

技术执行规范

上海梅达焊接设备有限公司

上海市宝山区富联一路98号3幢3层



连线规定

WIRE NUMBER

1 THRU 49
50 THRU 99
100 THRU 169
170 THRU 179
180 THRU 199
200 THRU 299
300 THRU 399
1L1, 1L2, 1L1A, 1L2A

COLOR

蓝色 (BU)
蓝色 (BU)
红色 (RD)
白色 (WH)
黄色 (YL)
蓝色 (BU)
蓝色 (BU)
黑色 (BK)

GAUGE

0.5mm² (20AWG)
0.5mm² (20AWG)
1.5mm² (16AWG)
1.5mm² (16AWG)
1.5mm² (16AWG)
0.5mm² (20AWG)
0.5mm² (20AWG)
1.5mm² (16AWG)

WIRE GAUGES AS SHOWN ABOVE EXCEPT WHERE NOTED

结构标识符总览

F24_002

完整的名称	标签	结构描述
=CP1	高层代号	COVER PAGE
=CON1	高层代号	CONTENT
=TD1	高层代号	TECHNICAL DESCRIPTION
=DIG1	高层代号	WIRING DIAGRAME
=RP1	高层代号	TERMINAL LIST
=PR2	高层代号	PARTS LIST
+OUT	位置代号	OUTSIDE
+ENCL	位置代号	ENCLOSURE

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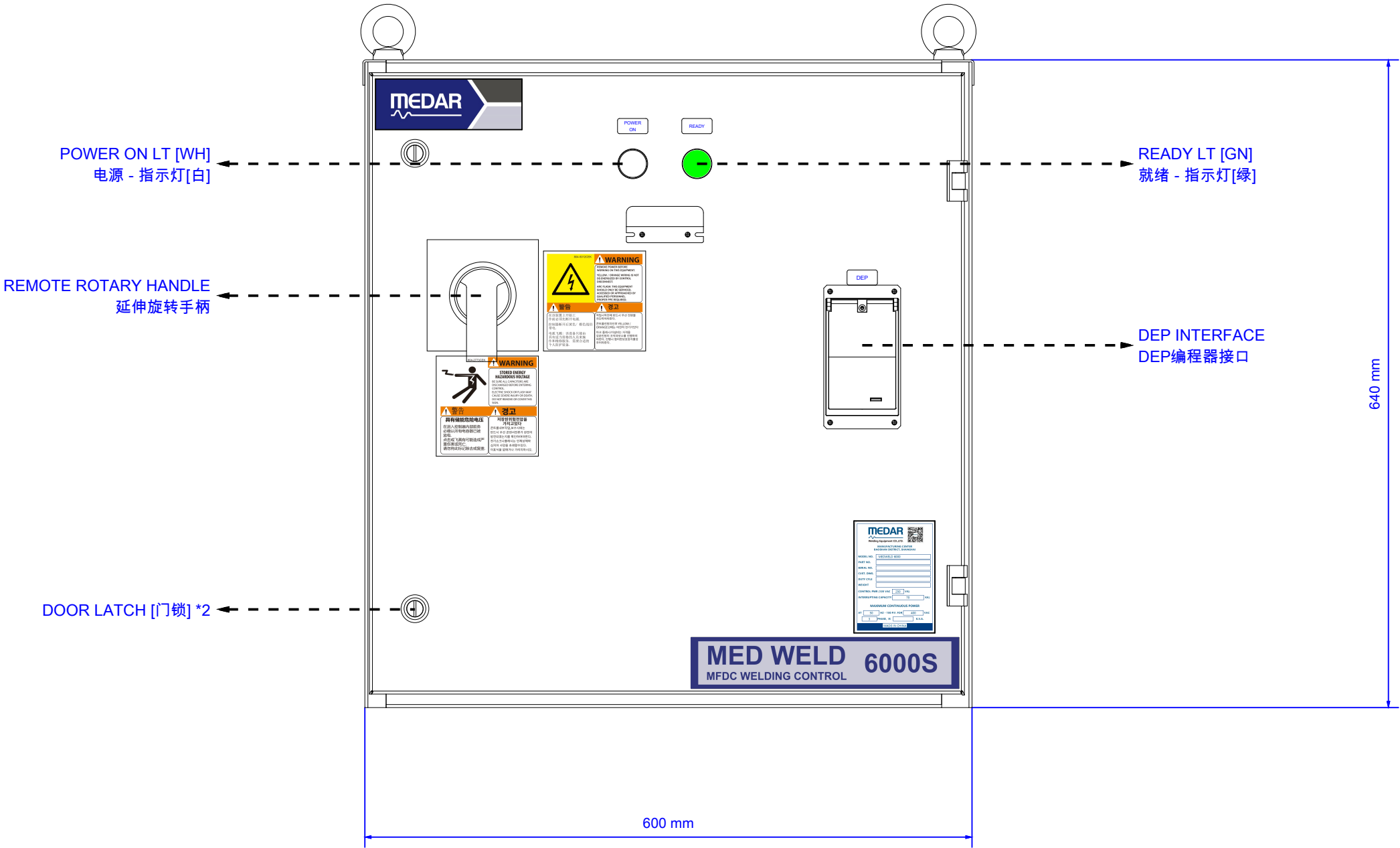
SPECIFICATIONS 1:

Area	Item	GEN6-CW4
Power	Voltage	3-Phase AC, 220-480 VAC (575VAC optional), +/- 10%
Power	Line Power Frequency	50/60hz
Power	Output frequency	400-2,000Hz (normally 1000hz)
Power	Output current @10% duty cycle with 2 sec averaging time	600 amps (water cooled)
Power	Output Current @100% duty cycle	190 amps (water cooled) @250 micro-sec on time
Power	Output Voltage	approximately=line voltage * √2 *0.98
Power	Input Apparent Power (KVA)	53 KVA @ 480 VAC
Power	Input AWG Wire size based on 90C insulation	35mm² @ 10 meter
Power	Output AWG Wire size based on 90C insulation	35mm² @ 8 meter
Power	Power Consumption in idle	70VA
Power	Device type	IGBT
Power	Current rise time	less than 4 ms into resistive load
Control / Monitoring	Firing Control	Fixed frequency, Pulse width modulation
Control / Monitoring	Current control	Primary Constant Current / Primary Constant Volt-Sec / Secondary Constant Current / RAFT Adaptive
Control / Monitoring	Primary current range	10% of rated current output current
Control / Monitoring	Primary current accuracy	+/-1% setting, +/-0.5% repeatability
Control / Monitoring	Primary voltage measurement accuracy (DC bus)	+/-1% setting, +/-0.5% repeatability
Control / Monitoring	Secondary current accuracy	+/-2% setting, +/-1% repeatability
Control / Monitoring	Secondary voltage accuracy	+/-3%
Control / Monitoring	Secondary resistance accuracy	+/-3%
Control / Monitoring	MFDC Transformer flux protection	Included
Control / Monitoring	Digital Scope function	1MHz equivalent uploads to PC
Control / Monitoring	Duty Cycle protection	Inverter and Weld Transformer
Control / Monitoring	MFDC transformer Secondary Diode fault monitor	Included

SPECIFICATIONS 2:

Area	Item	GEN6-CW4
Weld Processor	Placement	Integrated
Weld Processor	Communications - Standard	Ethernet IP 10/100 Base-T, Ethernet 10/100 Based-T, SSPI - 1mb, RS485
Weld Processor	Communications - Optional	DeviceNet, ProfiBus, ProfiNet, External Current Interface (ECI)
Weld Processor	Local I/O	With optional DeviceNet board: 2 inputs - 24VDC & 3 outputs - 120VAC
Weld Processor	Expanded I/O using SSPI (up to 8 modules allowed from items A, B, C, D and E)	A. CIOM, IC and breaker control (max 1) B. Discrete I/O Module (max 2) 【16 inputs @24VDC and10 outputs - relay】 C. Analog I/O Module (max 1) 【2 inputs / 2 outputs - 4-20V, 0-10VDC】 D. MCCM Cascade Module (max 3) 【one inverter to 3 MFDC transformers】 E. Ground Fault/Integrity Module (max 2)
Weld Processor	Number of weld schedules	255
Weld Processor	The available number of programmable instructions	77
Weld Processor	Programming steps per schedule	99
Weld Processor	Unit of time setting	Millisecond or Line Cycles
Weld Processor	Number of steppers	32
Weld Processor	Storage of Weld Schedules	F-RAM no battery
Weld Processor	Programming Languages	English, French, German, Spanish, Portuguese, Chinese, Korean, Polish
Cooling	Type	Water
Cooling	Water cooled units - Flow	greater than 5L / min (1.32 gal / min)
Cooling	Water cooled units - Temperature	less than 35 degrees C
Cooling	Water cooled units - pressure	less then 620 kPa / 6.2 bar / 90 PSI
Cooling	Water Hose connection	3/8 Inch rubber hose
Operating Environment	Ambient temperature	+5 degrees C to +45 degrees C
Operating Environment	Rel. air humidity	0-90% RH, non-condensing
Operating Environment	Noise immunity	EN 61000-4-4 Level 3
Operating Environment	Surge	EN 61000-4-5 Level 3
Operating Environment	ESD	EN 61000-4-2 Level 3

