

0 1 2 3 4 5 6 7 8 9

# Electrical Specification - Specifiche Elettriche

Model - Modello

## CUBO PACKS MULTI - Bitzer Semihermetics

Bitzer MT-BT  
3 Comprs Semihermetics , 1 INV.  
PCO xs  
Condenser Fans 2 x Ø 630 1Ph  
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A

B

C

D

E

F

A

B

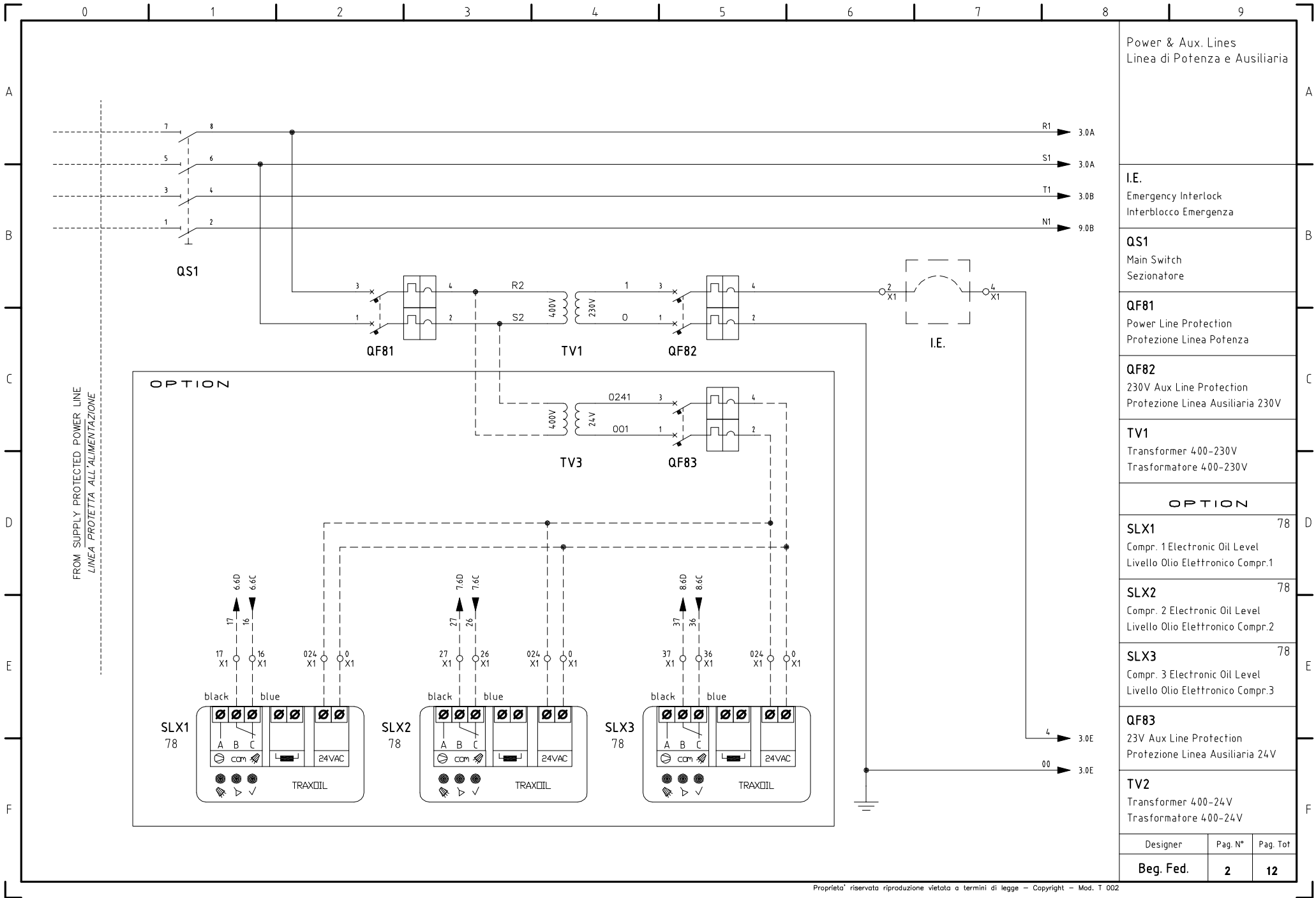
C

D

E

F

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Power & Aux. Lines  
Linea di Potenza e Ausiliaria

