Base Load Power Hub (BLPH)

Technical Data Sheet (TDS) - LV Distribution Boards

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Document Class: 2

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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.	
2.	
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REFERENCE DOCUMENT AND STANDARD:

1)	Electrical Single Line Diagrams (Distribution Board BoP)	Doc. No. 123A90-DDL-EL-DG-20162

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Data Sheet for LV Distribution Boards

Row	Ref. Clause	Description			Additional notes	Rev.
1	Ref. Clause	Description			Additional notes	
2		**Identifier**				
3		Tag number :	DP-200N1			
4		Tag description :	Distribution panel			
5		**General information**				
6		Conformity assessment system (CAS) level :	D			
7		Project country :	Netherlands			
8		Project region :	Netherlands			
9		**Electrical system**				
10	8.6.1	Earthing system :	TN-S			
11		System configuration phases/wires :	3-phase 4-wire			
12		**Voltage ratings**				
13		Nominal voltage of supply system :	400	V		
14		Transient overvoltages :	Category III			
15		**Current ratings**				
16	5.3.1	Rated current of assembly busbars (I_{nA}) :	100	A		
17	6,1	Rated peak withstand current (I_{pk}) :	63	kA		
18	6.1,9.3.1	Rated short-time withstand current (I_{cw}) :	25	kA		
19	6,1	Rated short-time withstand current (I_{cw}) time duration :	1	s		
20		Short-circuit current in neutral conductor and in protective circuit :	60	%		
21		**Rated diversity factor (RDF)**				
22		Assumed loading factor distribution - 1 circuit :	1,0			
23		Assumed loading factor distribution - 2 and 3 circuits :	0,9			
24		Assumed loading factor distribution - 4 and 5 circuits :	0,8			
25		Assumed loading factor distribution - 6 and 9 circuits :	0,6			
26		Assumed loading factor distribution - 10 or more circuits :	0,7			
27		Assumed loading factor electric actuator (MOV) :	0,2			
28		Assumed loading factor motors rated less than or equal to 100 kW :	0,8			
29		Assumed loading factor motors rated greater than 100 kW :	1,0			
30		**Rated frequency**				
31	5,4	Rated frequency (f_r) :	50	Hz		
32		**Other characteristics**				
33	8.102.1	Mounting arrangement :	longitudinal channels flush with floor			
34		**Information relating to assembly**				
35		Language used for all provided information :	English			
36		**Instructions for handling, installation, operation and maintenance**				
37	6.2.2	Lifting device for withdrawable parts heavier than 25 kg :	Not required			
38		**Device and/or component identification**				
39		Main component, primary identification language :	English			
40		Mimic (synoptic) diagrams :	Not required			
41		**Normal service conditions**				
42		Location type :	indoor climate controlled			
43	8.102.3,8.102.4	Operating environment :	offshore – fixed			
44	7.1.1	Ambient air temperature - lower limit :	-8.4	°C		
45		Ambient air temperature - upper limit :	40	°C		
46		Ambient air temperature - daily average maximum :	35	°C		
47		Humidity conditions - maximum relative humidity :	95 % at −5 °C to +30 °C	%		
48		Pollution degree of macro-environment (of installation environment) :	3			
49		Altitude :	≤ 2 000	m		
50		**Special service conditions**				
51		Seismic activity zone in accordance with IEC 60721-2-6 :	not applicable			
52		EMC environment :	A			
53	8.102.3,8.102.4	Maximum rolling of vessel in dynamic conditions :	not applicable			
54	8.102.3,8.102.4	Maximum pitching of vessel in dynamic conditions :	not applicable			
55		**Storage and handling**				
56		Storage and handling environmental conditions :	within IEC default conditions			
57		**Degree of protection provided by assembly enclosure**				
58		Minimum external mechanical impact protection :	IK08			
59		Protection against ingress of solid foreign bodies and ingress of water :	IP2X			
60		**Protection against electric shock**				
61		Type of protection against electric shock - basic protection :	constructional (manufacturer's standard)			
62		Type of protection against electric shock - fault protection :	automatic disconnection of supply			
63		Access to manually operated devices :	authorized persons			
64	8.5.5.101.7	Closed compartment doors :	hasp and padlock			
65	8.2.3	Safety shutters, disconnectors and switches :	hasp and padlock			
66	8.5.5.101.7	Padlock provider :	manufacturer supplied			
67		**Withdrawable parts (IEC 61439-2)**				
68	8.5.101	Type of electrical connections for outgoing functional units rated up to and	not applicable			
69	8.5.2.101	Facility to remotely test withdrawn functional units :	not applicable			
70		**Selection of switching devices and components**				
71	8.5.3.101.2	Incoming unit switching device requirement :	Fixed MCCB			
72		Bus coupler switching device requirement :	not applicable			
73	8.5.3,8.5.3.104.1	Main circuit protection for lighting and small power feeders :	MCB only for Small Power feeders, RCBO for Lighting Circuits, Power Socket Circuits and Heat Tracing Circuits		RCBO Operating current = 30mA for circuits of less than 125A , RCBO Operating current = 300mA for circuits equal to or greater than 125A	01