FRONT VIEW

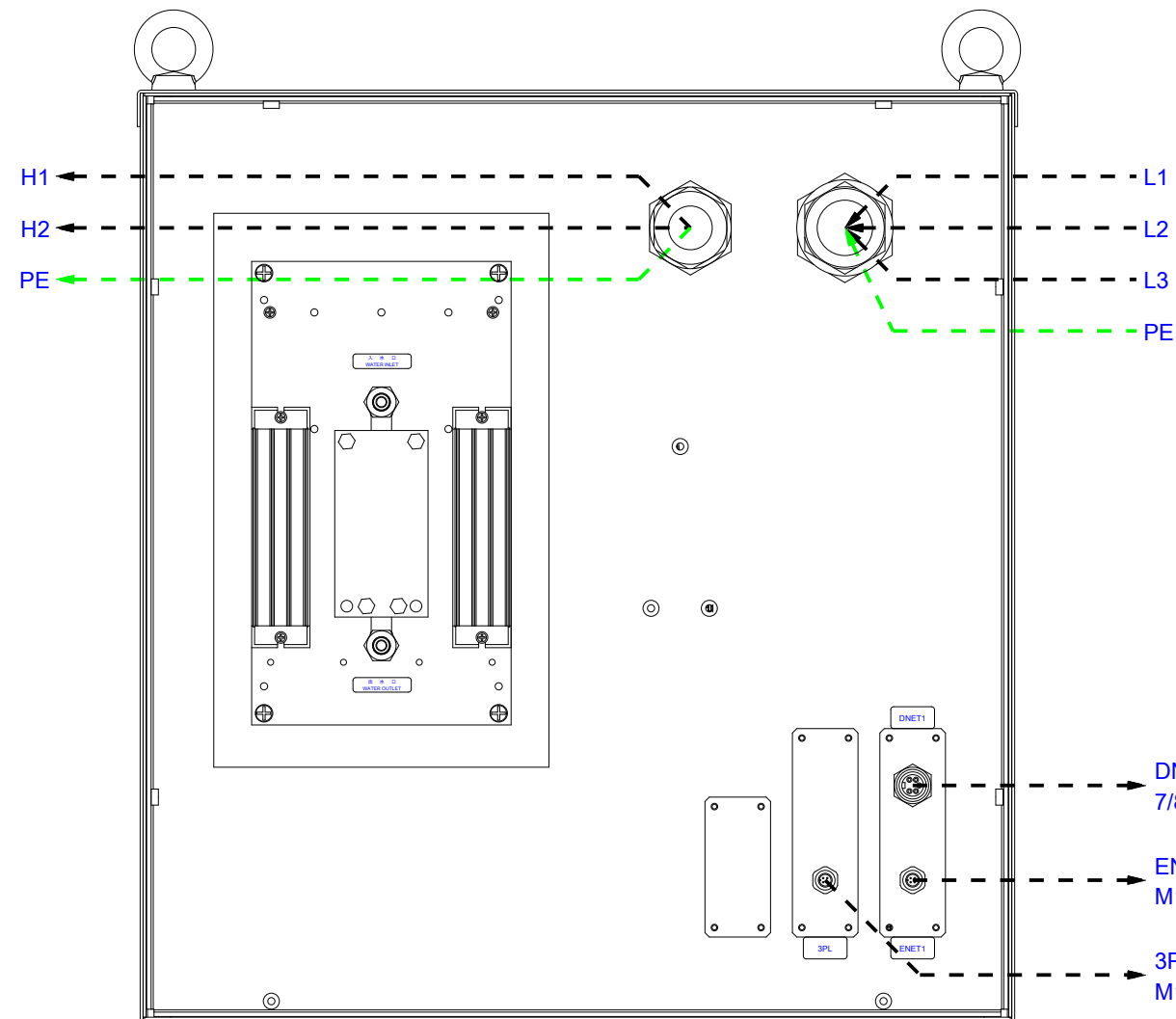


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RAER VIEW

POWER OUT CORD GRIP
CABLE RANGE: 22-32MM
电源输出接头, 夹线范围 : 22-32毫米

CONNECTION TYPE: M8
连接形式: M8



380V-480VAC, 50/60Hz, 3 PHASE
3 X [35MM SQ] MIN + PE [35MM SQ] MIN
