BASE LOAD POWER HUB (BLPH)

Electrical Typical Installation Details

Power System & Cable Installation

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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
FRONT PAGE

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

SHEET 001

REV. 02

F.to UNI A3: 420mmx297mm

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

REV.	SHEET NUMBER	DESCRIPTION	REF. CODE
02	001	FRONT PAGE	
02	002	SUMMARY and GENERAL NOTES	
02	003	POWER TYPICAL DETAILS ELECTRIC MOTOR	P01
02	004	POWER TYPICAL DETAILS POWER SOCKET FLOOR MOUNTED	P03/P03S/P03W
02	005	POWER TYPICAL DETAILS LOCAL PANEL/JB FLOOR MOUNTED	P05
02	006	POWER TYPICAL DETAIL CABLE GLAND INSTALLATION FOR E&I CABLES	C01
02	007	CABLES INSTALLATION SYSTEM IDENTIFICATION FOR POWER CABLES	C02
02	008	CABLES INSTALLATION SYSTEM IDENTIFICATION FOR CONTROL CABLES	C04
02	009	CABLES ARRANGEMENT IN CABLE LADDER/TRAY FOR ELECTRICAL CABLES	C05A
02	010	MAXIMUM CABLE TIES/CLEATS SPACING TYPICAL INSTALLATION DETAILS CABLE FASTENING IN TRAYS/LADDER	C06
02	011	BLANK SHEET	
02	012	BLANK SHEET	

02

GENERAL NOTES

1) AS MATERIAL OF THE EQUIPMENT SUPPORTS AND CABLE TRAYS, IN ADDITION TO THE PAINTED CARBON STEEL SUPPORTS, USE U-CHANNEL IN AISI 316L STAINLESS STEEL ON BOTH OUTSIDE AND INSIDE TECHNICAL ROOMS.
2) OUTSIDE AND INSIDE TECHNICAL ROOMS WILL BE INSTALLED AISI 316L STAINLESS STEEL CABLE WAYS.
3) INSTALLATION HEIGHTS OF THE EQUIPMENTS AND CABLE WAYS ARE INDICATED IN THE RESPECTIVE LAYOUTS.
4) ARRANGEMENTS SHOWN ON THIS DOCUMENT ARE GUIDELINES AND SHOULD BE MODIFIED TO SUIT THE LOCATION.
5) PROVIDE NYLON SHEET BETWEEN AISI 316L STAINLESS STEEL AND CARBON STEEL ITEMS TO AVOID GALVANIC CORROSION.
6) SHAPE, DIMENSION AND QUANTITY OF SUPPORTS AND ACCESSORIES FOR INSTALLATION ARE INDICATIVE ONLY.
7) WHEN CABLE GLAND IS USED, ALWAYS ENSURE TO LEAVE AS MUCH CABLE RICHNESS AS POSSIBLE INSIDE JB AND ANY OTHER TYPE OF ENCLOSURE.
8) ALWAYS ENSURE TO LEAVE ENOUGH CABLE RICHNESS FOR FUTURE MAINTENANCE. THIS IS NOT APPLICABLE FOR EARTHING AND BONDING CONDUCTORS (GREEN/YELLOW) SINCE THIS LINK SHOULD BE AS DIRECT AS POSSIBLE. IT SHOULD ALSO NOT BE APPLIED TO SINGLE CORE CABLES.
9) IN THE CASE OF “INCREASED SAFETY” (Ex e) JBs, IN ORDER NOT TO EXCEED THE TEMPERATURE CLASS T OF THE CERTIFICATE, IT IS RECOMMENDED THAT THE MAXIMUM LENGTH OF EACH CONDUCTOR PER TERMINAL TO BE CONNECTED BE HALF THE LONGEST DIAGONAL OF THE JB. (IEC 60079-14:2013 CLAUSE 15.2).
10) CABLE ROUTING TO THE ITEM/EQUIPMENT SHALL BE DONE IN ORDER TO PREVENT DROP-OFF (CABLE SHALL ROUTE LOWER THAN CABLE GLAND SO THAT ANY DROP OF CONDENSATION OR WATER DUE TO ATMOSPHERIC CAUSES WILL DRAINS DOWNWARDS).
11) ALL UNARMOURED CABLES SHALL BE MECHANICAL PROTECTED FOR THE ENTIRE CABLE LENGTH

