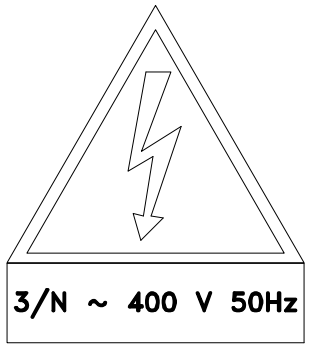
CFH - CFV

Generatore di vapore
Steam boiler

L.C.Z. -Parma-

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma–* *CFH500*	QCFH19–3G	=		
				DISEGN.	LB					+		
				VISTO	–			Presentazione *Presentation*			FG.	1
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S.	2



English

DESIGN	L.C.Z.	WORKING VOLTAGE	3/N ~ 400V 50Hz
SERIAL	Steam boiler	CONTROL VOLTAGE	1/N~24V 50Hz
JOB	5682	SIGNALS VOLTAGE	
CLIENT	–	MAX CURRENT	12A
THERMAL ROOM		MAX POWER	4KW

NORMS –

PROTECTIONS

STRUCTURAL FEATURE –

MAX CURRENT Icc KA

BOARD NUMBER 10336

REMARKS Protect the board in accordance with local norms

	DATA	FIRME
DIS.	02/11	LB
VISTO	02/11	–
APPROV.	02/11	–

CFH500

L.C.Z. –Parma–

QCFH19–3G

FOGLIO 1

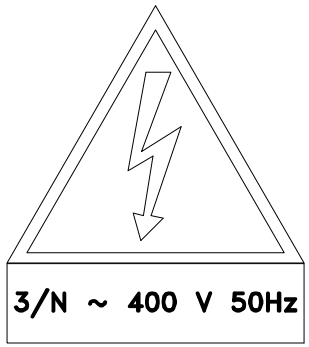
T.F. 22

REV.	MODIFICA	DATA	FIRME
00	First edition	02/11	LB

SOST. DA

SOST. IL

FILE : QCFH19–3G



Italiano

PROGETTAZIONE	L.C.Z.	TENSIONE ESERCIZIO	3/N ~ 400V 50Hz
SERIE	Generatore di vapore	TENSIONE COMANDI	1/N~ 24V 50Hz
COMMESSA	5682	TENSIONE SEGNALI	
COMMITTENTE	–	CORRENTE MASSIMA	12A
DESTINATARIO		POTENZA MASSIMA	4KW

NORME –

PROTEZIONI

CARATTERISTICHE CARPENTERIA –

CORRENTE Icc MASSIMA KA

QUADRO NUMERO 10336

NOTE Proteggere a monte come prescritto da CEI 64/8 e da leggi vigenti nel paese di installazione

	DATA	FIRME
DIS.	02/11	LB
VISTO	02/11	–
APPROV.	02/11	–

CFH500

L.C.Z. –Parma–

QCFH19–3G

FOGLIO 1

T.F. 22

REV.	MODIFICA	DATA	FIRME
00	Prima edizione	02/11	LB

SOST. DA

SOST. IL

FILE : QCFH19–3G

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PROGETTO
BANCA DIS.
TIPICO

PROGETTO
BANCA DIS.
TIPICO

REV.	MODIFICA	DATA	FIRMA		
				DATA	02/11
				DISEGN.	LB
				VISTO	–
				APPR.	–

SOST. IL :

SOST. DA :

L.C.Z. srl
Parma ITALY

FILE : QCFH19–3G

L.C.Z. –Parma–
CFH500

Dati progetto
Design data

QCFH19–3G

5682

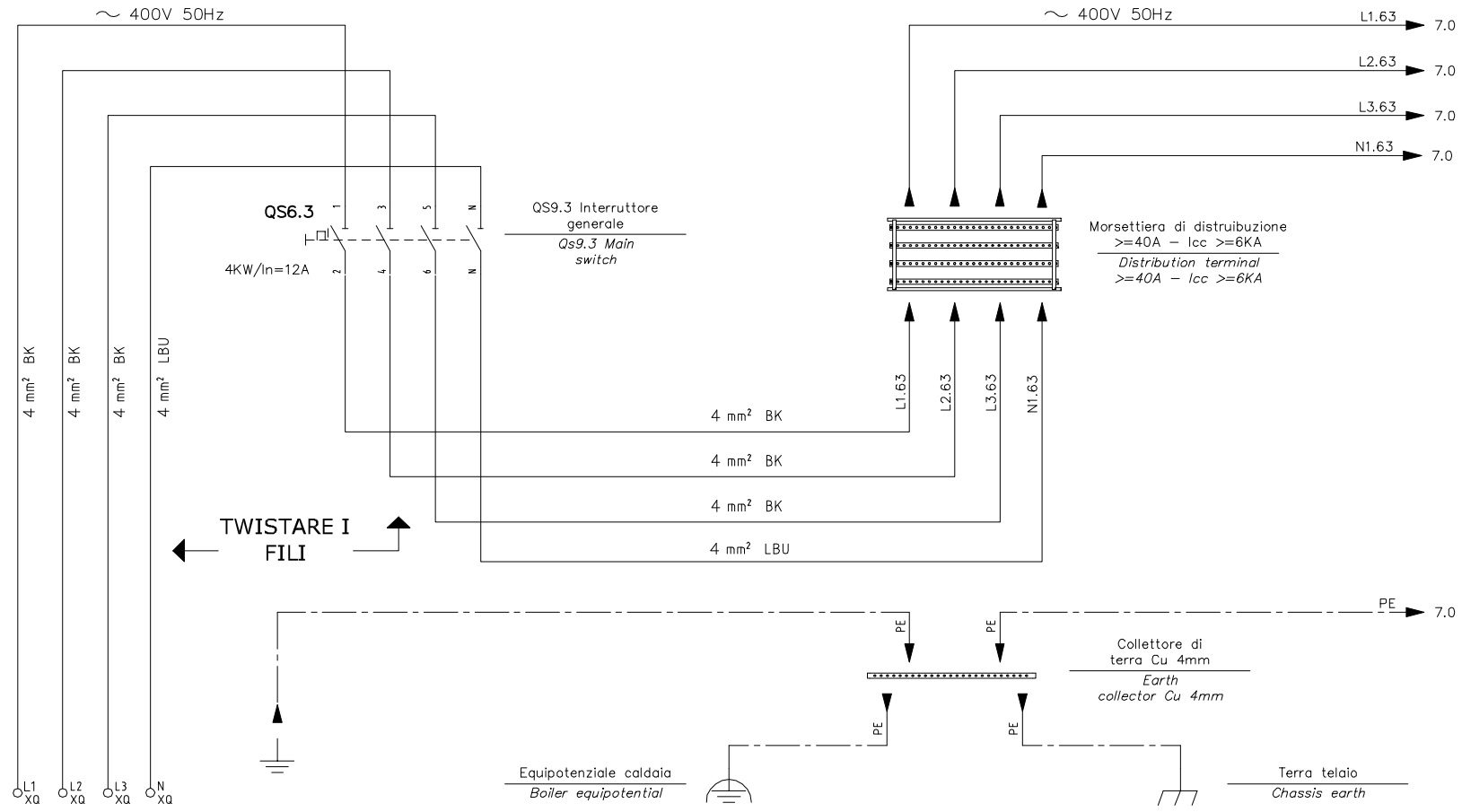
FG. 2
F.S. 3

Fg/Sh	Descrizione	Description	N.Rev.	Modifica/Modify	Data/Date
1	PRESENTAZIONE	PRESENTATION	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
2	DATI PROGETTO	DESIG DATA	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
3	LISTA FOGLI	SHEETS LIST	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
4	RISERVA	RESERVED	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
5	POTENZA	POWER	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
6	POTENZA	POWER	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
7	POTENZA POMPA	POWER PUMP	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
8	ALIMENTAZIONE AUSILIARI	AUXILIARIES POWER SUPPLY	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
9	POTENZA BRUCIATORE	POWER BURNER	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
10	CONTROLLO PRESSIONE	PRESSURE CONTROLLER	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
11	CONTROLLO TEMPERATURA FUMI	FLUE TEMPERATURE CONTROLLER	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
12	CONTROLLO TEMPERATURA SERPENTINO	BOILER TEMPERATURE CONTROL	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
13	SICUREZZE	SAFETIES	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
14	SICUREZZE	SAFETIES	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
15	SICUREZZE BRUCIATORE	SAFETIES BURNER	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
16	COMANDI BRUCIATORE	BURNER CONTROL	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
17	CONTROLLO POMPA	PUMP CONTROL	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
18	INGRESSI MODULO LOGICO	INPUT PLC	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
19	INGRESSI MODULO LOGICO	INPUT PLC	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
20	SEGNALAZIONI	SIGNALING	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
21	SEGNALAZIONI	SIGNALING	00 –	PRIMA EDIZIONE FIRST EDITION	02/11
22	RISERVA	RESERVED	00 –	PRIMA EDIZIONE FIRST EDITION	02/11

