



Carel Industries SPA

Via dell'Industria, 11
35020 Brugine, Padova - Italy
tel. +39 00499716611
info: carel@carel.com



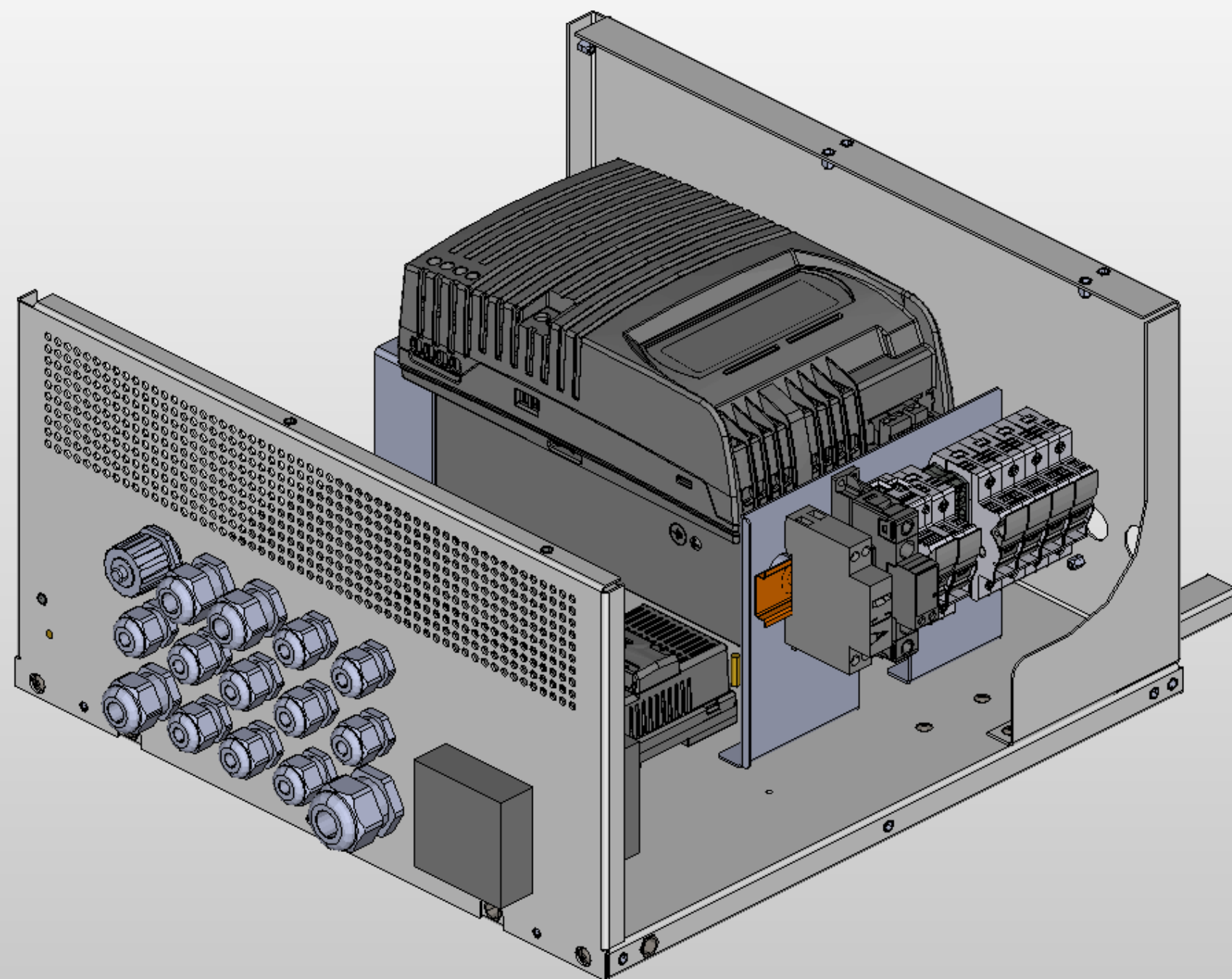
power solution

Project code	CM000MB030	Rev	REV_0
Project description	EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD		
Supply voltage	3P+N+E - 400V - 50/60Hz	Operating temperature	60°C
Rated current	59A		
Auxiliary voltage	230Vac		
Designed by	Franco Meneghetti	on	20/09/2023
Checked by	Matteo Mazzocco	on	20/09/2023
Approved by	Matteo Mazzocco	on	20/09/2023
NOT ALLOWED DELIVER TO THIRD PARTIES OR REPRODUCE THIS DOCUMENT NOT USE THE CONTENT OR OTHERWISE MAKE KNOWN TO THIRD PARTIES WITHOUT OUR EXPRESS PERMISSION. ANY INFRINGEMENT WILL RESULT IN DAMAGES SUFFERED. And it MADE SUBJECT TO ALL RIGHTS UNDER PATENTS OR MODELS			

			Date	20/09/2023	CM000MB030		Title page	Mounting locations	+	Page	&EAA/1
			Elab	Franco Meneghetti	EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD					Next	2
Modification	Date	Name	Rev.	REV_0				Function	=	Total pages	22

F06_003

[illegible]

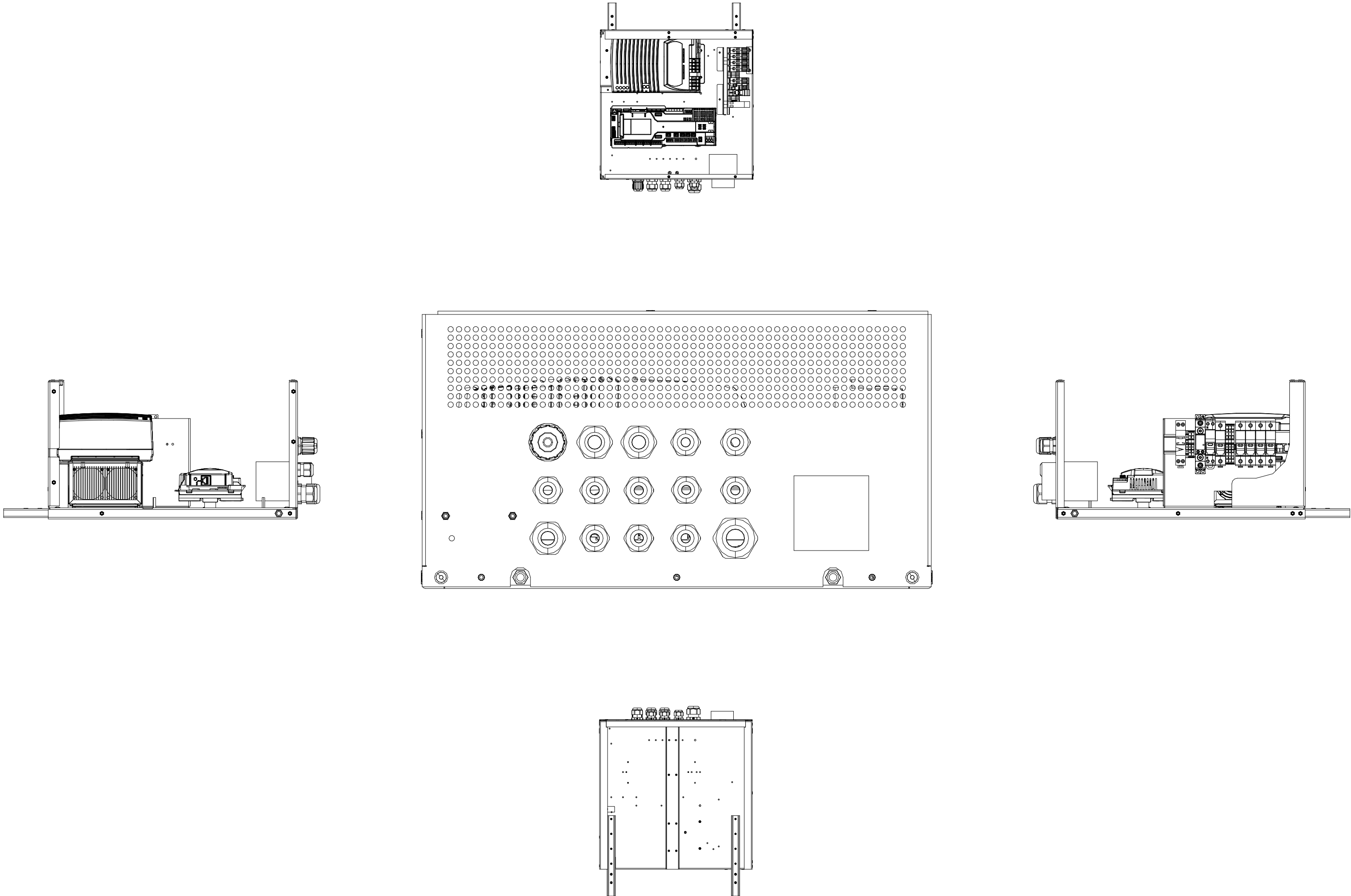


			Date	20/09/2023	CM000MB030
			Elab	Franco Meneghetti	EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD
Modification	Date	Name	Rev.	REV_0	