**I.E.**  
Emergency Interlock  
Interblocco Emergenza

**QS1**  
Main Switch  
Sezionatore

**QF81**  
Power Line Protection  
Protezione Linea Potenza

**QF82**  
230V Aux Line Protection  
Protezione Linea Ausiliaria 230V

**TV1**  
Transformer 400-230V  
Trasformatore 400-230V

**OPTION**

**SLX1** 78  
Compr. 1 Electronic Oil Level  
Livello Olio Elettronico Compr.1

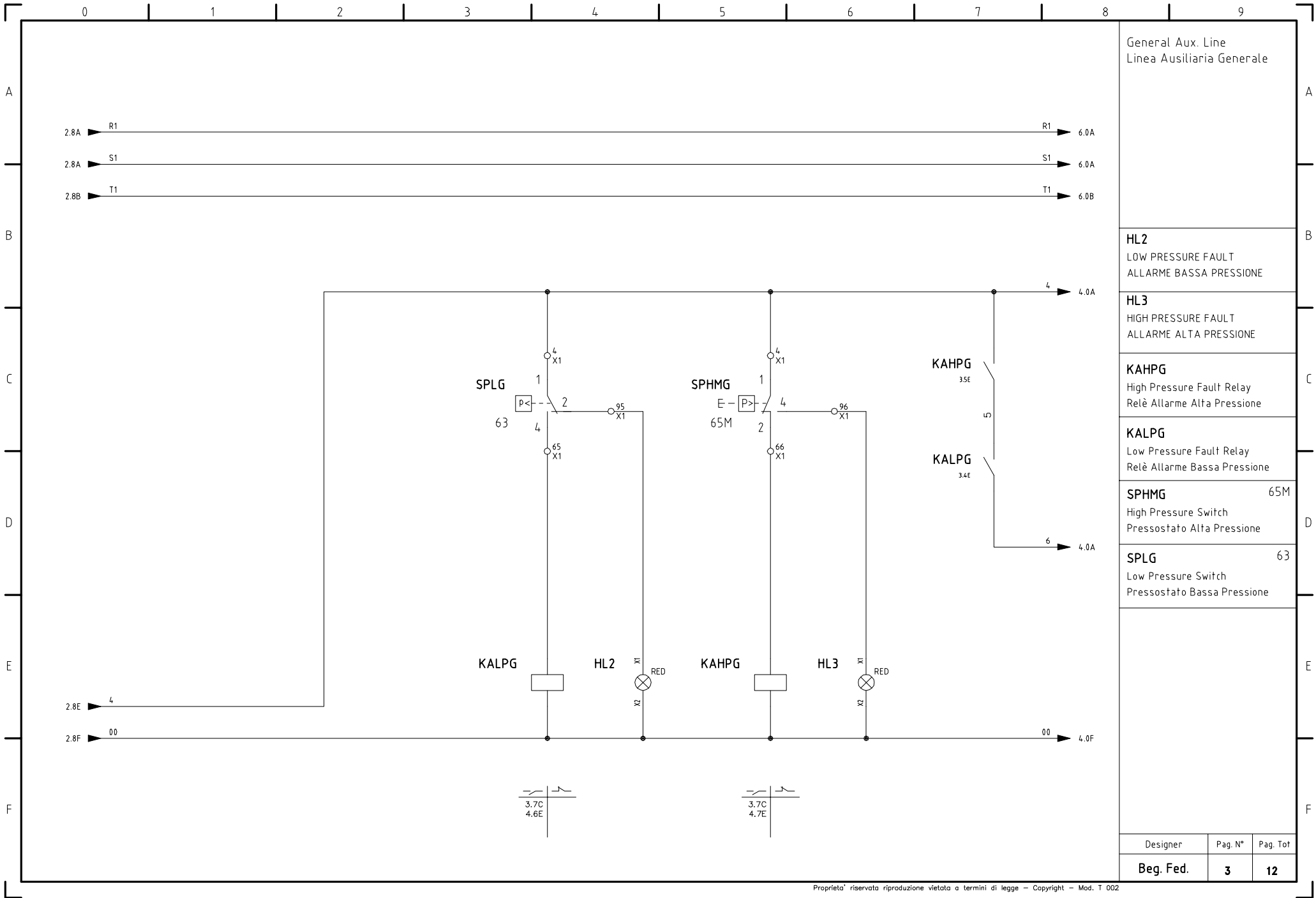
**SLX2** 78  
Compr. 2 Electronic Oil Level  
Livello Olio Elettronico Compr.2

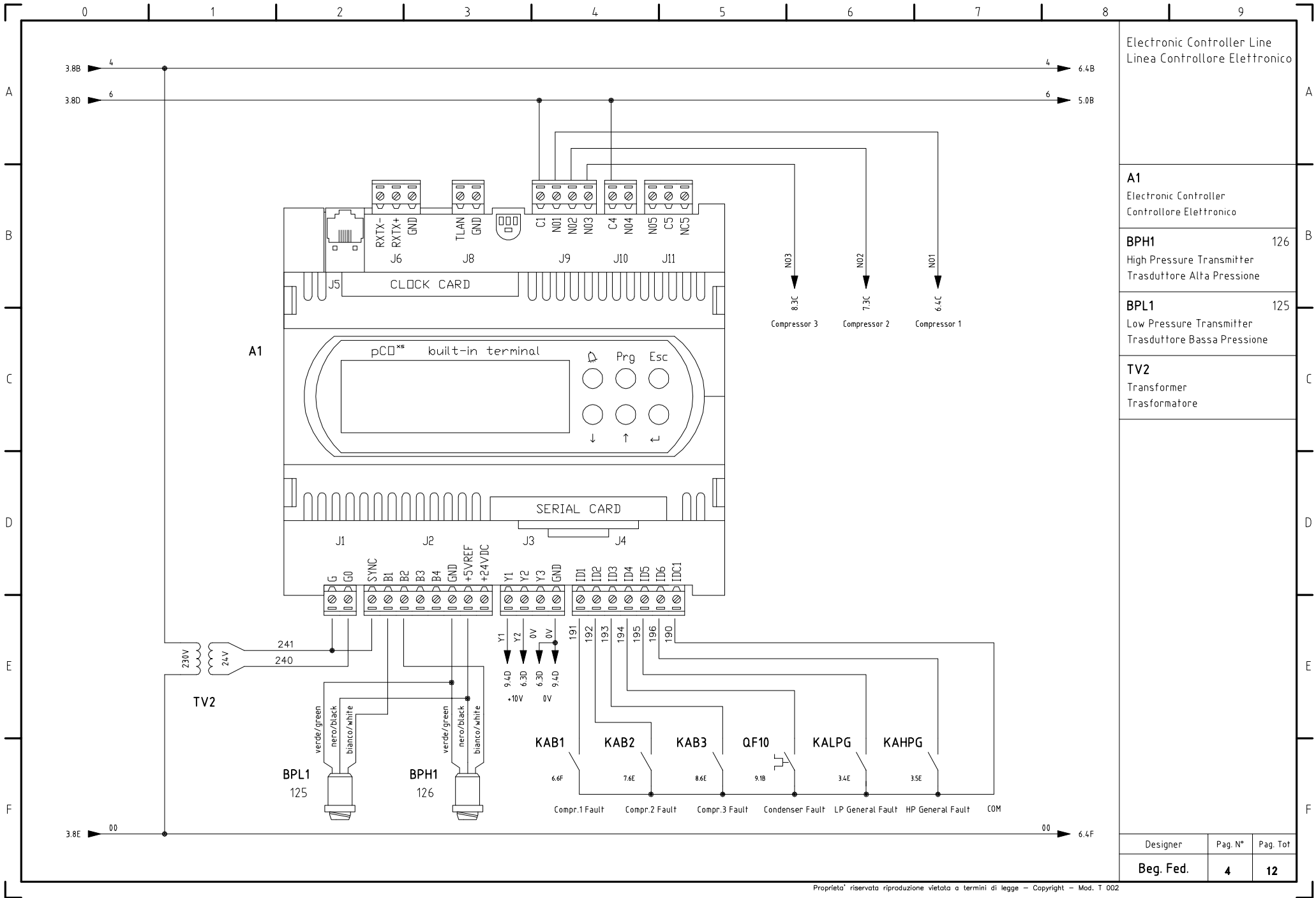
**SLX3** 78  
Compr. 3 Electronic Oil Level  
Livello Olio Elettronico Compr.3