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma–* *CFH500*	**QCFH19–3G**	=		
				DISEGN.	LB					+		
				VISTO	–			Riserva *Reserved*			FG. **4**	
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S. **5**	

Potenza

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma–* *CFH500*	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Potenza *Power*			FG. 5
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682		F.S. 6



XQ	

Alimentazione
3/N ~ 400V 50Hz
Power supply
3/N ~ 400V 50Hz

				DATA	02/11
				DISEGN.	LB
				VISTO	–
REV.	MODIFICA	DATA	FIRMA	APPR.	–

SOST. IL : SOST. DA :

L.C.Z. srl
Parma ITALY

FILE : QCFH19–3G

L.C.Z. –Parma–
CFH500

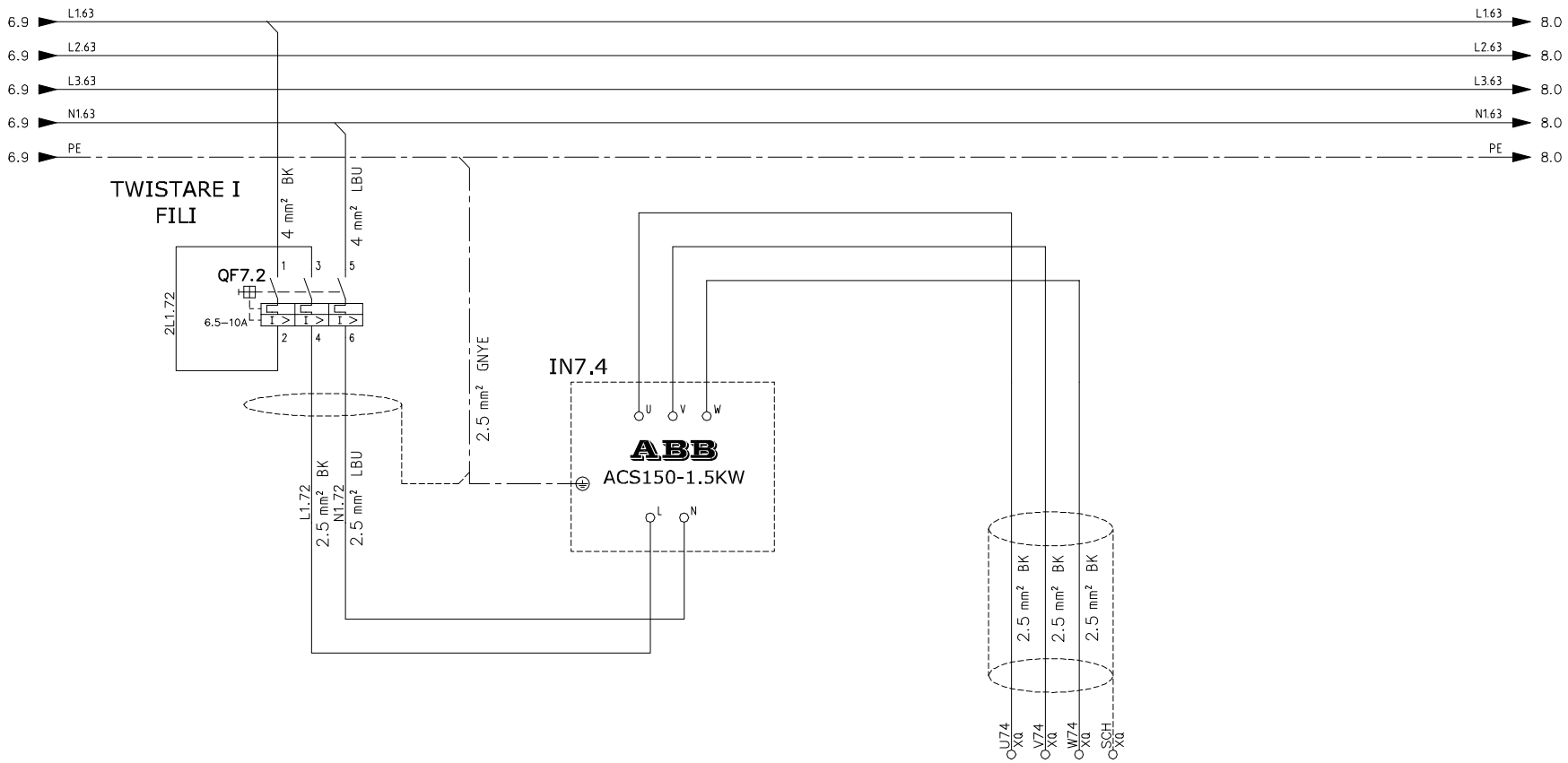
Ingresso potenza
Power supply

QCFH19–3G

=
+

5682

FG. **6**
F.S. **7**

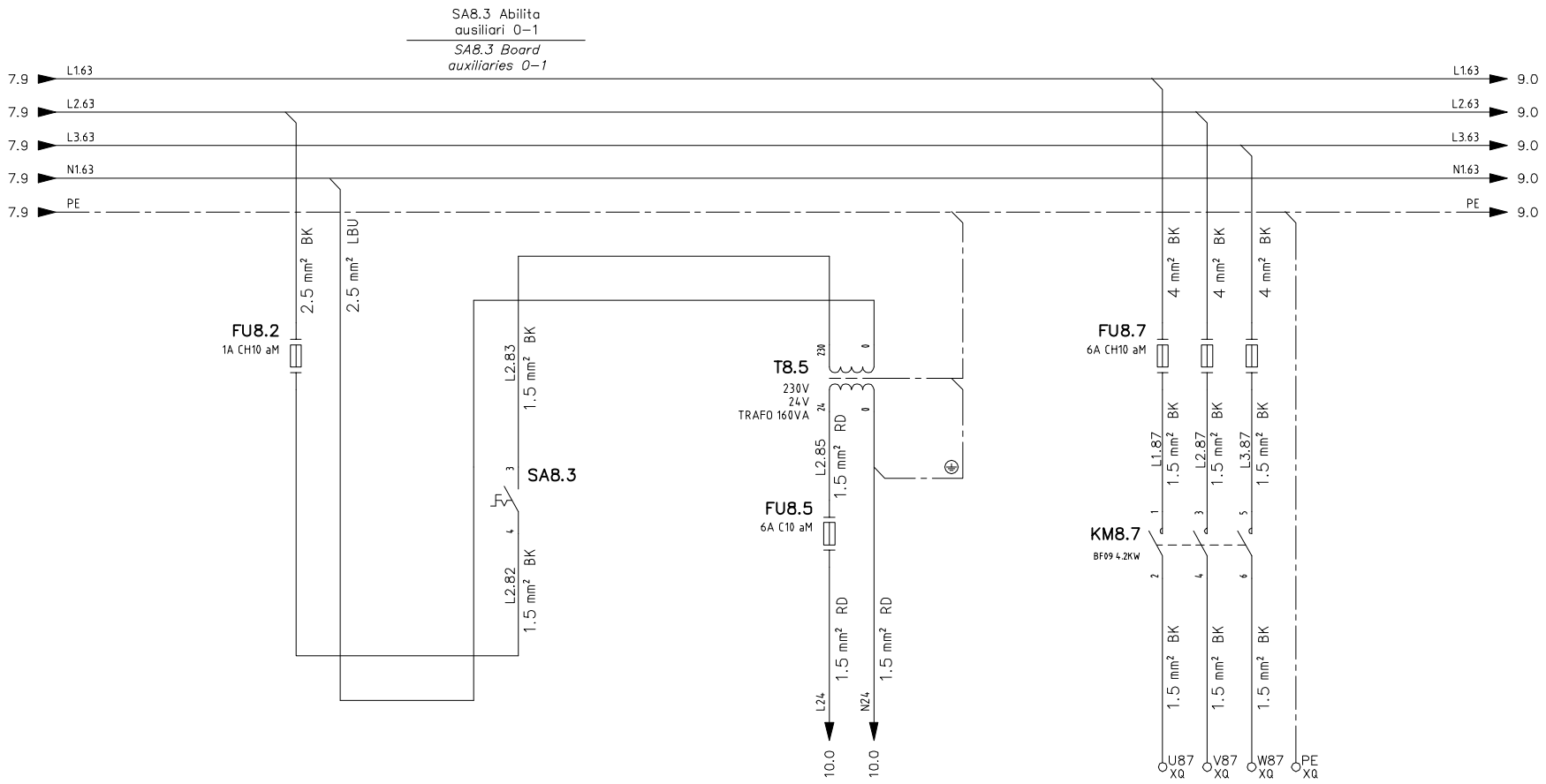


XQ	

Potenza pompa
1.1KW 3~230V 50Hz

Pump power supply
1.1KW 3~230V 50Hz

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=
				DISEGN.	LB					+
				VISTO	–			Potenza pompa *Power pump*		FG. 7
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL : / SOST. DA :	FILE : QCFH19–3G		5682	F.S. 8