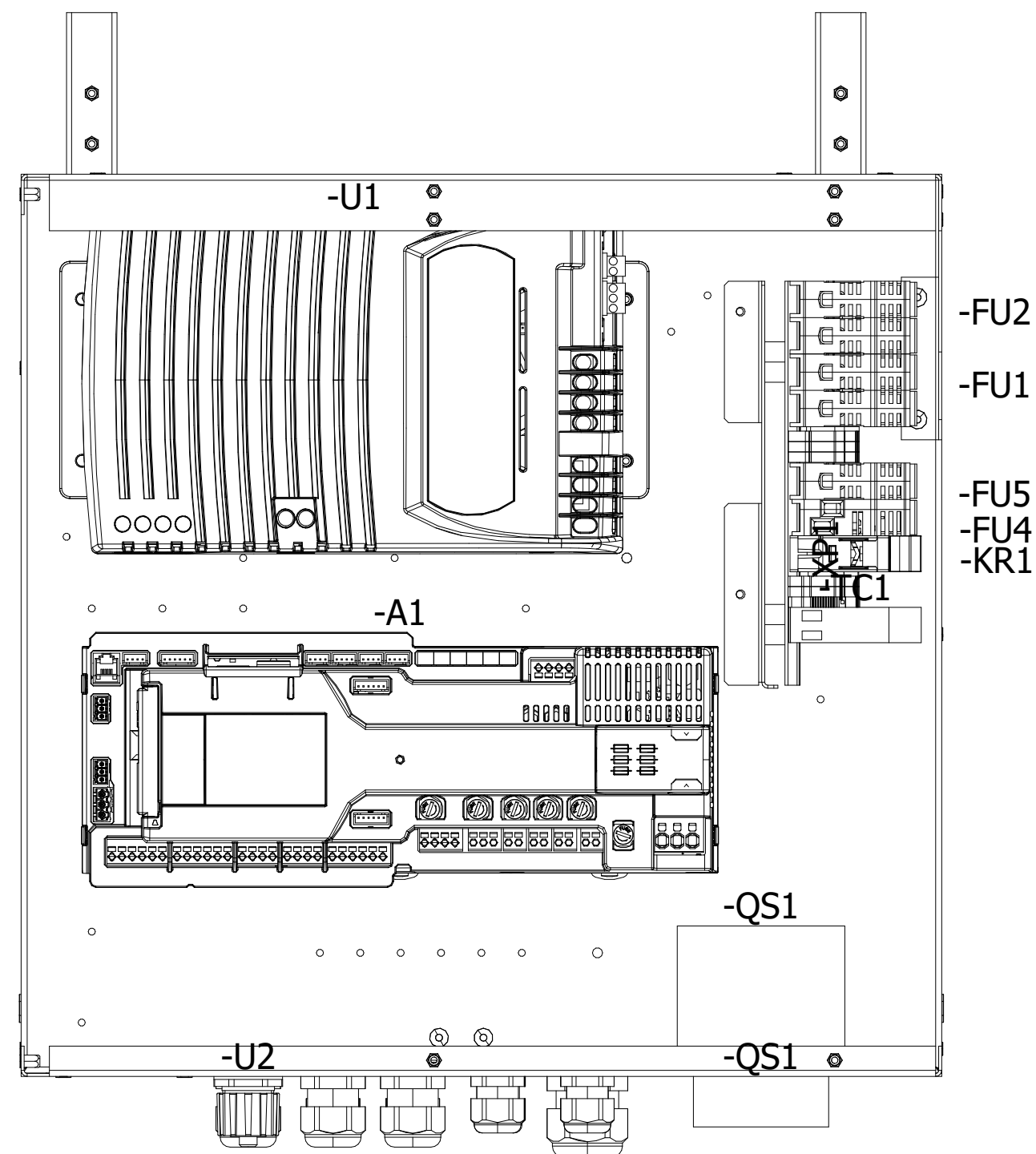
CAREL

General view

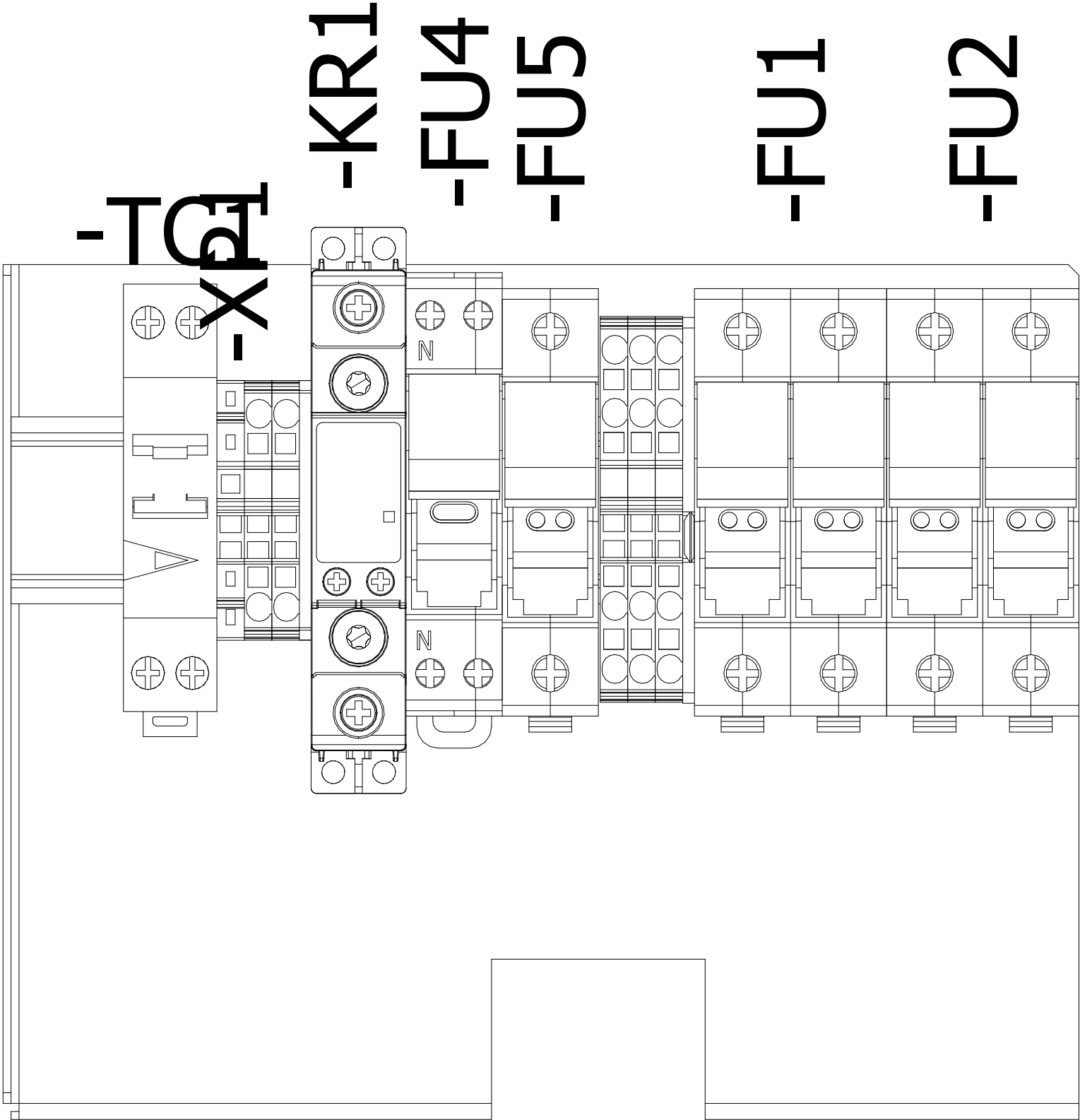
Mounting locations	+	QE	Page	+QE&ETL/1
Function	=		Next	2
			Total pages	22



			Date	20/09/2023	CM000MB030	CAREL	View of all sides	Mounting locations + QE	Page +QE&ETL/2
			Elab	Franco Meneghetti	EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD				Next 3
Modification	Date	Name	Rev.	REV_0				Function =	Total pages 22

