



Robotiq

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2022.0.3

Project description

Palletizing

Job number

PAL-AE05

Project name

PE Solution

Modification date

2022-01-10

Revision

Rev C

Power supply

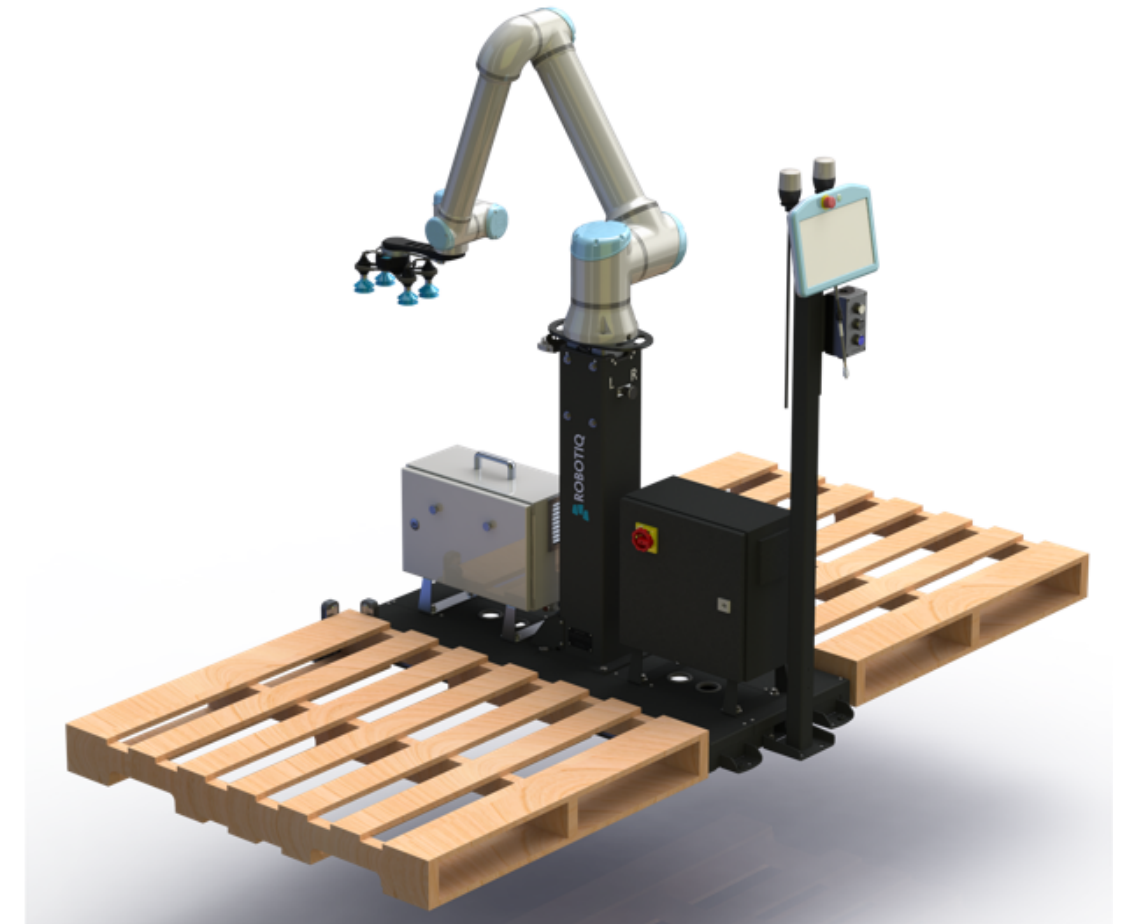
100-240 VAC / 50-60 Hz

Input lead

15A

Control voltage

24 VDC



Created on 2021-10-13

Edit date 2022-01-10

by (short name) Michael Goidin

Number of pages 37

Rev C	2021-11-30	Michael Goidin	Date	2021-12-15
Rev B	2021-10-27	Michael Goidin	Created by	Michael Goidin
Rev A	2021-10-27	Michael Goidin	Approved by	
Modification	Date	Name	Revision	Rev C

Palletizing



Title page / cover sheet

PAL-AE05

Folio 1

Page 1 / 37

Table of contents

Table of contents Robotiq

Higher-level function	Mounting location:	Page	Page description	Date	Edited by
		1	Title page / cover sheet	2021-12-15	Michael Goidin
		2	Table of contents	2022-01-10	Michael Goidin
		2.a	Table of contents	2022-01-10	Michael Goidin
		3	Revision overview : =3D_Views+CAB1/53 - =SYS+CAB1/14	2022-01-10	Michael Goidin
		3.a	Revision overview : =SYS+CAB1/16 - =Reports+CAB1/204	2022-01-10	Michael Goidin
		3.b	Revision overview : =Reports+CAB1/151 - =+	2022-01-10	Michael Goidin
		4	Safety	2021-12-15	Michael Goidin
		5	Technical Notes	2021-12-15	Michael Goidin
		6	System Overview	2021-12-15	Michael Goidin
SYS	CAB1	Cabinet 1			
		10	AC Voltage Supply	2022-01-10	Michael Goidin
		12	DC Voltage Supply	2021-12-15	Michael Goidin
		13	PLC - Inputs	2021-12-15	Michael Goidin
		14	PLC - Outputs	2021-12-15	Michael Goidin
		15	Pallet Sensing	2021-12-15	Michael Goidin
3D_Views	CAB1	Cabinet 1			
		50	General Views	2022-01-10	Michael Goidin
		51	External Views	2022-01-10	Michael Goidin
		52	Mounting Plate	2022-01-10	Michael Goidin
3D_Views	Box				
		54	Pushbuttons Box	2022-01-10	Michael Goidin
Reports	CAB1	Cabinet 1			
		100	Parts list : PXC.3022276 - OMR.D2HW-C273MR	2022-01-10	Michael Goidin
		101	Parts list : OMR.D2HW-C273MR - ROB.PAL-AE059	2021-12-15	Michael Goidin
		102	Parts list : ROB.PAL-AE060 - PXC.1522516	2021-12-15	Michael Goidin
		103	Parts list : LAPP.601805 - SCH.6051.2109	2021-12-15	Michael Goidin

0

1

2

3

4

5

6

7

8

9

Table of contents

Table of contents Robotiq

Higher-level function	Mounting location:	Page	Page description	Date	Edited by
Reports	CAB1	Cabinet 1			
		104	Parts list : PXC.1419690 - PXC.3030514	2021-12-15	Michael Goidin
		150	Summarized parts list	2022-01-10	Michael Goidin
		151	Summarized parts list	2021-12-15	Michael Goidin
		200	Terminal diagram =SYS+CAB1-X1	2021-12-15	Michael Goidin
		202	Terminal diagram =SYS+CAB1-X25	2021-12-15	Michael Goidin
		203	Terminal diagram =SYS+CAB1-X26	2021-12-15	Michael Goidin
		204	Terminal diagram =SYS+CAB1-X50	2021-12-15	Michael Goidin
		205	Terminal diagram =SYS+CAB1-XE	2021-12-15	Michael Goidin
		300	Cable diagram:W1 :W2 :W50 :W51	2021-12-15	Michael Goidin
		301	Cable diagram:W52 :W53 :W60 :W61	2021-12-15	Michael Goidin
		302	Cable diagram:W62 :W63 :W70 :W80	2021-12-15	Michael Goidin
		303	Cable diagram:W100 :W101 :W103	2021-12-15	Michael Goidin
400	Connection list : 1 - 51	2022-01-10	Michael Goidin		

2

3

Rev C	2021-11-30	Michael Goidin	Date	2022-01-10	Palletizing		Table of contents		
Rev B	2021-10-27	Michael Goidin	Created by	Michael Goidin					
Rev A	2021-10-27	Michael Goidin	Approved by						
Modification	Date	Name	Revision	Rev C					
								PAL-AE05	Folio 2.a Page 3 / 37

Revision overview

Revision Overview Robotiq

Revision nameRev C					
Index	Page name	Date	Creator	Revision description	Reason for revision change
	=3D_Views+CAB1/53	2022-01-10	Michael Goidin	New page created	
02	/6	2021-12-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	/6	2021-12-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=SYS+CAB1/16	2021-12-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=SYS+CAB1/16	2021-12-13	Michael Goidin	Teach pendant position Add pushbuttons box	
Revision nameRev B					
Index	Page name	Date	Creator	Revision description	Reason for revision change
02	=+ (CAB1)	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/51	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/150	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/51	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/151	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/200	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=+ (CAB1)	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/52	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/50	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/102	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=SYS+CAB1/10	2021-11-30	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	=SYS+CAB1/12	2021-11-18	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	=SYS+CAB1/14	2021-11-18	Michael Goidin	Teach pendant position Add pushbuttons box	

2.a

Rev C	2021-11-30	Michael Goidin	Date	2022-01-10
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Rev A	2021-10-27	Michael Goidin	Approved by	
Modification	Date	Name	Revision	Rev C

Palletizing



Revision overview : =3D_Views+CAB1/53 -
=SYS+CAB1/14

PAL-AE05

3.a

Revision overview

Revision nameRev B					
Index	Page name	Date	Creator	Revision description	Reason for revision change
02	=SYS+CAB1/16	2021-11-18	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	=Reports+CAB1/400	2021-11-18	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	=Reports+CAB1/100	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/51	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/151	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/102	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/150	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	=Reports+CAB1/103	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=SYS+CAB1/16	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/52	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=3D_Views+CAB1/50	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/104	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/204	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/303	2021-11-15	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	/6	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
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02	=Reports+CAB1/150	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/204	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	

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Revision Overview Robotiq

Revision nameRev B					
Index	Page name	Date	Creator	Revision description	Reason for revision change
02	=Reports+CAB1/151	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/303	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	/2	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	/2.a	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	/3	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	/1	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=SYS+CAB1/16	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
02	=Reports+CAB1/101	2021-11-03	Michael Goidin	Teach pendant position Add pushbuttons box	
	/3	2021-11-02	Michael Goidin	New page created	
02	=3D_Views+CAB1/51	2021-10-27	Michael Goidin	Teach pendant position Add pushbuttons box	
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Revision nameRev A					
Index	Page name	Date	Creator	Revision description	Reason for revision change
01	=Reports+CAB1/150	2021-10-27	Michael Goidin	First Release	
01	=Reports+CAB1/151	2021-10-27	Michael Goidin	First Release	
01	=3D_Views+CAB1/50	2021-10-27	Michael Goidin	First Release	
01	/2.a	2021-10-27	Michael Goidin	First Release	
01	/2	2021-10-27	Michael Goidin	First Release	
01	/6	2021-10-27	Michael Goidin	First Release	
01	=3D_Views+CAB1/52	2021-10-27	Michael Goidin	First Release	
01	=3D_Views+CAB1/51	2021-10-27	Michael Goidin	First Release	
01	=+ (CAB1)	2021-10-27	Michael Goidin	First Release	

SAFETY REGULATIONS

GENERAL SAFETY REGULATIONS



DANGER !

During plant operation certain items are under dangerous voltage!
Non-observance of safety instructions can result in death, serious injuries or material damage.

Only specialist personnel may carry out transport, installation and commissioning work.

The applicable valid standards as well as the national and / or company-specific accident prevention regulations are to be observed.

The following safety instructions are to be observed:

The erection, commissioning, troubleshooting as well as repair of the plant may only be carried out by qualified personnel that is familiar with the corresponding operating instructions.

Mounting of the devices has to be effected in accordance with the valid standards, state and local regulations.
Proper grounding and conductor dimensioning as well as proper short-circuit proofing have to be ensured.
These measures serve to ensure the safety of the plant and of the operating personnel.

Before carrying out safety checks, maintenance work and repair measures ensure that all the power supplies are switched off, are secured against being switched on unintentionally and are marked correspondingly.

Only test devices that are in a technically perfect condition and are suitable for the respective measurement may be used to carry out measurements!

The instructions specified in the respective operating instructions are to be followed strictly!
It is mandatory that hazard, warning and safety instructions be observed!

All doors and covers are to be kept closed during the plant operation.
If cooling devices are installed in the plant, ensure that these systems operate trouble-free.
These include the regular cleaning of the filters, in as far as they exist.