**QF83**  
23V Aux Line Protection  
Protezione Linea Ausiliaria 24V

**TV2**  
Transformer 400-24V  
Trasformatore 400-24V

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Electronic Controller Line  
Linea Controllore Elettronico

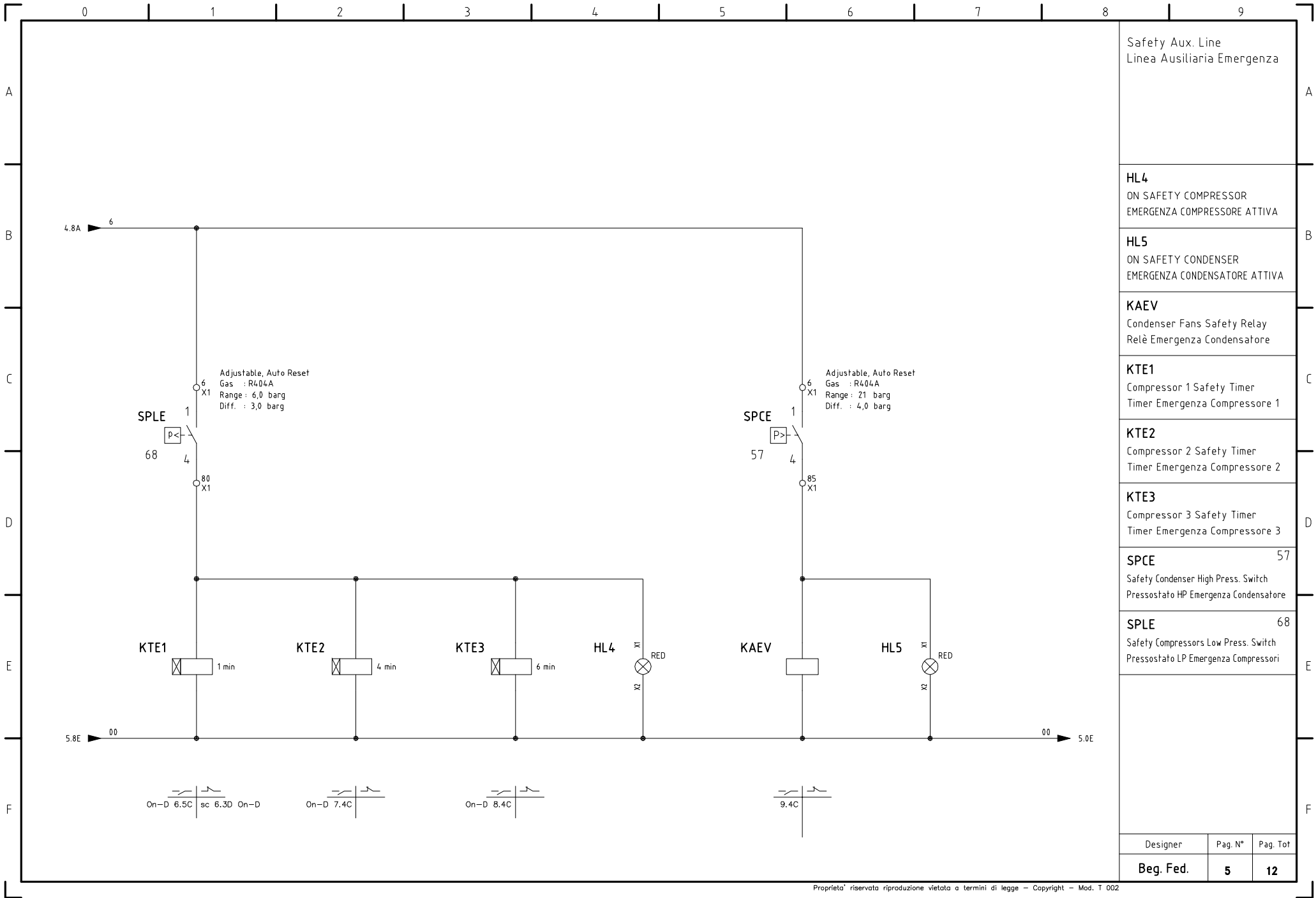
**A1**  
Electronic Controller  
Controllore Elettronico

**BPH1** 126  
High Pressure Transmitter  
Trasduttore Alfa Pressione

**BPL1** 125  
Low Pressure Transmitter  
Trasduttore Bassa Pressione

**TV2**  
Transformer  
Trasformatore

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Safety Aux. Line  
Linea Ausiliaria Emergenza