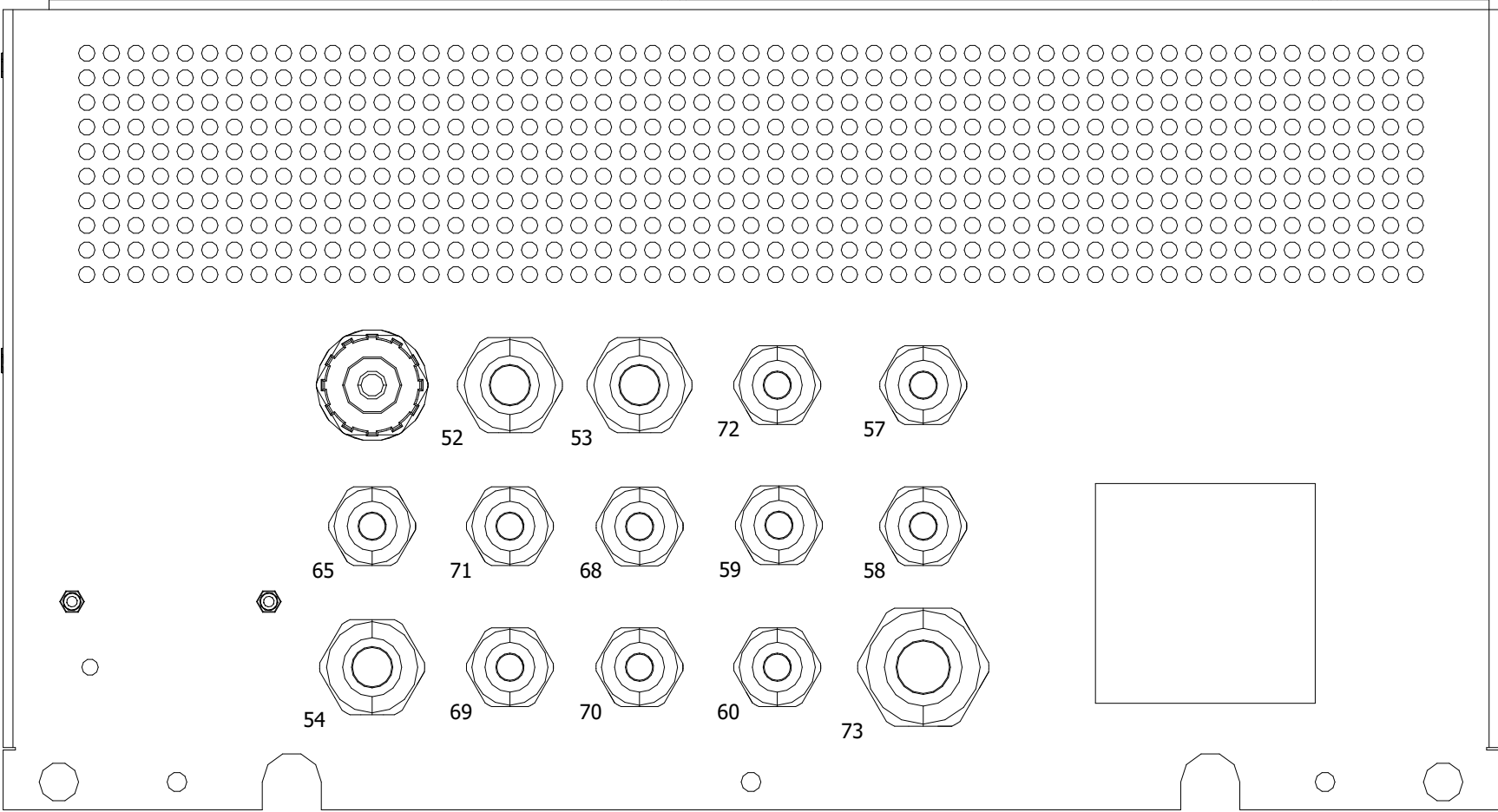


			Date	20/09/2023	CM000MB030	CAREL	Mounting plate view	Mounting locations + QE	Page +QE&ETL/3
			Elab	Franco Meneghetti	EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD				Next 4
Modification	Date	Name	Rev.	REV_0				Function =	Total pages 22

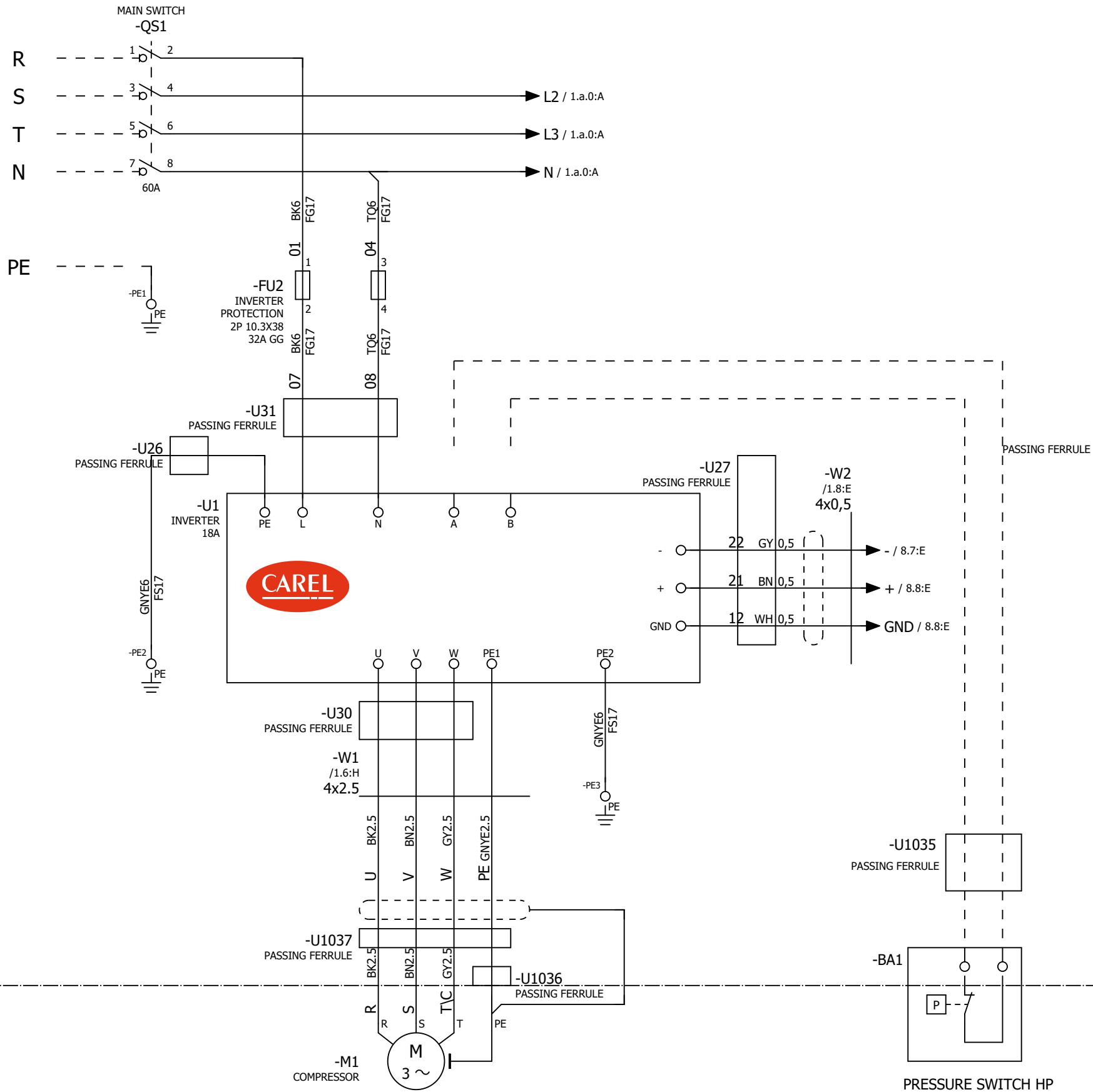
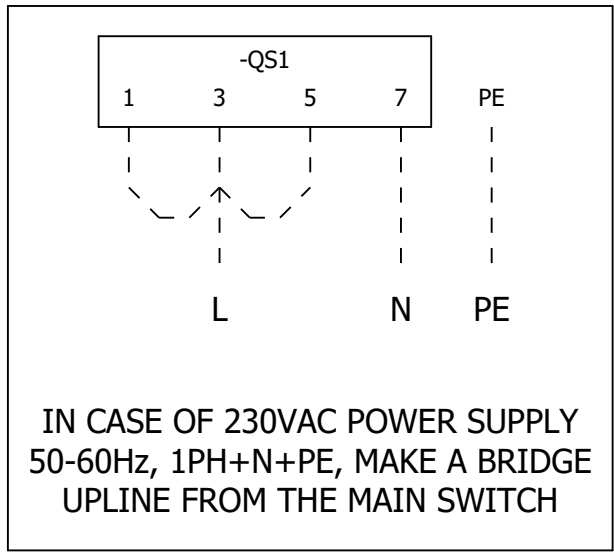
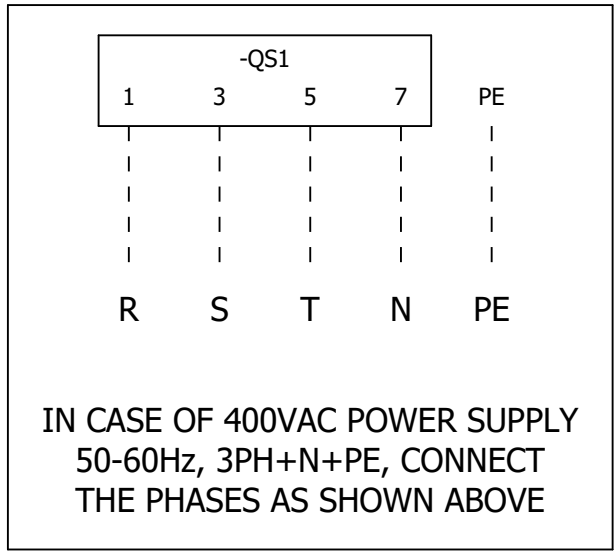


