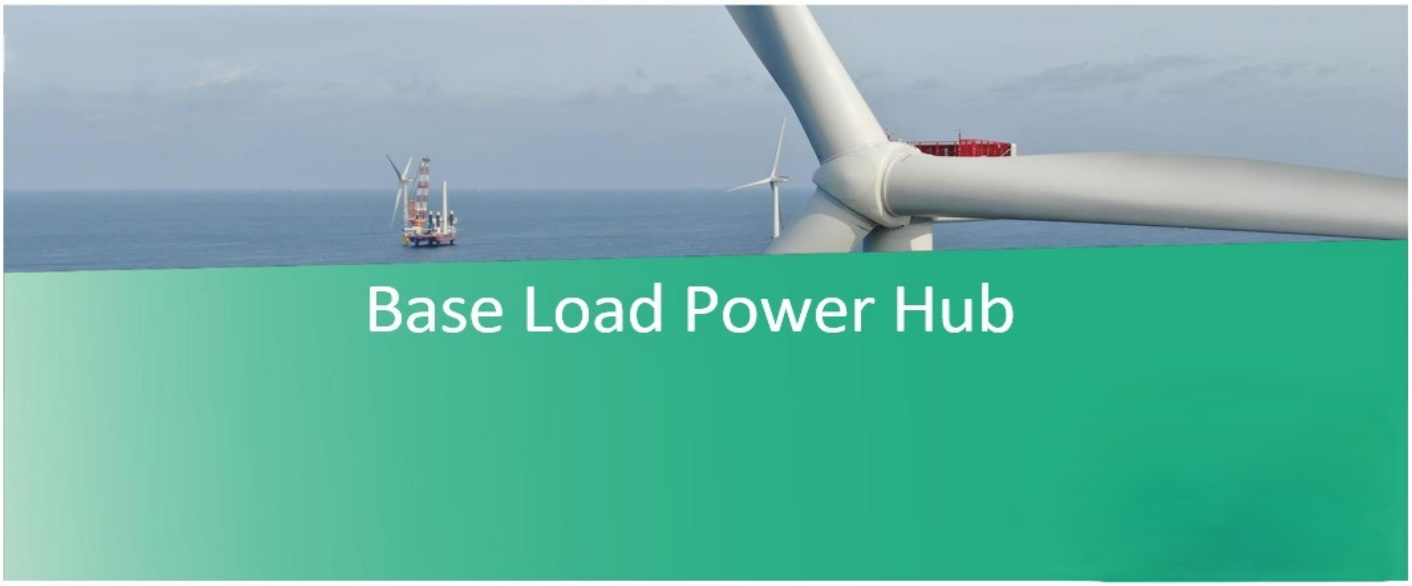
CROSSWIND

ROSETTI MARINO

PROVERLIS

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



MECHANICAL COMPLETION DOSSIER (ONSHORE)

SYSTEM

79
Emergency Shutdown systems

SUBSYSTEM

79-15

Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

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

Sub System N°:	79-15	Tick as appropriate	ONSHORE	O
Description:	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)		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*	NA
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*	NA
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*	NA
13.	***MECHANICAL COMPLETION CHANGES / MARK-UPS*** *A copy of the changes initiated during the Mechanical Completion process pertaining to the relevant Sub-System will be incorporated in this section*	NA

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

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

ROSETTI MARINO

123A90 - HOLLANDSE KUST NOORD WIND PARK
BLPH Project

CROSSWIND

Ready For Commissioning (RFC) Certificate

COMPLETE	●	PARTIAL	

Revision:	1		Issued on:	2025-05-05	
System:	79	/	Emergency Shutdown systems		
SubSystem:	79-15	/	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)		

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

PUNCH LIST	PENDING POINTS	
Note: All Category "A" Items must be cleared prior to issue a Ready For Commissioning (RFC) Certificate	A 0'	B 4

REMARKS: ONSHORE SOW completed, n. 4 outstanding tasks to be cleared in OFFSHORE phase.

	CONTRACTOR Construction Manager	**CONTRACTOR** Commissioning Manager	**COMPANY** Construction Lead (if required)	**COMPANY** Commissioning Lead (if required)
Name	Wolmer Borghi	Anthony Iveson	CPY NOT PRESENT	CPY NOT PRESENT
Date	2025-05-06	2025-05-12	2025-05-12	2025-05-12
Signature	PROVERLIS Digitaly signed by Wolmer Borghi 2025-05-06T09:49:33.137Z	PROVERLIS Digitaly signed by Anthony Iveson 2025-05-12T08:13:41.796Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2025-05-12T09:20:31.341Z	PROVERLIS Digitaly signed by CPY NOT PRESEN 2025-05-12T09:20:38.915Z

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 79-15 & process: MC

Instrumental	79-15 Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
950-ASD-07101	FZ-07 Abandon Shutdown Activation	ONSHORE	C10000958	CJX00	100	2025-04-29	RFC 1
950-ESD-07101	FZ-07 ESD-1 Push Button Activation	ONSHORE	C10000963	CJX00	100	2025-04-29	RFC 1
950-ESDD-07101	FZ-07 ESD-1D Push Button Activation	ONSHORE	C10000968	CJX00	100	2025-04-29	RFC 1
950-MOB-07101	FZ-07 Man Over Board Activation	ONSHORE	C10001077	CJX00	100	2025-04-29	RFC 1
C-950-ASD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000166	CJX10	100	2025-02-19	-
		OFFSHORE	C10004672	CJX10	0	-	-
C-950-ESD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000168	CJX10	100	2025-02-19	-
		OFFSHORE	C10004674	CJX10	0	-	-
C-950-ESDD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000169	CJX10	100	2025-02-19	-
		OFFSHORE	C10004675	CJX10	0	-	-
C-950-MOB-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000167	CJX10	100	2025-02-19	-
		OFFSHORE	C10004673	CJX10	0	-	-

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	79	Emergency Shutdown systems
SUBSYSTEM	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004030	A	C-950-ESDD-07101/00-JE-22002	The termination (core white) to be redone	.		APolo 2025-02-19	2025-03-04	JKrizanic 2025-03-04	2025-03-04
C30004032	A	C-950-ESD-07101/00-JE-22002 C10000168	The termination (core black) to be redone	.		APolo 2025-02-19	2025-03-04	JKrizanic 2025-03-04	2025-03-04
C30004029	B	C-950-ESDD-07101/00-JE-22002	Wrong cores identification tag. side 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30004031	B	C-950-ESD-07101/00-JE-22002 C10000168	Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-26	APolo 2025-02-26	2025-02-26
C30004033	B	C-950-MOB-07101/00-JE-22002 C10000167	Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30004034	B	C-950-ASD-07101/00-JE-22002 C10000166	Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30004337	B	950-ASD-07101 C10000958	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29			
C30004338	B	950-ESD-07101 C10000963	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29			
C30004339	B	950-MOB-07101 C10001077	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29			

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	79	Emergency Shutdown systems
SUBSYSTEM	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004340	B	950-ESDD-07101 C10000968	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29			

Section 2 CONSOLIDATED PUNCH LISTS

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM	79	Emergency Shutdown systems
SUBSYSTEM	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004030	A	C-950-ESDD-07101/00-JE-22002	The termination (core white) to be redone	.		APolo 2025-02-19	2025-03-04	JKrizanic 2025-03-04	2025-03-04
C30004032	A	C-950-ESD-07101/00-JE-22002 C10000168	The termination (core black) to be redone	.		APolo 2025-02-19	2025-03-04	JKrizanic 2025-03-04	2025-03-04
C30004029	B	C-950-ESDD-07101/00-JE-22002	Wrong cores identification tag. side 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30004031	B	C-950-ESD-07101/00-JE-22002 C10000168	Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-26	APolo 2025-02-26	2025-02-26
C30004033	B	C-950-MOB-07101/00-JE-22002 C10000167	Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30004034	B	C-950-ASD-07101/00-JE-22002 C10000166	Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)	.		APolo 2025-02-19	2025-02-21	JKrizanic 2025-02-21	2025-02-21
C30004337	B	950-ASD-07101 C10000958	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29	2025-05-21	Gtangianu 2025-05-21	2025-05-21
C30004338	B	950-ESD-07101 C10000963	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29	2025-05-21	Gtangianu 2025-05-21	2025-05-21
C30004339	B	950-MOB-07101 C10001077	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29	2025-05-21	Gtangianu 2025-05-21	2025-05-21

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

PUNCH LIST REPORT

SYSTEM 79 Emergency Shutdown systems

SUBSYSTEM 79-15 Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

Instrumental

CODE	CAT	ITEM	DEFECT DESCRIPTION	CORRECTIVE ACTION	PERFORMED ACTION	ISSUED	CARRIED	CHECKED	APPROVED
C30004340	B	950-ESDD-07101 C10000968	Painting is damage on the instrument. (See attached photo)	.		Gtangianu 2025-04-29	2025-05-21	Gtangianu 2025-05-21	2025-05-21

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004340

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000968	1.4 Discipline	Instrumental
1.2 Item	950-ESDD-07101	FZ-07 ESD-1D Push Button Activation	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Painting is damage on the instrument. (See attached photo)

Name: Giovanni Tangianu

Date: 2025-04-29

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	2025-04-29
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Paint has been restored

Name: Giovanni Tangianu

Date: 2025-05-21

Signature:

6- CLEARANCE APPROVAL

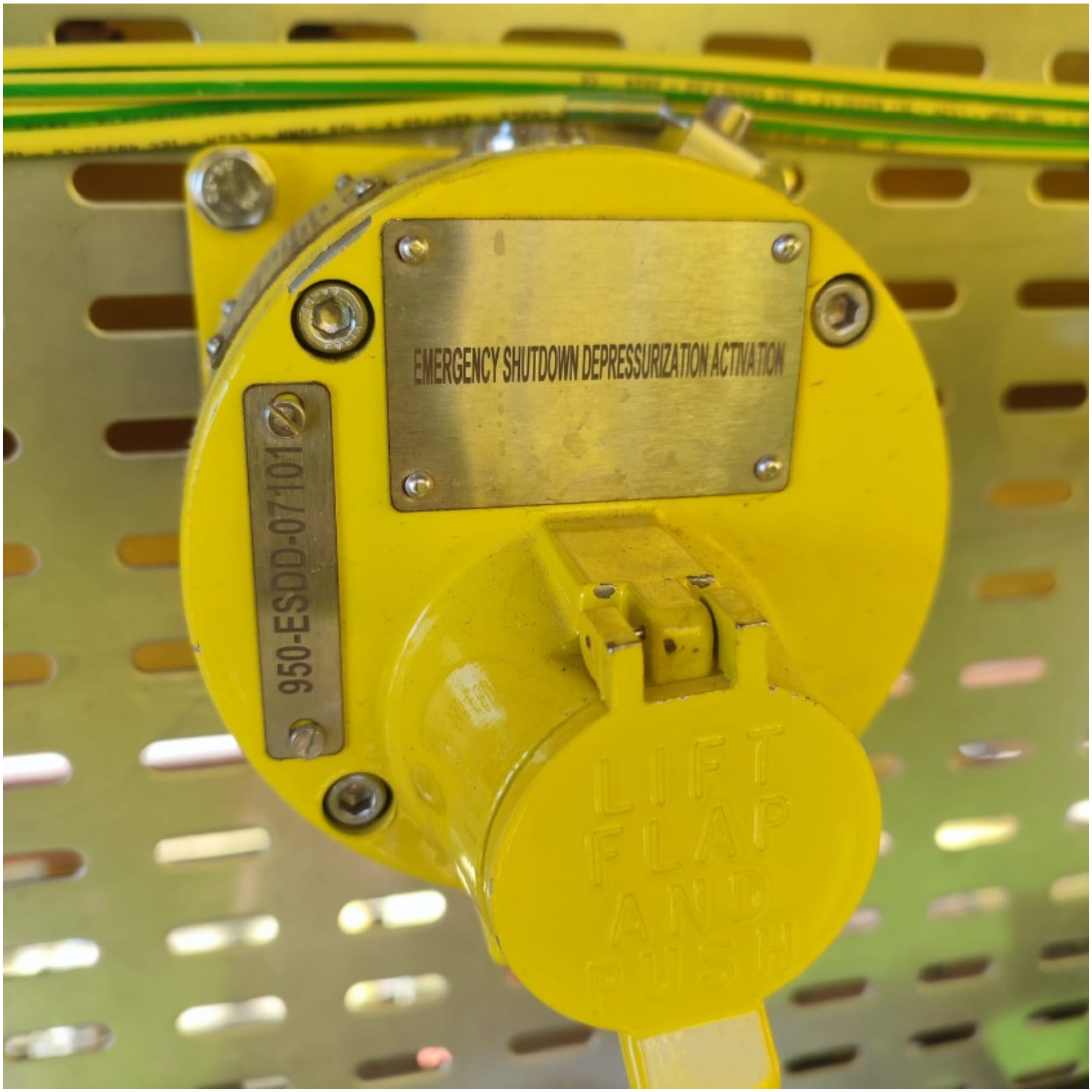
Name:

Date:

Signature:


EATON
MEDC
II 2 GD Ex d IIC T5 (Tamb.-55°C to +70°C) Gb
Ex tb IIIC T100°C (Tamb.-55°C to +55°C)
T6 (Tamb.-55°C to +70°C) Db IP66/67
T85°C (Tamb.-55°C to +55°C)
Baseefa03ATEX0075
RATINGS - V: 24V I: 2A
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE
ATMOSPHERE IS PRESENT
CABLE TEMPERATURE RISE: 10K
CABLE ENTRIES: 2XM20
SERIAL No. 225420465 30 20 Y.o.M. 2024
SUTTON-IN-ASHFIELD U.K. NG17 5FB
LB60402
0598
PASSED
INSPECTION
DATE


EMERGENCY SHUTDOWN DEPRESSURIZATION
950-ESDD-07101


EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
950-ESDD-07101
LIFT
FLAP
AND
PUSH

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004029

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000169	1.4 Discipline	Instrumental
1.2 Item	C-950-ESDD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Wrong cores identification tag. side 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo

Date: 2025-02-19

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-19
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004030

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000169	1.4 Discipline	Instrumental
1.2 Item	C-950-ESDD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

The termination (core white) to be redone

Name: Alessio Polo

Date: 2025-02-19

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-19
3.5 Action by	PRE-COMM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-03-04

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


CORTEA
SH/64-ZSH-001/6
17/950-ASD-031011
18/950-ASD-031016
SH/950-ASD-031013SH

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004031

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000168	1.4 Discipline	Instrumental
1.2 Item	C-950-ESD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo

Date: 2025-02-19

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-19
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Alessio Polo

Date: 2025-02-26

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004032

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000168	1.4 Discipline	Instrumental
1.2 Item	C-950-ESD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

The termination (core black) to be redone

Name: Alessio Polo

Date: 2025-02-19

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	A PL A	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-19
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-03-04

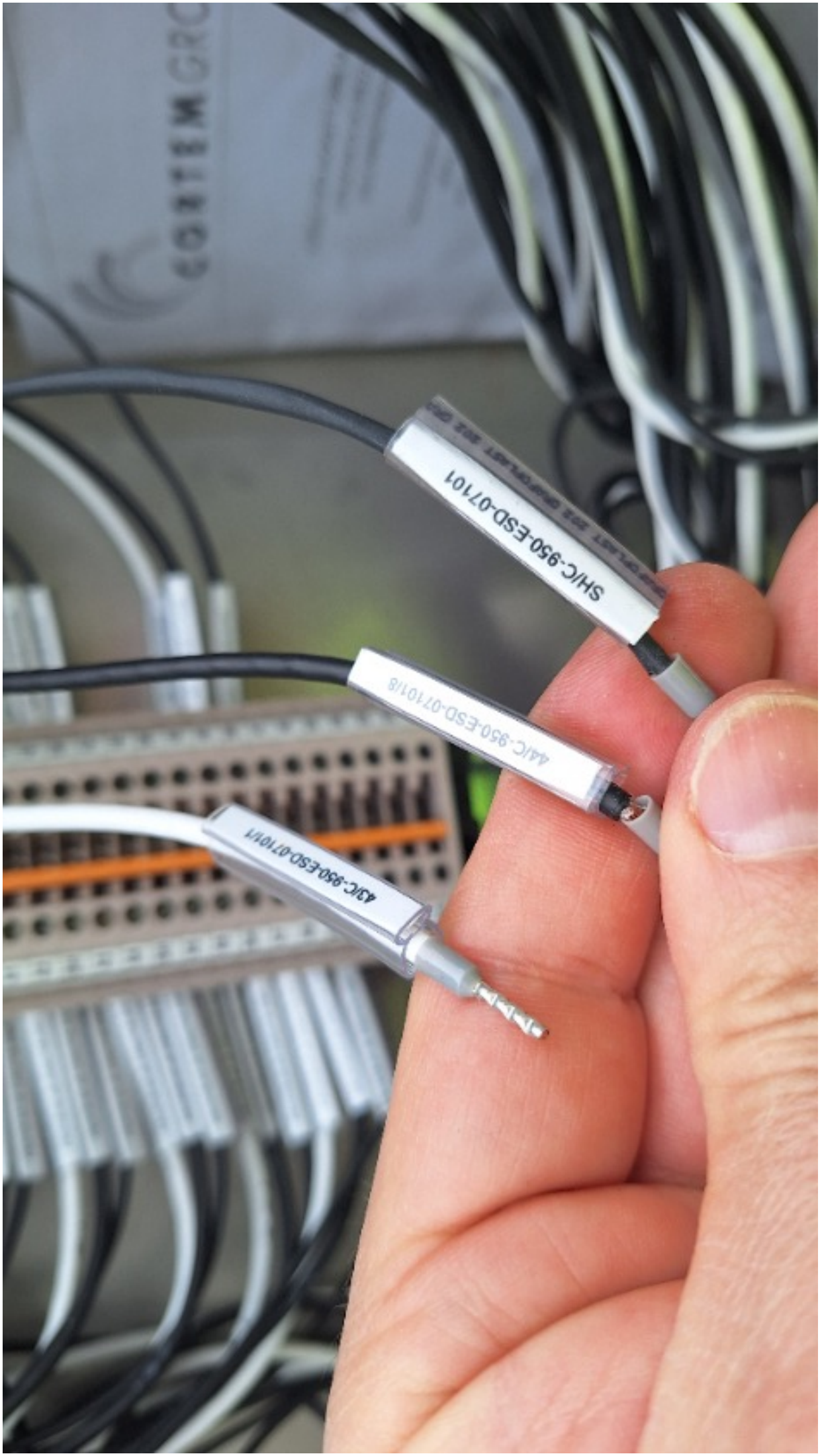
Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


SHJC-950-ESD-07101
44JC-950-ESD-07101/8
43JC-950-ESD-07101/7

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004033

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000167	1.4 Discipline	Instrumental
1.2 Item	C-950-MOB-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo

Date: 2025-02-19

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-19
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004034

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000166	1.4 Discipline	Instrumental
1.2 Item	C-950-ASD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Wrong cores identification tag. side J.B. 00-JE-22002 . (see document 123A90-DDL-IN-DG-40016 sh.3)

Name: Alessio Polo

Date: 2025-02-19

Signature:

3 - DEFECT ASSESSMENT

.

3.1 Corrective action proposal

3.2 Material required

3.3 Priority	B PL B	Name	Alessio Polo
3.4 Activity code	MC Mechanical Completion	Date	2025-02-19
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

DONE

Name: Josip Krizanic

Date: 2025-02-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004337

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000958	1.4 Discipline	Instrumental
1.2 Item	950-ASD-07101	FZ-07 Abandon Shutdown Activation	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Painting is damage on the instrument. (See attached photo)

Name: Giovanni Tangianu

Date: 2025-04-29

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	2025-04-29
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Paint has been restored

Name: Giovanni Tangianu

Date: 2025-05-21

Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


ABANDON ACTIVATION
950-ASD-07101
LIFT
FLAP
AND
PUSH


MEDC
TYPE SMB7PBLD
T6 (Tamb -55°C to +70°C) Db IP66/67
T85°C (Tamb -55°C to +55°C)
RATINGS - V: 24V I: 2A
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE
ATMOSPHERE IS PRESENT
CABLE TEMPERATURE RISE: 10K
CABLE ENTRIES: 2XM20
SERIAL No. 225420465 30 05 Y.o.M. 2024
SUTTON-IN-ASHFIELD U.K. NG17 5FB
0598
SERIES
E.O.L.


950-ASD-07101

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004338

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10000963	1.4 Discipline	Instrumental
1.2 Item	950-ESD-07101	FZ-07 ESD-1 Push Button Activation	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Painting is damage on the instrument. (See attached photo)

Name: Giovanni Tangianu

Date: 2025-04-29

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	2025-04-29
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Paint has been restored

Name: Giovanni Tangianu

Date: 2025-05-21

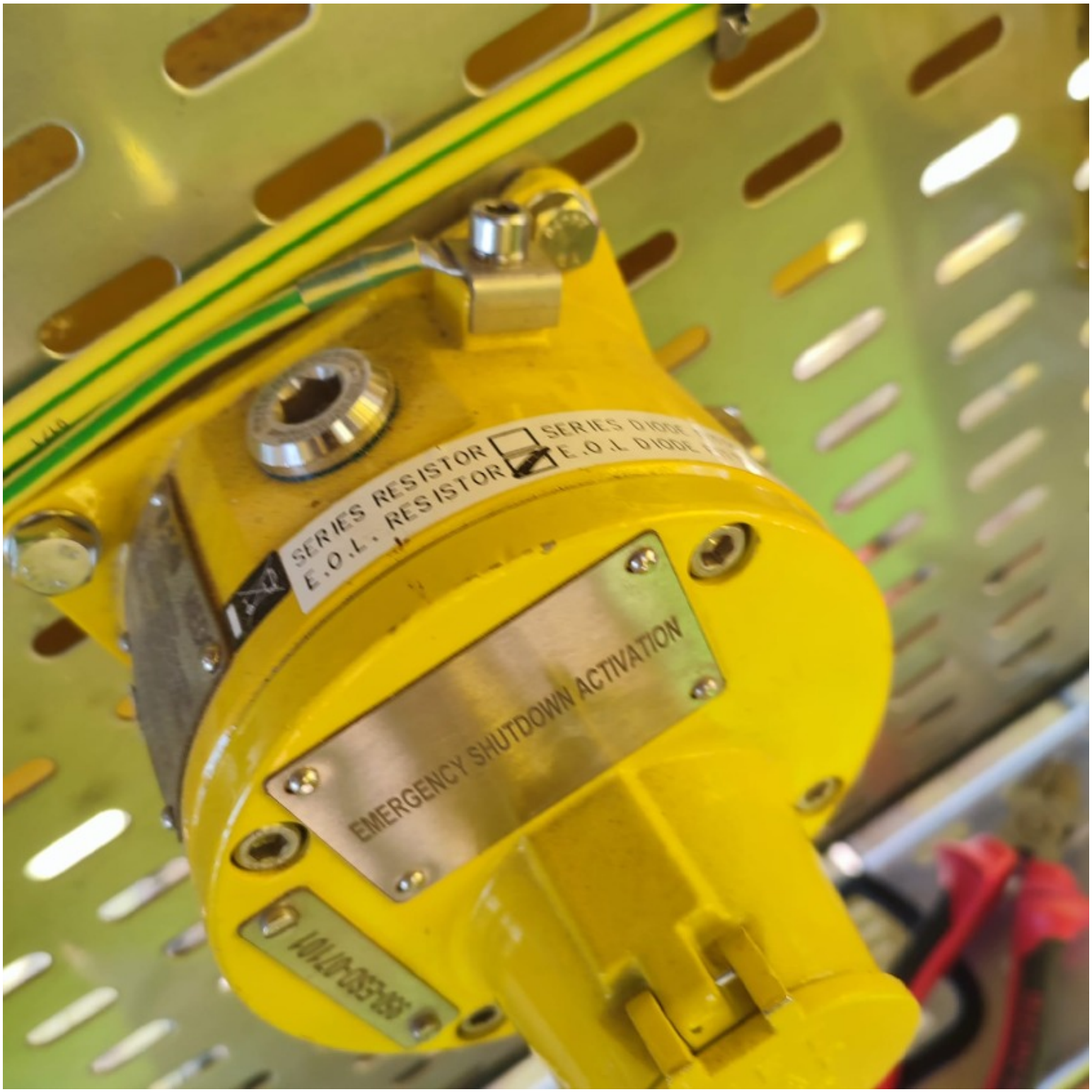
Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


SERIES RESISTOR
E.O.L. RESISTOR
EMERGENCY SHUTDOWN ACTIVATION


EATON
MEDC
TYPE SM077BLD
T3 (Tamb.-55°C to +70°C) Gb
T6 (Tamb.-55°C to +55°C)
T85°C (Tamb.-55°C to +70°C) Db IP66/67
T80°C (Tamb.-55°C to +55°C)
Baseefa03ATEX0075
RATINGS V: 24V I: 2A
DO NOT OPEN WHEN AN EXPLOSIVE
ATMOSPHERE IS PRESENT
CABLE TEMPERATURE RISE: 10K
CABLE ENTRIES 2xM20
PASSED
INSPECTION
SERIES
E.O.L.


EMERGENCY SHUTDOWN ACTIVATION
950-ESD-07101
LIFT
FLAP
AND
PUSH

ROSETTI MARINO
CROSSWIND

PUNCH ITEM ENTRY / CLEARANCE FORM

C30004339

PROVERLIS

1 -ELEMENT IDENTIFICATION

1.1 Task	C10001077	1.4 Discipline	Instrumental
1.2 Item	950-MOB-07101	FZ-07 Man Over Board Activation	
1.3 Subsystem	79-15	Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	

2 - OBSERVATION

Painting is damage on the instrument. (See attached photo)

Name: Giovanni Tangianu

Date: 2025-04-29

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	2025-04-29
3.5 Action by	RM_CONSTR RM	Signature	

4 - PERFORMED ACTION

Name:

Date:

Signature:

5 - CLEARANCE CHECK

Paint has been restored

Name: Giovanni Tangianu

Date: 2025-05-21

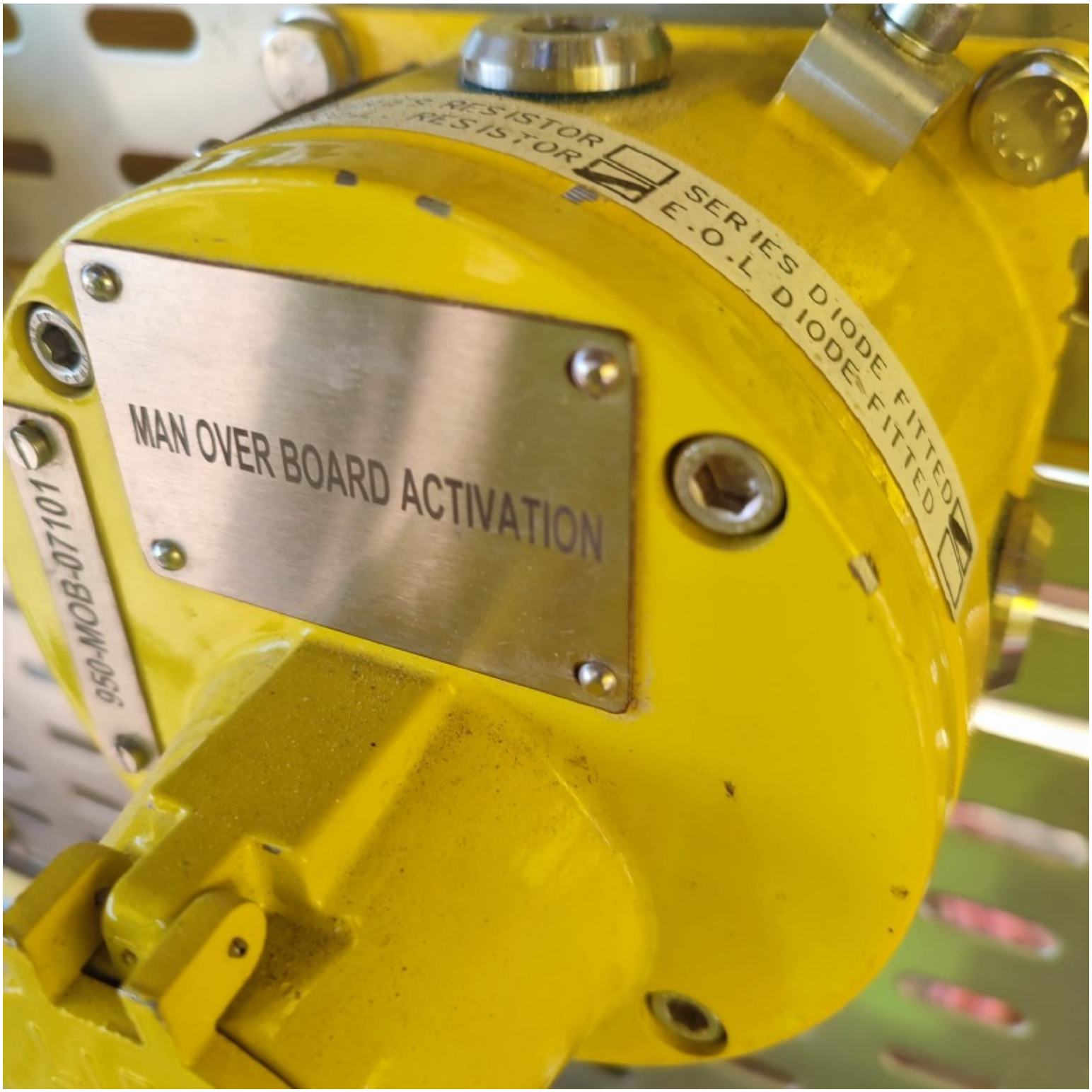
Signature:

6- CLEARANCE APPROVAL

Name:

Date:

Signature:


RESISTOR
RESISTOR
SERIES DIODE FITTED
E.O.L DIODE FITTED
MAN OVER BOARD ACTIVATION
950-MOB-07101


SERIES RESISTOR
E.O.L. RESISTOR
E.O.L DIODE
MAN OVER BOARD ACTIVATION

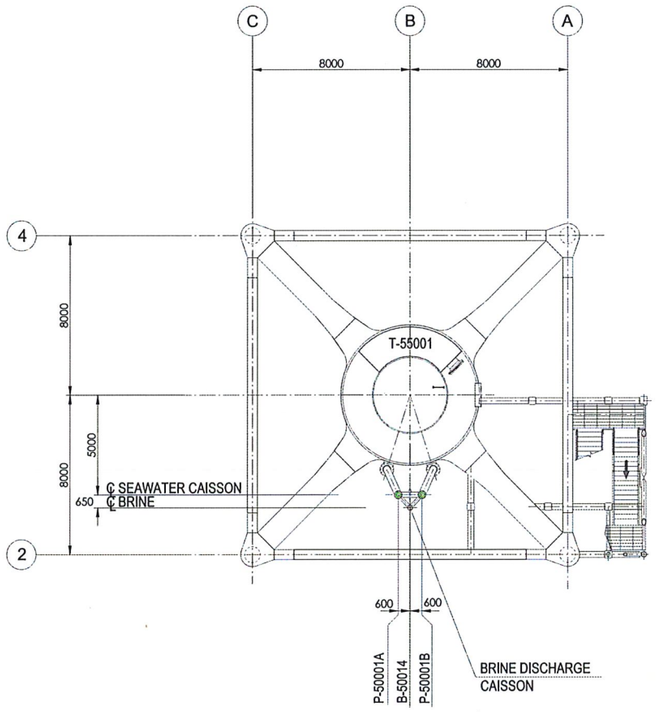

EATON
MEDC
PASSED


950-MOB-07101
LIFT
FLAP
AND
PUSH

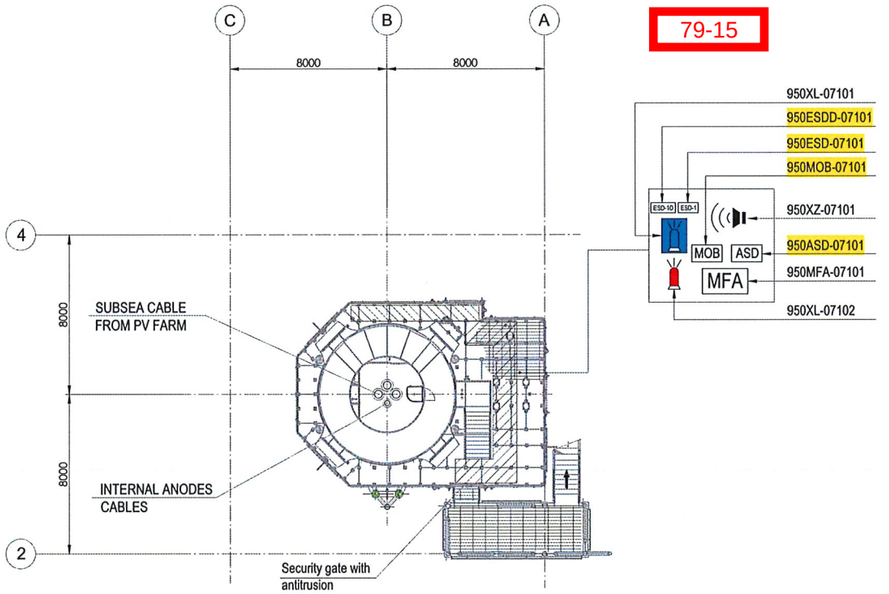
Section 3 SYSTEM,SUB-SYSTEM LIMIT DRAWINGS

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.



