Base Load Power Hub (BLPH)

INTEGRATED CONTROL AND SAFETY SYSTEM (ICSS)

Bill of Material

Document Number: 1724000594-IN-LIS-00003

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

NOTE: Approval doesn't relieve the supplier from mandatory compliance with contractual documents and specifications. Comments made do not imply acceptance of any cost or delivery impact.

Sign	Date
	28/02/2025

Rev.	Date	Description	Prepared	Reviewed	Approved
04	30/01/2025	Issue for Information (IFI)	A.Giorgetti	A.Berra	S.Corradi
03	13/12/2024	Issue for Information (IFI)	A.Giorgetti	A.Berra	S.Corradi
02	20/09/2024	Issue for Information (IFI)	A.Giorgetti	A.Berra	S.Corradi
01	07/08/2024	Issue for Information (IFI)	A.Giorgetti	A.Berra	S.Corradi
00	23/04/2024	Issue for Information (IFI)	A.Giorgetti	A.Berra	S.Corradi

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ITEM	Area	PART NUMBER	DESCRIZIONE	BRAND	SUPPLIER	TOTAL INSTALLED	SPARE PARTS Start-up_Comm.	SPARE PARTS 2Years	TOTAL ITER & OER
1	Cabinets	AGR Series	System Cabinet (800x800x2000+100) FRONT	Auger	PREI	7			7
2	Cabinets	AGR Series	Net Cabinet (800x1000x2000+100)	Auger	PREI	2			2
3	Cabinets	AGR Series	Net/Srv Cabinet (800x1200x2000+100)	Auger	PREI	2			2
4	Cabinets	n.a.	Att. 01_PREI sub-orders list_RM Crosswind	Imat Felco	PREI	0			0
5	Cabinets	n.a.	Att. 01_PREI sub-orders list_RM Crosswind	Sacchi Giuseppe	PREI	0			0
6	Cabinets	n.a.	Att. 01_PREI sub-orders list_RM Crosswind	WEIDMULLER	PREI	0			0
7	Cabinets	n.a.	MCT	Roxtec	PREI	0			0
8	-					0			0
11	NET / CR / SW	PLC-RSC-24DC/21	Relay, 24/48/110 Vdc	Phoenix Contact	Phoenix Contact	0			0
12	NET / CR / SW	FG-100 F/Equivalent	FortiGate Firewall with 12x GE RJ45 ports	FortiNet	Bechtle	2		1	3
13	NET / CR / SW	FG-80 F/Equivalent	FortiGate Firewall with 6x GE RJ45 ports, 2 x GE RJ45/SFP Shared Media Ports	FortiNet	Bechtle	2			2
14	NET / CR / SW	FG-40 F/Equivalent	FortiGate Firewall with 4x GE RJ45 ports - DCS / SIS	FortiNet	Bechtle	2			2
15	NET / CR / SW	FG-80 F/Equivalent	FortiGate Firewall with 6x GE RJ45 ports, 2 x GE RJ45/SFP Shared Media Ports	FortiNet	Bechtle	4		1	5
16	NET / CR / SW			Tecnofiber	Tecnofiber	2			2
17	NET / CR / SW	CRDC6EU05MRO	RED 5m cables - conn. RJ45	STT	STT	10			10
18	NET / CR / SW	FO CA LCdx-LCdx 2E9/125 G657.A1, 10.0m	HARTING FO Patch Cord - SingleMode	Amazon	Amazon	1			1
19	NET / CR / SW	BRS40-0012OOOO-EFCY99HHSEAXX.X.XX	Managed Switch L2, Hirschmann, 8 port Gb, 4x SFP	Hirschmann	BELDEN	8		1	9
20	NET / CR / SW	BRS40-0024OOOO-SFCY99HHSEAXX.X.XX	Managed Switch L2, Hirschmann, 20 port Gb, 4x SFP	Hirschmann	BELDEN	7		1	8
22	NET / CR / SW	BRS40-00169999-SFCY99HHSPAXX.X.XX	Managed Switch L2, Hirschmann, 16 port Gb - For Third Party	Hirschmann	BELDEN	1			1
27	NET / CR / SW	ATEN CL1008M	8-Port Slideaway 17" LCD KVM Switch	DELL	DELL	2			2
28	NET / CR / SW	GRS105-24TX/6SFP-2HV-2A	L2 Switch 24 Port (Vnet/IP) AC Red.	Hirschmann	BELDEN	4		1	5
29	NET / CR / SW	PRE-SFP-B45-120-MSA	SFP Module for PIN and Service Network (1° tipo)	ELPACK	ELPACK	4		2	6
30	NET / CR / SW	PRE-SFP-B54-120-MSA	SFP Module for PIN and Service Network (2° tipo)	ELPACK	ELPACK				
