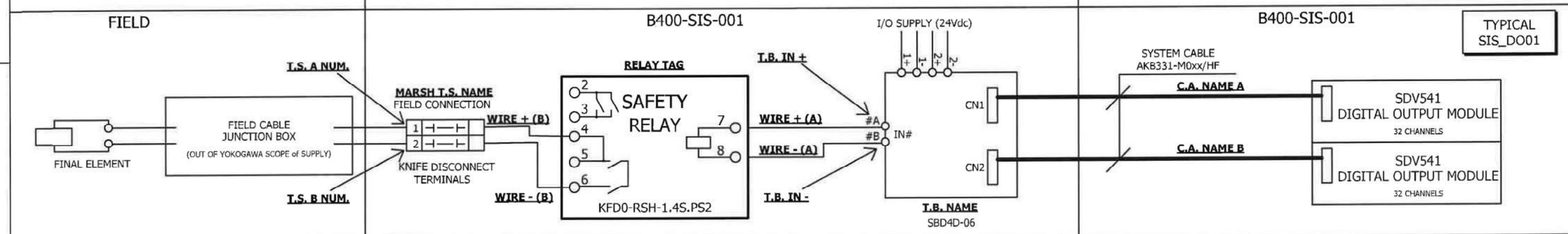
SHEET 065

REV. 1

SIS PANEL - TYPICAL WIRING DIGITAL INPUT/OUTPUT







REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - TYPICAL WIRING DIGITAL INPUT/OUTPUT

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

SCALE : 1

A3

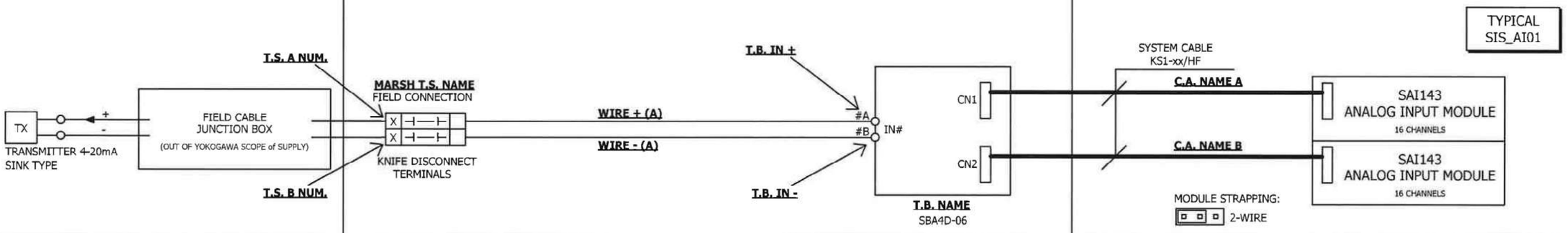
DRAWING NO.
1724000594-IN-DG-00021

SHEET 066

REV. 1

SIS PANEL - TYPICAL WIRING ANALOG INPUT

FIELD	B400-SIS-001	B400-SIS-001



REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - TYPICAL WIRING ANALOG INPUT

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

A3 | DRAWING NO. 1724000594-IN-DG-00021 | SHEET 067 | REV. 1

SHEET LEFT INTENTIONALLY BLANK

1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SPARE PAGE

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 068

REV. 1

SIS PANEL - TB-00-JE-23001 + TB-00-JE-23002 + TB-UP-200F3

TAG NAME	IO TYPE	MARSH T.S. NAME	T.S. A NUM.	T.S. B NUM.	WIRE + (A)	WIRE - (A)	WIRE + (B)	WIRE - (B)	WIRE SECTION (A+B)	WIRE COLOUR + (A+B)	WIRE COLOUR - (A+B)	FUSE T.S. NAME	FUSE T.S. A NUM	FUSE T.S. B NUM	T.B. NAME	T.B. IN +	T.B. IN -	NODE	SLOT	CHANNEL	C.A. NAME A	C.A. NAME B	RELAY	TYPICAL
25-BDY-005	DO	TB-00-JE-23001	1	2	06901	06902	06903	06904	1mm²	BK	WH	TS-01-05	1	2	TB-01-05	05A	05B	01	05	05	CA_01_05	CA_01_06	-	ESD_DO2
25-BDY-007	DO	TB-00-JE-23001	3	4	06905	06906	06907	06908	1mm²	BK	WH	TS-01-05	3	4	TB-01-05	06A	06B	01	05	06	CA_01_05	CA_01_06	-	ESD_DO2
25-BDY-010	DO	TB-00-JE-23001	5	6	06909	06910	06911	06912	1mm²	BK	WH	TS-01-05	5	6	TB-01-05	07A	07B	01	05	07	CA_01_05	CA_01_06	-	ESD_DO2
25-BDY-013	DO	TB-00-JE-23001	7	8	06913	06914	06915	06916	1mm²	BK	WH	TS-01-05	7	8	TB-01-05	08A	08B	01	05	08	CA_01_05	CA_01_06	-	ESD_DO2
25-BDY-016	DO	TB-00-JE-23001	9	10	06917	06918	06919	06920	1mm²	BK	WH	TS-01-05	9	10	TB-01-05	09A	09B	01	05	09	CA_01_05	CA_01_06	-	ESD_DO2
25-BDY-019	DO	TB-00-JE-23001	11	12	06921	06922	06923	06924	1mm²	BK	WH	TS-01-05	11	12	TB-01-05	10A	10B	01	05	10	CA_01_05	CA_01_06	-	ESD_DO2
25-SDY-001	DO	TB-00-JE-23002	1	2	06925	06926	06927	06928	1mm²	BK	WH	TS-01-05	13	14	TB-01-05	12A	12B	01	05	12	CA_01_05	CA_01_06	-	ESD_DO2
WS0110010513	DO	TB-00-JE-23002	3	4	06929	06930	06931	06932	1mm²	BK	WH	TS-01-05	15	16	TB-01-05	13A	13B	01	05	13	CA_01_05	CA_01_06	-	ESD_DO2
25-BDY-022	DO	TB-00-JE-23002	5	6	06933	06934	06935	06936	1mm²	BK	WH	TS-01-05	17	18	TB-01-05	11A	11B	01	05	11	CA_01_05	CA_01_06	-	ESD_DO2
25-SDY-023	DO	TB-00-JE-23002	7	8	06937	06938	06939	06940	1mm²	BK	WH	TS-02-05	1	2	TB-02-05	04A	04B	02	05	04	CA_02_05	CA_02_06	-	ESD_DO2
64-SDY-001	DO	TB-00-JE-23002	9	10	06941	06942	06943	06944	1mm²	BK	WH	TS-02-05	3	4	TB-02-05	09A	09B	02	05	09	CA_02_05	CA_02_06	-	ESD_DO2
WS0110010514	DO	TB-00-JE-23002	11	12	06945	06946	06947	06948	1mm²	BK	WH	TS-01-05	19	20	TB-01-05	14A	14B	01	05	14	CA_01_05	CA_01_06	-	ESD_DO2
84-XS-001	DO	TB-UP-200F3	1	2	06949	06950	06951	06952	1mm²	BK	WH	TS-02-07	1	2	TB-02-07	12A	12B	02	07	12	CA_02_07	CA_02_08	-	ESD_DO2
84-XS-002	DO	TB-UP-200F3	3	4	06953	06954	06955	06956	1mm²	BK	WH	TS-03-05	1	2	TB-03-05	01A	01B	03	05	01	CA_03_05	CA_03_06	-	ESD_DO2
84-XS-003	DO	TB-UP-200F3	5	6	06957	06958	06959	06960	1mm²	BK	WH	TS-03-05	3	4	TB-03-05	02A	02B	03	05	02	CA_03_05	CA_03_06	-	ESD_DO2
84-XS-004	DO	TB-UP-200F3	7	8	06961	06962	06963	06964	1mm²	BK	WH	TS-03-05	5	6	TB-03-05	03A	03B	03	05	03	CA_03_05	CA_03_06	-	ESD_DO2
84-XS-005	DO	TB-UP-200F3	9	10	06965	06966	06967	06968	1mm²	BK	WH	TS-03-05	7	8	TB-03-05	04A	04B	03	05	04	CA_03_05	CA_03_06	-	ESD_DO2
84-XS-010	DO	TB-UP-200F3	11	12	06969	06970	06971	06972	1mm²	BK	WH	TS-03-05	9	10	TB-03-05	07A	07B	03	05	07	CA_03_05	CA_03_06	-	ESD_DO2