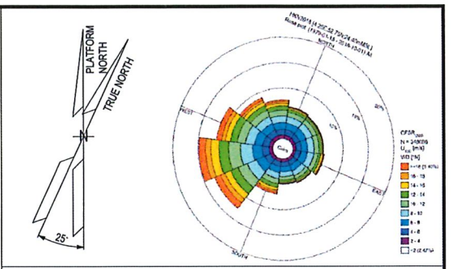
PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

79-15

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

REFERENCE DOCUMENTS

	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
01	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

F & G DETECTORS LAYOUT - BELOW LOWER DECK

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

DRAWN | CHECKED C. CARACCIOLO | APPROVED D. LO STERZO | DATE 10/07/24

A1 | DRAWING NO. 123A90-DDL-SAF-DL-30028 | SHEET 001 | REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

NOT APPLICABLE

Section 4 MECHANICAL COMPLETION STATUS INDEX - BUILDING DISCIPLINE

NOT APPLICABLE

Section 5 MECHANICAL COMPLETION STATUS INDEX - ELECTRICAL DISCIPLINE

NOT APPLICABLE

Section 6 MECHANICAL COMPLETION STATUS INDEX - INSTRUMENTAL DISCIPLINE

CROSSWIND

ROSETTI MARINO

Project CROSSWIND

STATUS INDEX DETAIL

Filtered on subsystem: 79-15 & process: MC & discipline : I

Instrumental	79-15 Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)

ITEM		TASK					
Code	Description	Location	Code	Form	Progress	Date	Certificate
950-ASD-07101	FZ-07 Abandon Shutdown Activation	ONSHORE	C10000958	CJX00	100	2025-04-29	RFC 1
950-ESD-07101	FZ-07 ESD-1 Push Button Activation	ONSHORE	C10000963	CJX00	100	2025-04-29	RFC 1
950-ESDD-07101	FZ-07 ESD-1D Push Button Activation	ONSHORE	C10000968	CJX00	100	2025-04-29	RFC 1
950-MOB-07101	FZ-07 Man Over Board Activation	ONSHORE	C10001077	CJX00	100	2025-04-29	RFC 1
C-950-ASD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000166	CJX10	100	2025-02-19	-
		OFFSHORE	C10004672	CJX10	0	-	-
C-950-ESD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000168	CJX10	100	2025-02-19	-
		OFFSHORE	C10004674	CJX10	0	-	-
C-950-ESDD-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000169	CJX10	100	2025-02-19	-
		OFFSHORE	C10004675	CJX10	0	-	-
C-950-MOB-07101/00-JE-22002	PUSH BUTTON / MARSHALLING PCS	ONSHORE	C10000167	CJX10	100	2025-02-19	-
		OFFSHORE	C10004673	CJX10	0	-	-

ROSETTI MARINO — CROSSWIND

ITEM	Tag	C-950-ASD-07101/00-JE-22002	: PUSH BUTTON / MARSHALLING PCS		Dwg	123A90-DDL-IN-LIS-40091	
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)		Module	TP/UD	
TASK	code	C10000166	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	MC	Activity CCK	Discipline Instrumental	Form	CJX10	Multi/Single-Core Instrument Control Cable

CABLE DATA

Type	Cu-MICA-XLPE-OS-LSZH-SWB-LSZH	Cores/Size mm²	1X2X0,75 mm2	Color	ORANGE
From	950-ASD-07101	To	00-JE-22002		

1	Check cable is as specified in project cable schedule.	OK
2	Check relevant documents are at the latest revision.	OK
3	Check cable is routed in accordance with cable layout drawings.	Note
4	Check cable for any physical damage.	Note
5	Check cable is adequately supported and correctly fixed to rack according to Project specification.	OK
6	Check bending radius is within the specified limits.	OK
7	Check cable is correctly loomed and segregated in accordance with specification.	OK
8	Check cable and core marking are in accordance with specification.	OK
9	Check cable labelling is in accordance with specification.	OK
10	Check that glands, shrouds and earthing are in accordance with specification.	OK
11	Check terminations are in accordance with termination diagram	Note
12	Check gland plate for single core cables is non-ferrous.	NA
13	If required produce Red Line Mark Up for "AS BUILT"	

INSULATION	CORE to EARTH	>999	MΩ
	CORE to CORE	>999	MΩ
	CORE to SCREEN	>999	MΩ
	CORE to ARMr	>999	MΩ
	SCREEN to EARTH	>999	MΩ
	SCREEN to ARMr	>999	MΩ
CONTINUITY	CORES	2,7	Ω
	SCREEN	2,7	Ω
	EARTH	NA	Ω
	ARMr	2,7	Ω
	TEST VOLTS	500	V

TEST ALL CORES AND RECORD LOWEST VALUE

Notes: The lowest value is recorded and must be within project specifications

TESTING INSTRUMENTS USED

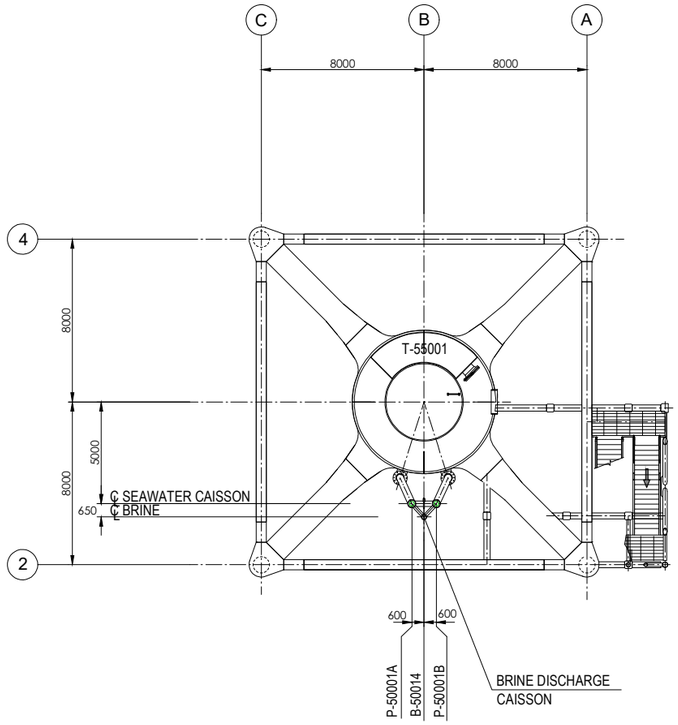
TYPE / SERIAL N°: MEGGER: KEW3125A SERIAL:W8330207 Calibration date: N° 7722/24 10/07/2024

Comments
Nota 4: refer to PL C30000680/C30000682
Note 3,11: Cable dressing and termination will be completed on OFFSHORE phase. Refer to task

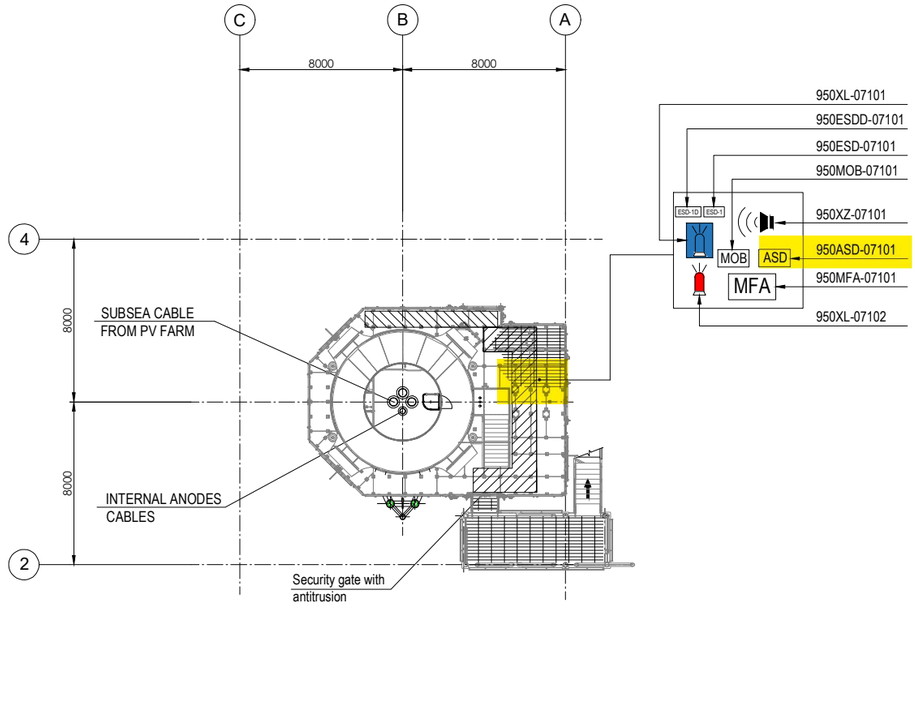
Page 1/1	Performed by	☉ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Michele Tartaglia	Alessio Polo	
Date	2025-01-15	2025-02-19	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-15T10:25:18.491Z	PROVERLIS Digitaly signed by Alessio Polo 2025-02-19T16:50:39.744Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

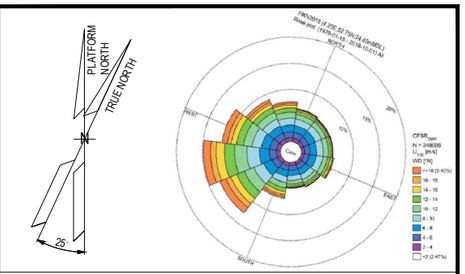


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

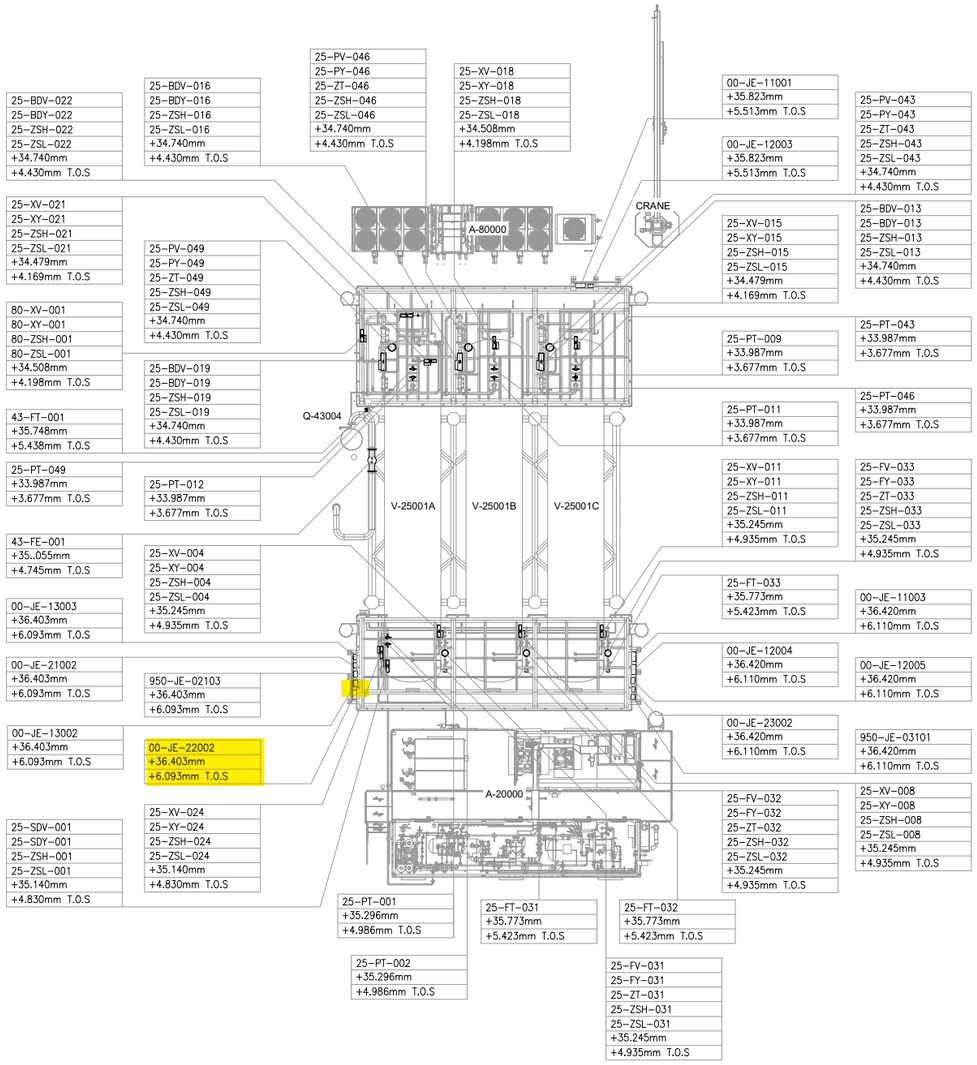
F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK				SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24	
A1	DRAWING NO. 123A90-DDL-SAF-DL-30028		SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DL-40081

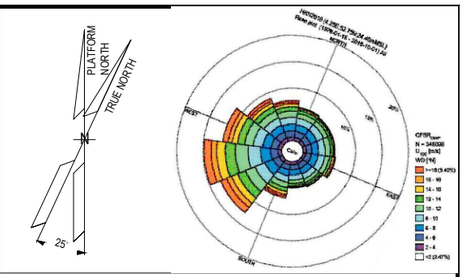
REV. 02



UPPER DECK

SCALE: 1:100

VIEW EL. 33740mm to 36500mm



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. THIS DRAWING IS VALID ONLY FOR INSTRUMENT LOCATION LAYOUT.

LEGEND

- INSTRUMENT JUNCTION BOX
- ELECTRONIC INSTRUMENT
- CONTROL / ON-OFF VALVE

HOLDS

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-IN-DL-40080	INSTRUMENT LAYOUT -LOWER DECK
123A90-DDL-IN-LIS-40091	INSTRUMENT CABLE LIST
123A90-DDL-IN-DG-40015	INSTRUMENT-CCS WIRING DIAGRAMS
123A90-DDL-IN-DG-40016	INSTRUMENT-SAFETY SYSTEM WIRING DIAGRAMS
123A90-DDL-IN-DL-40083	INSTRUMENT MAIN CABLES ROUTING-LOWER DECK

INSERT SUBCONTRACTOR / VENDOR LOGO HERE

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	05/08/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	22/12/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT LOCATION LAYOUT–UPPER DECK
TOS EL. 30.310M

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 04/10/24
A1	DRAWING NO. 123A90–DDL–IN–DL–40081	SHEET 002	REV. 02

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DL-40081**

REV.:	DATE:	SIGNATURE:
2_A	07/10/24	G.Randi

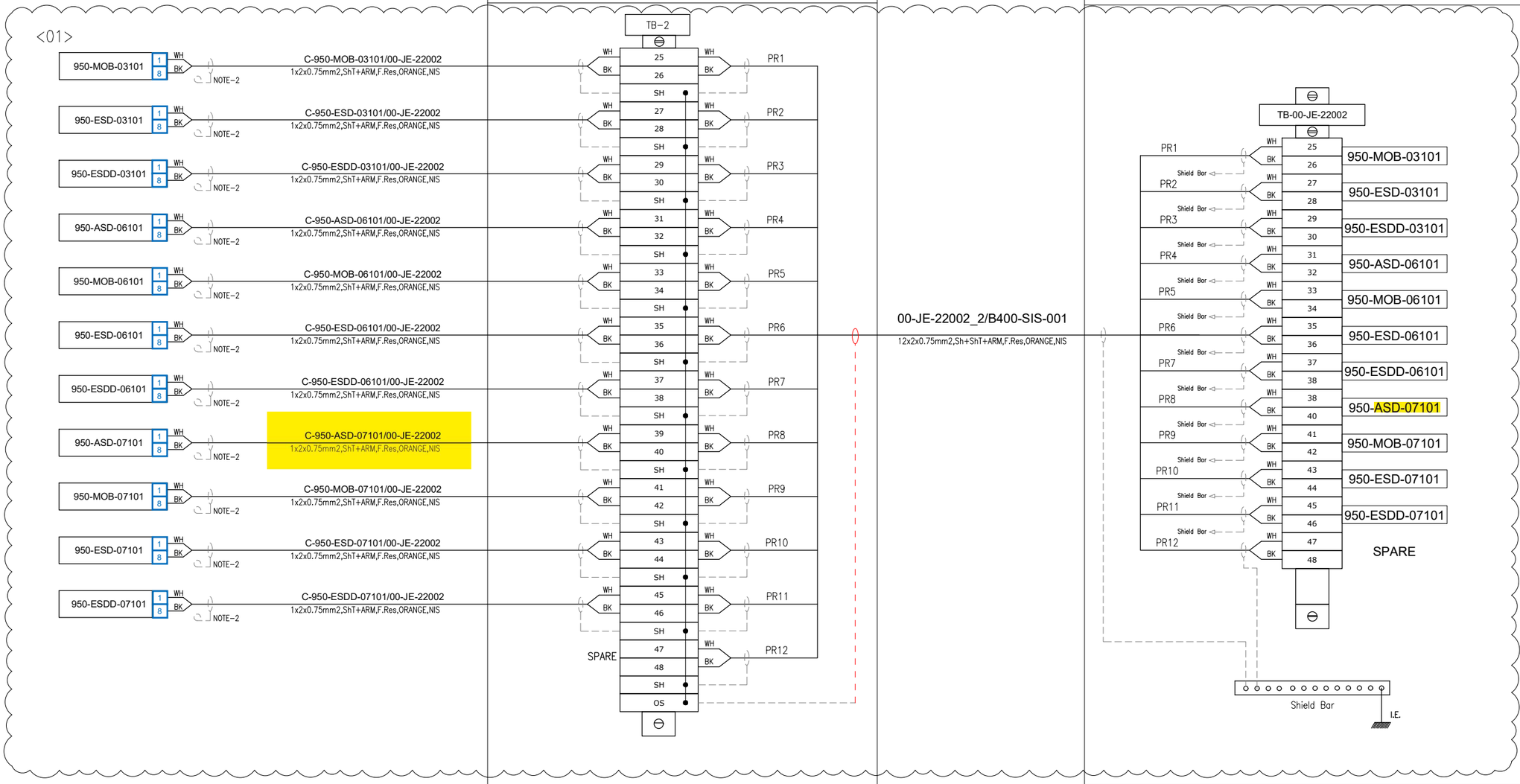
ROSETTI MARINO SpA

File Name : 123A90-DDL-IN-DL-40081 REV02.dwg

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD		MULTICABLE	I&T EQUIPMENT ROOM (ITER)
INSTRUMENTS	JUNCTION BOX 00-JE-22002	No.	MARSHALLING CABINET B400-SIS-001



VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024
A3	DRAWING NO. 123A90–DDL–IN–DG–40016	SHEET 013	REV. 01

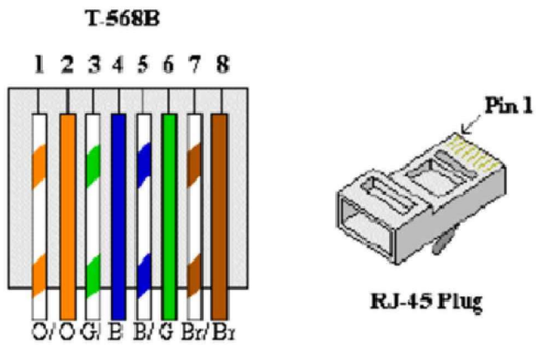
File Name : 123A90-DDL-IN-DG-40016_Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40015

REV. 01

NOTES:

1. ALL SPARE ENTRIES SHALL BE PROVIDED WITH CERTIFIED EX PROOF PLUGS.
2. CABLE SCREENS / DRAIN WIRE SHALL BE SECURELY INSULATED AND TIED BACK IN THE INSTRUMENT SIDE AND SHAL BE TERMINATED IN THE MARSHALLING SIDE OF THE PANEL.
3. SPARE PAIRS / TRIADS SHALL BE CONNECTED TO TERMINALS IN JUNCTION BOX AND PANEL / MARSHALLING CABINETS.
4. ALL CABLE SCREENS TO BE TERMINATED AT THE INSTRUMENT EARTH BAR IN THE RESPECTIVE EARTH BARS (IS OR NIS) AS APPLICABLE IN THE MARSHALLING CABINET.
5. SWITCH TAG NAME AND PORT WILL BE DEFINED DURING THE CONSTRUCTION PHASE
6. FOR OPTICAL FIBERS, USE THE FOLLOWING COLOR CODING:
   - 01- RED
   - 02- GREEN
   - 03- BLUE
   - 04- YELLOW
   - 05- GREY
   - 06- PURPLE
   - 07- BROWN
   - 08- ORANGE
   - 09- WHITE
   - 10- PINK
   - 11- BLACK
   - 12- TURQUOISE
7. CAT.6A CABLE SHALL BE TERMINATED MEETING REQUIREMENTS OF STANDARD EIA/TIA 568B:



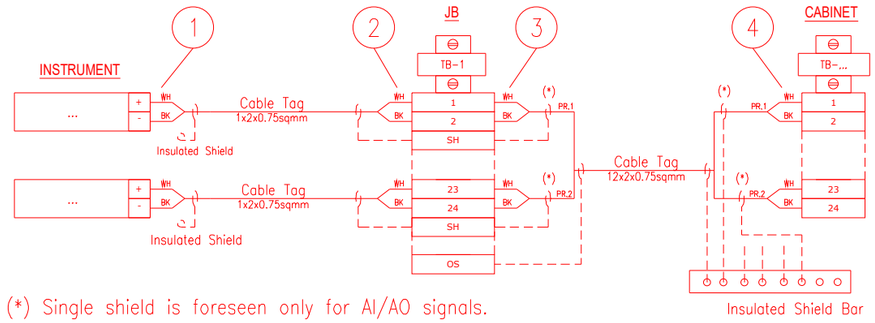
8. FOR INTRISICALLY SAFE CIRCUIT USE LIGHT BLUE CABLE OR ALTERNATIVELY ORANGE CABLE WITH HEAT SHRINKABLE SLEEVE BLUE AT BOTH END (SEE DOC. 123A90-FDL-IN-DD-40017).

LEGENDS & SYMBOLS:

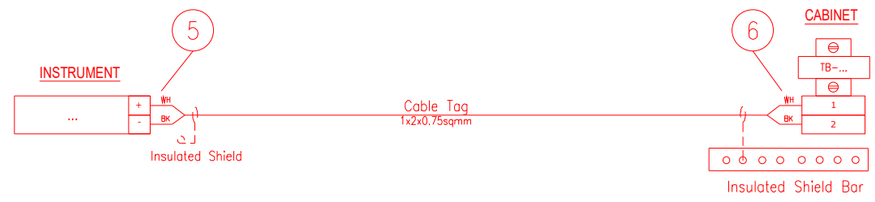
I.E.	- GREEN ⟶ INSTRUMENT SIGNAL EARTH
P.E.	- GREEN / YELLOW ⟶ P.E. EARTH / BONDING
	- TERMINAL BLOCK (TB)
WH	- WHITE
BK	- BLACK
RD	- RED
S	- SHIELD TERMINAL
OS	- OVERALL SHIELD TERMINAL
O/A Shld	- OVERALL SHIELD
I&O/A Shld	- INDIVIDUAL & OVERALL SHIELD
NIS	- NON INTRINSICALLY SAFE
IS	- INTRINSICALLY SAFE
P.E.	- PLANT EARTH
PCS	- PROCESS CONTROL SYSTEM
ESD	- EMERGENCY SHUTDOWN SYSTEM
SIS	- SAFETY INSTRUMENT SYSTEM
FGS	- FIRE & GAS SYSTEM
MC	- MARSHALLING CABINET
AI	- ANALOGUE INPUT
AO	- ANALOGUE OUTPUT
DI	- DIGITAL INPUT
DO	- DIGITAL OUTPUT
JE	- JUNCTION BOX FOR ELECTRICAL SIGNALS

PHILOSOPHY OF CROSS-FERRULING:

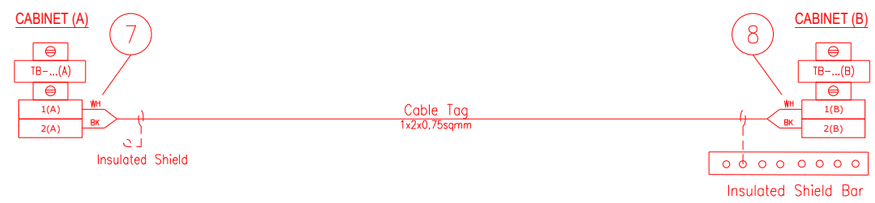
INSTRUMENT CONNECTION THROUGH MARSHALLING JB TO CABINET



INSTRUMENT CONNECTION STRAIGHT TO CABINET



CABINET CONNECTION TO CABINET



1 - INSTR. TERMINAL NO. OR POLARITY / JB TAG / JB TERMINAL NO.
2 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / JB TERMINAL NO.
3 - JB TERMINAL NO. / JB TERMINAL STRIP / CABINET TERMINAL STRIP / PAIR OR CORE NO.
4 - PAIR OR CORE NO. / JB TAG / JB TERMINAL NO. / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
5 - INSTR. TERMINAL NO. OR POLARITY / CABINET TAG / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
6 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / CABINET TERMINAL STRIP/ CABINET TERMINAL NO.
7 - TERMINAL NO. (A) / TERMINAL STRIP (A) / CABINET TAG (B) / CABINET TERMINAL NO. (B) / PAIR OR CORE NO.
8 - PAIR OR CORE NO. / CABINET TERMINAL NO. (A) / CABINET TAG (A) / TERMINAL STRIP (B) / TERMINAL NO. (B)

NOTES: A - HEAT SHRINKABLE BLACK FOR SHIELD OF NIS INSTRUMENT CABLE.
HEAT SHRINKABLE BLUE FOR SHIELD OF IS INSTRUMENT CABLE.
B - ABOVE DESCRIBED PHILOSOPHY IS INTENDED FOR CONNECTION AS REPRESENTED:
IN CASE OF CONNECTION FROM THE OPPOSITE SIDE, ORDER OF FERULE TAG SHALL BE MIRRORED.
C - SAME TAGGING PHILOSOPHY SHALL APPLIED ALSO TO SHIELDS TERMINATED ON TERMINAL STRIP.

REFERENCE DRAWINGS:

PIPING AND INSTRUMENT DIAGRAM 123A90-DDL-PR-PID-80009
INSTRUMENT INDEX 123A90-DDL-IN-LIS-40088
F&G DETECTORS LAYOUT 123A90-DDL-SAF-DL-30027

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT – PCS WIRING DIAGRAMS
GENERAL NOTES/LEGENDS

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

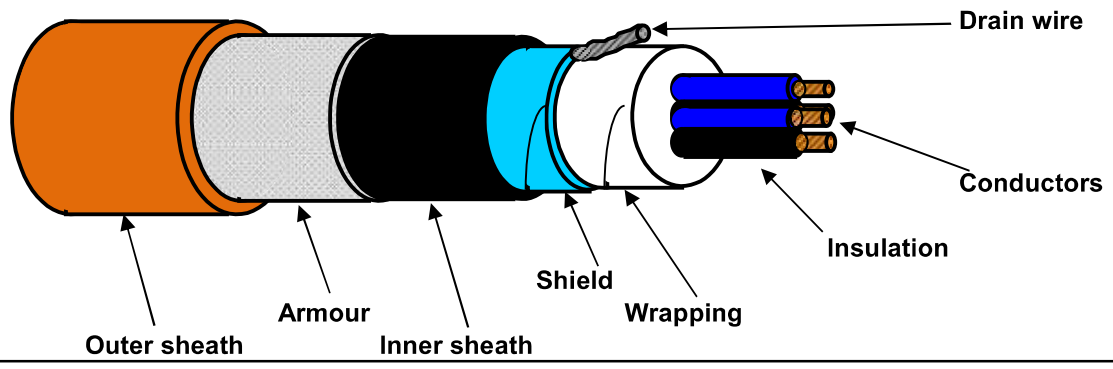
A3	DRAWING NO. 123A90-DDL-IN-DG-40015	SHEET 003	REV. 01

File Name : 123A90-DDL-IN-DG-40015_Rev.01

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitti	To Gland	To Entry	To Fitting	Routing	Routing Manual
C-950-ASD-07101/00-JE-22002	Cable	IN	VFC	123A90-DDL-IN-LIS-40091						950-ASD-07101	Push Button	Below Lower Deck	00-JE-22002	DI JB to SIS	Upper Deck	SMICV08-1X2X0,75	Cable Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250V (300V) 1x2x0,75mm² - Orange	M20S	T2_M20S_Double			T2_M20S_Double				T-SEC-02 / T-SEC-01 / L-SEC-22 / L-SEC-18E / L-SEC-13 / L-SEC-1J / L-SEC-1I / L-SEC-11 / U-SEC-14A / U-SEC-15

Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250 V (300 V)

1X2X0,75 - INSTRUMENT CABLE - Fire Resistant - Not I.S.



TECHNICAL FEATURES

Conductors :	**7-STRANDED** plain/bare soft annealed copper wires	**IEC 60228 Class 2**
Insulation :	Mica/Glass Tape (MGT) plus XLPE, Nominal Thickness 0,5 mm	
Cores colour code :	**White - Black**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not required	
Total Assembling :	10/1mt	
Overall Wrapping:	by polyester-PET Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Drain wire :	7-Stranded **TINNED** annealed copper drain wire, **size 0,5 sqmm**, in continuous contact with the shield	
Overall Shield :	by Aluminium-**Al** Minimum Thickness 0,008 mm / polyester-**PET** Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Inner sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,1 mm	
Inner sheath color code:	**Black**	
Armour :	Galvanized Steel Wire Braid Armour (coverage ≥ 90%)	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, moisture/abrasion/UV Resistant, Average Thickness 1,2 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - 1X2X0,75 SQMM - MGT/XLPE/OS/LSZH/SWB/LSZH - 150/250 V - IEC 60331.21 -**	
(every 1000 mm)	**IEC 60332.1.2 - IEC 60332.3.22 - Year of Manufacture - CE + Meter Marking**	
Under armour diameter :	(8,5 ± 10%) mm	
Over armour diameter :	(9,3 ± 10%) mm	
Outer diameter :	(11,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10 (in fixed installation)	
Voltage Test :	1,5 kV a.c. for 5' (Between Cores) / 1,5 kV a.c. for 5' (Between Cores - Shield)	
Conductors DC Resistance :	≤ 26 Ω/km (@ 20°C)	
Insulation Resistance :	≥ 1000 MΩ x Km (@ 20°C)	
Mutual Capacitance :	≤ 150 nF/km	
L/R ratio :	≤ 25 µH/Ω	
Inductance :	≤ 0,9 mH/km	
Applicable Standards		
Design Guidelines :	**IEC 60092.376**	
ON COMPLETE CABLE		
Fire Resistant test :	**IEC 60331.21**	
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance :	IEC 61034.2 (LT ≥ 60%)	
Hazardous Areas :	IEC 60079.14 par.9.3.2a	
Temperature Range :		
ON INSULATION	(max +90°C) (max continuous operation temperature of conductors)	
	(max +250°C) (max conductors temperature during short-circuit for 5 seconds)	
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C) (in fixed installation)	
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner sheath together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	04/04/2024	Messa			
Checked :	04/04/2024	Spaccasassi			
Approved :	04/04/2024	Cucinotta			

The data provided herein are meant for the transaction will be used in the sense of the article 19 of the Regulation (UE) 2016/679, also by such subjects 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.