31	NET / CR / SW	CRDC6EU05MBL	BLUE 5m cable- conn. RJ45	STT	STT	10			10
32	NET / CR / SW	CRDC6EU05MVE	GREEN 5m cable - conn. RJ45	STT	STT	40			40
33	NET / CR / SW	LANTIME M1000-IMS	Lantime NTP server incl. **8** (2)x 10/100 Mbit ports + GPS antenna 50m	Meinberg	Sincron Sistemi	1			1
34	-					0			0
35	NET / CR / SW	-	Fiber Optic patch panel - Nr.12 ports LC	LAN	Yokogawa	0			0
36	NET / CR / SW	-	Ethernet RJ45 patch panel	1aTTack.de	Yokogawa	3			3
37	NET / CR / SW	Mgate 5103	Profinet Converter	MOXA	Yokogawa	2			2
38	NET / CR / SW	GP4SY-04XX250S1900E/GR1/RAIL/ARM	CI-Core (Server) - ITER	Yokogawa	Yokogawa	2			2
39	NET / CR / SW	GP4SY-04XX240S1900E/GR1/RAIL/ARM	CI-Portal server	Yokogawa	Yokogawa	2			2
40	NET / CR / SW	GP4SY-04XX240S1900E/GR1/RAIL/ARM	CI-Portal / View (AMS, OWS, CAP)	Yokogawa	Yokogawa	1			1
41	NET / CR / SW	GP2SY-02BB210W1019E/DPW1/RAIL/ARM	EWS Client PC for RDP	Yokogawa	Yokogawa	1			1
42	NET / CR / SW	GP4SY-04XX240S1900E/GR1/RAIL/ARM	EWS (PCS , SAFETY)	Yokogawa	Yokogawa	1			1
43	NET / CR / SW	GP4SY-04XX240S1900E/RAIL/ARM	IAMS Server	Yokogawa	Yokogawa	1			1
44	NET / CR / SW	Optiplex XE3	CI-View (OWS) - (devices to be installed in CCR but not confirmed)	DELL	DELL	1			1
45	NET / CR / SW	Optiplex XE3	CI-View (CAP) - (devices to be installed in CCR but not confirmed)	DELL	DELL	1			1
46	NET / CR / SW	Optiplex XE3	IAMS Client - (devices to be installed in CCR but not confirmed)	DELL	DELL	1			1
47	NET / CR / SW	Dell PowerEdge R450	AV Server	DELL	DELL	1			1
48	NET / CR / SW	Dell PowerEdge R450	WSUS Server	DELL	DELL	1			1
49	NET / CR / SW	Dell PowerEdge R450	Domain Controller	DELL	DELL	2			2
50	NET / CR / SW	Dell PowerEdge R450 RAID 5	B&R Server	DELL	DELL	1			1
51	NET / CR / SW	Dell PowerEdge R450	NMS Server (Domain Controller)	DELL	DELL	1			1
52	NET / CR / SW	24" Monitor P2422H	Dell LCD 24inch, 16:9, resolution: 1920x1080 - (devices to be installed in CCR but not confirmed)	DELL	DELL	4		1	5
53	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - RED - 5m	STT	STT	2			2
54	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - RED - 10m	STT	STT	5			5
55	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - RED - 15m	STT	STT	4			4
56	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - RED - 20m	STT	STT	2			2
57	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - BLUE - 5m	STT	STT	2			2
58	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - BLUE - 10m	STT	STT	5			5
59	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - BLUE - 15m	STT	STT	8			8
60	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - BLUE - 20m	STT	STT	15			15
61	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREEN - 3m	STT	STT	1			1
62	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREEN - 5m	STT	STT	30			30
63	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREEN - 10m	STT	STT	13			13
64	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREEN - 15m	STT	STT	4			4
65	NET / CR / SW	Veeam Backup Essentials - 5 Univ. Lic. / 1 yr. subscr.	Backup & Recovery software - 1 yr. subscr.	PIPELINE	PIPELINE	1			1
66	NET / CR / SW	Whatsup Gold Premium 100	NMS Software for 100 devices with 1y service	Progress	BECHTLE	1			1