**HL4**  
ON SAFETY COMPRESSOR  
EMERGENZA COMPRESSORE ATTIVA

**HL5**  
ON SAFETY CONDENSER  
EMERGENZA CONDENSATORE ATTIVA

**KAEV**  
Condenser Fans Safety Relay  
Relè Emergenza Condensatore

**KTE1**  
Compressor 1 Safety Timer  
Timer Emergenza Compressore 1

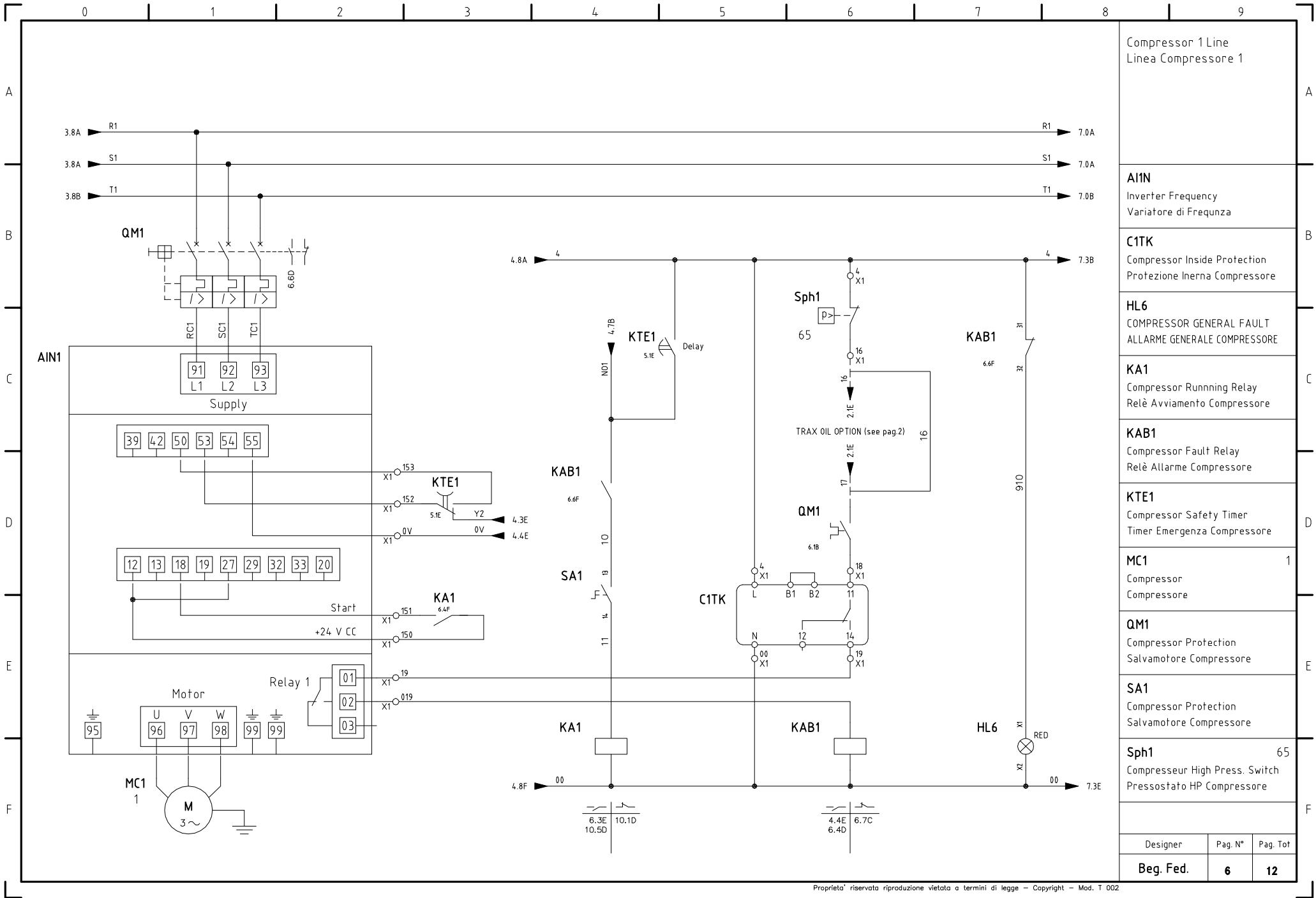
**KTE2**  
Compressor 2 Safety Timer  
Timer Emergenza Compressore 2

**KTE3**  
Compressor 3 Safety Timer  
Timer Emergenza Compressore 3

**SPCE** 57  
Safety Condenser High Press. Switch  
Pressostato HP Emergenza Condensatore

**SPLE** 68  
Safety Compressors Low Press. Switch  
Pressostato LP Emergenza Compressori

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Compressor 1 Line  
Linea Compressore 1