ROSETTI MARINO — CROSSWIND

ITEM	Tag	C-950-MOB-07101/00-JE-22002	: PUSH BUTTON / MARSHALLING PCS		Dwg	123A90-DDL-IN-LIS-40091	
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)		Module	TP/UD	
TASK	code	C10000167	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	MC	Activity CCK	Discipline Instrumental	Form	CJX10	Multi/Single-Core Instrument Control Cable

CABLE DATA

Type	Cu-MICA-XLPE-OS-LSZH-SWB-LSZH	Cores/Size mm²	1X2X0,75 mm2	Color	ORANGE
From	950-MOB-07101	To	00-JE-22002		

1	Check cable is as specified in project cable schedule.	OK
2	Check relevant documents are at the latest revision.	OK
3	Check cable is routed in accordance with cable layout drawings.	Note
4	Check cable for any physical damage.	Note
5	Check cable is adequately supported and correctly fixed to rack according to Project specification.	OK
6	Check bending radius is within the specified limits.	OK
7	Check cable is correctly loomed and segregated in accordance with specification.	OK
8	Check cable and core marking are in accordance with specification.	OK
9	Check cable labelling is in accordance with specification.	OK
10	Check that glands, shrouds and earthing are in accordance with specification.	OK
11	Check terminations are in accordance with termination diagram	Note
12	Check gland plate for single core cables is non-ferrous.	NA
13	If required produce Red Line Mark Up for "AS BUILT"	

INSULATION	CORE to EARTH	>999	MΩ
	CORE to CORE	>999	MΩ
	CORE to SCREEN	>999	MΩ
	CORE to ARMr	>999	MΩ
	SCREEN to EARTH	>999	MΩ
	SCREEN to ARMr	>999	MΩ
CONTINUITY	CORES	0,5	Ω
	SCREEN	0,5	Ω
	EARTH	NA	Ω
	ARMr	0,5	Ω
	TEST VOLTS	500	V

TEST ALL CORES AND RECORD LOWEST VALUE

Notes: The lowest value is recorded and must be within project specifications

TESTING INSTRUMENTS USED

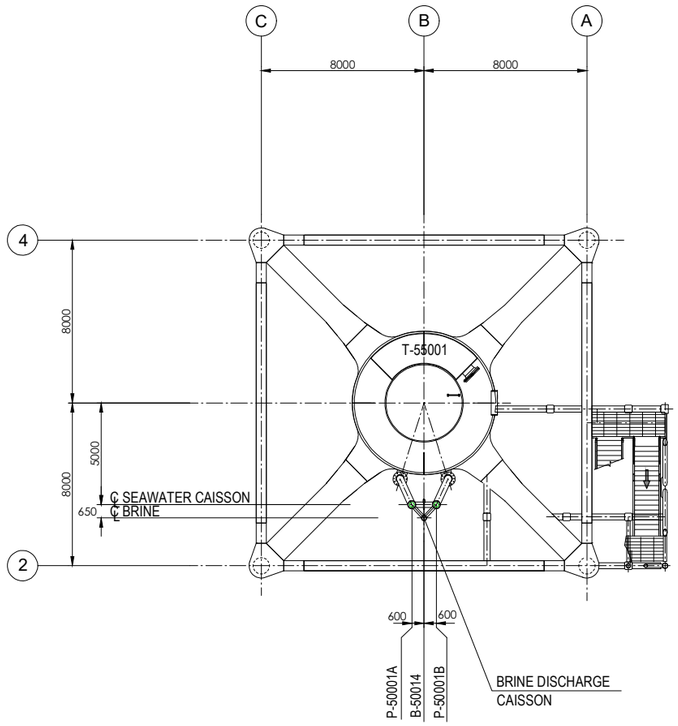
TYPE / SERIAL N°: MEGGER: KEW3125A SERIAL:W8330207 Calibration date: N° 7722/24 10/07/2024

Comments
Nota 4: refer to PL C30000680/C30000682
Note 3,11: Cable dressing and termination will be completed on OFFSHORE phase. Refer to task C10004673

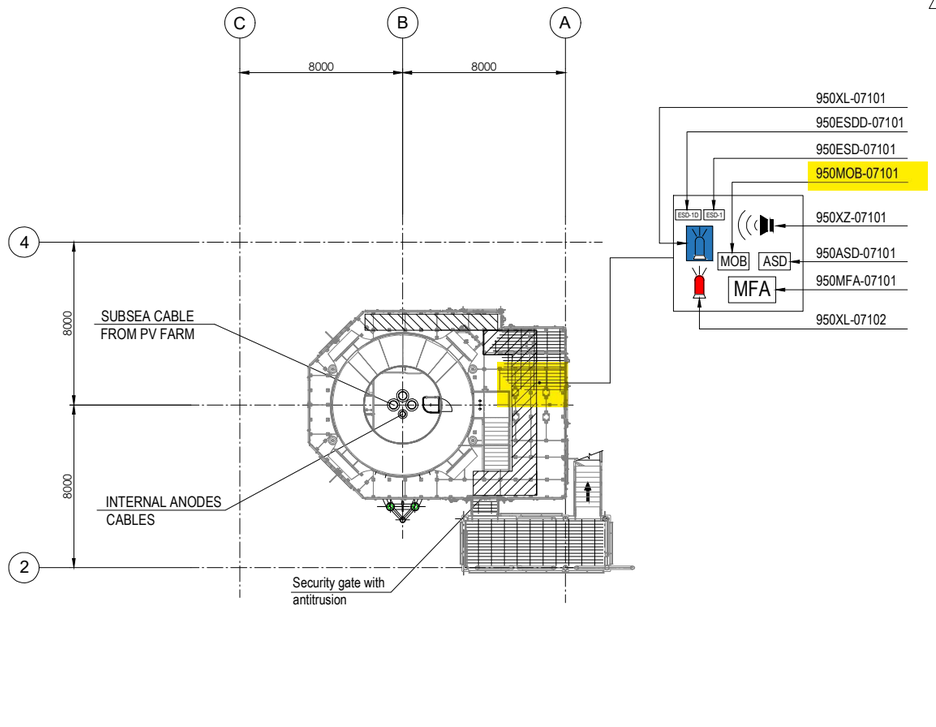
Page 1/1	Performed by	☉ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Michele Tartaglia	Alessio Polo	
Date	2025-01-15	2025-02-19	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-15T10:25:31.664Z	PROVERLIS Digitaly signed by Alessio Polo 2025-02-19T16:48:41.976Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

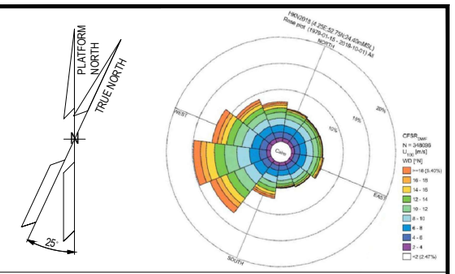


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

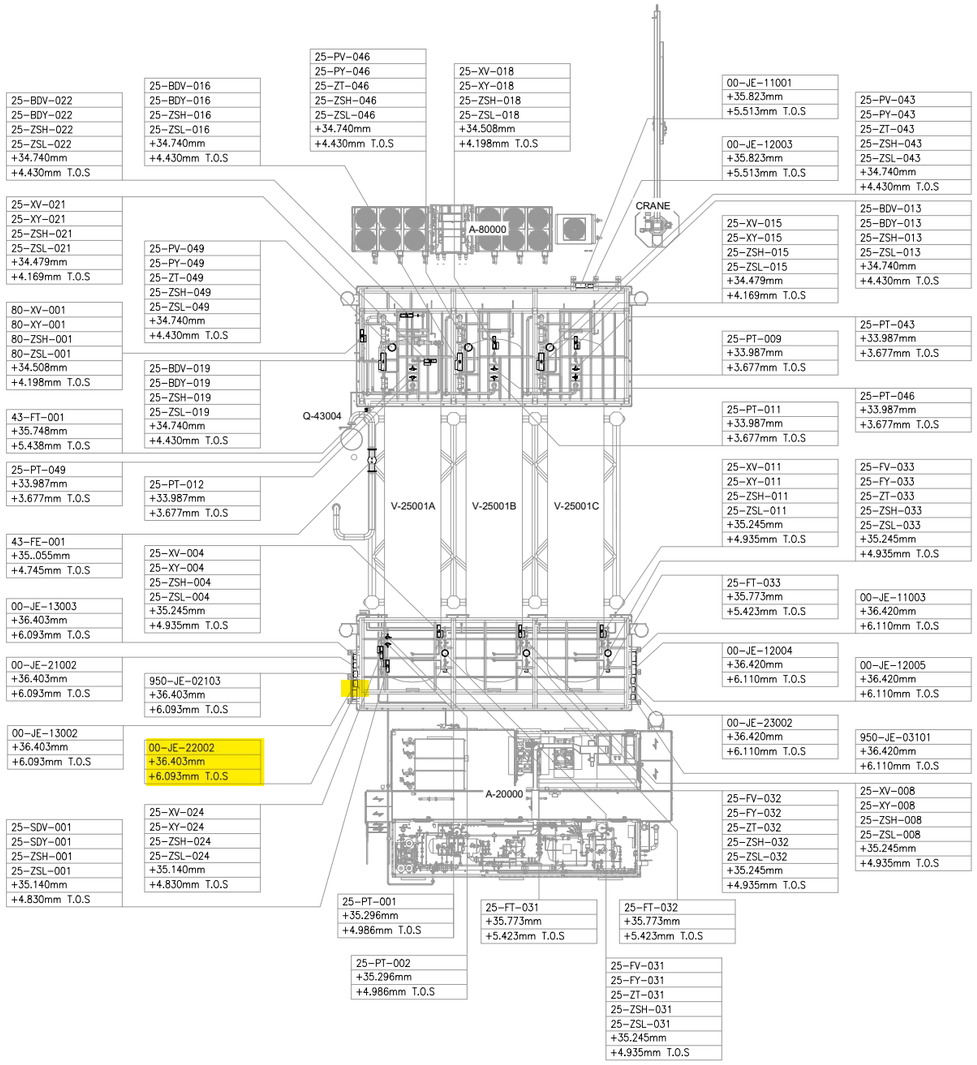
F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK				SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24	
A1	DRAWING NO. 123A90-DDL-SAF-DL-30028		SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DL-40081

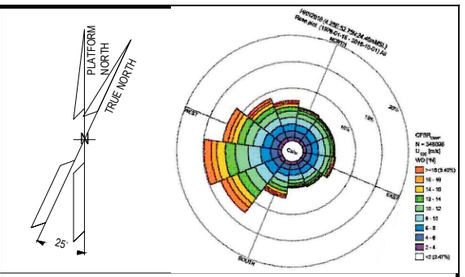
REV. 02



UPPER DECK

SCALE: 1:100

VIEW EL. 33740mm to 36500mm



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. THIS DRAWING IS VALID ONLY FOR INSTRUMENT LOCATION LAYOUT.

LEGEND

- INSTRUMENT JUNCTION BOX
- ELECTRONIC INSTRUMENT
- CONTROL / ON-OFF VALVE

HOLDS

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-IN-DL-40080	INSTRUMENT LAYOUT -LOWER DECK
123A90-DDL-IN-LIS-40091	INSTRUMENT CABLE LIST
123A90-DDL-IN-DG-40015	INSTRUMENT-CCS WIRING DIAGRAMS
123A90-DDL-IN-DG-40016	INSTRUMENT-SAFETY SYSTEM WIRING DIAGRAMS
123A90-DDL-IN-DL-40083	INSTRUMENT MAIN CABLES ROUTING-LOWER DECK

INSERT SUBCONTRACTOR / VENDOR LOGO HERE

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	05/08/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	22/12/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT LOCATION LAYOUT–UPPER DECK
TOS EL. 30.310M

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 04/10/24
A1	DRAWING NO. 123A90–DDL–IN–DL–40081	SHEET 002	REV. 02

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DL-40081**

REV.:	DATE:	SIGNATURE:
2_A	07/10/24	G.Randi

ROSETTI MARINO SpA

File Name : 123A90-DDL-IN-DL-40081 REV02.dwg

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD

INSTRUMENTS

JUNCTION BOX

00-JE-22002

MULTICABLE

No.

I&T EQUIPMENT ROOM (ITER)

MARSHALLING CABINET

B400-SIS-001

<01>

INSTRUMENTS	CABLE	JUNCTION BOX 00-JE-22002	MULTICABLE No.	MARSHALLING CABINET B400-SIS-001
950-MOB-03101 (1 WH / 8 BK)	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	25 WH / 26 BK → PR1	00-JE-22002_2/B400-SIS-001 12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS	25 WH / 26 BK → PR1 → 950-MOB-03101
950-ESD-03101 (1 WH / 8 BK)	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	27 WH / 28 BK → PR2		27 WH / 28 BK → PR2 → 950-ESD-03101
950-ESDD-03101 (1 WH / 8 BK)	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	29 WH / 30 BK → PR3		29 WH / 30 BK → PR3 → 950-ESDD-03101
950-ASD-06101 (1 WH / 8 BK)	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	31 WH / 32 BK → PR4		31 WH / 32 BK → PR4 → 950-ASD-06101
950-MOB-06101 (1 WH / 8 BK)	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	33 WH / 34 BK → PR5		33 WH / 34 BK → PR5 → 950-MOB-06101
950-ESD-06101 (1 WH / 8 BK)	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	35 WH / 36 BK → PR6		35 WH / 36 BK → PR6 → 950-ESD-06101
950-ESDD-06101 (1 WH / 8 BK)	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	37 WH / 38 BK → PR7		37 WH / 38 BK → PR7 → 950-ESDD-06101
950-ASD-07101 (1 WH / 8 BK)	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	39 WH / 40 BK → PR8		38 WH / 40 BK → PR8 → 950-ASD-07101
950-MOB-07101 (1 WH / 8 BK)	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	41 WH / 42 BK → PR9		41 WH / 42 BK → PR9 → 950-MOB-07101
950-ESD-07101 (1 WH / 8 BK)	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	43 WH / 44 BK → PR10		43 WH / 44 BK → PR10 → 950-ESD-07101
950-ESDD-07101 (1 WH / 8 BK)	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	45 WH / 46 BK → PR11		45 WH / 46 BK → PR11 → 950-ESDD-07101
		SPARE 47 WH / 48 BK → PR12		47 WH / 48 BK → PR12 → SPARE
		SH, SH, SH, SH, SH, SH, SH, SH, SH, OS		Shield Bar → I.E.

TB-2

TB-00-JE-22002

VALID FOR CONSTRUCTION

FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

	DRAWING NO.	SHEET	REV.
A3	123A90–DDL–IN–DG–40016	013	01

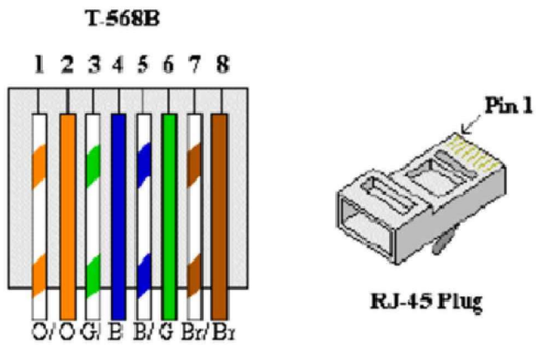
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DRAWING NO. 123A90-DDL-IN-DG-40015

REV. 01

NOTES:

1. ALL SPARE ENTRIES SHALL BE PROVIDED WITH CERTIFIED EX PROOF PLUGS.
2. CABLE SCREENS / DRAIN WIRE SHALL BE SECURELY INSULATED AND TIED BACK IN THE INSTRUMENT SIDE AND SHAL BE TERMINATED IN THE MARSHALLING SIDE OF THE PANEL.
3. SPARE PAIRS / TRIADS SHALL BE CONNECTED TO TERMINALS IN JUNCTION BOX AND PANEL / MARSHALLING CABINETS.
4. ALL CABLE SCREENS TO BE TERMINATED AT THE INSTRUMENT EARTH BAR IN THE RESPECTIVE EARTH BARS (IS OR NIS) AS APPLICABLE IN THE MARSHALLING CABINET.
5. SWITCH TAG NAME AND PORT WILL BE DEFINED DURING THE CONSTRUCTION PHASE
6. FOR OPTICAL FIBERS, USE THE FOLLOWING COLOR CODING:
   - 01- RED
   - 02- GREEN
   - 03- BLUE
   - 04- YELLOW
   - 05- GREY
   - 06- PURPLE
   - 07- BROWN
   - 08- ORANGE
   - 09- WHITE
   - 10- PINK
   - 11- BLACK
   - 12- TURQUOISE
7. CAT.6A CABLE SHALL BE TERMINATED MEETING REQUIREMENTS OF STANDARD EIA/TIA 568B:



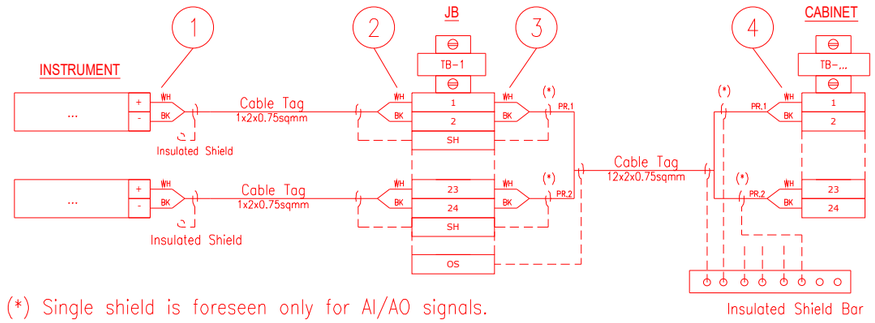
8. FOR INTRISICALLY SAFE CIRCUIT USE LIGHT BLUE CABLE OR ALTERNATIVELY ORANGE CABLE WITH HEAT SHRINKABLE SLEEVE BLUE AT BOTH END (SEE DOC. 123A90-FDL-IN-DD-40017).

LEGENDS & SYMBOLS:

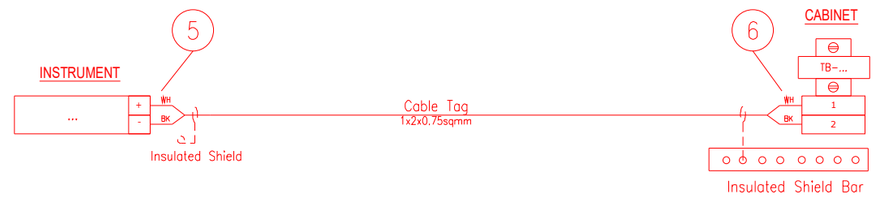
I.E.	- GREEN ⟶ INSTRUMENT SIGNAL EARTH
P.E.	- GREEN / YELLOW ⟶ P.E. EARTH / BONDING
	- TERMINAL BLOCK (TB)
WH	- WHITE
BK	- BLACK
RD	- RED
S	- SHIELD TERMINAL
OS	- OVERALL SHIELD TERMINAL
O/A Shld	- OVERALL SHIELD
I&O/A Shld	- INDIVIDUAL & OVERALL SHIELD
NIS	- NON INTRINSICALLY SAFE
IS	- INTRINSICALLY SAFE
P.E.	- PLANT EARTH
PCS	- PROCESS CONTROL SYSTEM
ESD	- EMERGENCY SHUTDOWN SYSTEM
SIS	- SAFETY INSTRUMENT SYSTEM
FGS	- FIRE & GAS SYSTEM
MC	- MARSHALLING CABINET
AI	- ANALOGUE INPUT
AO	- ANALOGUE OUTPUT
DI	- DIGITAL INPUT
DO	- DIGITAL OUTPUT
JE	- JUNCTION BOX FOR ELECTRICAL SIGNALS

PHILOSOPHY OF CROSS-FERRULING:

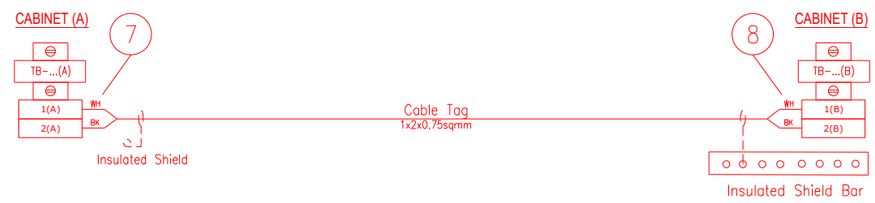
INSTRUMENT CONNECTION THROUGH MARSHALLING JB TO CABINET



INSTRUMENT CONNECTION STRAIGHT TO CABINET



CABINET CONNECTION TO CABINET



1 - INSTR. TERMINAL NO. OR POLARITY / JB TAG / JB TERMINAL NO.
2 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / JB TERMINAL NO.
3 - JB TERMINAL NO. / JB TERMINAL STRIP / CABINET TERMINAL STRIP / PAIR OR CORE NO.
4 - PAIR OR CORE NO. / JB TAG / JB TERMINAL NO. / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
5 - INSTR. TERMINAL NO. OR POLARITY / CABINET TAG / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
6 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / CABINET TERMINAL STRIP/ CABINET TERMINAL NO.
7 - TERMINAL NO. (A) / TERMINAL STRIP (A) / CABINET TAG (B) / CABINET TERMINAL NO. (B) / PAIR OR CORE NO.
8 - PAIR OR CORE NO. / CABINET TERMINAL NO. (A) / CABINET TAG (A) / TERMINAL STRIP (B) / TERMINAL NO. (B)

NOTES: A - HEAT SHRINKABLE BLACK FOR SHIELD OF NIS INSTRUMENT CABLE.
HEAT SHRINKABLE BLUE FOR SHIELD OF IS INSTRUMENT CABLE.
B - ABOVE DESCRIBED PHILOSOPHY IS INTENDED FOR CONNECTION AS REPRESENTED:
IN CASE OF CONNECTION FROM THE OPPOSITE SIDE, ORDER OF FERULE TAG SHALL BE MIRRORED.
C - SAME TAGGING PHILOSOPHY SHALL APPLIED ALSO TO SHIELDS TERMINATED ON TERMINAL STRIP.

REFERENCE DRAWINGS:

PIPING AND INSTRUMENT DIAGRAM 123A90-DDL-PR-PID-80009
INSTRUMENT INDEX 123A90-DDL-IN-LIS-40088
F&G DETECTORS LAYOUT 123A90-DDL-SAF-DL-30027

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT – PCS WIRING DIAGRAMS
GENERAL NOTES/LEGENDS

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

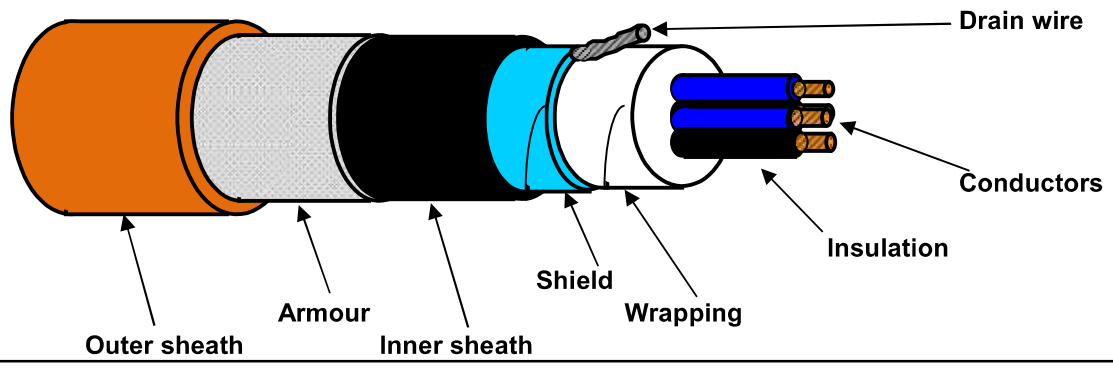
A3	DRAWING NO. 123A90-DDL-IN-DG-40015	SHEET 003	REV. 01

File Name : 123A90-DDL-IN-DG-40015_Rev.01

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitti	To Gland	To Entry	To Fitting	Routing	Routing Manual
C-950-MOB-07101/00-JE-22002	Cable	IN	VFC	123A90-DDL-IN-LIS-40091						950-MOB-07101	Push Button	Below Lower Deck	00-JE-22002	DI JB to SIS	Upper Deck	SMICV08-1X2X0,75	Cable Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250V (300V) 1x2x0,75mm² - Orange	M20S	T2_M20S_Double			T2_M20S_Double				T-SEC-02 / T-SEC-01 / L-SEC-22 / L-SEC-18E / L-SEC-13 / L-SEC-1J / L-SEC-1I / L-SEC-11 / U-SEC-14A / U-SEC-15

Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250 V (300 V)

1X2X0,75 - INSTRUMENT CABLE - Fire Resistant - Not I.S.



TECHNICAL FEATURES

Conductors :	**7-STRANDED** plain/bare soft annealed copper wires	**IEC 60228 Class 2**
Insulation :	Mica/Glass Tape (MGT) plus XLPE, Nominal Thickness 0,5 mm	
Cores colour code :	**White - Black**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not required	
Total Assembling :	10/1mt	
Overall Wrapping:	by polyester-PET Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Drain wire :	7-Stranded **TINNED** annealed copper drain wire, **size 0,5 sqmm**, in continuous contact with the shield	
Overall Shield :	by Aluminium-**Al** Minimum Thickness 0,008 mm / polyester-**PET** Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Inner sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,1 mm	
Inner sheath color code:	**Black**	
Armour :	Galvanized Steel Wire Braid Armour (coverage ≥ 90%)	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, moisture/abrasion/UV Resistant, Average Thickness 1,2 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - 1X2X0,75 SQMM - MGT/XLPE/OS/LSZH/SWB/LSZH - 150/250 V - IEC 60331.21 -**	
(every 1000 mm)	**IEC 60332.1.2 - IEC 60332.3.22 - Year of Manufacture - CE + Meter Marking**	
Under armour diameter :	(8,5 ± 10%) mm	
Over armour diameter :	(9,3 ± 10%) mm	
Outer diameter :	(11,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10 (in fixed installation)	
Voltage Test :	1,5 kV a.c. for 5' (Between Cores) / 1,5 kV a.c. for 5' (Between Cores - Shield)	
Conductors DC Resistance :	≤ 26 Ω/km (@ 20°C)	
Insulation Resistance :	≥ 1000 MΩ x Km (@ 20°C)	
Mutual Capacitance :	≤ 150 nF/km	
L/R ratio :	≤ 25 µH/Ω	
Inductance :	≤ 0,9 mH/km	
Applicable Standards		
Design Guidelines :	**IEC 60092.376**	
ON COMPLETE CABLE		
Fire Resistant test :	**IEC 60331.21**	
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance :	IEC 61034.2 (LT ≥ 60%)	
Hazardous Areas :	IEC 60079.14 par.9.3.2a	
Temperature Range :		
ON INSULATION	(max +90°C) (max continuous operation temperature of conductors)	
	(max +250°C) (max conductors temperature during short-circuit for 5 seconds)	
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C) (in fixed installation)	
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner sheath together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	04/04/2024	Messa			
Checked :	04/04/2024	Spaccasassi			
Approved :	04/04/2024	Cucinotta			

The data provided herein are meant for the transaction will be used in the sense of the article 19 of the Regulation (UE) 2016/679, also by such subjects 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.

ROSETTI MARINO — PROVERLIS — CROSSWIND

ITEM	Tag	C-950-ESD-07101/00-JE-22002	: PUSH BUTTON / MARSHALLING PCS		Dwg	123A90-DDL-IN-LIS-40091	
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)		Module	TP/UD	
TASK	code	C10000168	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	MC	Activity CCK	Discipline Instrumental	Form	CJX10	Multi/Single-Core Instrument Control Cable

CABLE DATA

Type	Cu-MICA-XLPE-OS-LSZH-SWB-LSZH	Cores/Size mm²	1X2X0,75 mm2	Color	ORANGE
From	950-ESD-07101	To	00-JE-22002		

1	Check cable is as specified in project cable schedule.	OK
2	Check relevant documents are at the latest revision.	OK
3	Check cable is routed in accordance with cable layout drawings.	Note
4	Check cable for any physical damage.	Note
5	Check cable is adequately supported and correctly fixed to rack according to Project specification.	OK
6	Check bending radius is within the specified limits.	OK
7	Check cable is correctly loomed and segregated in accordance with specification.	OK
8	Check cable and core marking are in accordance with specification.	OK
9	Check cable labelling is in accordance with specification.	OK
10	Check that glands, shrouds and earthing are in accordance with specification.	OK
11	Check terminations are in accordance with termination diagram	Note
12	Check gland plate for single core cables is non-ferrous.	NA
13	If required produce Red Line Mark Up for "AS BUILT"	

INSULATION	CORE to EARTH	>999	MΩ
	CORE to CORE	>999	MΩ
	CORE to SCREEN	>999	MΩ
	CORE to ARMr	>999	MΩ
	SCREEN to EARTH	>999	MΩ
	SCREEN to ARMr	>999	MΩ
CONTINUITY	CORES	2,7	Ω
	SCREEN	2,7	Ω
	EARTH	NA	Ω
	ARMr	2,7	Ω
	TEST VOLTS	500	V

TEST ALL CORES AND RECORD LOWEST VALUE

Notes: The lowest value is recorded and must be within project specifications

TESTING INSTRUMENTS USED

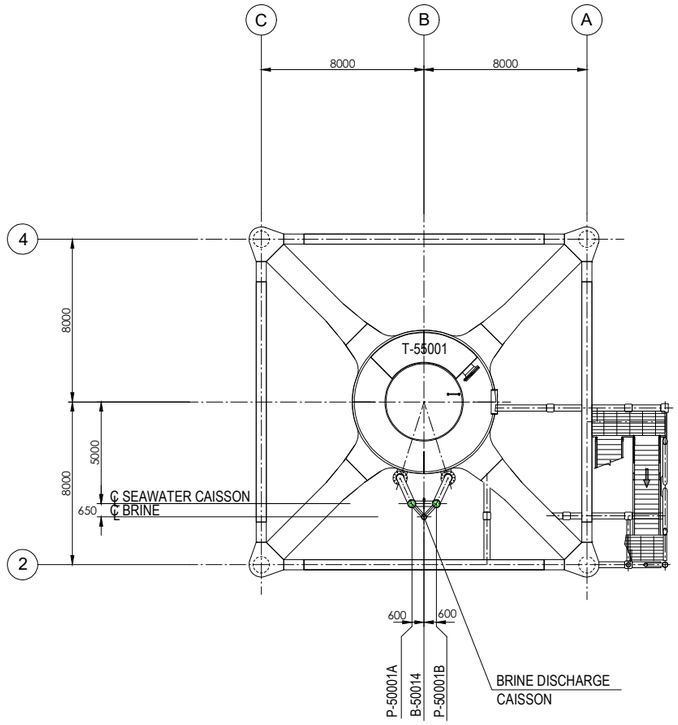
TYPE / SERIAL N°: MEGGER: KEW3125A SERIAL:W8330207 Calibration date: N° 7722/24 10/07/2024

Comments
Nota 4: refer to PL C30000680/C30000682
Note 3,11: Cable dressing and termination will be completed on OFFSHORE phase. Refer to task C10004674

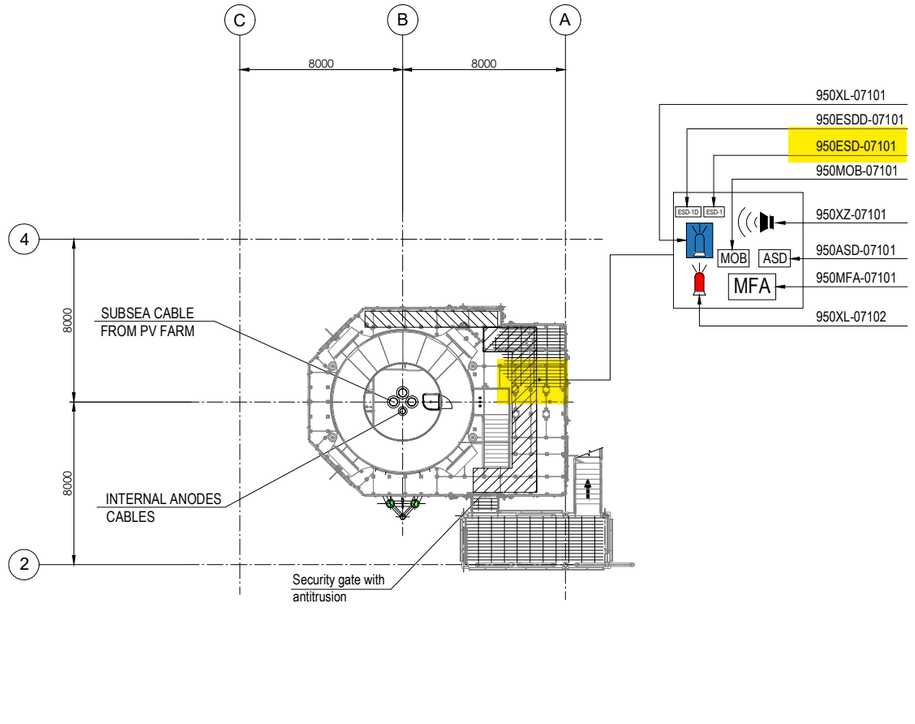
Page 1/1	Performed by	☉ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Michele Tartaglia	Alessio Polo	
Date	2025-01-15	2025-02-19	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-15T10:25:46.461Z	PROVERLIS Digitaly signed by Alessio Polo 2025-02-19T16:45:58.458Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

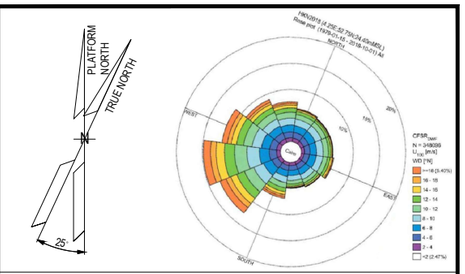


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

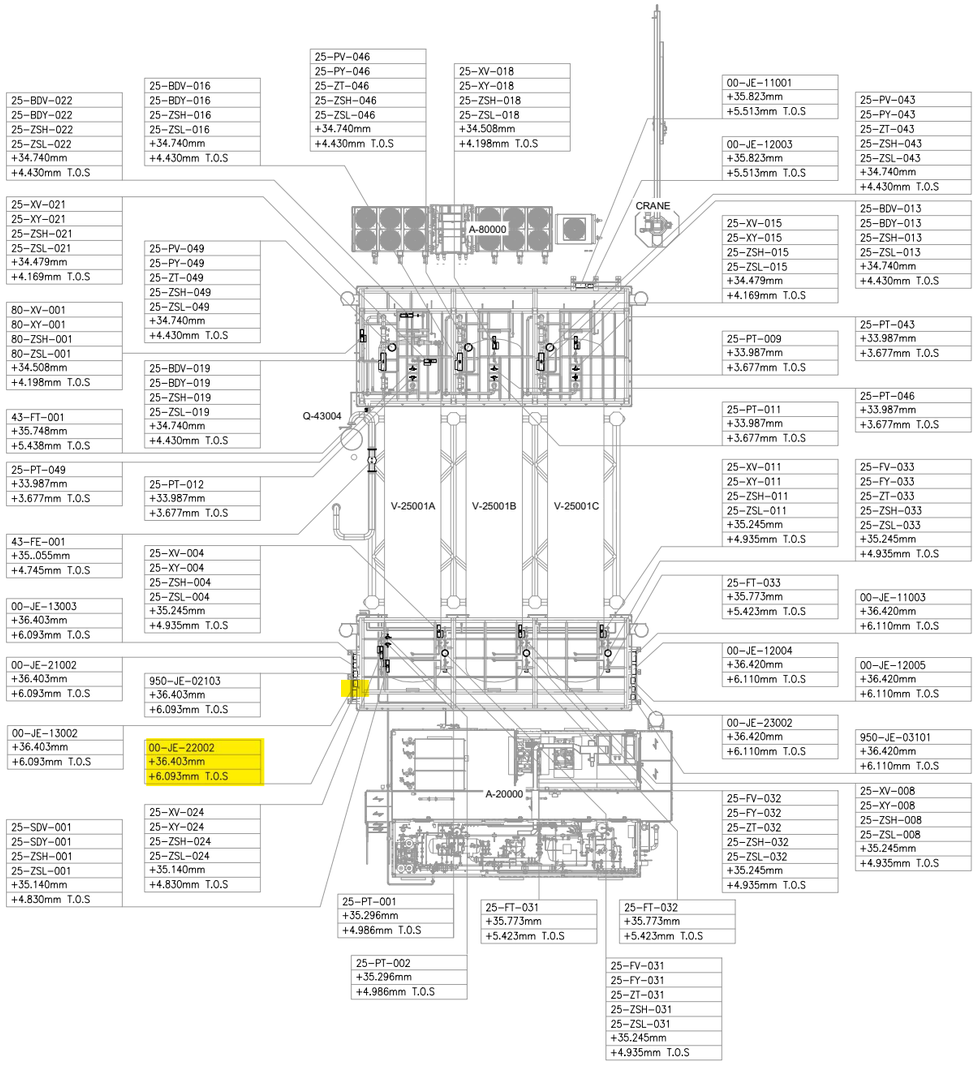
F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK				SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24	
A1	DRAWING NO. 123A90-DDL-SAF-DL-30028		SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DL-40081

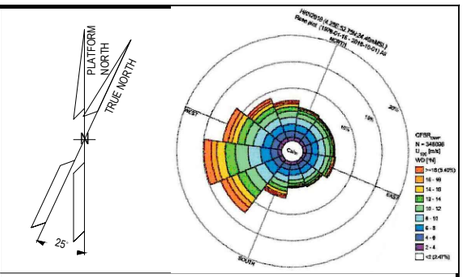
REV. 02



UPPER DECK

SCALE: 1:100

VIEW EL. 33740mm to 36500mm



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. THIS DRAWING IS VALID ONLY FOR INSTRUMENT LOCATION LAYOUT.

LEGEND

- INSTRUMENT JUNCTION BOX
- ELECTRONIC INSTRUMENT
- CONTROL / ON-OFF VALVE

HOLDS

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-IN-DL-40080	INSTRUMENT LAYOUT -LOWER DECK
123A90-DDL-IN-LIS-40091	INSTRUMENT CABLE LIST
123A90-DDL-IN-DG-40015	INSTRUMENT-CCS WIRING DIAGRAMS
123A90-DDL-IN-DG-40016	INSTRUMENT-SAFETY SYSTEM WIRING DIAGRAMS
123A90-DDL-IN-DL-40083	INSTRUMENT MAIN CABLES ROUTING-LOWER DECK

INSERT SUBCONTRACTOR / VENDOR LOGO HERE

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	05/08/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	22/12/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT LOCATION LAYOUT–UPPER DECK
TOS EL. 30.310M

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 04/10/24
A1	DRAWING NO. 123A90–DDL–IN–DL–40081	SHEET 002	REV. 02

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DL-40081**

REV.:	DATE:	SIGNATURE:
2_A	07/10/24	G.Randi

ROSETTI MARINO SpA

File Name : 123A90-DDL-IN-DL-40081 REV02.dwg

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD

INSTRUMENTS

JUNCTION BOX

00-JE-22002

MULTICABLE

No.