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67	NET / CR / SW	NEC MultiSync, resolution:3840x2160	65" Screen M651 - (devices to be installed in CCR but not confirmed)	NEC/Equivalent	BECHTLE	1			1
68	NET / CR / SW	HP M255dw	A4 size Color Laserjet Network Printer - (devices to be installed in CCR but not confirmed)	HP/Equivalent		1			1
69	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREY - 3m	STT	STT	2			2
70	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREY - 5m	STT	STT	12			12
71	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - GREY - 10m	STT	STT	19			19
72	NET / CR / SW	-	Cat6 Ethernet cable RJ45 - WHITE - 2m	STT	STT	4			4
73	-					0			0
74	License	VP6F3100-V11	Project I/O License	Yokogawa	Yokogawa	8			8
75	License	VP6CPJT-V11N01	Project ID License	Yokogawa	Yokogawa	2			2
76	License	SV2CPML-V1107-S1112	Product Maintenance License	Yokogawa	Yokogawa	2			2
77	License	VP6CKM-V11	Software Media for CENTUM VP R6	Yokogawa	Yokogawa	2			2
78	License	SS2CPMLM-V1107-S1112	Certificate of PML	Yokogawa	Yokogawa	2			2
79	License	VP6H1100-V11N01	Standard Operation / Monitoring Function	Yokogawa	Yokogawa	2			2
80	License	VP6H4410-V11N01	Control Drawing Status Display Package	Yokogawa	Yokogawa	2			2
81	License	VP6H4420-V11N01	Logic Chart Status Display Package	Yokogawa	Yokogawa	2			2
82	License	MS Excel - DG7GMGF0D7FT-0002	MIC CSP Microsoft Excel LTSC 2021	Microsoft	Yokogawa	3			3
83	License	VP6F1700-V11C01	Control Function for FCS(A2FV30x)	Yokogawa	Yokogawa	2			2
84	License	VP6E51AD-V11N01	AD Suite Standard Engineering Function & Engineering Server function	Yokogawa	Yokogawa	2			2
85	License	VP6E5150-V11	Graphic Builder	Yokogawa	Yokogawa	2			2
86	License	VP6E5490-V11N01	Self-documentation Package	Yokogawa	Yokogawa	2			2
87	License	VP6C5495-V11	Electronic Instruction Manual	Yokogawa	Yokogawa	2			2
88	License	PM4SSET-V11N1000	PRM Set	Yokogawa	Yokogawa	2			2
89	License	PM4CPJT-V11	Project ID License for PRM R4	Yokogawa	Yokogawa	2			2
90	License	CS2CKM-D11	CI Server Software Media	Yokogawa	Yokogawa	2			2
91	License	CS2CKM2-C11	CI Server User's Manual Media	Yokogawa	Yokogawa	2			2
92	License	CS2CLC-L11/FCA02/SCA02/CB02/CD02/PTL03/VER01/DEP02/ADH02	CI Server Software License	Yokogawa	Yokogawa	2			2
93	License	SV2CPMLC-V1100-S1112/C01	Product Maintenance License - CI Server	Yokogawa	Yokogawa	2			2
