Base Load Power Hub (BLPH)

SG-200N1 EQUIPMENT DATA SHEET INCLUDING MSDS AND WEIGHT DATA SHEET

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Document Class: 3

ROSETTI MARINO

1	NO COMMENTS - APPROVED - WORK MAY PROCEED
2	MINOR COMMENTS - REVISE AND RESUBMIT - WORK MAY PROCEED
3	MAJOR COMMENTS – REJECTED – DO NOT PROCEED
4	APPROVAL NOT REQUIRED

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Sign	Date
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Revision / Change Log

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1	
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3	
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3 WEIGHT L.V. SWITCHBOARD SG-2001 11

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1 LOW VOLTAGE SWITCHBOARD DATA SHEET

	Environmental data	
1	***AMBIENT***	MARINE - OFFSHORE
2	***INSTALLATION***	INDOOR
3	***AMBIENT AIR TEMPERATURE - DELAY AVERAGE MAXIMUM***	35°C
4	***AMBIENT AIR MINIMUM/MAXIMUM TEMPERATURE***	-8,4 ÷ +40°C
5	***RELATIVE HUMIDITY AVERAGE***	95%
6	***RELATIVE HUMIDITY MAXIMUM***	-
7	***POLLUTION LEVEL DEGREE***	VERY LIGHT

	Mechanical Features	
1	***EXTERNAL DEGREE OF PROTECTION***	IP30
2	***INTERNAL DEGREE OF PROTECTION***	IP20
3	***EXTERNAL MECHANICAL IMPACT PROTECTION***	IK10
4	***ACCESSIBILITY***	FRONT
5	***TYPE DESIGNATION***	LSC2B-PM
6	***COLOUR PAINTING***	RAL 7035
7	***SURFACE NOT PAINTED***	ZINC PLATED OR TROPICALIZED

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	Switchgear Electrical Features	
1	***RATED VOLTAGE (Ue)***	0,4/0,23 kV
2	***NOMINAL VOLTAGE (Un)***	0,4/0,23 kV
	RATED INSULATION VOLTAGE (Ui)	0,69 kV
3	***RATED FREQUENCY (Fn)***	50 Hz
4	***RATED IMPULSE WITHSTAND VOLTAGE (Uimp)***	4 kV
5	***RATED LIGHTNING IMPULSE WITHSTAND VOLTAGE (Up)***	60 kV
6	***RATED NORMAL CURRENT (Ir)***	2500 A
7	***RATED SHORT TIME WITHSTAND CURRENT (Ik)***	50 kA
8	***RATED DURATION OF SHORT CIRCUIT (tk)***	1 s
9	***RATED PEAK WITHSTAND CURRENT (Ipk)***	105 kA
10	***INTERNAL ARC CLASSIFICATION IAC (only A1 column)***	50 kA
11	***ARCING CLASS (only A1 column)***	0,3 s
12	***NUMBER OF PHASES***	3 ÷ 1
13	***PHASES IDENTIFICATION***	L1-L2-L3-N
14	***EARTHING CIRCUITS MAIN BUSBAR SECTION***	>300mmq
15	***REFERENCE STANDARDS***	IEC 61439-2
16	***EARTHING SYSTEM***	TN-S
17	***NEUTRAL BUSBAR SIZING***	50% PHASE SECTION

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2 LOW VOLTAGE CIRCUIT BRAKER DATASHEET

2.1 LOW VOLTAGE CIRCUIT BRAKER DATASHEET (INCOMING UNIT)

ABB E4.2N/MS 3200 4p F HR

Circuit Braker Siwtch-Disconnector SACE EMAX2 E4.2N/MS 3200 Four-pole

- **Product Main Type:** SACE Emax 2
- **Product Name:** Switch Disconnector
- **Current Type:** AC
- **Neutral Pole Current ([%Iu]):** 100 %
- **Number of Poles:** 4
- **Power Loss:** 743 W
- **Rated Impulse Withstand Voltage (U_{imp}):** 12 kV
- **Rated Insulation Voltage (U_i):** AC 1000 V
- **Rated Operational Voltage:** 690 V AC
- **Rated Short-time Withstand Current Low Voltage (I_{cw}):** for 1 s 66 kA
- **Rated Uninterrupted Current (I_u):** 3200 A
- **Rated Voltage (U_r):** 690 V
- **Short-Circuit Performance Level:** N
- **Standards:** IEC

*For type of trip unit (Ekip HI-Touch LSIG or Ekip DIP LSIG) refer to single line diagram (document number 1723002197-EL-DG-00011-Rev.04)

2.2 LOW VOLTAGE CIRCUIT BRAKER DATASHEET (ELECTROLYSER AUXILIARY LOAD)

ABB E1.2C 1250 Ekip Hi-Touch LSIG 4p WMP

Moving part for Circuit Braker SACE E1.2C 1250 FIXED Four-pole with state release in AC EKIP/HI-TOUCH-LSIG fitted with: 4 Auxiliary contact and C.B. in position open-closed.