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
SUMMARY and GENERAL NOTES

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

SHEET 002

REV. 02

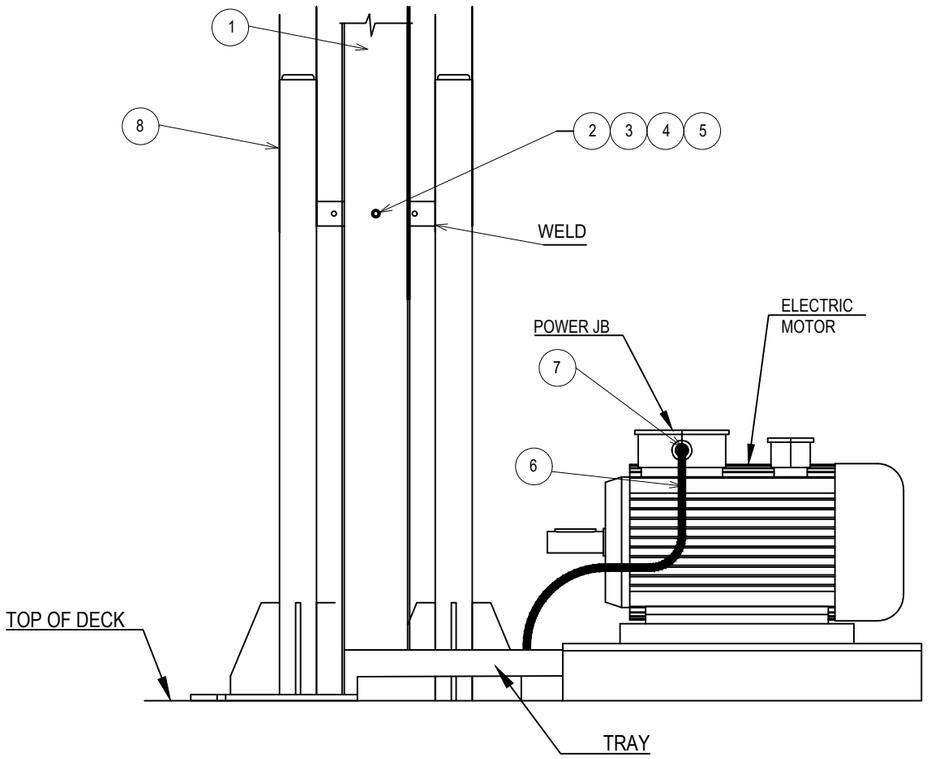
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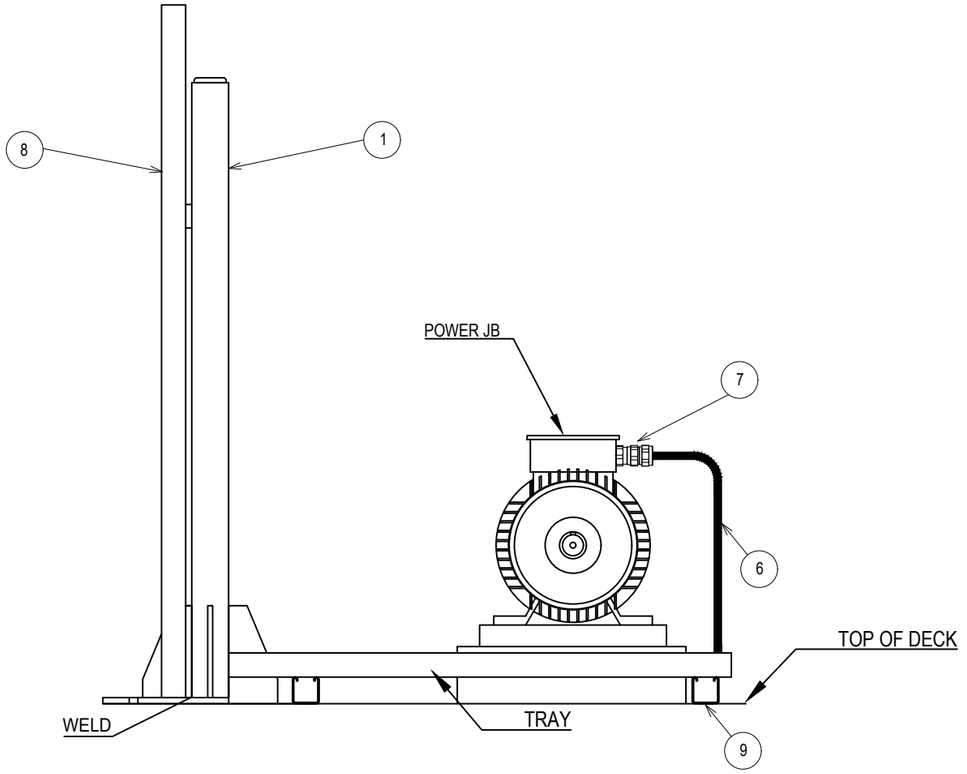
F.to UNI A3: 420mmx297mm

P01

POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	CABLE LADDER WITH COVER	AISI 316L			
2	DOUBLE SLOT CROWED HEAD SCREW	AISI 316L	M6x30		
3	NYLON WASHER		M6		
4	GROWER SPRING WASHER	AISI 316L	M6		
5	NUT FOR CHANNEL WITH SPRING	AISI 316L	M6		
6	UNARMOURED CABLE				
7	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE	NICK.PL.BRASS		2	
8	PROFILE SUPPORT	PAINTED C.S.			
9	SINGLE U-CHANNEL PERFORATED	AISI 316L	41x41x2		

02





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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS ELECTRIC MOTOR

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

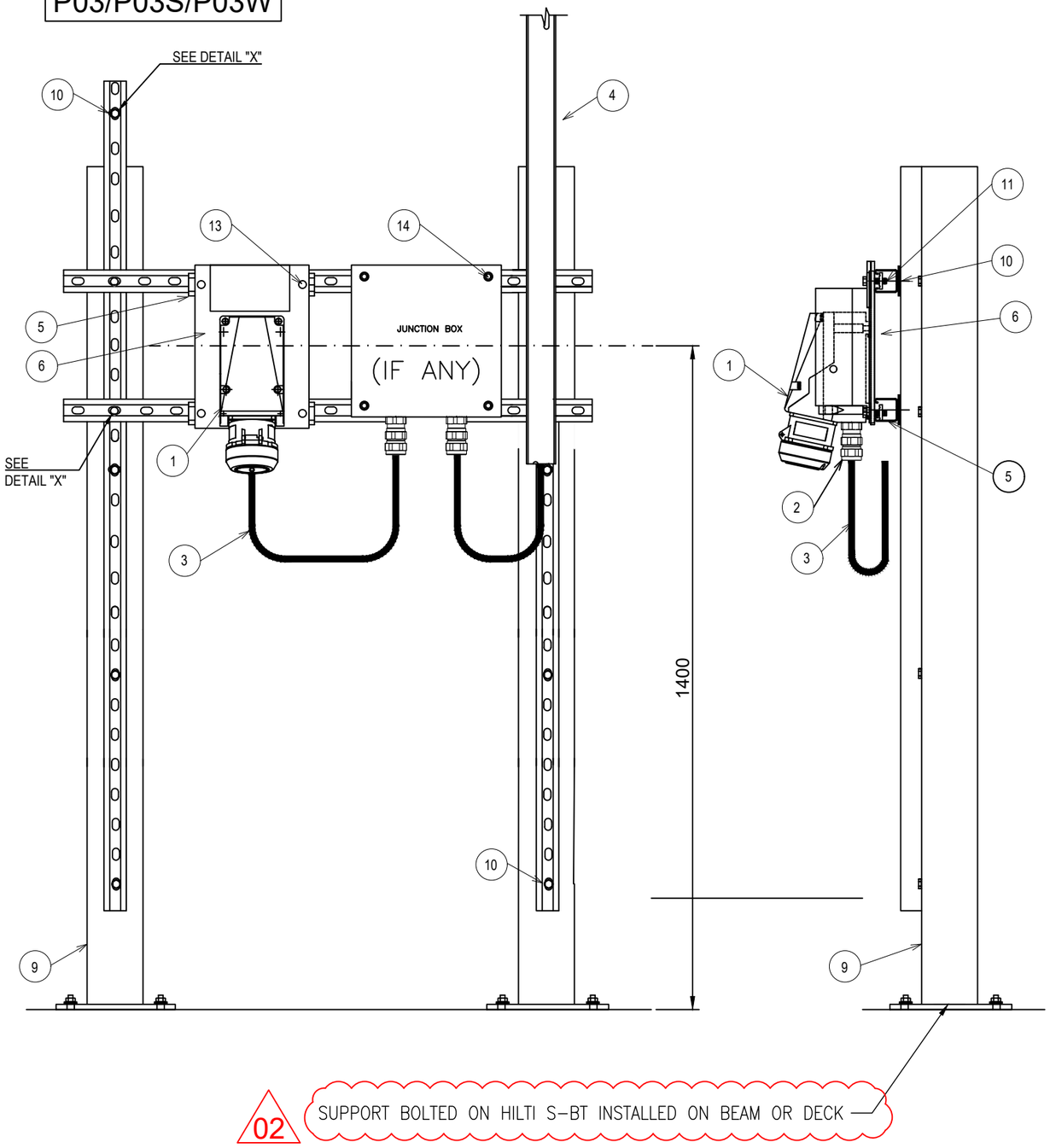
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REV. 02