3相, 380-480VAC 50/60Hz,

POWER IN CORD GRIP
CABLE RANGE: 32-38MM
电源输入接头, 夹线范围 : 32-38毫米

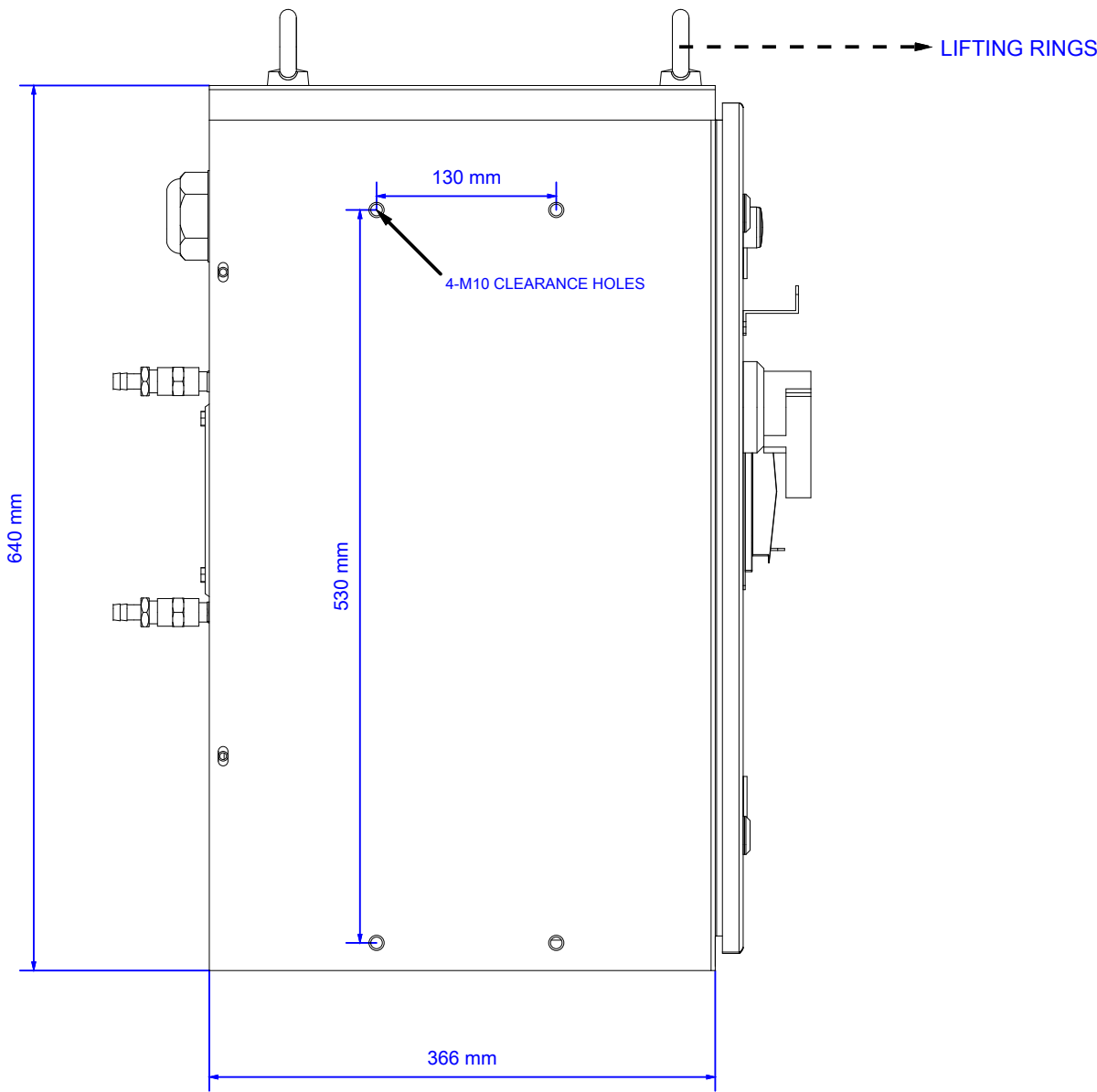
CONNECTION TYPE: M8
连接方式: M8

▶ DNET1: DEVICENET,
7/8" 5-POLE, MALE

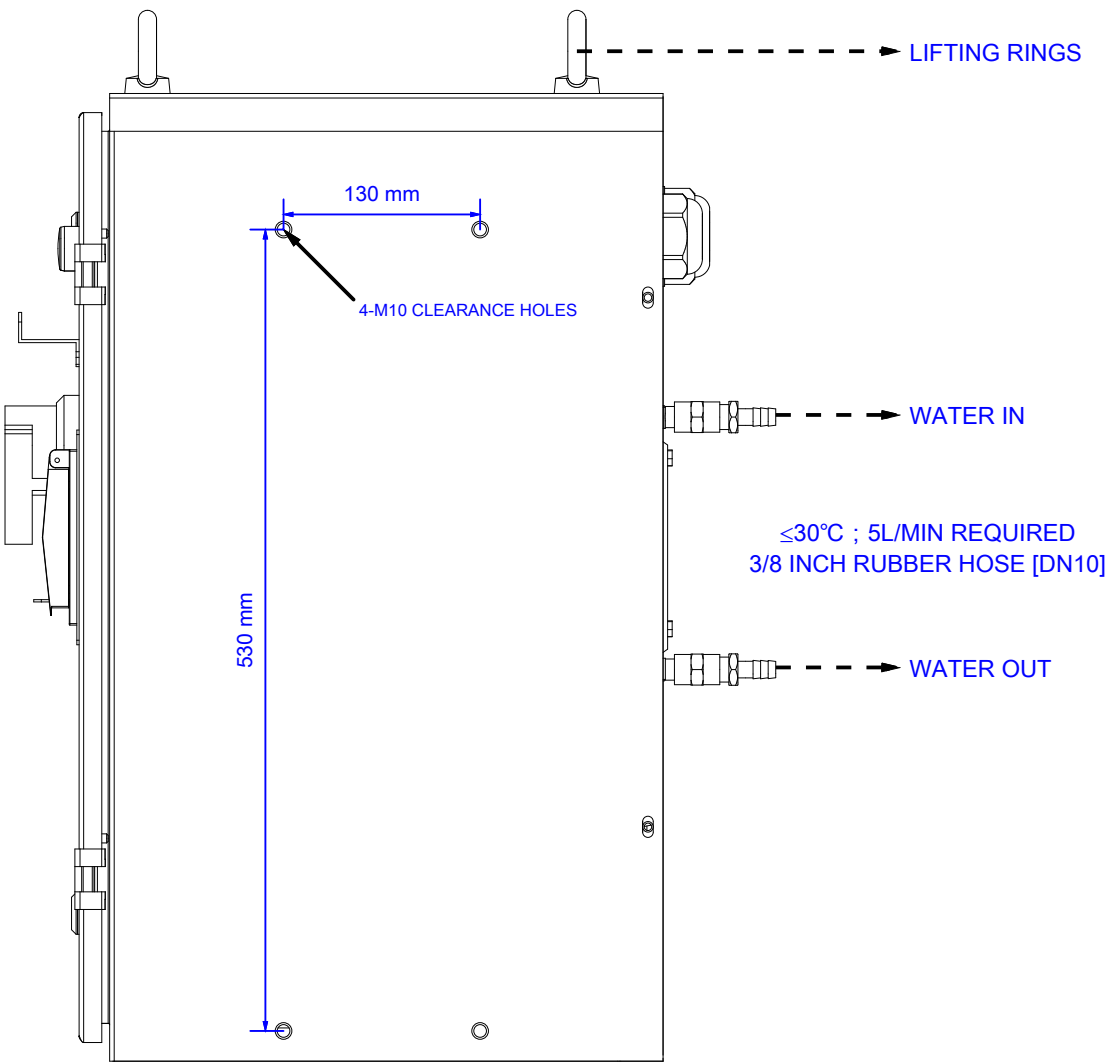
ENET1:ETHERNET,
M12 4-POLE D-CODE, FEMALE