94	License	LS1SN001-E01/AV	End Point Security License (Intial) - For applicable products	Yokogawa	Yokogawa	14			14
95	License	LS1SN001-E01/AVX	End Point Security License (Intial) - For other products	Yokogawa	Yokogawa	7			7
96	-					0			0
102	DCS HW	AFV30D-A41262	Field Control Station (Redundant)	Yokogawa	Yokogawa	1			1
103	DCS HW	EC401-51	ESB Bus Coupler Master Module	Yokogawa	Yokogawa	2	1	1	4
104	Common HW	YCB301-C020	ESB Cable	Yokogawa	Yokogawa	20			20
105	Common HW	YCB301-C100	ESB Cable	Yokogawa	Yokogawa	6			6
106	DCS HW	ANB10D-426/CU2N	Node Interface Unit	Yokogawa	Yokogawa	3			3
107	DCS HW	ANB10D-426/CU2T	Node Interface Unit	Yokogawa	Yokogawa	1			1
108	DCS HW	AAI143-H53/K4A00	Analog Input Module, 16 Channel	Yokogawa	Yokogawa	8	1	1	10
109	DCS HW	AAI543-H61/K4A00	Analog Output Module, 16 Channel	Yokogawa	Yokogawa	4	1	1	6
110	DCS HW	ADV151-P63/D5A00	Digital Input Module, 32 Channel	Yokogawa	Yokogawa	8	1	1	10
111	DCS HW	ADV551-P63/D5A00	Digital Output Module, 32 Channel	Yokogawa	Yokogawa	2	1	1	4
112	DCS HW	ALE111-S51	Modbus TCP/IP Communication Module	Yokogawa	Yokogawa	3	1		4
113	DCS HW	A2LP131-S01	ProfiNet Communication Module	Yokogawa	Yokogawa	1	1		2
114	DCS HW	ADCV01	Dummy Cover	Yokogawa	Yokogawa	4			4
115	DCS HW	A1BA4D-06	TB for Analog DIN mount type	Yokogawa	Yokogawa	6	1	1	8
116	DCS HW	A1BD5D-06	TB for Digital DIN mount type	Yokogawa	Yokogawa	5	1	1	7
117	DCS HW	KS1-07/HF	Dedicated Signal Cable for Analog Modules	Yokogawa	Yokogawa	12			12
118	DCS HW	AKB331-M007/HF	Dedicated Signal Cable for Digital Modules	Yokogawa	Yokogawa	10			10
119	DCS HW	VI-702	Netwok Interface Card	Yokogawa	Yokogawa	4	1	1	6
120	DCS HW	SCP471-01	Processor Module	Yokogawa	Yokogawa	0	1	1	2
121	DCS HW	SPW482-51	220-240V AC Input Power Supply Module	Yokogawa	Yokogawa	0	1	1	2
122	-					0			0
126	ProSAFE HW	S2SC70D-FA12010	Duplex Safety Control Unit	Yokogawa	Yokogawa	2			2
127	ProSAFE HW	SNB10D-425/CU2N	Safety Node Unit	Yokogawa	Yokogawa	5			5
128	ProSAFE HW	SNB10D-425/CU2T	Safety Node Unit	Yokogawa	Yokogawa	2			2
129	ProSAFE HW	SAI143-H63	Analog Input Module (4-20mA,16-ch), HART	Yokogawa	Yokogawa	22	1	1	24
130	ProSAFE HW	SDV144-S63	Digital Input Module (16-ch, 24V DC)	Yokogawa	Yokogawa	22	1	1	24
131	ProSAFE HW	SDV541-S63	Digital Output Module (16-ch, 24V DC)	Yokogawa	Yokogawa	20	1	1	22
132	ProSAFE HW	SDCV01	Dummy cover	Yokogawa	Yokogawa	4			4
133	ProSAFE HW	SEC401-S1	ESB Bus Coupler Module	Yokogawa	Yokogawa	4	1	1	6