F.to UNI A3: 420mmx297mm

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

P03/P03S/P03W

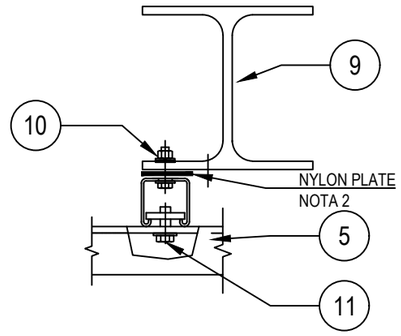


02 SUPPORT BOLTED ON HILTI S-BT INSTALLED ON BEAM OR DECK

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

02

DETAIL "X"



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

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

CROSSWIND

ROSETTI MARINO

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

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

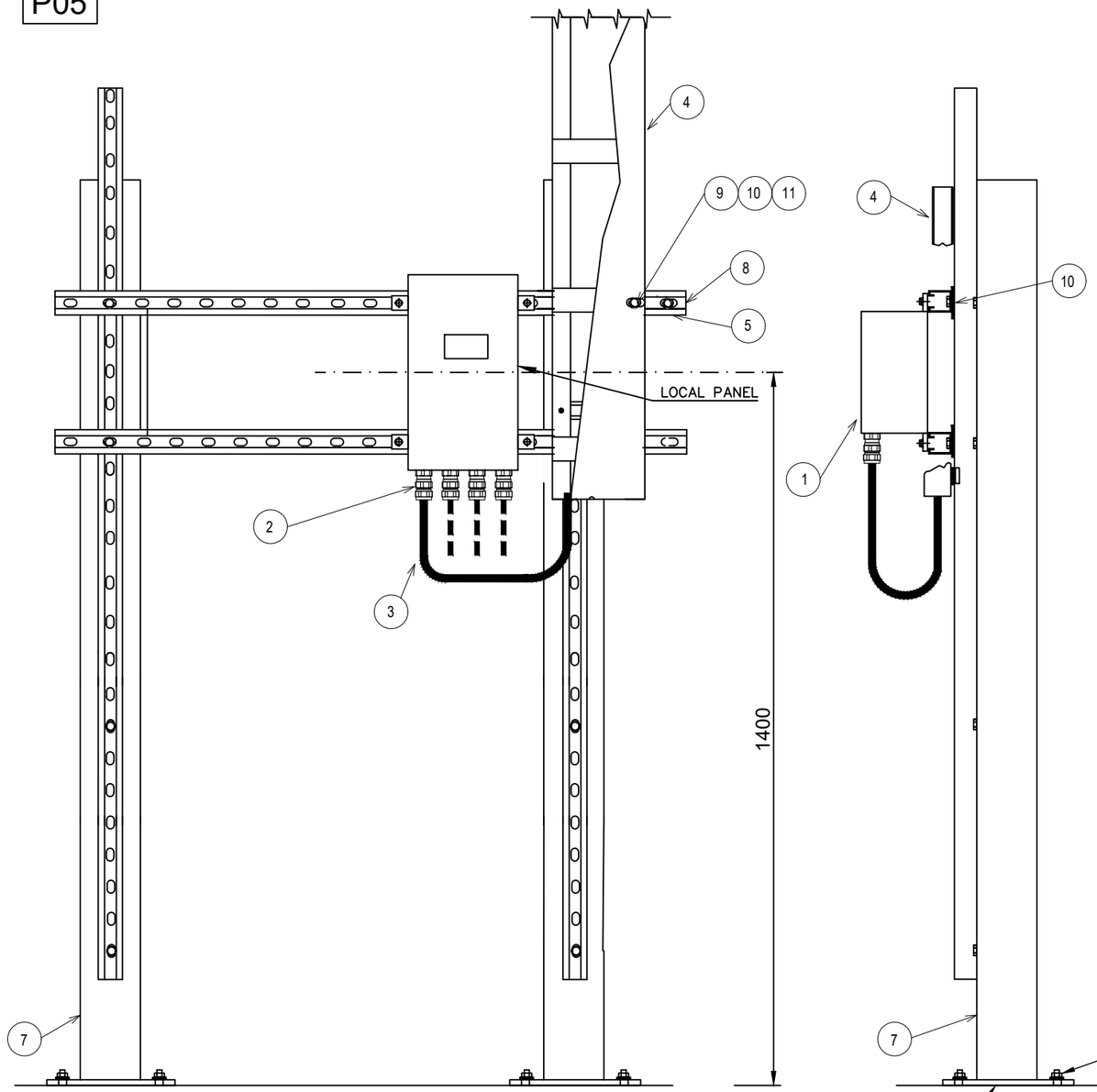
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REV. 02

F.to UNI A3: 420mmx297mm

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

P05



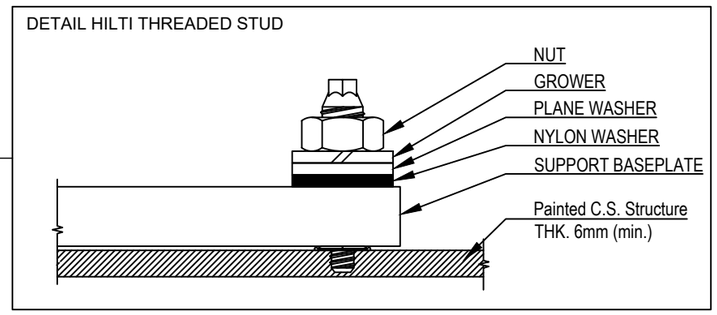
POS.	DESCRIPTION	MATERIAL	SIZE	Q.TY	NOTE
1	LOCAL PANEL / JB	316 STAINLESS STEEL OR GRP		1	
2	SINGLE SEAL CABLE GLAND FOR UNARMOURED CABLE				
3	UNARMOURED CABLE				
4	CABLE LADDER WITH COVER	AISI 316L			
5	SINGLE U-CHANNEL PERFORATED ON NO.3 SIDE	AISI 316L			
7	PROFILE SUPPORT	PAINTED C.S.		2	
8	PLUG FOR U-CHANNEL	LPDE			
9	BOLT, LARGE PLANE WASHER, PLANE WASHER AND NUT.	AISI 316L			
10	ROUND HEAD SCREW WITH SQUARE NECK COMPLETE WITH PLANE WASHER AND NUT	AISI 316L			
11	BOLT, LARGE FLATE WASHER AND NUT FOR U-CHANNEL WITH SPRING	AISI 316L	M12x30		