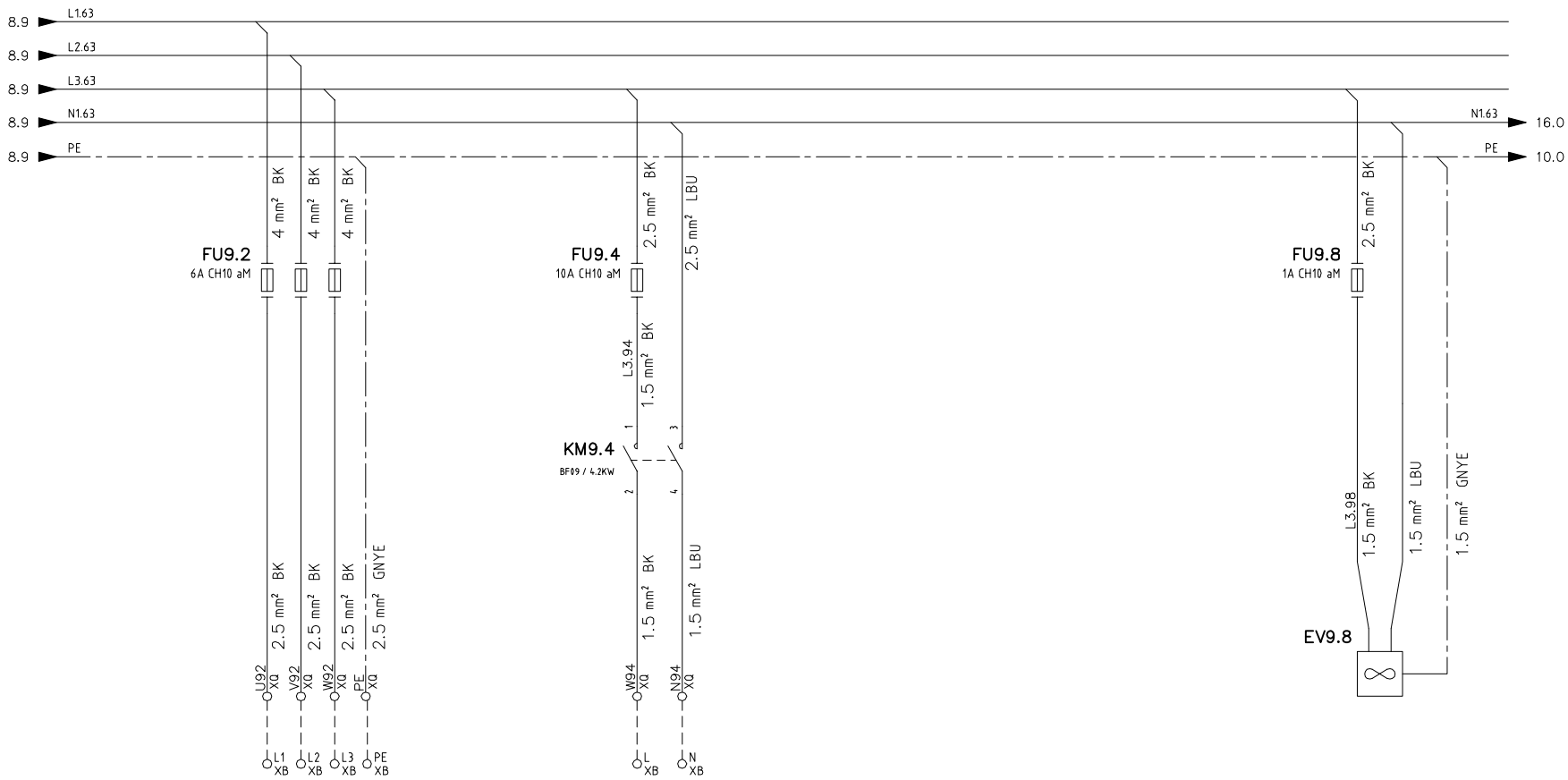


XQ	

Alimentazione ausiliari 24V AC
Board auxiliaries power supply 24V AC

Alimentazione pompa anticavitazione
Uncavitation pump supply

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Alimentazione ausiliari *Auxiliaries power supply*		FG. 8	
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682	F.S. 9	



XQ

Alimentazione ventilatore bruciatatore 3~400V 50Hz MAX 2KW

Burner fan power supply 3~400V 50Hz MAX 2KW

OPTION!

Alimentazione bruciatore 1/N~230V 50Hz MAX 1KW

Burner power supply 1/N~230V 50Hz MAX 1KW

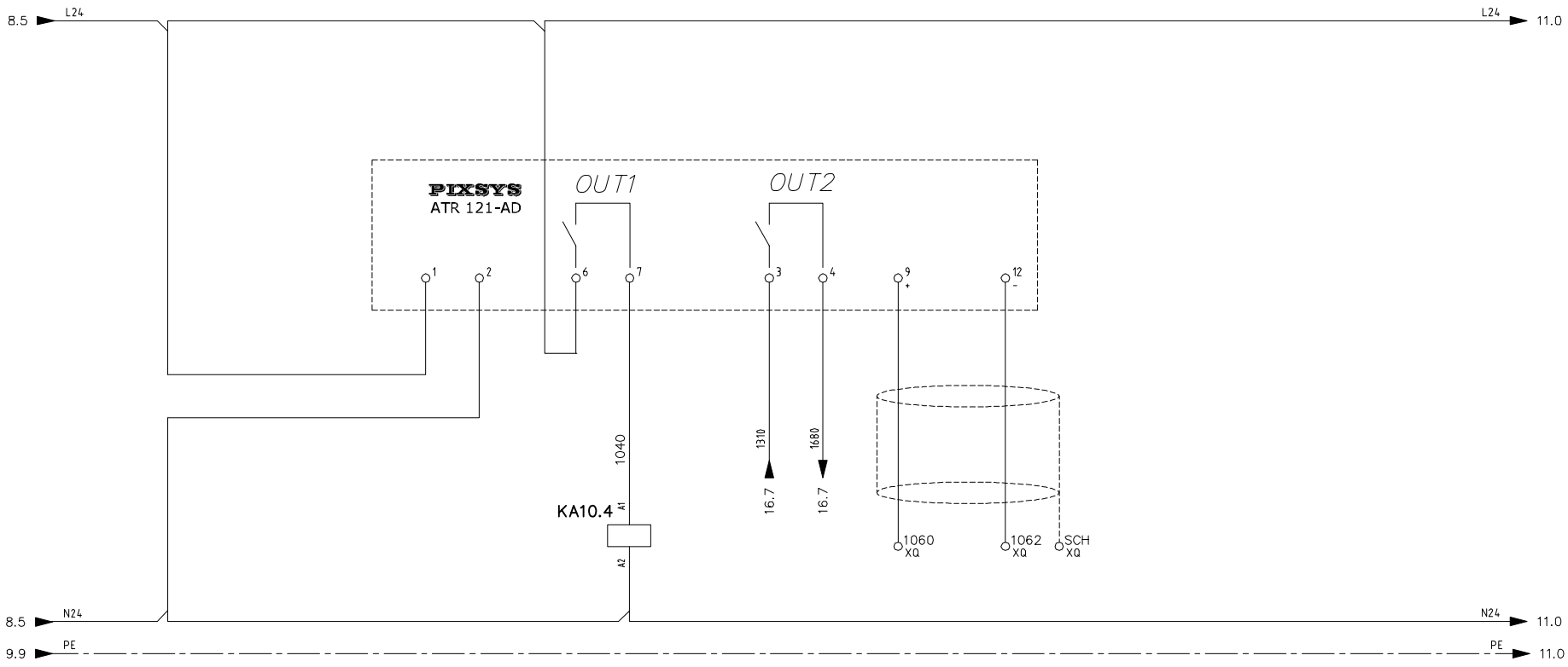
EV9.8 Ventilatore quadro

EV9.8 Board fan

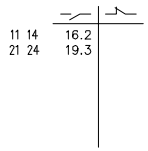
				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Potenza bruciatore *Burner power supply*			FG. 9
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682		F.S. 10