Rev C	2021-11-30	Michael Goidin	Date	2021-12-15
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WIRING REGULATIONS

(Symbols in accordance with IEC 60757)

WIRING COLORS

Main current AC	Black (BK)	Control circuit DC	Blue (BU)
Neutral conductor	Red (RD)	External voltage	Orange (OG)
Neutral conductor	Red (RD)	Jumpers	Orange (OG)
Protective wire	Green-yellow (GNYE)		

MINIMUM CROSS-SECTIONS

Main current	2,5 mm²
Control line	0,75 mm²
PLC wiring	0,75 mm²

CROSS REFERENCE AWG TO MM2

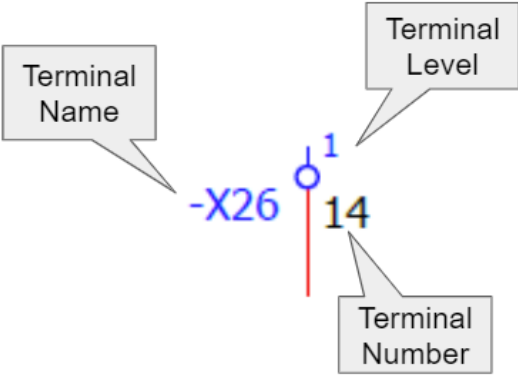
AWG	MM2
26	0.14
24	0.25
22	0.34
21	0.38
20	0.5
18	0.75
17	1
16	1.5
14	2.5
12	4
10	6
8	10
6	16

MATERIAL REGULATIONS

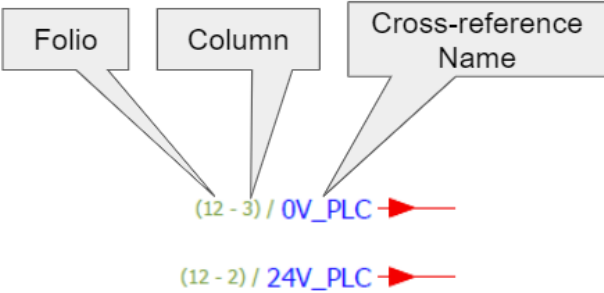
ENCLOSURES

Enclosures	RITTAL WM 1244.250
Enclosure protection category	NEMA 4
Enclosure color	RAL 7035
Degree of protection	IP 66

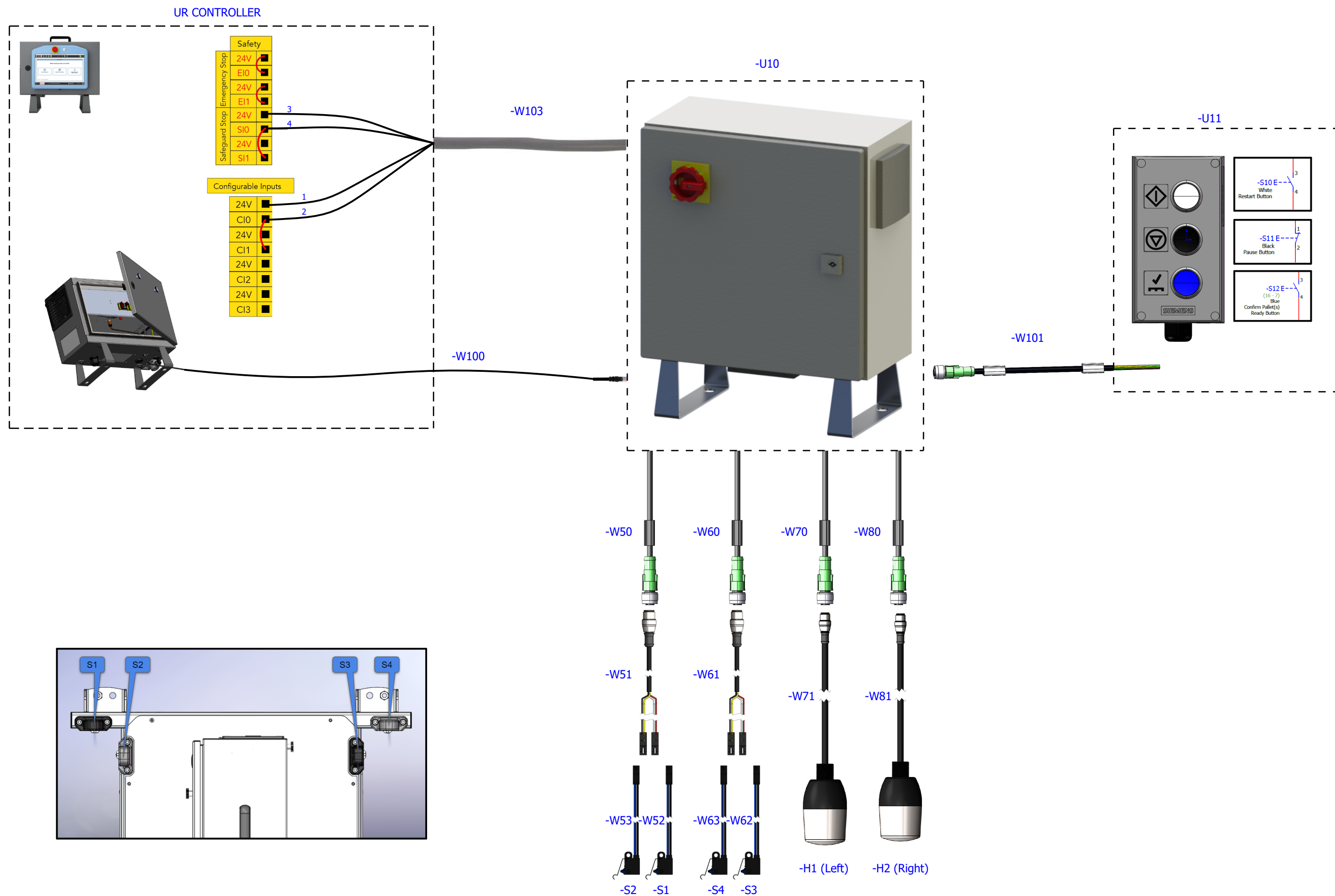
Terminals Configuration

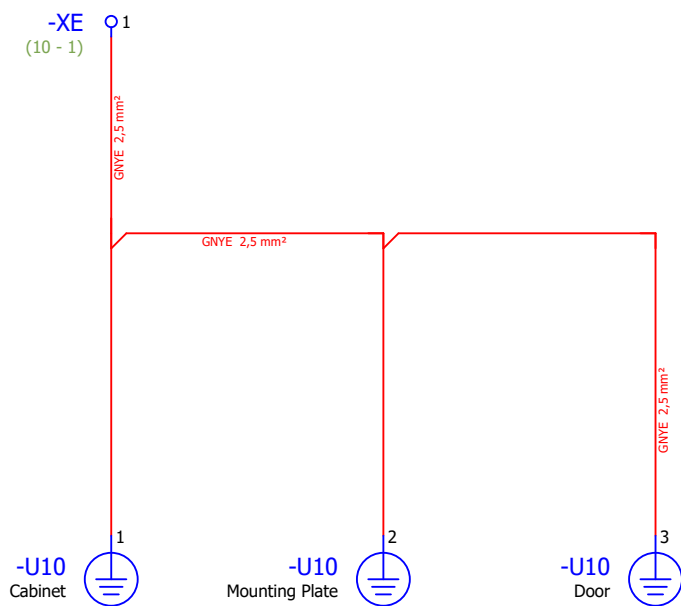
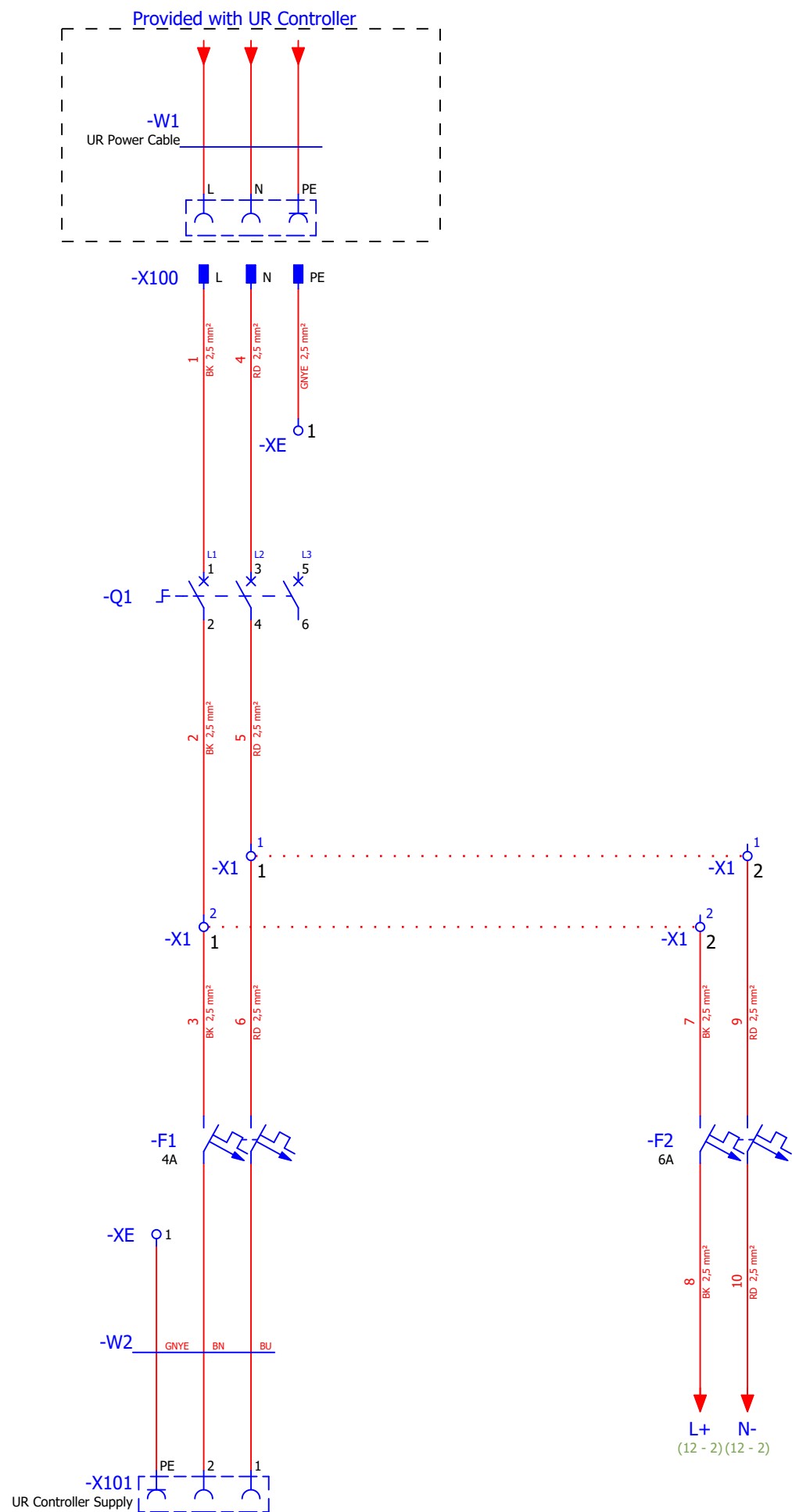