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134	ProSAFE HW	KS1-10/HF	Dedicated Signal Cable for Analog Modules (10m)	Yokogawa	Yokogawa	20			20
135	ProSAFE HW	KS1-5/HF	Dedicated Signal Cable for Analog Modules (5m)	Yokogawa	Yokogawa	2			2
136	ProSAFE HW	AKB331-M010/HF	Dedicated Signal Cable for Digital Modules (10m)	Yokogawa	Yokogawa	24			24
137	ProSAFE HW	AKB331-M005/HF	Dedicated Signal Cable for Digital Modules (5m)	Yokogawa	Yokogawa	18			18
138	ProSAFE HW	SBA4D-06	TB for Analog DIN mount type	Yokogawa	Yokogawa	8	1	1	10
139	ProSAFE HW	SBD4D-06	TB for Digital DIN mount type	Yokogawa	Yokogawa	21	1	1	23
140	ProSAFE HW	SCB-100-S0	Wiring Check Adapter (open circuit) - 8 per set	Yokogawa	Yokogawa	13	1	1	15
141	ProSAFE HW	SCB-110-S0	Wiring Check Adapter (short-circuited) - 8 per set	Yokogawa	Yokogawa	13	1	1	15
142	ProSAFE HW	S2CP471-01	Processor Module	Yokogawa	Yokogawa	0	1	1	2
143	ProSAFE HW	SPW482-53	220-240V AC Input Power Supply Module	Yokogawa	Yokogawa	0	1	1	2
144	-					0			0
147	SIS HW 3rd	P+F - KFD0-RSH-1.4S.PS2	Safety Relay 24 Vdc, 5A (SIL 3)	P+F	P+F	42			42
148	SIS HW 3rd	HiC2025	AI 1ch. Barrier (SIL2)	P+F	P+F	30			30
149	SIS HW 3rd	HiCTB16-YRS-RRB-KS-CC-AI16	IS Term. Board for SAI143, 1ch isolator (HiC2025 x 16)	P+F	P+F	3			3
150	-					0			0
155	SIS License	RS4F1500-V11	Safety Control Function (for S2SC70x)	Yokogawa	Yokogawa	2			2
156	SIS License	RS4E5600-V11	Centum VP integration package	Yokogawa	Yokogawa	1			1
157	SIS License	RS4CPJT-V11	Project ID License	Yokogawa	Yokogawa	1			1
158	SIS License	RS4F3100-V11	Project I/O License for ProSafe-RS	Yokogawa	Yokogawa	5			5
159	SIS License	RS4E5100-V11	Safety System Engineering and Maintenance Function (for Engineering & Server Function)	Yokogawa	Yokogawa	1			1
160	SIS License	RS4C5400-V11	Electronic Instruction Manual	Yokogawa	Yokogawa	1			1
161	SIS License	RS4CKM-V11	Software and Electronic Instruction Media	Yokogawa	Yokogawa	1			1
162	-					0			0
167	EMCS	MOXA 5103	Modbus to Profinet Converter	MOXA	BaxEnergy	1	1		2
168	EMCS	SEL-3555	RTAC	SEL	BaxEnergy	2			2
170	EMCS	SEL-2242	Backplane	SEL	BaxEnergy	2			2
171	EMCS	SEL-2241	RTAC	SEL	BaxEnergy	2	1		3
172	EMCS	SEL-2243	Power Coupler	SEL	BaxEnergy	2	1	1	4
173	EMCS	SEL-2245-2	DC Analog Input Module	SEL	BaxEnergy	2	1	1	4
174	EMCS	SEL-2244-2	DC Digital Input Module	SEL	BaxEnergy	2	1	1	4
175	EMCS	SEL-2244-3	Digital Output Module	SEL	BaxEnergy	2	1	1	4
176	EMCS	SEL-2245-3	DC Analog Output Module	SEL	BaxEnergy	2	1	1	4
178	EMCS	KFD2-STC5-1.2O	Analog signal duplicator/splitter	P+F	Yokogawa	16			16
179	EMCS	SEL-9331-A	Power Supply unit	SEL	BaxEnergy	4			4
183	EMCS	202290240000	Pulse relay	FINDER	Yokogawa	9			9

As per previous revision missing the license for SEL, EMCS servers etc.