02

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

02

SUPPORT BOLTED ON HILTI S-BT INSTALLED ON WELDED BEAM:



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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAILS LOCAL PANEL/JB FLOOR MOUNTED

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

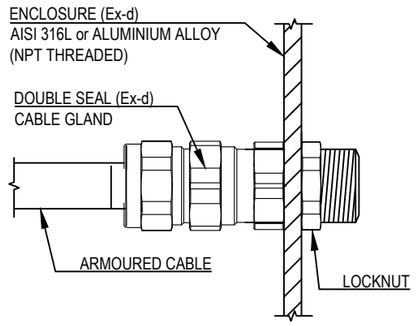
A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 005 | REV. 02

F.to UNI A3: 420mmx297mm

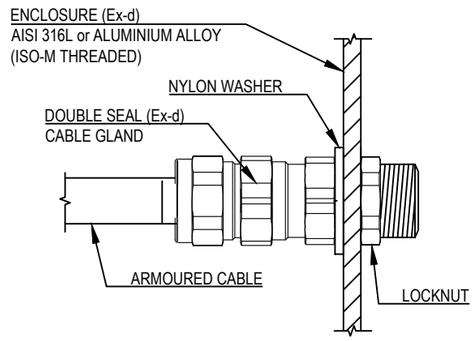
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C01

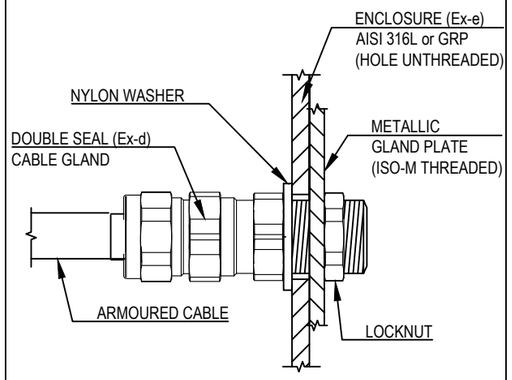
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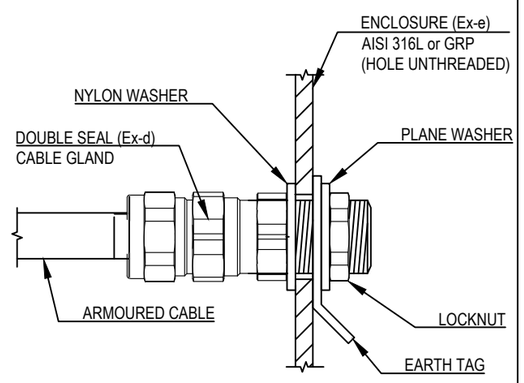
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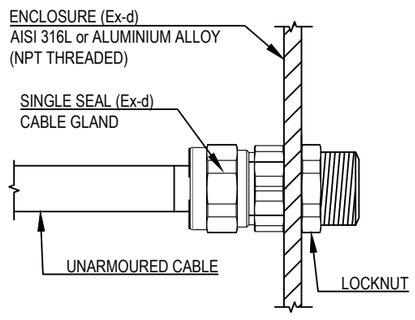
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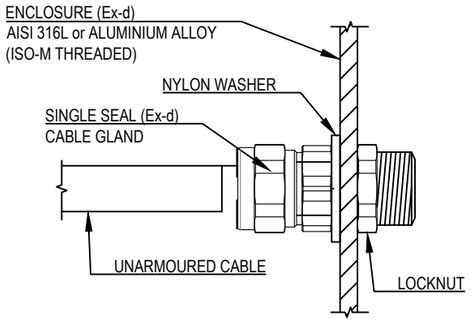
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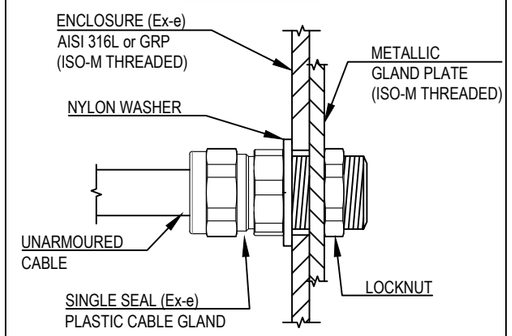
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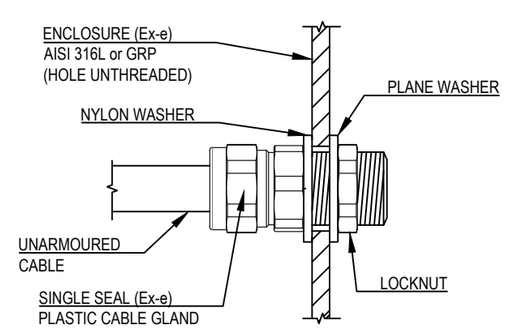
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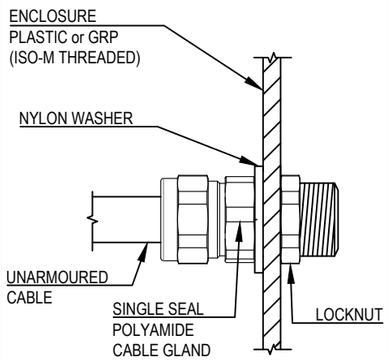
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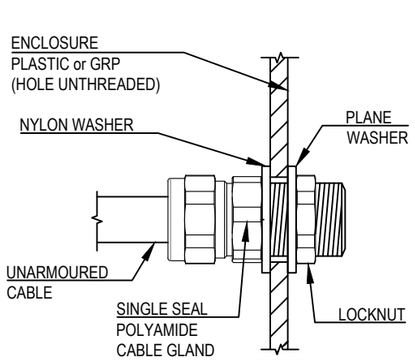
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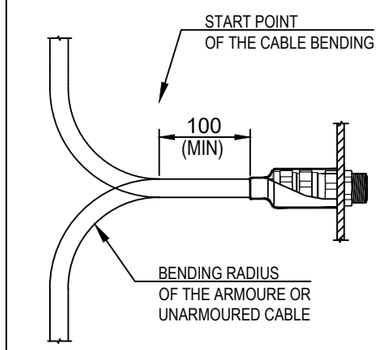


DETAIL "9"



DETAIL "10"





NOTES:

1) IF A REDUCTION OR ADAPTAR ARE NEEDED, ONLY ONE SHALL BE ALLOWED.
2) FOR GRP JUNCTION BOXES AND EQUIPMENTS CONNECTED BY ARMOURED CABLE, CABLE GLAND SHALL BE NICKEL PLATED BRASS TYPE AND GRP JUNCTION BOX AND EQUIPMENTS EQUIPPED WITH NICKEL PLATED CABLE GLAND PLATE. IF THE CABLE IS NON-ARMOURED, CABLE GLAND MAY BE POLYAMIDE TYPE.
3) SINGLE CORE CABLE SHALL HAVE AN EQUIPMENT ENTRY VIA NON MAGNETIC GLAND PLATE AND CONNECTING BY HDG STEEL CABLE GLAND.
4) OUTDOOR CABLE ENTRIES SHALL PREFERABLY BE FROM BOTTOM ENTRY, SIDE ENTRY SHALL BE SUBMITTED TO THE COMPANY APPROVAL. CABLE ENTRY FROM TOP IS FORBIDDEN.