I&T EQUIPMENT ROOM (ITER)

MARSHALLING CABINET

B400-SIS-001

<01>

INSTRUMENTS	CABLE	JUNCTION BOX TB-2	MULTICABLE
950-MOB-03101 (1 WH / 8 BK) NOTE-2	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 25 / BK 26 → PR1	00-JE-22002_2/B400-SIS-001 12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS
950-ESD-03101 (1 WH / 8 BK) NOTE-2	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 27 / BK 28 → PR2	
950-ESDD-03101 (1 WH / 8 BK) NOTE-2	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 29 / BK 30 → PR3	
950-ASD-06101 (1 WH / 8 BK) NOTE-2	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 31 / BK 32 → PR4	
950-MOB-06101 (1 WH / 8 BK) NOTE-2	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 33 / BK 34 → PR5	
950-ESD-06101 (1 WH / 8 BK) NOTE-2	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 35 / BK 36 → PR6	
950-ESDD-06101 (1 WH / 8 BK) NOTE-2	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 37 / BK 38 → PR7	
950-ASD-07101 (1 WH / 8 BK) NOTE-2	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 39 / BK 40 → PR8	
950-MOB-07101 (1 WH / 8 BK) NOTE-2	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 41 / BK 42 → PR9	
950-ESD-07101 (1 WH / 8 BK) NOTE-2	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 43 / BK 44 → PR10	
950-ESDD-07101 (1 WH / 8 BK) NOTE-2	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	WH 45 / BK 46 → PR11	
		SPARE 47 / 48 → PR12	
		SH, SH, SH, SH, SH, SH, SH, OS	

TB-00-JE-22002

PR		MARSHALLING CABINET
PR1	WH 25 / BK 26	950-MOB-03101
PR2	WH 27 / BK 28	950-ESD-03101
PR3	WH 29 / BK 30	950-ESDD-03101
PR4	WH 31 / BK 32	950-ASD-06101
PR5	WH 33 / BK 34	950-MOB-06101
PR6	WH 35 / BK 36	950-ESD-06101
PR7	WH 37 / BK 38	950-ESDD-06101
PR8	WH 38 / BK 40	950-ASD-07101
PR9	WH 41 / BK 42	950-MOB-07101
PR10	WH 43 / BK 44	950-ESD-07101
PR11	WH 45 / BK 46	950-ESDD-07101
PR12	WH 47 / BK 48	SPARE

Shield Bar

I.E.

VALID FOR CONSTRUCTION

FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

	DRAWING NO.	SHEET	REV.
A3	123A90–DDL–IN–DG–40016	013	01

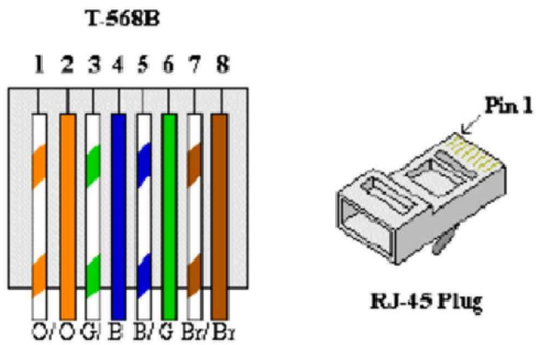
File Name : 123A90-DDL-IN-DG-40016_Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40015

REV. 01

NOTES:

1. ALL SPARE ENTRIES SHALL BE PROVIDED WITH CERTIFIED EX PROOF PLUGS.
2. CABLE SCREENS / DRAIN WIRE SHALL BE SECURELY INSULATED AND TIED BACK IN THE INSTRUMENT SIDE AND SHAL BE TERMINATED IN THE MARSHALLING SIDE OF THE PANEL.
3. SPARE PAIRS / TRIADS SHALL BE CONNECTED TO TERMINALS IN JUNCTION BOX AND PANEL / MARSHALLING CABINETS.
4. ALL CABLE SCREENS TO BE TERMINATED AT THE INSTRUMENT EARTH BAR IN THE RESPECTIVE EARTH BARS (IS OR NIS) AS APPLICABLE IN THE MARSHALLING CABINET.
5. SWITCH TAG NAME AND PORT WILL BE DEFINED DURING THE CONSTRUCTION PHASE
6. FOR OPTICAL FIBERS, USE THE FOLLOWING COLOR CODING:
   - 01- RED
   - 02- GREEN
   - 03- BLUE
   - 04- YELLOW
   - 05- GREY
   - 06- PURPLE
   - 07- BROWN
   - 08- ORANGE
   - 09- WHITE
   - 10- PINK
   - 11- BLACK
   - 12- TURQUOISE
7. CAT.6A CABLE SHALL BE TERMINATED MEETING REQUIREMENTS OF STANDARD EIA/TIA 568B:



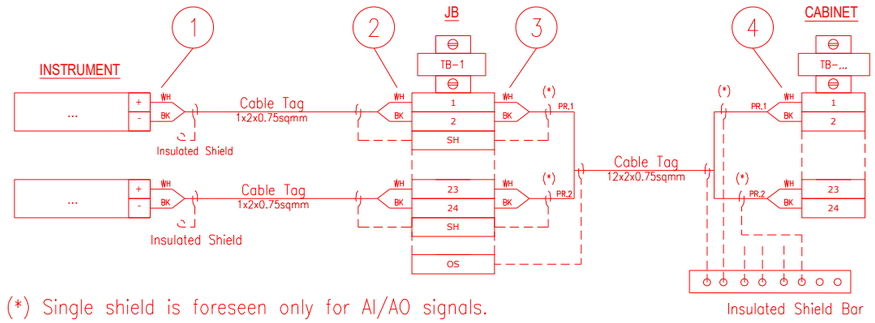
8. FOR INTRISICALLY SAFE CIRCUIT USE LIGHT BLUE CABLE OR ALTERNATIVELY ORANGE CABLE WITH HEAT SHRINKABLE SLEEVE BLUE AT BOTH END (SEE DOC. 123A90-FDL-IN-DD-40017).

LEGENDS & SYMBOLS:

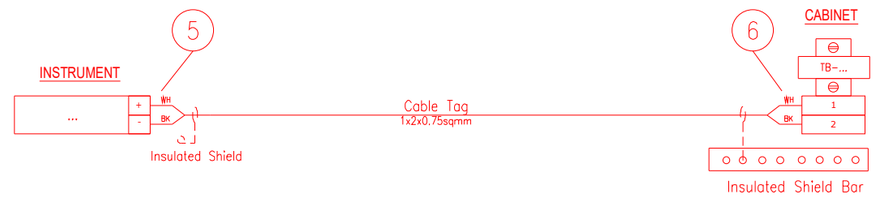
I.E.	- GREEN ⟶ INSTRUMENT SIGNAL EARTH
P.E.	- GREEN / YELLOW ⟶ P.E. EARTH / BONDING
	- TERMINAL BLOCK (TB)
WH	- WHITE
BK	- BLACK
RD	- RED
S	- SHIELD TERMINAL
OS	- OVERALL SHIELD TERMINAL
O/A Shld	- OVERALL SHIELD
I&O/A Shld	- INDIVIDUAL & OVERALL SHIELD
NIS	- NON INTRINSICALLY SAFE
IS	- INTRINSICALLY SAFE
P.E.	- PLANT EARTH
PCS	- PROCESS CONTROL SYSTEM
ESD	- EMERGENCY SHUTDOWN SYSTEM
SIS	- SAFETY INSTRUMENT SYSTEM
FGS	- FIRE & GAS SYSTEM
MC	- MARSHALLING CABINET
AI	- ANALOGUE INPUT
AO	- ANALOGUE OUTPUT
DI	- DIGITAL INPUT
DO	- DIGITAL OUTPUT
JE	- JUNCTION BOX FOR ELECTRICAL SIGNALS

PHILOSOPHY OF CROSS-FERRULING:

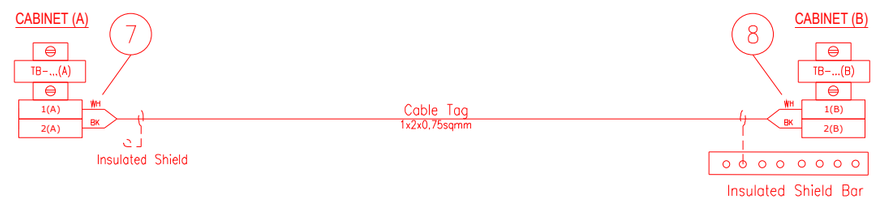
INSTRUMENT CONNECTION THROUGH MARSHALLING JB TO CABINET



INSTRUMENT CONNECTION STRAIGHT TO CABINET



CABINET CONNECTION TO CABINET



1 - INSTR. TERMINAL NO. OR POLARITY / JB TAG / JB TERMINAL NO.
2 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / JB TERMINAL NO.
3 - JB TERMINAL NO. / JB TERMINAL STRIP / CABINET TERMINAL STRIP / PAIR OR CORE NO.
4 - PAIR OR CORE NO. / JB TAG / JB TERMINAL NO. / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
5 - INSTR. TERMINAL NO. OR POLARITY / CABINET TAG / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
6 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / CABINET TERMINAL STRIP/ CABINET TERMINAL NO.
7 - TERMINAL NO. (A) / TERMINAL STRIP (A) / CABINET TAG (B) / CABINET TERMINAL NO. (B) / PAIR OR CORE NO.
8 - PAIR OR CORE NO. / CABINET TERMINAL NO. (A) / CABINET TAG (A) / TERMINAL STRIP (B) / TERMINAL NO. (B)

NOTES: A - HEAT SHRINKABLE BLACK FOR SHIELD OF NIS INSTRUMENT CABLE.
HEAT SHRINKABLE BLUE FOR SHIELD OF IS INSTRUMENT CABLE.
B - ABOVE DESCRIBED PHILOSOPHY IS INTENDED FOR CONNECTION AS REPRESENTED:
IN CASE OF CONNECTION FROM THE OPPOSITE SIDE, ORDER OF FERULE TAG SHALL BE MIRRORED.
C - SAME TAGGING PHILOSOPHY SHALL APPLIED ALSO TO SHIELDS TERMINATED ON TERMINAL STRIP.

REFERENCE DRAWINGS:

PIPING AND INSTRUMENT DIAGRAM 123A90-DDL-PR-PID-80009
INSTRUMENT INDEX 123A90-DDL-IN-LIS-40088
F&G DETECTORS LAYOUT 123A90-DDL-SAF-DL-30027

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT – PCS WIRING DIAGRAMS
GENERAL NOTES/LEGENDS

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

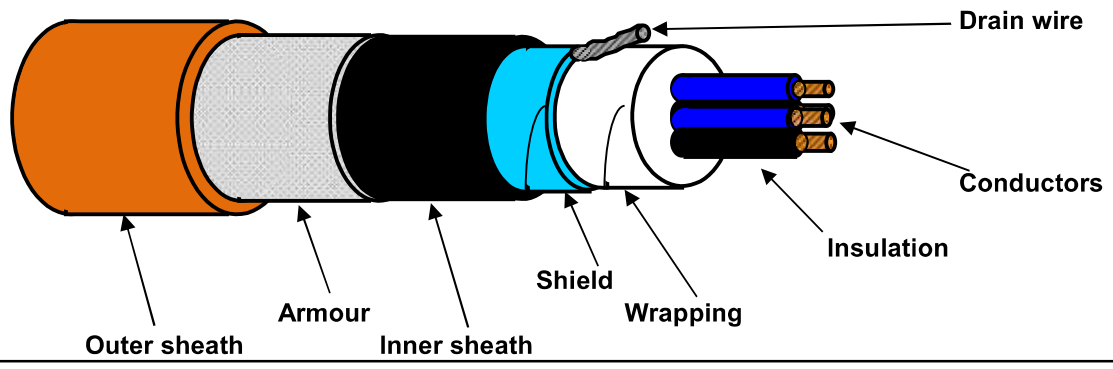
A3	DRAWING NO. 123A90-DDL-IN-DG-40015	SHEET 003	REV. 01

File Name : 123A90-DDL-IN-DG-40015_Rev.01

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitti	To Gland	To Entry	To Fitting	Routing	Routing Manual
C-950-ESD-07101/00-JE-22002	Cable	IN	VFC	123A90-DDL-IN-LIS-40091						950-ESD-07101	Push Button	Below Lower Deck	00-JE-22002	DI JB to SIS	Upper Deck	SMICV08-1X2X0,75	Cable Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250V (300V) 1x2x0,75mm² - Orange	M20S	T2_M20S_Double			T2_M20S_Double				T-SEC-02 / T-SEC-01 / L-SEC-22 / L-SEC-18E / L-SEC-13 / L-SEC-1J / L-SEC-1I / L-SEC-11 / U-SEC-14A / U-SEC-15

Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250 V (300 V)

1X2X0,75 - INSTRUMENT CABLE - Fire Resistant - Not I.S.



TECHNICAL FEATURES

Conductors :	**7-STRANDED** plain/bare soft annealed copper wires	**IEC 60228 Class 2**
Insulation :	Mica/Glass Tape (MGT) plus XLPE, Nominal Thickness 0,5 mm	
Cores colour code :	**White - Black**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not required	
Total Assembling :	10/1mt	
Overall Wrapping:	by polyester-PET Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Drain wire :	7-Stranded **TINNED** annealed copper drain wire, **size 0,5 sqmm**, in continuous contact with the shield	
Overall Shield :	by Aluminium-**Al** Minimum Thickness 0,008 mm / polyester-**PET** Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Inner sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,1 mm	
Inner sheath color code:	**Black**	
Armour :	Galvanized Steel Wire Braid Armour (coverage ≥ 90%)	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, moisture/abrasion/UV Resistant, Average Thickness 1,2 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - 1X2X0,75 SQMM - MGT/XLPE/OS/LSZH/SWB/LSZH - 150/250 V - IEC 60331.21 -**	
(every 1000 mm)	**IEC 60332.1.2 - IEC 60332.3.22 - Year of Manufacture - CE + Meter Marking**	
Under armour diameter :	(8,5 ± 10%) mm	
Over armour diameter :	(9,3 ± 10%) mm	
Outer diameter :	(11,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10 (in fixed installation)	
Voltage Test :	1,5 kV a.c. for 5' (Between Cores) / 1,5 kV a.c. for 5' (Between Cores - Shield)	
Conductors DC Resistance :	≤ 26 Ω/km (@ 20°C)	
Insulation Resistance :	≥ 1000 MΩ x Km (@ 20°C)	
Mutual Capacitance :	≤ 150 nF/km	
L/R ratio :	≤ 25 µH/Ω	
Inductance :	≤ 0,9 mH/km	
Applicable Standards		
Design Guidelines :	**IEC 60092.376**	
ON COMPLETE CABLE		
Fire Resistant test :	**IEC 60331.21**	
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance :	IEC 61034.2 (LT ≥ 60%)	
Hazardous Areas :	IEC 60079.14 par.9.3.2a	
Temperature Range :		
ON INSULATION	(max +90°C) (max continuous operation temperature of conductors)	
	(max +250°C) (max conductors temperature during short-circuit for 5 seconds)	
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C) (in fixed installation)	
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner sheath together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	04/04/2024	Messa			
Checked :	04/04/2024	Spaccasassi			
Approved :	04/04/2024	Cucinotta			

The data provided herein are meant for the transaction will be used in the sense of the article 19 of the Regulation (UE) 2016/679, also by such subjects 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.

ROSETTI MARINO — CROSSWIND

ITEM	Tag	C-950-ESDD-07101/00-JE-22002	: PUSH BUTTON / MARSHALLING PCS	Dwg	123A90-DDL-IN-LIS-40091		
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)	Module	TP/UD		
TASK	code	C10000169	Location	Onshore Activities	User	Rosetti Marino Quality Control	
FORM	Process	MC	Activity CCK	Discipline	Instrumental	Form	CJX10

Multi/Single-Core Instrument Control Cable

CABLE DATA

Type	Cu-MICA-XLPE-OS-LSZH-SWB-LSZH	Cores/Size mm²	1X2X0,75 mm2	Color	ORANGE
From	950-ESDD-07101	To	00-JE-22002		

1	Check cable is as specified in project cable schedule.	OK
2	Check relevant documents are at the latest revision.	OK
3	Check cable is routed in accordance with cable layout drawings.	Note
4	Check cable for any physical damage.	Note
5	Check cable is adequately supported and correctly fixed to rack according to Project specification.	OK
6	Check bending radius is within the specified limits.	OK
7	Check cable is correctly loomed and segregated in accordance with specification.	OK
8	Check cable and core marking are in accordance with specification.	OK
9	Check cable labelling is in accordance with specification.	OK
10	Check that glands, shrouds and earthing are in accordance with specification.	OK
11	Check terminations are in accordance with termination diagram	Note
12	Check gland plate for single core cables is non-ferrous.	NA
13	If required produce Red Line Mark Up for "AS BUILT"	

INSULATION	CORE to EARTH	>999	MΩ
	CORE to CORE	>999	MΩ
	CORE to SCREEN	>999	MΩ
	CORE to ARMr	>999	MΩ
	SCREEN to EARTH	>999	MΩ
	SCREEN to ARMr	>999	MΩ
CONTINUITY	CORES	2,7	Ω
	SCREEN	2,7	Ω
	EARTH	NA	Ω
	ARMr	2,7	Ω
	TEST VOLTS	500	V

TEST ALL CORES AND RECORD LOWEST VALUE

Notes: The lowest value is recorded and must be within project specifications

TESTING INSTRUMENTS USED

TYPE / SERIAL N°: MEGGER: KEW3125A SERIAL:W8330207 Calibration date: N° 7722/24 10/07/2024

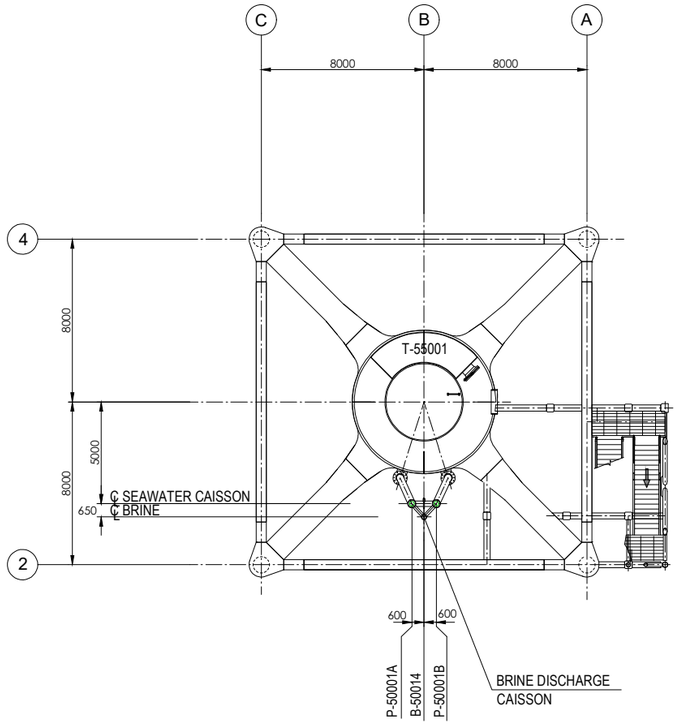
Comments Nota 4: refer to PL C30000680/C30000682

Note 3,11: Cable dressing and termination will be completed on OFFSHORE phase. Refer to task C10004675

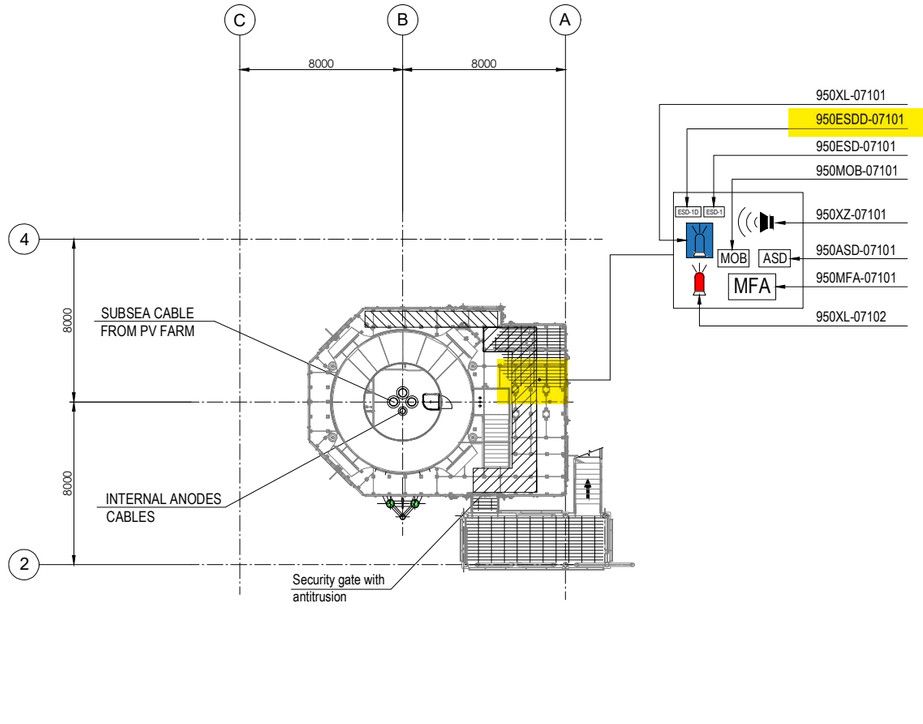
Page 1/1	Performed by	☉ WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	ICS IMPIANTI	RM (ROSETTI MARINO)	
Name	Michele Tartaglia	Alessio Polo	
Date	2025-01-15	2025-02-19	
Signature	PROVERLIS Digitaly signed by Michele Tartaglia 2025-01-15T10:26:38.683Z	PROVERLIS Digitaly signed by Alessio Polo 2025-02-19T16:40:05.561Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

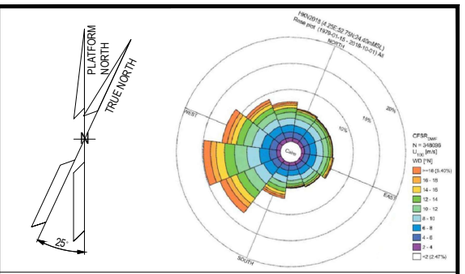


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

F & G DETECTORS LAYOUT - BELOW LOWER DECK

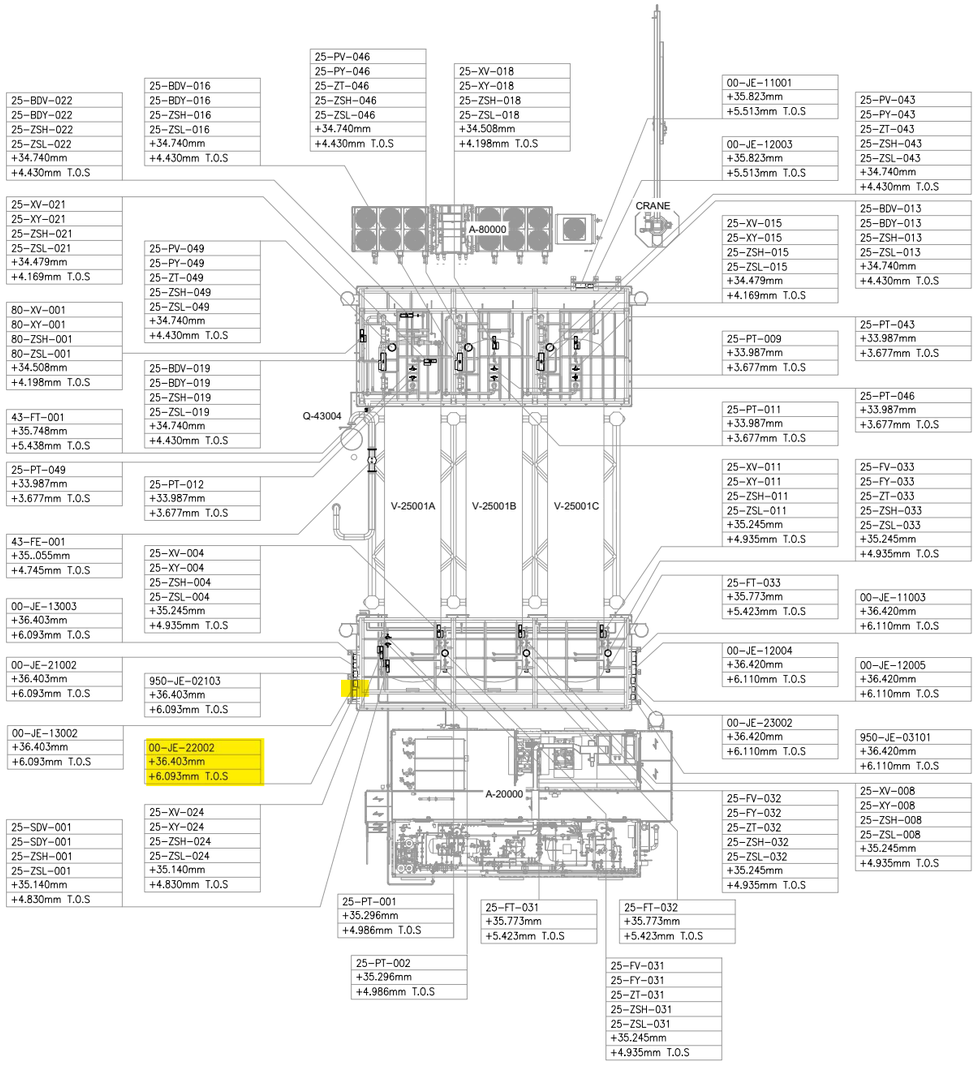
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24

A1	DRAWING NO. 123A90-DDL-SAF-DL-30028	SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DL-40081

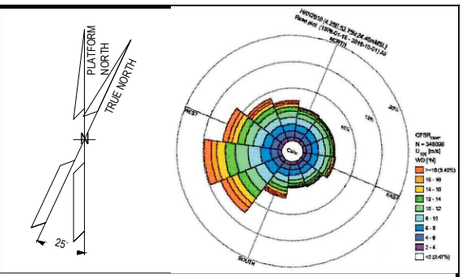
REV. 02



UPPER DECK

SCALE: 1:100

VIEW EL. 33740mm to 36500mm



NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE GIVEN IN mm UNLESS OTHERWISE NOTED.
2. ELEVATIONS REFER TO T.O.S.
3. THIS DRAWING IS VALID ONLY FOR INSTRUMENT LOCATION LAYOUT.

LEGEND

- INSTRUMENT JUNCTION BOX
- ELECTRONIC INSTRUMENT
- CONTROL / ON-OFF VALVE

HOLDS

REFERENCE DOCUMENTS

123A90-DDL-PP-DL-70070	PLOT PLAN - LOWER & UPPER DECK
123A90-DDL-IN-DL-40080	INSTRUMENT LAYOUT -LOWER DECK
123A90-DDL-IN-LIS-40091	INSTRUMENT CABLE LIST
123A90-DDL-IN-DG-40015	INSTRUMENT-CCS WIRING DIAGRAMS
123A90-DDL-IN-DG-40016	INSTRUMENT-SAFETY SYSTEM WIRING DIAGRAMS
123A90-DDL-IN-DL-40083	INSTRUMENT MAIN CABLES ROUTING-LOWER DECK

INSERT SUBCONTRACTOR / VENDOR LOGO HERE

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
02	04/10/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
01	05/08/24	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	22/12/23	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT LOCATION LAYOUT–UPPER DECK
TOS EL. 30.310M

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 04/10/24
A1	DRAWING NO. 123A90–DDL–IN–DL–40081	SHEET 002	REV. 02

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DL-40081**

REV.:	DATE:	SIGNATURE:
2_A	07/10/24	G.Randi

ROSETTI MARINO SpA

File Name : 123A90-DDL-IN-DL-40081 REV02.dwg

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD

INSTRUMENTS

JUNCTION BOX

00-JE-22002

MULTICABLE

No.

I&T EQUIPMENT ROOM (ITER)

MARSHALLING CABINET

B400-SIS-001

<01>

INSTRUMENTS	CABLE	JUNCTION BOX 00-JE-22002	MULTICABLE No.	MARSHALLING CABINET B400-SIS-001
950-MOB-03101	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	25 WH/BK → PR1	00-JE-22002_2/B400-SIS-001 12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS	25 WH/BK → PR1 → 950-MOB-03101
950-ESD-03101	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	27 WH/BK → PR2		27 WH/BK → PR2 → 950-ESD-03101
950-ESDD-03101	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	29 WH/BK → PR3		29 WH/BK → PR3 → 950-ESDD-03101
950-ASD-06101	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	31 WH/BK → PR4		31 WH/BK → PR4 → 950-ASD-06101
950-MOB-06101	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	33 WH/BK → PR5		33 WH/BK → PR5 → 950-MOB-06101
950-ESD-06101	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	35 WH/BK → PR6		35 WH/BK → PR6 → 950-ESD-06101
950-ESDD-06101	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	37 WH/BK → PR7		37 WH/BK → PR7 → 950-ESDD-06101
950-ASD-07101	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	39 WH/BK → PR8		38 WH/BK → PR8 → 950-ASD-07101
950-MOB-07101	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	41 WH/BK → PR9		41 WH/BK → PR9 → 950-MOB-07101
950-ESD-07101	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	43 WH/BK → PR10		43 WH/BK → PR10 → 950-ESD-07101
950-ESDD-07101	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	45 WH/BK → PR11		45 WH/BK → PR11 → 950-ESDD-07101
		SPARE 47 WH/BK → PR12		47 WH/BK → PR12 → SPARE
		48 SH OS		48

All instrument connections: 1 WH, 8 BK, NOTE-2

Shield Bar → I.E.

VALID FOR CONSTRUCTION

FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

	DRAWING NO.	SHEET	REV.
A3	123A90–DDL–IN–DG–40016	013	01

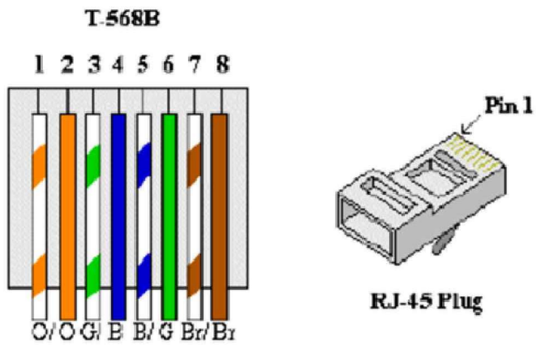
File Name : 123A90-DDL-IN-DG-40016_Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40015

REV. 01

NOTES:

1. ALL SPARE ENTRIES SHALL BE PROVIDED WITH CERTIFIED EX PROOF PLUGS.
2. CABLE SCREENS / DRAIN WIRE SHALL BE SECURELY INSULATED AND TIED BACK IN THE INSTRUMENT SIDE AND SHAL BE TERMINATED IN THE MARSHALLING SIDE OF THE PANEL.
3. SPARE PAIRS / TRIADS SHALL BE CONNECTED TO TERMINALS IN JUNCTION BOX AND PANEL / MARSHALLING CABINETS.
4. ALL CABLE SCREENS TO BE TERMINATED AT THE INSTRUMENT EARTH BAR IN THE RESPECTIVE EARTH BARS (IS OR NIS) AS APPLICABLE IN THE MARSHALLING CABINET.
5. SWITCH TAG NAME AND PORT WILL BE DEFINED DURING THE CONSTRUCTION PHASE
6. FOR OPTICAL FIBERS, USE THE FOLLOWING COLOR CODING:
   - 01- RED
   - 02- GREEN
   - 03- BLUE
   - 04- YELLOW
   - 05- GREY
   - 06- PURPLE
   - 07- BROWN
   - 08- ORANGE
   - 09- WHITE
   - 10- PINK
   - 11- BLACK
   - 12- TURQUOISE
7. CAT.6A CABLE SHALL BE TERMINATED MEETING REQUIREMENTS OF STANDARD EIA/TIA 568B:



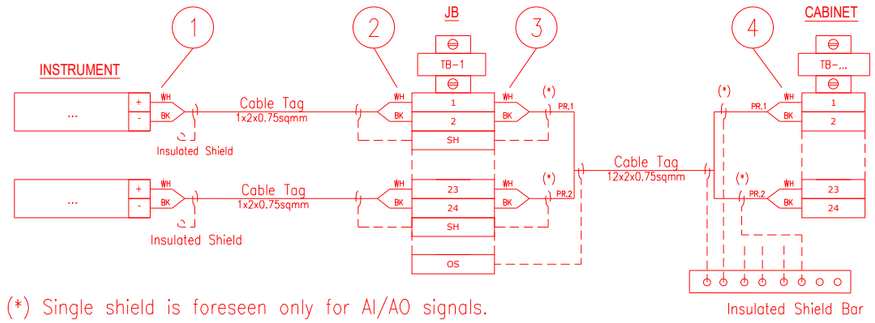
8. FOR INTRISICALLY SAFE CIRCUIT USE LIGHT BLUE CABLE OR ALTERNATIVELY ORANGE CABLE WITH HEAT SHRINKABLE SLEEVE BLUE AT BOTH END (SEE DOC. 123A90-FDL-IN-DD-40017).