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - DIGITAL OUTPUT SIGNALS

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

A3 | DRAWING NO. 1724000594-IN-DG-00021 | SHEET 069 | REV. 1

SIS PANEL - TB-XS-000

TAG NAME	IO TYPE	MARSH T.S. NAME	T.S. A NUM.	T.S. B NUM.	WIRE + (A)	WIRE - (A)	WIRE + (B)	WIRE - (B)	WIRE SECTION (A+B)	WIRE COLOUR + (A+B)	WIRE COLOUR - (A+B)	FUSE T.S. NAME	FUSE T.S. A NUM	FUSE T.S. B NUM	T.B. NAME	T.B. IN +	T.B. IN -	NODE	SLOT	CHANNEL	C.A. NAME A	C.A. NAME B	RELAY	TYPICAL
83-XS-001A	DO	TB-XS-000	1	2	07001	07002	07003	07004	1mm²	BK	WH	TS-01-05	21	22	TB-01-05	01A	01B	01	05	01	CA_01_05	CA_01_06	-	ESD_DO2
84-XS-007A	DO	TB-XS-000	3	4	07005	07006	07007	07008	1mm²	BK	WH	TS-01-05	23	24	TB-01-05	02A	02B	01	05	02	CA_01_05	CA_01_06	-	ESD_DO2
84-XS-008A	DO	TB-XS-000	5	6	07009	07010	07011	07012	1mm²	BK	WH	TS-01-05	25	26	TB-01-05	03A	03B	01	05	03	CA_01_05	CA_01_06	-	ESD_DO2
20-XS-001	DO	TB-XS-000	7	8	07013	07014	07015	07016	1mm²	BK	WH	TS-01-05	27	28	TB-01-05	04A	04B	01	05	04	CA_01_05	CA_01_06	-	ESD_DO2
83-XS-001B	DO	TB-XS-000	9	10	07017	07018	07019	07020	1mm²	BK	WH	TS-02-05	5	6	TB-02-05	01A	01B	02	05	01	CA_02_05	CA_02_06	-	ESD_DO2
84-XS-007B	DO	TB-XS-000	11	12	07021	07022	07023	07024	1mm²	BK	WH	TS-02-05	7	8	TB-02-05	02A	02B	02	05	02	CA_02_05	CA_02_06	-	ESD_DO2
84-XS-008B	DO	TB-XS-000	13	14	07025	07026	07027	07028	1mm²	BK	WH	TS-02-05	9	10	TB-02-05	03A	03B	02	05	03	CA_02_05	CA_02_06	-	ESD_DO2
50-XS-001	DO	TB-XS-000	15	16	07029	07030	07031	07032	1mm²	BK	WH	TS-02-05	11	12	TB-02-05	05A	05B	02	05	05	CA_02_05	CA_02_06	-	ESD_DO2
63-XS-001	DO	TB-XS-000	17	18	07033	07034	07035	07036	1mm²	BK	WH	TS-02-05	13	14	TB-02-05	08A	08B	02	05	08	CA_02_05	CA_02_06	-	ESD_DO2
64-XS-001	DO	TB-XS-000	19	20	07037	07038	07039	07040	1mm²	BK	WH	TS-02-05	15	16	TB-02-05	10A	10B	02	05	10	CA_02_05	CA_02_06	-	ESD_DO2
77-XS-001	DO	TB-XS-000	21	22	07041	07042	07043	07044	1mm²	BK	WH	TS-02-05	17	18	TB-02-05	11A	11B	02	05	11	CA_02_05	CA_02_06	-	ESD_DO2
77-XS-002	DO	TB-XS-000	23	24	07045	07046	07047	07048	1mm²	BK	WH	TS-02-05	19	20	TB-02-05	12A	12B	02	05	12	CA_02_05	CA_02_06	-	ESD_DO2
77-XS-003	DO	TB-XS-000	25	26	07049	07050	07051	07052	1mm²	BK	WH	TS-02-07	3	4	TB-02-07	01A	01B	02	07	01	CA_02_07	CA_02_08	-	ESD_DO2
77-XS-004	DO	TB-XS-000	27	28	07053	07054	07055	07056	1mm²	BK	WH	TS-02-07	5	6	TB-02-07	02A	02B	02	07	02	CA_02_07	CA_02_08	-	ESD_DO2
80-XS-001	DO	TB-XS-000	29	30	07057	07058	07059	07060	1mm²	BK	WH	TS-02-07	7	8	TB-02-07	07A	07B	02	07	07	CA_02_07	CA_02_08	-	ESD_DO2
81-XS-001	DO	TB-XS-000	31	32	07061	07062	07063	07064	1mm²	BK	WH	TS-02-07	9	10	TB-02-07	08A	08B	02	07	08	CA_02_07	CA_02_08	-	ESD_DO2
82-XS-001	DO	TB-XS-000	33	34	07065	07066	07067	07068	1mm²	BK	WH	TS-02-07	11	12	TB-02-07	09A	09B	02	07	09	CA_02_07	CA_02_08	-	ESD_DO2
82-XS-002	DO	TB-XS-000	35	36	07069	07070	07071	07072	1mm²	BK	WH	TS-02-07	13	14	TB-02-07	10A	10B	02	07	10	CA_02_07	CA_02_08	-	ESD_DO2
82-XS-003	DO	TB-XS-000	37	38	07073	07074	07075	07076	1mm²	BK	WH	TS-02-07	15	16	TB-02-07	11A	11B	02	07	11	CA_02_07	CA_02_08	-	ESD_DO2

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - DIGITAL OUTPUT SIGNALS

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

SCALE : 1

A3

DRAWING NO.
1724000594-IN-DG-00021

SHEET 070

REV. 1

A B C D E F G H J K

FGS PANEL - DIGITAL SIGNALS

TAG NAME	IO TYPE	MARSH T.S. NAME	T.S. A NUM.	T.S.A NUM.	WIRE + (A)	WIRE - (A)	WIRE + (B)	WIRE - (B)	WIRE SECTION (A+B)	WIRE COLOUR + (A+B)	WIRE COLOUR - (A+B)	FUSE T.S. NAME	FUSE T.S. A NUM	FUSE T.S. B NUM	T.B. NAME	T.B. IN +	T.B. IN -	NODE	SLOT	CHANNEL	C.A. NAME A	C.A. NAME B	RELAY	TYPICAL
84-XS-006	DO	TB-XS-000	39	40	07101	07102	07103	07104	1mm²	BK	WH	TS-03-05	11	12	TB-03-05	05A	05B	03	05	05	CA_03_05	CA_03_06	-	ESD_DO2
84-XS-009	DO	TB-XS-000	41	42	07105	07106	07107	07108	1mm²	BK	WH	TS-03-05	13	14	TB-03-05	06A	06B	03	05	06	CA_03_05	CA_03_06	-	ESD_DO2
84-XS-011	DO	TB-XS-000	43	44	07109	07110	07111	07112	1mm²	BK	WH	TS-03-05	15	16	TB-03-05	08A	08B	03	05	08	CA_03_05	CA_03_06	-	ESD_DO2
85-XS-001	DO	TB-XS-000	45	46	07113	07114	07115	07116	1mm²	BK	WH	TS-03-05	17	18	TB-03-05	09A	09B	03	05	09	CA_03_05	CA_03_06	-	ESD_DO2
79-XS-010	DO	TB-XS-000	47	48	07117	07118	07119	07120	1mm²	BK	WH	TS-03-05	19	20	TB-03-05	10A	10B	03	05	10	CA_03_05	CA_03_06	-	ESD_DO2
WS0110030511	DO	TB-XS-000	49	50	07121	07122	07123	07124	1mm²	BK	WH	TS-03-05	21	22	TB-03-05	11A	11B	03	05	11	CA_03_05	CA_03_06	-	ESD_DO2
WS0110020513	DO	TB-XS-000	51	52	07125	07126	07127	07128	1mm²	BK	WH	—	—	—	TB-02-05	13A	13B	02	05	13	CA_02_05	CA_02_06	K41	ESD_DO1
WS0110020514	DO	TB-XS-000	53	54	07129	07130	07131	07132	1mm²	BK	WH	—	—	—	TB-02-05	14A	14B	02	05	14	CA_02_05	CA_02_06	K42	ESD_DO1
SPARE			55	56																				
SPARE			57	58																				

01 02 03 04 05 06 07 08 09 10

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND ROSETTI MARINO

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - DIGITAL OUTPUT SIGNALS

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

A3 | DRAWING NO. 1724000594-IN-DG-00021 | SHEET 071 | REV. 1

SHEET LEFT INTENTIONALLY BLANK

1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SPARE PAGE

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

SHEET 072

REV. 1

FGS PANEL - TB-00-JE-22001

INSERT SPARE TERMINALS

TAG NAME	IO TYPE	MARSH T.S. NAME	T.S. A NUM.	T.S. B NUM.	WIRE + (A)	WIRE - (A)	WIRE SECTION (A)	WIRE COLOUR + (A)	WIRE COLOUR - (A)	T.B. NAME	T.B. IN +	T.B. IN -	NODE	SLOT	CHANNEL	C.A. NAME A	C.A. NAME B	TYPICAL
25-ZSL-005	DI	TB-00-JE-22001	1	2	07301	07302	1mm²	BK	WH	TB-01-03	01A	01B	01	03	01	CA_01_03	CA_01_04	SIS_DI01
25-ZSH-005	DI	TB-00-JE-22001	3	4	07303	07304	1mm²	BK	WH	TB-01-03	02A	02B	01	03	02	CA_01_03	CA_01_04	SIS_DI01
25-ZSL-007	DI	TB-00-JE-22001	5	6	07305	07306	1mm²	BK	WH	TB-01-03	03A	03B	01	03	03	CA_01_03	CA_01_04	SIS_DI01
25-ZSH-007	DI	TB-00-JE-22001	7	8	07307	07308	1mm²	BK	WH	TB-01-03	04A	04B	01	03	04	CA_01_03	CA_01_04	SIS_DI01
25-ZSL-010	DI	TB-00-JE-22001	9	10	07309	07310	1mm²	BK	WH	TB-01-03	05A	05B	01	03	05	CA_01_03	CA_01_04	SIS_DI01
25-ZSH-010	DI	TB-00-JE-22001	11	12	07311	07312	1mm²	BK	WH	TB-01-03	06A	06B	01	03	06	CA_01_03	CA_01_04	SIS_DI01
25-ZSL-013	DI	TB-00-JE-22001	13	14	07313	07314	1mm²	BK	WH	TB-01-03	07A	07B	01	03	07	CA_01_03	CA_01_04	SIS_DI01
25-ZSH-013	DI	TB-00-JE-22001	15	16	07315	07316	1mm²	BK	WH	TB-01-03	08A	08B	01	03	08	CA_01_03	CA_01_04	SIS_DI01
25-ZSL-016	DI	TB-00-JE-22001	17	18	07317	07318	1mm²	BK	WH	TB-01-03	09A	09B	01	03	09	CA_01_03	CA_01_04	SIS_DI01
25-ZSH-016	DI	TB-00-JE-22001	19	20	07319	07320	1mm²	BK	WH	TB-01-03	10A	10B	01	03	10	CA_01_03	CA_01_04	SIS_DI01
25-ZSL-019	DI	TB-00-JE-22001	25	26	07321	07322	1mm²	BK	WH	TB-01-03	11A	11B	01	03	11	CA_01_03	CA_01_04	SIS_DI01
25-ZSH-019	DI	TB-00-JE-22001	27	28	07323	07324	1mm²	BK	WH	TB-01-03	12A	12B	01	03	12	CA_01_03	CA_01_04	SIS_DI01
950-ASD-01101	DI	TB-00-JE-22001	29	30	07325	07326	1mm²	BK	WH	TB-01-03	13A	13B	01	03	13	CA_01_03	CA_01_04	SIS_DI01
WS0110010315	DI	TB-00-JE-22001	21	22	07327	07328	1mm²	BK	WH	TB-01-03	15A	15B	01	03	15	CA_01_03	CA_01_04	SIS_DI01
WS0110010316	DI	TB-00-JE-22001	23	24	07329	07330	1mm²	BK	WH	TB-01-03	16A	16B	01	03	16	CA_01_03	CA_01_04	SIS_DI01
950-MOB-01101	DI	TB-00-JE-22001	31	32	07331	07332	1mm²	BK	WH	TB-02-01	01A	01B	02	01	01	CA_02_01	CA_02_02	SIS_DI01
950-ESD-01101	DI	TB-00-JE-22001	33	34	07333	07334	1mm²	BK	WH	TB-02-01	02A	02B	02	01	02	CA_02_01	CA_02_02	SIS_DI01
950-ESDD-01101	DI	TB-00-JE-22001	35	36	07335	07336	1mm²	BK	WH	TB-02-01	03A	03B	02	01	03	CA_02_01	CA_02_02	SIS_DI01
950-ASD-04101	DI	TB-00-JE-22001	37	38	07337	07338	1mm²	BK	WH	TB-02-01	04A	04B	02	01	04	CA_02_01	CA_02_02	SIS_DI01
950-MOB-04101	DI	TB-00-JE-22001	39	40	07339	07340	1mm²	BK	WH	TB-02-01	05A	05B	02	01	05	CA_02_01	CA_02_02	SIS_DI01
950-ESD-04101	DI	TB-00-JE-22001	41	42	07341	07342	1mm²	BK	WH	TB-02-01	06A	06B	02	01	06	CA_02_01	CA_02_02	SIS_DI01
950-ESDD-04101	DI	TB-00-JE-22001	43	44	07343	07344	1mm²	BK	WH	TB-02-01	07A	07B	02	01	07	CA_02_01	CA_02_02	SIS_DI01
WS0110020316	DI	TB-00-JE-22001	45	46	07345	07346	1mm²	BK	WH	TB-02-03	16A	16B	02	03	16	CA_02_03	CA_02_04	SIS_DI01