Cross-references



System Overview





Cabinet #1

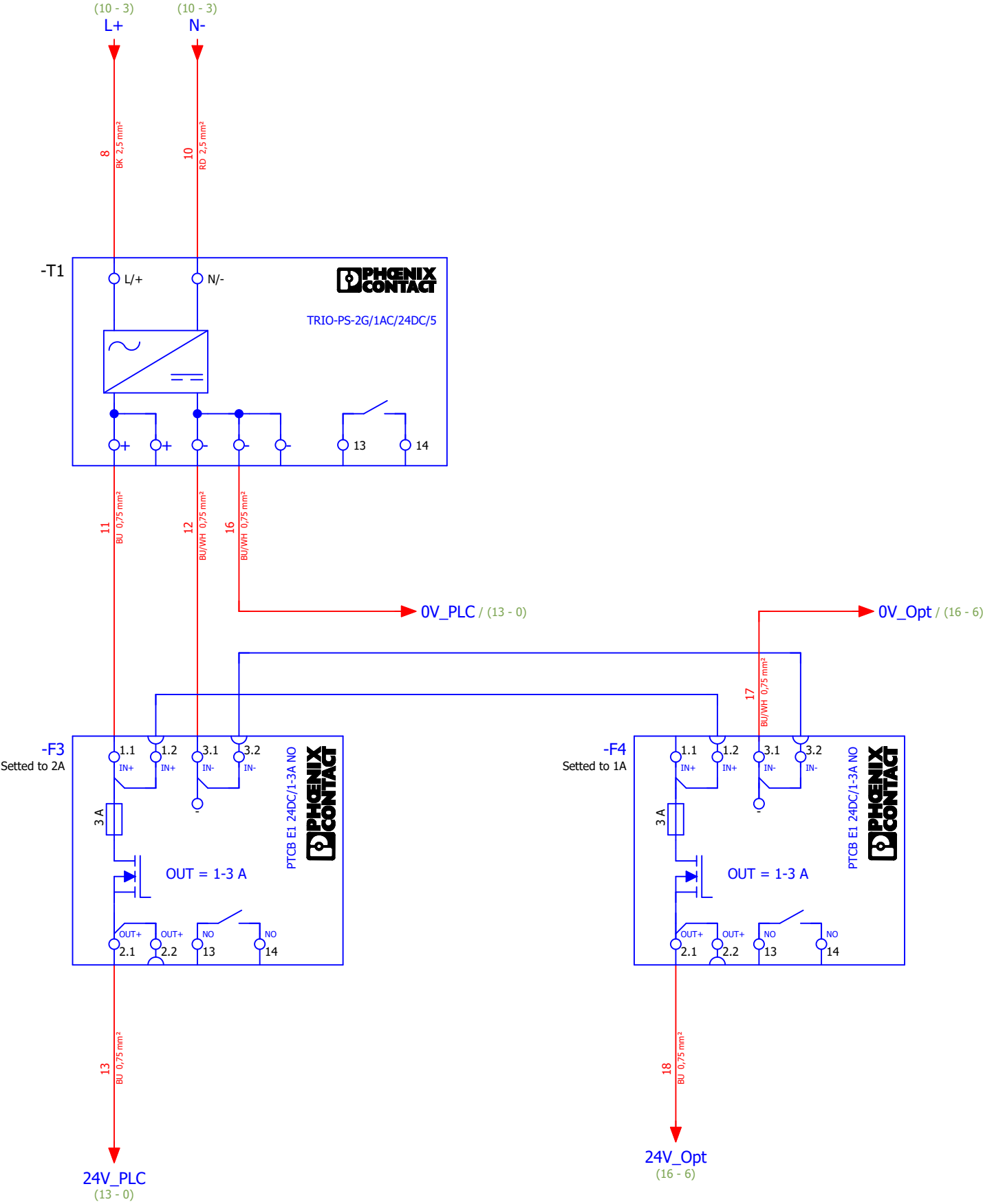
Cabinet Accessories

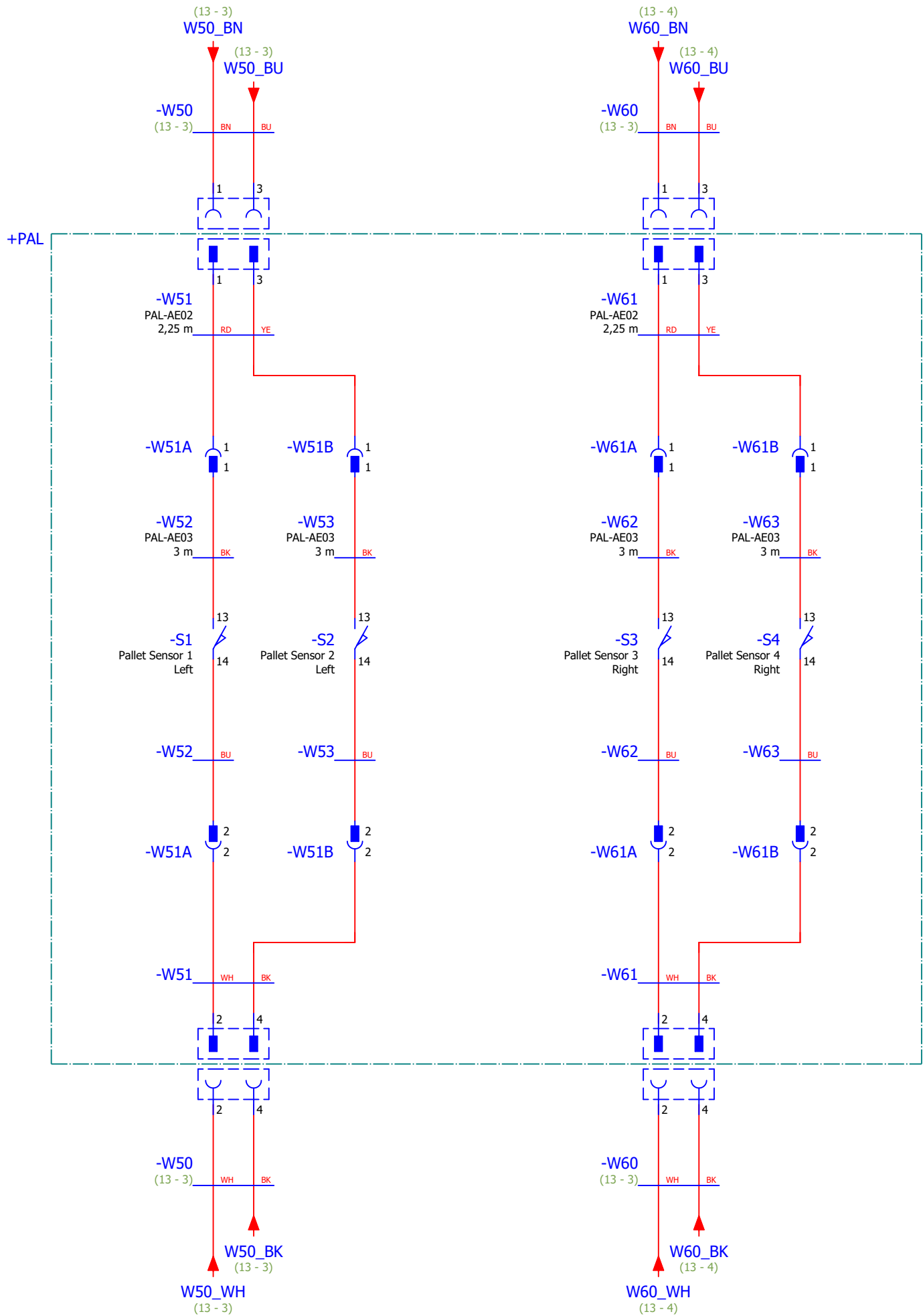
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Pushbuttons Box