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00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
POWER TYPICAL DETAIL CABLE GLAND INSTALLATION FOR E&I CABLES

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

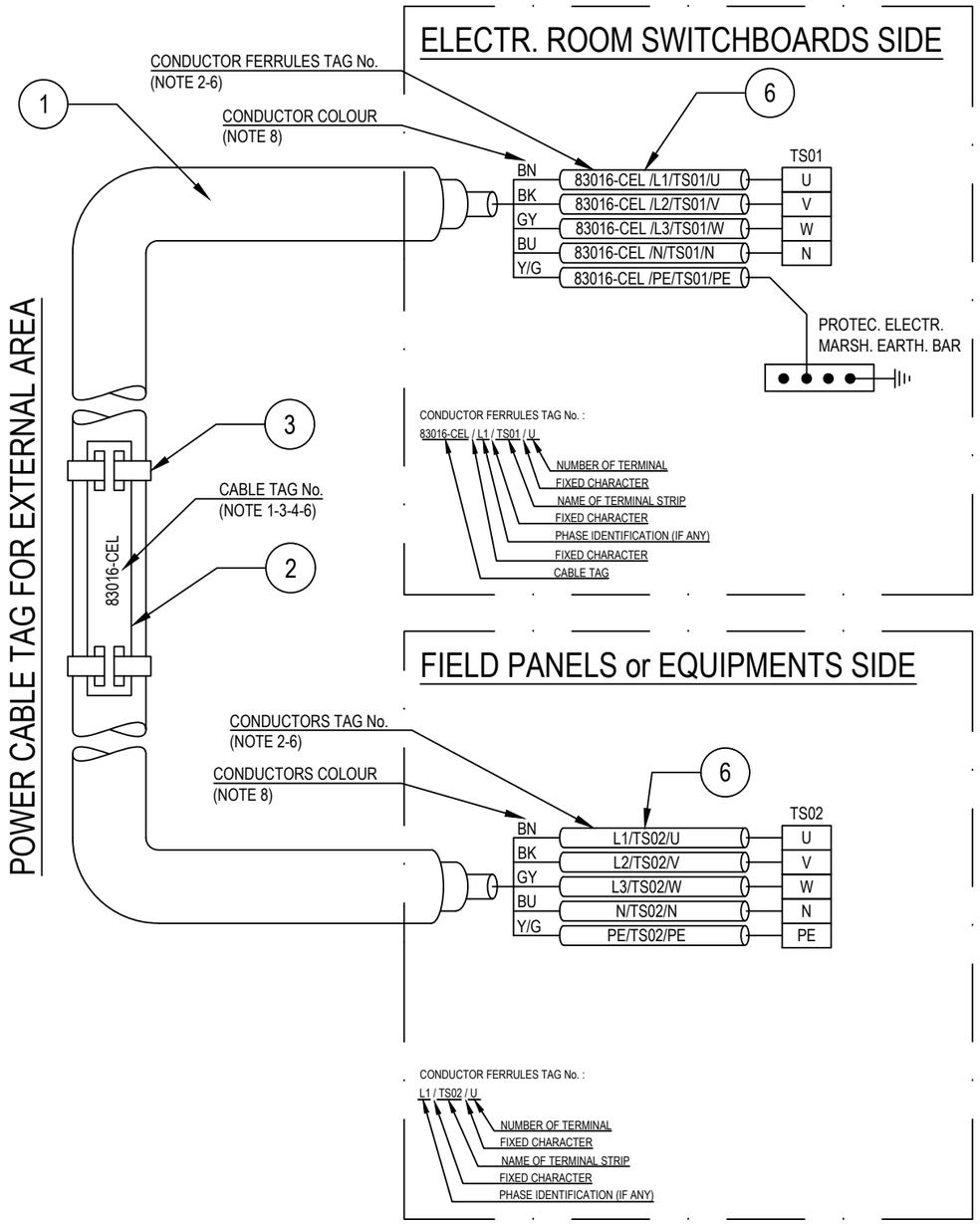
SHEET 006

REV. 02

F.to UNI A3: 420mmx297mm

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

C02



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

NOTES:

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

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

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

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

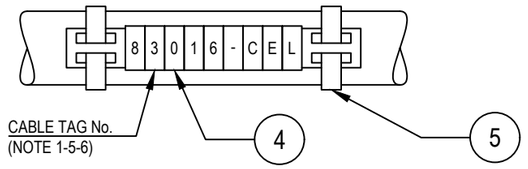
5) THE CABLE TAG FOR INTERNAL AREA SHALL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

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

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

POWER CABLE TAG FOR INTERNAL AREA



REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
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00	21/11/23	SPS	FMA/AMA	FPA/DLO	ISSUE FOR REVIEW (IFR)