ARRANGE ORDER BY MARSH TS NUMBER
(VALID FOR ALL SHEETS)

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND | ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - DIGITAL INPUT SIGNALS

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

A3 | DRAWING NO. 1724000594-IN-DG-00021 | SHEET 073 | REV. 1

FGS PANEL - TB-00-JE-22002

TAG NAME	IO TYPE	MARSH T.S. NAME	T.S. A NUM.	T.S. B NUM.	WIRE + (A)	WIRE - (A)	WIRE SECTION (A)	WIRE COLOUR + (A)	WIRE COLOUR - (A)	T.B. NAME	T.B. IN +	T.B. IN -	NODE	SLOT	CHANNEL	C.A. NAME A	C.A. NAME B	TYPICAL
25-ZSL-001	DI	TB-00-JE-22002	1	2	07401	07402	1mm²	BK	WH	TB-02-01	08A	08B	02	01	08	CA_02_01	CA_02_02	SIS_DI01
25-ZSH-001	DI	TB-00-JE-22002	3	4	07403	07404	1mm²	BK	WH	TB-02-01	09A	09B	02	01	09	CA_02_01	CA_02_02	SIS_DI01
25-ZSL-023	DI	TB-00-JE-22002	5	6	07405	07406	1mm²	BK	WH	TB-02-01	10A	10B	02	01	10	CA_02_01	CA_02_02	SIS_DI01
25-ZSH-023	DI	TB-00-JE-22002	7	8	07407	07408	1mm²	BK	WH	TB-02-01	11A	11B	02	01	11	CA_02_01	CA_02_02	SIS_DI01
25-ZSL-022	DI	TB-00-JE-22002	9	10	07409	07410	1mm²	BK	WH	TB-02-01	12A	12B	02	01	12	CA_02_01	CA_02_02	SIS_DI01
25-ZSH-022	DI	TB-00-JE-22002	11	12	07411	07412	1mm²	BK	WH	TB-02-01	13A	13B	02	01	13	CA_02_01	CA_02_02	SIS_DI01
WS0110020114	DI	TB-00-JE-22002	19	20	07413	07414	1mm²	BK	WH	TB-02-01	14A	14B	02	01	14	CA_02_01	CA_02_02	SIS_DI01
WS0110020115	DI	TB-00-JE-22002	21	22	07415	07416	1mm²	BK	WH	TB-02-01	15A	15B	02	01	15	CA_02_01	CA_02_02	SIS_DI01
WS0110020116	DI	TB-00-JE-22002	23	24	07417	07418	1mm²	BK	WH	TB-02-01	16A	16B	02	01	16	CA_02_01	CA_02_02	SIS_DI01
64-ZSL-001	DI	TB-00-JE-22002	13	14	07419	07420	1mm²	BK	WH	TB-02-03	01A	01B	02	03	01	CA_02_03	CA_02_04	SIS_DI01
64-ZSH-001	DI	TB-00-JE-22002	15	16	07421	07422	1mm²	BK	WH	TB-02-03	02A	02B	02	03	02	CA_02_03	CA_02_04	SIS_DI01
950-ASD-03101	DI	TB-00-JE-22002	17	18	07423	07424	1mm²	BK	WH	TB-02-03	03A	03B	02	03	03	CA_02_03	CA_02_04	SIS_DI01
950-MOB-03101	DI	TB-00-JE-22002	25	26	07425	07426	1mm²	BK	WH	TB-02-03	04A	04B	02	03	04	CA_02_03	CA_02_04	SIS_DI01
950-ESD-03101	DI	TB-00-JE-22002	27	28	07427	07428	1mm²	BK	WH	TB-02-03	05A	05B	02	03	05	CA_02_03	CA_02_04	SIS_DI01
950-ESDD-03101	DI	TB-00-JE-22002	29	30	07429	07430	1mm²	BK	WH	TB-02-03	06A	06B	02	03	06	CA_02_03	CA_02_04	SIS_DI01
950-ASD-06101	DI	TB-00-JE-22002	31	32	07431	07432	1mm²	BK	WH	TB-02-03	07A	07B	02	03	07	CA_02_03	CA_02_04	SIS_DI01
950-MOB-06101	DI	TB-00-JE-22002	33	34	07433	07434	1mm²	BK	WH	TB-02-03	08A	08B	02	03	08	CA_02_03	CA_02_04	SIS_DI01
950-ESD-06101	DI	TB-00-JE-22002	35	36	07435	07436	1mm²	BK	WH	TB-02-03	09A	09B	02	03	09	CA_02_03	CA_02_04	SIS_DI01
950-ESDD-06101	DI	TB-00-JE-22002	37	38	07437	07438	1mm²	BK	WH	TB-02-03	10A	10B	02	03	10	CA_02_03	CA_02_04	SIS_DI01
950-ASD-07101	DI	TB-00-JE-22002	39	40	07439	07440	1mm²	BK	WH	TB-02-03	11A	11B	02	03	11	CA_02_03	CA_02_04	SIS_DI01
950-MOB-07101	DI	TB-00-JE-22002	41	42	07441	07442	1mm²	BK	WH	TB-02-03	12A	12B	02	03	12	CA_02_03	CA_02_04	SIS_DI01
950-ESD-07101	DI	TB-00-JE-22002	43	44	07443	07444	1mm²	BK	WH	TB-02-03	13A	13B	02	03	13	CA_02_03	CA_02_04	SIS_DI01
950-ESDD-07101	DI	TB-00-JE-22002	45	46	07445	07446	1mm²	BK	WH	TB-02-03	14A	14B	02	03	14	CA_02_03	CA_02_04	SIS_DI01
WS0110020315	DI	TB-00-JE-22002	47	48	07447	07448	1mm²	BK	WH	TB-02-03	15A	15B	02	03	15	CA_02_03	CA_02_04	SIS_DI01

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - DIGITAL INPUT SIGNALS

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

SCALE : 1

A3 DRAWING NO. 1724000594-IN-DG-00021

SHEET 074

REV. 1

FGS PANEL - TB-P320PLC + TB-XA-000 + AT01

TAG NAME	IO TYPE	MARSH T.S. NAME	T.S. A NUM.	T.S. B NUM.	WIRE + (A)	WIRE - (A)	WIRE SECTION (A)	WIRE COLOUR + (A)	WIRE COLOUR - (A)	T.B. NAME	T.B. IN +	T.B. IN -	NODE	SLOT	CHANNEL	C.A. NAME A	C.A. NAME B	TYPICAL
85-XA-003	DI	TB-P320PLC	1	2	07501	07502	1mm²	BK	WH	TB-03-01	01A	01B	03	01	01	CA_03_01	CA_03_02	SIS_DI01
85-XA-004	DI	TB-P320PLC	3	4	07523	07524	1mm²	BK	WH	TB-03-01	12A	12B	03	01	12	CA_03_01	CA_03_02	SIS_DI01
20-XA-003	DI	TB-XA-000	1	2	07503	07504	1mm²	BK	WH	TB-03-01	02A	02B	03	01	02	CA_03_01	CA_03_02	SIS_DI01
80-XA-003	DI	TB-XA-000	3	4	07505	07506	1mm²	BK	WH	TB-03-01	03A	03B	03	01	03	CA_03_01	CA_03_02	SIS_DI01
50-XA-003	DI	TB-XA-000	5	6	07507	07508	1mm²	BK	WH	TB-03-01	04A	04B	03	01	04	CA_03_01	CA_03_02	SIS_DI01
63-XA-003	DI	TB-XA-000	7	8	07509	07510	1mm²	BK	WH	TB-03-01	05A	05B	03	01	05	CA_03_01	CA_03_02	SIS_DI01
64-XA-003	DI	TB-XA-000	9	10	07511	07512	1mm²	BK	WH	TB-03-01	06A	06B	03	01	06	CA_03_01	CA_03_02	SIS_DI01
77-XA-001	DI	TB-XA-000	11	12	07513	07514	1mm²	BK	WH	TB-03-01	07A	07B	03	01	07	CA_03_01	CA_03_02	SIS_DI01
77-XA-002	DI	TB-XA-000	13	14	07515	07516	1mm²	BK	WH	TB-03-01	08A	08B	03	01	08	CA_03_01	CA_03_02	SIS_DI01
77-XA-003	DI	TB-XA-000	15	16	07517	07518	1mm²	BK	WH	TB-03-01	09A	09B	03	01	09	CA_03_01	CA_03_02	SIS_DI01
77-XA-004	DI	TB-XA-000	17	18	07519	07520	1mm²	BK	WH	TB-03-01	10A	10B	03	01	10	CA_03_01	CA_03_02	SIS_DI01
72-XA-001	DI	TB-XA-000	19	20	07521	07522	1mm²	BK	WH	TB-03-01	11A	11B	03	01	11	CA_03_01	CA_03_02	SIS_DI01
WS0110030113	DI	TB-XA-000	21	22	07525	07526	1mm²	BK	WH	TB-03-01	13A	13B	03	01	13	CA_03_01	CA_03_02	SIS_DI01
WS0110030114	DI	TB-XA-000	23	24	07527	07528	1mm²	BK	WH	TB-03-01	14A	14B	03	01	14	CA_03_01	CA_03_02	SIS_DI01
WS0110030115	DI	TB-XA-000	25	26	07529	07530	1mm²	BK	WH	TB-03-01	15A	15B	03	01	15	CA_03_01	CA_03_02	SIS_DI01
WS0110030116	DI	TB-XA-000	27	28	07531	07532	1mm²	BK	WH	TB-03-01	16A	16B	03	01	16	CA_03_01	CA_03_02	SIS_DI01
SIS001-UA-05	DI	AT01	1	2	07533	07534	1mm²	BK	WH	TB-03-07	07A	07B	03 01	07 03	07 14	CA_03_07	CA_03_08	SIS_DI02