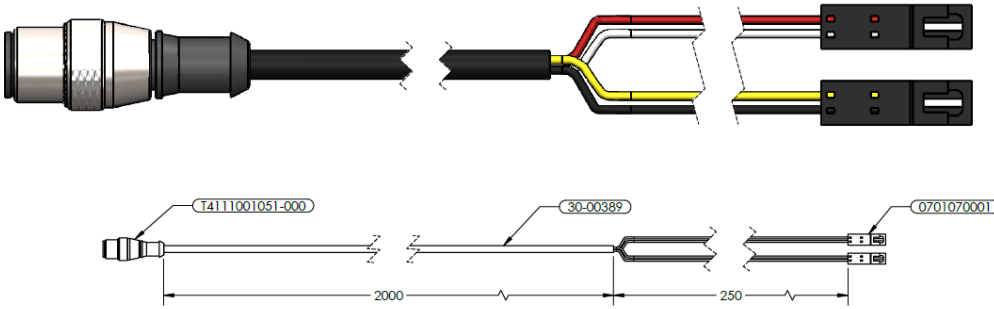
+Box

-U11

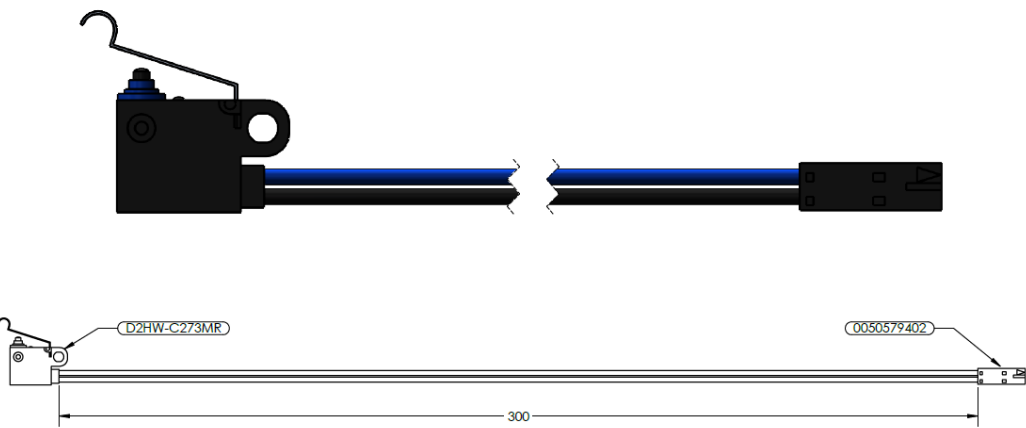




W51 / W61



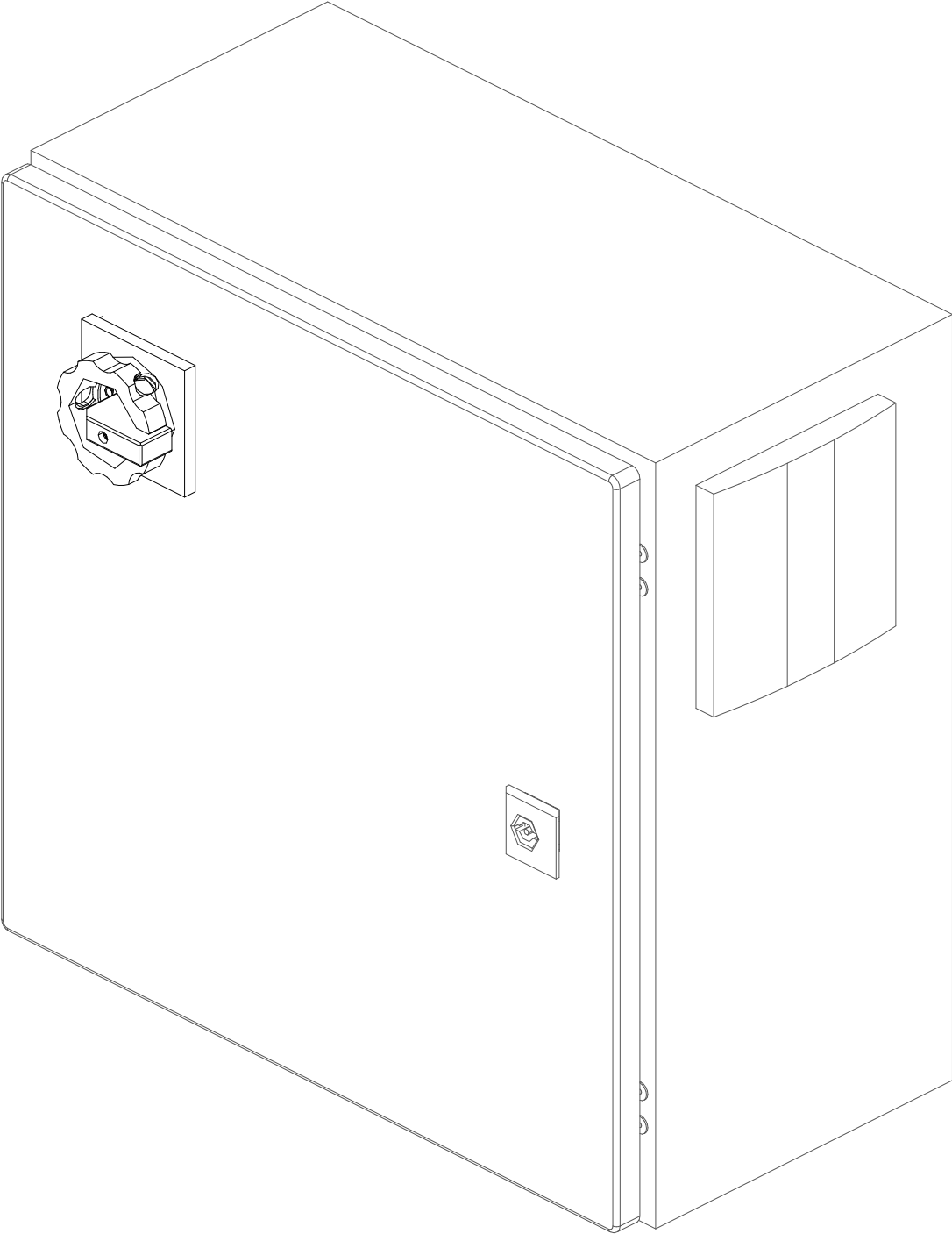
W52 / W53 / W62 / W63



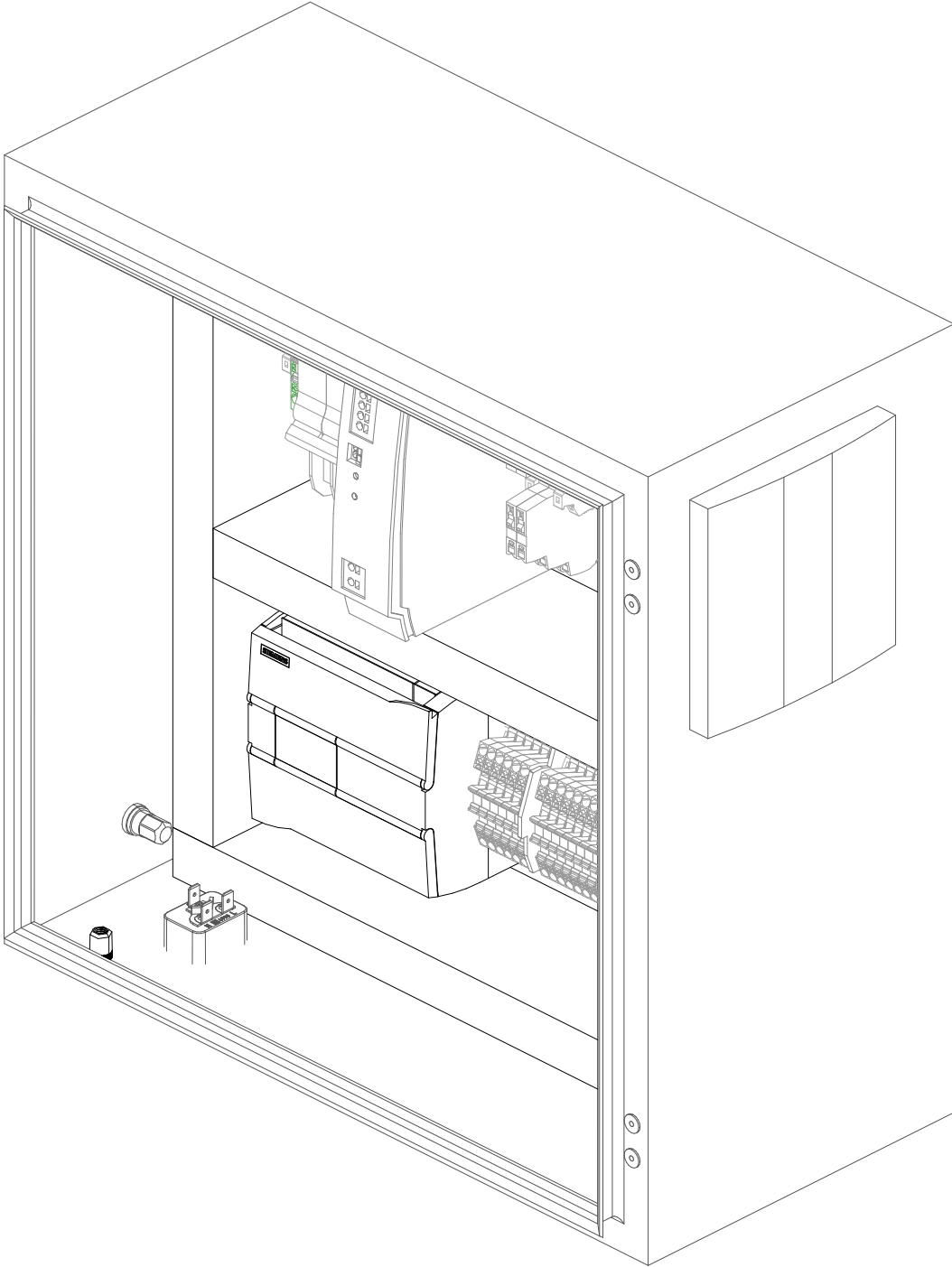


Palletizing	
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PAL-AE05	Folio 16 Page 15 / 37

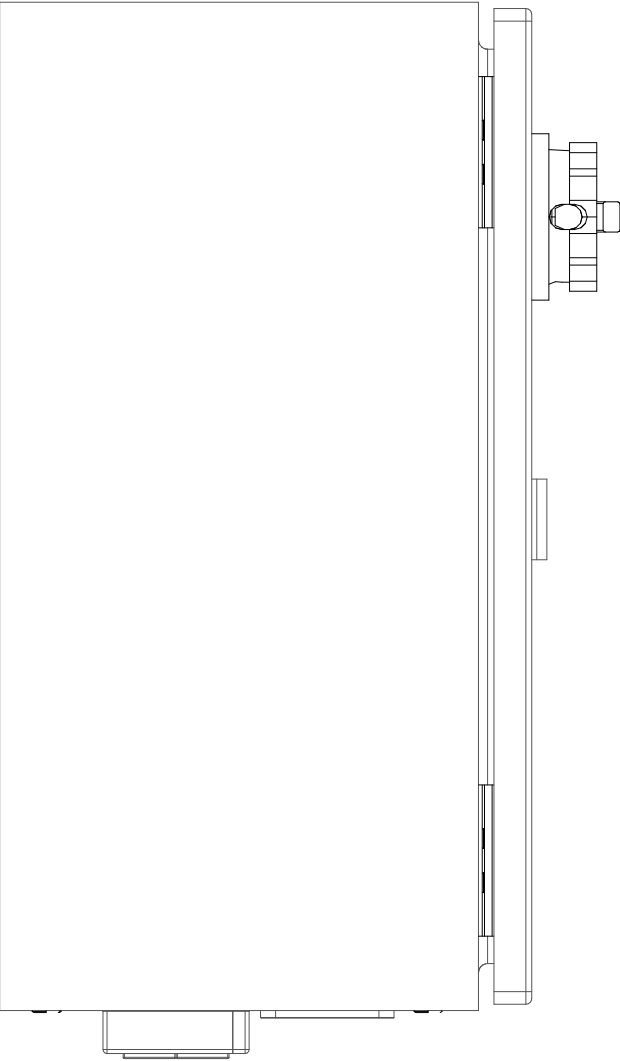


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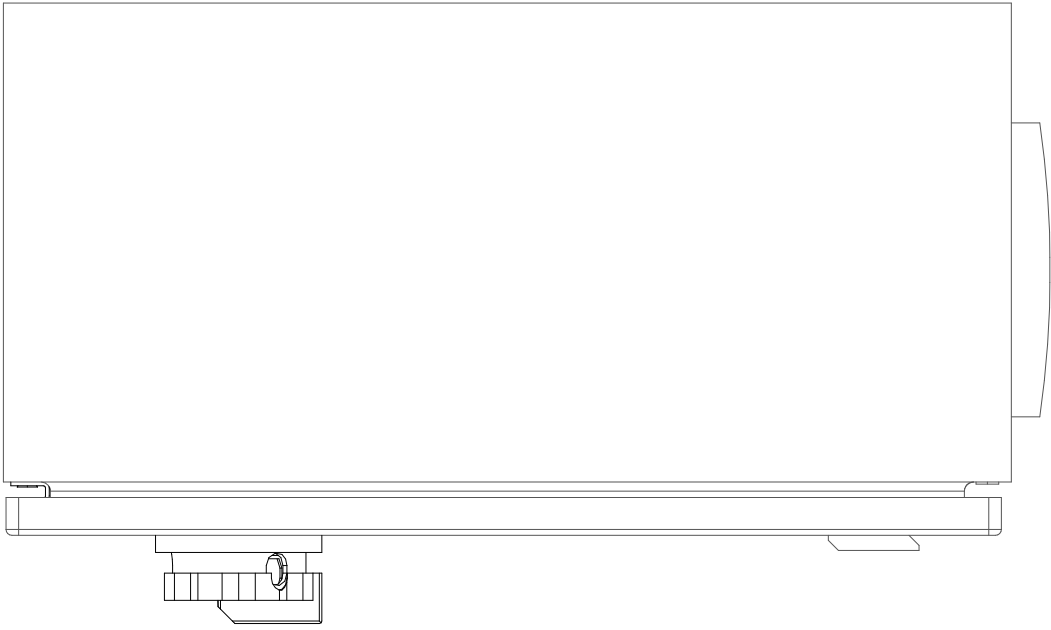


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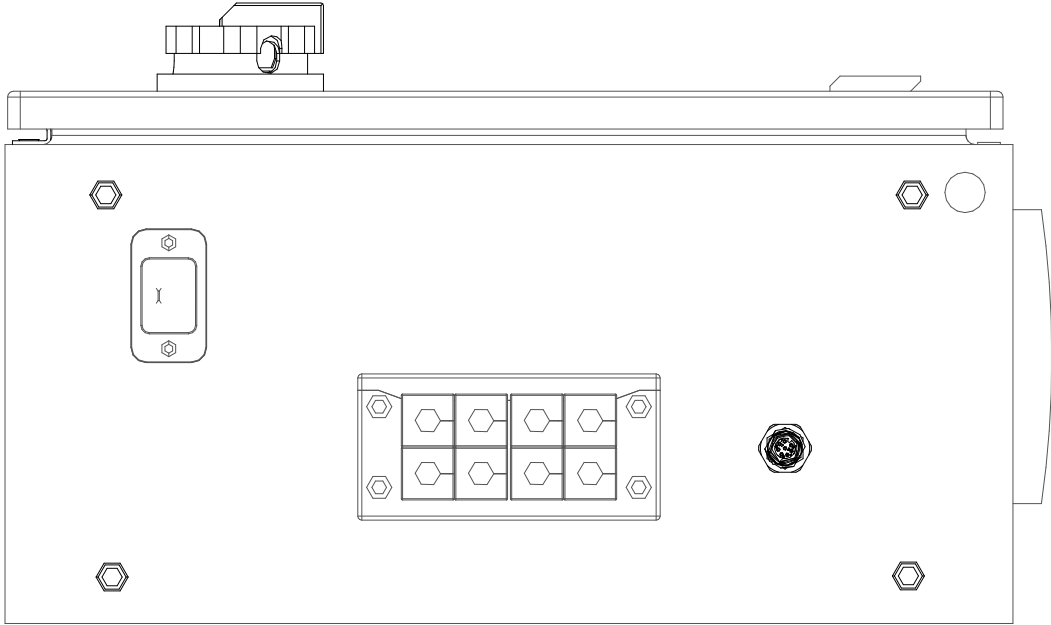
Rev C	2021-11-30	Michael Goidin	Date	2021-12-15
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Modification	Date	Name	Revision	Rev C