CROSSWIND

ROSETTI MARINO

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

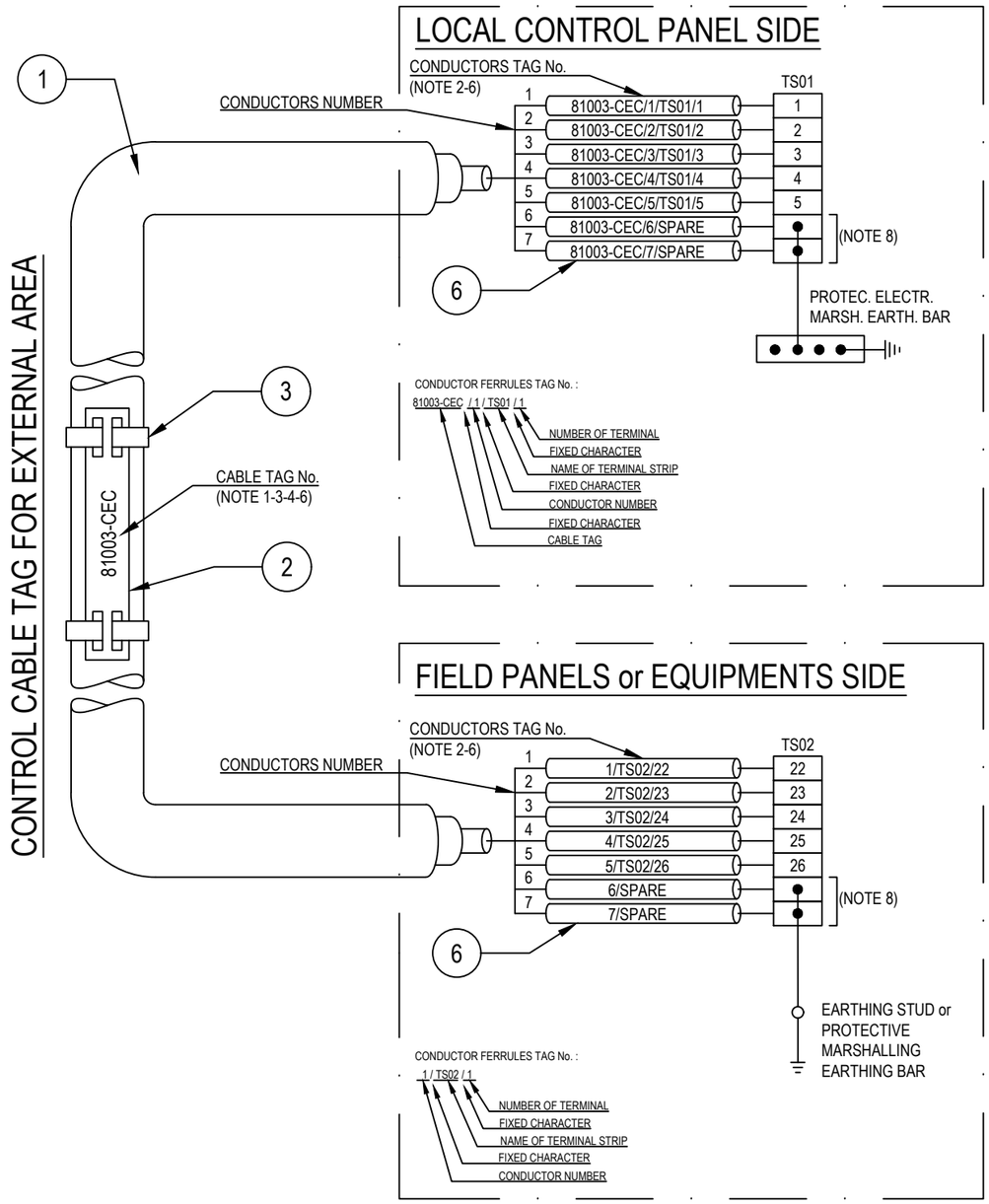
CONTRACT NO./TITLE CW-I-WP4-2023-05/HOLLANDSE KUST NOORD WIND PARK | SCALE : NTS

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

F.to UNI A3: 420mmx297mm

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

C04



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

NOTES:

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

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

3) ON CABLE TRAYS OR LADDERS, CABLES SHALL BE IDENTIFIED AT EACH END, AND EVERY 50 METERS.

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

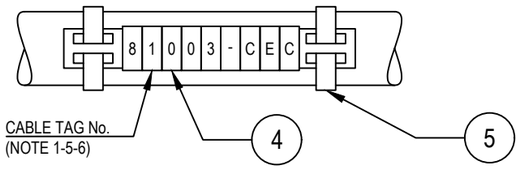
5) THE CABLE TAG FOR INTERNAL AREA SHAL BE DONE BY ENGRAVED PLASTIC SLIP ON CHARACTERS ONTO PLASTIC TIE, BLACK LETTER (H=5mm) ON WHITE.

6) CABLE AND CONDUCTOR TAG ARE INDICATIVE ONLY.

7) THE EARTHING CONNECTION OF THE ARMOUR CABLE IS NOT APPLICABILE IF THE ARMOUR IS CONNECTED TO EARTH WITH METALLIC CABLE GLAND.
   WITHIN TECHNICAL BUILDING, PROTECTIVE CONDUCTOR SHALL BE TAGGED BETWEEN FOLLOWING ITEMS:
   - PANEL (SWITCHBOARD, SWITCHGEAR, DISTRIBUTION BOARD, ETC) AND EARTH RING
   - EARTHING BOSS AND EARTH RING
   - EARTH BAR AND EARTH BAR (IF ANY).

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

CONTROL CABLE TAG FOR INTERNAL AREA



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

CROSSWIND

ROSETTI MARINO

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

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

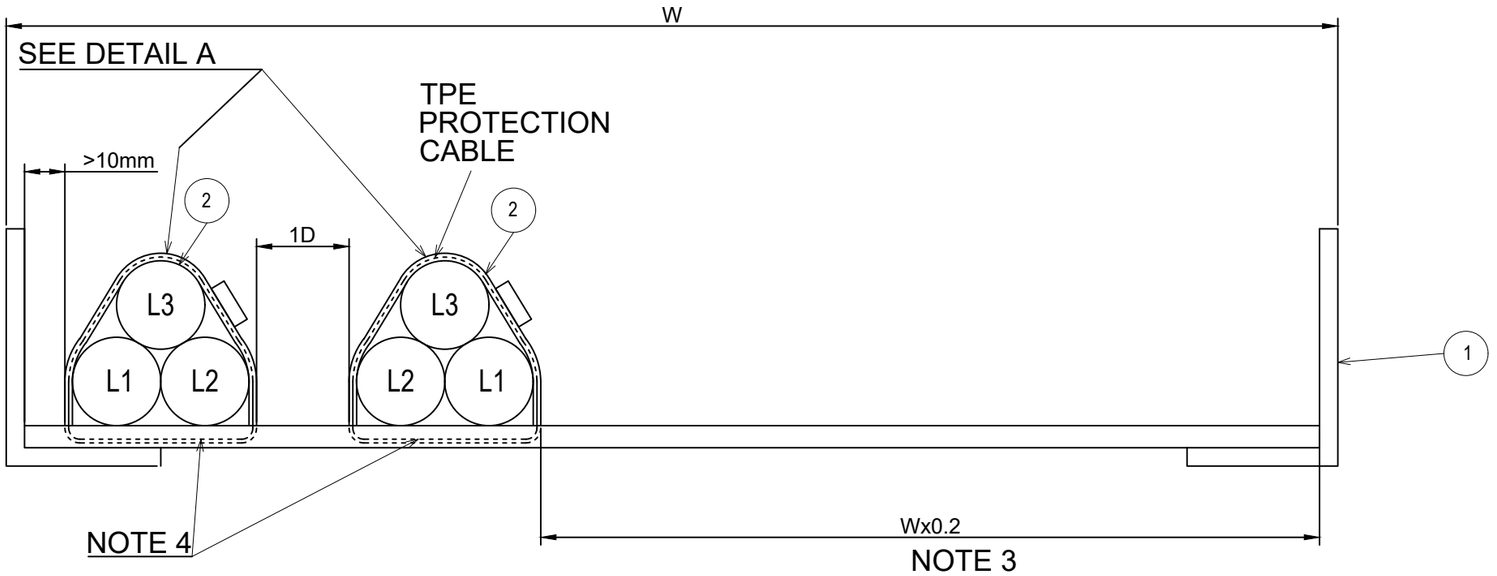
A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 008 | REV. 02