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.10.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	05.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_WD

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
SIS AND FGS WIRING DIAGRAMS AND TERMINAL STRIPS
SIS PANEL - DIGITAL INPUT SIGNALS

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DG-00021

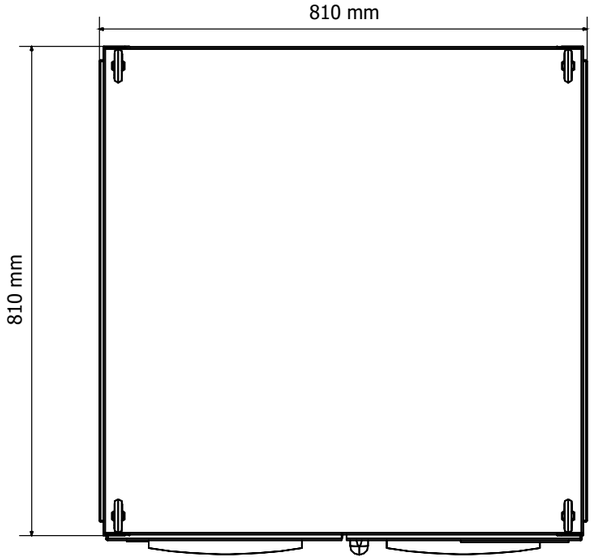
SHEET 075

REV. 1

SIS PANEL - EXTERNAL & INTERNAL TOP VIEW

EXTERNAL TOP VIEW

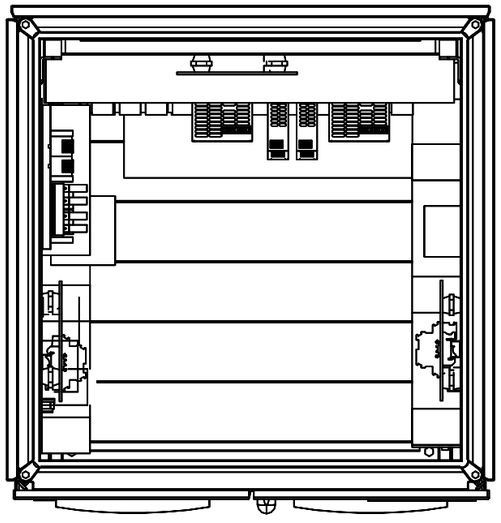
REAR



FRONT

INTERNAL TOP VIEW

REAR

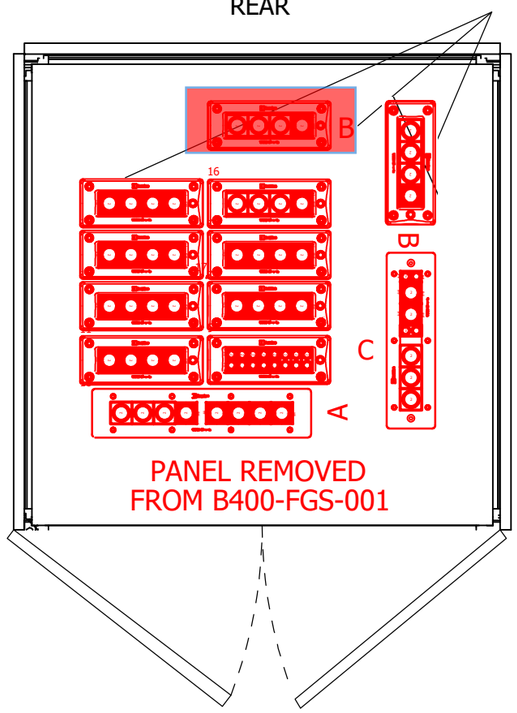


FRONT

EXTERNAL TOP VIEW (DOOR OPEN)

Cable Entry with MCT Roxtec

REAR



PANEL REMOVED FROM B400-FGS-001

FRONT

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
00-JE-21001/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	C
00-JE-21002/B400-SIS-001	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	C
C-63-PT-004/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	C
00-JE-22001_1/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-22001_2/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-22002_1/B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-22002_2 / B400-SIS-001	12x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
P320PLC/B400-SIS-001	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	40x40	A
C-20-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-80-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-50-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-63-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-64-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-001/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-002/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-003/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-77-XA-004/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
C-NC-200F2/B400-SIS-001	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	A
00-JE-23001/B400-SIS-001	24x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	A
00-JE-23002/B400-SIS-001	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	A
C-85-XS-001/B-400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-20-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-80-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-50-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-63-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-64-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-003/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-77-XS-004/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-CP-100E1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-SG-100D1-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-SG-100D1-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-SG-100D1-003/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-CB-200F1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-UP-200F1/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-SG-200N1-001/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-SG-200N1-002/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-UP-200F3/B400-SIS-001	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	A
C-CB-200F3A/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-CB-200F3B/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-CB-200F4A/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-CB-200F4B/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A
C-UP-200F4/B400-SIS-001	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	A

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
84301-CEL	ELECV19-3G2,5	15.5	40x40	B
84302-CEL	ELECV19-3G2,5	15.5	40x40	B
83104-CEL	ELECV06-3G2,5	13	40x40	B

RLMU 29/10/2024 by E&I FIELD ENGINEER

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA

PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

TITLE : BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
SIS - EXTERNAL & INTERNAL TOP VIEW

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DA-00010

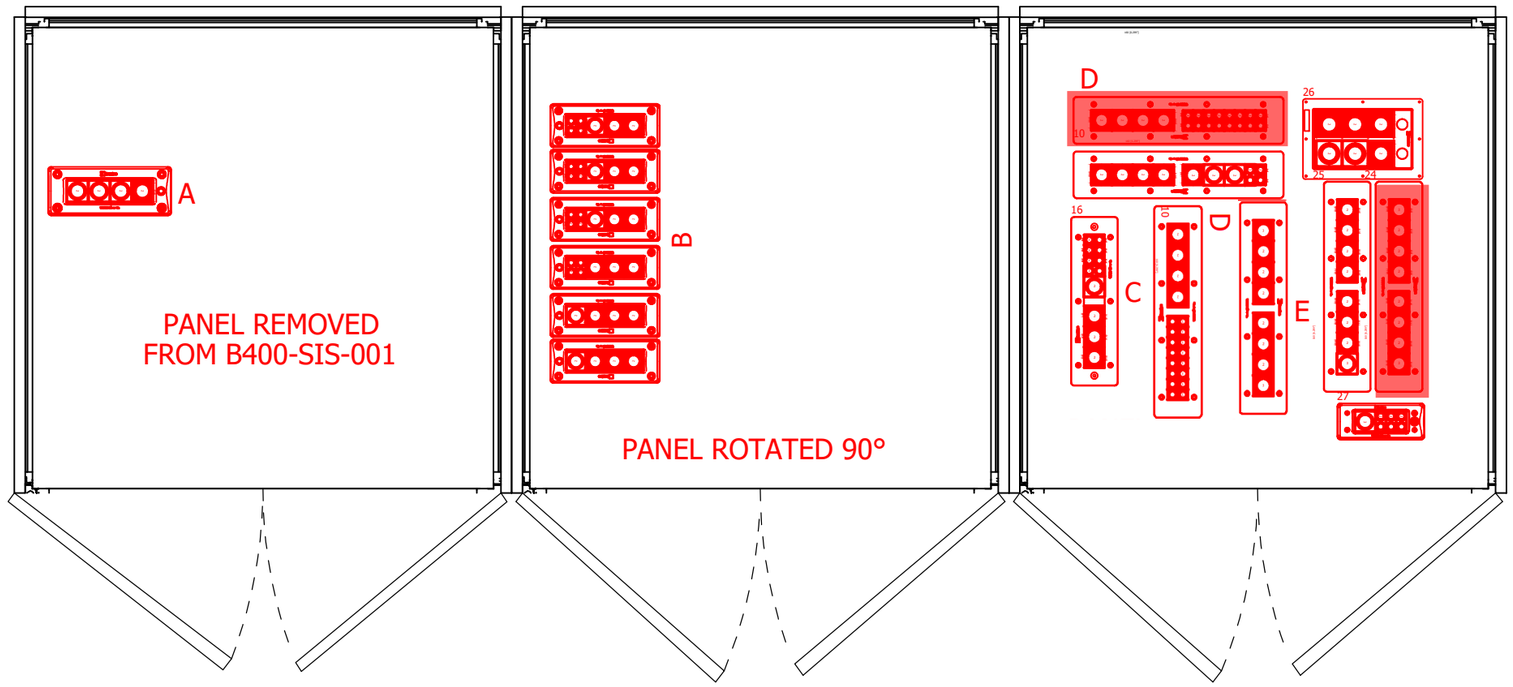
SHEET 022

REV. 1

FGS PANEL - EXTERNAL TOP VIEW DOOR OPEN & MCT TABLE LIST

EXTERNAL TOP VIEW
(DOOR OPEN)