74	8.5.3.104.1,8.5.3.105.1	Main circuit protection for motor starters and contactor feeders :	not applicable			
75		**Accessibility**				
76	8.5.5.101.2	PSC-assembly physical configuration :	access front only			
77		**Internal electrical circuits and connections**				
78	8.6.1	Main circuit busbar insulation :	not applicable			
79		Main circuit earth-neutral link within incoming circuit units :	not applicable			
80		Auxiliary circuit wiring insulation type :	low smoke zero halogen			
81	8.6.5	Supplementary conductor marking by colour :	not applicable			
82		**Terminals for external conductors**				
83		Incoming (supply) unit direction of external conductors :	from above			
84	8,8	Incoming (supply) unit external conductor type :	cable			
85		Outgoing (load) unit direction of external conductors :	from above			
86	8,8	Outgoing (load) unit external conductor type :	cable			
87		Auxiliary cable direction of external conductors :	from above			
88		Auxiliary cable external conductor type :	cable			
89		External conductor material :	copper			
90	8,8	Multicore cable entry method :	undrilled removable gland-plate			
91	8,8	Single core cable entry method (non-magnetic) :	undrilled removable gland-plate			
92		Special glanding requirement :	none			
93		**Terminals for control and auxiliaries**				
94		Minimum spare unwired terminal provision for future use :	10% spare			
95		**Internal separation of PSC-assemblies (IEC 61439-2:2020)**				
96	8.101]	Internal separation for ACB functional units :	Form 2			
97	8.101]	Internal separation for non-ACB functional units :	Form 2			
98		**Enclosure space heaters**				
99	8.103.1.1	Assembly enclosure space heater requirement :	required			
100	8.103.1.1	Assembly enclosure space heater voltage :	230	V_{ac}		
101		Assembly enclosure space heater control method :	thermostat			
102	8.103.3,8.103.2.1,8.103.2.2,8.103.3.1,8.103.3.2,8.103.3.3,8.103.3.4,8.103.3.5,8.103.3.6	Assembly enclosure space heater monitoring method :	not applicable			
103		**Provision for future development**				
104		Provision of equipped spare functional outgoing units :	10	%		
105		Provision of space for future outgoing functional units :	10	%		
106		**Interface with control systems**				
107		Electrical control interface :	hardwired			
108		**Switchgear interlocking/intertripping interfaces**				
109		Interlocking/intertripping interface media :	hardwired discrete			
110		Interlocking/intertripping interface protocol :	hardwired			
111		**Dimensions and accessories**				
112		Distribution panel dimensions - DP-200N1	required	mm		
113		Distribution panel weight - DP-200N1	required	kg		

Row	Data Sheet for LV Distribution Boards	Issue
1	Tag No. : *DP-200N1*	01
2	Service : *LV DISTRIBUTION BOARDS*	01
3	**PURCHASE ORDER SPECIFIC REQUIREMENTS**	
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Data Sheet for
LV Distribution Boards

Guidance on the use of this data sheet

To be used in conjunction with :
Electrical Single Line Diagrams (Distribution Board BoP)

This data sheet is set-up to be used in electronic format by both the purchaser/user and the supplier/manufacturer.

This data sheet provides reference back to the parent standard or the supplementary specification where relevant.

Default values (if applicable) have been set according to essential minimum requirements as an integral part of this specification and should only be changed where specific justification can be provided.

The Supplement sheet is provided in an open format sheet for application of specific items not covered in the main part of the data sheet. This sheet is not intended to modify requirements defined in the supplementary requirements specification.

The data sheet includes a revision (issue) column on the right hand side for use by the purchaser/user. After the first issue, for each subsequent revision of the data sheet that is issued to suppliers for enquiry or purchase, the purchaser/user should use the issue column to denote that the data on a specific row has been updated since the previous revision. This will enable the supplier to easily identify where changes have been made.

Legend		
	Select	Supplier/manufacturer completed, pick list of pre-defined values (may be pre-populated with a default value).
	Input data	Supplier/manufacturer completed data entry.
	Select	Purchaser/user completed, pick list of pre-defined values (may be pre-populated with a default value).
	Input data	Purchaser/user completed data entry.
	Select	Either supplier/manufacturer or purchaser/user completed, pick list of pre-defined values (may be pre-populated with a default value).
	Input Data	Either supplier/manufacturer or purchaser/user completed data entry.
	Select	Selection of units from a pre-defined pick list.