AIN1  
Inverter Frequency  
Variatore di Frequenza

C1TK  
Compressor Inside Protection  
Protezione Interna Compressore

HL6  
COMPRESSOR GENERAL FAULT  
ALLARME GENERALE COMPRESSORE

KA1  
Compressor Running Relay  
Relè Avviamento Compressore

KAB1  
Compressor Fault Relay  
Relè Allarme Compressore

KTE1  
Compressor Safety Timer  
Timer Emergenza Compressore

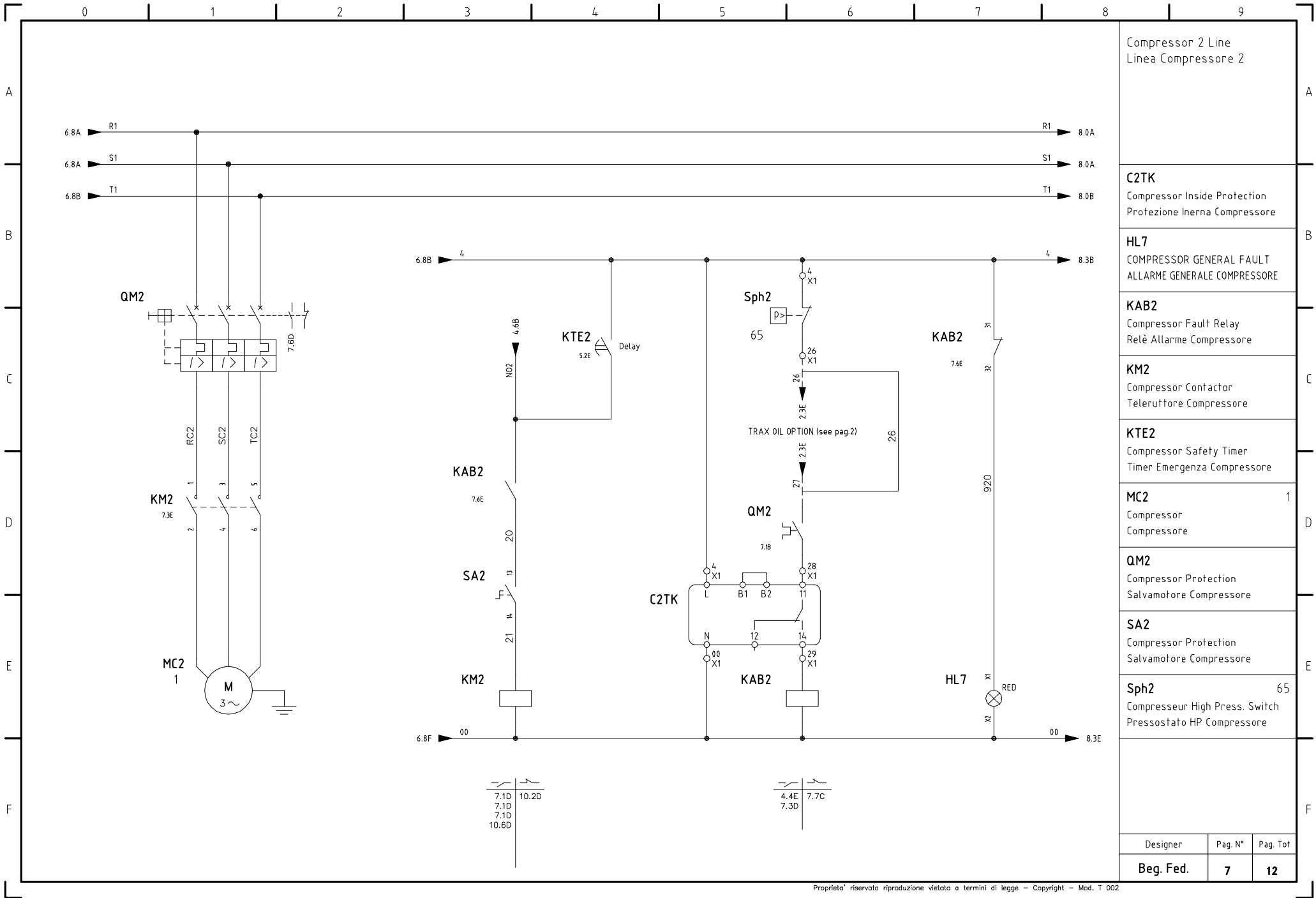
MC1  
Compressor  
Compressore

QM1  
Compressor Protection  
Salvatore Compressore

SA1  
Compressor Protection  
Salvatore Compressore

Sph1 65  
Compressor High Press. Switch  
Pressostato HP Compressore

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Compressor 2 Line  
Linea Compressore 2