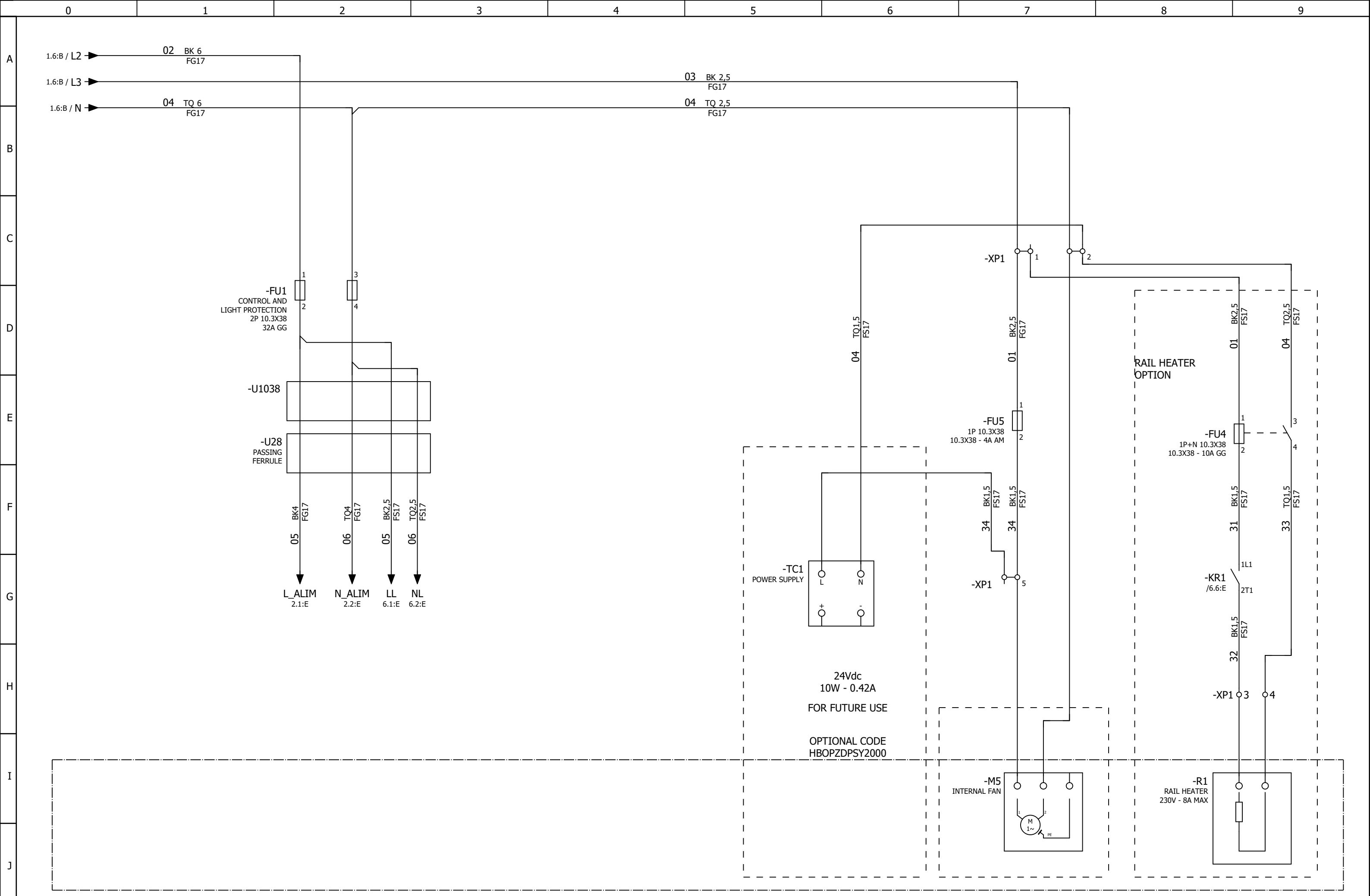
Cable entry/exit components

Item number	Component tipe	Drilling (Tollerance +/-0.5mm)
52	M25 Gland	Ø 25.5mm
53	M25 Gland	Ø 25.5mm
54	M25 Gland	Ø 25.5mm
57	M20 Gland	Ø 20.5mm
58	M20 Gland	Ø 20.5mm
59	M20 Gland	Ø 20.5mm
60	M20 Gland	Ø 20.5mm
65	M20 Gland	Ø 20.5mm
68	M20 Gland	Ø 20.5mm
69	M20 Gland	Ø 20.5mm
70	M20 Gland	Ø 20.5mm
71	M20 Gland	Ø 20.5mm
72	M20 Gland	Ø 20.5mm
73	M32 Gland	Ø 32.5mm