F.to UNI A3: 420mmx297mm

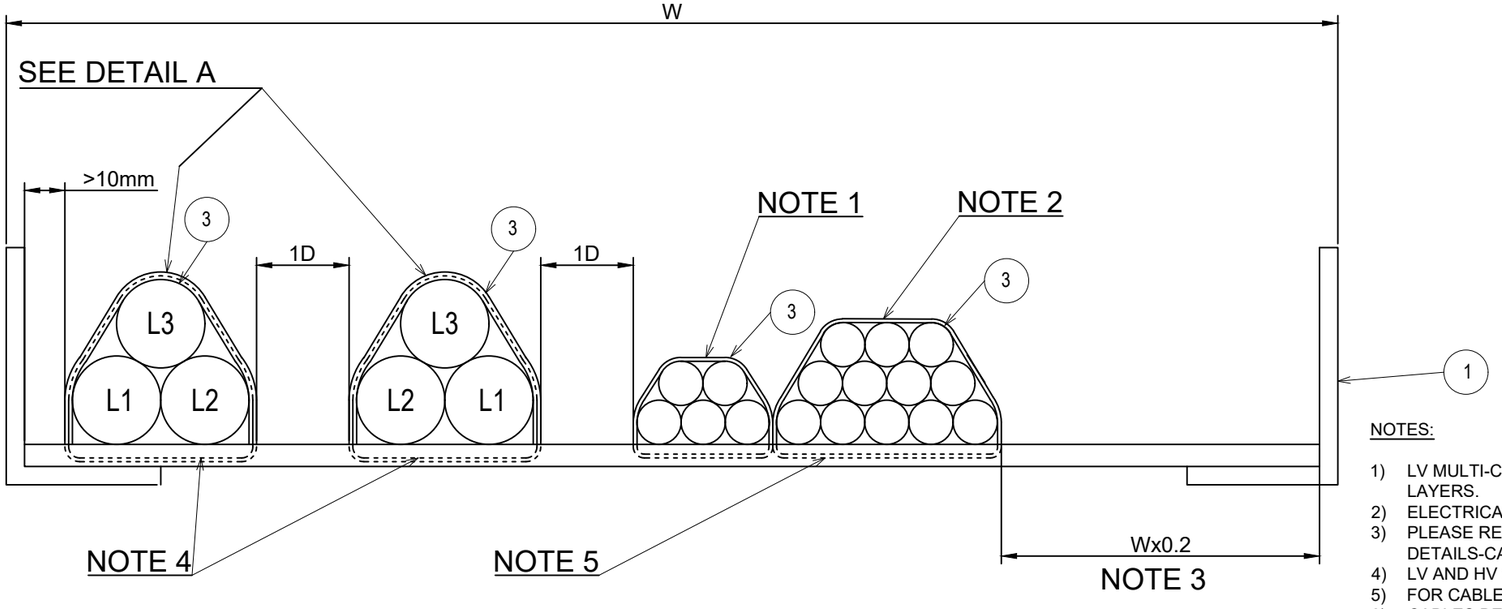
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C-05A

HV CABLETRAY

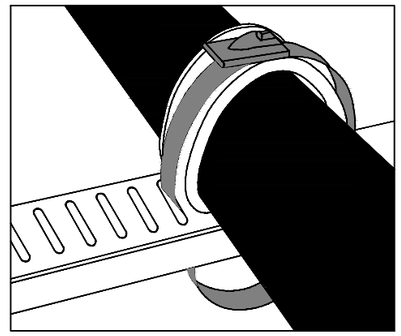


LV CABLETRAY



MATERIALS		
POS.		DESCRIPTION
1		CABLE LADDER AISI 316L
2		CABLE CLEATS STAINLESS STEEL FOR HV CABLES WITH TPE CABLE PROTECTION
3		UV RESISTANT PVC CABLE TIES
4		CABLE CLEATS STAINLESS STEEL FOR LV CABLES WITH TPE CABLE PROTECTION

DETAIL CABLE CLEATS



NOTES:

1) LV MULTI-CORE POWER CABLE (LESS THAN 120SQMM) CAN BE INSTALLED ON TWO LAYERS.
2) ELECTRICAL CONTROL CABLES CAN BE INSTALLED ON THREE LAYERS.
3) PLEASE REFER 123A90-DDL-EL-DD-20093-ELECTRICAL TYPICAL INSTALLATION DETAILS-CABLE ROUTES SYSTEM SHEET-003 FOR CABLE SEGREGATION DETAIL.
4) LV AND HV SINGLE CORE POWER CABLE INSTALLED IN TREFOIL FORMATION.
5) FOR CABLE TIES INSTALLATION SEE DETAIL "C-06" ON SH.011.
6) CABLES BETWEEN TR-200DE1 TRASFORMER AND SG-200N1 POWER CENTER HAVE TO BE PROVIDE WITH CABLE CLEATES WITH STAINLESS STEEL TYPE

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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
CABLES ARRANGEMENT IN CABLE LADDER/TRAY FOR ELECTRICAL CABLES