**C2TK**  
Compressor Inside Protection  
Protezione Interna Compressore

**HL7**  
COMPRESSOR GENERAL FAULT  
ALLARME GENERALE COMPRESSORE

**KAB2**  
Compressor Fault Relay  
Relè Allarme Compressore

**KM2**  
Compressor Contactor  
Teleruttore Compressore

**KTE2**  
Compressor Safety Timer  
Timer Emergenza Compressore

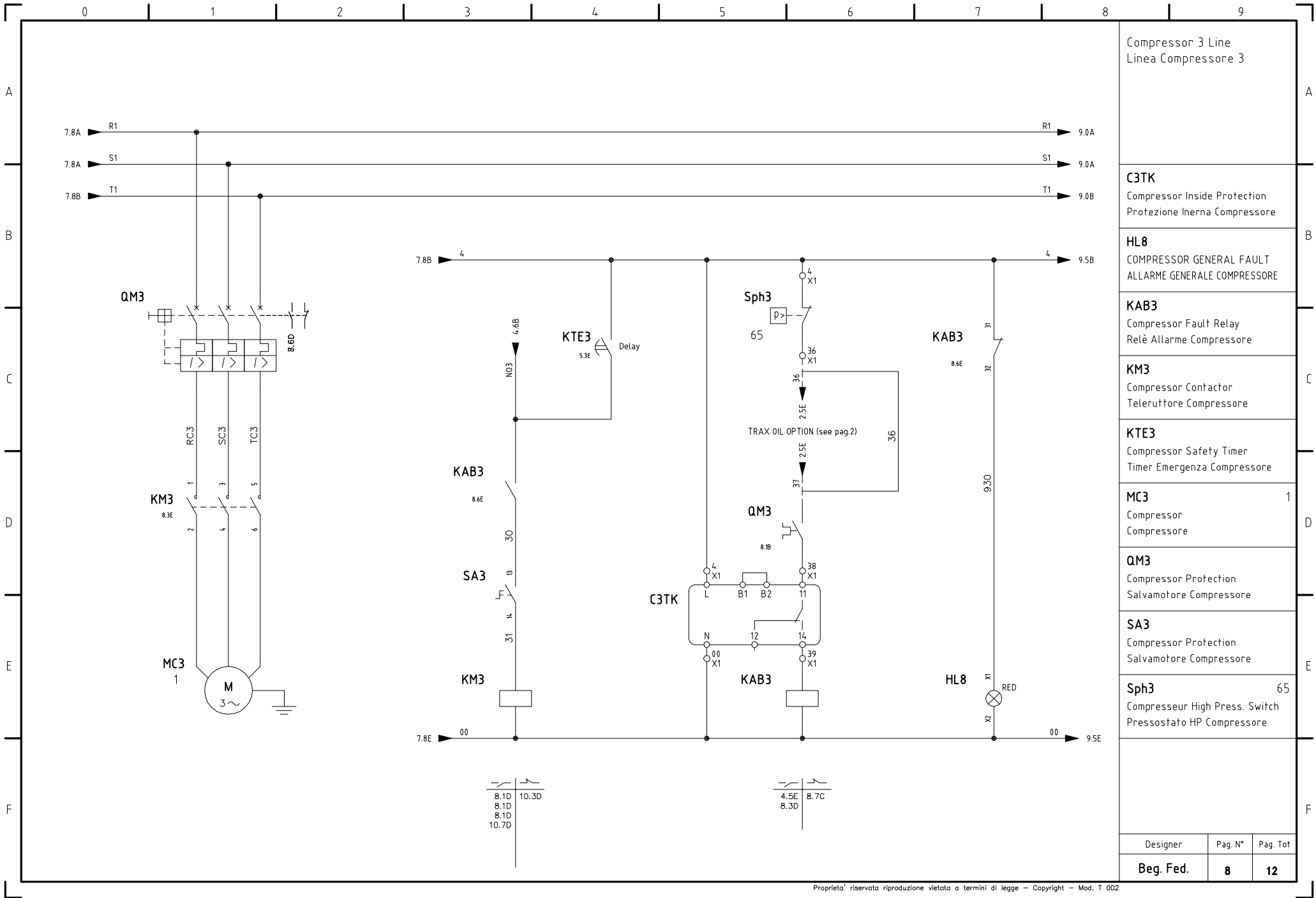
**MC2**  
Compressor  
Compressore

**QM2**  
Compressor Protection  
Salvatore Compressore

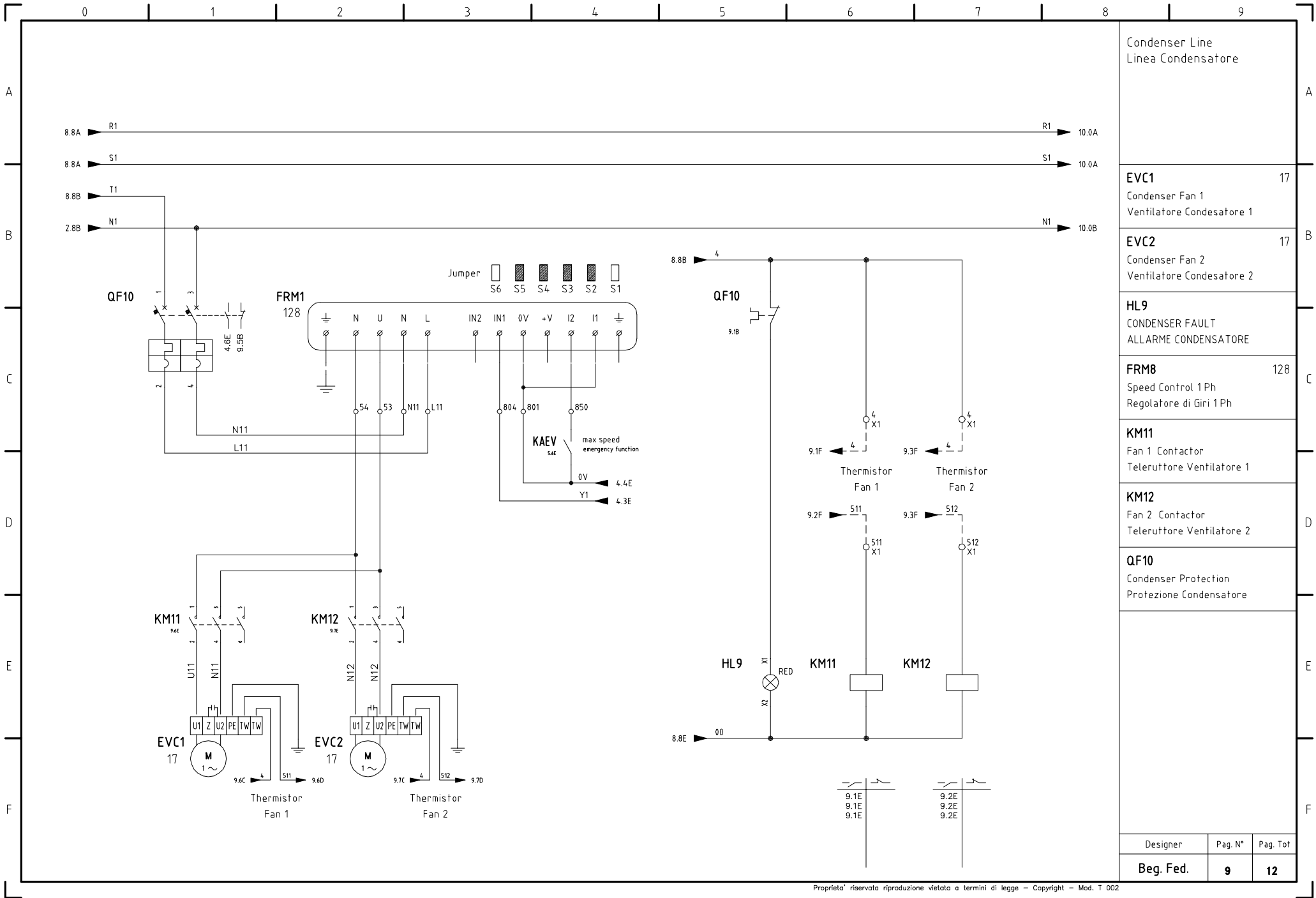
**SA2**  
Compressor Protection  
Salvatore Compressore

**Sph2** 65  
Compressor High Press. Switch  
Pressostato HP Compressore

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Condenser Line  
Linea Condensatore