Controllo pressione

Pressure controller



XQ	



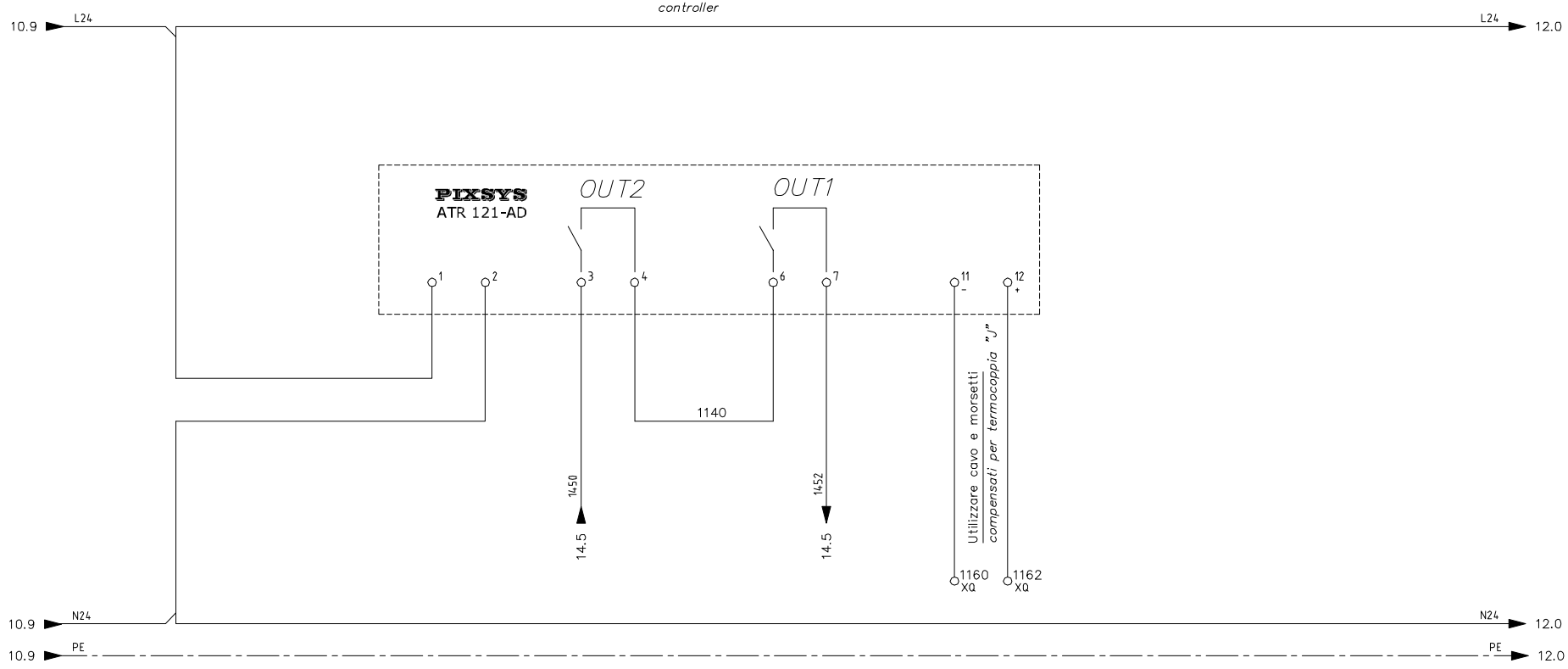
Trasmettitore di pressione 4–20mA

Pressure transmitter 4–20mA

				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Controllo pressione *Pressure controller*			FG. 10
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S. 11

Controllo massima temperatura fumi

Temperature flue controller



XQ	

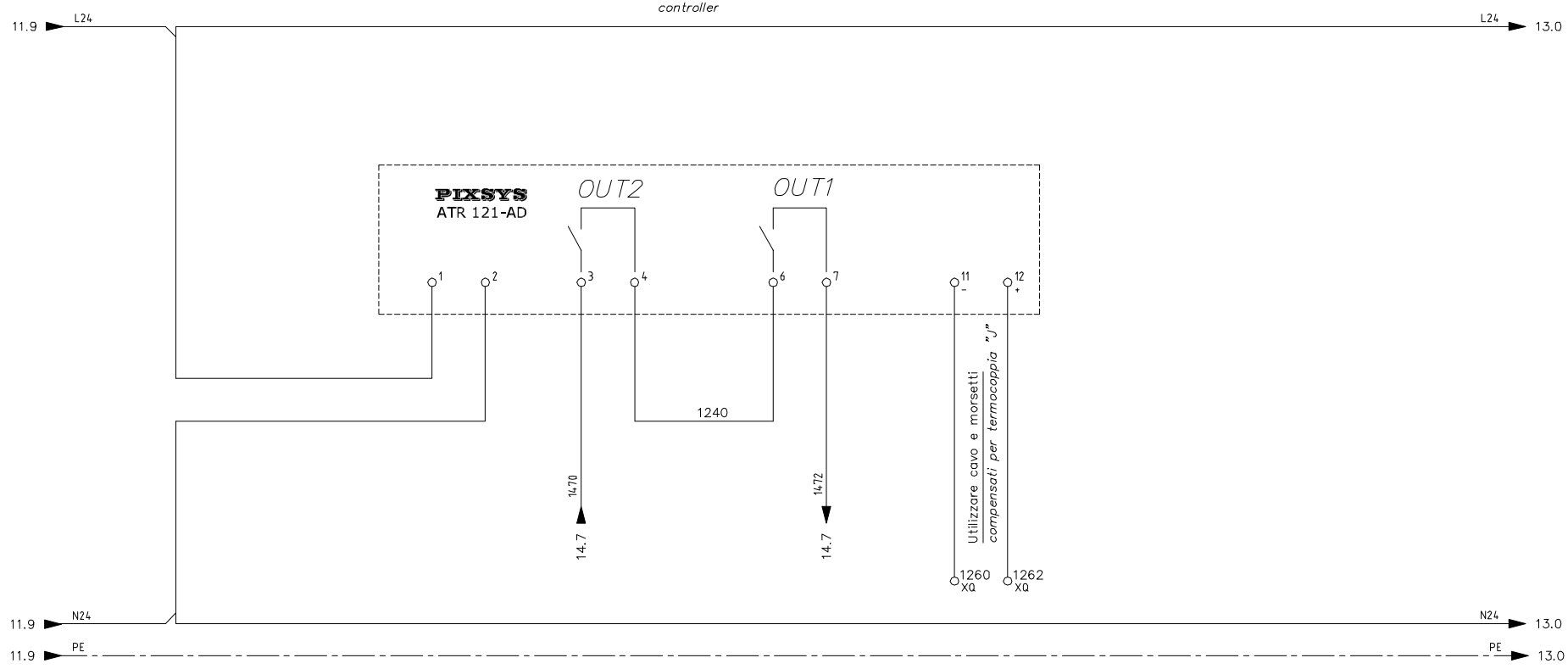
Termocoppia tipo J

Flue thermocouple J

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=		
				DISEGN.	LB					+		
				VISTO	–			Controllo temperatura fumi *Temperature flue controller*			FG.	11
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S.	12