LEGENDS & SYMBOLS:

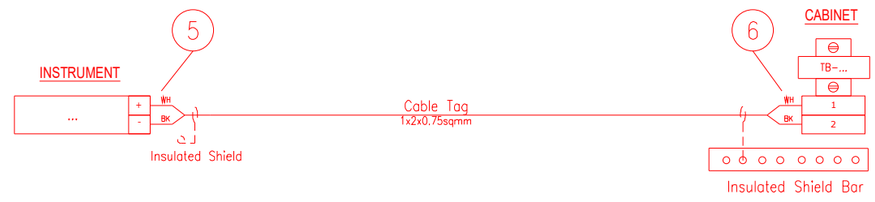
I.E.	- GREEN ⟶ INSTRUMENT SIGNAL EARTH
P.E.	- GREEN / YELLOW ⟶ P.E. EARTH / BONDING
	- TERMINAL BLOCK (TB)
WH	- WHITE
BK	- BLACK
RD	- RED
S	- SHIELD TERMINAL
OS	- OVERALL SHIELD TERMINAL
O/A Shld	- OVERALL SHIELD
I&O/A Shld	- INDIVIDUAL & OVERALL SHIELD
NIS	- NON INTRINSICALLY SAFE
IS	- INTRINSICALLY SAFE
P.E.	- PLANT EARTH
PCS	- PROCESS CONTROL SYSTEM
ESD	- EMERGENCY SHUTDOWN SYSTEM
SIS	- SAFETY INSTRUMENT SYSTEM
FGS	- FIRE & GAS SYSTEM
MC	- MARSHALLING CABINET
AI	- ANALOGUE INPUT
AO	- ANALOGUE OUTPUT
DI	- DIGITAL INPUT
DO	- DIGITAL OUTPUT
JE	- JUNCTION BOX FOR ELECTRICAL SIGNALS

PHILOSOPHY OF CROSS-FERRULING:

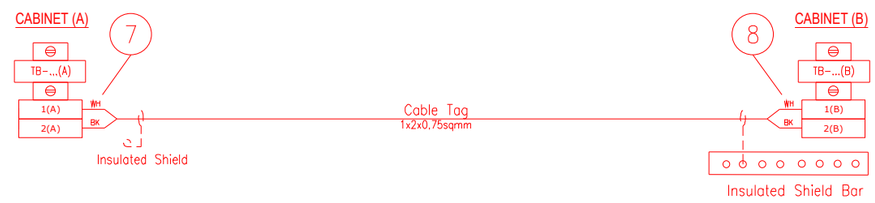
INSTRUMENT CONNECTION THROUGH MARSHALLING JB TO CABINET



INSTRUMENT CONNECTION STRAIGHT TO CABINET



CABINET CONNECTION TO CABINET



1 - INSTR. TERMINAL NO. OR POLARITY / JB TAG / JB TERMINAL NO.
2 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / JB TERMINAL NO.
3 - JB TERMINAL NO. / JB TERMINAL STRIP / CABINET TERMINAL STRIP / PAIR OR CORE NO.
4 - PAIR OR CORE NO. / JB TAG / JB TERMINAL NO. / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
5 - INSTR. TERMINAL NO. OR POLARITY / CABINET TAG / CABINET TERMINAL STRIP / CABINET TERMINAL NO.
6 - INSTR. TERMINAL NO. OR POLARITY / INSTR. TAG / CABINET TERMINAL STRIP/ CABINET TERMINAL NO.
7 - TERMINAL NO. (A) / TERMINAL STRIP (A) / CABINET TAG (B) / CABINET TERMINAL NO. (B) / PAIR OR CORE NO.
8 - PAIR OR CORE NO. / CABINET TERMINAL NO. (A) / CABINET TAG (A) / TERMINAL STRIP (B) / TERMINAL NO. (B)

NOTES: A - HEAT SHRINKABLE BLACK FOR SHIELD OF NIS INSTRUMENT CABLE.
HEAT SHRINKABLE BLUE FOR SHIELD OF IS INSTRUMENT CABLE.
B - ABOVE DESCRIBED PHILOSOPHY IS INTENDED FOR CONNECTION AS REPRESENTED:
IN CASE OF CONNECTION FROM THE OPPOSITE SIDE, ORDER OF FERULE TAG SHALL BE MIRRORED.
C - SAME TAGGING PHILOSOPHY SHALL APPLIED ALSO TO SHIELDS TERMINATED ON TERMINAL STRIP.

REFERENCE DRAWINGS:

PIPING AND INSTRUMENT DIAGRAM 123A90-DDL-PR-PID-80009
INSTRUMENT INDEX 123A90-DDL-IN-LIS-40088
F&G DETECTORS LAYOUT 123A90-DDL-SAF-DL-30027

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_R	12/02/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT – PCS WIRING DIAGRAMS
GENERAL NOTES/LEGENDS

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

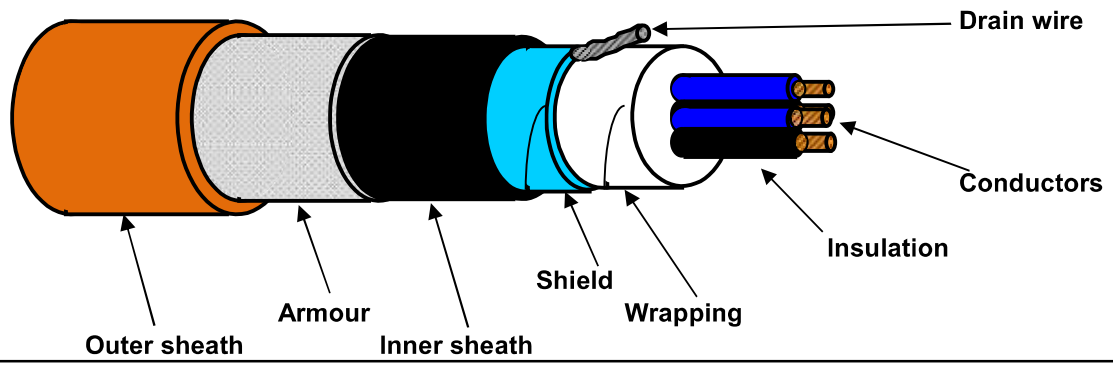
A3	DRAWING NO. 123A90-DDL-IN-DG-40015	SHEET 003	REV. 01

File Name : 123A90-DDL-IN-DG-40015_Rev.01

Tag Number	Category	Discipline	Eng Status	NativeDoc	Layout	Parent Tag	Main Function	Secondary Function	Area	From Tag	From Main Function	From Area	To Tag	To Main Function	To Area	Material ID	Material Desc.	Gland Standard	From Gland	From Entry	From Fitti	To Gland	To Entry	To Fitting	Routing	Routing Manual
C-950-ESDD-07101/00-JE-22002	Cable	IN	VFC	123A90-DDL-IN-LIS-40091						950-ESDD-07101	Push Button	Below Lower Deck	00-JE-22002	DI JB to SIS	Upper Deck	SMICV08-1X2X0,75	Cable Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250V (300V) 1x2x0,75mm² - Orange	M20S	T2_M20S_Double			T2_M20S_Double				T-SEC-02 / T-SEC-01 / L-SEC-22 / L-SEC-18E / L-SEC-13 / L-SEC-1J / L-SEC-1I / L-SEC-11 / U-SEC-14A / U-SEC-15

Cu Cl.2/MGT/XLPE/OS/LSZH/SWB/LSZH 150/250 V (300 V)

1X2X0,75 - INSTRUMENT CABLE - Fire Resistant - Not I.S.



TECHNICAL FEATURES

Conductors :	**7-STRANDED** plain/bare soft annealed copper wires	**IEC 60228 Class 2**
Insulation :	Mica/Glass Tape (MGT) plus XLPE, Nominal Thickness 0,5 mm	
Cores colour code :	**White - Black**	
Pair Assembling :	Not required	
Pair Wrapping:	Not required	
Drain wire :	Not required	
Pair Shield :	Not required	
Shield Insulation :	Not required	
Total Assembling :	10/1mt	
Overall Wrapping:	by polyester-PET Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Drain wire :	7-Stranded **TINNED** annealed copper drain wire, **size 0,5 sqmm**, in continuous contact with the shield	
Overall Shield :	by Aluminium-**Al** Minimum Thickness 0,008 mm / polyester-**PET** Minimum Thickness 0,010 mm tape helically wound (overlap ≥ 25%)	
Inner sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, Average Thickness 1,1 mm	
Inner sheath color code:	**Black**	
Armour :	Galvanized Steel Wire Braid Armour (coverage ≥ 90%)	
Outer sheath :	Extruded LSZH Thermoplastic Compound (O.I. ≥ 30%), type **SHF1** to IEC 60093.360, moisture/abrasion/UV Resistant, Average Thickness 1,2 mm	
Outer sheath color code:	**Orange**	
Outer printing (INKJET) :	**FLEI - 1X2X0,75 SQMM - MGT/XLPE/OS/LSZH/SWB/LSZH - 150/250 V - IEC 60331.21 -**	
(every 1000 mm)	**IEC 60332.1.2 - IEC 60332.3.22 - Year of Manufacture - CE + Meter Marking**	
Under armour diameter :	(8,5 ± 10%) mm	
Over armour diameter :	(9,3 ± 10%) mm	
Outer diameter :	(11,7 ± 10%) mm	
Bending radius :	cable outer diameter x 10 (in fixed installation)	
Voltage Test :	1,5 kV a.c. for 5' (Between Cores) / 1,5 kV a.c. for 5' (Between Cores - Shield)	
Conductors DC Resistance :	≤ 26 Ω/km (@ 20°C)	
Insulation Resistance :	≥ 1000 MΩ x Km (@ 20°C)	
Mutual Capacitance :	≤ 150 nF/km	
L/R ratio :	≤ 25 µH/Ω	
Inductance :	≤ 0,9 mH/km	
Applicable Standards		
Design Guidelines :	**IEC 60092.376**	
ON COMPLETE CABLE		
Fire Resistant test :	**IEC 60331.21**	
Flame Retardant test :	IEC 60332.1.2 - IEC 60332.3.22	
Acid Gas generation :	IEC 60754.1/2	
Smoke density/Light Transmittance :	IEC 61034.2 (LT ≥ 60%)	
Hazardous Areas :	IEC 60079.14 par.9.3.2a	
Temperature Range :		
ON INSULATION	(max +90°C) (max continuous operation temperature of conductors)	
	(max +250°C) (max conductors temperature during short-circuit for 5 seconds)	
ON COMPLETE CABLE		
During Operation :	(-20°C up to +90°C) (in fixed installation)	
During installation :	(- 5°C up to +50°C)	
Note :	**To meet the requirements of installation and use in Zone 1 & Zone 2 (IEC 60079-14) and "Gas & Vapour Tight" the cable must be provided with Penetrating Inner sheath together with correct ATEX approved equipment or accessories.**	

Office	Date	Sign	Rev.	Date	Sign
Drawn by :	04/04/2024	Messa			
Checked :	04/04/2024	Spaccasassi			
Approved :	04/04/2024	Cucinotta			

The data provided herein are meant for the transaction will be used in the sense of the article 19 of the Regulation (UE) 2016/679, also by such subjects 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	950-ASD-07101	: FZ-07 Abandon Shutdown Activation			Dwg	123A90-DDL-SAF-DL-30027
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)			Module	TP
TASK	code	C10000958		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Instrumental	Form	CJX00 Miscellaneous

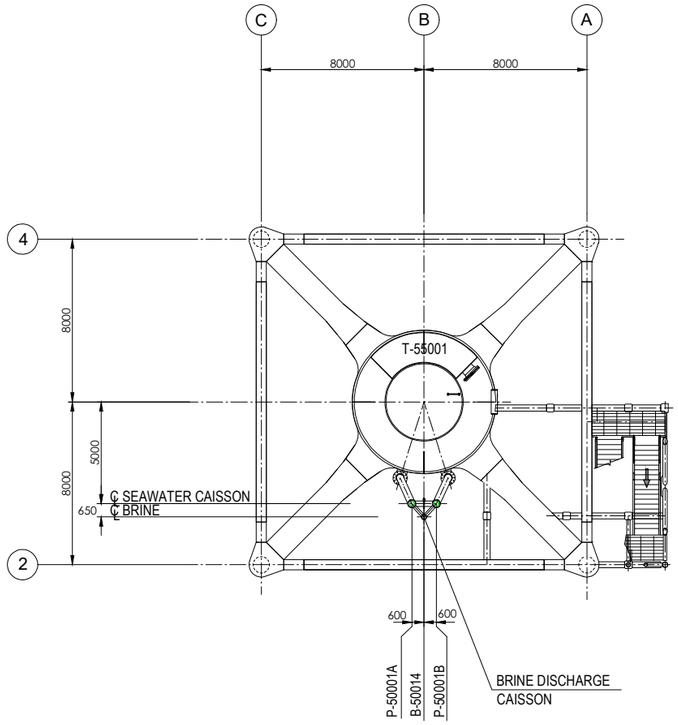
1	Check for mechanical damage.	PL
2	Check installed equipment is suitable and conforms to specification.	OK
3	Check installation conforms to P&ID and hook-up drawing.	OK
4	Check tube fittings manufacturer is the one chosen for the plant.	OK
5	Check that piping connections provide the block & bleed facility (if required).	OK
6	Check that all stop plugs are properly installed	OK
7	Check identification (tag number, tag plates).	OK
8	Check supporting and protection against vibrations.	OK
9	Check the conformity of earthing as per specification (I.P.E. or I.E.)	OK
10	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

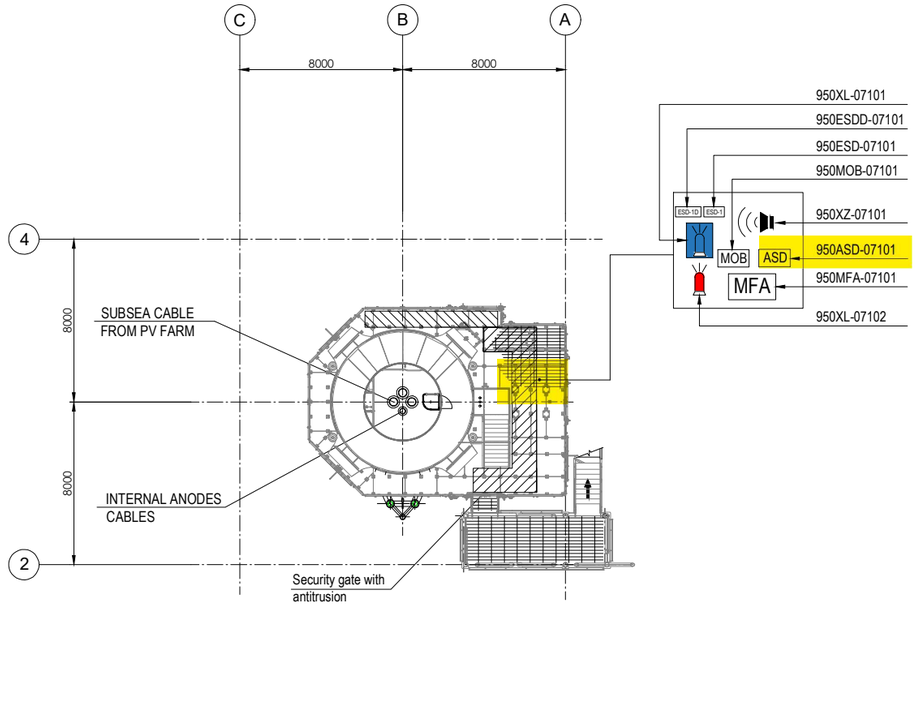
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-04-18	2025-04-29	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-04-18T06:02:45.925Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-04-29T06:31:58.894Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

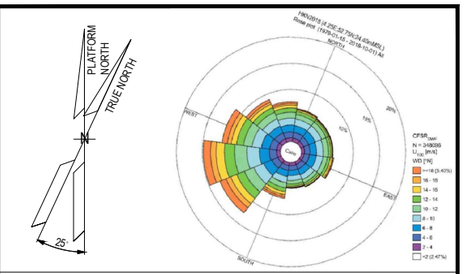


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK				SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24	
A1	DRAWING NO. 123A90-DDL-SAF-DL-30028		SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD		MULTICABLE	I&T EQUIPMENT ROOM (ITER)
INSTRUMENTS	JUNCTION BOX 00-JE-22002	No.	MARSHALLING CABINET B400-SIS-001

<01>

INSTRUMENTS		JUNCTION BOX TB-2	
950-MOB-03101	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 25 BK	PR1
950-ESD-03101	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 27 BK	PR2
950-ESDD-03101	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 29 BK	PR3
950-ASD-06101	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 31 BK	PR4
950-MOB-06101	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 33 BK	PR5
950-ESD-06101	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 35 BK	PR6
950-ESDD-06101	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 37 BK	PR7
950-ASD-07101	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 39 BK	PR8
950-MOB-07101	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 41 BK	PR9
950-ESD-07101	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 43 BK	PR10
950-ESDD-07101	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 45 BK	PR11
		SPARE WH 47 BK	PR12
		48	
		SH / OS	

00-JE-22002_2/B400-SIS-001
12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS

TB-00-JE-22002

PR1	WH 25 BK	950-MOB-03101
PR2	WH 27 BK	950-ESD-03101
PR3	WH 29 BK	950-ESDD-03101
PR4	WH 31 BK	950-ASD-06101
PR5	WH 33 BK	950-MOB-06101
PR6	WH 35 BK	950-ESD-06101
PR7	WH 37 BK	950-ESDD-06101
PR8	WH 38 BK	950-ASD-07101
PR9	WH 40 BK	950-MOB-07101
PR10	WH 41 BK	950-ESD-07101
PR11	WH 43 BK	950-ESDD-07101
PR12	WH 45 BK	SPARE
	WH 47 BK	
	48	

Shield Bar

I.E.

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_S	13/03/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

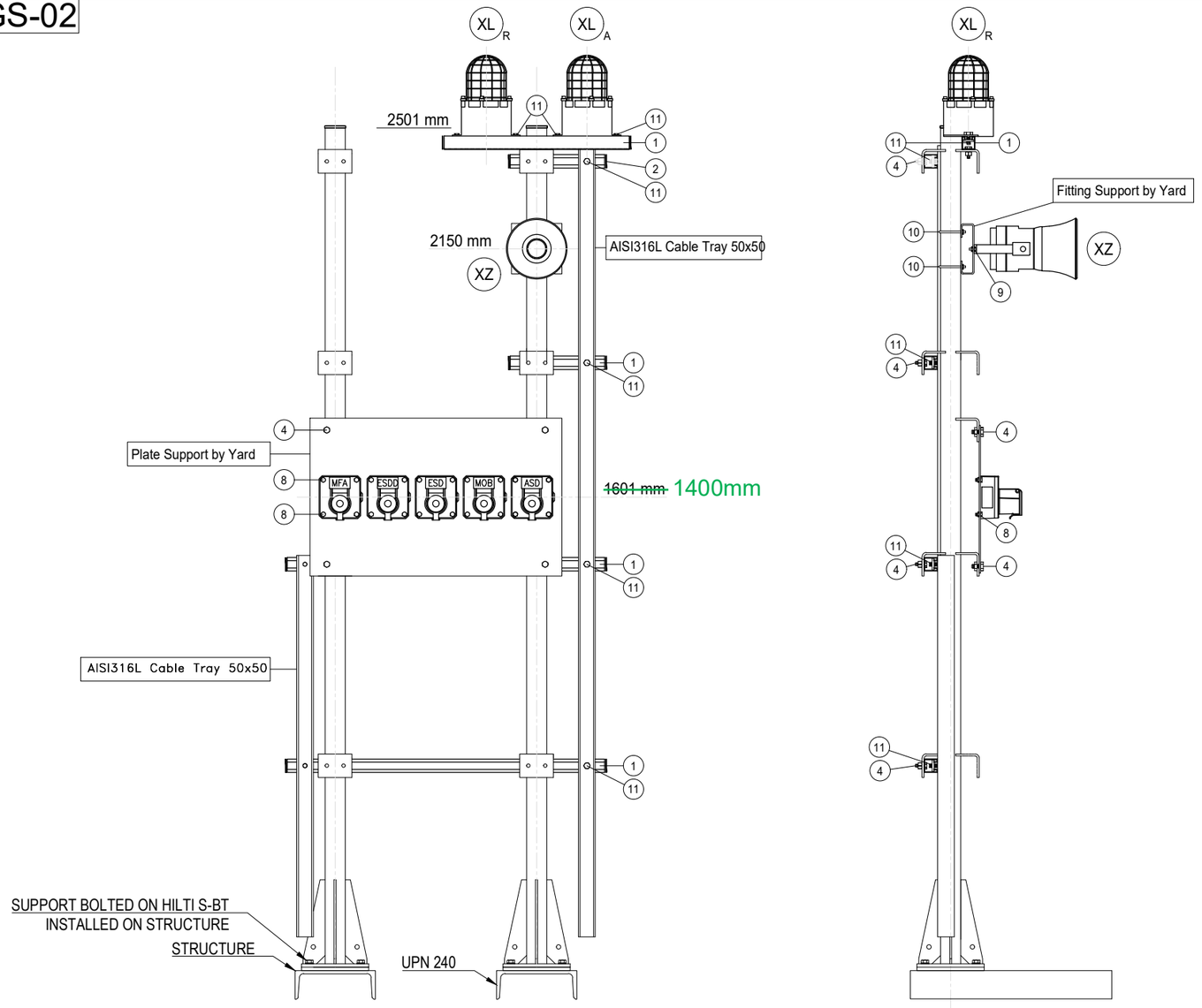
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A3	123A90–DDL–IN–DG–40016	013	01

File Name : 123A90-DDL-IN-DG-40016_Rev.01

FGS-02

DRAWING NO. 123A90-DDL-IN-DD-40017

REV. 00



POS.	DESCRIPTION	Q.TY
1	AISI 316L U-CHANNEL 41x41	6m
2	LDPE PLUG FOR U-CHANNEL 41x41	8
4	AISI 316L BOLT M10x35 + NUT M10 + WASHER M10	18
8	AISI 316L BOLT M8x35 + NUT M8 + WASHER M8	20
~~9~~	~~AISI 316L BOLT M6x35 + NUT M6 + WASHER M6~~	2
10	AISI 316L 2" U BOLT M8+ N.2 NUT M8 + N.2 WASHER M8	2
11	AISI 316L SPRING NUT M6 FOR U-CHANNEL 41X41 + BOLT M6 + WASHER M6	10

POLE	ITEM	DESCRIPTION	TAGNAME
1	XL_A	BEACON - AMBER	950-XL-04101
	XL_R	BEACON - RED	950-XL-04102
	XZ	SOUNDER	950-XZ-04101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-04101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-04101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-04101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-04101
	~~MFA~~	~~MANUAL CALL POINT CONNECTED TO FGS~~	~~950-MFA-04101~~
2	XL_A	BEACON - AMBER	950-XL-07101
	XL_R	BEACON - RED	950-XL-07102
	XZ	SOUNDER	950-XZ-07101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-07101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-07101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-07101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-07101
	MFA	MANUAL CALL POINT CONNECTED TO FGS	950-MFA-07101

NOTES

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/09/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	11/07/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT INSTALLATION DETAILS
FIRE & GAS DEVISES ON POLE

CONTRACT NO./TITLE			SCALE /
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 11/07/2024

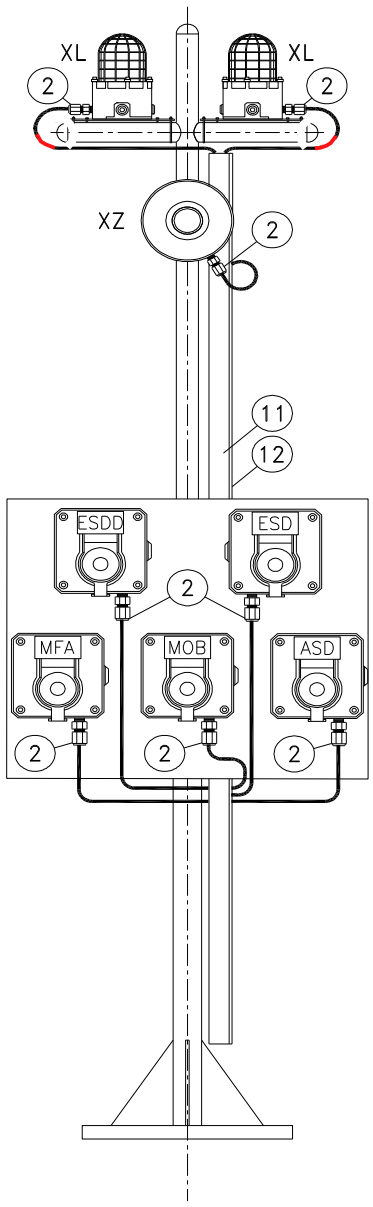
A3	DRAWING NO. 123A90-DDL-IN-DD-40017	SHEET 021	REV. 01

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DD-40017**

REV.:	DATE:	SIGNATURE:
1_J	31/01/25	G.Randi

ROSETTI MARINO SpA

ELECTRICAL HOOK-UP FOR FIRE & GAS DEVICES



INSTRUMENT TAG	
1	950-XL-04101 (AMBER)
	950-XL-04102 (RED)
	950-XZ-04101
	950-ESDD-04101
	950-ESD-04101
	950-MFA-04101
	950-MOB-04101
	950-ASD-04101
2	950-XL-07101 (AMBER)
	950-XL-07102 (RED)
	950-XZ-07101
	950-ESDD-07101
	950-ESD-07101
	950-MFA-07101
	950-MOB-07101
	950-ASD-07101

NOTE: Mechanical support is only indicative in this drawing, for real mehanical support refer to Instrument Installation Details, doc. n. 123A90-DDL-IN-DD-40017 - Instrument Installation Details

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-HD-40079**

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

ROSETTI MARINO SpA

POS.	NORM/STD CODE	DESCRIPTION	SIZE/ CONNECTION TYPE	Q.TY
12		Cover for cable tray, FRP, Grey Color	50 W x 10 H x 5 THK	3 mt
11		Perforated cable tray, FRP, Grey Color	50 W x 50 H x 5 THK	3 mt
2		Nickel Plated Brass Double Compression Cable Gland Ex-d/e IIC (or IIB + H2) T1	M20	7

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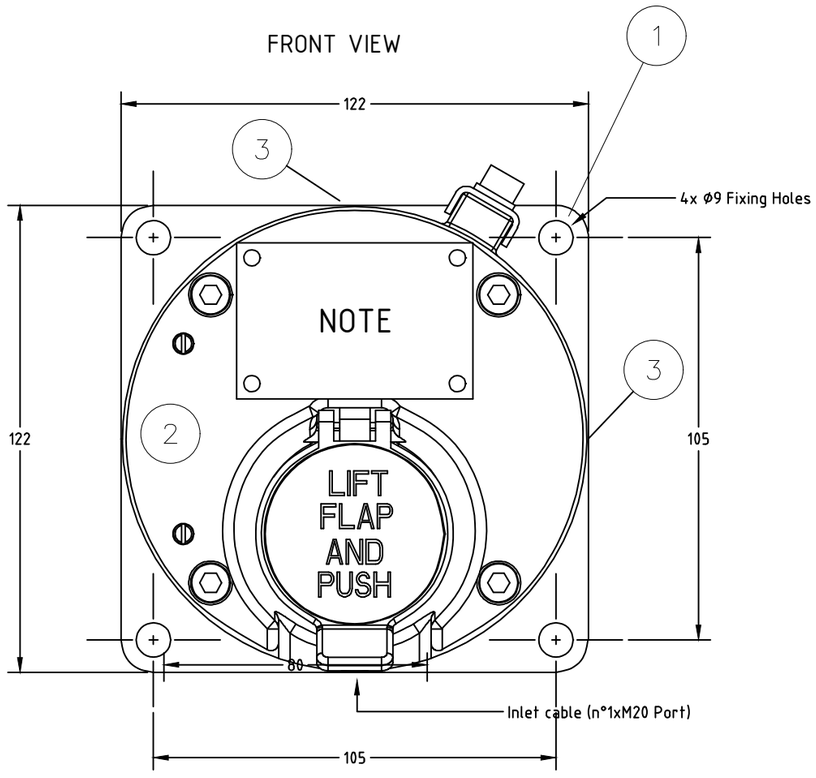
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

ITEM	DESCRIPTIONS	NR
1	Manual Call Point (Push Button) (Yellow), MEDC SM87PBLSD1B1ROYHDYZ	1
2	Stainless Steel Name Plate	1
3	Stop Plug M20 Ex d AISI 316	2
4		
5		
6		
7		
8		
9		
10		

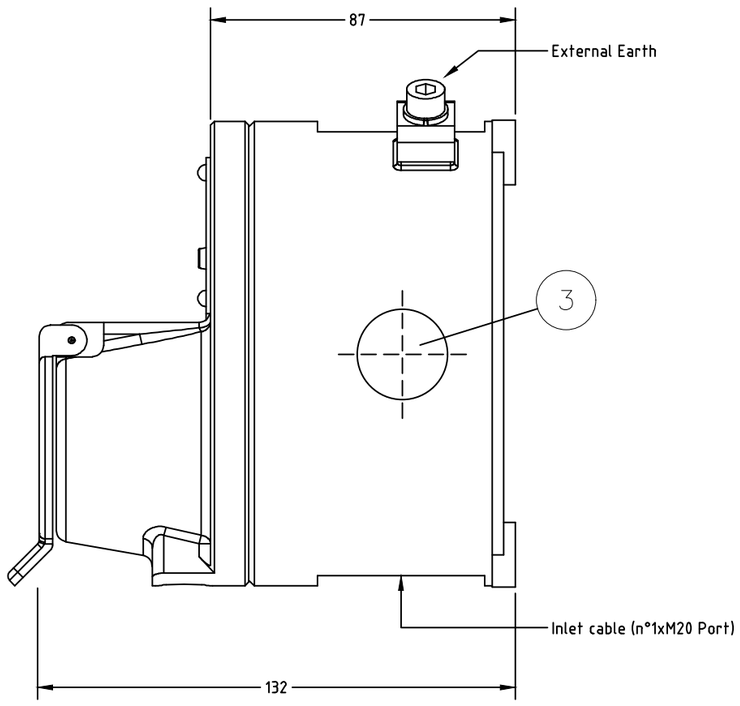
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20

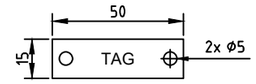
FRONT VIEW



SIDE VIEW



2 STAINLESS STEEL NAME PLATE DETAILS

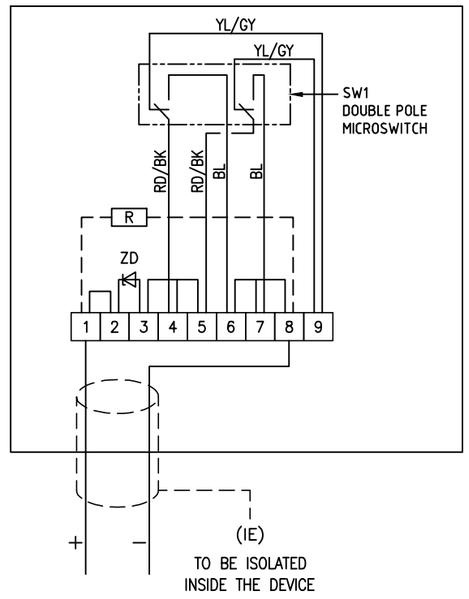


NOTE 5

WIRING

TERMINAL STRIP

ZD= ZENER 1N5339B 5.6V
R= 36 KOhm



NOTE

Q.TY	DUTY LABEL
5	ABANDON ACTIVATION
5	MAN OVER BOARD ACTIVATION
5	EMERGENCY SHUTDOWN ACTIVATION
5	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

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

SCALE : NTS

A3

DRAWING NO. 1724000821-IN-DA-00003

SHEET 017

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

POS.	TAG NUMBER
1	950-ASD-01101
2	950-ASD-03101
3	950-ASD-04101
4	950-ASD-06101
5	950-ASD-07101
6	950-MOB-01101
7	950-MOB-03101
8	950-MOB-04101
9	950-MOB-06101
10	950-MOB-07101
11	950-ESD-01101
12	950-ESD-03101
13	950-ESD-04101
14	950-ESD-06101
15	950-ESD-07101
16	950-ESDD-01101
17	950-ESDD-03101
18	950-ESDD-04101
19	950-ESDD-06101
20	950-ESDD-07101

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

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

SCALE : NTS

A3

DRAWING NO. 1724000821-IN-DA-00003

SHEET 018

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

PUSH BUTTON TO SIS

POS.	TAG NUMBER	SERVICE	DUTY LABEL
1	950-ASD-01101	FZ-01 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
2	950-ASD-03101	FZ-03 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
3	950-ASD-04101	FZ-04 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
4	950-ASD-06101	FZ-06 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
5	950-ASD-07101	FZ-07 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
6	950-MOB-01101	FZ-01 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
7	950-MOB-03101	FZ-03 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
8	950-MOB-04101	FZ-04 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
9	950-MOB-06101	FZ-06 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
10	950-MOB-07101	FZ-07 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
11	950-ESD-01101	FZ-01 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
12	950-ESD-03101	FZ-03 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
13	950-ESD-04101	FZ-04 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
14	950-ESD-06101	FZ-06 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
15	950-ESD-07101	FZ-07 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
16	950-ESDD-01101	FZ-01 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
17	950-ESDD-03101	FZ-03 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
18	950-ESDD-04101	FZ-04 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
19	950-ESDD-06101	FZ-06 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
20	950-ESDD-07101	FZ-07 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

File: 1724000821-IN-DS-00004-02.xlsx
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SM87BG & SM87PB manual call point range

Ex d, Ex ia, weatherproof



Overview

These manual fire alarm, emergency shutdown break-glass and pushbutton units have been designed for the most arduous environmental conditions.

The units are both easy to install and maintain. Intrinsically safe Ex ia and flameproof Ex d versions of each model are available.

A choice of either stainless steel or alloy makes the range suitable for either the offshore or onshore industries. Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 0, Zone 1 and Zone 2 use*
- ATEX certified
- UL listed for USA and Canada (SM87PBL only). Class I, Div 1, Groups C & D
- ULC certified (SM87PBL only) for Class I, Zone 1 Groups C & D
- CSA certified
- IECEx certified
- Brazilian (INMETRO) certified
- Russian Fire certified
- PESO certified (Ex d only)
- SIL 2 certified (SM87PB only)
- IP66 and IP67
- DNV type approval (IEC 60945) (SM87PB only)
- Certified temperature: –55°C to +70°C*
- Stainless steel or marine grade alloy
- Robust yet lightweight
- Easy to maintain

*Model dependent

Eaton
Unit B, Sutton Parkway
Oddicroft Lane
Sutton in Ashfield
United Kingdom
NG17 5FB

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All other trademarks are property of their respective owners.

All specifications, dimensions, weights and tolerances are nominal (typical) and Eaton reserve the right to vary all data without prior notice.
No liability is accepted for any consequence of use.