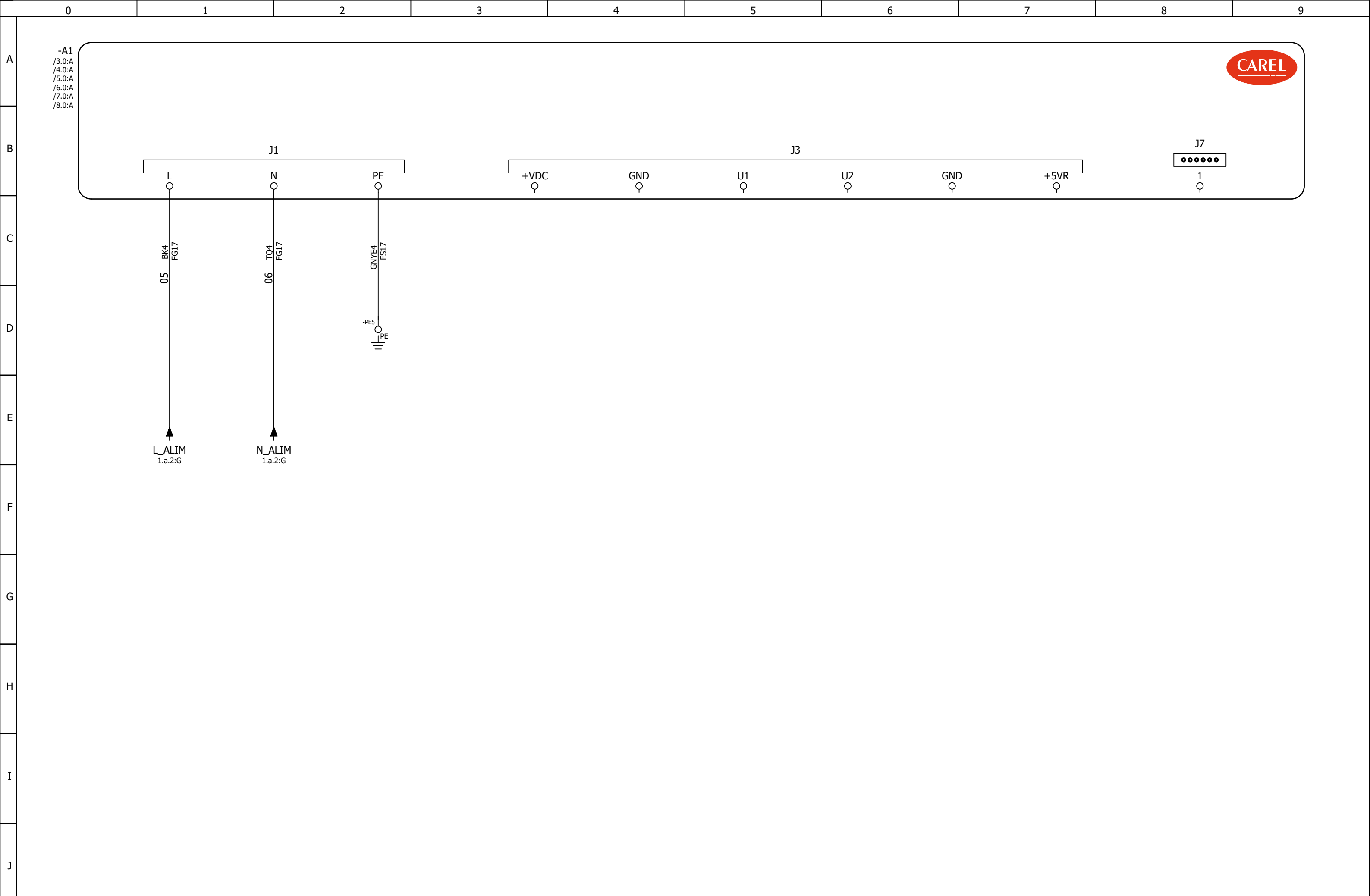


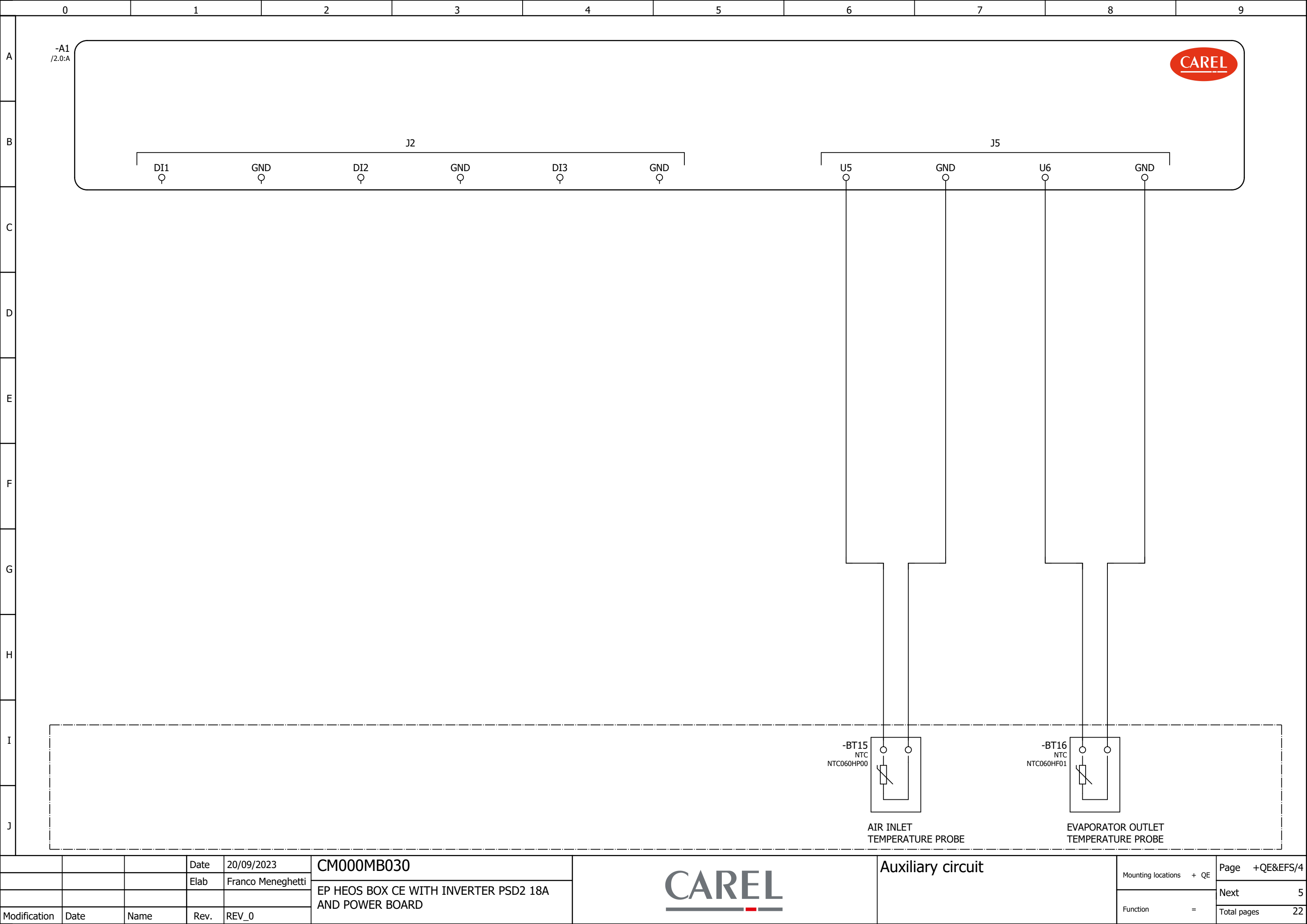
PLEASE NOTE THAT FUSES HAVE BEEN SIZED TO PROTECT THE LOADS AGAINST SHORT CIRCUIT AND NOT AGAINST OVERLOAD