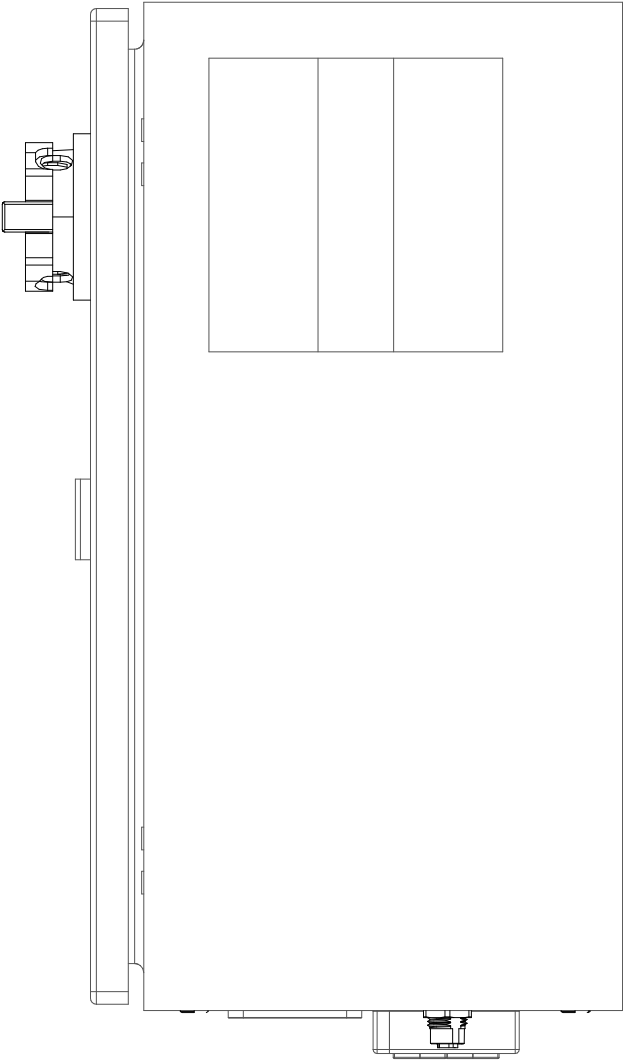
Left Side



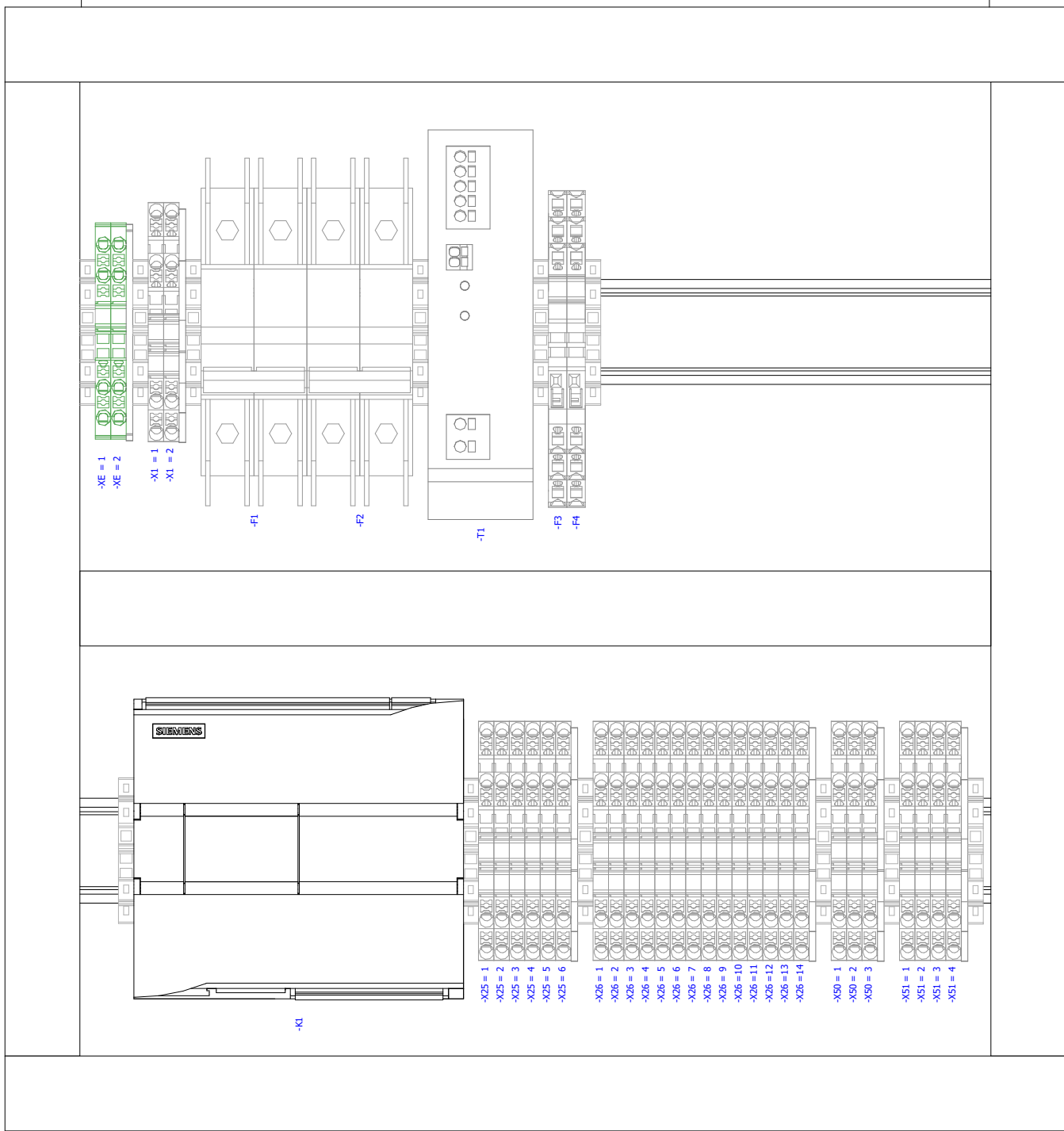
Top



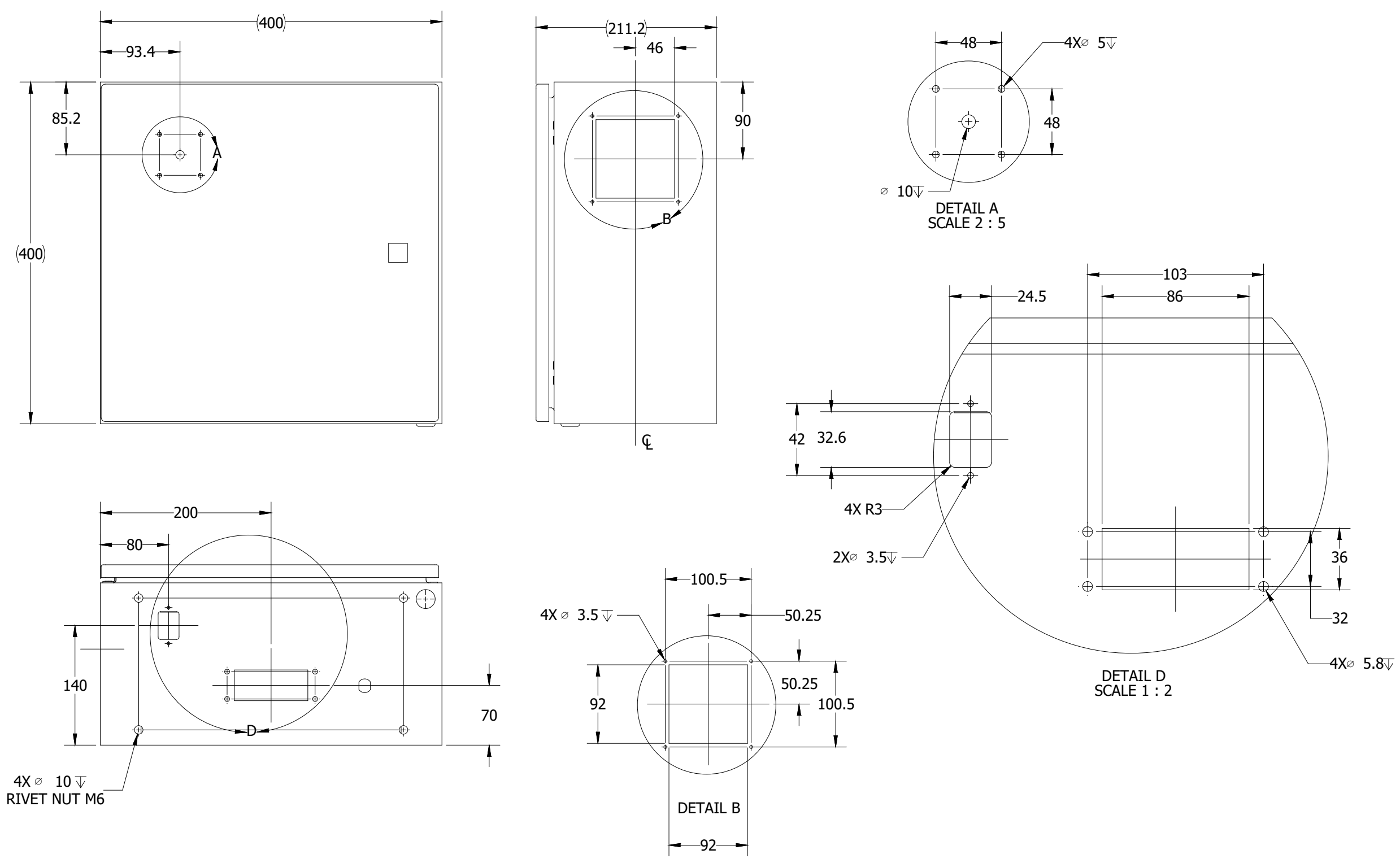
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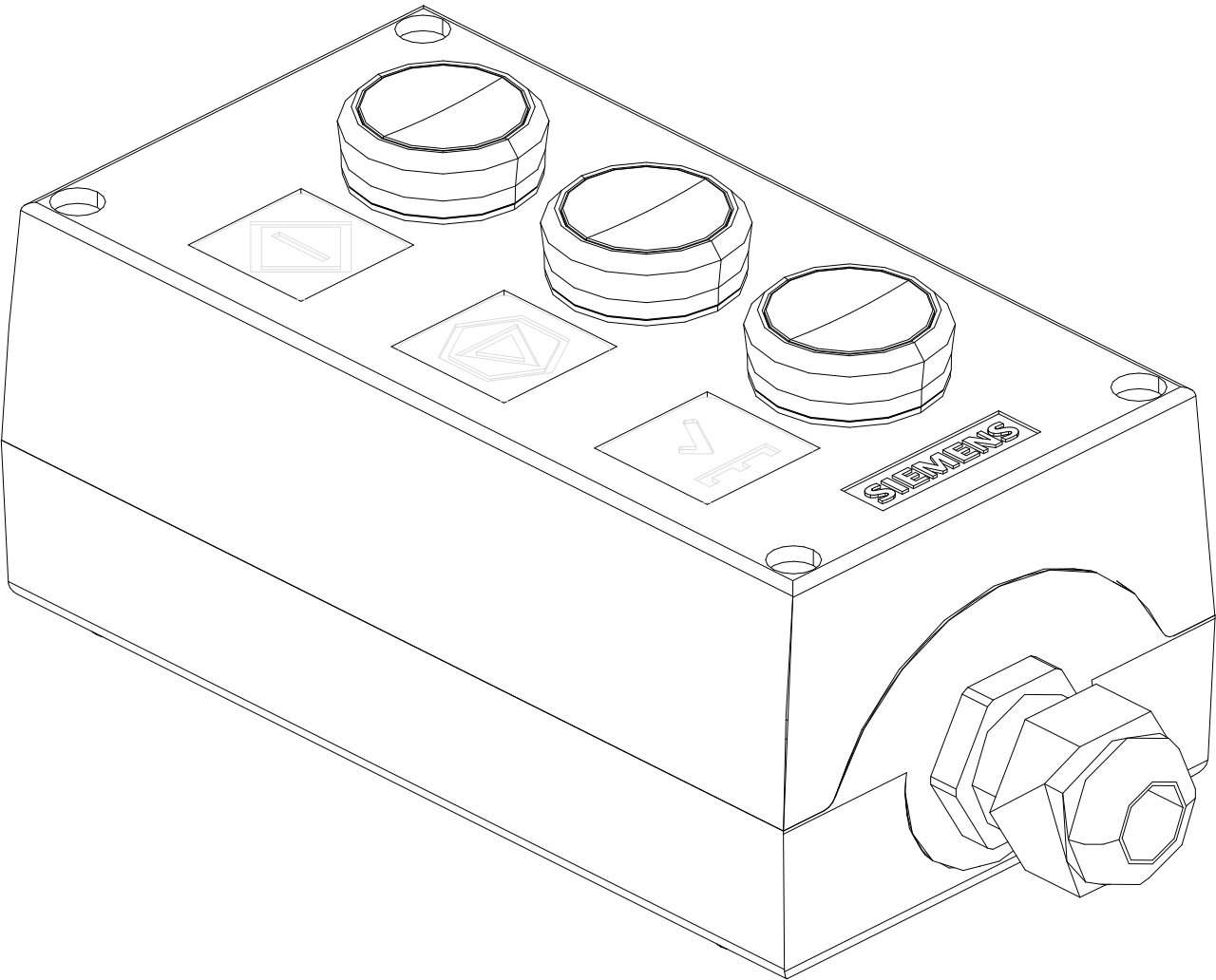


Right Side



Mounting plate





Pushbuttons

Parts list

Device tag	Qty	Designation	Order number	Manufacturer	Part number
Placement				Supplier	Function text
-1 (CAB1.S1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-2 (CAB1.S1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-3 (CAB1.S1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-6 (CAB1.S1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-7 (CAB1.S1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-8 (CAB1.S1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-F1 (=SYS10 - 1)	1	Circuit breaker TMC 82C 04A TMC 82C 04A	2907586	Phoenix Contact PAX	PXC.2907586
-F2 (=SYS10 - 3)	1	Circuit breaker TMC 82C 06A TMC 82C 06A	2907588	Phoenix Contact PAX	PXC.2907588
-F3 (=SYS12 - 1)	1	Electronic device circuit breaker PTCB E1 24DC/1-3A NO	2909909	Phoenix Contact PAX	PXC.2909909 Setted to 2A
-F3 (=SYS12 - 1)	1	Plug-in bridge FBS 2-6 BU	3036932	Phoenix Contact PAX	PXC.3036932 =
-F3 (=SYS12 - 1)	1	Plug-in bridge FBS 2-6	3030336	Phoenix Contact PAX	PXC.3030336 =
-F4 (=SYS12 - 4)	1	Electronic device circuit breaker PTCB E1 24DC/1-3A NO	2909909	Phoenix Contact PAX	PXC.2909909 Setted to 1A
-H1 (=SYS14 - 1)	1	Stack Light Cable Prefabricated Harness	PAL-AE01	Robotiq CNT	ROB.PAL-AE01 Left Side Pallet Stacklight
-H2 (=SYS14 - 4)	1	Stack Light Cable Prefabricated Harness	PAL-AE01	Robotiq CNT	ROB.PAL-AE01 Right Side Pallet Stacklight
-K1 (=SYS13 - 0)	1	CPU 1214C, DC/DC/DC, 14DI/10DO/2AI 6ES7214-1AG40-0XB0	6ES7214-1AG40-0XB0	Siemens FRE	SIE.6ES7214-1AG40-0XB0
-Q1 (=SYS10 - 1)	1	EM. STOP SWITCH 25A/690V 400V/9.5KW 3LD2103-0TK53	3LD2103-0TK53	Siemens FRE	SIE.3LD2103-0TK53
-S1 (=SYS15 - 1)	1	SWITCH SNAP SPST-NO 100MA 125V Limit Switch	D2HW-C273MR	Omron CNT	OMR.D2HW-C273MR Pallet Sensor 1 Left
-S2 (=SYS15 - 2)	1	SWITCH SNAP SPST-NO 100MA 125V Limit Switch	D2HW-C273MR	Omron CNT	OMR.D2HW-C273MR Pallet Sensor 2 Left

Rev C	2021-11-30	Michael Goidin	Date	2022-01-10	Palletizing		Parts list : PXC.3022276 - OMR.D2HW-C273MR		
Rev B	2021-10-27	Michael Goidin	Created by	Michael Goidin					
Rev A	2021-10-27	Michael Goidin	Approved by						
Modification	Date	Name	Revision	Rev C					
								PAL-AE05	Folio 100
									Page 21 / 37