Certifications

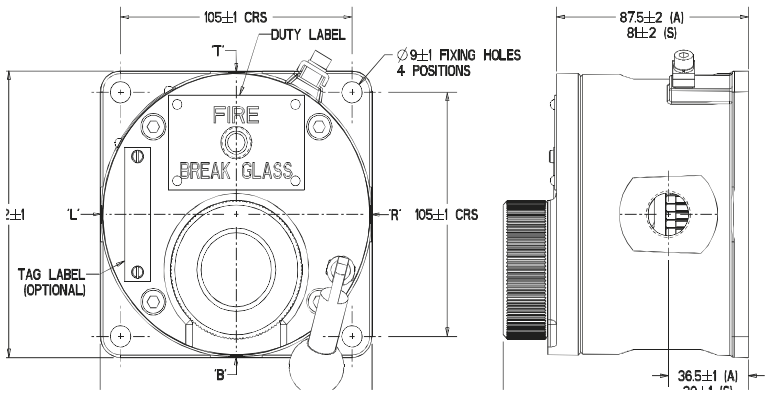
ATEX Ex d	Cert. no. Baseefa03ATEX0075. ATEX Approved Ex II 2GD Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67
ATEX Ex ia	Cert no. Baseefa 02ATEX0152X. ATEX Approved Ex II 1GD Certified to: EN60079-0, EN60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
IECEx Ex d	Cert. no. IECEx BAS 09.0060 Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°/T100°C Db. IP66/IP67
IECEx Ex ia	Cert. no. IECEx BAS 10.0033X Certified to: IEC60079-0, IEC60079-11, Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
UL	Listing no. E186629 UL listed to Class 1, Div 1. Groups C & D. (SM87PBL)
ULC	Cert. no. 20091023-E320282 ULC certified for Class I, Zone 1 Groups C & D (SM87PBL)
CSA Explosion proof	Class 1, Div 1 & 2. Group D Ex d IIC T5/T6 Gb
CSA Intrinsically safe	Class 1, Div 1 & 2. Groups A-D
INMETRO Ex d	Ex db IIC T5/T6 Gb
Type Approvals	DNV (IEC 60945) (Stainless Steel SM87PB only)
SIL	SM87PB only - SIL2 Certification to IEC61508. Cert no. 20151118-4786827453
CCC	Ex d IIC T5/T6 Gb, Ex tD A21 IP66/IP67 T85°C/T100°C

Specifications

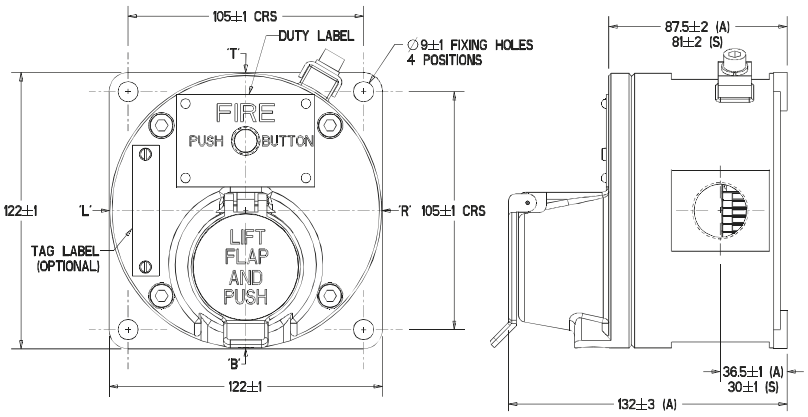
Material	Grade 316 ANC4B stainless steel or LM 25 TF marine grade alloy	
Finish	Paint finish as standard or to customer specification	
Voltage	Ex d 24V a.c./d.c. Ex ia 28V	
Rating	2A	
Switches	2 pole c/o, wired to terminals Optional up to 4 pole (UL version 2 pole only)	
Optional indicator	A red high intensity LED can be fitted for alarm indication As standard the LED is not provided with over current protection. The forward current (If) should be limited to 20mA	
Certified temp	Ex d* Ex ia* UL CSA Explosion proof - Class 1, Div 1 & 2. CSA - Ex d IIC CSA Intrinsically safe - Class 1, Div 1 & 2 *Note: includes ATEX, IECEx & INMETRO versions	–55°C to +70°C. –55°C to +60°C –20°C to +55°C (LED version only) –40°C to +70°C, –20°C to +55°C (LED version only) –50°C to +55°C –55°C to +70°C –50°C to +40°C
Weight	3·8 kg. steel (approx.) or 2.5 kg. alloy (approx)	
Ingress protection	IP66 & IP67. SM87PB IP68 (35m for 40 hours)	
Entries	Up to 4 x M20 or M25 ISO Ex d/Ex ia Up to 4 x ½" or ¾" NPT UL Stainless steel version comes with two entries as standard. Units ordered with a single entry ordering code are supplied with 2x entries inc. plug on the opposite side	
Terminals	Will accept up to 1·5mm² cable	
Resistor values	470R minimum (d.c. & I.S. units only)	

General arrangement drawing (all dimensions in mm)

Break glass



Push button



Both the Ex ia units and the Ex d units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

Unit	Model	Material	Certification	Entries	Duty label	Tag label	Options	Finish
SM87	PBL	S	D	1B1R	O	Y	HD	Y

Material*

	Code
Stainless steel	S
Alloy	A

*UL version only available in alloy

Model*

	Code
Breakglass latching	BGL
Lift flap breakglass latching	LBGL
Push button latching key reset	PBL
Push button only momentary action	PBM

*UL and ULC versions only available in PBL model

Certification

	Code
Ex ia	I
Ex d	D
IECEx - Ex ia	IJ
IECEx - Ex d	DJ
UL	UL
ULC	UC
CSA - Intrinsically Safe	IC
CSA - Ex proof	DC
INMETRO - Ex d	DM
CCC	DQ

Entries

	Code
M20	1
M25	2
½" NPT	3
¾" NPT	4
Other	5
Position	
Top	*T
Bottom	*B
RHS	*R
LHS	*L

*Prefix position with size code i.e. 1T1B = M20 Top and Bottom

Duty label

	Code
Fire breakglass	1
Push button	2
Fire push button	3
ESDO abandon	4
Burning house logo	5
Fire/FEU	6†
Other	O*
None	N

*Please specify
†This option must be used when ordering a red callpoint for ULC Fire Alarm applications

Tag label

	Code
Required	Y*
Not required	N

*Please specify

Options

	Code
Not required	N
LED	A
Resistor series	G*
Resistor EOL	H*
Diode	D*
3 pole c/o switch	T
4 pole c/o switch	F

*Please specify

Finish

	Code
Red	R
Blue	B
Yellow	Y
Yellow/black stripes	X
Special	S*

*Please specify

ITEM	Tag	950-ESD-07101	: FZ-07 ESD-1 Push Button Activation			Dwg	123A90-DDL-SAF-DL-30027
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)			Module	TP
TASK	code	C10000963		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Instrumental Form CJX00		Miscellaneous

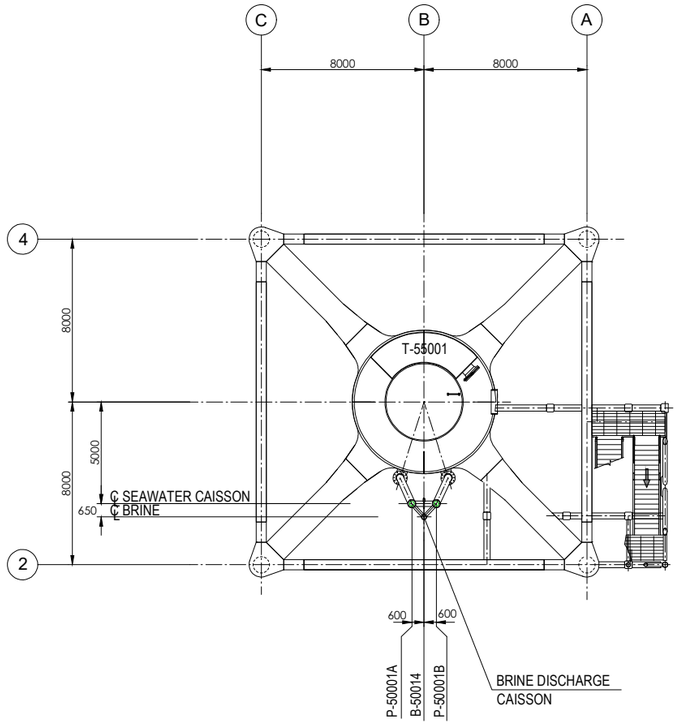
1	Check for mechanical damage.	PL
2	Check installed equipment is suitable and conforms to specification.	OK
3	Check installation conforms to P&ID and hook-up drawing.	OK
4	Check tube fittings manufacturer is the one chosen for the plant.	OK
5	Check that piping connections provide the block & bleed facility (if required).	OK
6	Check that all stop plugs are properly installed	OK
7	Check identification (tag number, tag plates).	OK
8	Check supporting and protection against vibrations.	OK
9	Check the conformity of earthing as per specification (I.P.E. or I.E.)	OK
10	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

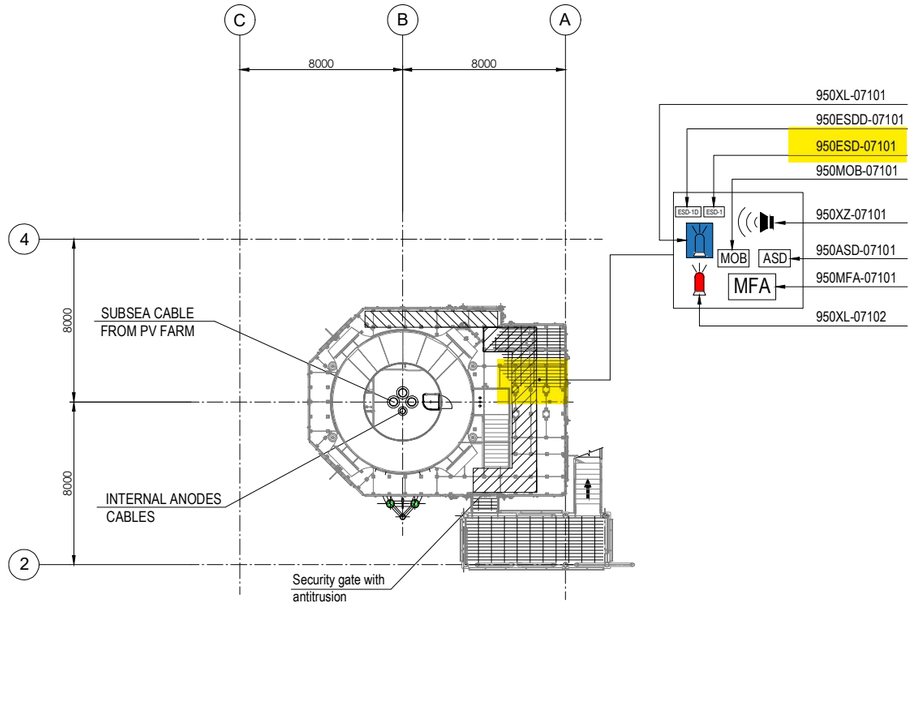
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-04-18	2025-04-29	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-04-18T09:29:59.369Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-04-29T06:31:34.054Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

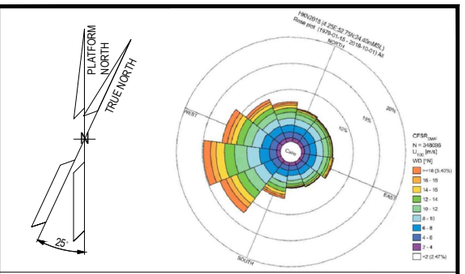


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK				SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24	
A1	DRAWING NO. 123A90-DDL-SAF-DL-30028		SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD		MULTICABLE	I&T EQUIPMENT ROOM (ITER)
INSTRUMENTS	JUNCTION BOX 00-JE-22002	No.	MARSHALLING CABINET B400-SIS-001

<01>

INSTRUMENTS		JUNCTION BOX TB-2		
950-MOB-03101	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 25 BK	26 SH	PR1
950-ESD-03101	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 27 BK	28 SH	PR2
950-ESDD-03101	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 29 BK	30 SH	PR3
950-ASD-06101	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 31 BK	32 SH	PR4
950-MOB-06101	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 33 BK	34 SH	PR5
950-ESD-06101	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 35 BK	36 SH	PR6
950-ESDD-06101	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 37 BK	38 SH	PR7
950-ASD-07101	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 39 BK	40 SH	PR8
950-MOB-07101	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 41 BK	42 SH	PR9
950-ESD-07101	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 43 BK	44 SH	PR10
950-ESDD-07101	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	WH 45 BK	46 SH	PR11
		SPARE WH 47 BK	48 SH	PR12
			OS	

MULTICABLE No.: 00-JE-22002_2/B400-SIS-001
12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS

MARSHALLING CABINET TB-00-JE-22002		
PR1	WH 25 BK	950-MOB-03101
Shield Bar	26	
PR2	WH 27 BK	950-ESD-03101
Shield Bar	28	
PR3	WH 29 BK	950-ESDD-03101
Shield Bar	30	
PR4	WH 31 BK	950-ASD-06101
Shield Bar	32	
PR5	WH 33 BK	950-MOB-06101
Shield Bar	34	
PR6	WH 35 BK	950-ESD-06101
Shield Bar	36	
PR7	WH 37 BK	950-ESDD-06101
Shield Bar	38	
PR8	WH 38 BK	950-ASD-07101
Shield Bar	40	
PR9	WH 41 BK	950-MOB-07101
Shield Bar	42	
PR10	WH 43 BK	950-ESD-07101
Shield Bar	44	
PR11	WH 45 BK	950-ESDD-07101
Shield Bar	46	
PR12	WH 47 BK	SPARE
	48	

Shield Bar — I.E.

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_S	13/03/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

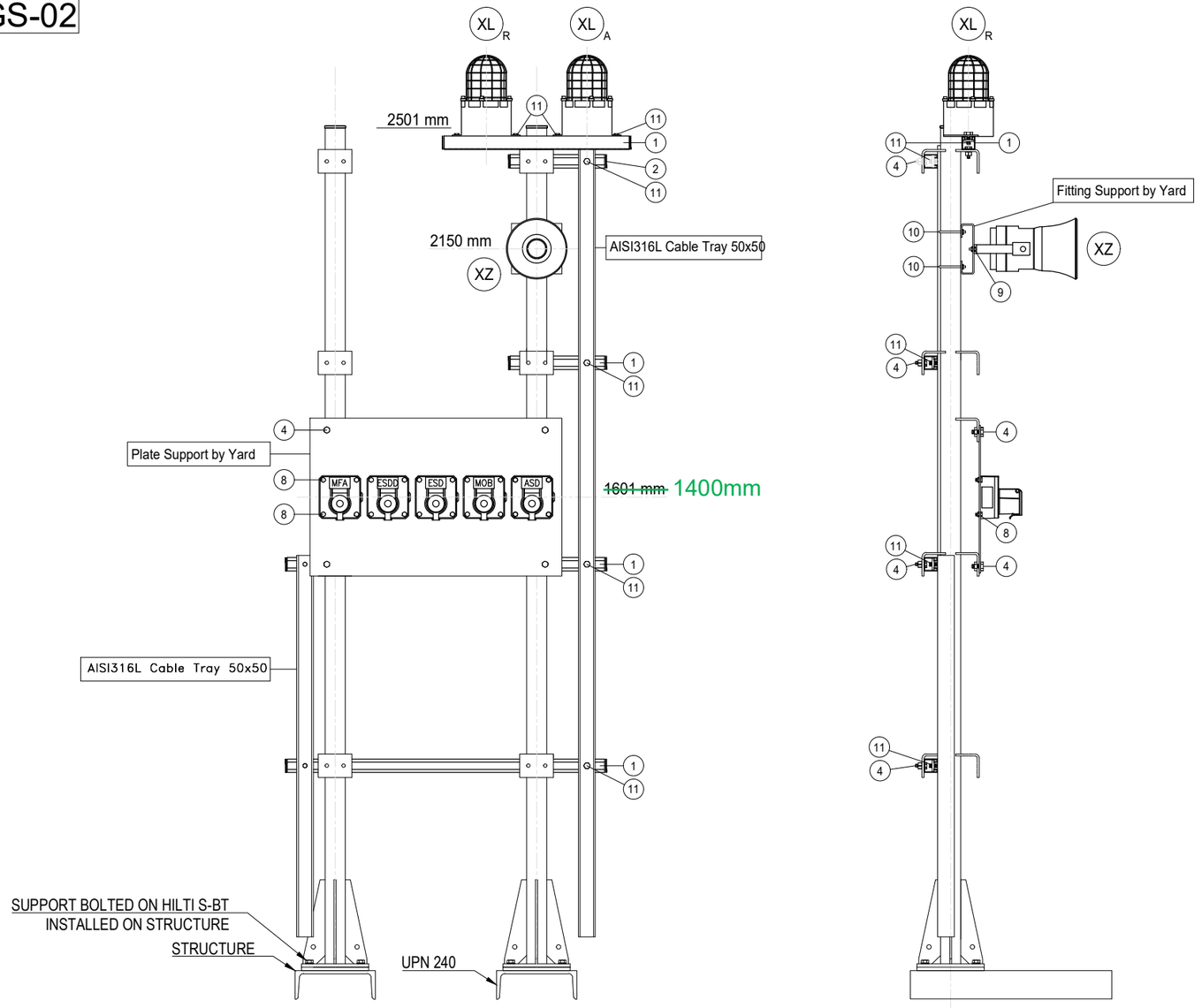
	DRAWING NO.	SHEET	REV.
A3	123A90–DDL–IN–DG–40016	013	01

File Name : 123A90-DDL-IN-DG-40016_Rev.01

FGS-02

DRAWING NO. 123A90-DDL-IN-DD-40017

REV. 00



POS.	DESCRIPTION	Q.TY
1	AISI 316L U-CHANNEL 41x41	6m
2	LDPE PLUG FOR U-CHANNEL 41x41	8
4	AISI 316L BOLT M10x35 + NUT M10 + WASHER M10	18
8	AISI 316L BOLT M8x35 + NUT M8 + WASHER M8	20
~~9~~	~~AISI 316L BOLT M6x35 + NUT M6 + WASHER M6~~	2
10	AISI 316L 2" U BOLT M8+ N.2 NUT M8 + N.2 WASHER M8 1	2
11	AISI 316L SPRING NUT M6 FOR U-CHANNEL 41X41 + BOLT M6 + WASHER M6	10

POLE	ITEM	DESCRIPTION	TAGNAME
1	XL_A	BEACON - AMBER	950-XL-04101
	XL_R	BEACON - RED	950-XL-04102
	XZ	SOUNDER	950-XZ-04101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-04101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-04101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-04101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-04101
	~~MFA~~	~~MANUAL CALL POINT CONNECTED TO FGS~~	~~950-MFA-04101~~
1 2	XL_A	BEACON - AMBER	950-XL-07101
	XL_R	BEACON - RED	950-XL-07102
	XZ	SOUNDER	950-XZ-07101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-07101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-07101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-07101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-07101
	MFA	MANUAL CALL POINT CONNECTED TO FGS	950-MFA-07101

NOTES

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/09/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	11/07/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT INSTALLATION DETAILS
FIRE & GAS DEVISES ON POLE

CONTRACT NO./TITLE			SCALE /
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 11/07/2024

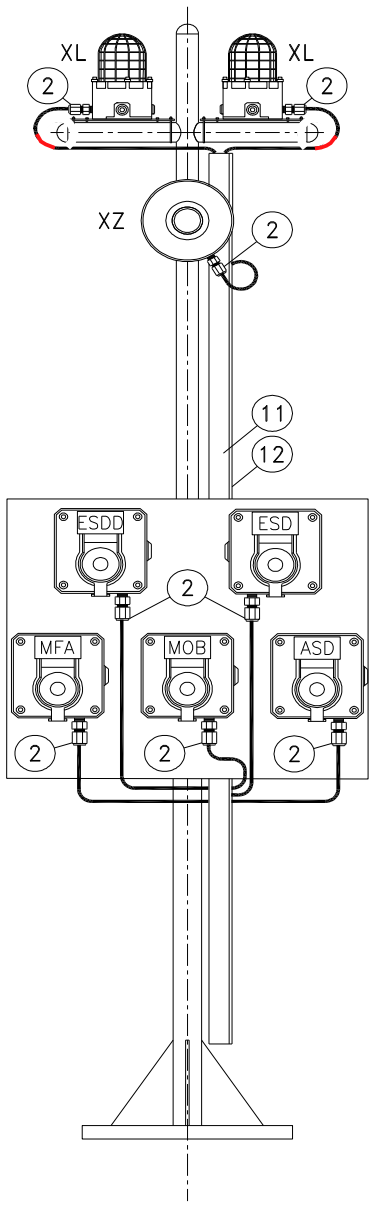
A3	DRAWING NO. 123A90-DDL-IN-DD-40017	SHEET 021	REV. 01

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DD-40017**

REV.:	DATE:	SIGNATURE:
1_J	31/01/25	G.Randi

ROSETTI MARINO SpA

ELECTRICAL HOOK-UP FOR FIRE & GAS DEVICES



INSTRUMENT TAG	
1	950-XL-04101 (AMBER)
	950-XL-04102 (RED)
	950-XZ-04101
	950-ESDD-04101
	950-ESD-04101
	950-MFA-04101
	950-MOB-04101
	950-ASD-04101
2	950-XL-07101 (AMBER)
	950-XL-07102 (RED)
	950-XZ-07101
	950-ESDD-07101
	950-ESD-07101
	950-MFA-07101
	950-MOB-07101
	950-ASD-07101

NOTE: Mechanical support is only indicative in this drawing, for real mehanical support refer to Instrument Installation Details, doc. n. 123A90-DDL-IN-DD-40017 - Instrument Installation Details

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-HD-40079**

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

ROSETTI MARINO SpA

POS.	NORM/STD CODE	DESCRIPTION	SIZE/ CONNECTION TYPE	Q.TY
12		Cover for cable tray, FRP, Grey Color	50 W x 10 H x 5 THK	3 mt
11		Perforated cable tray, FRP, Grey Color	50 W x 50 H x 5 THK	3 mt
2		Nickel Plated Brass Double Compression Cable Gland Ex-d/e IIC (or IIB + H2) T1	M20	7

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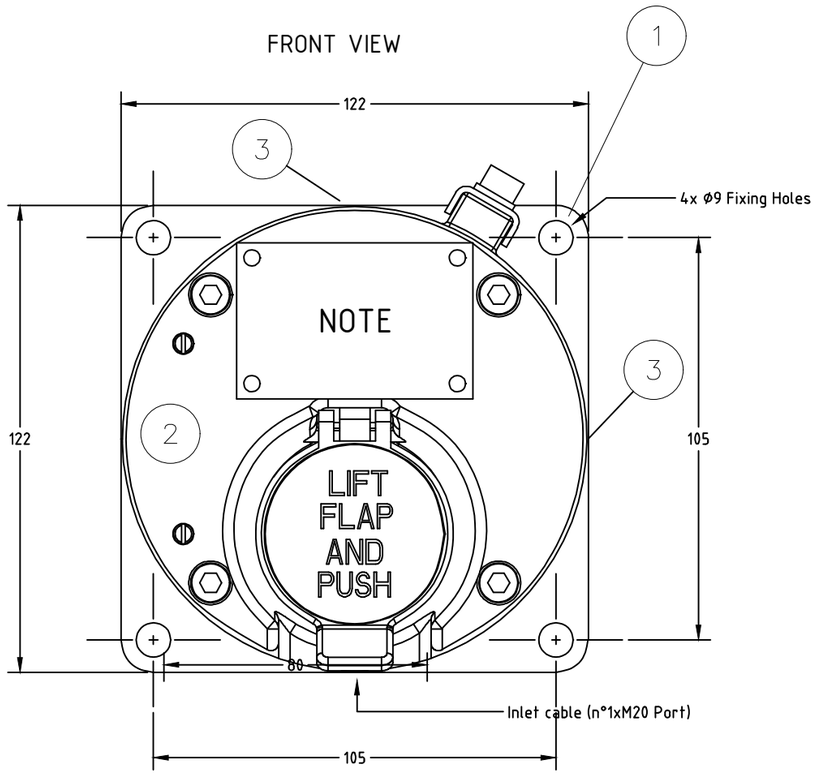
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

ITEM	DESCRIPTIONS	NR
1	Manual Call Point (Push Button) (Yellow), MEDC SM87PBLSD1B1ROYHDYZ	1
2	Stainless Steel Name Plate	1
3	Stop Plug M20 Ex d AISI 316	2
4		
5		
6		
7		
8		
9		
10		

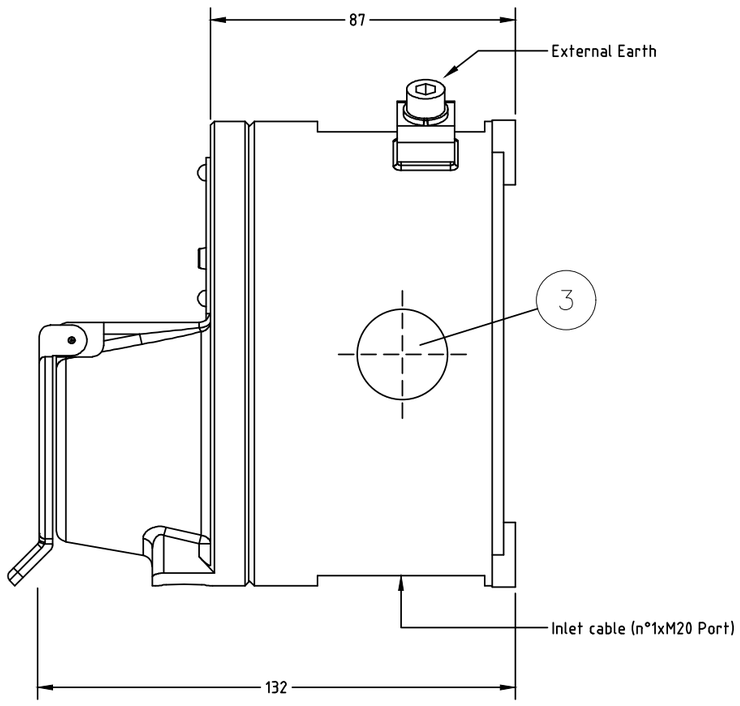
INSTALLATION QUANTITY

20

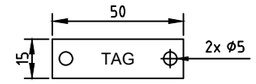
FRONT VIEW



SIDE VIEW



2 STAINLESS STEEL NAME PLATE DETAILS

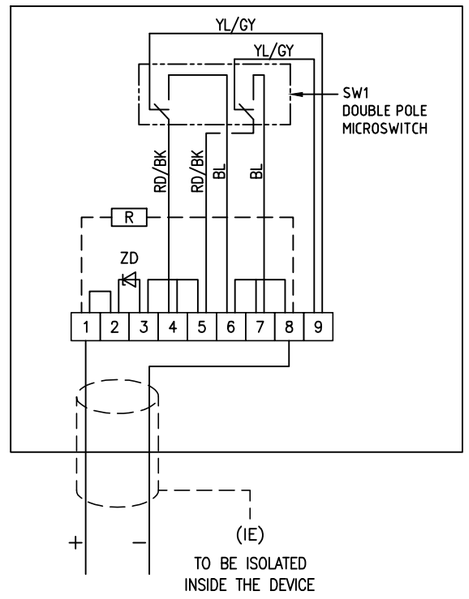


NOTE 5

WIRING

TERMINAL STRIP

ZD= ZENER 1N5339B 5.6V
R= 36 KOhm



NOTE

Q.TY	DUTY LABEL
5	ABANDON ACTIVATION
5	MAN OVER BOARD ACTIVATION
5	EMERGENCY SHUTDOWN ACTIVATION
5	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

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

SCALE : NTS

A3

DRAWING NO. 1724000821-IN-DA-00003

SHEET 017

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

POS.	TAG NUMBER
1	950-ASD-01101
2	950-ASD-03101
3	950-ASD-04101
4	950-ASD-06101
5	950-ASD-07101
6	950-MOB-01101
7	950-MOB-03101
8	950-MOB-04101
9	950-MOB-06101
10	950-MOB-07101
11	950-ESD-01101
12	950-ESD-03101
13	950-ESD-04101
14	950-ESD-06101
15	950-ESD-07101
16	950-ESDD-01101
17	950-ESDD-03101
18	950-ESDD-04101
19	950-ESDD-06101
20	950-ESDD-07101

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

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

A3 | DRAWING NO. 1724000821-IN-DA-00003 | SHEET 018 | REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

PUSH BUTTON TO SIS

POS.	TAG NUMBER	SERVICE	DUTY LABEL
1	950-ASD-01101	FZ-01 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
2	950-ASD-03101	FZ-03 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
3	950-ASD-04101	FZ-04 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
4	950-ASD-06101	FZ-06 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
5	950-ASD-07101	FZ-07 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
6	950-MOB-01101	FZ-01 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
7	950-MOB-03101	FZ-03 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
8	950-MOB-04101	FZ-04 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
9	950-MOB-06101	FZ-06 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
10	950-MOB-07101	FZ-07 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
11	950-ESD-01101	FZ-01 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
12	950-ESD-03101	FZ-03 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
13	950-ESD-04101	FZ-04 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
14	950-ESD-06101	FZ-06 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
15	950-ESD-07101	FZ-07 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
16	950-ESDD-01101	FZ-01 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
17	950-ESDD-03101	FZ-03 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
18	950-ESDD-04101	FZ-04 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
19	950-ESDD-06101	FZ-06 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
20	950-ESDD-07101	FZ-07 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

File: 1724000821-IN-DS-00004-02.xlsx
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SM87BG & SM87PB manual call point range

Ex d, Ex ia, weatherproof



Overview

These manual fire alarm, emergency shutdown break-glass and pushbutton units have been designed for the most arduous environmental conditions.

The units are both easy to install and maintain. Intrinsically safe Ex ia and flameproof Ex d versions of each model are available.

A choice of either stainless steel or alloy makes the range suitable for either the offshore or onshore industries. Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 0, Zone 1 and Zone 2 use*
- ATEX certified
- UL listed for USA and Canada (SM87PBL only). Class I, Div 1, Groups C & D
- ULC certified (SM87PBL only) for Class I, Zone 1 Groups C & D
- CSA certified
- IECEx certified
- Brazilian (INMETRO) certified
- Russian Fire certified
- PESO certified (Ex d only)
- SIL 2 certified (SM87PB only)
- IP66 and IP67
- DNV type approval (IEC 60945) (SM87PB only)
- Certified temperature: –55°C to +70°C*
- Stainless steel or marine grade alloy
- Robust yet lightweight
- Easy to maintain

*Model dependent

Eaton
Unit B, Sutton Parkway
Oddicroft Lane
Sutton in Ashfield
United Kingdom
NG17 5FB

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March 2024

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All other trademarks are property of their respective owners.

All specifications, dimensions, weights and tolerances are nominal (typical) and Eaton reserve the right to vary all data without prior notice.
No liability is accepted for any consequence of use.

Certifications

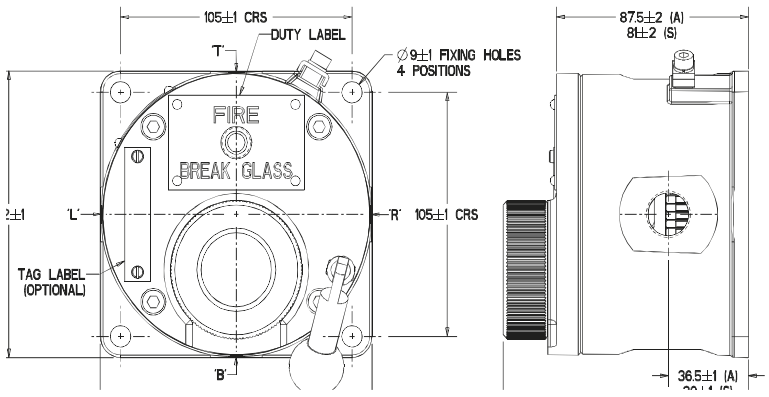
ATEX Ex d	Cert. no. Baseefa03ATEX0075. ATEX Approved Ex II 2GD Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67
ATEX Ex ia	Cert no. Baseefa 02ATEX0152X. ATEX Approved Ex II 1GD Certified to: EN60079-0, EN60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
IECEx Ex d	Cert. no. IECEx BAS 09.0060 Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°/T100°C Db. IP66/IP67
IECEx Ex ia	Cert. no. IECEx BAS 10.0033X Certified to: IEC60079-0, IEC60079-11, Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
UL	Listing no. E186629 UL listed to Class 1, Div 1. Groups C & D. (SM87PBL)
ULC	Cert. no. 20091023-E320282 ULC certified for Class I, Zone 1 Groups C & D (SM87PBL)
CSA Explosion proof	Class 1, Div 1 & 2. Group D Ex d IIC T5/T6 Gb
CSA Intrinsically safe	Class 1, Div 1 & 2. Groups A-D
INMETRO Ex d	Ex db IIC T5/T6 Gb
Type Approvals	DNV (IEC 60945) (Stainless Steel SM87PB only)
SIL	SM87PB only - SIL2 Certification to IEC61508. Cert no. 20151118-4786827453
CCC	Ex d IIC T5/T6 Gb, Ex tD A21 IP66/IP67 T85°C/T100°C

Specifications

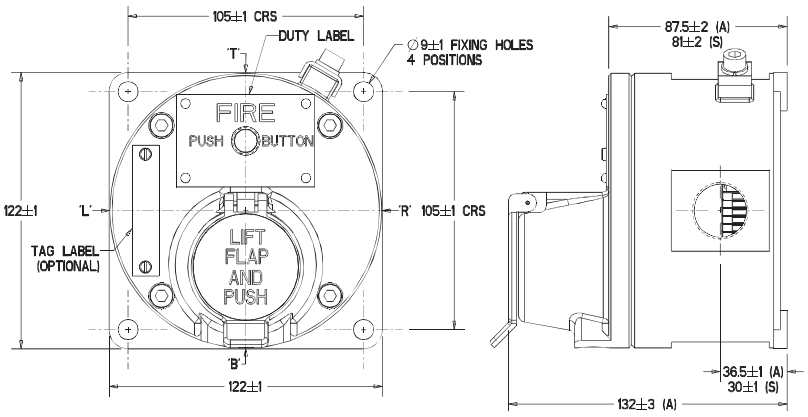
Material	Grade 316 ANC4B stainless steel or LM 25 TF marine grade alloy	
Finish	Paint finish as standard or to customer specification	
Voltage	Ex d 24V a.c./d.c. Ex ia 28V	
Rating	2A	
Switches	2 pole c/o, wired to terminals Optional up to 4 pole (UL version 2 pole only)	
Optional indicator	A red high intensity LED can be fitted for alarm indication As standard the LED is not provided with over current protection. The forward current (If) should be limited to 20mA	
Certified temp	Ex d* Ex ia* UL CSA Explosion proof - Class 1, Div 1 & 2. CSA - Ex d IIC CSA Intrinsically safe - Class 1, Div 1 & 2 *Note: includes ATEX, IECEx & INMETRO versions	–55°C to +70°C. –55°C to +60°C –20°C to +55°C (LED version only) –40°C to +70°C, –20°C to +55°C (LED version only) –50°C to +55°C –55°C to +70°C –50°C to +40°C
Weight	3·8 kg. steel (approx.) or 2.5 kg. alloy (approx)	
Ingress protection	IP66 & IP67. SM87PB IP68 (35m for 40 hours)	
Entries	Up to 4 x M20 or M25 ISO Ex d/Ex ia Up to 4 x ½" or ¾" NPT UL Stainless steel version comes with two entries as standard. Units ordered with a single entry ordering code are supplied with 2x entries inc. plug on the opposite side	
Terminals	Will accept up to 1·5mm² cable	
Resistor values	470R minimum (d.c. & I.S. units only)	

General arrangement drawing (all dimensions in mm)

Break glass



Push button



Both the Ex ia units and the Ex d units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

Unit	Model	Material	Certification	Entries	Duty label	Tag label	Options	Finish
SM87	PBL	S	D	1B1R	O	Y	HD	Y