REAR



CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
C-77-HS-012B/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	D
C-77-ZSL-012/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-77-HS-013B/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	D
C-77-ZSL-013/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-77-HS-014B/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	D
C-77-ZSL-014/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-77-HS-015B/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	D
C-77-ZSL-015/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-77-HS-016B/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	D
C-77-ZSL-016/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
20-UCP-001/B400-FGS-002	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	40x40	D
80-UCP-001/B400-FGS-002	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	40x40	D
50-LP-002/B400-FGS-002	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	40x40	D
B100-HSB-001/B400-FGS-002	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
B200-HSB-001/B400-FGS-002	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
B300-HSB-001/B400-FGS-002	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D

RLMU 29/10/2024 by E&I FIELD ENGINEER

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
950-JE-06204/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM,F.Res,LIGHT BLUE,IS	25.2	40x40	C
950-JE-04204/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM,F.Res,LIGHT BLUE,IS	25.2	40x40	C
950-JE-04208/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM,F.Res,LIGHT BLUE,IS	25.2	40x40	C
C-950-SDZ-04201/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, LIGHT BLUE, IS	11.7	20x40	C
C-950-SDZ-04202/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, LIGHT BLUE, IS	11.7	20x40	C
C-950-SDZ-04203/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, LIGHT BLUE, IS	11.7	20x40	C
C-950-SDZ-04204/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, LIGHT BLUE, IS	11.7	20x40	C
C-950-SDZ-04205/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, LIGHT BLUE, IS	11.7	20x40	C
C-950-SDZ-04206/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, LIGHT BLUE, IS	11.7	20x40	C
950-JE-01101/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-02101/B400-FGS-003	12x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	43.7	50x50	E
950-JE-02102/B400-FGS-003	12x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	43.7	50x50	E
950-JE-03101/B400-FGS-003	12x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	43.7	50x50	E
950-JE-04101/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-05101/B400-FGS-003	12x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	43.7	50x50	E
950-JE-06101/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-06201/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-04201/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-04205/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-01102/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-02103/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
950-JE-03102/B400-FGS-003	6x3x2.5 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	32.9	40x40	E
C-950-GDZ-04201/B400-FGS-002	3x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.7	40x40	E
C-950-GDZ-04202/B400-FGS-002	3x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.7	40x40	E
C-950-GDZ-04203/B400-FGS-002	3x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.7	40x40	E
C-950-GDZ-04204/B400-FGS-002	3x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.7	40x40	E
C-950-GDZ-04205/B400-FGS-002	3x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.7	40x40	E
C-950-GDZ-04206/B400-FGS-002	3x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.7	40x40	E
950-JE-01104/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-02104/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-03104/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-04103/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-05103/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-06103/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-07101/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-06203/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-04203/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
950-JE-04207/B400-FGS-002	24x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	32.8	40x40	B
950-JE-05104/B400-FGS-002	12x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	24.2	40x40	B
C-950-XZ-04201/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	B
C-950-XL-04201/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	B
C-950-XL-04202/B400-FGS-002	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	B
P320PLC/B400-FGS-002	2x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	19.3	40x40	B
C-NC-200F2/B400-FGS-002.01	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	B
C-NC-200F2/B400-FGS-002.02	2x2.5 mm2, ShT+ARM, F.Res, ORANGE, NIS	14.1	40x40	B
950-JE-01103/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
950-JE-03103/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
950-JE-04102/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
950-JE-05102/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
950-JE-06102/B400-FGS-003	6x2x0.75 mm2, Sh+ShT+ARM, F.Res, ORANGE, NIS	25.2	40x40	D
C-950-MFA-02101/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	40x40	D
C-950-MFA-07101/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	40x40	D
C-950-MFA-06201/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-950-MFA-04203/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-950-MFA-04202/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-950-MFA-05201/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D
C-950-MFA-04201/B400-FGS-002	1x2x0.75 mm2, ShT+ARM, F.Res, ORANGE, NIS	11.7	20x40	D

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
84401-CEL	ELECV19-3G2,5	15.5	40x40	A
84402-CEL	ELECV19-3G2,5	15.5	40x40	A
83107-CEL	ELECV06-3G2,5	13	40x40	A

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	02.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	29.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA

PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

TITLE :
BASE LOAD POWER HUB (BLPH)
SAFETY SYSTEMS CABINET (SIS & FGS) GEN. ARR. DRW AND INT. LAYOUT
FGS - EXTERNAL TOP VIEW DOOR OPEN & MCT TABLE LIST

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

SCALE : 1

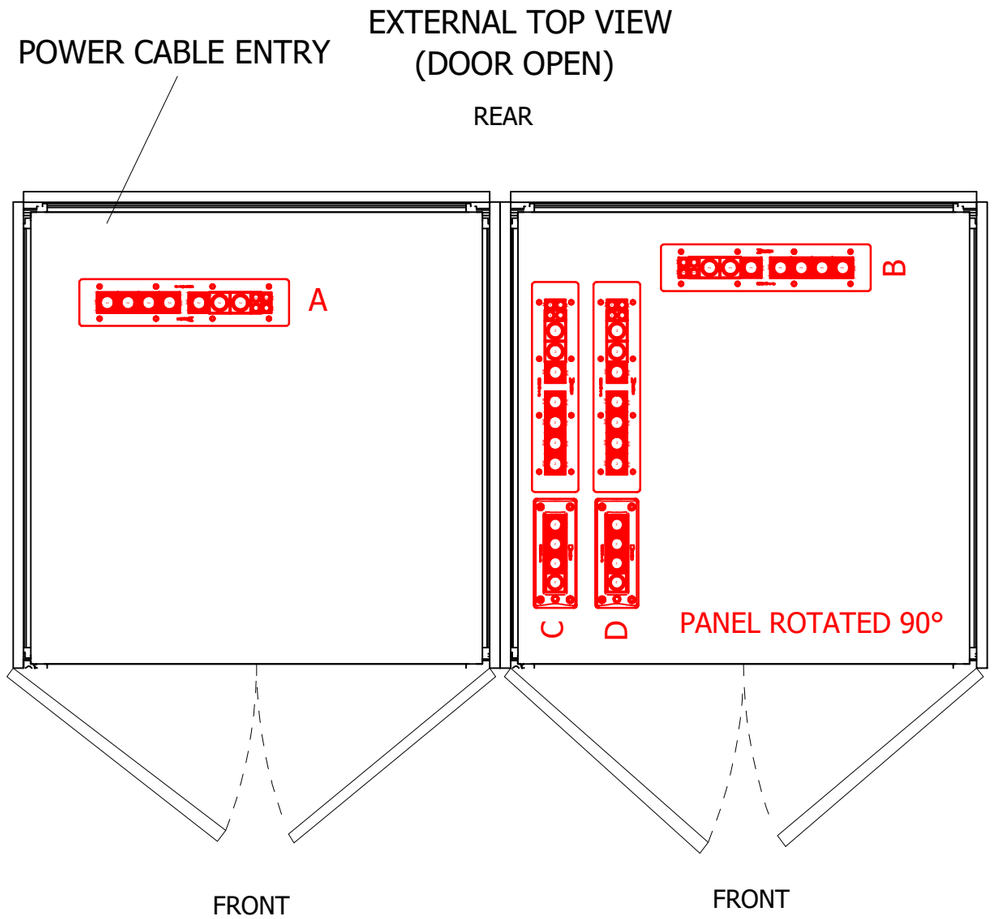
A3

DRAWING NO.
1724000594-IN-DA-00010

SHEET 012

REV. 1

PCS PANEL - EXTERNAL TOP VIEW DOOR OPEN & MCT TABLE LIST



CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
00-JE-11001_1/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	C
00-JE-11001_2/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	C
00-JE-11002/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	C
00-JE-11003_1/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	C
00-JE-11003_2/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	C
00-JE-11004/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	C
00-JE-11005/B400-PCS-002	6x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	19.4	30x30	C
C-63-PT-003/B400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	C
00-JE-12001_1/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-12001_2/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-12002/B400-PCS-002	6x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	19.4	30x30	B
00-JE-12003/B400-PCS-002	6x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	19.4	30x30	B
00-JE-12004_1/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-12004_2/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-12005/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-12006_1/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-12006_2/B400-PCS-002	12x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	24.8	40x40	B
00-JE-13001/B400-PCS-002	24x2.5mm2,ShT+ARM,F.Ret,GREY,NIS	27.8	40x40	B
00-JE-13002/B400-PCS-002	24x2.5mm2,ShT+ARM,F.Ret,GREY,NIS	27.8	40x40	B
00-JE-13003/B400-PCS-002	12x2.5mm2,ShT+ARM,F.Ret,GREY,NIS	20.8	30x30	B
C-B100-TDC-001/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B100-TDC-002/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B100-TIR-001/B-400-PCS-002	2x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	15.2	30x30	D
C-B200-TDC-001/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B200-TDC-002/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B200-TIR-001/B-400-PCS-002	2x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	15.2	30x30	D
C-B300-TDC-001/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B300-TDC-002/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B300-TIR-001/B-400-PCS-002	2x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	15.2	30x30	D
C-B400-TDC-001/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B400-TDC-002/B-400-PCS-002	1x2x0.75mm2,ShT+ARM,F.Ret,GREY,NIS	9.5	15x15	D
C-B400-TIR-001/B-400-PCS-002	2x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	15.2	30x30	D

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
84303-CEL	ELECV19-3G2,5	15.5	40x40	B
84304-CEL	ELECV19-3G2,5	15.5	40x40	B
83105-CEL	ELECV06-3G2,5	13	40x40	B

RLMU 29/10/2024 by E&I FIELD ENGINEER

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	05.08.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	20.05.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA

PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-SIS_CLO

TITLE : BASE LOAD POWER HUB (BLPH)
PCS CABINETS GENERAL ARRANGEMENT DRAWINGS AND INTERNAL LAYOUT
EXTERNAL TOP VIEW DOOR OPEN & MCT TABLE LIST