Parts list

Parts List Robotiq

Device tag	Qty	Designation	Order number	Manufacturer	Part number
Placement				Supplier	Function text
-S3 (=SYS15 - 3)	1	SWITCH SNAP SPST-NO 100MA 125V Limit Switch	D2HW-C273MR	Omron CNT	OMR.D2HW-C273MR Pallet Sensor 3 Right
-S4 (=SYS15 - 4)	1	SWITCH SNAP SPST-NO 100MA 125V Limit Switch	D2HW-C273MR	Omron CNT	OMR.D2HW-C273MR Pallet Sensor 4 Right
-S10 (=SYS16 - 3)	1	PUSHBUTTON, WHITE 3SU1050-0AB60-0AA0	3SU1050-0AB60-0AA0	Siemens FRE	SIE.3SU1050-0AB60-0AA0 Restart Button
-S10 (=SYS16 - 3)	1	HOLDER 3SU1550-0AA10-0AA0	3SU1550-0AA10-0AA0	Siemens FRE	SIE.3SU1550-0AA10-0AA0 =
-S10 (=SYS16 - 3)	1	CONTACT MODULE 1NO 3SU1400-1AA10-1BA0	3SU1400-1AA10-1BA0	Siemens FRE	SIE.3SU1400-1AA10-1BA0 =
-S11 (=SYS16 - 4)	1	PUSHBUTTON, BLACK 3SU1050-0AB10-0AA0	3SU1050-0AB10-0AA0	Siemens FRE	SIE.3SU1050-0AB10-0AA0 Pause Button
-S11 (=SYS16 - 4)	1	HOLDER 3SU1550-0AA10-0AA0	3SU1550-0AA10-0AA0	Siemens FRE	SIE.3SU1550-0AA10-0AA0 =
-S11 (=SYS16 - 4)	1	CONTACT MODULE 1NC 3SU1400-1AA10-1CA0	3SU1400-1AA10-1CA0	Siemens FRE	SIE.3SU1400-1AA10-1CA0 =
-S12 (=SYS16 - 6)	1	ILLUMINATED PUSHBUTTON, BLUE 3SU1051-0AB50-0AA0	3SU1051-0AB50-0AA0	Siemens FRE	SIE.3SU1051-0AB50-0AA0 Confirm Pallet(s) Ready Button
-S12 (=SYS16 - 6)	1	HOLDER 3SU1550-0AA10-0AA0	3SU1550-0AA10-0AA0	Siemens FRE	SIE.3SU1550-0AA10-0AA0 =
-S12 (=SYS16 - 6)	1	CONTACT MODULE 1NO 3SU1400-1AA10-1BA0	3SU1400-1AA10-1BA0	Siemens FRE	SIE.3SU1400-1AA10-1BA0 =
-S12 (=SYS16 - 6)	1	LED MODULE, BLUE 3SU1401-1BB50-1AA0	3SU1401-1BB50-1AA0	Siemens FRE	SIE.3SU1401-1BB50-1AA0 =
-T1 (=SYS12 - 1)	1	Power supply unit TRIO-PS-2G/1AC/24DC/5	2903148	Phoenix Contact PAX	PXC.2903148
-U10 (=SYS10 - 9)	1	Compact enclosures WM WM.1244250	1244250	Rittal PAX	RIT.1244250
-U11 (=SYS10 - 9)	1	ENCLOSURE PLASTIC, 3 COMMAND POINTS 3SU1803-0AA00-0AB1	3SU1803-0AA00-0AB1	Siemens FRE	SIE.3SU1803-0AA00-0AB1
-U11 (=SYS10 - 9)	1	Cable gland G-INS-M20-S68N-PNES-BK	1411133	Phoenix Contact PAX	PXC.1411133
-U11 (=SYS10 - 9)	1	Nut A-INL-M20-P-BK	1411215	Phoenix Contact PAX	PXC.1411215
-U11 (=SYS10 - 9)	1	Start button symbol Sticker	PAL-AE059	Robotiq ROB	ROB.PAL-AE059

Parts list

Parts List Robotiq

Device tag	Qty	Designation	Order number	Manufacturer	Part number
Placement				Supplier	Function text
-U11 (=SYS10 - 9)	1	Stop button symbol Sticker	PAL-AE060	Robotiq ROB	ROB.PAL-AE060
-U11 (=SYS10 - 9)	1	Pallet button symbol Sticker	PAL-AE061	Robotiq ROB	ROB.PAL-AE061
-U15 (=SYS10 - 9)	1	Outlet filter SK.3237200	3237200	Rittal PAX	RIT.3237200
-U15 (=SYS10 - 9)	1	KEL-ER 16 8 / Cable entry frame, split, double row, IP65 KEL-ER 16 8	48168	Icotek IAC	ICO.48168
-U15 (=SYS10 - 9)	16	Resistant Rivet Nuts M6x1.0 Interior Thread, .7-4.2mm Steel Twist-Resistant Rivet Nuts	95105A183	Mc Master MCM	MCM.95105A183
-U15 (=SYS10 - 9)	1	Cam lock SZ.2420000	2420000	Rittal PAX	RIT.2420000
-W50 (=SYS13 - 3)	1	Sensor/actuator cable SAC-4P- 1,5-PUR/M12FS	1668108	Phoenix Contact PAX	PXC.1668108
-W51 (=SYS15 - 1)	1	Pallet Sensor Cable (M12 4P) Prefabricated Harness	PAL-AE02	Robotiq CNT	ROB.PAL-AE02
-W52 (=SYS15 - 1)	1	Pallet Sensor Cable (Sensor) Prefabricated Harness	PAL-AE03	Robotiq CNT	ROB.PAL-AE03
-W53 (=SYS15 - 2)	1	Pallet Sensor Cable (Sensor) Prefabricated Harness	PAL-AE03	Robotiq CNT	ROB.PAL-AE03
-W60 (=SYS13 - 3)	1	Sensor/actuator cable SAC-4P- 1,5-PUR/M12FS	1668108	Phoenix Contact PAX	PXC.1668108
-W61 (=SYS15 - 3)	1	Pallet Sensor Cable (M12 4P) Prefabricated Harness	PAL-AE02	Robotiq CNT	ROB.PAL-AE02
-W62 (=SYS15 - 3)	1	Pallet Sensor Cable (Sensor) Prefabricated Harness	PAL-AE03	Robotiq CNT	ROB.PAL-AE03
-W63 (=SYS15 - 4)	1	Pallet Sensor Cable (Sensor) Prefabricated Harness	PAL-AE03	Robotiq CNT	ROB.PAL-AE03
-W70 (=SYS14 - 2)	1	Sensor/actuator cable SAC-5P-10,0-PUR/M12FS	1683374	Phoenix Contact PAX	PXC.1683374
-W80 (=SYS14 - 4)	1	Sensor/actuator cable SAC-5P-10,0-PUR/M12FS	1683374	Phoenix Contact PAX	PXC.1683374
-W100 (=SYS14 - 8)	1	Ethernet cable Cat5e 6ft 350Mhz RJ45 ETH Cables Cat6 10ft	AT-C5-6WH	Prime Cables PRC	PRC.AT-C5-6WH
-W101 (=SYS16 - 3)	1	Sensor/actuator cable SAC-8P-M12MS/ 5,0-PUR	1522516	Phoenix Contact PAX	PXC.1522516

Parts list

Parts List Robotiq

Device tag	Qty	Designation	Order number	Manufacturer	Part number
Placement				Supplier	Function text
-W103 (=SYS16 - 3)	1	ÖLFLEX 190 5G18AWG ÖLFLEX® 190	601805	LAPP LAPP	LAPP.601805
-X1 (=SYS10 - 1);(=SYS10 - 3)	2	Double-level terminal block PTTBS 2,5	3209604	Phoenix Contact PAX	PXC.3209604
-X1 (=SYS10 - 1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-X1 (=SYS10 - 3)	1	End cover D-STTBS 2,5	3038503	Phoenix Contact PAX	PXC.3038503
-X25 (=SYS13 - 1);(=SYS13 - 3);(=SYS13 - 4);(=SYS14 - 0)	6	Double-level terminal block PTTBS 2,5	3209604	Phoenix Contact PAX	PXC.3209604
-X25 (=SYS13 - 1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-X25 (=SYS14 - 0)	1	End cover D-STTBS 2,5	3038503	Phoenix Contact PAX	PXC.3038503
-X26;=SYS+CAB1-X26 (=SYS14 - 1);(=SYS14 - 2);(=SYS14 - 3);(=SYS14 - 4);(=SYS14 - 5);(=SYS14 - 6);(=SYS14 - 7)	14	Double-level terminal block PTTBS 2,5	3209604	Phoenix Contact PAX	PXC.3209604
-X26 (=SYS14 - 1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
=SYS+CAB1-X26	1	End cover D-STTBS 2,5	3038503	Phoenix Contact PAX	PXC.3038503
-X50 (=SYS16 - 6);(=SYS16 - 8);(=SYS16 - 9)	3	Double-level terminal block PTTBS 2,5	3209604	Phoenix Contact PAX	PXC.3209604
-X50 (=SYS16 - 6)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-X50 (=SYS16 - 9)	1	End cover D-STTBS 2,5	3038503	Phoenix Contact PAX	PXC.3038503
-X51;=SYS+CAB1-X51 (=SYS16 - 3);(=SYS16 - 4);(=SYS16 - 7)	4	Double-level terminal block PTTBS 2,5	3209604	Phoenix Contact PAX	PXC.3209604
-X51 (=SYS16 - 3)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
=SYS+CAB1-X51	1	End cover D-STTBS 2,5	3038503	Phoenix Contact PAX	PXC.3038503
-X100 (CAB1.S1)	1	IEC Appliance Inlet C20 Power Entry Connector Receptacle	4798.9200	Schurter Inc DGY	SCH.4798.9200
-X101 (=SYS10 - 1)	1	Stripped cordset 16A 3.0m, V-Lock VAC19KS	6051.2109	Schurter Inc DGY	SCH.6051.2109 UR Controller Supply

Rev C	2021-11-30	Michael Goidin	Date	2021-12-15
Rev B	2021-10-27	Michael Goidin	Created by	Michael Goidin
Rev A	2021-10-27	Michael Goidin	Approved by	
Modification	Date	Name	Revision	Rev C

Palletizing



Parts list : LAPP.601805 - SCH.6051.2109
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PAL-AE05	Folio 103
	Page 24 / 37

Parts list

Parts List Robotiq

Device tag Placement	Qty	Designation	Order number	Manufacturer Supplier	Part number Function text
-X110 (=SYS16 - 3)	1	Flush-type connector SACC-DSI-M12FS-8CON-M16/0,5	1419690	Phoenix Contact PAX	PXC.1419690
-XE (=SYS10 - 1);(=SYS13 - 1)	2	Ground modular terminal block PT 2,5-QUATTRO-PE	3209594	Phoenix Contact PAX	PXC.3209594
-XE (=SYS10 - 1)	1	End clamp CLIPFIX 35-5	3022276	Phoenix Contact PAX	PXC.3022276
-XE (=SYS13 - 1)	1	End cover D-ST 2,5-QUATTRO	3030514	Phoenix Contact PAX	PXC.3030514

Summarized parts list

Summarized Parts List Robotiq

Manufacturer	Order number	Designation	Type number	Quantity	DT
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Omron	D2HW-C273MR	SWITCH SNAP SPST-NO 100MA 125V	Limit Switch	4	-S1...-S4
Robotiq	PAL-AE01	Stack Light Cable	Prefabricated Harness	2	-H1;-H2
Robotiq	PAL-AE02	Pallet Sensor Cable (M12 4P)	Prefabricated Harness	2	-W51;-W61
Robotiq	PAL-AE03	Pallet Sensor Cable (Sensor)	Prefabricated Harness	4	-W52;-W53;-W62;-W63

Schurter Inc	6051.2109	Stripped cordset 16A 3.0m, V-Lock	VAC19KS	1	-X101
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Siemens	6ES7214-1AG40-0XB0	CPU 1214C, DC/DC/DC, 14DI/10DO/2AI	6ES7214-1AG40-0XB0	1	-K1
Siemens	3LD2103-0TK53	EM. STOP SWITCH 25A/690V 400V/9.5KW	3LD2103-0TK53	1	-Q1
Siemens	3SU1050-0AB60-0AA0	PUSHBUTTON, WHITE	3SU1050-0AB60-0AA0	1	-S10
Siemens	3SU1550-0AA10-0AA0	HOLDER	3SU1550-0AA10-0AA0	3	-S10...-S12
Siemens	3SU1400-1AA10-1BA0	CONTACT MODULE 1NO	3SU1400-1AA10-1BA0	2	-S10;-S12
Siemens	3SU1050-0AB10-0AA0	PUSHBUTTON, BLACK	3SU1050-0AB10-0AA0	1	-S11
Siemens	3SU1400-1AA10-1CA0	CONTACT MODULE 1NC	3SU1400-1AA10-1CA0	1	-S11
Siemens	3SU1051-0AB50-0AA0	ILLUMINATED PUSHBUTTON, BLUE	3SU1051-0AB50-0AA0	1	-S12
Siemens	3SU1401-1BB50-1AA0	LED MODULE, BLUE	3SU1401-1BB50-1AA0	1	-S12
Siemens	3SU1803-0AA00-0AB1	ENCLOSURE PLASTIC, 3 COMMAND POINTS	3SU1803-0AA00-0AB1	1	-U11