Material*

	Code
Stainless steel	S
Alloy	A

*UL version only available in alloy

Model*

	Code
Breakglass latching	BGL
Lift flap breakglass latching	LBGL
Push button latching key reset	PBL
Push button only momentary action	PBM

*UL and ULC versions only available in PBL model

Certification

	Code
Ex ia	I
Ex d	D
IECEx - Ex ia	IJ
IECEx - Ex d	DJ
UL	UL
ULC	UC
CSA - Intrinsically Safe	IC
CSA - Ex proof	DC
INMETRO - Ex d	DM
CCC	DQ

Entries

	Code
M20	1
M25	2
½" NPT	3
¾" NPT	4
Other	5
Position	
Top	*T
Bottom	*B
RHS	*R
LHS	*L

*Prefix position with size code i.e. 1T1B = M20 Top and Bottom

Duty label

	Code
Fire breakglass	1
Push button	2
Fire push button	3
ESDO abandon	4
Burning house logo	5
Fire/FEU	6†
Other	O*
None	N

*Please specify
†This option must be used when ordering a red callpoint for ULC Fire Alarm applications

Tag label

	Code
Required	Y*
Not required	N

*Please specify

Options

	Code
Not required	N
LED	A
Resistor series	G*
Resistor EOL	H*
Diode	D*
3 pole c/o switch	T
4 pole c/o switch	F

*Please specify

Finish

	Code
Red	R
Blue	B
Yellow	Y
Yellow/black stripes	X
Special	S*

*Please specify

ITEM	Tag	950-ESDD-07101	: FZ-07 ESD-1D Push Button Activation			Dwg	123A90-DDL-SAF-DL-30027
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)			Module	TP
TASK	code	C10000968		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Instrumental	Form	CJX00 Miscellaneous

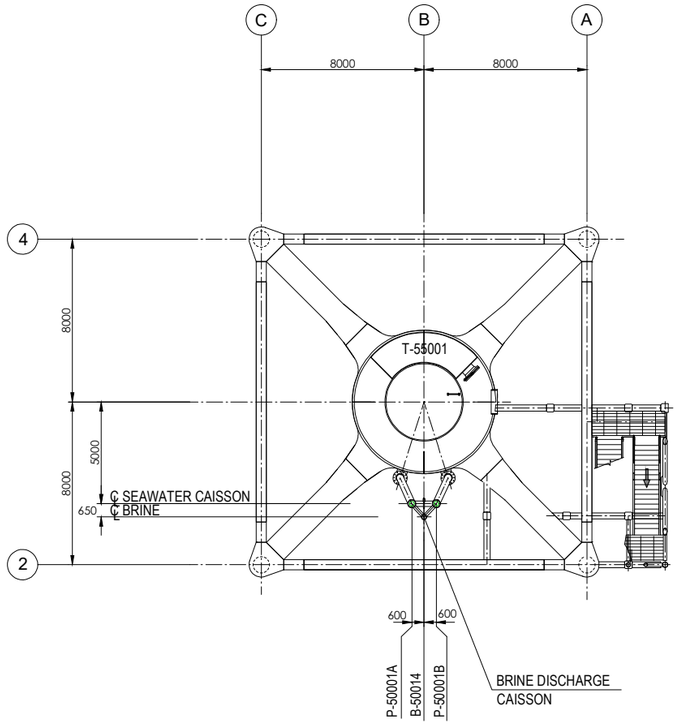
1	Check for mechanical damage.	PL
2	Check installed equipment is suitable and conforms to specification.	OK
3	Check installation conforms to P&ID and hook-up drawing.	OK
4	Check tube fittings manufacturer is the one chosen for the plant.	OK
5	Check that piping connections provide the block & bleed facility (if required).	OK
6	Check that all stop plugs are properly installed	OK
7	Check identification (tag number, tag plates).	OK
8	Check supporting and protection against vibrations.	OK
9	Check the conformity of earthing as per specification (I.P.E. or I.E.)	OK
10	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

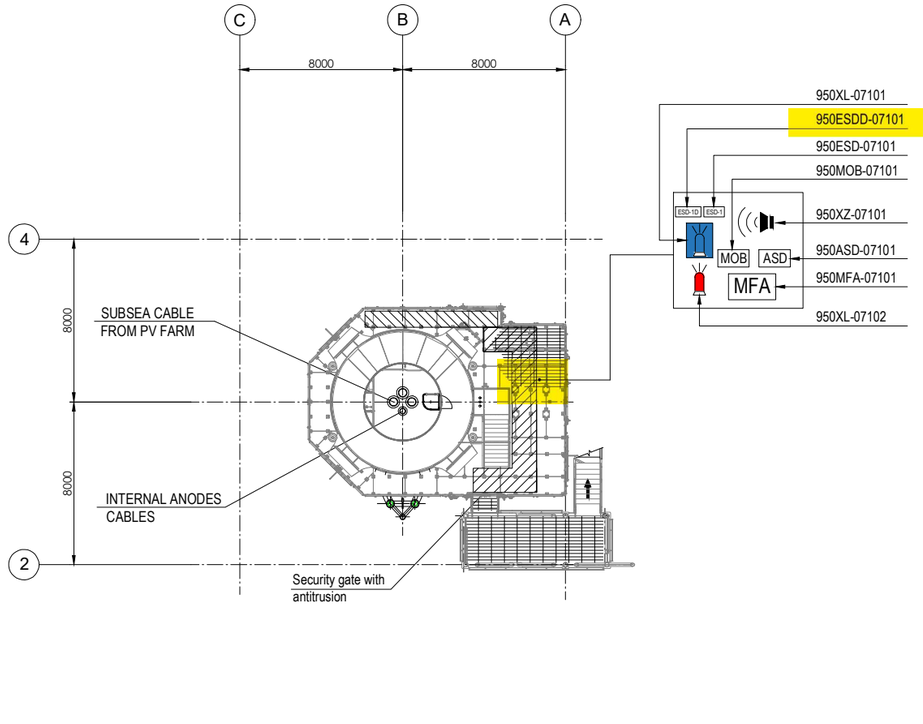
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-04-18	2025-04-29	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-04-18T06:03:43.095Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-04-29T06:37:12.405Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

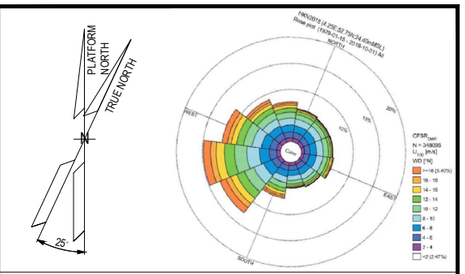


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK			SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24

A1	DRAWING NO. 123A90-DDL-SAF-DL-30028	SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD		MULTICABLE	I&T EQUIPMENT ROOM (ITER)
INSTRUMENTS	JUNCTION BOX 00-JE-22002	No.	MARSHALLING CABINET B400-SIS-001

<01>

INSTRUMENTS		JUNCTION BOX TB-2		MULTICABLE No.	MARSHALLING CABINET B400-SIS-001 TB-00-JE-22002	
					PR1 Shield Bar	950-MOB-03101
950-MOB-03101	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	25 WH / 26 BK	PR1		PR2 Shield Bar	950-ESD-03101
950-ESD-03101	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	27 WH / 28 BK	PR2		PR3 Shield Bar	950-ESDD-03101
950-ESDD-03101	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	29 WH / 30 BK	PR3		PR4 Shield Bar	950-ASD-06101
950-ASD-06101	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	31 WH / 32 BK	PR4		PR5 Shield Bar	950-MOB-06101
950-MOB-06101	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	33 WH / 34 BK	PR5		PR6 Shield Bar	950-ESD-06101
950-ESD-06101	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	35 WH / 36 BK	PR6	00-JE-22002_2/B400-SIS-001 12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS	PR7 Shield Bar	950-ESDD-06101
950-ESDD-06101	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	37 WH / 38 BK	PR7		PR8 Shield Bar	950-ASD-07101
950-ASD-07101	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	39 WH / 40 BK	PR8		PR9 Shield Bar	950-MOB-07101
950-MOB-07101	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	41 WH / 42 BK	PR9		PR10 Shield Bar	950-ESD-07101
950-ESD-07101	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	43 WH / 44 BK	PR10		PR11 Shield Bar	950-ESDD-07101
950-ESDD-07101	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS NOTE-2	45 WH / 46 BK	PR11		PR12	SPARE
		47 WH / 48 BK	PR12		Shield Bar I.E.	
		SPARE 47 / 48				
		OS				

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DG-40016**

REV.:	DATE:	SIGNATURE:
1_S	13/03/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

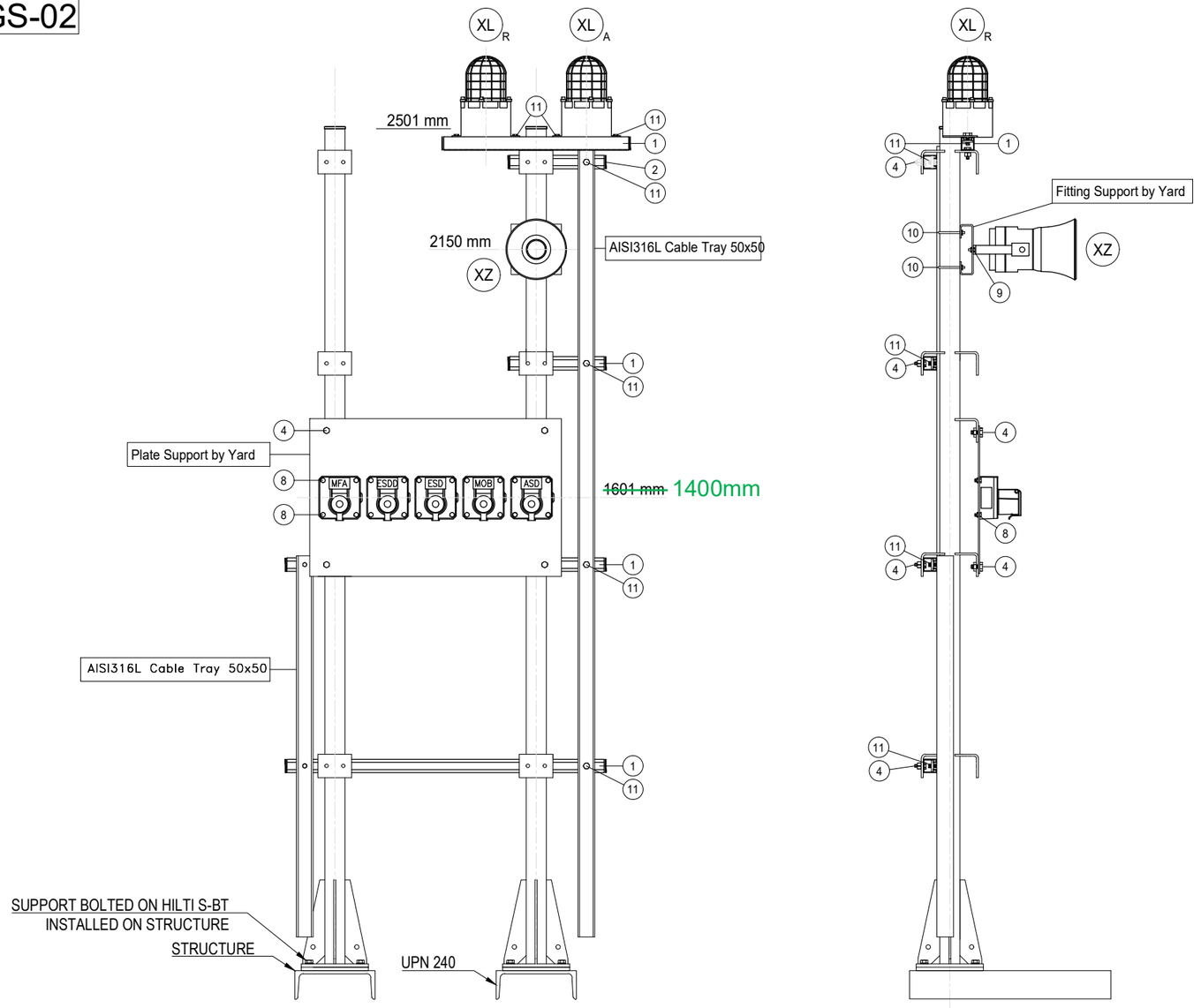
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File Name : 123A90-DDL-IN-DG-40016_Rev.01

DRAWING NO. 123A90-DDL-IN-DD-40017

REV. 00

FGS-02



POS.	DESCRIPTION	Q.TY
1	AISI 316L U-CHANNEL 41x41	6m
2	LDPE PLUG FOR U-CHANNEL 41x41	8
4	AISI 316L BOLT M10x35 + NUT M10 + WASHER M10	18
8	AISI 316L BOLT M8x35 + NUT M8 + WASHER M8	20
~~9~~	~~AISI 316L BOLT M6x35 + NUT M6 + WASHER M6~~	2
10	AISI 316L 2" U BOLT M8+ N.2 NUT M8 + N.2 WASHER M8 1	2
11	AISI 316L SPRING NUT M6 FOR U-CHANNEL 41X41 + BOLT M6 + WASHER M6	10

POLE	ITEM	DESCRIPTION	TAGNAME
1	XL_A	BEACON - AMBER	950-XL-04101
	XL_R	BEACON - RED	950-XL-04102
	XZ	SOUNDER	950-XZ-04101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-04101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-04101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-04101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-04101
	~~MFA~~	~~MANUAL CALL POINT CONNECTED TO FGS~~	~~950-MFA-04101~~
2 1	XL_A	BEACON - AMBER	950-XL-07101
	XL_R	BEACON - RED	950-XL-07102
	XZ	SOUNDER	950-XZ-07101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-07101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-07101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-07101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-07101
	MFA	MANUAL CALL POINT CONNECTED TO FGS	950-MFA-07101

NOTES

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/09/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	11/07/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT INSTALLATION DETAILS
FIRE & GAS DEVISES ON POLE

CONTRACT NO./TITLE			SCALE /
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 11/07/2024

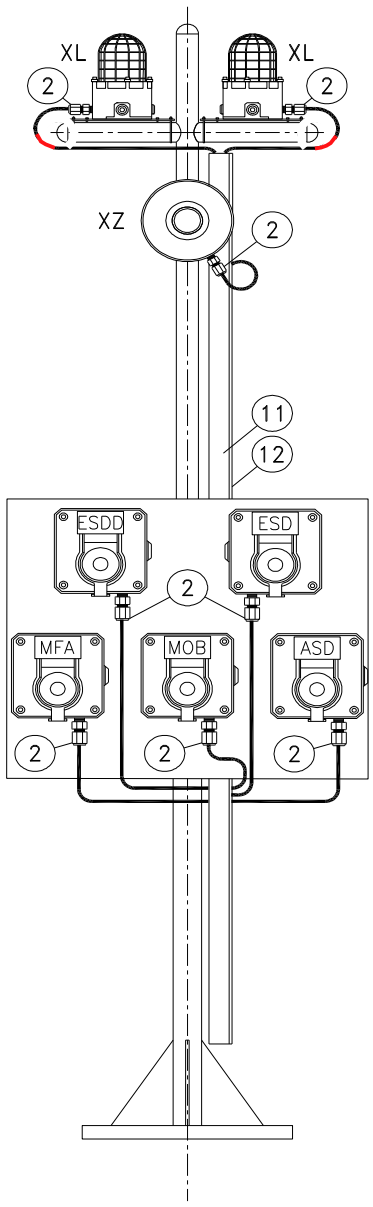
A3	DRAWING NO. 123A90-DDL-IN-DD-40017	SHEET 021	REV. 01

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DD-40017**

REV.:	DATE:	SIGNATURE:
1_J	31/01/25	G.Randi

ROSETTI MARINO SpA

ELECTRICAL HOOK-UP FOR FIRE & GAS DEVICES



INSTRUMENT TAG	
1	950-XL-04101 (AMBER)
	950-XL-04102 (RED)
	950-XZ-04101
	950-ESDD-04101
	950-ESD-04101
	950-MFA-04101
	950-MOB-04101
	950-ASD-04101
2	950-XL-07101 (AMBER)
	950-XL-07102 (RED)
	950-XZ-07101
	950-ESDD-07101
	950-ESD-07101
	950-MFA-07101
	950-MOB-07101
	950-ASD-07101

NOTE: Mechanical support is only indicative in this drawing, for real mehanical support refer to Instrument Installation Details, doc. n. 123A90-DDL-IN-DD-40017 - Instrument Installation Details

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-HD-40079**

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

ROSETTI MARINO SpA

POS.	NORM/STD CODE	DESCRIPTION	SIZE/ CONNECTION TYPE	Q.TY
12		Cover for cable tray, FRP, Grey Color	50 W x 10 H x 5 THK	3 mt
11		Perforated cable tray, FRP, Grey Color	50 W x 50 H x 5 THK	3 mt
2		Nickel Plated Brass Double Compression Cable Gland Ex-d/e IIC (or IIB + H2) T1	M20	7

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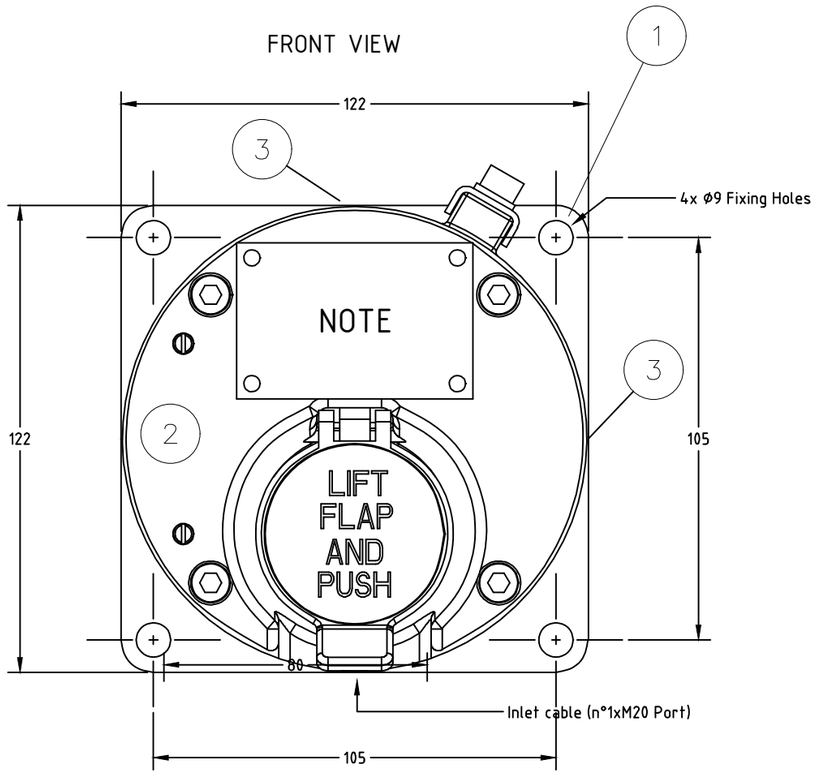
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

ITEM	DESCRIPTIONS	NR
1	Manual Call Point (Push Button) (Yellow), MEDC SM87PBLSD1B1ROYHDYZ	1
2	Stainless Steel Name Plate	1
3	Stop Plug M20 Ex d AISI 316	2
4		
5		
6		
7		
8		
9		
10		

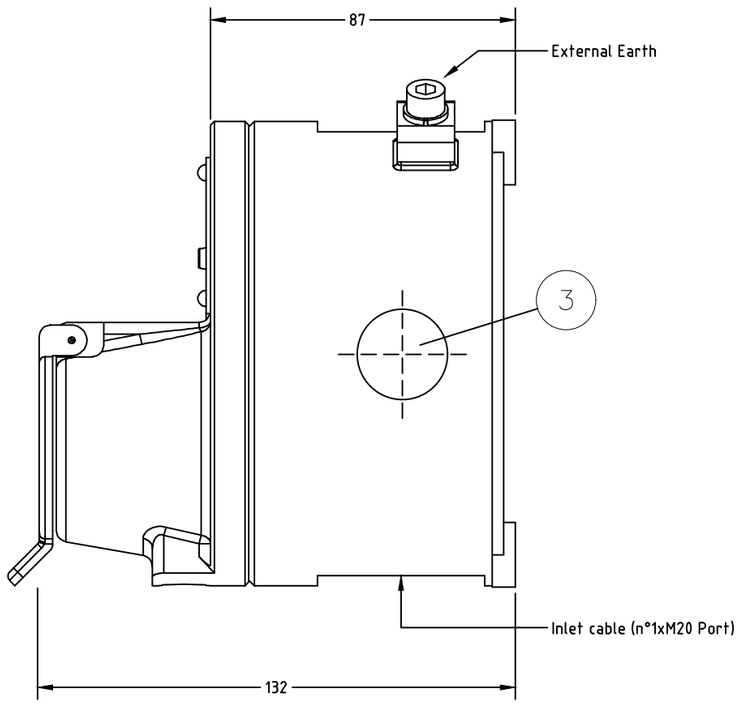
INSTALLATION QUANTITY

20

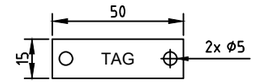
FRONT VIEW



SIDE VIEW



2 STAINLESS STEEL NAME PLATE DETAILS

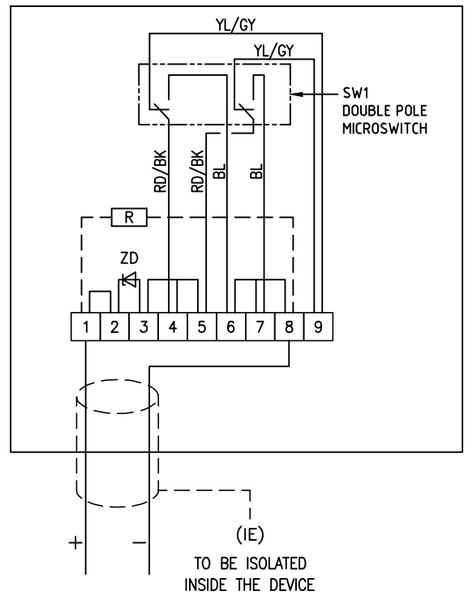


NOTE 5

WIRING

TERMINAL STRIP

ZD= ZENER 1N5339B 5.6V
R= 36 KOhm



NOTE

Q.TY	DUTY LABEL
5	ABANDON ACTIVATION
5	MAN OVER BOARD ACTIVATION
5	EMERGENCY SHUTDOWN ACTIVATION
5	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

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

SCALE : NTS

A3

DRAWING NO. 1724000821-IN-DA-00003

SHEET 017

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

POS.	TAG NUMBER
1	950-ASD-01101
2	950-ASD-03101
3	950-ASD-04101
4	950-ASD-06101
5	950-ASD-07101
6	950-MOB-01101
7	950-MOB-03101
8	950-MOB-04101
9	950-MOB-06101
10	950-MOB-07101
11	950-ESD-01101
12	950-ESD-03101
13	950-ESD-04101
14	950-ESD-06101
15	950-ESD-07101
16	950-ESDD-01101
17	950-ESDD-03101
18	950-ESDD-04101
19	950-ESDD-06101
20	950-ESDD-07101

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

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

A3 | DRAWING NO. 1724000821-IN-DA-00003 | SHEET 018 | REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

PUSH BUTTON TO SIS

POS.	TAG NUMBER	SERVICE	DUTY LABEL
1	950-ASD-01101	FZ-01 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
2	950-ASD-03101	FZ-03 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
3	950-ASD-04101	FZ-04 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
4	950-ASD-06101	FZ-06 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
5	950-ASD-07101	FZ-07 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
6	950-MOB-01101	FZ-01 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
7	950-MOB-03101	FZ-03 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
8	950-MOB-04101	FZ-04 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
9	950-MOB-06101	FZ-06 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
10	950-MOB-07101	FZ-07 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
11	950-ESD-01101	FZ-01 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
12	950-ESD-03101	FZ-03 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
13	950-ESD-04101	FZ-04 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
14	950-ESD-06101	FZ-06 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
15	950-ESD-07101	FZ-07 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
16	950-ESDD-01101	FZ-01 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
17	950-ESDD-03101	FZ-03 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
18	950-ESDD-04101	FZ-04 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
19	950-ESDD-06101	FZ-06 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
20	950-ESDD-07101	FZ-07 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

File: 1724000821-IN-DS-00004-02.xlsx
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SM87BG & SM87PB manual call point range

Ex d, Ex ia, weatherproof



Overview

These manual fire alarm, emergency shutdown break-glass and pushbutton units have been designed for the most arduous environmental conditions.

The units are both easy to install and maintain. Intrinsically safe Ex ia and flameproof Ex d versions of each model are available.

A choice of either stainless steel or alloy makes the range suitable for either the offshore or onshore industries. Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 0, Zone 1 and Zone 2 use*
- ATEX certified
- UL listed for USA and Canada (SM87PBL only). Class I, Div 1, Groups C & D
- ULC certified (SM87PBL only) for Class I, Zone 1 Groups C & D
- CSA certified
- IECEx certified
- Brazilian (INMETRO) certified
- Russian Fire certified
- PESO certified (Ex d only)
- SIL 2 certified (SM87PB only)
- IP66 and IP67
- DNV type approval (IEC 60945) (SM87PB only)
- Certified temperature: –55°C to +70°C*
- Stainless steel or marine grade alloy
- Robust yet lightweight
- Easy to maintain

*Model dependent

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Oddicroft Lane
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All specifications, dimensions, weights and tolerances are nominal (typical) and Eaton reserve the right to vary all data without prior notice.
No liability is accepted for any consequence of use.

Certifications

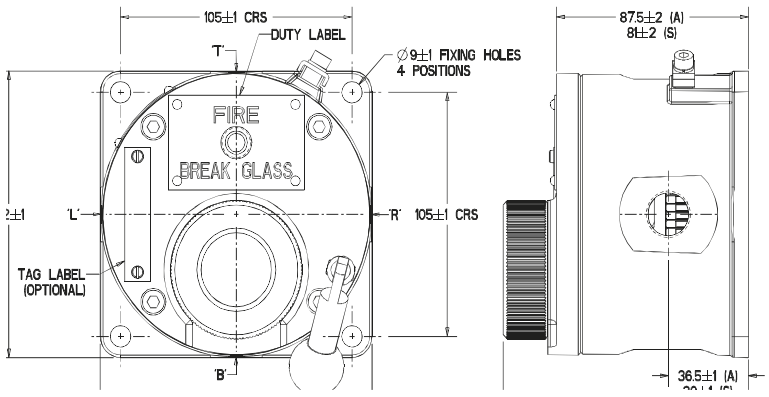
ATEX Ex d	Cert. no. Baseefa03ATEX0075. ATEX Approved Ex II 2GD Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67
ATEX Ex ia	Cert no. Baseefa 02ATEX0152X. ATEX Approved Ex II 1GD Certified to: EN60079-0, EN60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
IECEx Ex d	Cert. no. IECEx BAS 09.0060 Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°/T100°C Db. IP66/IP67
IECEx Ex ia	Cert. no. IECEx BAS 10.0033X Certified to: IEC60079-0, IEC60079-11, Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
UL	Listing no. E186629 UL listed to Class 1, Div 1. Groups C & D. (SM87PBL)
ULC	Cert. no. 20091023-E320282 ULC certified for Class I, Zone 1 Groups C & D (SM87PBL)
CSA Explosion proof	Class 1, Div 1 & 2. Group D Ex d IIC T5/T6 Gb
CSA Intrinsically safe	Class 1, Div 1 & 2. Groups A-D
INMETRO Ex d	Ex db IIC T5/T6 Gb
Type Approvals	DNV (IEC 60945) (Stainless Steel SM87PB only)
SIL	SM87PB only - SIL2 Certification to IEC61508. Cert no. 20151118-4786827453
CCC	Ex d IIC T5/T6 Gb, Ex tD A21 IP66/IP67 T85°C/T100°C

Specifications

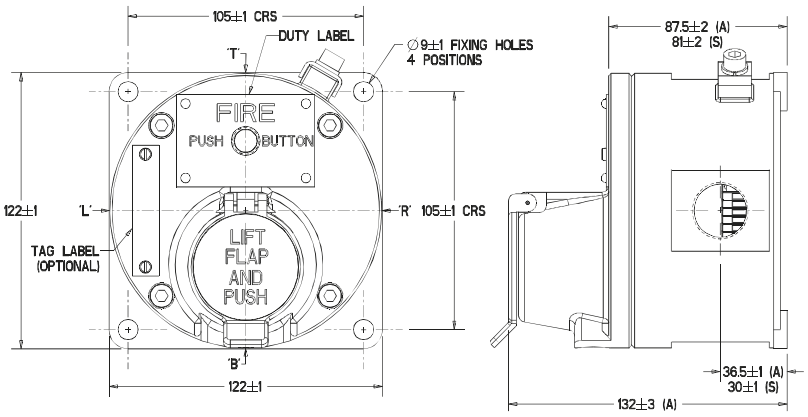
Material	Grade 316 ANC4B stainless steel or LM 25 TF marine grade alloy	
Finish	Paint finish as standard or to customer specification	
Voltage	Ex d 24V a.c./d.c. Ex ia 28V	
Rating	2A	
Switches	2 pole c/o, wired to terminals Optional up to 4 pole (UL version 2 pole only)	
Optional indicator	A red high intensity LED can be fitted for alarm indication As standard the LED is not provided with over current protection. The forward current (If) should be limited to 20mA	
Certified temp	Ex d* Ex ia* UL CSA Explosion proof - Class 1, Div 1 & 2. CSA - Ex d IIC CSA Intrinsically safe - Class 1, Div 1 & 2 *Note: includes ATEX, IECEx & INMETRO versions	–55°C to +70°C. –55°C to +60°C –20°C to +55°C (LED version only) –40°C to +70°C, –20°C to +55°C (LED version only) –50°C to +55°C –55°C to +70°C –50°C to +40°C
Weight	3·8 kg. steel (approx.) or 2.5 kg. alloy (approx)	
Ingress protection	IP66 & IP67. SM87PB IP68 (35m for 40 hours)	
Entries	Up to 4 x M20 or M25 ISO Ex d/Ex ia Up to 4 x ½" or ¾" NPT UL Stainless steel version comes with two entries as standard. Units ordered with a single entry ordering code are supplied with 2x entries inc. plug on the opposite side	
Terminals	Will accept up to 1·5mm² cable	
Resistor values	470R minimum (d.c. & I.S. units only)	

General arrangement drawing (all dimensions in mm)

Break glass



Push button



Both the Ex ia units and the Ex d units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

Unit	Model	Material	Certification	Entries	Duty label	Tag label	Options	Finish
SM87	PBL	S	D	1B1R	O	Y	HD	Y

Material*

	Code
Stainless steel	S
Alloy	A

*UL version only available in alloy

Model*

	Code
Breakglass latching	BGL
Lift flap breakglass latching	LBGL
Push button latching key reset	PBL
Push button only momentary action	PBM

*UL and ULC versions only available in PBL model

Certification

	Code
Ex ia	I
Ex d	D
IECEx - Ex ia	IJ
IECEx - Ex d	DJ
UL	UL
ULC	UC
CSA - Intrinsically Safe	IC
CSA - Ex proof	DC
INMETRO - Ex d	DM
CCC	DQ

Entries

	Code
M20	1
M25	2
½" NPT	3
¾" NPT	4
Other	5
Position	
Top	*T
Bottom	*B
RHS	*R
LHS	*L

*Prefix position with size code i.e. 1T1B = M20 Top and Bottom

Duty label

	Code
Fire breakglass	1
Push button	2
Fire push button	3
ESDO abandon	4
Burning house logo	5
Fire/FEU	6†
Other	O*
None	N

*Please specify
†This option must be used when ordering a red callpoint for ULC Fire Alarm applications

Tag label

	Code
Required	Y*
Not required	N

*Please specify

Options

	Code
Not required	N
LED	A
Resistor series	G*
Resistor EOL	H*
Diode	D*
3 pole c/o switch	T
4 pole c/o switch	F

*Please specify

Finish

	Code
Red	R
Blue	B
Yellow	Y
Yellow/black stripes	X
Special	S*

*Please specify

ITEM	Tag	950-MOB-07101	: FZ-07 Man Over Board Activation			Dwg	123A90-DDL-SAF-DL-30027
	S/Sys	79-15	: Emergency Shutdown Systems (SIS) - Devices FZ-07 (Transition Piece Area)			Module	TP
TASK	code	C10001077		Location	Onshore Activities	User	Rosetti Marino Quality Control
FORM	Process	MC	Activity CCK	Discipline	Instrumental	Form	CJX00 Miscellaneous

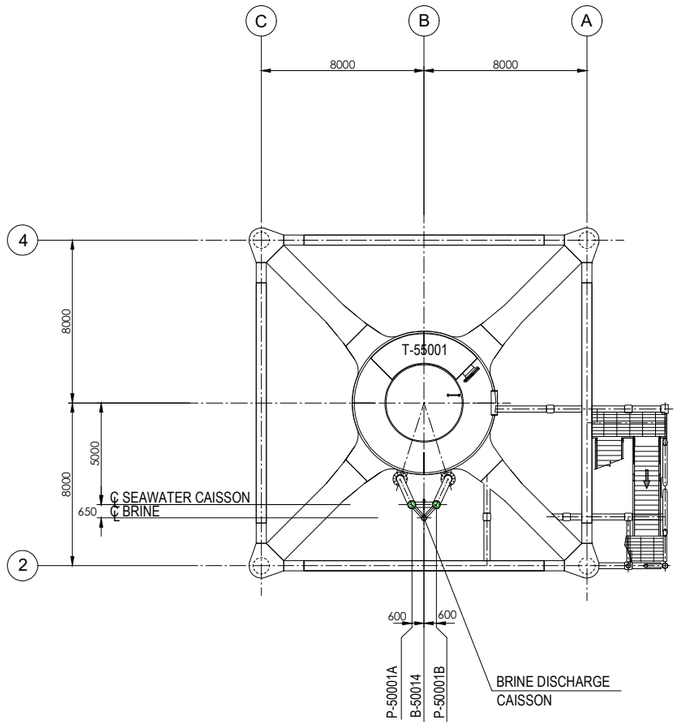
1	Check for mechanical damage.	PL
2	Check installed equipment is suitable and conforms to specification.	OK
3	Check installation conforms to P&ID and hook-up drawing.	OK
4	Check tube fittings manufacturer is the one chosen for the plant.	OK
5	Check that piping connections provide the block & bleed facility (if required).	OK
6	Check that all stop plugs are properly installed	OK
7	Check identification (tag number, tag plates).	OK
8	Check supporting and protection against vibrations.	OK
9	Check the conformity of earthing as per specification (I.P.E. or I.E.)	OK
10	If required produce Red Line Mark Up for "AS BUILT"	

Comments:

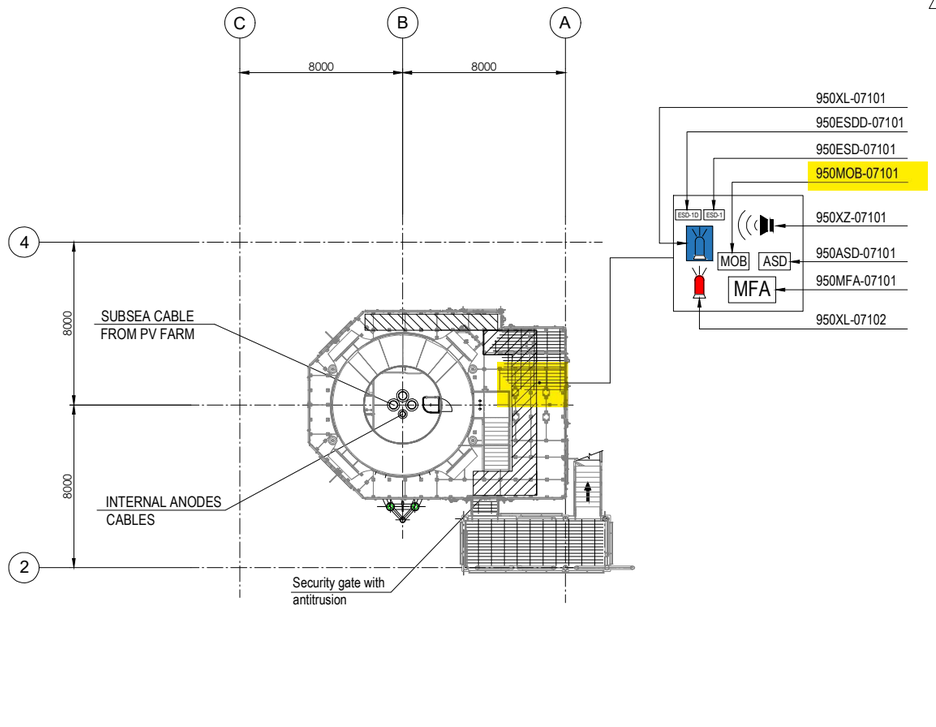
	Performed by	● WITNESS ☐ REVIEW	☐ WITNESS ☐ REVIEW
Company	VIP	RM(ROSETTI MARINO)	
Name	Madhankumar Arunagiri	Giovanni Tangianu	
Date	2025-04-18	2025-04-29	
Signature	PROVERLIS Digitaly signed by Madhankumar Arunagiri 2025-04-18T06:05:26.460Z	PROVERLIS Digitaly signed by Giovanni Tangianu 2025-04-29T06:34:27.209Z	

DRAWING NO. 123A90-DDL-SAF-DL-30028

REV. 00



PLAN ON TRANSITION PIECE
EL+21.710 T.O.S.