- **Product Main Type:** SACE Emax 2
- **Product Name:** Air Circuit Breaker
- **Current Type:** AC
- **Neutral Pole Current ([%Iu]):** 100 %
- **Number of Poles:** 4
- **Power Loss:** 244 W
- **Rated Impulse Withstand Voltage (U_{imp}):** acc. to IEC 60947-212 12 kV
- **Rated Insulation Voltage (U_i):** AC 1000 V
- **Rated Operational Voltage:** 690 V AC
- **Rated Short-time Withstand Current Low Voltage (I_{cw}):** for 1 s 42 kA
- **Rated Service Short-Circuit Breaking Capacity (I_{cs}):** (400 V AC) 50 kA
- **Rated Service Short-Circuit Breaking Capacity, in % of Icu (I_{cs}):**100 %
- **Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}):** (400 V AC) 50 kA
- **Rated Uninterrupted Current (I_u):** 1250 A
- **Rated Voltage (U_r):** 690 V
- **Short-Circuit Performance Level:** C
- **Standards:** IEC

2.3 LOW VOLTAGE CIRCUIT BRAKER (FEEDERS)

2.3.1 ABB XT2S 160 BREAKING PART 4p F F

Breaking part TMAX XT2S 160 Fixed Four-pole with Front Terminals

- **Product Main Type:** SACE Tmax XT
- **Product Name:** Moulded Case Circuit Breaker
- **Number of Poles:** 4
- **Opening Time:**
  - CB with SOR 15 ms
  - CB with UVR 15 ms
- **Rated Frequency (f):** 50 / 60 Hz
- **Rated Impulse Withstand Voltage (U_{imp}):** 8 kV
- **Rated Insulation Voltage (U_i):**1000 V
- **Rated Operational Voltage:**690 V AC
- **Rated Service Short-Circuit Breaking Capacity (I_{cs}):** (415 V AC) 50 kA
- **Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}):** (415 V AC) 50 kA
- **Rated Uninterrupted Current (I_u):** 160 A
- **Rated Voltage (U_r):** 690 V
- **Short-Circuit Performance Level:** S
- **Standards:** IEC60947-2

* For nominal current and type of trip unit (Ekip HI-Touch LSIG or Ekip DIP LSIG) refer to single line diagram (document number 1723002197-EL-DG-00011-Rev.04)

2.3.2 ABB XT4S 250 BREAKING PART 4p F F

Breaking part TMAX XT4S 250 Fixed Four-Pole With Front Terminals

- **Product Main Type:** SACE Tmax XT
- **Product Name:** Moulded Case Circuit Breaker
- **Number of Poles:** 4
- **Opening Time:**
  - CB with SOR 15 ms
  - CB with UVR 15 m
- **Rated Impulse Withstand Voltage (U_{imp}):** 8 kV
- **Rated Insulation Voltage (U_i):**1000 V
- **Rated Operational Voltage:** 690 V AC
- **Rated Service Short-Circuit Breaking Capacity (I_{cs}):** (415 V AC) 50 kA
- **Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}):** (415 V AC) 50 kA
- **Rated Uninterrupted Current (I_u):** 250 A
- **Short-Circuit Performance Level:** S
- **Standards:** IEC 60947-2

* For nominal current and type of Trip unit (Ekip HI-Touch LSIG or Ekip DIP LSIG) refer to single line diagram (document number 1723002197-EL-DG-00011-Rev.04)

2.3.3 ABB XT5S 400 BREAKING PART 4p F F

Breaking Part TMAX XT5S 400 Fixed Four-Pole With Front Terminals

- **Product Main Type:** SACE Tmax XT
- **Product Name:** Moulded Case Circuit Breaker
- **Number of Poles:** 4
- **Rated Impulse Withstand Voltage (U_{imp}):** 8 kV
- **Rated Insulation Voltage (U_i):** 1000 V
- **Rated Operational Voltage:** 690 V AC
- **Rated Service Short-Circuit Breaking Capacity (I_{cs}):** (415 V AC) 50 kA
- **Rated Short-time Withstand Current Low Voltage (I_{cw}):** 5 kA
- **Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}):** (415 V AC) 50 kA
- **Rated Uninterrupted Current (I_u):** 400 A
- **Short-Circuit Performance Level:** S
- **Standards:** IEC60947-2

* For nominal current and type of trip unit (Ekip HI-Touch LSIG or Ekip DIP LSIG) refer to single line diagram (document number 1723002197-EL-DG-00011-Rev.04)

3 WEIGHT L.V. SWITCHBOARD SG-200N1

1) SWITCHBOARD SG-200N1 UNIT A1 - WEIGHT ± 920 Kg

2) SWITCHBOARD SG-200N1 UNIT A2 - WEIGHT ± 500 Kg

3) SWITCHBOARD SG-200N1 UNIT A3 - WEIGHT ±7 00 Kg

4) SWITCHBOARD SG-200N1 UNIT A4 - WEIGHT ± 675 Kg

5) SWITCHBOARD SG-200N1 UNIT A5 - WEIGHT ± 675 Kg

6) SWITCHBOARD SG-200N1 UNIT A6 - WEIGHT ±645 Kg

7) SWITCHBOARD SG-200N1 UNIT A7 - WEIGHT ±645 Kg

TOTAL WEIGHT 4760 Kg ± 10%

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