Base Load Power Hub (BLPH)

UTILITY LOAD CALCULATION

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Document Class: 3

ROSETTI MARINO

1	NO COMMENTS - APPROVED - WORK MAY PROCEED
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Sign	Date
Luca Moeurle	13.03.2024

Rev.	Date	Description	Prepared	Reviewed	Approved
02	29/02/2024	Issue for Information (IFI)	Y.D.LEE	Y.W.LEE	S.J.CHO
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Revision / Change Log

Rev.	Description
00	ISSUE FOR INFORMATION (IFI)
01	ISSUE FOR INFORMATION (IFI)
02	ISSUE FOR INFORMATION (IFI)

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2.	
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1.1 DC POWER CONSUMPTION FOR GIS EQUIPMENT

– Supply voltage : 110 Vdc

Item	No.	Description	Load [A]	Operating time	Remark
CB operating mechanism - Q0(QA1)	1	Trip coil current - Trip 1	1.50	≤ 20 ms	(for 3 phase)
	2	Trip coil current - Trip 2	1.50	≤ 20 ms	
	3	Close coil current	3.30	≤ 20 ms	
	4	Auxiliary relay current	0.05	≤ 70 ms	
	5	Motor starting current (260 W)	40.00	-	
	6	Motor stable current (260 W)	4.50	≤ 6.2 sec	
3PDS operating mechanism - QZ91	7	Auxiliary relay current	0.05	≤ 1.1 sec	(for 3 phase)
	8	Motor starting current (350 W)	14.00	-	
	9	Motor stable current (350 W)	7.00	≤ 1.1 sec	
3PDS operating mechanism - QZ92	10	Auxiliary relay current	0.05	≤ 1.1 sec	(for 3 phase)
	11	Motor starting current (350 W)	14.00	-	
	12	Motor stable current (350 W)	7.00	≤ 1.1 sec	
Local control panel	13	Redbox - RSG907R	0.20	Continuous	1 ea
	14	MU (Merging Unit) - IM2	0.49	Continuous	1 ea
	15	Protection Relay - 7UT85	0.16	Continuous	1 ea
	16	Protection Relays - 7SJ85	0.16	Continuous	1 ea
	17	Lock out Relay - 7PJ1524	0.13	Continuous	1 ea
	18	Pilot Lamp - Position Indicator	0.22	Continuous	10 ea
	19	Relays	0.88	Continuous	30 ea
		Total of LCP (1 set)	2.25		

1.2. DC POWER CONSUMPTION FOR EACH CONDITION

DCDB No.	No.	Mode	Load [A]	Remarks
DCDB-1	1	Operating	10.94	No. 1.3.4.6,13,15,17,18,19
	2	Stand-by	1.59	No. 13,15,17,18,19
	3	Maximum Absorbed	46.44	No. 1.3.4,5,13,15,17,18,19
DCDB-2 (only for Trip2)	1	Operating	9.25	No. 2,7,9,10,14,16
	2	Stand-by	0.65	No. 14,16
	3	Maximum Absorbed	16.25	No. 2,7,8,10,14,16

2.1. AC POWER CONSUMPTION FOR GIS EQUIPMENT

– Supply voltage : 230 Vac

Item	No.	Description	Load [A]	Operating time	Remark
CB operating mechanism	1	Heater current (100 W)	0.52	Continuous	(for 3 phase)
3PDS operating mechanism - QZ91	2	Heater current (50 W)	0.26	Continuous	(for 3 phase)
3PDS operating mechanism - QZ92	3	Heater current (50 W)	0.26	Continuous	(for 3 phase)
Local control panel	4	Heater current (100 W)	0.52	Continuous	1 ea
	5	Lighting	0.10	Continuous	1 ea
	6	Socket Load (1 kW)	5.22	Continuous	1 ea
		Total of C&P Panel (1 set)	5.84		

2.2. DC POWER CONSUMPTION FOR EACH CONDITION

ACDB No.	No.	Mode	Load [A]	Remarks
ACDB	1	Operating	-	-
	2	Stand-by	1.67	from No.1 to 5
	3	Maximum Absorbed	6.89	from No.1 to 6