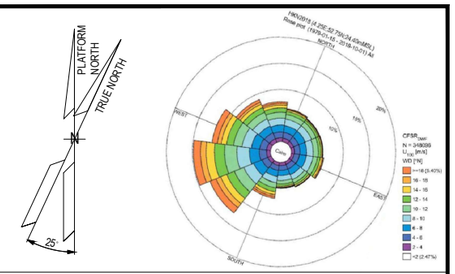


PLAN ON EXISTING
PLATFORM AT
EL+16.860 T.O.S.

EQUIPMENT LIST

TAG NUMBER	DESCRIPTION
P-50001A/B	SEAWATER LIFT PUMPS
T-55001	WASTE WATER TANK

SYMBOL	DESCRIPTION	QTY.	SYMBOL	DESCRIPTION	QTY.
	SOUNDER (XZ)	1		FIRE BEACON (XL)	1
MOB	MAN OVER BOARD (MOB)	1		FLAMMABLE GAS RELEASE BEACON (XL)	1
ASD	ABANDON SHUTDOWN (ASD)	1	ESD-1	ESD-1 PUSH BUTTON (ESD)	1
MFA	MANUAL FIRE ALARM (MFA)	1	ESD-1D	ESD-1D PUSH BUTTON (ESDD)	1



NOTES

1. ALL DIMENSIONS IN mm U.N.O
2. ALL ELEVATIONS IN METERS.
3. PERSONNEL EXPECTED TO USE HANDHELD HYDROGEN AND LOW OXYGEN DETECTORS WHEN WORKING IN CONFINED SPACES ENTRY.
01 4. DETAIL LOCATION IS SHOWN IN THE 3D MODEL.

01 ELEVATION
1. ALL BUTTONS ARE 1.5M TOP
2. SOUNDERS AND BEACONS ARE 2.4/2.5M

LEGEND

HOLDS

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-SAF-DL-30028**

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

ROSETTI MARINO SpA

REFERENCE DOCUMENTS

01	123A90-DDL-PP-DS-70071	PLOT PLAN - BELOW LOWER DECK
	123A90-DDL-SAP-RE-30020	FERA REPORT

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	10/07/24	MMA	CCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	12/02/24	MMA	CCA	DLO	ISSUE FOR APPROVAL (IFA)

CROSSWIND

ROSETTI MARINO

TITLE :

F & G DETECTORS LAYOUT - BELOW LOWER DECK

CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK				SCALE 1:150
DRAWN	CHECKED C. CARACCIOLO	APPROVED D. LO STERZO	DATE 10/07/24	
A1	DRAWING NO. 123A90-DDL-SAF-DL-30028		SHEET 001	REV. 01

File Name : 123A90-DDL-SAF-DL-30028 Rev.01

DRAWING NO. 123A90-DDL-IN-DG-40016

REV. 01

FIELD

INSTRUMENTS

JUNCTION BOX

00-JE-22002

MULTICABLE

No.

I&T EQUIPMENT ROOM (ITER)

MARSHALLING CABINET

B400-SIS-001

<01>

INSTRUMENTS	CABLE	JUNCTION BOX 00-JE-22002	MULTICABLE No.	MARSHALLING CABINET B400-SIS-001
950-MOB-03101	C-950-MOB-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	25 WH/BK → PR1	00-JE-22002_2/B400-SIS-001 12x2x0.75mm2,Sh+ShT+ARM,F.Res,ORANGE,NIS	25 WH/BK → PR1 → 950-MOB-03101
950-ESD-03101	C-950-ESD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	27 WH/BK → PR2		27 WH/BK → PR2 → 950-ESD-03101
950-ESDD-03101	C-950-ESDD-03101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	29 WH/BK → PR3		29 WH/BK → PR3 → 950-ESDD-03101
950-ASD-06101	C-950-ASD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	31 WH/BK → PR4		31 WH/BK → PR4 → 950-ASD-06101
950-MOB-06101	C-950-MOB-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	33 WH/BK → PR5		33 WH/BK → PR5 → 950-MOB-06101
950-ESD-06101	C-950-ESD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	35 WH/BK → PR6		35 WH/BK → PR6 → 950-ESD-06101
950-ESDD-06101	C-950-ESDD-06101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	37 WH/BK → PR7		37 WH/BK → PR7 → 950-ESDD-06101
950-ASD-07101	C-950-ASD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	39 WH/BK → PR8		38 WH/BK → PR8 → 950-ASD-07101
950-MOB-07101	C-950-MOB-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	41 WH/BK → PR9		41 WH/BK → PR9 → 950-MOB-07101
950-ESD-07101	C-950-ESD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	43 WH/BK → PR10		43 WH/BK → PR10 → 950-ESD-07101
950-ESDD-07101	C-950-ESDD-07101/00-JE-22002 1x2x0.75mm2,ShT+ARM,F.Res,ORANGE,NIS	45 WH/BK → PR11		45 WH/BK → PR11 → 950-ESDD-07101
		SPARE 47 WH/BK → PR12		47 WH/BK → PR12 → SPARE
		48 SH OS		48

All instrument cables: 1 WH, 8 BK — NOTE-2

Junction box TB-2: 25, 26, SH, 27, 28, SH, 29, 30, SH, 31, 32, SH, 33, 34, SH, 35, 36, SH, 37, 38, SH, 39, 40, SH, 41, 42, SH, 43, 44, SH, 45, 46, SH, 47, 48, SH, OS

Marshalling cabinet TB-00-JE-22002: 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48

PR1 Shield Bar PR2 Shield Bar PR3 Shield Bar PR4 Shield Bar PR5 Shield Bar PR6 Shield Bar PR7 Shield Bar PR8 Shield Bar PR9 Shield Bar PR10 Shield Bar PR11 Shield Bar PR12

Shield Bar — I.E.

VALID FOR CONSTRUCTION

FDL DWG: 123A90-FDL-IN-DG-40016

REV.:	DATE:	SIGNATURE:
1_S	13/03/25	G.Randi

ROSETTI MARINO SpA

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT– SAFETY SYSTEM WIRING DIAGRAMS
00–JE–22002–SH.2 OF 2

CONTRACT NO./TITLE			SCALE N/A
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 23/02/2024

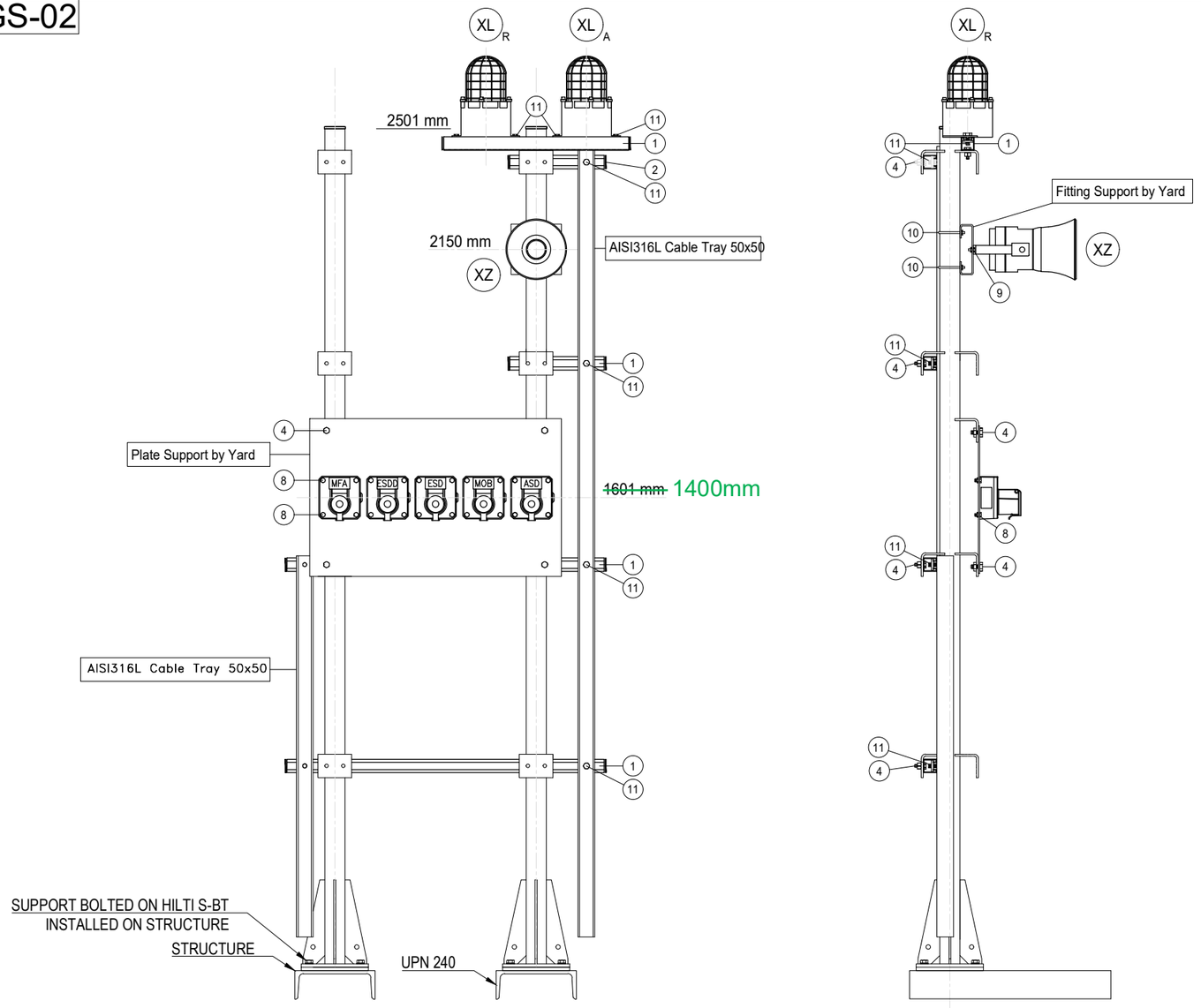
	DRAWING NO.	SHEET	REV.
A3	123A90–DDL–IN–DG–40016	013	01

File Name : 123A90-DDL-IN-DG-40016_Rev.01

FGS-02

DRAWING NO. 123A90-DDL-IN-DD-40017

REV. 00



POS.	DESCRIPTION	Q.TY
1	AISI 316L U-CHANNEL 41x41	6m
2	LDPE PLUG FOR U-CHANNEL 41x41	8
4	AISI 316L BOLT M10x35 + NUT M10 + WASHER M10	18
8	AISI 316L BOLT M8x35 + NUT M8 + WASHER M8	20
~~9~~	~~AISI 316L BOLT M6x35 + NUT M6 + WASHER M6~~	2
10	AISI 316L 2" U BOLT M8+ N.2 NUT M8 + N.2 WASHER M8 1	2
11	AISI 316L SPRING NUT M6 FOR U-CHANNEL 41X41 + BOLT M6 + WASHER M6	10

POLE	ITEM	DESCRIPTION	TAGNAME
1	XL_A	BEACON - AMBER	950-XL-04101
	XL_R	BEACON - RED	950-XL-04102
	XZ	SOUNDER	950-XZ-04101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-04101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-04101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-04101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-04101
	~~MFA~~	~~MANUAL CALL POINT CONNECTED TO FGS~~	~~950-MFA-04101~~
1 2	XL_A	BEACON - AMBER	950-XL-07101
	XL_R	BEACON - RED	950-XL-07102
	XZ	SOUNDER	950-XZ-07101
	ESDD	MANUAL CALL POINT CONNECTED TO SIS	950-ESDD-07101
	ESD	MANUAL CALL POINT CONNECTED TO SIS	950-ESD-07101
	MOB	MANUAL CALL POINT CONNECTED TO SIS	950-MOB-07101
	ASD	MANUAL CALL POINT CONNECTED TO SIS	950-ASD-07101
	MFA	MANUAL CALL POINT CONNECTED TO FGS	950-MFA-07101

NOTES

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
01	02/09/2024	VBA	LCA	DLO	ACCEPTED FOR CONSTRUCTION (AFC)
00	11/07/2024	VBA	LCA	DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE :

BASE LOAD POWER HUB (BLPH)
INSTRUMENT INSTALLATION DETAILS
FIRE & GAS DEVISES ON POLE

CONTRACT NO./TITLE			SCALE /
DRAWN VBA	CHECKED LCA	APPROVED DLO	DATE 11/07/2024

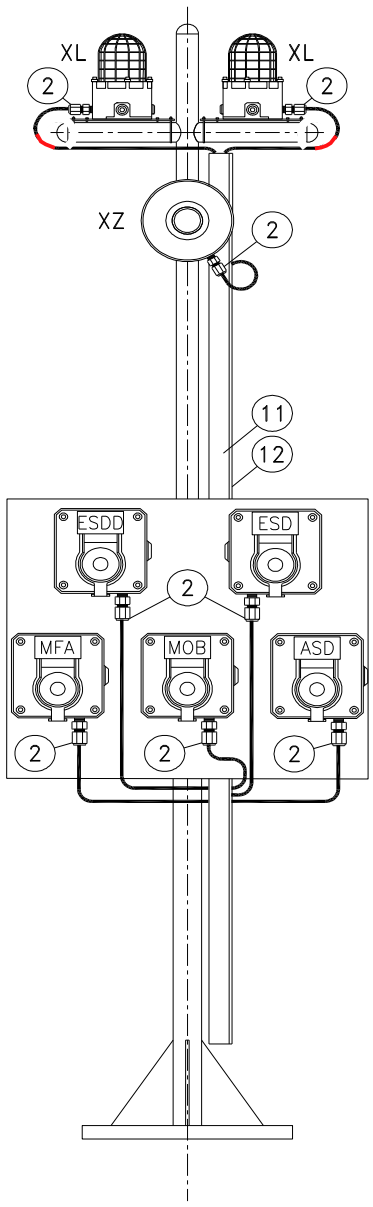
A3	DRAWING NO. 123A90-DDL-IN-DD-40017	SHEET 021	REV. 01

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-DD-40017**

REV.:	DATE:	SIGNATURE:
1_J	31/01/25	G.Randi

ROSETTI MARINO SpA

ELECTRICAL HOOK-UP FOR FIRE & GAS DEVICES



INSTRUMENT TAG	
1	950-XL-04101 (AMBER)
	950-XL-04102 (RED)
	950-XZ-04101
	950-ESDD-04101
	950-ESD-04101
	950-MFA-04101
	950-MOB-04101
	950-ASD-04101
2	950-XL-07101 (AMBER)
	950-XL-07102 (RED)
	950-XZ-07101
	950-ESDD-07101
	950-ESD-07101
	950-MFA-07101
	950-MOB-07101
	950-ASD-07101

NOTE: Mechanical support is only indicative in this drawing, for real mehanical support refer to Instrument Installation Details, doc. n. 123A90-DDL-IN-DD-40017 - Instrument Installation Details

VALID FOR CONSTRUCTION
FDL DWG: **123A90-FDL-IN-HD-40079**

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

ROSETTI MARINO SpA

POS.	NORM/STD CODE	DESCRIPTION	SIZE/ CONNECTION TYPE	Q.TY
12		Cover for cable tray, FRP, Grey Color	50 W x 10 H x 5 THK	3 mt
11		Perforated cable tray, FRP, Grey Color	50 W x 50 H x 5 THK	3 mt
2		Nickel Plated Brass Double Compression Cable Gland Ex-d/e IIC (or IIB + H2) T1	M20	7

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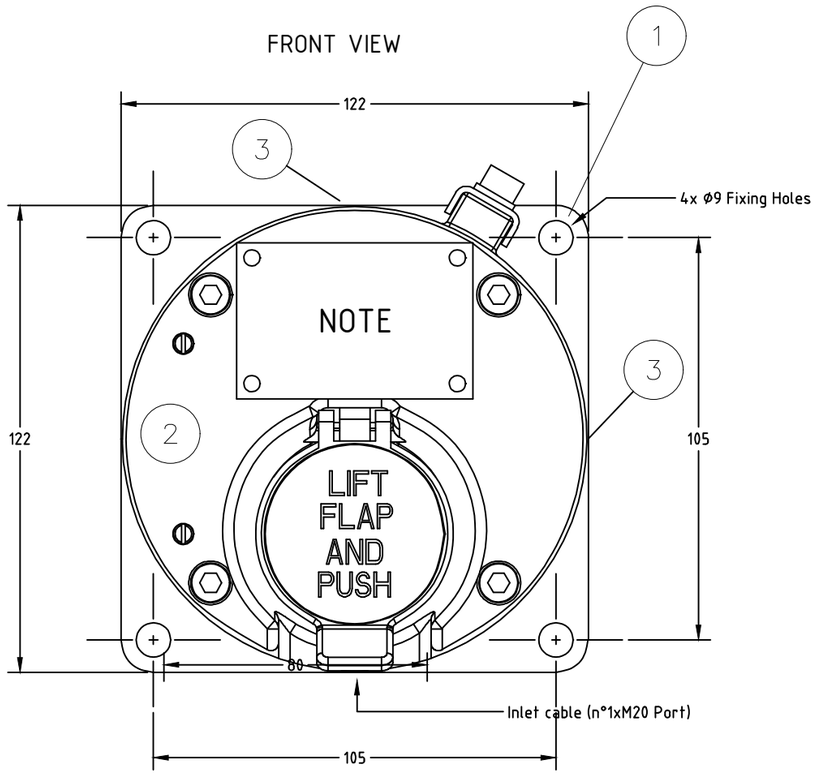
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

ITEM	DESCRIPTIONS	NR
1	Manual Call Point (Push Button) (Yellow), MEDC SM87PBLSD1B1ROYHDYZ	1
2	Stainless Steel Name Plate	1
3	Stop Plug M20 Ex d AISI 316	2
4		
5		
6		
7		
8		
9		
10		

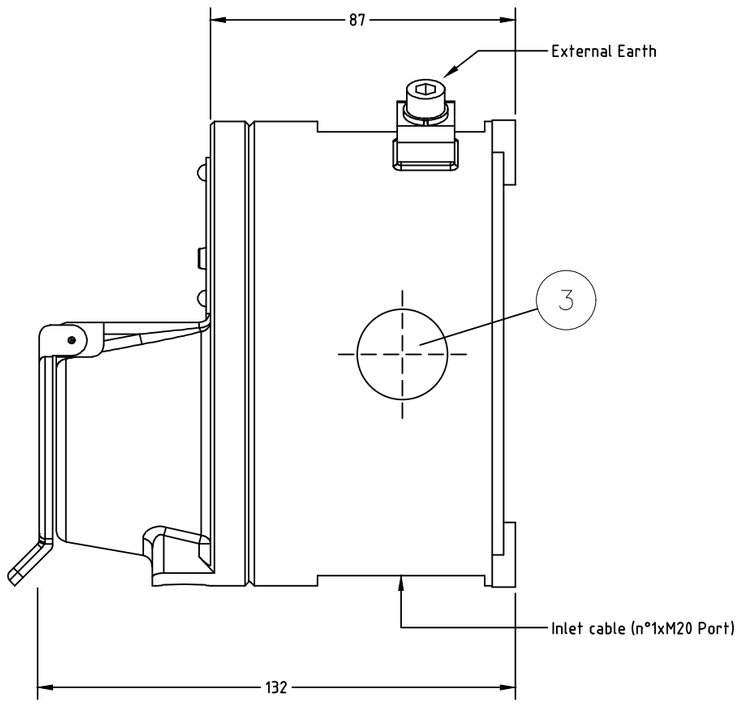
INSTALLATION QUANTITY

20

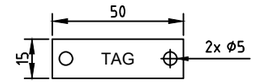
FRONT VIEW



SIDE VIEW



2 STAINLESS STEEL NAME PLATE DETAILS

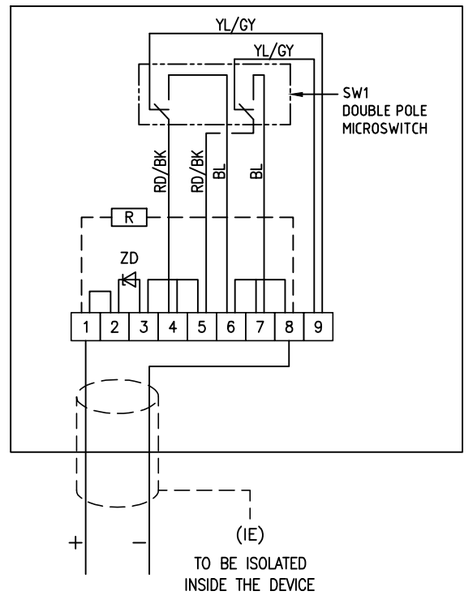


NOTE 5

WIRING

TERMINAL STRIP

ZD= ZENER 1N5339B 5.6V
R= 36 KOhm



NOTE

Q.TY	DUTY LABEL
5	ABANDON ACTIVATION
5	MAN OVER BOARD ACTIVATION
5	EMERGENCY SHUTDOWN ACTIVATION
5	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW)

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

SCALE : NTS

A3

DRAWING NO. 1724000821-IN-DA-00003

SHEET 017

REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

POS.	TAG NUMBER
1	950-ASD-01101
2	950-ASD-03101
3	950-ASD-04101
4	950-ASD-06101
5	950-ASD-07101
6	950-MOB-01101
7	950-MOB-03101
8	950-MOB-04101
9	950-MOB-06101
10	950-MOB-07101
11	950-ESD-01101
12	950-ESD-03101
13	950-ESD-04101
14	950-ESD-06101
15	950-ESD-07101
16	950-ESDD-01101
17	950-ESDD-03101
18	950-ESDD-04101
19	950-ESDD-06101
20	950-ESDD-07101

FORES ENGINEERING

CROSSWIND

ROSETTI MARINO

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	13/01/25	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
02	10/10/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
01	03/09/24	DB	MO	SM	ACCEPTED FOR CONSTRUCTION (AFC)
00	08/07/24	DB	MO	SM	ISSUE FOR REVIEW (IFR)

TITLE : BASE LOAD POWER HUB (BLPH)
GENERAL ARRANGEMENT
MANUAL CALL POINT (PUSH BUTTON TO SIS) (YELLOW) – TAG

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

A3 | DRAWING NO. 1724000821-IN-DA-00003 | SHEET 018 | REV. 03

F.to UNI A3: 420mmx297mm

File Name : 1724000821-IN-DA-00003 Rev. 03

PUSH BUTTON TO SIS

POS.	TAG NUMBER	SERVICE	DUTY LABEL
1	950-ASD-01101	FZ-01 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
2	950-ASD-03101	FZ-03 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
3	950-ASD-04101	FZ-04 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
4	950-ASD-06101	FZ-06 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
5	950-ASD-07101	FZ-07 ABANDON SHUTDOWN ACTIVATION	ABANDON ACTIVATION
6	950-MOB-01101	FZ-01 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
7	950-MOB-03101	FZ-03 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
8	950-MOB-04101	FZ-04 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
9	950-MOB-06101	FZ-06 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
10	950-MOB-07101	FZ-07 MAN OVER BOARD ACTIVATION	MAN OVER BOARD ACTIVATION
11	950-ESD-01101	FZ-01 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
12	950-ESD-03101	FZ-03 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
13	950-ESD-04101	FZ-04 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
14	950-ESD-06101	FZ-06 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
15	950-ESD-07101	FZ-07 ESD-1 PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN ACTIVATION
16	950-ESDD-01101	FZ-01 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
17	950-ESDD-03101	FZ-03 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
18	950-ESDD-04101	FZ-04 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
19	950-ESDD-06101	FZ-06 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION
20	950-ESDD-07101	FZ-07 ESD-1D PUSH BUTTON ACTIVATION	EMERGENCY SHUTDOWN DEPRESSURIZATION ACTIVATION

File: 1724000821-IN-DS-00004-02.xlsx
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SM87BG & SM87PB manual call point range

Ex d, Ex ia, weatherproof



Overview

These manual fire alarm, emergency shutdown break-glass and pushbutton units have been designed for the most arduous environmental conditions.

The units are both easy to install and maintain. Intrinsically safe Ex ia and flameproof Ex d versions of each model are available.

A choice of either stainless steel or alloy makes the range suitable for either the offshore or onshore industries. Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 0, Zone 1 and Zone 2 use*
- ATEX certified
- UL listed for USA and Canada (SM87PBL only). Class I, Div 1, Groups C & D
- ULC certified (SM87PBL only) for Class I, Zone 1 Groups C & D
- CSA certified
- IECEx certified
- Brazilian (INMETRO) certified
- Russian Fire certified
- PESO certified (Ex d only)
- SIL 2 certified (SM87PB only)
- IP66 and IP67
- DNV type approval (IEC 60945) (SM87PB only)
- Certified temperature: –55°C to +70°C*
- Stainless steel or marine grade alloy
- Robust yet lightweight
- Easy to maintain

*Model dependent

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Certifications

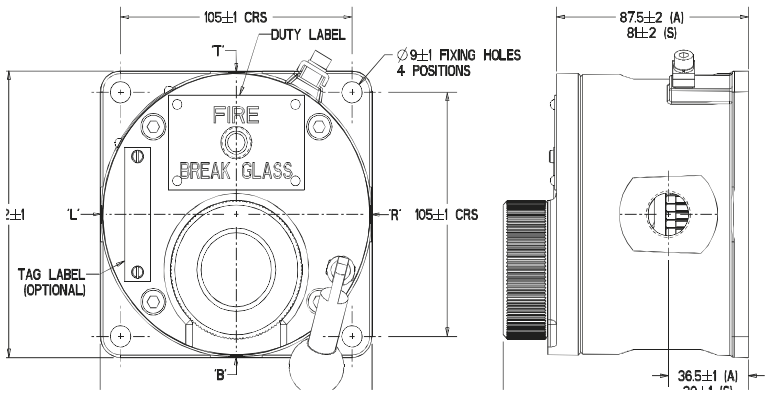
ATEX Ex d	Cert. no. Baseefa03ATEX0075. ATEX Approved Ex II 2GD Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67
ATEX Ex ia	Cert no. Baseefa 02ATEX0152X. ATEX Approved Ex II 1GD Certified to: EN60079-0, EN60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
IECEx Ex d	Cert. no. IECEx BAS 09.0060 Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°/T100°C Db. IP66/IP67
IECEx Ex ia	Cert. no. IECEx BAS 10.0033X Certified to: IEC60079-0, IEC60079-11, Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
UL	Listing no. E186629 UL listed to Class 1, Div 1. Groups C & D. (SM87PBL)
ULC	Cert. no. 20091023-E320282 ULC certified for Class I, Zone 1 Groups C & D (SM87PBL)
CSA Explosion proof	Class 1, Div 1 & 2. Group D Ex d IIC T5/T6 Gb
CSA Intrinsically safe	Class 1, Div 1 & 2. Groups A-D
INMETRO Ex d	Ex db IIC T5/T6 Gb
Type Approvals	DNV (IEC 60945) (Stainless Steel SM87PB only)
SIL	SM87PB only - SIL2 Certification to IEC61508. Cert no. 20151118-4786827453
CCC	Ex d IIC T5/T6 Gb, Ex tD A21 IP66/IP67 T85°C/T100°C

Specifications

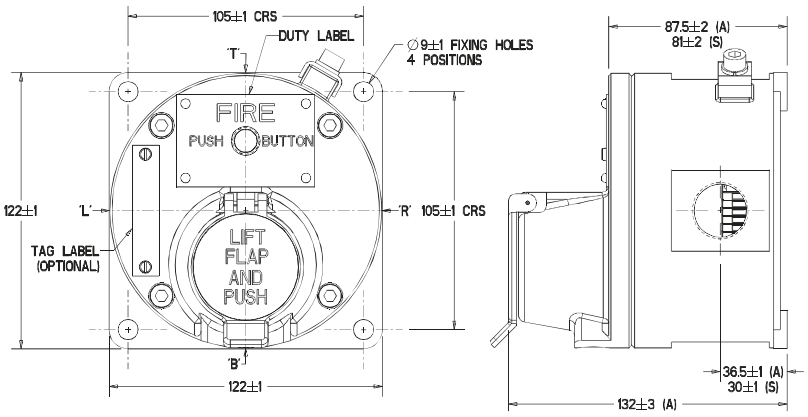
Material	Grade 316 ANC4B stainless steel or LM 25 TF marine grade alloy	
Finish	Paint finish as standard or to customer specification	
Voltage	Ex d 24V a.c./d.c. Ex ia 28V	
Rating	2A	
Switches	2 pole c/o, wired to terminals Optional up to 4 pole (UL version 2 pole only)	
Optional indicator	A red high intensity LED can be fitted for alarm indication As standard the LED is not provided with over current protection. The forward current (If) should be limited to 20mA	
Certified temp	Ex d* Ex ia* UL CSA Explosion proof - Class 1, Div 1 & 2. CSA - Ex d IIC CSA Intrinsically safe - Class 1, Div 1 & 2 *Note: includes ATEX, IECEx & INMETRO versions	–55°C to +70°C. –55°C to +60°C –20°C to +55°C (LED version only) –40°C to +70°C, –20°C to +55°C (LED version only) –50°C to +55°C –55°C to +70°C –50°C to +40°C
Weight	3·8 kg. steel (approx.) or 2.5 kg. alloy (approx)	
Ingress protection	IP66 & IP67. SM87PB IP68 (35m for 40 hours)	
Entries	Up to 4 x M20 or M25 ISO Ex d/Ex ia Up to 4 x ½" or ¾" NPT UL Stainless steel version comes with two entries as standard. Units ordered with a single entry ordering code are supplied with 2x entries inc. plug on the opposite side	
Terminals	Will accept up to 1·5mm² cable	
Resistor values	470R minimum (d.c. & I.S. units only)	

General arrangement drawing (all dimensions in mm)

Break glass



Push button



Both the Ex ia units and the Ex d units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

Unit	Model	Material	Certification	Entries	Duty label	Tag label	Options	Finish
SM87	PBL	S	D	1B1R	O	Y	HD	Y

Material*

	Code
Stainless steel	S
Alloy	A

*UL version only available in alloy

Model*

	Code
Breakglass latching	BGL
Lift flap breakglass latching	LBGL
Push button latching key reset	PBL
Push button only momentary action	PBM

*UL and ULC versions only available in PBL model

Certification

	Code
Ex ia	I
Ex d	D
IECEx - Ex ia	IJ
IECEx - Ex d	DJ
UL	UL
ULC	UC
CSA - Intrinsically Safe	IC
CSA - Ex proof	DC
INMETRO - Ex d	DM
CCC	DQ

Entries

	Code
M20	1
M25	2
½" NPT	3
¾" NPT	4
Other	5
Position	
Top	*T
Bottom	*B
RHS	*R
LHS	*L

*Prefix position with size code i.e. 1T1B = M20 Top and Bottom

Duty label

	Code
Fire breakglass	1
Push button	2
Fire push button	3
ESDO abandon	4
Burning house logo	5
Fire/FEU	6†
Other	O*
None	N

*Please specify
†This option must be used when ordering a red callpoint for ULC Fire Alarm applications

Tag label

	Code
Required	Y*
Not required	N

*Please specify

Options

	Code
Not required	N
LED	A
Resistor series	G*
Resistor EOL	H*
Diode	D*
3 pole c/o switch	T
4 pole c/o switch	F

*Please specify

Finish

	Code
Red	R
Blue	B
Yellow	Y
Yellow/black stripes	X
Special	S*

*Please specify

Section 7 MECHANICAL COMPLETION STATUS INDEX - MECHANICAL DISCIPLINE

NOT APPLICABLE

Section 8 MECHANICAL COMPLETION STATUS INDEX - TELECOMMUNICATION DISCIPLINE

NOT APPLICABLE

Section 9 MECHANICAL COMPLETION STATUS INDEX - HVAC DISCIPLINE

NOT APPLICABLE

Section 10 MECHANICAL COMPLETION STATUS INDEX - PIPING DISCIPLINE

NOT APPLICABLE

Section 11 MECHANICAL COMPLETION INDEX - SAFETY DISCIPLINE

NOT APPLICABLE

Section 12 FAT / VENDOR REPORTS

NOT APPLICABLE

Section 13 MECHANICAL COMPLETION CHANGES / MARK-UPS

NOT APPLICABLE