Controllo massima temperatura serpentino

Coil temperature controller

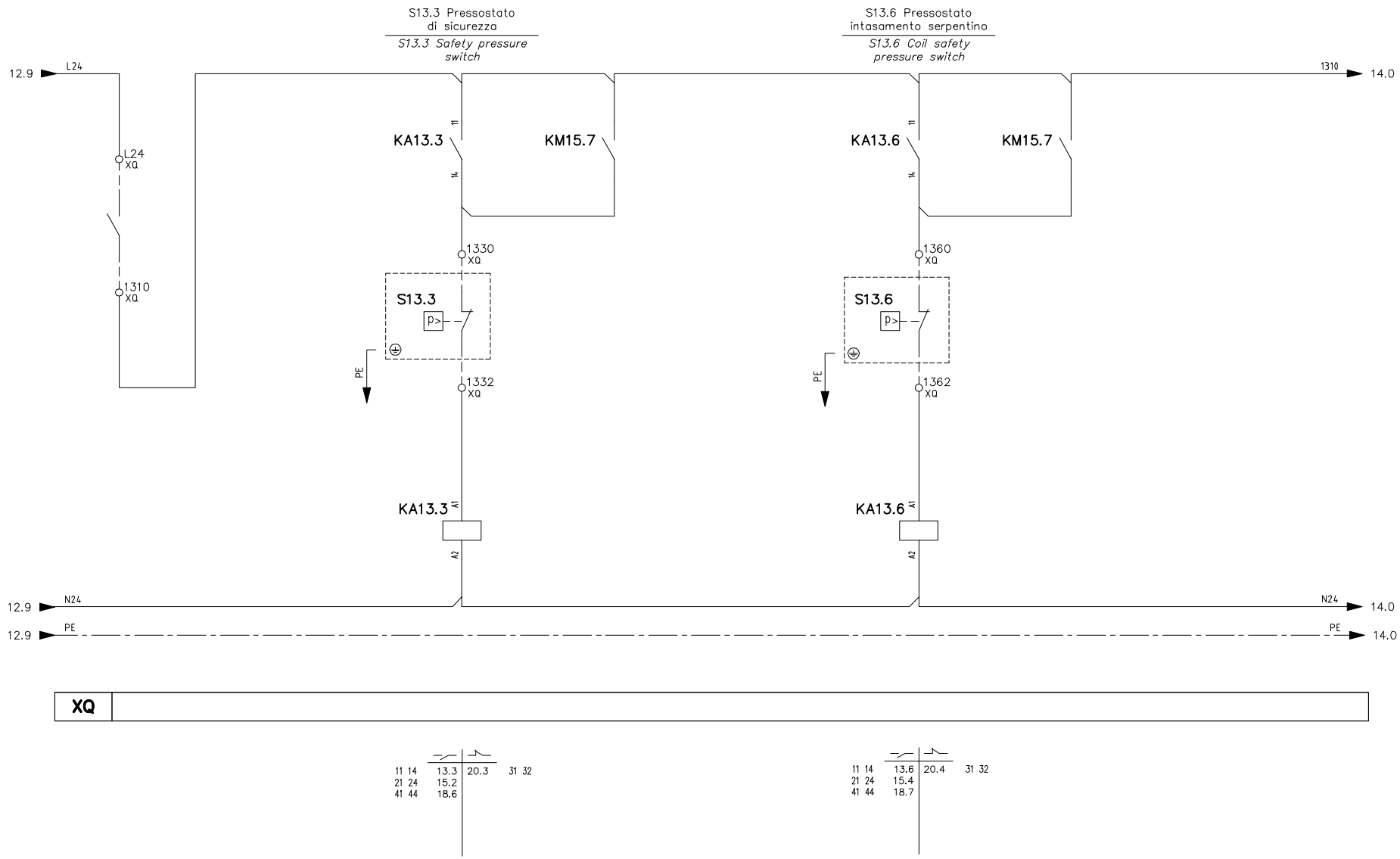


XQ	

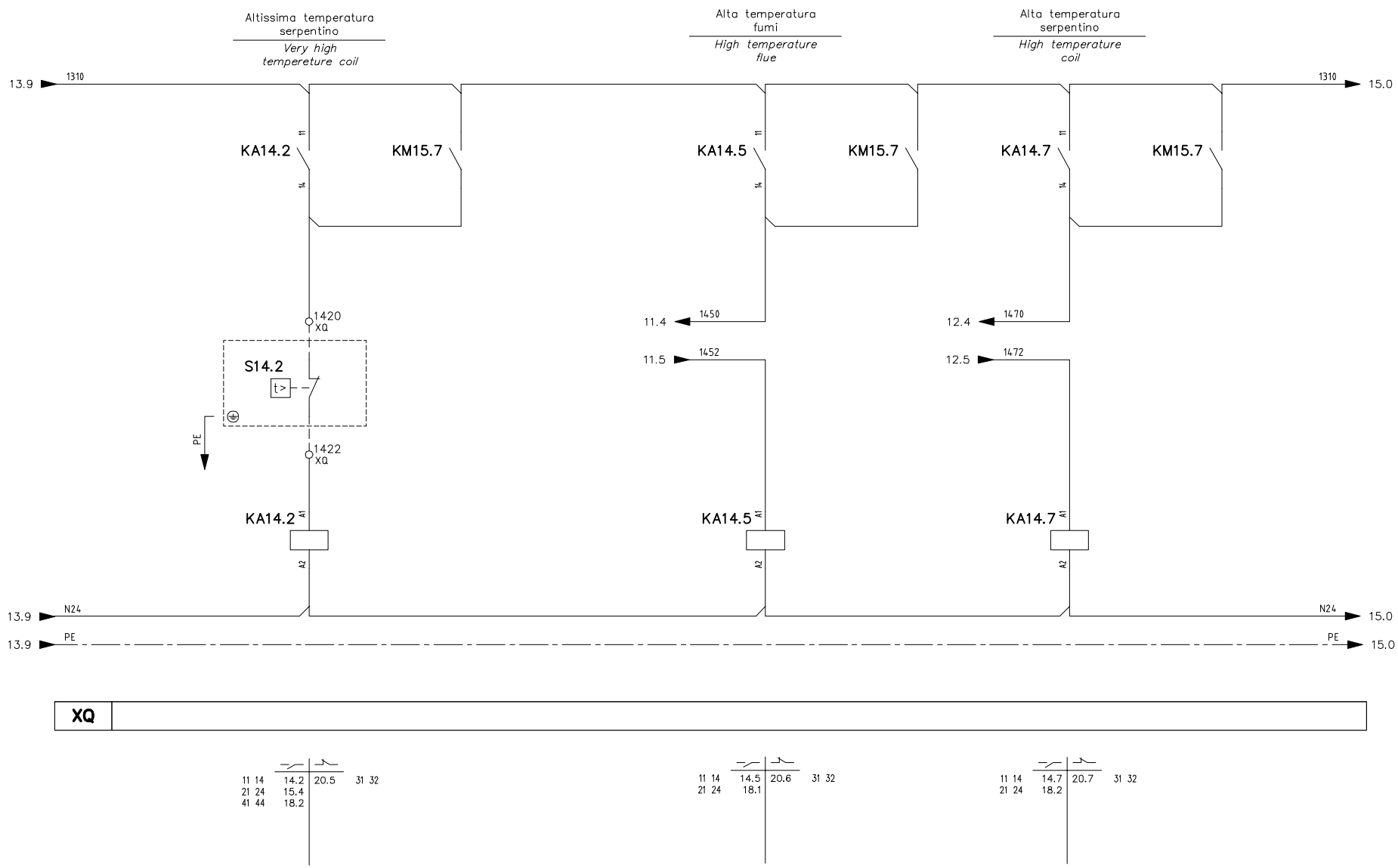
Termocoppia tipo J

Coil thermocouple J

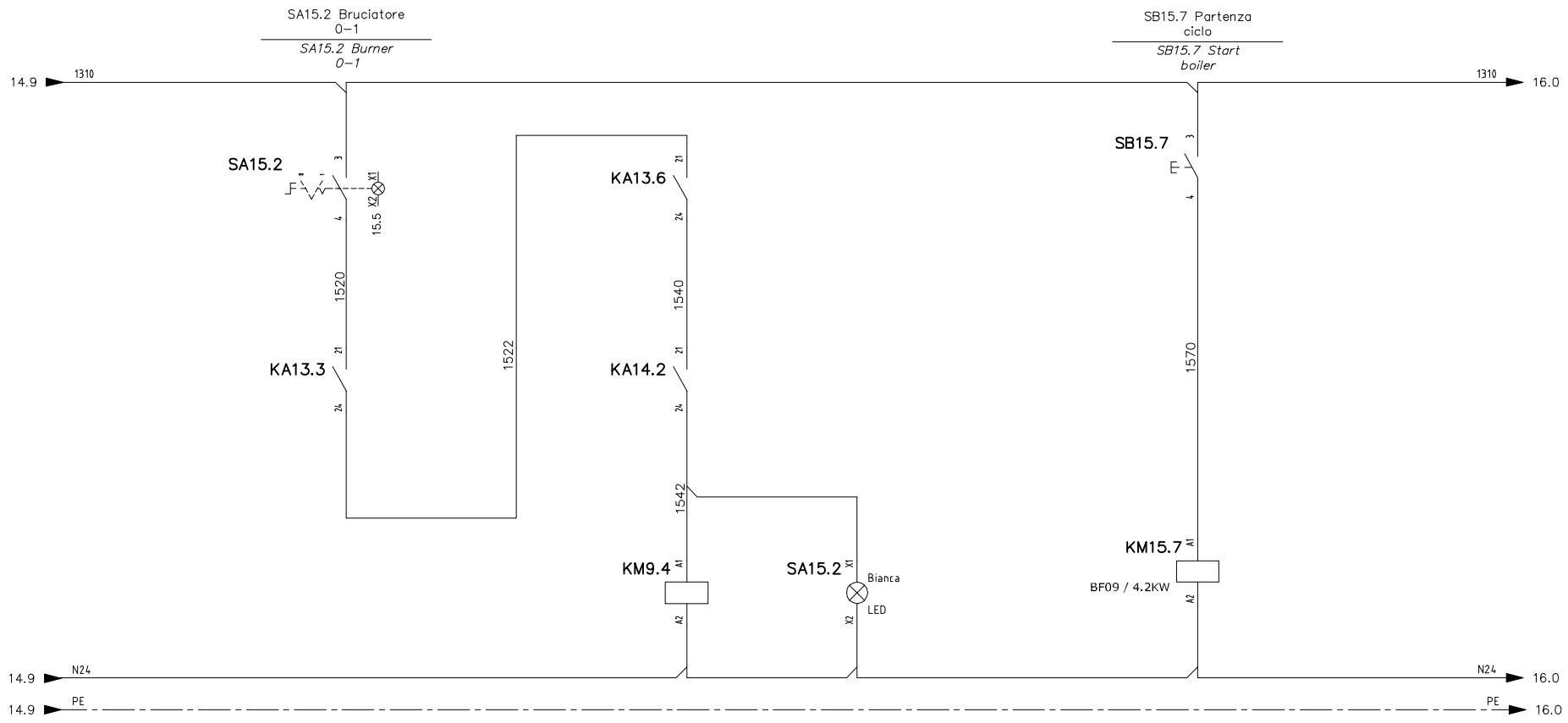
				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Controllo temperatura serpentino *Boiler temperature controller*			FG. 12
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682		F.S. 13