Icotek	48168	KEL-ER 16 8 / Cable entry frame, split, double row, IP65	KEL-ER 16 8	1	-U15
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LAPP	601805	ÖLFLEX 190 5G18AWG	ÖLFLEX® 190	2,00	-W103
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Mc Master	95105A183	Resistant Rivet Nuts M6x1.0 Interior Thread, .7-4.2mm	Steel Twist-Resistant Rivet Nuts	16	-U15
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Phoenix Contact	2907586	Circuit breaker TMC 82C 04A	TMC 82C 04A	1	-F1
Phoenix Contact	2907588	Circuit breaker TMC 82C 06A	TMC 82C 06A	1	-F2
Phoenix Contact	2909909	Electronic device circuit breaker	PTCB E1 24DC/1-3A NO	2	-F3;-F4

Summarized parts list

Summarized Parts List Robotiq

Manufacturer	Order number	Designation	Type number	Quantity	DT
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Phoenix Contact	3036932	Plug-in bridge	FBS 2-6 BU	1	-F3
Phoenix Contact	3030336	Plug-in bridge	FBS 2-6	1	-F3
Phoenix Contact	2903148	Power supply unit	TRIO-PS-2G/1AC/24DC/5	1	-T1
Phoenix Contact	1668108	Sensor/actuator cable	SAC-4P- 1,5-PUR/M12FS	2	-W50;-W60
Phoenix Contact	1683374	Sensor/actuator cable	SAC-5P-10,0-PUR/M12FS	2	-W70;-W80
Phoenix Contact	1522516	Sensor/actuator cable	SAC-8P-M12MS/ 5,0-PUR	1	-W101
Phoenix Contact	3209604	Double-level terminal block	PTTBS 2,5	29	-X1;-X25;-X26;-X50;-X51;=SYS+CAB1-X26;=SYS+CAB1-X51
Phoenix Contact	3022276	End clamp	CLIPFIX 35-5	6	-X1;-X25;-X26;-X50;-X51;-XE
Phoenix Contact	3038503	End cover	D-STTBS 2,5	5	-X1;-X25;-X50;=SYS+CAB1-X26;=SYS+CAB1-X51
Phoenix Contact	1419690	Flush-type connector	SACC-DSI-M12FS-8CON-M16/0,5	1	-X110
Phoenix Contact	3209594	Ground modular terminal block	PT 2,5-QUATTRO-PE	2	-XE
Phoenix Contact	3030514	End cover	D-ST 2,5-QUATTRO	1	-XE
Phoenix Contact	1411133	Cable gland	G-INS-M20-S68N-PNES-BK	1	-U11
Phoenix Contact	1411215	Nut	A-INL-M20-P-BK	1	-U11
Rittal	1244250	Compact enclosures WM	WM.1244250	1	-U10
Rittal	3237200	Outlet filter	SK.3237200	1	-U15
Rittal	2420000	Cam lock	SZ.2420000	1	-U15

Prime Cables	AT-C5-6WH	Ethernet cable Cat5e 6ft 350Mhz RJ45	ETH Cables Cat6 10ft	1	-W100
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Robotiq	PAL-AE059	Start button symbol	Sticker	1	-U11
Robotiq	PAL-AE060	Stop button symbol	Sticker	1	-U11
Robotiq	PAL-AE061	Pallet button symbol	Sticker	1	-U11

Terminal diagram

Function text							-W80	-W70	Cable name	Strip =SYS+CAB1-X26							Cable name	-W50	-W60			Page / column
							SAC-5P-10,0-PUR/M12FS	SAC-5P-10,0-PUR/M12FS	Cable type	Target designation	Connection point	Terminal	Level	Jumper	Target designation	Connection point	Cable type	SAC-4P-1,5-PUR/M12FS	SAC-4P-1,5-PUR/M12FS			
								BN		-W70	1	1	2	•		-X12:3						(14 - 1)
											-X10:7	1	1	•	-W50	2		WH				(13 - 3)
								WH		-W70	2	2	2	•		-X12:4						(14 - 2)
											-X10:8	2	1	•	-W50	4		BK				(13 - 3)
								BU		-W70	3	3	2	•		-X12:5						(14 - 3)
											-X10:9	3	1	•	-W60	2			WH			(13 - 4)
										-W70	4	4	2	•		-X12:6						(14 - 3)
											-X10:10	4	1	•	-W60	4			BK			(13 - 4)
							BN			-W80	1	5	2	•		-X12:7						(14 - 4)
											-X10:11	5	1	•	-X51	3:4						(13 - 4)
							WH			-W80	2	6	2	•		-X12:8						(14 - 5)
											-X10:12	6	1	•								(13 - 5)
							BU			-W80	3	7	2	•		-X12:9						(14 - 5)
											-X10:13	7	1	•								(13 - 5)
							BK			-W80	4	8	2	•		-X12:10						(14 - 6)
											-X10:14	8	1	•								(13 - 5)
										-X51	3:2	9	2	•		-X12:11						(14 - 7)
											-X10:15	9	1	•								(13 - 6)
												10	2	•		-X12:12						(14 - 7)
											-X10:16	10	1	•								(13 - 6)
												11	2	•								
											-X10:17	11	1	•								(13 - 7)
												12	2	•								
											-X10:18	12	1	•								(13 - 7)
												13	2	•								
											-X10:19	13	1	•								(13 - 7)
												14	2	•								
											-X10:20	14	1	•								(13 - 8)

Terminal diagram

Function text									Cable name	Strip =SYS+CAB1-X50							Cable name						Page / column
										Target designation	Connection point	Terminal	Level	Jumper	Target designation	Connection point	Cable type						
											5	1	2			2.1					(16 - 6)		
										3.1	1	1				8			(16 - 7)				
											2	2							(16 - 8)				
											2	1							(16 - 8)				
											3	2							(16 - 9)				
												3	1								(16 - 9)		

Rev C	2021-11-30	Michael Goidin	Date	2021-12-15
Rev B	2021-10-27	Michael Goidin	Created by	Michael Goidin
Rev A	2021-10-27	Michael Goidin	Approved by	
Modification	Date	Name	Revision	Rev C



Cable name

-W1

Cable type

Free conductors

0

Mounting location:

Source

Function text source

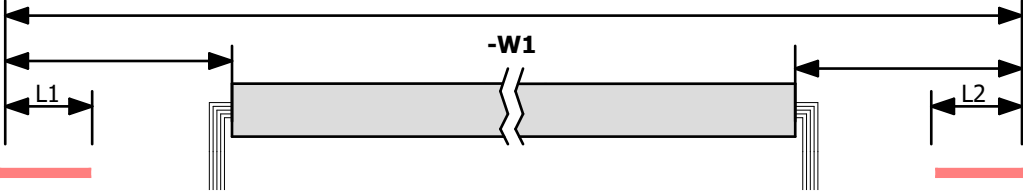
Stopper

L1
[mm]

Part number

Cabinet 1

-W1:L



Cable parts

Order number

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-W1:N	Cabinet 1

Cable name

-W2

Cable type

Free conductors

0

Mounting location:

Source

Function text source

Stopper

L1
[mm]

Part number

Cabinet 1

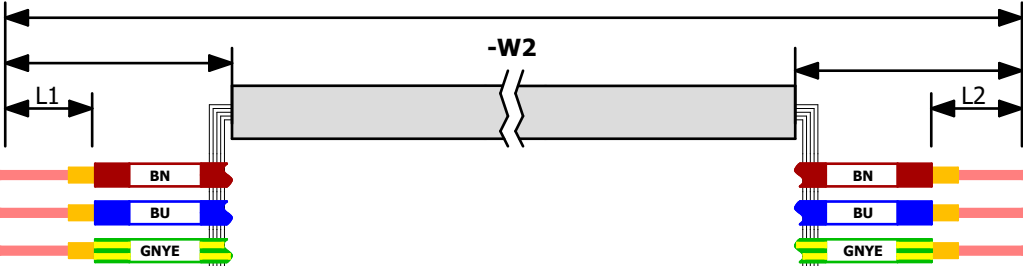
-F1

Cabinet 1

-F1

Cabinet 1

-XE:1:1



Cable parts

Order number

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-X101:2	Cabinet 1
				-X101:1	Cabinet 1
				-X101:PE	Cabinet 1

Cable name

-W50

Cable type

SAC-4P- 1,5-PUR/M12FS

Free conductors

0

Mounting location:

Source

Function text source

Stopper

L1
[mm]

Part number

Cabinet 1

-X26:2:1

Cabinet 1

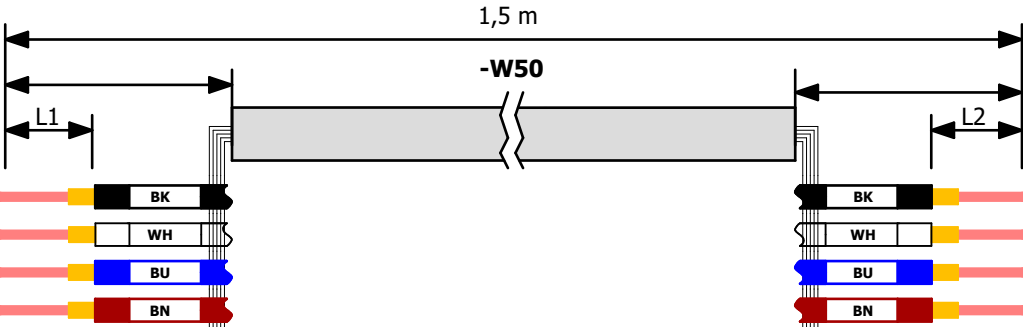
-X26:1:1

Cabinet 1

-X25:3:3

Cabinet 1

-X25:2:3



Cable parts

Order number

PXC.1668108

1668108

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-W50:4	Cabinet 1
				-W50:2	Cabinet 1
				-W50:3	Cabinet 1
				-W50:1	Cabinet 1

Cable name

-W51

Cable type

Prefabricated Harness

Free conductors

0

Mounting location:

Source

Function text source

Stopper

L1
[mm]

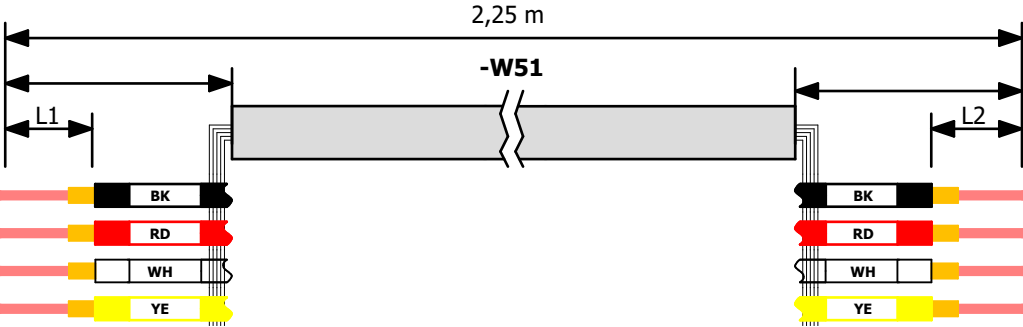
Part number

-W51B:2

-W51A:1

-W51A:2

-W51B:1



Cable parts

Order number

ROB.PAL-AE02

PAL-AE02

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-W51:4	
				-W51:1	
				-W51:2	
				-W51:3	

Cable name

-W52

Cable type

Prefabricated Harness

Free conductors

0

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
	-W52:1				
	-W52:2				

3 m

-W52

L1

L2

BK

BU

BK

BU

Cable parts

Order number

ROB.PAL-AE03

PAL-AE03

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-S1:13	
				-S1:14	

Cable name

-W53

Cable type

Prefabricated Harness

Free conductors

0

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
	-W53:1				
	-W53:2				

3 m

-W53

L1

L2

BK

BU

BK

BU

Cable parts

Order number

ROB.PAL-AE03

PAL-AE03

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-S2:13	
				-S2:14	

Cable name

-W60

Cable type

SAC-4P- 1,5-PUR/M12FS

Free conductors

0

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
Cabinet 1	-X26:4:1				
Cabinet 1	-X26:3:1				
Cabinet 1	-X25:5:3				
Cabinet 1	-X25:4:3				