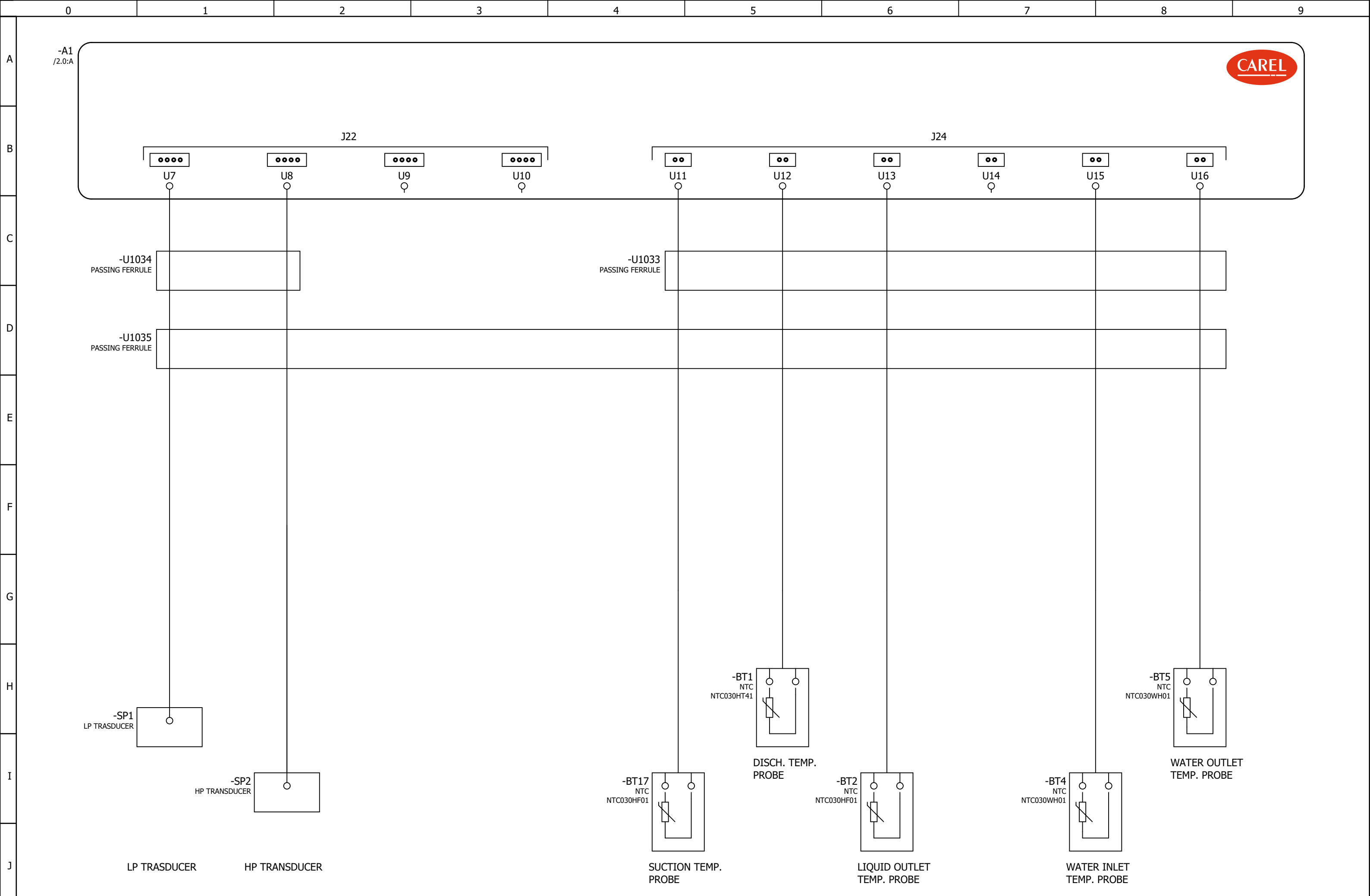


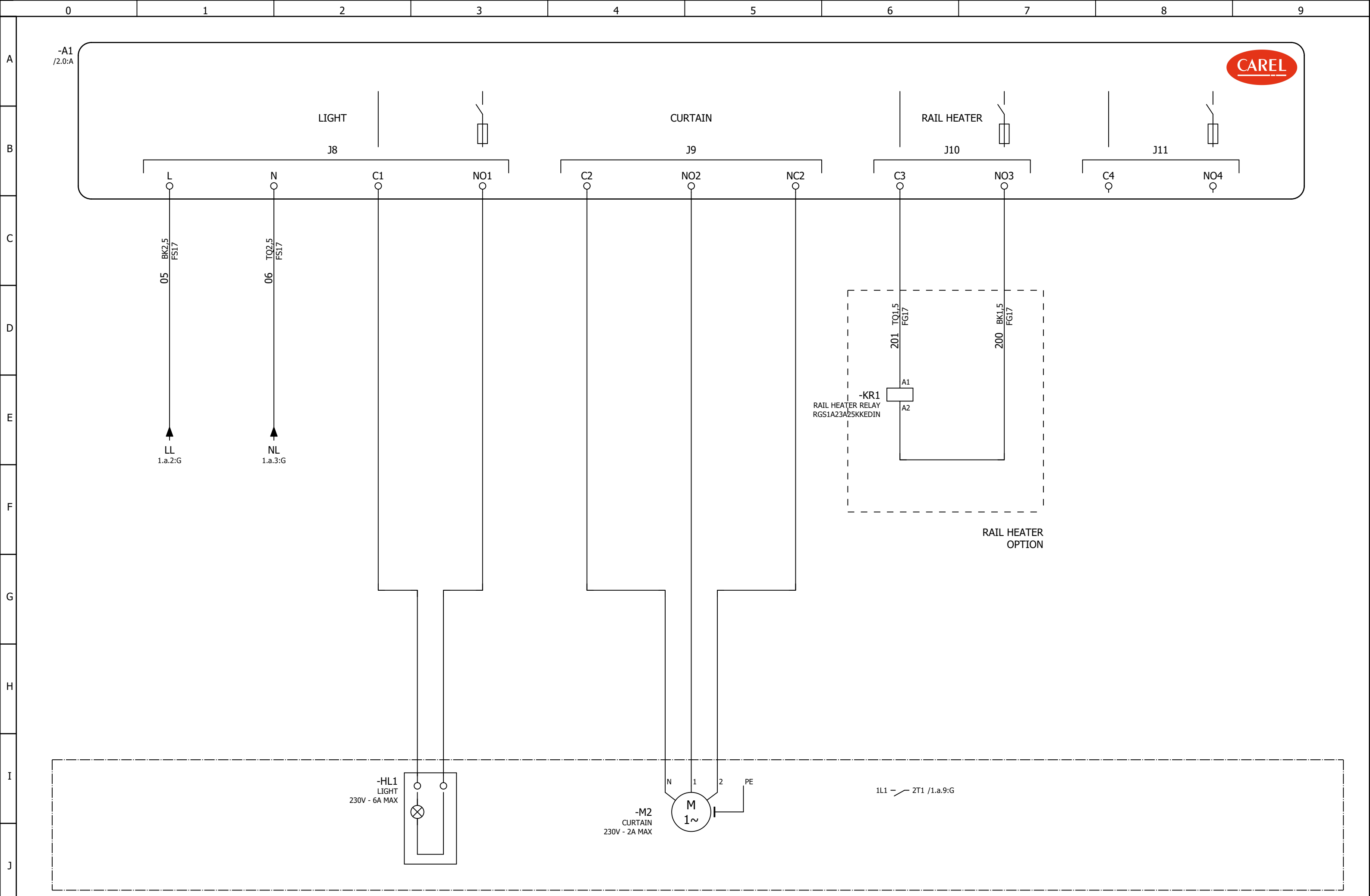
			Date	20/09/2023	CM000MB030 EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD		Power circuit	Mounting locations + QE	Page +QE&EFS/1.a
			Elab	Franco Meneghetti					Next 2
Modification	Date	Name	Rev.	REV_0				Function =	Total pages 22



