Base Load Power Hub (BLPH)

Technical Data Sheet (TDS) for IAC Cable Extension - Interface JB + Solar PV Power cable JB

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01	23/07/2024	Accepted for Construction (AFC)	NLK	FMA/AMA	FPA/DLO
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Rev.	Date	Description	Prepared	Reviewed	Approved

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Revision / Change Log

Rev.	Description
00	ISSUE FOR REVIEW (IFR)
01	ACCEPTED FOR CONSTRUCTION (AFC)

HOLDS LIST

No.	Description
1.	
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REFERENCE DOCUMENT AND STANDARD:

1)	Technical Specification for Electrical Requirement in Packaged Units	Doc. No. 123A90-DDL-EL-SP-20085
2)	Electrical Engineering Design-DEP Specification	DEP 33.64.10.10-Gen.
3)	Technical Query - Interface Junction Box	123A90-PML-PM-TQ-00070
4)	Technical Query - Floating Solar Power Cable Junction Box (SE4)	123A90-PML-PM-TQ-00059 Reply rev.1

NOTE

1) This document refers only to Solar PV Power cable JB

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Row	General				Rev.
1	Item	Required	Manufacturer Proposal	Comments	
2	Environmental Conditions				
3	Ambient Temperature(min/nom/max) – hourly @ +10m	-8.4 °C/ 10.5°C / 25.0°C			
4	Design Temperature	not more than 40°C Offshore (Netherlands)			
5	Relative humidity (%)	Maximum 95 %			
6	Atmospheric Pressure (nominal) – hourly @ +10m	1013.7 mbar			
7	Annual average wind speed (at 100m)	9.56 m/s			
8	Extreme Wind Speed for 1-Year Recurrence Period (at 100 m)	33.1 m/s			
9	Extreme Wind Speed for 50-Year Recurrence Period (at 100 m)	41.0 m/s			
10	Atmosphere	Marine Offshore-fixed			
11	Altitude > 1000 m (m)	not more than 1000 m			

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Row	Data Sheet for Solar PV Power Cable JB				Rev.
1	Item	Required	Manufacturer Proposal	Comments	
2	General				
3	Manufacturer	By vendor			
4	Model Number	By vendor			
5	Serial Number	By vendor			
6	Order Status	for Purchase			
7	Tag No.	JB-200E01			
8	Service	Junction Box			
9	Installation Area	Indoor			
10	Quantity	1			
11	Junction Box - Electrical Characteristics				
12	System	AC - (Alternating Current)			
13	Nominal Voltage phase to phase	800V			
14	Voltage Variation (Steady State)	±5 %			
15	Rated Frequency	50Hz			
16	Frequency Variation (Steady State)	±2 %			
17	Number of Phases	3			
18	Rated Current	630 A			
19	Rated peak withstand current for 1s	25 kA			
20	Neutral Connection	N.A.		Earthing system IT	
21	Hazardous Area Classification	Safe Area			
22	Rated Insulation Voltage	By vendor			
23	Short Circuit Level Min./Max.	By vendor			
24	Termination	Clamps			
25	Busbar electrical insulation	BY VENDOR		Busbar insulation against short circuit	
24	Earth Stud (Internal & Door)	Required			
25	Earth Stud Material	Stainless Steel			
26	Earth Stud Size	M10			
27	Earth Bar Material	Tinned Copper			
28	Earth Bar Size	285x50x5 mm			
29	Terminal Rail	BY VENDOR			
30	Anticondensation Heater	Not required			
31	Anticondesation Heater Voltage (V)	NA			
32	Anticondesation Heater Power rating (W)	NA			
33	Thermostat	NA			
34	Incoming Cable Details:				
35	Cable Core Type	Single Core Cable			
36	Cable Identification	Solar Power PV Submarine Cable			
37	Conductor Material	Annealed and tinned copper			
38	Conductor Insulation	Thermoplastic polyester elastomer			
39	Conductor Shape	Round			
40	Conductor cross-section	3 x 185 mm2			
41	Single core outer diameter over insulation	22,6 mm			
42	Nominal conductor diameter	17,6 mm			
43	No of Cores	3			
44	Cable Description	3x1Cx185mm² Dynamic Power Cable			
45	Armoured / Unarmoured	Unarmoured			
46	Cable Type	RJIT-O 1,8/3 (3,6) kV			
47	Max. Conductor Temperature	90°C			
48	Max. short-circuit temperature conductor	250°C			
49	Cable Entry	Bottom			

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Row	Data Sheet for Solar PV Power Cable JB				Rev.
1	Item	Required	Manufacturer Proposal	Comments	
2	**Outgoing Cable Details:**				
3	Cable Core Type	Single Core Cable			
4	Cable Identification	83002-CEL-L1 83002-CEL-L2 83002-CEL-L3			
5	Conductor Material	Copper			
6	Conductor Insulation	EPR			
7	Conductor Shape	Round			
8	Nominal Cross Section of the conductor	300 mm^2			
9	Single core outer diameter over sheat	29,4 ± 10% mm			
10	No of Cores	3			
11	Cable Description	3 x 1C x 300			
12	Armoured / Unarmoured	Unarmoured			
13	Cable Type	Cu Cl.2/EPR/LSZH (0.6/1kV)			
14	Outer Sheath	Extruded LSZH Thermoplastic Compound			
15	Max. Conductor Temperature	90°C			
16	Max. short-circuit temperature conductor	250°C			
17	Max conductor short circuit current for 1 second	by vendor			
18	Cable Entry	Bottom			
19	**Junction Box - Mechanical Characteristics**				
20	Junction Box Type	Manufacturer standard			
21	Material	AISI-316L			
22	Ingress Protection	IP-56			
23	External Finish	By Vendor			
24	Mounting Plate	Internal and Side gland plate			
25	Lifting Eyes	Required			
26	Client Label	Traffolyte/Stainless steel			
27	Breather / Drain	Required			
28	Canopy	Not Required			
29	Terminations	Cable lugs 1 conductor per phase in 1 conductor per phase out			
30	Blanking Plug Material	Suitable for offshore			
31	Body weight in kg	By Vendor			
32	Dimensions (L x W x H) mm	By Vendor			
33	Door type	By Vendor			
34	Earthing Provision	Required			
35	Cable Gland IP Rating	IP66			
36	Cable Gland Material	Nickel Plated Brass			
37	Gland Plate Size	By Vendor			
38	Gland Plate opening	Bottom			
39	Padlock Provision	Required			
40	Door Stay	By Vendor			
41	Installation	Mechanical support			

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Row	Data Sheet for IAC Cable Extension - Interface JB + Solar PV Power cable JB	Rev.
1	Tag No. :	
2	Service :	
3	PURCHASE ORDER SPECIFIC REQUIREMENTS	

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