1,5 m

-W60

L1

L2

BK

WH

BU

BN

BK

WH

BU

BN

Cable parts

Order number

PXC.1668108

1668108

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-W60:4	Cabinet 1
				-W60:2	Cabinet 1
				-W60:3	Cabinet 1
				-W60:1	Cabinet 1

Cable name

-W61

Cable type

Prefabricated Harness

Free conductors

0

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
	-W61B:2				
	-W61A:1				
	-W61A:2				
	-W61B:1				

2,25 m

-W61

L1

L2

BK

RD

WH

YE

BK

RD

WH

YE

Cable parts

Order number

ROB.PAL-AE02

PAL-AE02

Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-W61:4	
				-W61:1	
				-W61:2	
				-W61:3	

300

Rev C	2021-11-30	Michael Goidin	Date	2021-12-15
Rev B	2021-10-27	Michael Goidin	Created by	Michael Goidin
Rev A	2021-10-27	Michael Goidin	Approved by	
Modification	Date	Name	Revision	Rev C

Palletizing



Cable diagram:W52 :W53 :W60 :W61

PAL-AE05	Folio 301
	Page 34 / 37

302

Cable name

-W62

Cable type

Prefabricated Harness

Free conductors

0

Mounting location:

Source

Function text source

Stopper

L1
[mm]

Part number

-W62:1

-W52:2

3 m

-W62

L1

L2

BK

BU

Cable parts

ROB.PAL-AE03

Order number

PAL-AE03

Part number

L2
[mm]

Stopper

Function text target

Target

Mounting location:

-S3:13

-S3:14

Cable name

-W63

Cable type

Prefabricated Harness

Free conductors

0

Mounting location:

Source

Function text source

Stopper

L1
[mm]

Part number

-W63:1

-W53:2

3 m

-W63

L1

L2

BK

BU

Cable parts

ROB.PAL-AE03

Order number

PAL-AE03

Part number

L2
[mm]

Stopper

Function text target

Target

Mounting location:

-S4:13

-S4:14

Cable name

-W70

Cable type

SAC-5P-10,0-PUR/M12FS

Free conductors

1

Mounting location:

Source

Function text source

Stopper

L1
[mm]

Part number

Cabinet 1

-W70:1

Cabinet 1

-W70:2

Cabinet 1

-W70:3

Cabinet 1

-W70:4

Cabinet 1

-W70:5

10 m

-W70

L1

L2

BN

WH

BU

BK

GNYE

GNYE

Cable parts

PXC.1683374

Order number

1683374

Part number

L2
[mm]

Stopper

Function text target

Target

Mounting location:

-X26:1:3

Cabinet 1

-X26:2:3

Cabinet 1

-X26:3:3

Cabinet 1

-X26:4:3

Cabinet 1

-X25:5:1

Cabinet 1

Cable name

-W80

Cable type

SAC-5P-10,0-PUR/M12FS

Free conductors

1

Mounting location:

Source

Function text source

Stopper

L1
[mm]

Part number

Cabinet 1

-W80:1

Cabinet 1

-W80:2

Cabinet 1

-W80:3

Cabinet 1

-W80:4

Cabinet 1

-W70:5

10 m

-W80

L1

L2

BN

WH

BU

BK

GNYE

GNYE

Cable parts

PXC.1683374

Order number

1683374

Part number

L2
[mm]

Stopper

Function text target

Target

Mounting location:

-X26:5:3

Cabinet 1

-X26:6:3

Cabinet 1

-X26:7:3

Cabinet 1

-X26:8:3

Cabinet 1

-X25:6:1

Cabinet 1

301

Rev C

2021-11-30

Michael Goidin

Date

2021-12-15

Rev B

2021-10-27

Michael Goidin

Created by

Michael Goidin

Rev A

2021-10-27

Michael Goidin

Approved by

Modification

Date

Name

Revision

Rev C

Palletizing

ROBOTIQ

Cable diagram:W62 :W63 :W70 :W80

PAL-AE05

Folio 302

Page 35 / 37

303

Cable name

-W100

Cable type

ETH Cables Cat6 10ft

Free conductors

0

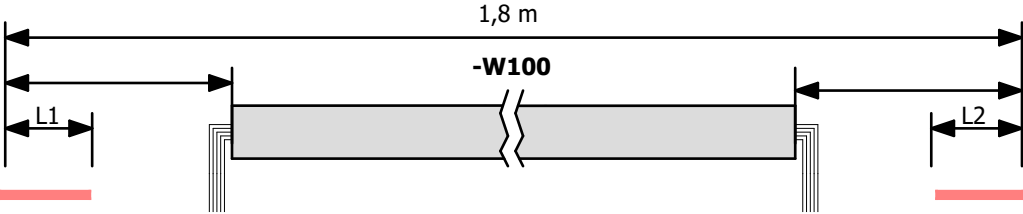
Cable parts

PRC.AT-C5-6WH

Order number

AT-C5-6WH

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
Cabinet 1	-W100:1				



Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				-K1:X1P1 R	Cabinet 1

Cable name

-W101

Cable type

SAC-8P-M12MS/ 5,0-PUR

Free conductors

0

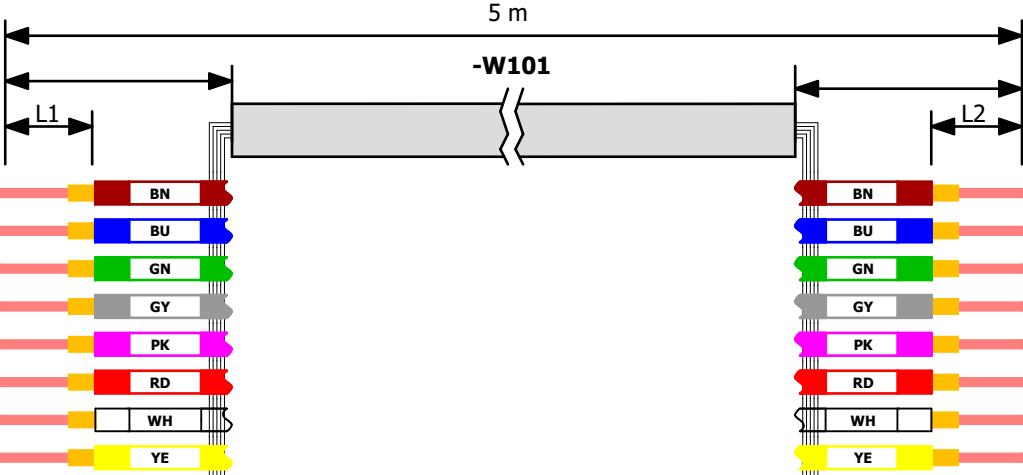
Cable parts

PXC.1522516

Order number

1522516

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
	+Box-W101:2				
	+Box-W101:7				
	+Box-W101:3				
	+Box-W101:5				
	+Box-W101:6				
	+Box-W101:8				
	+Box-W101:1				
	+Box-W101:4				



Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				+Box-S10:4	
				+Box-S12:X1	
				+Box-S11:1	
				+Box-S12:3	
				+Box-S12:4	
				+Box-S12:X2	
				+Box-S10:3	
				+Box-S11:2	

Cable name

-W103

Cable type

ÖLFLEX® 190

Free conductors

1

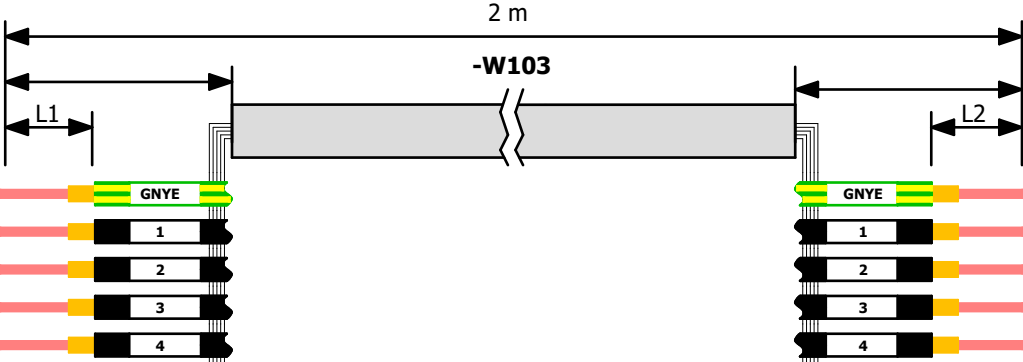
Cable parts

LAPP.601805

Order number

601805

Mounting location:	Source	Function text source	Stopper	L1 [mm]	Part number
Cabinet 1	-X51:1:2				
Cabinet 1	-X51:1:4				
Cabinet 1	-X51:2:2				
Cabinet 1	-X51:2:4				



Part number	L2 [mm]	Stopper	Function text target	Target	Mounting location:
				+UR_Controller-24V:2	
				+UR_Controller-CI0:1	
				+UR_Controller-24V:1	
				+UR_Controller-SI0:1	

Wires list

Connection	Target 1	Target 2	Color	Cross-section
1	=SYS-Q1:1	=SYS-X100:L	BK	2,5
2	=SYS-Q1:2	=SYS-X1:1:2	BK	2,5
3	=SYS-F1	=SYS-X1:1:3	BK	2,5
4	=SYS-Q1:3	=SYS-X100:N	RD	2,5
5	=SYS-Q1:4	=SYS-X1:1:1	RD	2,5
6	=SYS-F1	=SYS-X1:1:4	RD	2,5
7	=SYS-F2	=SYS-X1:2:3	BK	2,5
8	=SYS-F2	=SYS-T1:L/+	BK	2,5
9	=SYS-F2	=SYS-X1:2:4	RD	2,5
10	=SYS-F2	=SYS-T1:N/-	RD	2,5
11	=SYS-F3:1.1	=SYS-T1:+	BU	0,75
12	=SYS-F3:3.1	=SYS-T1:-	BU/WH	0,75
13	=SYS-F3:2.1	=SYS-X25:1:2	BU	0,75
16	=SYS-T1:-'	=SYS-X25:1:1	BU/WH	0,75
17	=SYS-F4:3.1	=SYS-X50:1:4	BU/WH	0,75
18	=SYS-F4:2.1	=SYS-X50:1:2	BU	0,75
20	=SYS-K1:-X10:1	=SYS-X25:1:3	BU	0,75
21	=SYS-K1:-X10:2	=SYS-X25:1:4	BU/WH	0,75
22	=SYS-K1:-X10:6	=SYS-X25:2:4	BU/WH	0,75
23	=SYS-K1:-X10:7	=SYS-X26:1:4	BU	0,75
24	=SYS-K1:-X10:8	=SYS-X26:2:4	BU	0,75
25	=SYS-K1:-X10:9	=SYS-X26:3:4	BU	0,75
26	=SYS-K1:-X10:10	=SYS-X26:4:4	BU	0,75
27	=SYS-X26:5:1	=SYS-X51:3:4	BU	0,75
28	=SYS-K1:-X10:11	=SYS-X26:5:4	BU	0,75
29	=SYS-K1:-X10:12	=SYS-X26:6:4	BU	0,75
30	=SYS-K1:-X10:13	=SYS-X26:7:4	BU	0,75
31	=SYS-K1:-X10:14	=SYS-X26:8:4	BU	0,75
32	=SYS-K1:-X10:15	=SYS-X26:9:4	BU	0,75

Connections List Robotiq

33	=SYS-K1:-X10:16	=SYS-X26:10:4	BU	0,75
34	=SYS-K1:-X10:17	=SYS-X26:11:4	BU	0,75
35	=SYS-K1:-X10:18	=SYS-X26:12:4	BU	0,75
36	=SYS-K1:-X10:19	=SYS-X26:13:4	BU	0,75
37	=SYS-K1:-X10:20	=SYS-X26:14:4	BU	0,75
38	=SYS-K1:-X11:1	=SYS-X25:3:4	BU/WH	0,75
39	=SYS-K1:-X12:1	=SYS-X25:6:2	BU	0,75
40	=SYS-K1:-X12:2	=SYS-X25:4:1	BU/WH	0,75
41	=SYS-K1:-X12:3	=SYS-X26:1:2	BU	0,75
42	=SYS-K1:-X12:4	=SYS-X26:2:2	BU	0,75
43	=SYS-K1:-X12:5	=SYS-X26:3:2	BU	0,75
44	=SYS-K1:-X12:6	=SYS-X26:4:2	BU	0,75
45	=SYS-K1:-X12:7	=SYS-X26:5:2	BU	0,75
46	=SYS-K1:-X12:8	=SYS-X26:6:2	BU	0,75
47	=SYS-K1:-X12:9	=SYS-X26:7:2	BU	0,75
48	=SYS-K1:-X12:10	=SYS-X26:8:2	BU	0,75
49	=SYS-K1:-X12:11	=SYS-X26:9:2	BU	0,75
50	=SYS-X26:9:3	=SYS-X51:3:2	BU	0,75
51	=SYS-K1:-X12:12	=SYS-X26:10:2	BU	0,75