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

SCALE : 1

A3

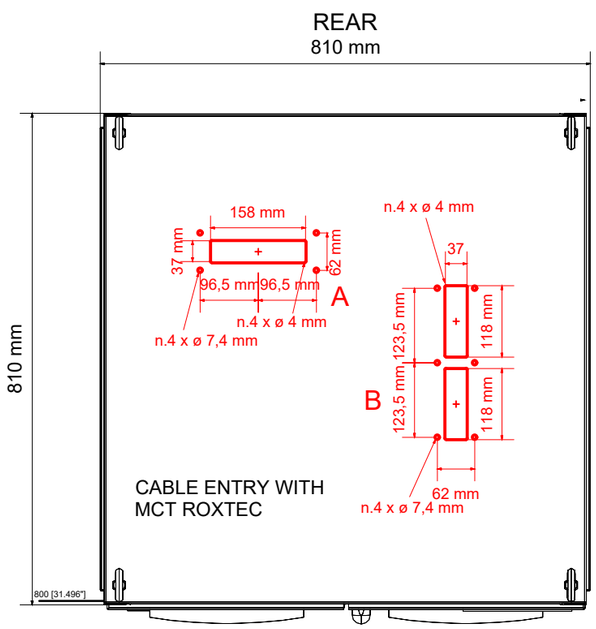
DRAWING NO. 1724000594-IN-DA-00009

SHEET 011

REV. 1

EMCS PANEL - EXTERNAL & INTERNAL TOP VIEW

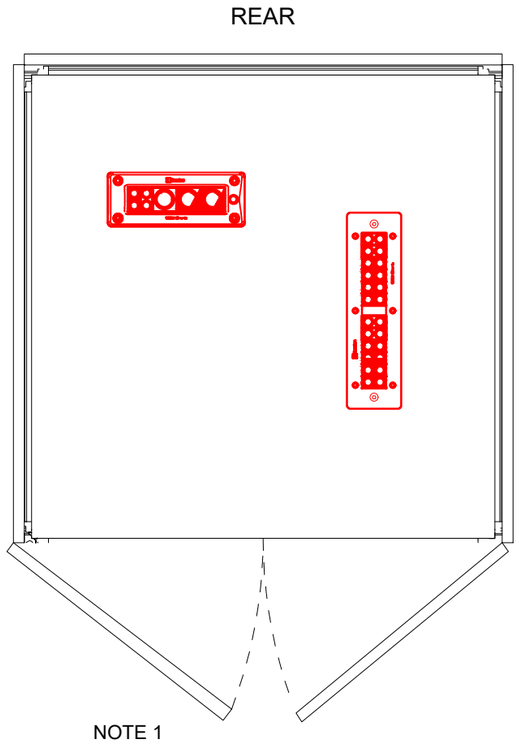
EXTERNAL TOP VIEW



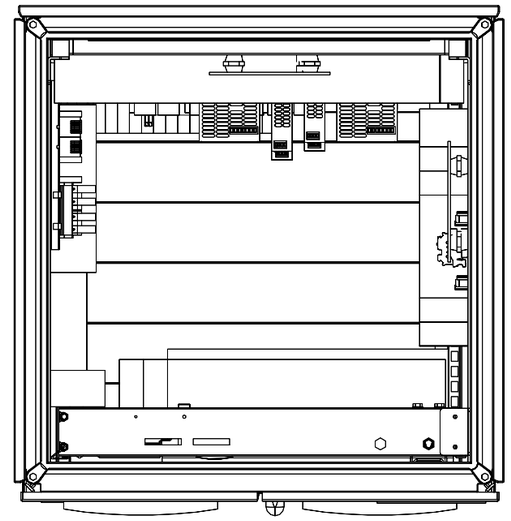
<1>

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	LOCATION
84305-CEL	3G2.5	15.5	40x40	A
84306-CEL	3G2.5	15.5	40x40	A
83106-CEL	3G2.5	13	20x40	A
85002-CEC	7C X 1.5			
B400-NET1-E8	7C X 1.5			
B400-NET1-E9	7C X 1.5			
B400-NET1-E17	7C X 1.5			
B400-NET1-E19	7C X 1.5			

EXTERNAL TOP VIEW (DOOR OPEN)



INTERNAL TOP VIEW



RLMU 29/10/2024 by E&I FIELD ENGINEER

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
1	30.09.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	13.06.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA

PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-EMCS_CLO

TITLE :
BASE LOAD POWER HUB (BLPH)
EMCS. CABINET IN ITER GEN. ARR. DRW. AND INTERNAL LAYOUT
EMCS- EXTERNAL & INTERNAL TOP VIEW

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

SCALE : 1

A3

DRAWING NO.
1724000594-IN-DA-00013

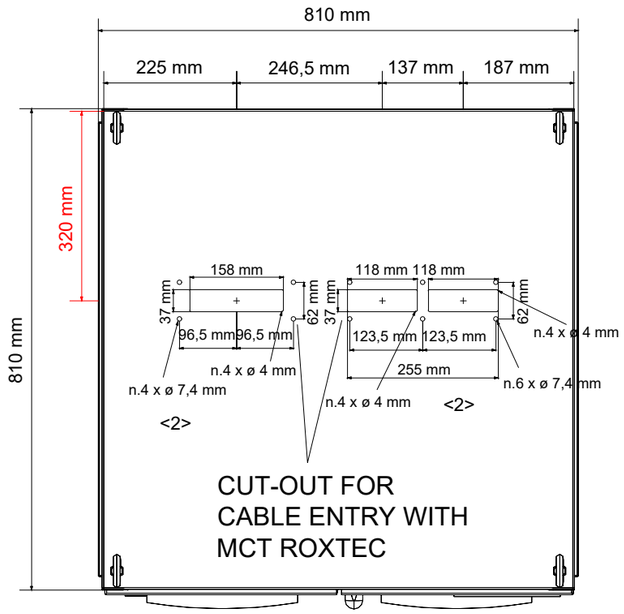
SHEET 011

REV. 1

NETWORK PANEL - EXTERNAL & INTERNAL TOP VIEW

EXTERNAL TOP VIEW

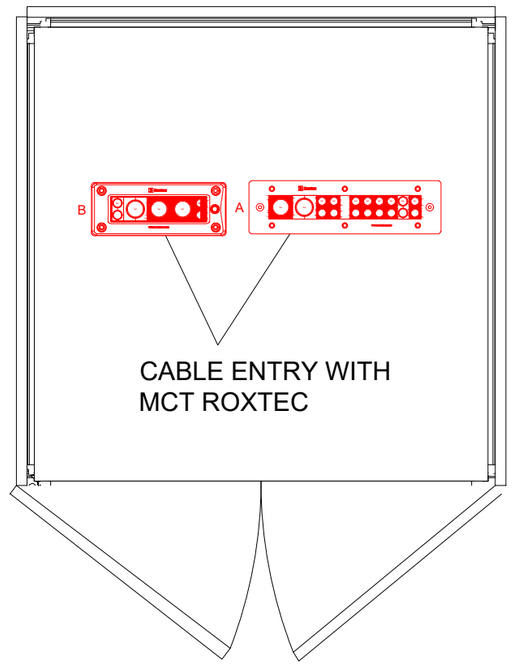
REAR



FRONT

EXTERNAL TOP VIEW (DOOR OPEN)

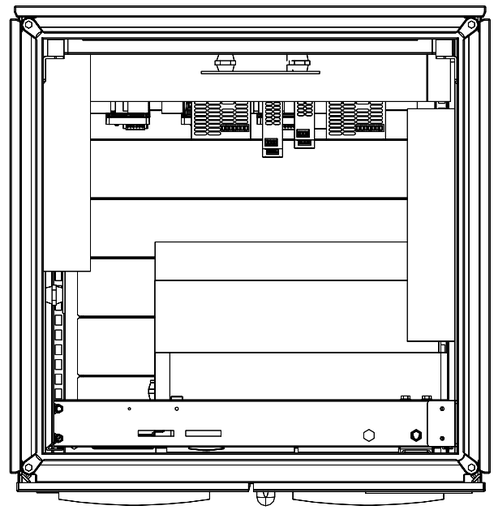
REAR



FRONT

INTERNAL TOP VIEW

REAR



FRONT

<2>

CABLE TAG	CABLE TYPE	OUTER CABLE DIAMETER (mm)	MCT SIZE	POSITION
B100-HSB-001/B400-NET-001	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
B200-HSB-001/B400-NET-001	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
B300-HSB-001/B400-NET-001	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
P320PLC/B400-NET-001.01	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
P320PLC/B400-NET-001.02	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
20-UCP-001/B400-NET-001.01	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
20-UCP-001/B400-NET-001.02	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
80-UCP-001/B400-NET-001.01	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
80-UCP-001/B400-NET-001.02	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
50-LP-001/B400-NET-001	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
63-LP-001/B400-NET-001	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
64-LP-001/B400-NET-001	CAT.6A 4x2xAWG23, Sh+ShT+ARM, F.Ret, GREEN, NIS	10.7	20x40	A
HNA6/B400-NET-001	FO12 OS2, ARM, F.Ret, YELLOW, NIS	8.5	20x40	A
X-FAULT-NET/B400-NET-001	6x2x0.75mm2,Sh+ShT+ARM,F.Ret,GREY,NIS	19.4	40x40	A
84403-CEL	3G2.5	15.5	40x40	B
84404-CEL	3G2.5	15.5	40x40	B
83108-CEL	3G2.5	13	20x40	B

RLMU 29/10/2024 by E&I FIELD ENGINEER

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
2	19.09.2024	A.G.	A.B.	S.C.	ACCEPTED FOR CONSTRUCTION (AFC)
1	10.07.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)
0	10.07.2024	A.G.	A.B.	S.C.	Issue for Review (IFR)