3PL: FEEDBACK,
M12 5-POLE A-CODE, MALE

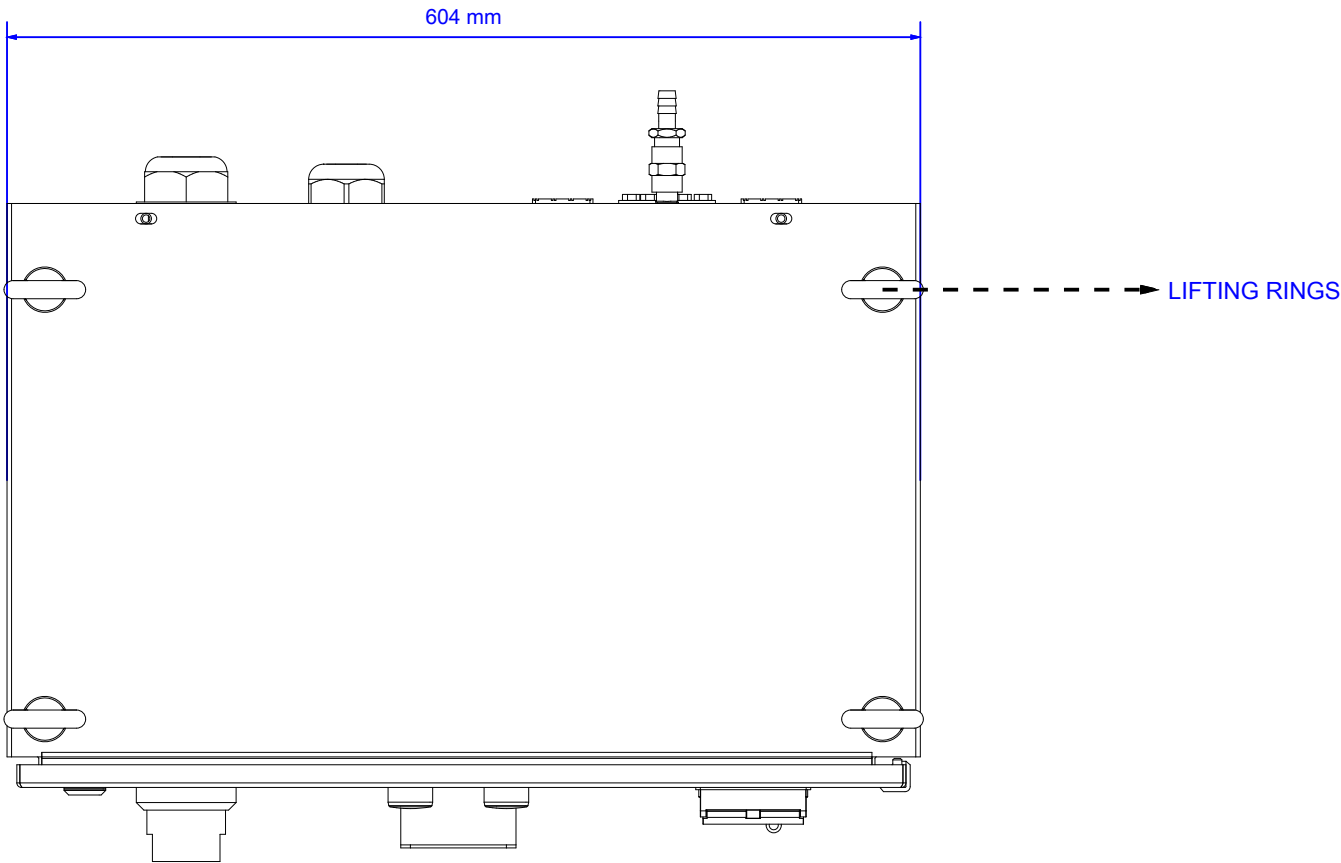
LEFT SIDE VIEW



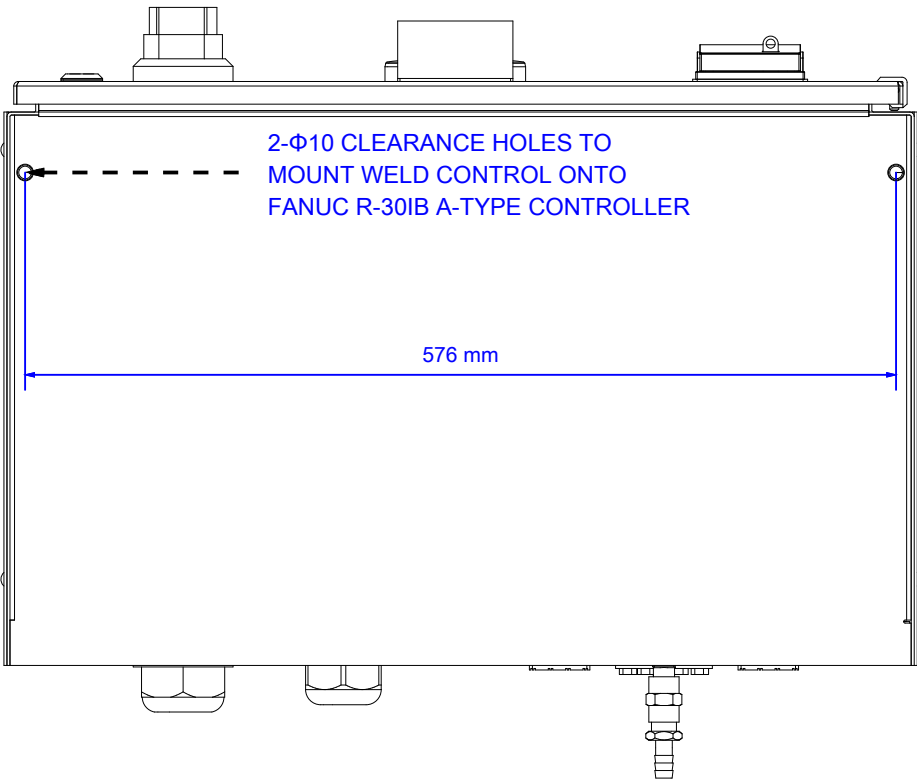
RIGHT SIDE VIEW



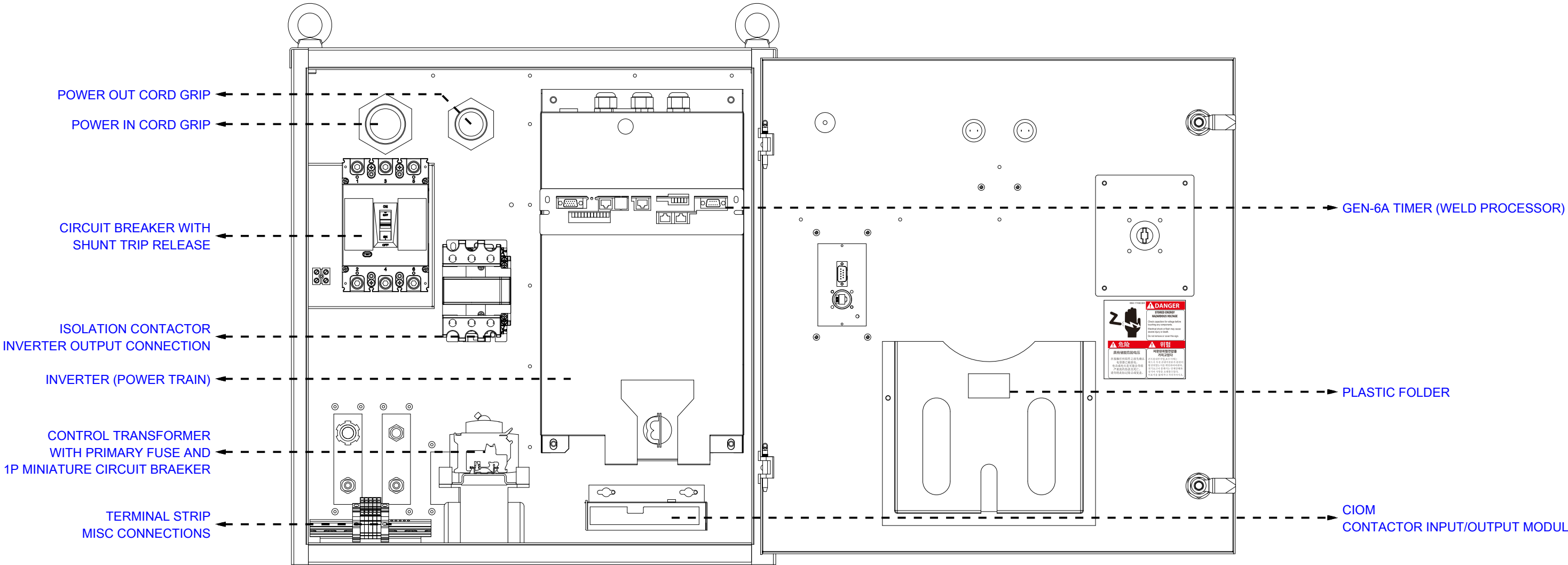
TOP VIEW

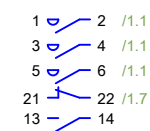


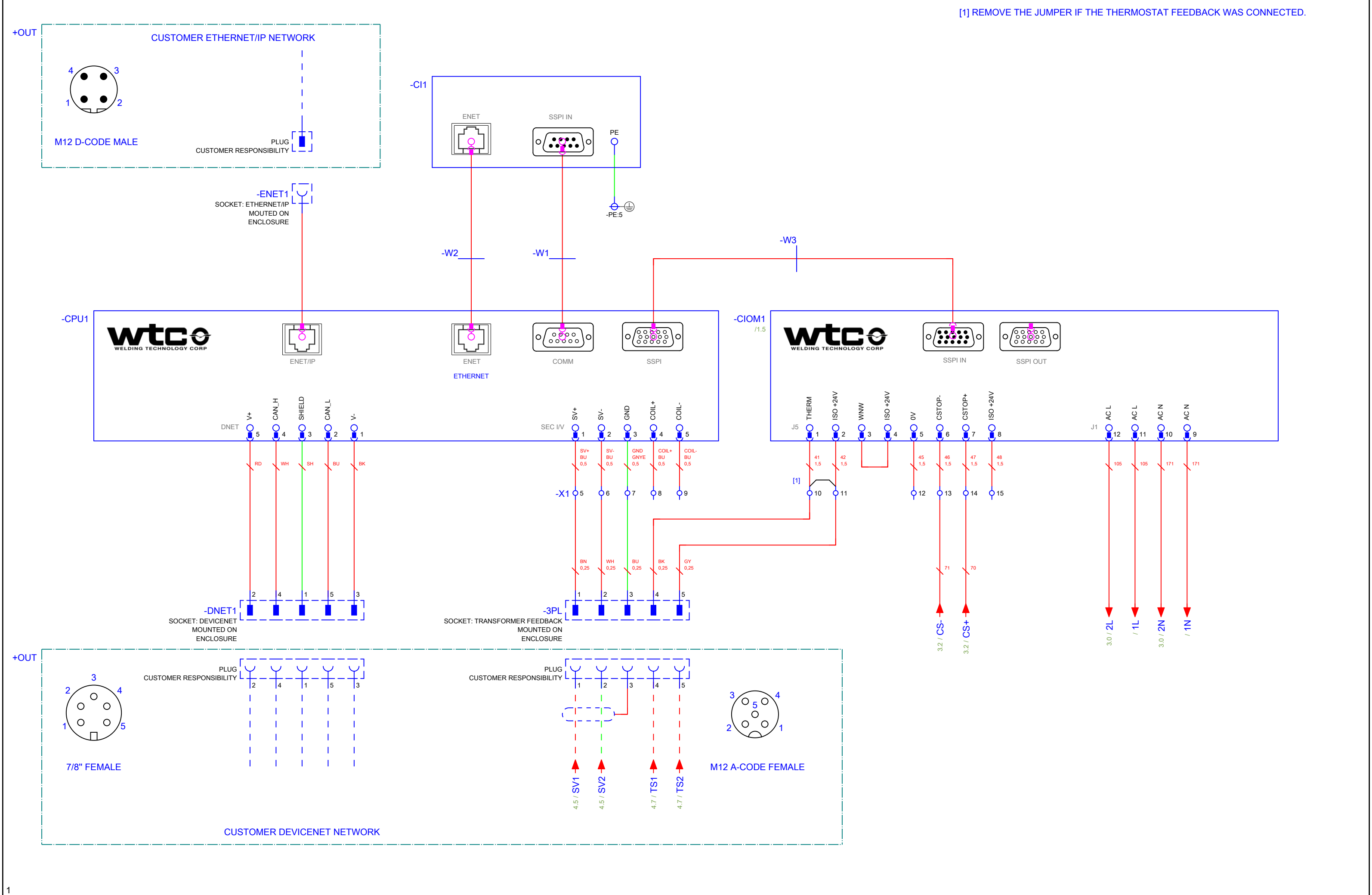
BOTTOM VIEW

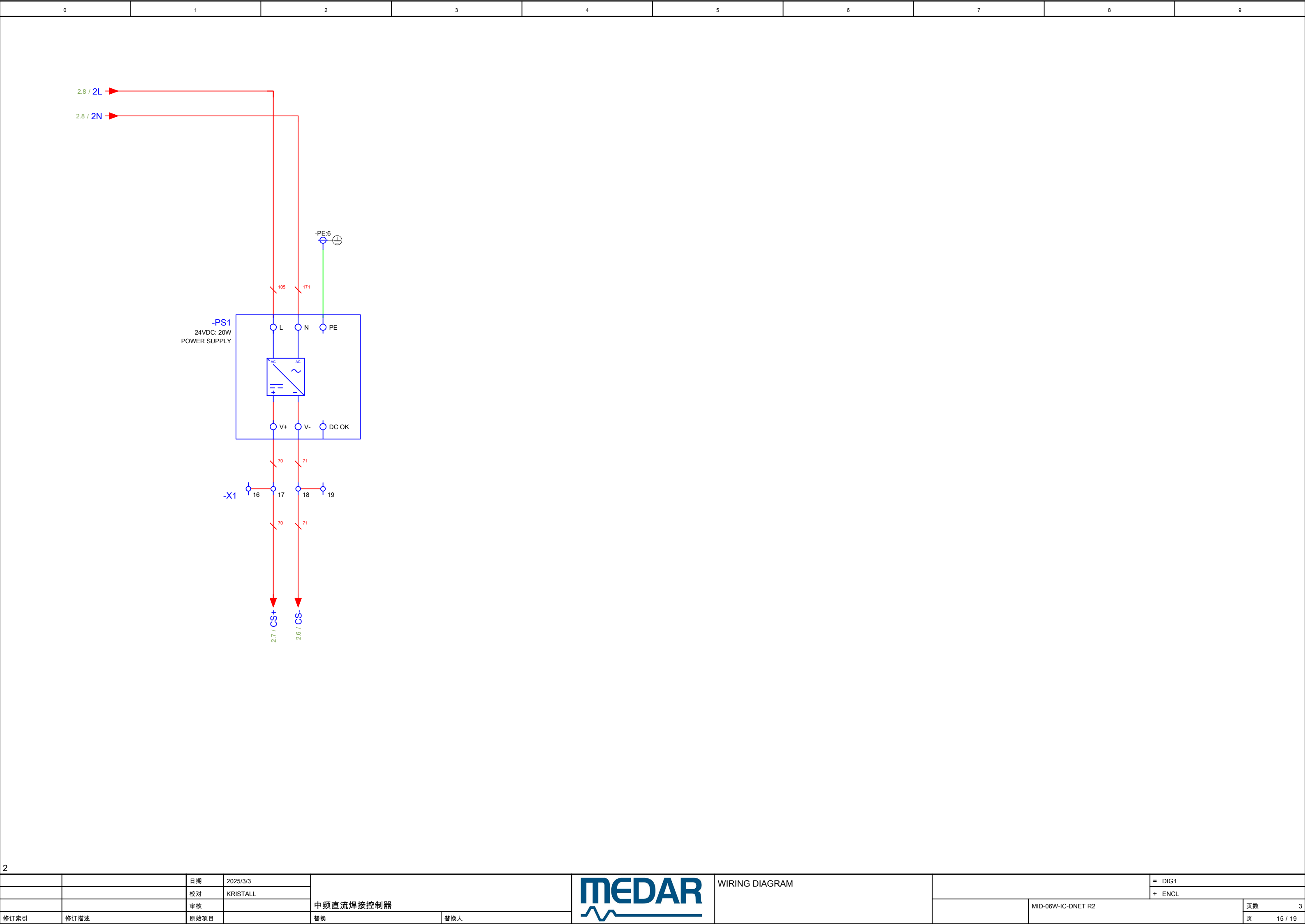


INSIDE VIEW









+OUT
MOUNTED ON
WELDING GUN



端子图表

F13_001

功能文本										电缆名称	排 =DIG1+ENCL-X1						电缆名称						页/列
											目标代号	连接点	端子	短连接	目标代号	连接点							
											-INV1	CNIG3:1	1		-H1	X2							/1.3
											-INV1	CNIG3:2	2		-H1	X1							/1.3
											-INV1	CNIG3:5											
													3		-H2	X2							/1.3
											-INV1	CNIG3:6	4		-H2	X1							/1.4
											-3PL	1	5	•	-CPU1	SEC IV:1							/2.4
											-3PL	2	6	•	-CPU1	SEC IV:2							/2.4
											-3PL	3	7	•	-CPU1	SEC IV:3							/2.4
													8	•	-CPU1	SEC IV:4							/2.4
													9	•	-CPU1	SEC IV:5							/2.4
											-3PL	4	10	•	-CIOM1	J5:1							/2.5
											-3PL	5	11	•	-CIOM1	J5:2							/2.6
													12	•	-CIOM1	J5:5							/2.6
													13		-CIOM1	J5:6							/2.6
													14		-CIOM1	J5:7							/2.7
													15	•	-CIOM1	J5:8							/2.7
													16										/3.1
													17		-PS1	V+							/3.2
													18		-PS1	V-							/3.2
													19										/3.2

