Base Load Power Hub (BLPH)

Technical Data Sheet (TDS) for Electrical Heat Tracing System

Document Number: 123A90-DDL-EL-DS-20045

Document Class: 2

01	24/06/2024	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, IDS and DDS for Electrical Heat Tracing (EHT) System	Doc. No. 123A90-DDL-EL-SP-20044
2)	Technical Specification for Electrical Requirement in Packaged Units	Doc. No. 123A90-DDL-EL-SP-20085
3)	BLPH Piping and Instrumentation Diagram	Doc. No. 123A90-DDL-PR-PID-80009 to 800042
4)	Process line List	Doc. No.123A90-DDL-PR-LIS-80035
5)	Electrical Heat Tracing (EHT) Layouts	Doc. No. 123A90-DDL-EL-DL-20140
6)	Isometrics drawing and list	Doc. No. 123A90-DDL-PP-DI-71000
7)	Insulation Specification	Doc. No. 123A90-DDL-MAT-SP-60003
8)	Instrument List	Doc. No.123A90-DDL-IN-LIS-40088 01
9)	Insulation and Winterization Philosophy	Doc. No. 123A90-DDL-PR-RE-80032 01

NOTES:

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CROSSWIND	HOLLANDSE KUST NOORD WIND PARK Project Contract No. CW-I-WP4-2023-05	ROSETTI MARINO
Document Title:	TECHNICAL DATA SHEET - ELECTRICAL HEAT TRACING (EHT) SYSTEM	Sh. : 5 of 7 Date: 24/06/2024 Rev. : 01

DATA SHEET FOR ELECTRICAL HEAT TRACING SYSTEM

1	ENVIRONMENTAL CONDITIONS	MIN. TEMPERATURE : -8.4 °C	NOM. TEMPERATURE : 10.5 °C	MAX. TEMPERATURE : 25 °C	
2		RELATIVE HUMIDITY : 95 %	ATMOSPHERIC PRESSURE (NOM.) – HOURLY @+10m : 1013.7 mbar		
3		ATMOSPHERE : Marine Offshore - Fixed	ALTITUDE > 1000 m : Not more than 1000 m		
4		EXTREME WIND SPEED FOR 1 YEAR RECURRENCE PERIOD @ 100 m : 33.1 m/s			
5		EXTREME WIND SPEED FOR 50 YEAR RECURRENCE PERIOD @ 100 m : 41.0 m/s			
6	GENERAL ELECTRICAL	POWER AVAILABLE : 230 V 50 Hz	ELECTRICAL SYSTEM : 1 Ph + NEUTRAL + PE		
7		VOLTAGE VARIATION (STEADY STATE) : ±5 %	FREQUENCY VARIATION (STEADY STATE) : ±2 %		
8	LOCATION	CLASS. AREA : Safe Area Zone-2 Gas Group IIC (or) IIB + H2, T1	INSTALLATION : Outdoor	IP RATING : IP 56	
9					

10	HEAT TRACING PHILOSOPHY		STANDARDS : IEC 62395, ATEX		
11	TYPE-I (TEMPERATURE MAINTAINED ABOVE A MINIMUM POINT) :	X			
12	TYPE-II (PROCESS MAINTAINED WITHIN A MODERATE BAND) :				
13	TYPE-III (PROCESS CONTROLLED WITH IN A NARROW BAND) :				
14	HEAT TRACING APPLICATION :	☑ PIPE LINES	☑ VESSELS	☑ PVC PIPE LINE	☑ INSTRUMENT △01
15	FROST PROTECTION :	☑ YES	☐ NO		
16	THERMAL INSULATION SYSTEM				
17	THICKNESS :	123A90-DDL-PR-LIS-80035 - Process Line List △01			
18	TYPE :	123A90-DDL-MAT-SP-60003 - Insulation Specification			
19	K FACTOR:	By Vendor			
20	MAX. EXPOSURE TEMPERATURE:	By Vendor			
21	SOFT INSULATION USED:	By Vendor			
22	INSTALLED OVERSIZED:	By Vendor			
23	PIPE LINE DETAILS				
24	NO. OF LINE/NOMINAL SECTION				
25	LINE LENGTH mm	Refer to the following documents:			
26	LINE MATERIAL	123A90-DDL-PR-PID-80009 to 800042 - BLPH Piping and Instrumentation Diagram			
27	LINE THICKNESS mm	123A90-DDL-PR-LIS-80035 - Process Line List △01			
28	SUPPORT DETAILS	123A90-DDL-PP-DI-71000 - Isometrics Drawing and List			
29	EQUIPMENT DETAILS				
30	VALVES N./SIZE				
31	PUMPS N./SIZE	Refer to the following documents:			
32	FLANGES N./SIZE	123A90-DDL-PR-PID-80009 to 800042 - BLPH Piping and Instrumentation Diagram			
33	FILTERS N./SIZE	123A90-DDL-PR-LIS-80035 - Process line List			
34	OTHER				
35	TEMPERATURE DETAILS				
36	OPERATING TEMPERATURE MIN. °C				
37	OPERATING TEMPERATURE MAX. °C	Refer to the following documents:			
38	OPERATING TEMPERATURE NOR. °C	123A90-DDL-PR-PID-80009 to 800042 - BLPH Piping and Instrumentation Diagram			
39	DESIGN TEMPARATURE MIN. °C	123A90-DDL-PR-LIS-80035 - Process line List			
40	DESIGN TEMPARATURE MAX. °C				