YOKOGAWA

PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-ITER_NLO

TITLE : BASE LOAD POWER HUB (BLPH)
NETWORK - EXTERNAL & INTERNAL TOP VIEW
& WIRING DIAGRAM

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DA-00011

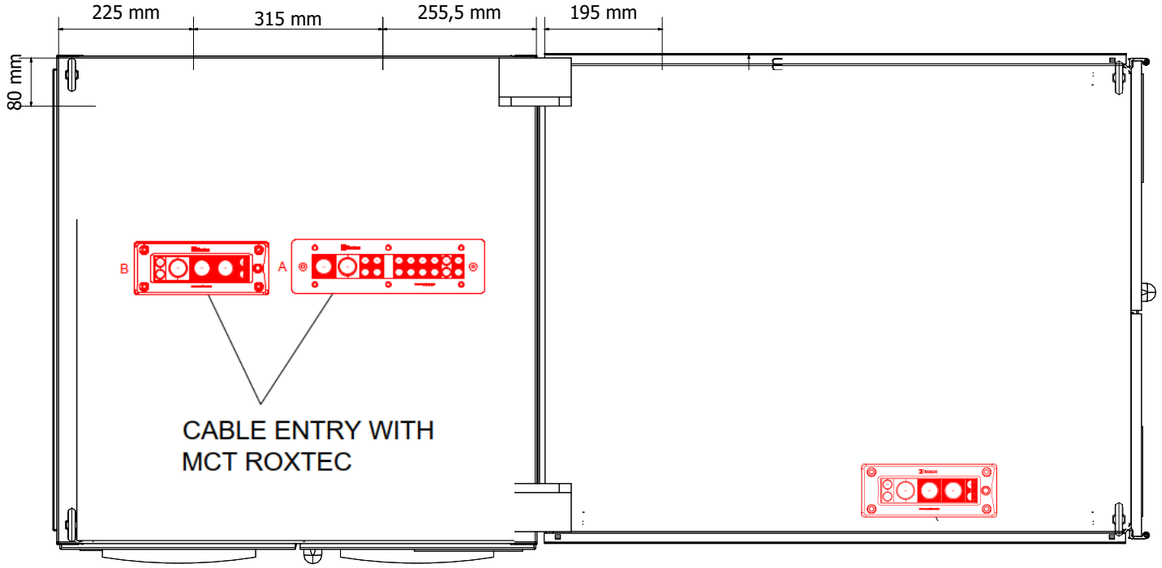
SHEET 025

REV. 2

SERVER & NETWORK - EXTERNAL & INTERNAL TOP VIEW

EXTERNAL TOP VIEW

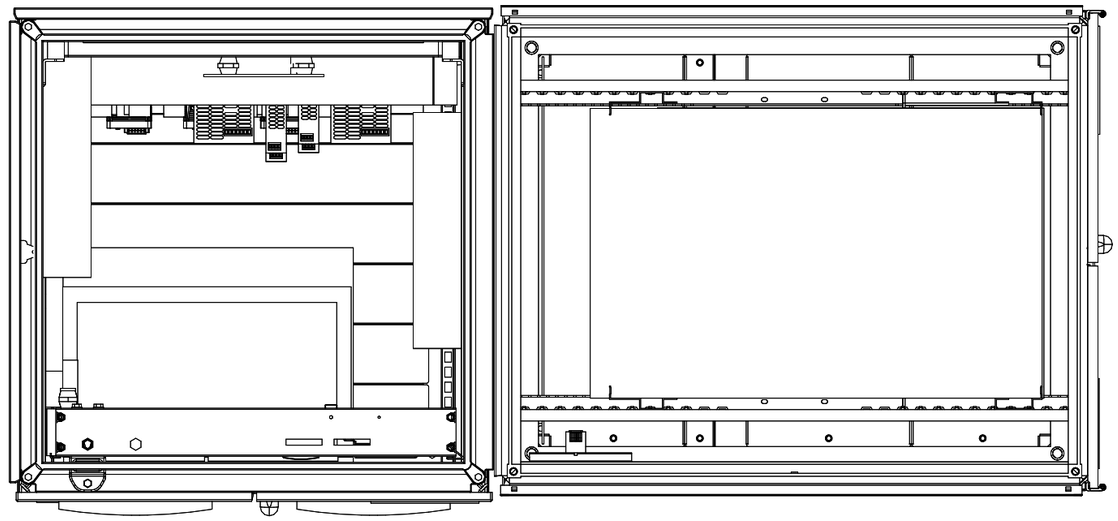
REAR



FRONT

INTERNAL TOP VIEW

REAR



FRONT

DRAWING SCALE 1:10

REV	DATE	PREPARED	CHECKED	APPROVED	DESCRIPTION
2	19.09.2024	A.G.	A.B.	S.C.	ACCEPTED FOR CONSTRUCTION (AFC)
1	10.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)
0	10.07.2024	A.G.	A.B.	S.C.	ISSUE FOR REVIEW (IFR)

YOKOGAWA◆ PROJECT Nr. E36672C00
DESCRIPTION: E366772C00-ITER_NLO

CROSSWIND ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
& WIRING DIAGRAM
SERVER & NETWORK - EXTERNAL & INTERNAL TOP VIEW

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

SCALE : 1

A3

DRAWING NO. 1724000594-IN-DA-00011

SHEET 009

REV. 02

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

ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 1 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	

DESCRIZIONE DEL MATERIALE / *Material Description*

POS. *Item*	**QUANTITA'** *Quantity*	**DESCRIZIONE** *Description*	**Nr. TAG** *TAG No.*	**TIPO DI ISPEZIONE** / *Kind of Inspection*	**ESITO** / *Result*
10	1	CONTROL SYSTEM	B400-NET/SRV-001 HKN-WPO1-BLPH-NET/SRV-01	Visual Check & FAT	**Satisfactory with Punch list**

DOCUMENTI APPLICABILI / *Applicable Documents*

TITOLO DOCUMENTO / *Document Title*	**NUMERO DOCUMENTO** / *Document Number*	**REVISIONE** / *Revision*	**STATO DOCUMENTO** / *Document Status*
INSPECTION AND TEST PLAN	1724000594-QC-ITP-00002	01	AFC
HARDWARE FACTORY ACCEPTANCE TEST (FAT) PROCEDURE	1724000594-QC-PRO-00030	01	AFC
*	*	*	*

Remarks:
*all other dwg's applicable are listed in section D like attachements

DISTRIBUZIONE A: / *Distribution to:*

☒**GESTIONE FORNITURE** / *Supply Management Department*	☒**CAPO COMMESSA** / *Project Manager*
☒**PRODUZIONE** / *Production*	☒**FORNITORE** / *Supplier*
☒**PPLM** */ Project Procurement & Logistic Manager*	☒**P.Q.M.**
☒**MAGAZZINO** / *Warehouse*	☒**P.E.M.**

ATTIVITA' ESEGUITE / *Activities Carried Out*

A - INTRODUZIONE / *Preliminary Introduction*

The present report refers to the inspection visit carried out from 17/10/2024 to 22/10/2024 at PREI factory (sucontractor of YOKOGAWA), located in ALZATE BRIANZA, ITALY.
The following inspection activities were witnessed by Rosetti Marino and Crosswind as specified in the Notification of Inspection (Noi) and in accordance with ITP and Factory acceptance test procedure
Attendees the test:

Mauro Dossena (Rosetti Marino)
Fabio Sirigu (Rosetti Marino)
Luigi Pignatelli (Crosswind)
Alessandro Giorgetti (Yokogawa)
Alessandro Berra (Yokogawa)

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 2 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	

Area of concern
None

B –SCOPO DELL'ISPEZIONE / *Scope of Inspection*

DESCRIZIONE DEI TEST PRESENZIATI / *Description of witnessed tests*	**ESITO** / *Result*
DAY 1 **B400-NET/SVR-001** - Visual & dimensional check - Electrical distribution functional check - Power supplies redundancy functional tests **DAY 2-4** **B400-NET/SVR-001 + HKN-WPO1-BLPH-NET/SRV-01** - Visual & dimensional check - Electrical distribution functional check - Power supplies redundancy functional tests - Network cables check	**Satisfactory with Punch List**

C –DETTAGLIO DEGLI STRUMENTI UTILIZZATI PER TEST E ISPEZIONE / *Details of Inspection and Test Instruments used*

NOME DELLO STRUMENTO *Equipment name*	**PRODUTTORE** *Manufacturer*	**MODELLO** *Model*	**PROSSIMA TARATURA** *Next calibration*
Multimeter	**FLUKE**	**87V (serial N. 96410192)**	**(1)**

Remarks

(1) Refer to calibration certificate N. 210866V10e24 issued by Aviatronik Trescal on 10th May 2024, here attached

D –ALLEGATI / *Attachments (***CERTIFICATI E TEST REPORT** */ Certificates and Test Reports)*

NUMERO DOCUMENTO / *Document Number*	**DESCRIZIONE** / *Description*	**TIPO** / *Type*	**NR. PAGINE** / *No. Pages*
1724000594-QC-PRO-00030	HW FACTORY ACCEPTANCE TEST (FAT) PROCEDURE	Signed copy	112
1724000594-IN-DA-00011	NETWORK AND SERVER CABINETS IN ITER ROOM GENERAL ARRANGEMENT DRAWINGS AND INTERNAL LAYOUT	Mark-up copy	42
1724000594-IN-DG-00022	NETWORK AND SERVER CABINETS IN ITER ROOM WIRING DIAGRAMS AND TERMINAL STRIPS	Mark-up copy	28
1724000594-IN-DA-00012	NETWORK AND SERVER CABINETS IN OER ROOM GENERAL ARRANGEMENT DRAWINGS AND INTERNAL LAYOUT	Mark-up copy	23

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 3 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	

1724000594-IN-DG-00023	NETWORK AND SERVER CABINETS IN OER ROOM WIRING DIAGRAMS AND TERMINAL STRIPS	Mark-up copy	19
1724000594-IN-DG-00016	NETWORK CONNCTION DIAGRAM	Mark-up copy	8
1724000594-IN-LIS-00007	SYSTEMS CABLES LIST	Mark-up copy	14
-	Bill of Material	Mark-up copy	3
-	PUNCH LIST	Signed copy	2
-	B400-NET/SRV-001 Check Sheet and Punch Records	Signed copy	15
-	HKN-WPO1-BLPH-NET/SRV-01 Check Sheet and Punch Records	Signed copy	13

E – DETTAGLI ED ESITO DELL'ISPEZIONE */ Details and Results of Inspection*

All details have been highlighted in the test reports

F – CONCLUSIONI */ Conclusions*

FAT of above listed cabinets has been completed successfully with Punch Lists.
During FAT has been created a Master Copy of documents with all red marked up in order to create a pictures for construction and commission team.
The above cabinets will be delivered during week 43.