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 009 | REV. 02

F.to UNI A3: 420mmx297mm

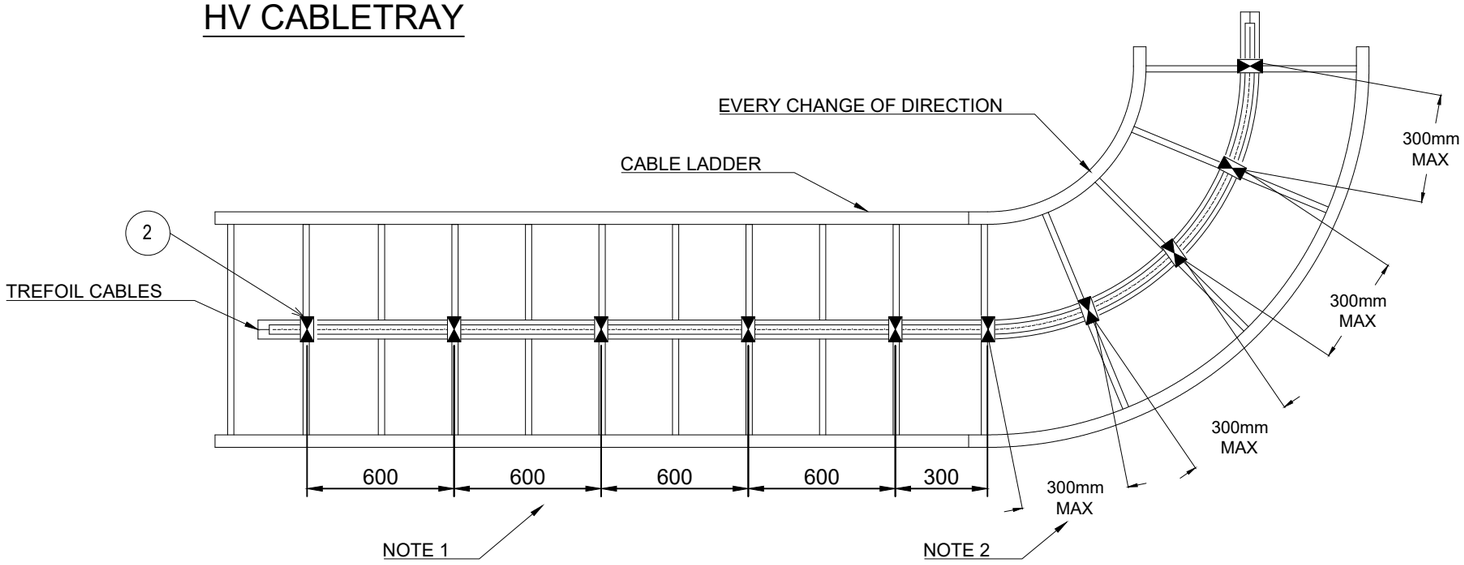
File Name : 123A90-DDL-EL-DD-20092 REV.02.DWG

C06

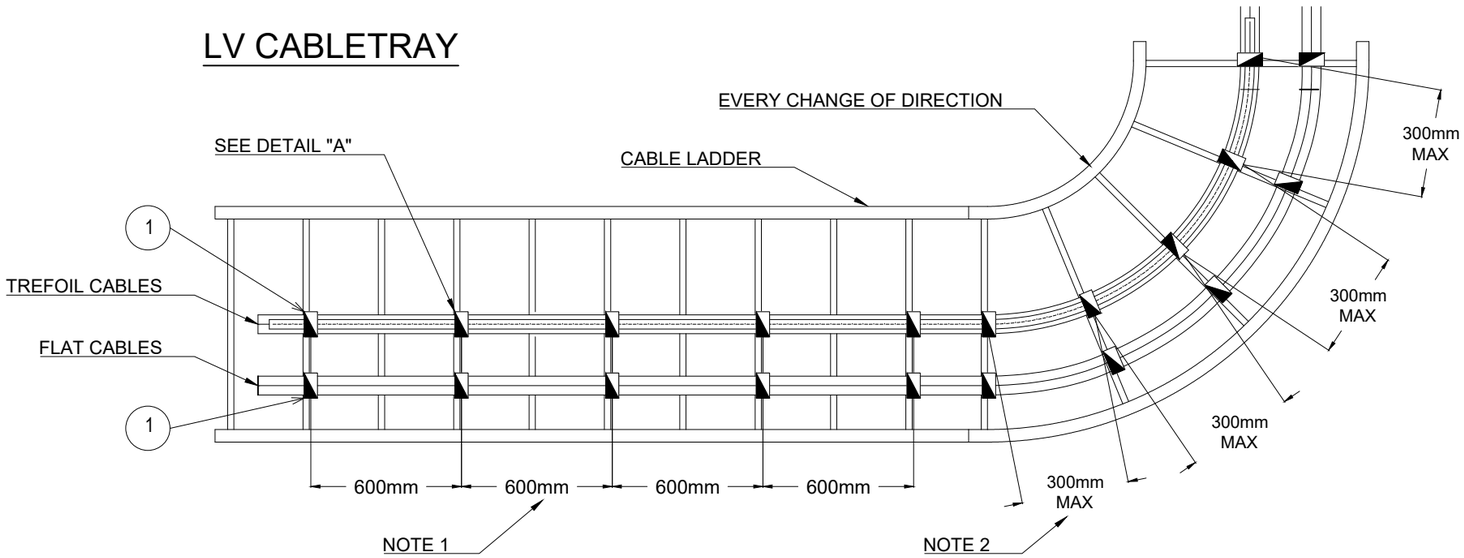
MAXIMUM CABLE TIES/CLEATS SPACING INSTALLATION DETAILS

MATERIALS		
POS.		DESCRIPTION
1		UV RESISTANT PVC CABLE TIES
2		STAINLESS STEEL DOUBLE WRAPPED CABLE CLEATS COMPLETE WITH TPE CUSHION SLEEVING

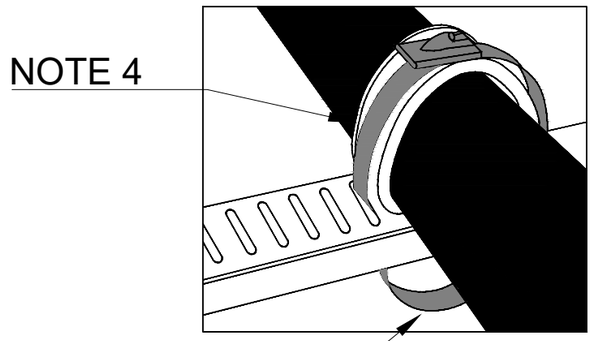
HV CABLETRAY



LV CABLETRAY



DETAIL "A" CABLE CLEATS



NOTES:

1) CABLES TIES SHALL BE HELD EVERY 600mm (CLEATS EVERY 600mm) ON HORIZONTAL RUNS.
2) CABLES SHALL BE HELD EVERY 300mm ON HORIZONTAL/VERTICAL ELBOW AND ON VERTICAL RUNS.
3) CABLE CLEATS WRAPPED TWO TIME AROUND THE CABLE RUNS.
4) TO PROTECT THE CABLE, INSTALL THE CUSHION SLEEVE BETWEEN THE CLAMP AND THE CABLE.

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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
MAXI. CABLE TIES SPACING TYPICAL INSTALLATION DETAILS CABLE FASTENING IN TRAYS/LADDER

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

A3 | DRAWING NO. 123A90-DDL-EL-DD-20092 | SHEET 010 | REV. 02

F.to UNI A3: 420mmx297mm

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

BLANK SHEET

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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
BLANK SHEET

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

SHEET 011

REV. 02

F.to UNI A3: 420mmx297mm

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

BLANK SHEET

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

CROSSWIND

ROSETTI MARINO

TITLE : BASE LOAD POWER HUB (BLPH)
ELECTRICAL TYPICAL INSTALLATION DETAILS-POWER SYSTEM & CABLE INSTALLATION
BLANK SHEET

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

SCALE : NTS

A3

DRAWING NO. 123A90-DDL-EL-DD-20092

SHEET 012

REV. 02

F.to UNI A3: 420mmx297mm

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