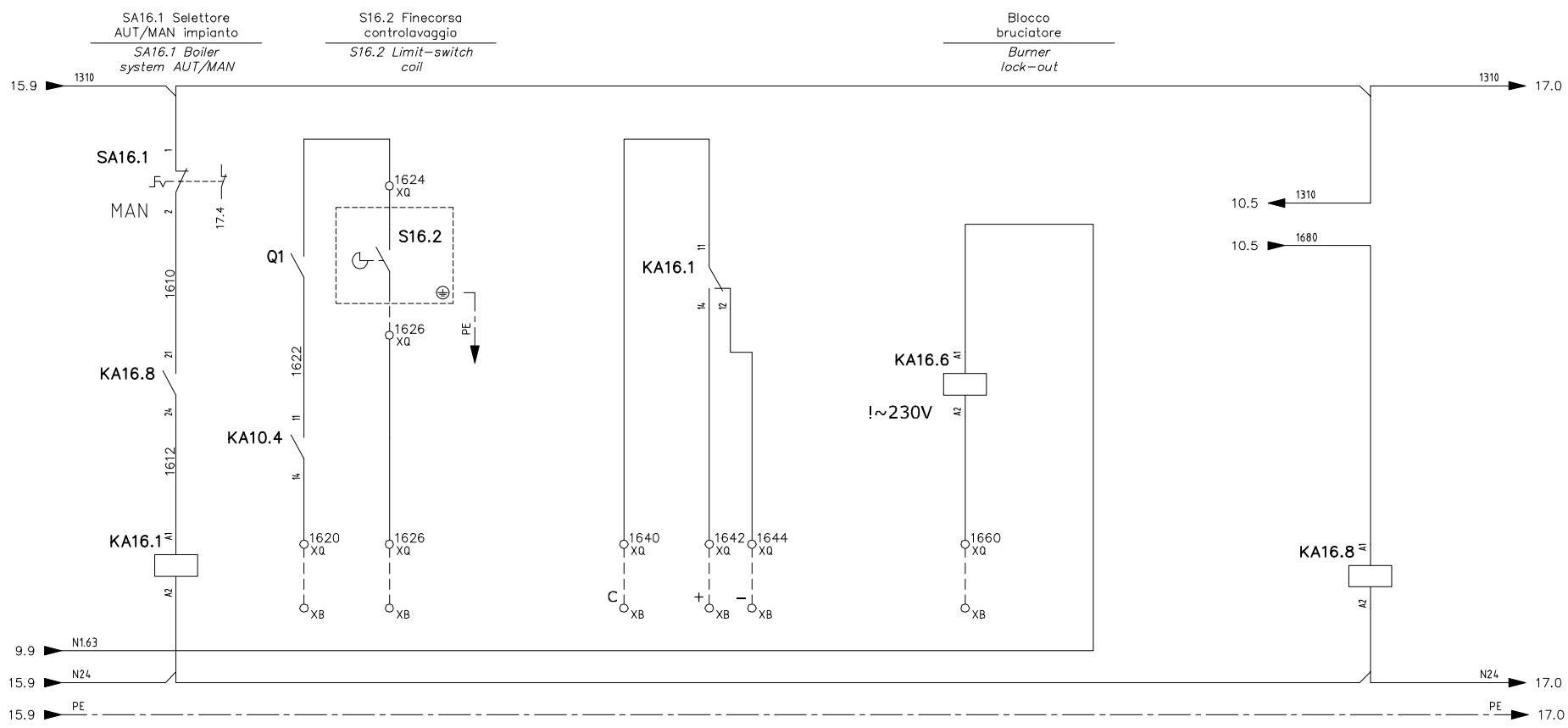
				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Sicurezze *Safeties*			FG. 13
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682		F.S. 14



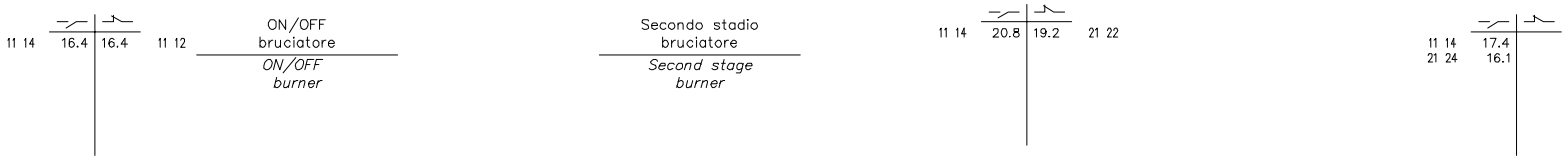
				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=
				DISEGN.	LB					+
				VISTO	–			Sicurezze *Safeties*		FG. 14
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL : / SOST. DA :	FILE : QCFH19–3G		5682	F.S. 15



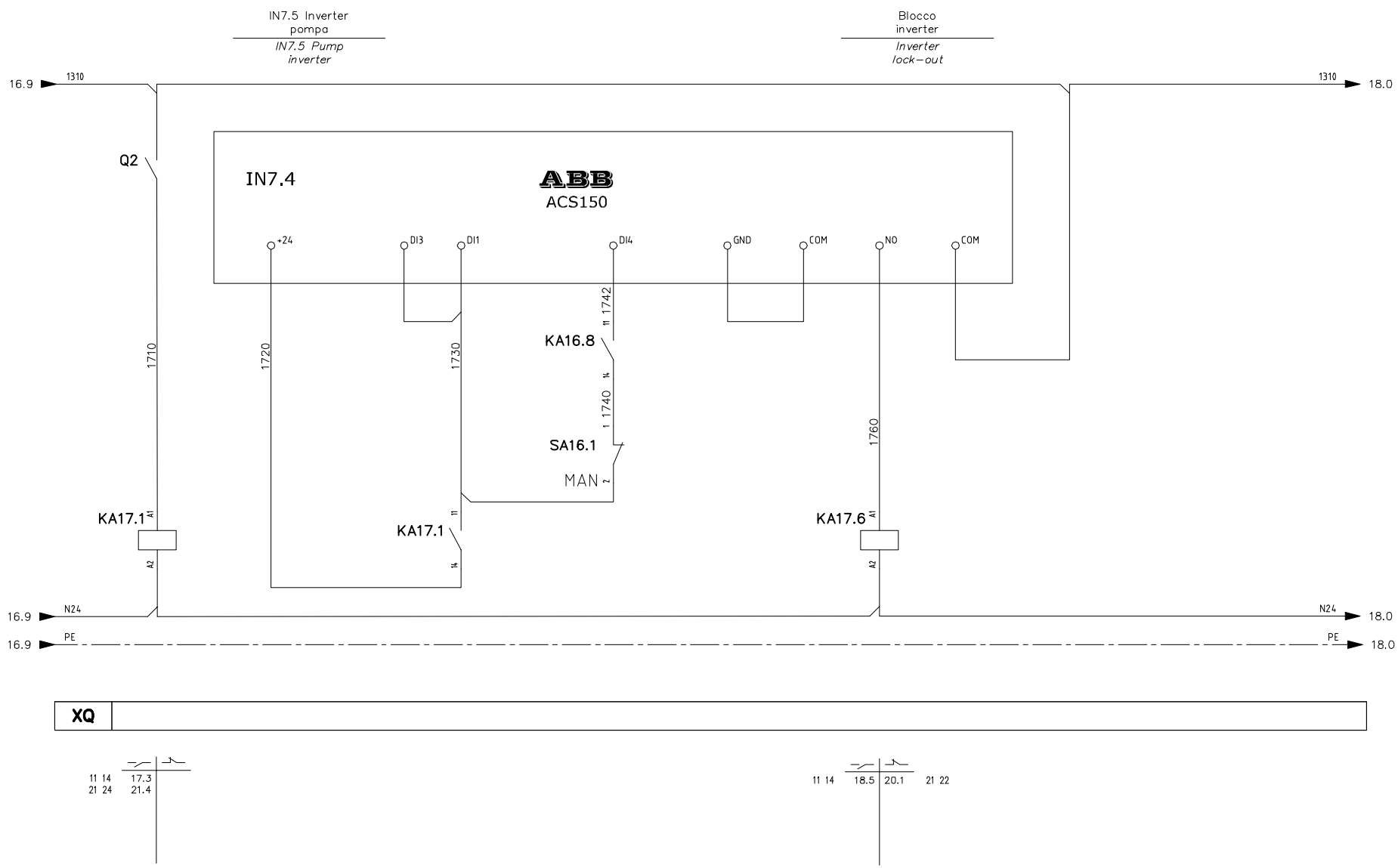
				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Sicurezze bruciatore *Burner safeties*			FG. 15
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682		F.S. 16