G – PUNTI IRRISOLTI */ Outstanding points*

See attached Punch List

H – STATO PACKING LIST / *Packing List Status*	☒ **EMESSO** / *Issued*	☐ **NON EMESSO** / *Not Issued*	DD/MM/YYYY **ULTIMA DATA UTILE** / *Last Date*

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

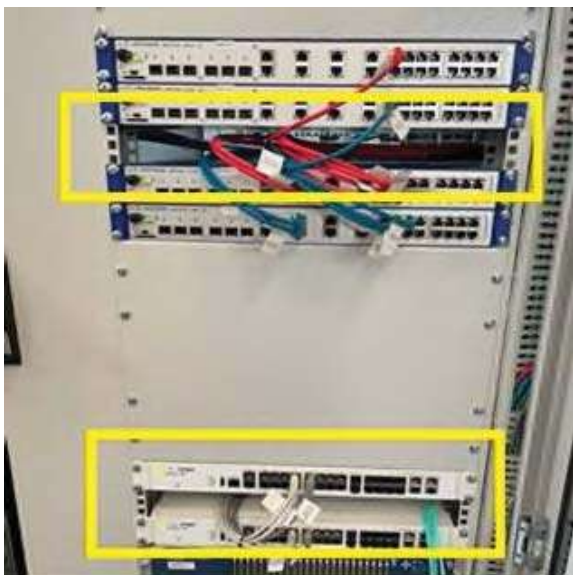
ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 4 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	

PUNCH LIST REPORT: VEDI ALLEGATO N° / *Refer to Attachment n° NOT APPLICABLE*

REPORT FOTOGRAFICO (SE PRESENTE) / *Digital Pictures (if any)*



Punch N001



Punch N006



Punch N008

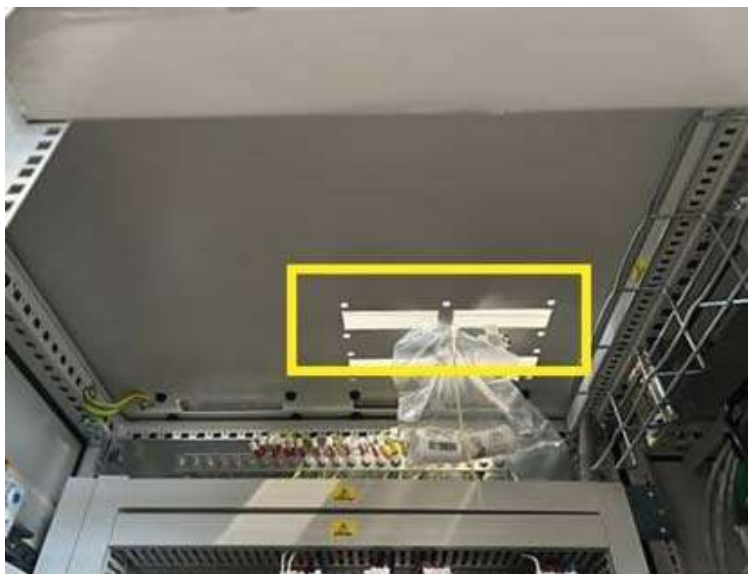


Punch N010

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 5 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	



Punch N011

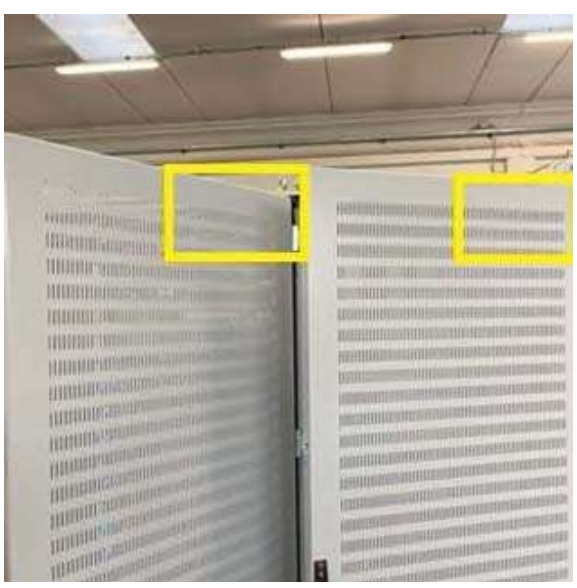


Punch N012





Punch N105



Punch N106

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 6 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	



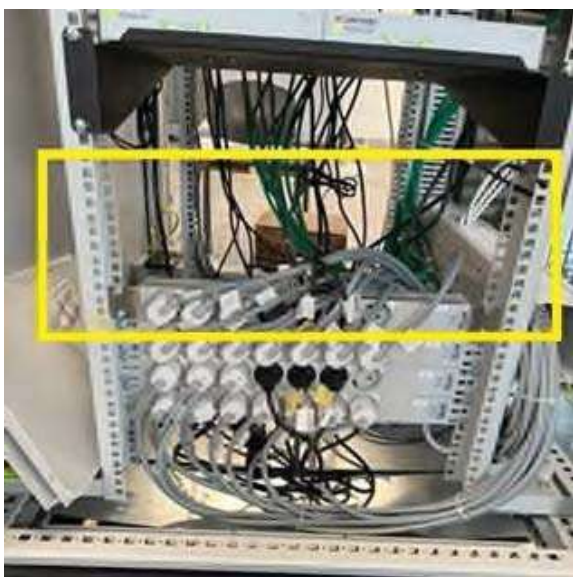
Punch N107



Punch N108



Punch N109

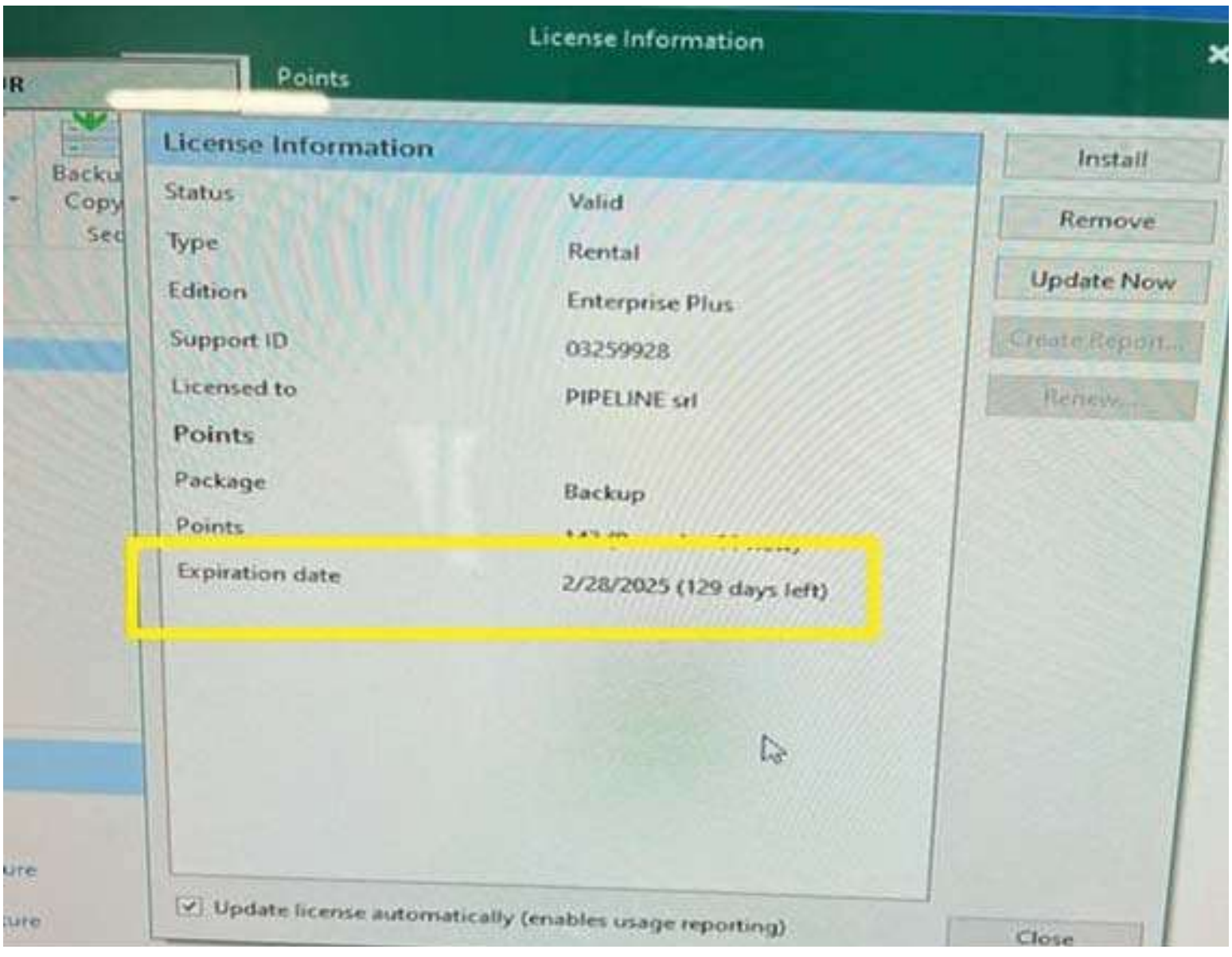


Punch N110

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

ROSETTI MARINO	**INSPECTION REPORT**	**Report No.** IR-YOK-0594-02	SHEET 7 di 7
		Data *Date from 17/10/2024 to 22/10/2024*	Rev. *Rev. 0*
PROGETTO *Project* **Base Load Power Hub (BLPH)**	**CLIENTE** *Client* CROSSWIND	**COMMESSA** / *Job* ***123A90***	**COMMESSA FORNITORE** / *Job Vendor* YOKOGAWA
FORNITORE *Supplier: YOKOGAWA*	**No. Ordine** *P.O. No.* **1724000594**	**OGGETTO** *Object* **INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)**	



Punch N111

NON VALIDO PER IL RILASCIO DELLA FORNITURA / *It is not valid for the supply's release*

L' INCARICATO / *The person in charge*	**IL RAPP. DEL CLIENTE** / *Client's Representative*	**IL FORNITORE** / *Supplier*
ROSETTI MARINO *Supply Management dept.*		

QUESTO DOCUMENTO NON SOLLEVA IL FORNITORE DALLA RESPONSABILITA' DI EVENTUALI DIFETTI E/O MALFUNZIONAMENTI RILEVATI DURANTE L'USO /
This document does not relieve the Supplier of the responsibility of any possible defects and/or misfunctioning arising during the utilisation.

Section 13 MECHANICAL COMPLETION CHANGES / MARK-UPS

NOT APPLICABLE