部件列表

MED_001

设备标识符	数量	名称	类型号	供应商
-F1	1	CH3小型断路器，单极，额定电流4A，瞬时脱扣电流型式：D	CH3N-63D4/1	Changshu Switchgear
-Q1	1	CM3系列塑壳断路器，三级，额定电流In=100A, 短路分断能力LS=标准型, 热磁脱扣, 分励脱扣器=AC110V	CM3-100LS/3310 In=100A AC110V	Changshu Switchgear
-Q1	1	中心式手操机构, A型圆形手柄, 方轴D=400mm, 适用断路器: CM3-100LS/FS/MS, CM3-125LS/FS/MS	FZC6M12-C-A D=400	Changshu Switchgear
-Q1	1	FLF6M零飞弧罩, 三极, 适用断路器: CM3-100LS/FS/MS,CM3-125LS/FS/MS	FLF6M12-3	Changshu Switchgear
-FU1	2	RSC有填料圆筒帽形快速熔断器 2A, 额定电压AC250/500, DC110/250, 分断能力100KA	RSC0520 2A	Hugong Electric
-FU1	2	保险丝端子, 螺帽式, GB14048.18/IEC60947-7-3, 0.5-16mm²	GK10 DRFUSE	Honeywell
-FU1	2	终端固定件	E/SK	Honeywell
-X1	18	双进双出直插式直通弹簧端子，IEC 60947-7-2，0.08-2.5mm²	DPK2.5/4	Honeywell
-X1	1	D-DPK2.5/4 - 端板	D-DPK2.5/4	Honeywell
-X1	2	终端固定件	E/SK	Honeywell
-X1	1	双进双出直插式接地弹簧端子，IEC 60947-7-2，0.08-2.5mm²	DPK2.5/4-PE	Honeywell
-CI1	1	DEP COVER	DEP-COVER	Medar Welding Equipment Co., Ltd.
-CI1	1	DB9串口9针转接头，公对母	DB9	Medar Welding Equipment Co., Ltd.
-CI1	1	六类网口直通插座	RJ45-CAT6	Medar Welding Equipment Co., Ltd.
-W1	1	DB9数据电缆, 公对母直线线, 1.0M	DB9-1.0M	Medar Welding Equipment Co., Ltd.
-W2	1	Cat5e超5类网线, 1.0M	CAT5e-1.0M	Medar Welding Equipment Co., Ltd.
-W3	1	HDB15数据电缆, 公对母直线线, 1.0M	HDB15-1.0M	Medar Welding Equipment Co., Ltd.
-CIOM1	1	Mini-Fit Jr. Receptacle Housing, Dual Row, 10 Circuits, UL 94V-2, Natural	39012100	MOLEX
-CIOM1	1	Mini-Fit Jr. Receptacle Housing, Single Row, 5 Circuits, UL 94V-2, Natural	39014050	MOLEX
-CIOM1	12	Mini-Fit Female Crimp Terminal, Tin (Sn) over Copper (Cu) Plated Brass, 16 AWG, Bag	39000078	MOLEX
-INV1	1	2.36mm Diameter Standard .093" Pin and Socket Receptacle Housing with Positive Latch, UL 94V-2, 4 Circuits	19091049	MOLEX
-INV1	1	2.36mm Diameter Standard .093" Pin and Socket Receptacle Housing with Positive Latch, UL 94V-2, 6 Circuits	19091069	MOLEX
-INV1	8	2.36mm Diameter, Standard .093" Pin and Socket Crimp Terminal, Series 1189, Female, with Tin (Sn) Plated Brass Contact, 20-14 AWG, Bag	02091104	MOLEX
-PS1	1	20W单组输出导轨电源	MDR-20-24	MEAN WELL
-T1	1	控制变压器, 额定容量=300VA, INPUT: 400/480/600VAC, OUTPUT: 24/120VAC	JBK3-300-1	ONE Mechanical & Electrical Co., Ltd.
-CIOM1	1	MSTB 2,5/ 8-ST - PCB 插拔式连接器	MSTB 2,5/ 8-ST	Phoenix Contact
-CIOM1	1	MSTB 2,5/10-ST - PCB 插拔式连接器	MSTB 2,5/10-ST	Phoenix Contact
-CIOM1	1	MSTB 2,5/12-ST - PCB 插拔式连接器	MSTB 2,5/12-ST	Phoenix Contact
-CPU1	1	MC 1,5/ 5-ST-3,81 - PCB 插拔式连接器	MC 1,5/ 5-ST-3,81	Phoenix Contact
-CPU1	1	MSTB 2,5/ 5-STF-5,08 - PCB 插拔式连接器	MSTB 2,5/ 5-STF-5,08	Phoenix Contact
-H1	1	AC/DC 24V 白色LED指示灯	XB2BVB1LC	Schneider Electric
-H2	1	AC/DC 24V 绿色LED指示灯	XB2BVB3LC	Schneider Electric
-K1	1	TeSys DS 系列交流接触器,3极(3NO),AC-3/AC-3e,<=440V,95A,110VAC,螺钉端子	LC1DS95F7C	Schneider Electric
-K1	1	TeSys Deca 浪涌抑制模器, 110...240 V AC	LA4DA2U	Schneider Electric
-DNET1	1	7/8"圆形连接器, DeviceNet Male, 2.0m	978501-803-0200	SVL Electric
-ENET1	1	M12总线连接器, Ethernet/IP, M12 D-code Female, 2.0m	944733Y-793-0200	SVL Electric
-3PL	1	板后安装连接器, M12 A-Coded, 5-pole Male, 1.0m	913521-971-0100	SVL Electric

=RP1/1