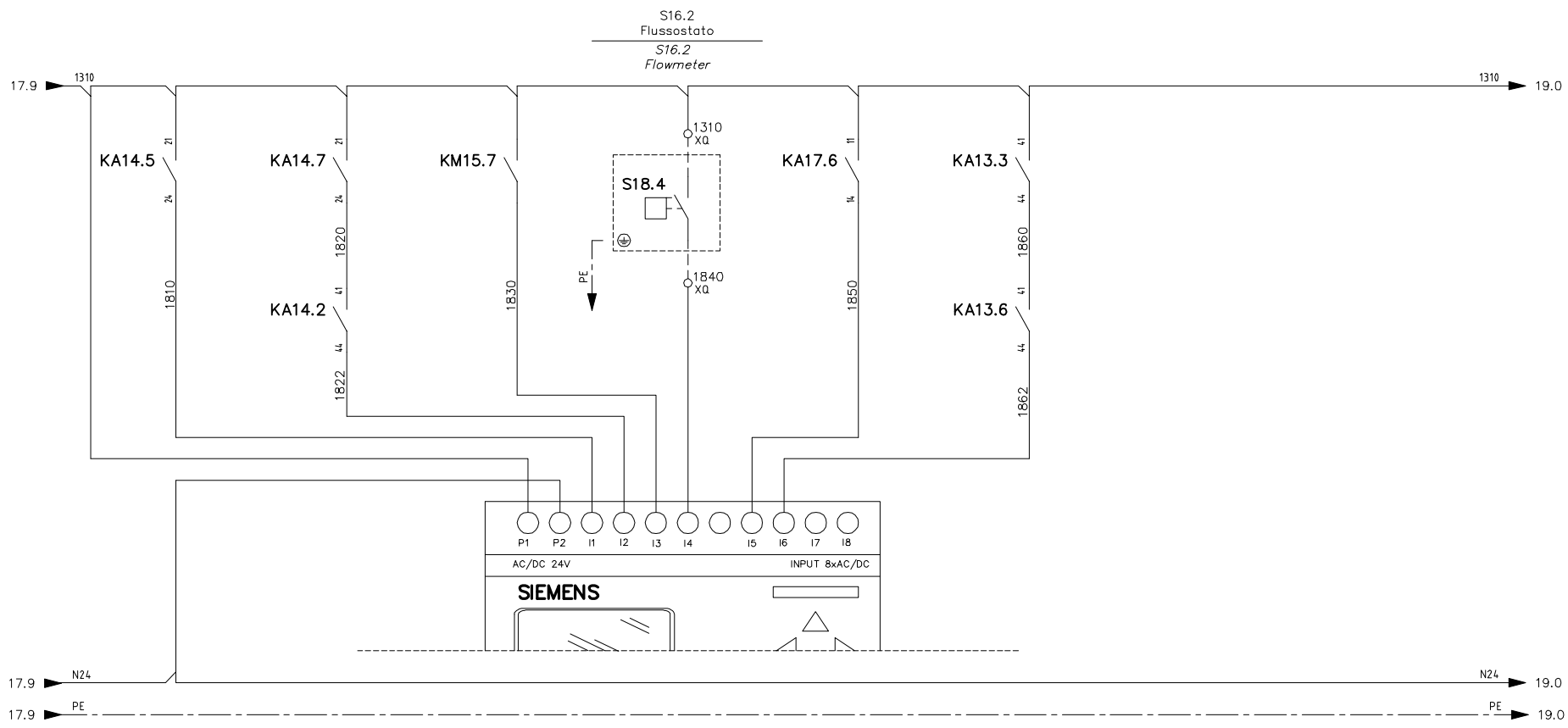
XQ	



				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Comandi bruciatore *Burner control*			FG. 16
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G	5682		F.S. 17

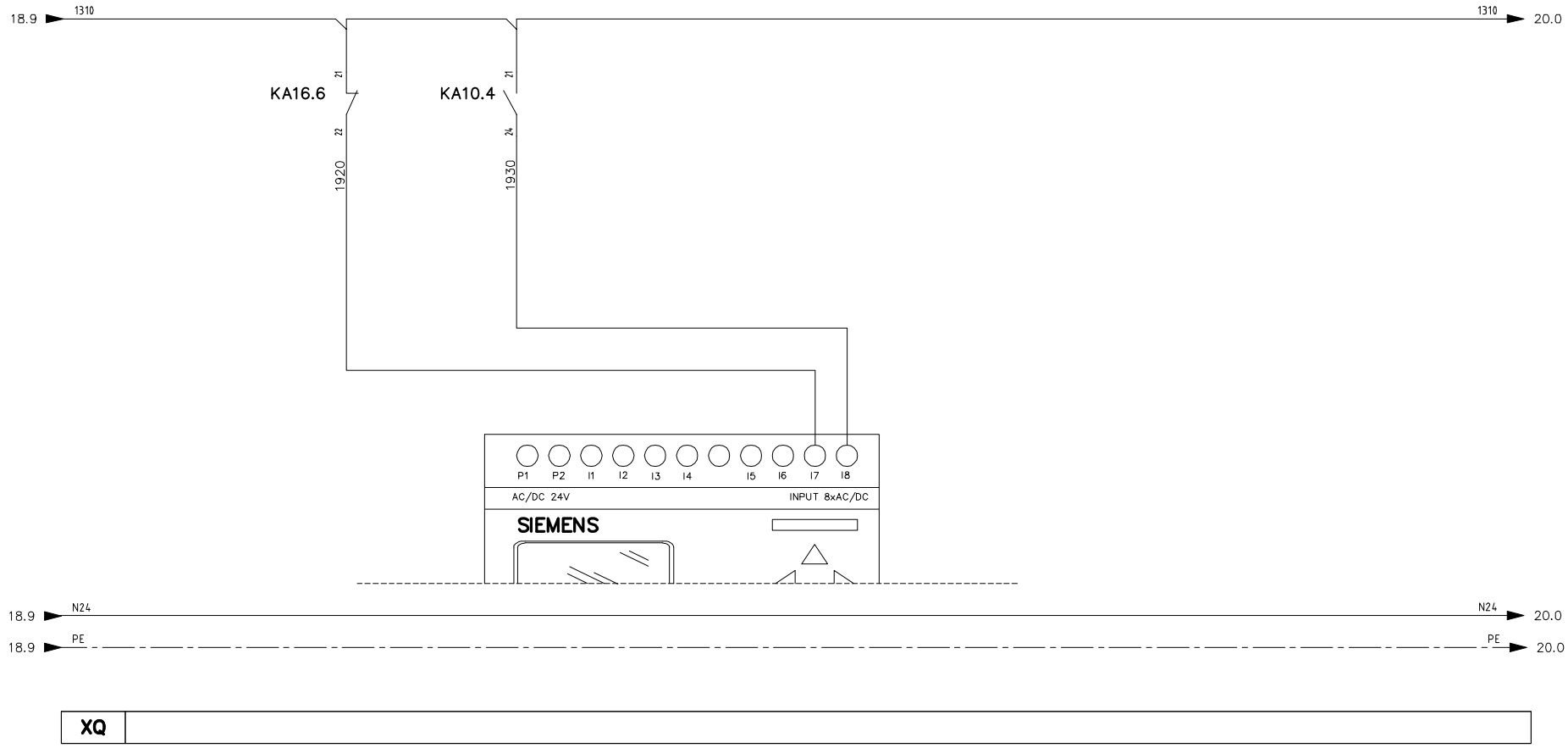


				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Controllo pompa *Pump control*			FG. 17
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S. 18