EVC1 17  
Condenser Fan 1  
Ventilatore Condensatore 1

EVC2 17  
Condenser Fan 2  
Ventilatore Condensatore 2

HL9  
CONDENSER FAULT  
ALLARME CONDENSATORE

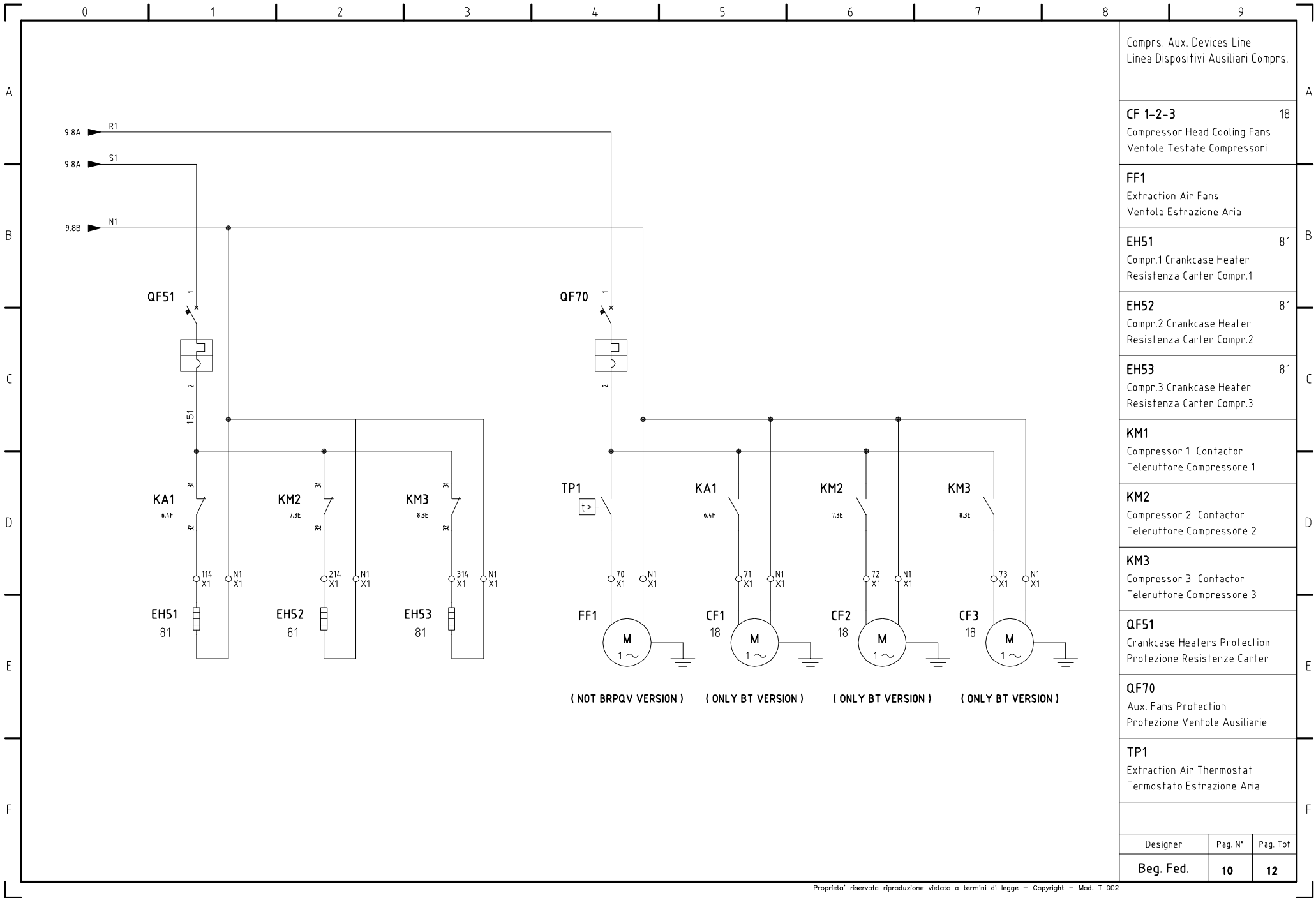
FRM8 128  
Speed Control 1 Ph  
Regolatore di Giri 1 Ph

KM11  
Fan 1 Contactor  
Teleruttore Ventilatore 1

KM12  
Fan 2 Contactor  
Teleruttore Ventilatore 2

QF10  
Condenser Protection  
Protezione Condensatore

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Comprs. Aux. Devices Line  
Linea Dispositivi Ausiliari Comprs.