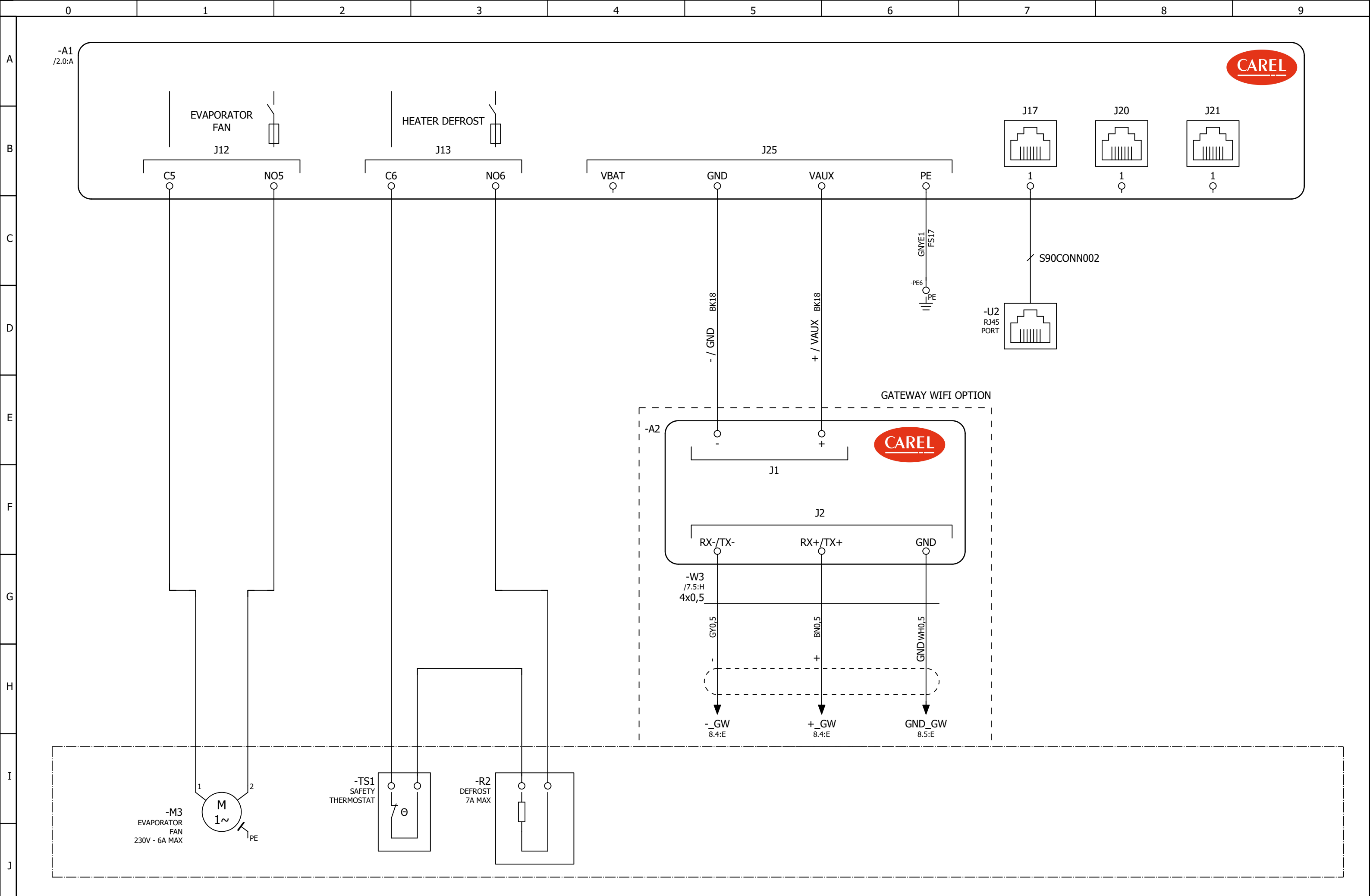


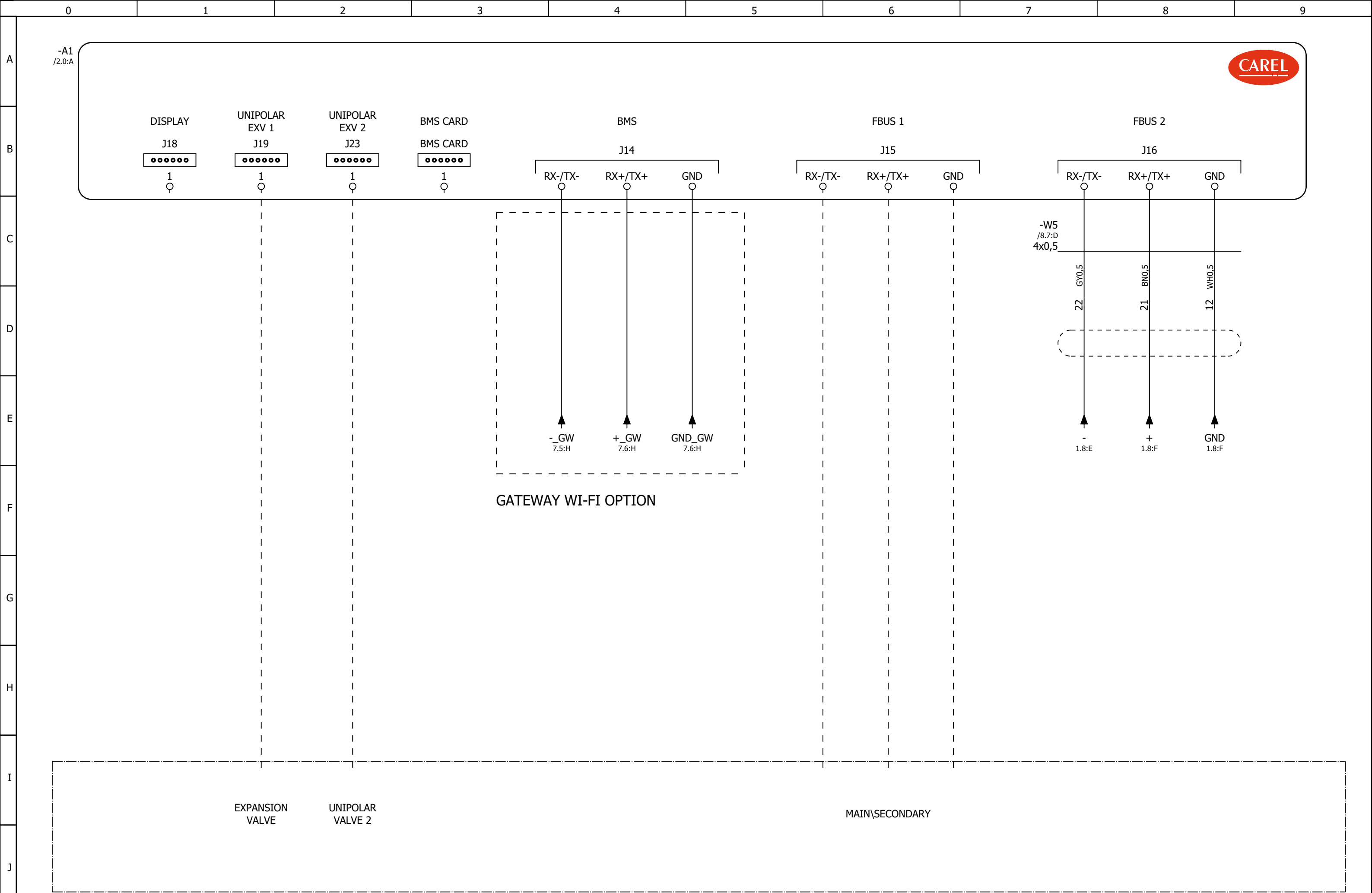
			Date	20/09/2023	CM000MB030 EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD		Auxiliary circuit	Mounting locations + QE	Page	+QE&EFS/4
			Elab	Franco Meneghetti					Next	5
Modification	Date	Name	Rev.	REV_0				Function =	Total pages	22





			Date	20/09/2023	CM000MB030 EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD		Auxiliary circuit	Mounting locations + QE	Page +QE&EFS/6
			Elab	Franco Meneghetti					Next 7
Modification	Date	Name	Rev.	REV_0				Function =	Total pages 22



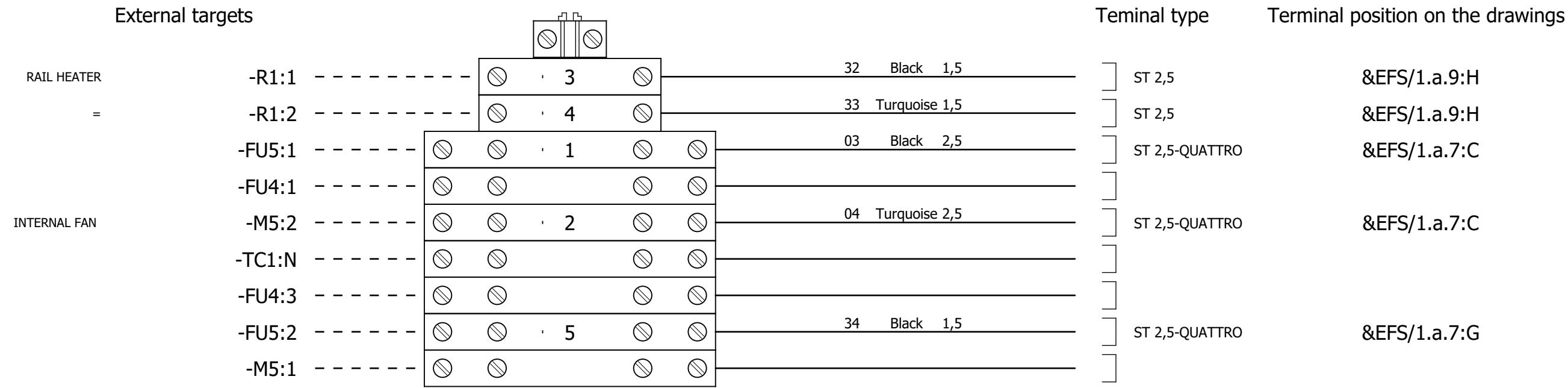


			Date	20/09/2023	CM000MB030		Auxiliary circuit	Mounting locations + QE	Page	+QE&EFS/8
			Elab	Franco Meneghetti					Next	&EMA/1
					Function =			Total pages	22	
Modification	Date	Name	Rev.	REV_0						

Terminal diagram

Terminal strip

+QE-XP1



			Date	20/09/2023	CM000MB030		Terminal strip	Mounting locations + QE	Page +QE&EMA/1
			Elab	Franco Meneghetti					Next &EMB/1
					EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD			Function =	Total pages 22
Modification	Date	Name	Rev.	REV_0					

Cable name

+QE-W1

Cable type

4x2.5 mm²

Free conductors

1

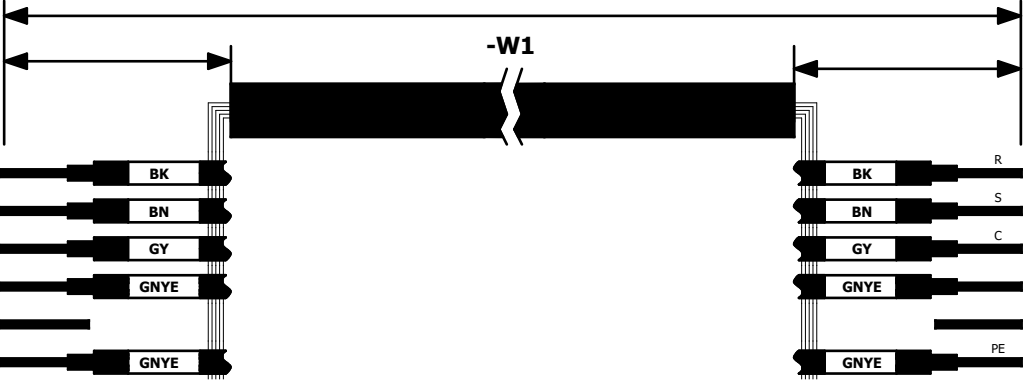
Cable parts

B08C04250

Order number

1008277AXX

Mounting location:	Origin	Function text source	Display
Elettrical panel	-M1:R	COMPRESSOR	
Elettrical panel	-M1:S	=	
Elettrical panel	-M1:T	=	
Elettrical panel	-M1:PE	COMPRESSOR	
Elettrical panel	-M1:PE	=	



Display	Function text target	Target	Mounting location:
	COMPRESSOR	-U1:U	Elettrical panel
	=	-U1:V	Elettrical panel
	=	-U1:W	Elettrical panel
	COMPRESSOR	-W1	Elettrical panel
	=	-U1:PE1	Elettrical panel

Cable name

+QE-W2

Cable type

4x0,5 mm²

Free conductors

3

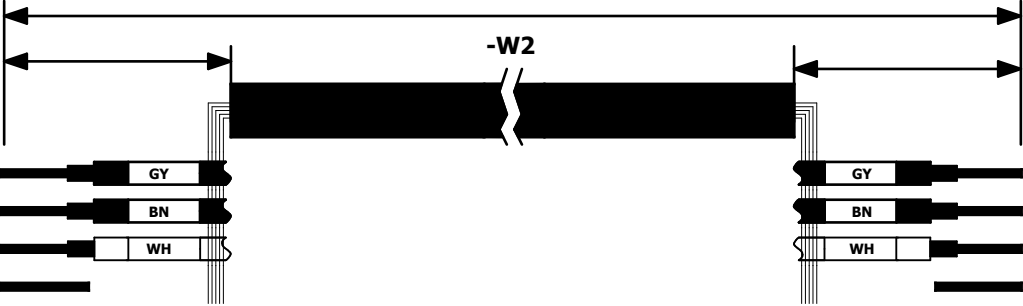
Cable parts

Shielded 3x0.5

Order number

1008019AXX

Mounting location:	Origin	Function text source	Display



Display	Function text target	Target	Mounting location:

Cable name

+QE-W3

Cable type

4x0,5 mm²

Free conductors

3

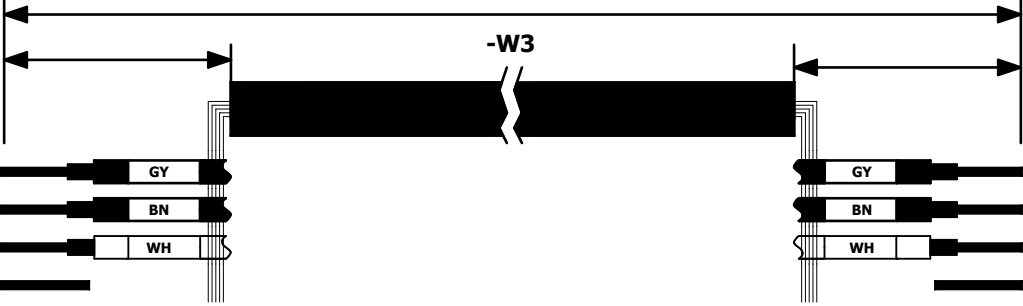
Cable parts

Shielded 3x0.5

Order number

1008019AXX

Mounting location:	Origin	Function text source	Display



Display	Function text target	Target	Mounting location:

Cable name

+QE-W5

Cable type

4x0,5 mm²

Free conductors

3

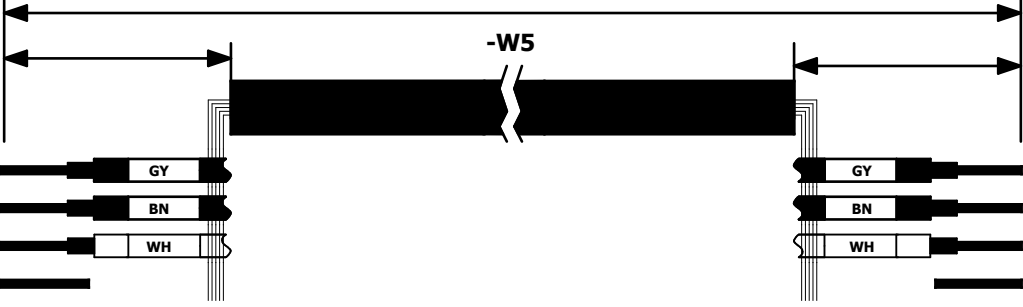
Cable parts

Shielded 3x0.5

Order number

1008019AXX

Mounting location:	Origin	Function text source	Display



Display	Function text target	Target	Mounting location:

BOM internal panel

InternoQE_F01_003

Short name	Designation	Function text	Position	Manufacturer	Component tipe	Oracle code
A1	HEOS ELECTRONIC CONTROL		&EFS/2.0:A	CAREL	HEC00001113E2	HEC00001113E2
A2	GATEWAY WI-FI		&EFS/7.4:E	Carel	GTW0000WT0	GTW0000WT0
BA1		PRESSURE SWITCH HP	&EFS/1.8:H			
BT1	TEMPERATURE PROBE	DISCH. TEMP. PROBE	&EFS/5.5:H	CAREL	NTC030HT41	NTC030HT41
BT2	TEMPERATURE PROBE	LIQUID OUTLET TEMP. PROBE	&EFS/5.6:I	CAREL	NTC030HF01	NTC030HF01
BT4	TEMPERATURE PROBE	WATER INLET TEMP. PROBE	&EFS/5.7:I	CAREL	NTC030WH01	NTC030WH01
BT5	TEMPERATURE PROBE	WATER OUTLET TEMP. PROBE	&EFS/5.8:H	CAREL	NTC030WH01	NTC030WH01
BT13	TEMPERATURE PROBE	NTC060HP00	&EFS/3.1:I	CAREL	NTC060HP00	NTC060HP00
BT14	TEMPERATURE PROBE	=	&EFS/3.3:I	CAREL	NTC060HP00	NTC060HP00
BT15	TEMPERATURE PROBE	=	&EFS/4.6:I	CAREL	NTC060HP00	NTC060HP00
BT16	TEMPERATURE PROBE	NTC060HF01	&EFS/4.8:I	CAREL	NTC060HF01	NTC060HF01
BT17	TEMPERATURE PROBE	SUCTION TEMP. PROBE	&EFS/5.4:I	CAREL	NTC030HF01	NTC030HF01
FU1	Fuse holder	CONTROL AND LIGHT PROTECTION	&EFS/1.a.2:D		2P 10.3X38	0606198AXX
FU1	Safety fuse	=	&EFS/1.a.2:D		10.3X38 - 32A GG	0605368CEL
FU2	Fuse holder	INVERTER PROTECTION	&EFS/1.5:C		2P 10.3X38	0606198AXX
FU2	Safety fuse	=	&EFS/1.5:C		10.3X38 - 32A GG	0605368CEL
FU4	Fuse holder		&EFS/1.a.9:E		1P+N 10.3X38	0606194AXX
FU4	Safety fuse		&EFS/1.a.9:E		10.3X38 - 10A GG	0605362AUN
FU5	Fuse holder		&EFS/1.a.7:E		1P 10.3X38	0606197AXX
FU5	Safety fuse		&EFS/1.a.7:E		10.3X38 - 4A AM	0605331AXX
HL1		LIGHT	&EFS/6.3:I			
KR1	SSR Relay	RAIL HEATER RELAY	&EFS/6.6:E	CARLO GAVAZZI	RGS1A23A25KKEDIN	0110133AXX
M1		COMPRESSOR	&EFS/1.5:I			

BOM internal panel

InternoQE_F01_003

Short name	Designation	Function text	Position	Manufacturer	Component tipe	Oracle code
M2		CURTAIN	&EFS/6.4:I			
M3		EVAPORATOR FAN	&EFS/7.1:I			
M5		INTERNAL FAN	&EFS/1.a.7:I			
PE1	GROUND		&EFS/1.4:C		PE	PE
PE2	GROUND		&EFS/1.4:F		PE	PE
PE3	GROUND		&EFS/1.6:G		PE	PE
PE5	GROUND		&EFS/2.2:D		PE	PE
PE6	GROUND		&EFS/7.6:C		PE	PE
QS1	Disconnect switch	MAIN SWITCH	&EFS/1.4:A	GIOVENZANA INTERNATIONAL	REGOLUS 4P 80A	0402120AXX
QS1	Operation	=	&EFS/1.4:A	GIOVENZANA INTERNATIONAL	MANOVRA G/N 67X67 LUCCH. SERIE REGOLUS 4P 50A	0402118AXX
R1		RAIL HEATER	&EFS/1.a.8:I			
R2		DEFROST	&EFS/7.3:I			
SP1	CABLE FOR PRESSURE TRANSDUCER	LP TRASDUCER	&EFS/5.1:H	CAREL	Trasduttore	SPKC002321
SP2	CABLE FOR PRESSURE TRANSDUCER	HP TRANSDUCER	&EFS/5.1:I	CAREL	Trasduttore	SPKC002321
TC1	100/230VAC-24VDC POWER SUPPLY FOR PGDX	POWER SUPPLY	&EFS/1.a.5:G	CAREL		PGTA00TRX0
TS1		SAFETY THERMOSTAT	&EFS/7.2:I			
U1	POWER+ 18 A, 200-240 VAC 1PH, IP20/IP44 WITH COVER	INVERTER	&EFS/1.5:E	CAREL	PS20018204110	PS20018204110
U2	Passaparete RJ45	RJ45 PORT	&EFS/7.7:D	CONEC	PASSAPARETE RJ45	0510180AXX
U26		PASSING FERRULE	&EFS/1.4:D		FERRITE	0910268AXX
U27		=	&EFS/1.7:E		FERRITE	0910268AXX
U28		PASSING FERRULE	&EFS/1.a.2:E		FERRITE	0910322AXX
U30		PASSING FERRULE	&EFS/1.5:F		FERRITE	0910269AXX
U31		=	&EFS/1.5:D		FERRITE	0910269AXX

BOM internal panel

InternoQE_F01_003

[illegible]

			Date	20/09/2023	CM000MB030		Parts list	Mounting locations + QE	Page +QE&EPA/1.b
			Elab	Franco Meneghetti					EP HEOS BOX CE WITH INVERTER PSD2 18A AND POWER BOARD
Modification	Date	Name	Rev.	REV_0	Function =				