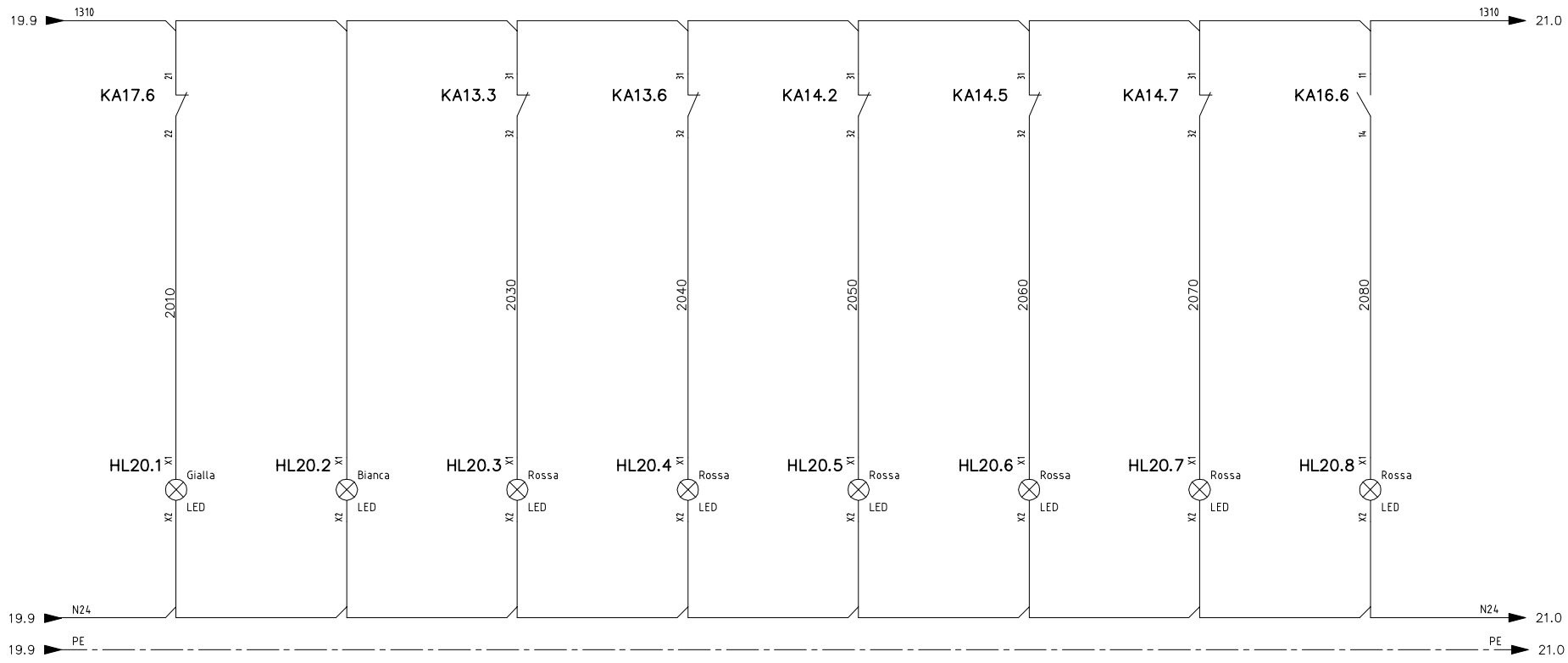


XQ	

				DATA	02/11		L.C.Z. srl Parma ITALY	L.C.Z. –Parma– CFH500	QCFH19–3G	=
				DISEGN.	LB					+
				VISTO	–			Ingressi modulo logico PLC input		FG. 18
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL : / SOST. DA :	FILE : QCFH19–3G		5682	F.S. 19



				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=	
				DISEGN.	LB					+	
				VISTO	–			Ingressi modulo logico *PLC input*			FG. 19
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S. 20



XQ	

HL20.1 Blocco inverter *HL20.1 Inverter lock–out*	HL20.2 Presenza tensione *HL20.2 Board power supply*	HL20.3 Allarme pressione di sicurezza *HL20.3 Boiler high pressure*	HL20.4 Allarme intasamento serpentino *HL20.4 Coil high pressure*	HL20.5 Allarme altissima temperatura *HL20.5 Very high boiler temperature*	HL20.6 Allarme fumi temperatura *HL20.6 Flue high temperature*	HL20.7 Allarme alta temperatura *HL20.7 High boiler temperature*	HL20.8 Blocco bruciatore *HL20.8 Burner lock–out*

REV.	MODIFICA	DATA	FIRMA	APPR.	DISEGN.	VISTO
					LB	–

DATA 02/11

SOST. IL : SOST. DA :

L.C.Z. srl
Parma ITALY

FILE : QCFH19–3G

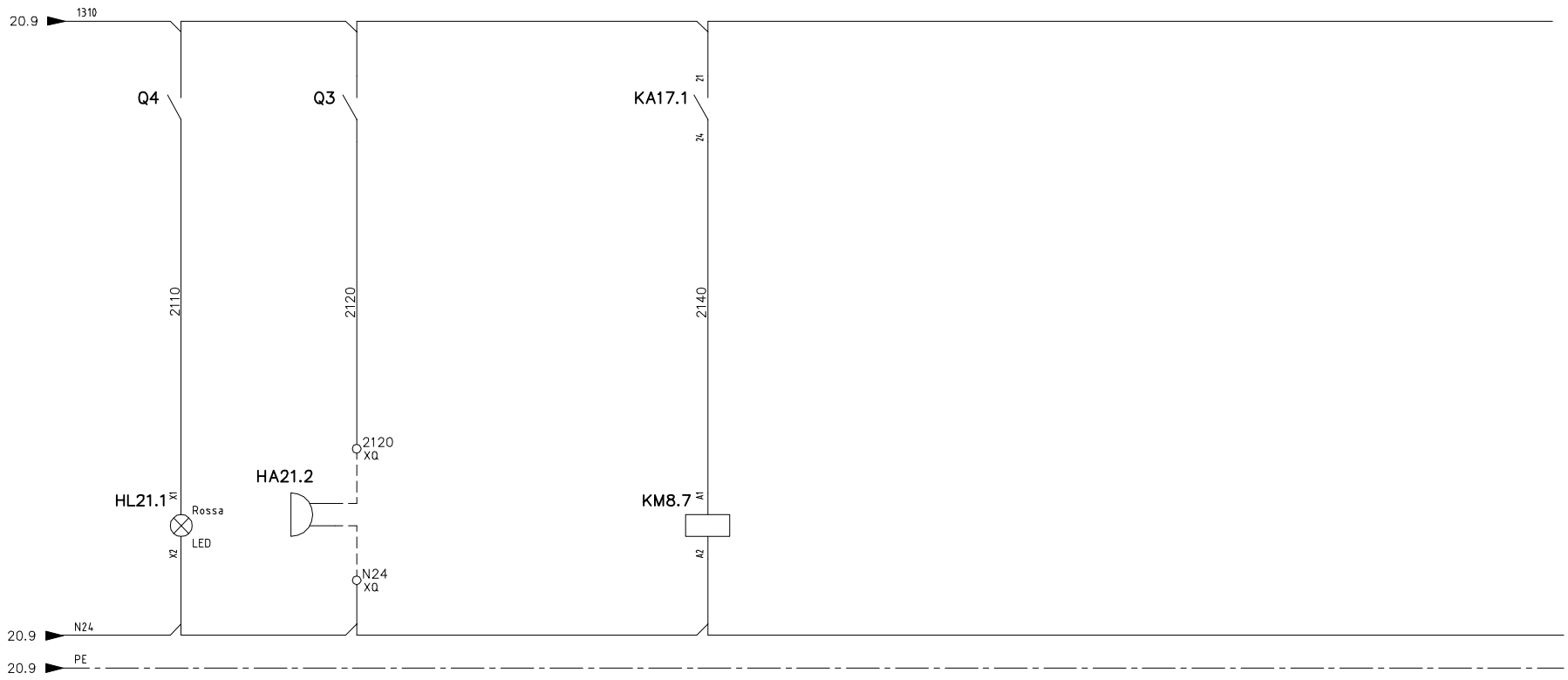
L.C.Z. –Parma–
CFH500

Segnalazioni
Signaling

QCFH19–3G

5682

FG. **20**
F.S. **21**



XQ	

HL21.1 Allarme mancanza acqua

HL21.1 Wantage water

Consenso pompa anticavitazione

Consensus pump uncavitation

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma– CFH500*	QCFH19–3G	=
				DISEGN.	LB					+
				VISTO	–			Segnalazioni *Signaling*		FG. 21
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL : / SOST. DA :	FILE : QCFH19–3G		5682	F.S. 22

				DATA	02/11		L.C.Z. srl Parma ITALY	*L.C.Z. –Parma–* *CFH500*	**QCFH19–3G**	=		
				DISEGN.	LB					+		
				VISTO	–			Riserva *Reserved*			FG. **22**	
REV.	MODIFICA	DATA	FIRMA	APPR.	–	SOST. IL :	SOST. DA :	FILE : QCFH19–3G		5682	F.S. **–**	