**CF 1-2-3** 18  
Compressor Head Cooling Fans  
Ventole Testate Compressori

**FF1**  
Extraction Air Fans  
Ventola Estrazione Aria

**EH51** 81  
Compr.1 Crankcase Heater  
Resistenza Carter Compr.1

**EH52** 81  
Compr.2 Crankcase Heater  
Resistenza Carter Compr.2

**EH53** 81  
Compr.3 Crankcase Heater  
Resistenza Carter Compr.3

**KM1**  
Compressor 1 Contactor  
Teleruttore Compressore 1

**KM2**  
Compressor 2 Contactor  
Teleruttore Compressore 2

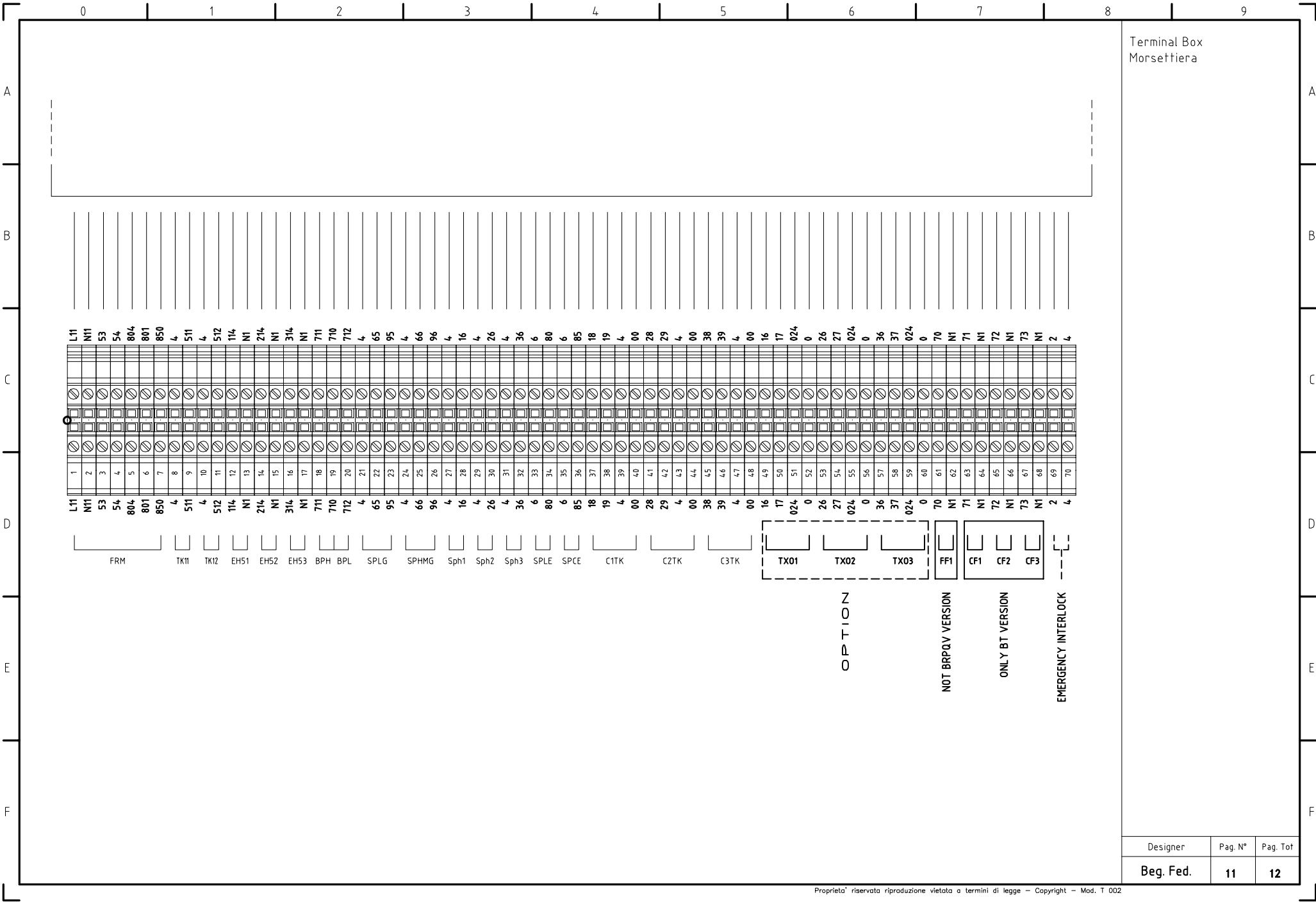
**KM3**  
Compressor 3 Contactor  
Teleruttore Compressore 3

**QF51**  
Crankcase Heaters Protection  
Protezione Resistenze Carter

**QF70**  
Aux. Fans Protection  
Protezione Ventole Ausiliarie

**TP1**  
Extraction Air Thermostat  
Termostato Estrazione Aria

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Components List  
Lista Componenti

Nome/Item	Tipo/Type	Costruttore/Marke	Fg/Sh	Funzione/Function [1]
A1		Dixell	4	Electronic Controller
BPH1		Wika	4	HP Transmitter
BPL1		Wika	4	LP Transmitter
EVC1		Ebm - Papst	9	Condenser Fan 1
EVC2		Ebm - Papst	9	Condenser Fan 2
KA30		Finder	3	Control Phases Relay
KAB1		Finder	6	Compressor 1 Fault Relay
KAB2		Finder	7	Compressor 2 Fault Relay
KAB3		Finder	8	Compressor 3 Fault Relay
KAEV		Finder	5	Condenser Fans Safety Relay
KAHPG		Finder	3	High Pressure Fault Relay
KALPG		Finder	3	Low Pressure Fault Relay
KM1		Siemens	6	Compressor 1 Contactor
KM2		Siemens	7	Compressor 2 Contactor
KM3		Siemens	8	Compressor 3 Contactor
KM11		Siemens	9	Condenser Fan 1 Contactor
KM12		Siemens	9	Condenser Fan 2 Contactor
KTE1		Omron	5	Compressor 1 Safety Timer
KTE2		Omron	5	Compressor 2 Safety Timer
KTE3		Omron	5	Compressor 3 Safety Timer
MC1		Copeland	6	Compressor 1
MC2		Copeland	7	Compressor 2
MC3		Copeland	8	Compressor 3
QF10		Siemens	9	Condenser Protection
QF30		Siemens	3	Control Phases Relay Protection
QF51		Siemens	10	Compressors Crankcase Heaters Protection
QF81		Siemens	2	400V Power Line Protection
QF82		Siemens	2	230V Aux. Line Protection
QF83		Siemens	2	24V Aux. Line Protection
QM1		Siemens	6	Compressor 1 Protection
QM2		Siemens	7	Compressor 2 Protection
QM3		Siemens	8	Compressor 3 Protection
QS1		Socomec	2	Main Switch
SA1		Abb	6	Compressor 1 Off/On Switch
SA2		Abb	7	Compressor 2 Off/On Switch
SA3		Abb	8	Compressor 3 Off/On Switch
SLX1	Option ---->	Alco	2	Compressor 1 Electronic Oil Level
SLX2	Option ---->	Alco	2	Compressor 2 Electronic Oil Level
SLX3	Option ---->	Alco	2	Compressor 3 Electronic Oil Level
SPE		Danfoss	5	Safety Condenser High Pressure Switch
Sph1		Danfoss	6	Compresseur 1 High Mini-Pressure Switch
Sph2		Danfoss	7	Compresseur 2 High Mini-Pressure Switch
Sph3		Danfoss	8	Compresseur 3 High Mini-Pressure Switch
SPHMG		Danfoss	3	General High Pressure Switch
SPL		Danfoss	5	Safety Compressors Low Pressure Switch
SPLG		Danfoss	3	General Low Pressure Switch
TV1		Tecnocablaggi	2	Transformer 400-230V
TV2		Tecnocablaggi	4	Transformer 230-12V
TV3		Tecnocablaggi	2	Transformer 400-24V
YVds	Option ---->	Digital Scroll	4	Digital Scroll Unloading Valve

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