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DATA SHEET FOR ELECTRICAL HEAT TRACING SYSTEM

41	TYPE	☐ MINERAL INSULATION CABLE			☑ SELF-REGULATING HEATING CABLE							
42	FUNCTION	☐ MAINTENANCE			☐ RAISE			☑ WINTERIZATION				
43	BRAND				MODEL							
44	CONSTRUCTION DETAILS OF HEATING ELEMENT	HEATING ELEMENT			By Vendor			By Vendor			By Vendor			By Vendor		
45		COND.N./COND.SECT	mm^2		By Vendor			By Vendor			By Vendor			By Vendor		
46		ELEMENT SECTION	mm^2		By Vendor			By Vendor			By Vendor			By Vendor		
47		CIRCUIT TYPE			☐ SERIES ☐ PARALLEL			☐ SERIES ☐ PARALLEL			☐ SERIES ☐ PARALLEL			☐ SERIES ☐ PARALLEL		
48		ELEMENT LENGTH	mm		By Vendor			By Vendor			By Vendor			By Vendor		
49		BRAIDED METAL			By Vendor			By Vendor			By Vendor			By Vendor		
50		CURVE RADIUS MIN	mm		By Vendor			By Vendor			By Vendor			By Vendor		
51		SHEATH MATERIAL			By Vendor			By Vendor			By Vendor			By Vendor		
52		FASTENERS			By Vendor			By Vendor			By Vendor			By Vendor		
53		ADHESIVE TAPE			By Vendor			By Vendor			By Vendor			By Vendor		
54		CAUTION SIGNS			By Vendor			By Vendor			By Vendor			By Vendor		
55	ELECTRICAL CHARECTERISTICS OF HEATING ELEMENT	ELECTRIC POWER			By Vendor			By Vendor			By Vendor			By Vendor		
56		NOMINAL VOLTAGE		V	Hz	Phase	V	Hz	Phase	V	Hz	Phase	V	Hz	Phase
57				230	50	1PH	230	50	1PH	230	50	1PH	230	50	1PH
58		APPROVAL			By Vendor			By Vendor			By Vendor			By Vendor		
59		CERTIFICATION			By Vendor			By Vendor			By Vendor			By Vendor		
60					By Vendor			By Vendor			By Vendor			By Vendor		
61	TEMPERATURE CONTROLLER	RATED POWER	W/m		By Vendor			By Vendor			By Vendor			By Vendor		
62		TOTAL POWER	W		By Vendor			By Vendor			By Vendor			By Vendor		
63		MIN.TEMP. OF INSTALL.	°C		By Vendor			By Vendor			By Vendor			By Vendor		
64		MAX OPERATING TEMP.	°C		By Vendor			By Vendor			By Vendor			By Vendor		
65		MAX EXPOSURE TEMP.	°C		By Vendor			By Vendor			By Vendor			By Vendor		
66		TEMPERATURE CLASS		T3	T4	T5	T3	T4	T5	T3	T4	T5	T3	T4	T5
67		MIN/MAX TEMP. MANT.			By Vendor			By Vendor			By Vendor			By Vendor		
68		I Avv.	A/m		By Vendor			By Vendor			By Vendor			By Vendor		
69		OPERATIONAL CHARACTERISTICS	W/m		By Vendor			By Vendor			By Vendor			By Vendor		
70					By Vendor			By Vendor			By Vendor			By Vendor		
71	ACCESSORIES	CONNECTION BOX	DIMENSIONS		By Vendor			By Vendor			By Vendor			By Vendor		
72			MATERIAL		By Vendor			By Vendor			By Vendor			By Vendor		
73			TERMINALS		By Vendor			By Vendor			By Vendor			By Vendor		
74			IP RATING		By Vendor			By Vendor			By Vendor			By Vendor		
75			PAINTING		By Vendor			By Vendor			By Vendor			By Vendor		
76		SUPPLY SIDE TERM. KIT			By Vendor			By Vendor			By Vendor			By Vendor		
77		INSULATION ENTRY KIT			By Vendor			By Vendor			By Vendor			By Vendor		
78		END SEAL KIT			By Vendor			By Vendor			By Vendor			By Vendor		
79		NON-POWERED SIDE TERM. KIT			By Vendor			By Vendor			By Vendor			By Vendor		
80		THERMOSTAT			By Vendor			By Vendor			By Vendor			By Vendor		
81		TEMPERATURE PROBE			By Vendor			By Vendor			By Vendor			By Vendor		
82		SPLICE BOX			By Vendor			By Vendor			By Vendor			By Vendor		
83		CABLING SYSTEM			By Vendor			By Vendor			By Vendor			By Vendor		

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Row	Technical Data Sheet (TDS) for Electrical Heat Tracing (EHT) System	Rev.
1	Tag No. :	
2	Service :	
3	PURCHASE ORDER SPECIFIC REQUIREMENTS	

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