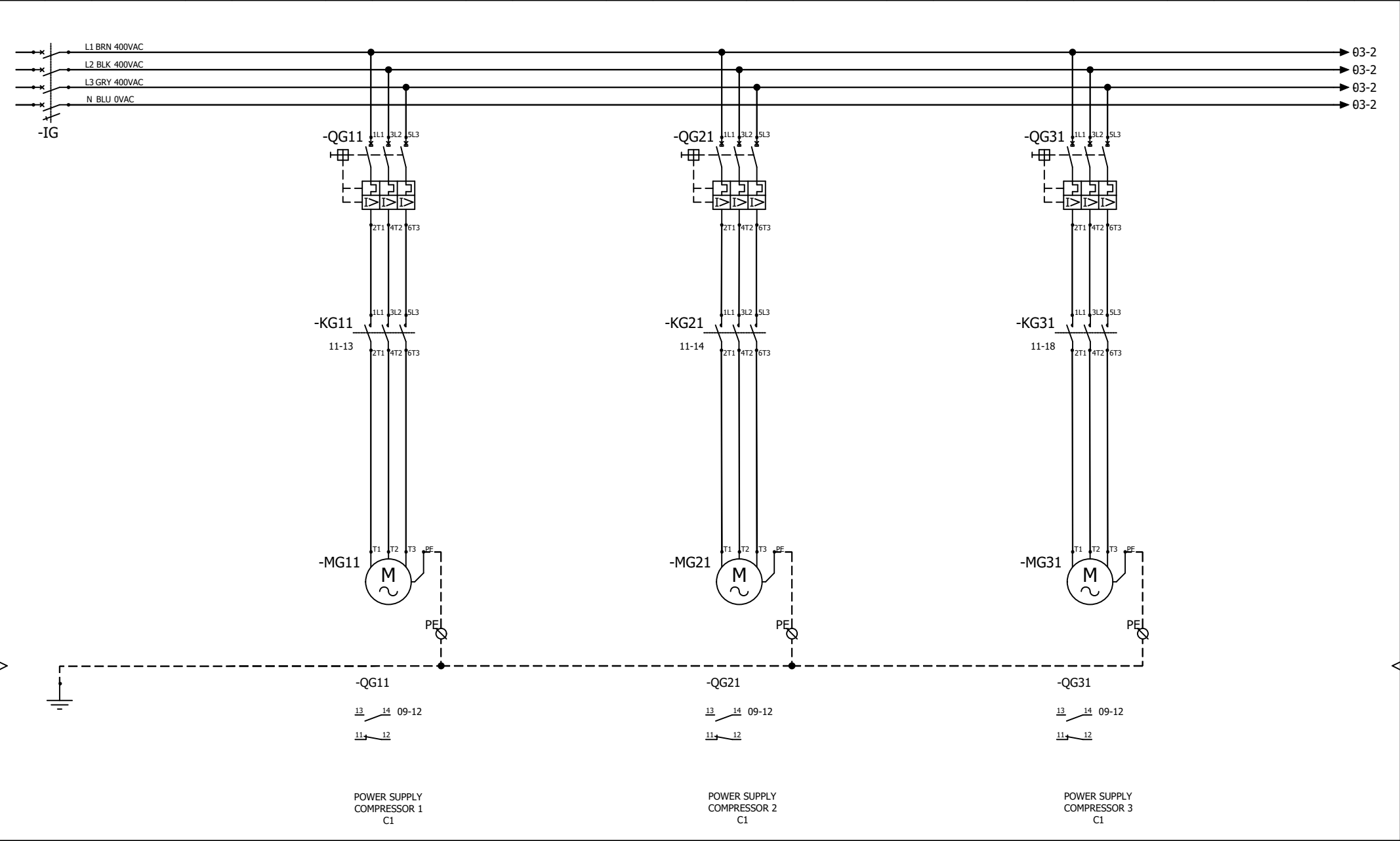


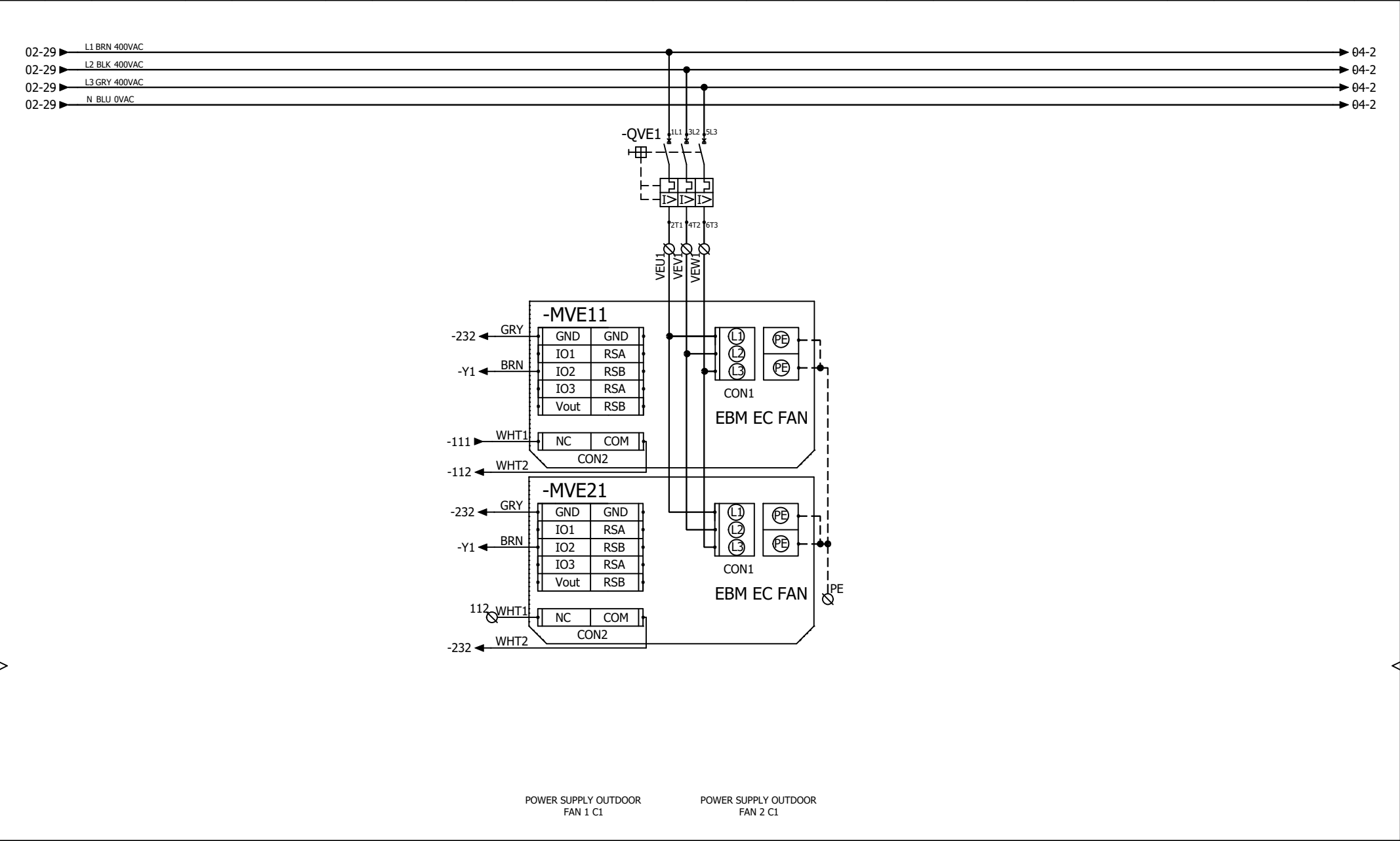
WIRING DIAGRAM

ÍNDICE / INDEX - MHA_1C_E_R06K

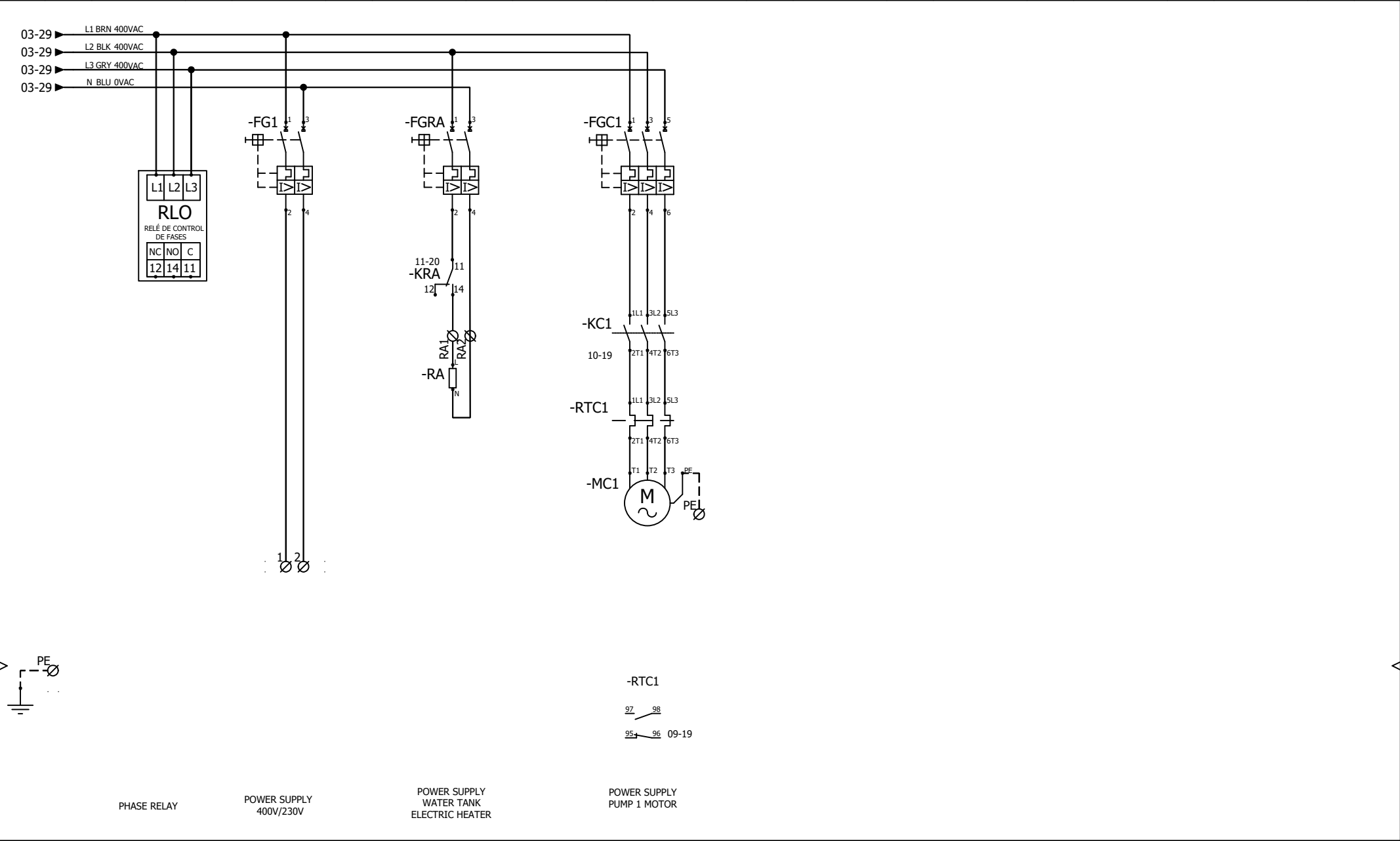
Drawing	Revision	Date	Created by	Description	Descripción
01	0	21/01/2025	farroyo	Drawing list	Lista de hojas
02	0	21/01/2025	farroyo	Power Circuits - Compressor Circuits 1	Circuitos Fuerza - Compresores Circuitos 1
03	0	21/01/2025	farroyo	Power Circuits - ECE Outdoor Fans 1	Circuitos Fuerza - Vent. Exteriores ECE 1
04	0	21/01/2025	farroyo	Control Circuits - Supply 230V	Circuitos Control - Alimentación 230V
05	0	21/01/2025	farroyo	Control Circuits - Supply 230V 1	Circuitos Control - Alimentación 230V 1
06	0	21/01/2025	farroyo	Control Circuits - Electrical Control I 1	Circuitos Control - Maniobra I 1
07	0	21/01/2025	farroyo	Control Circuits - Supply 24V	Circuitos Control - Alimentación 24V
08	0	21/01/2025	farroyo	Control Circuits - M0-T1-T2	Circuitos Control - M0-T1-T2
09	0	21/01/2025	farroyo	Control Circuits - M0-T3-T4-T5	Circuitos Control - M0-T3-T4-T5
10	0	21/01/2025	farroyo	Control Circuits - M0-T9-T10	Circuitos Control - M0-T9-T10
11	0	21/01/2025	farroyo	Control Circuits - M0-T11	Circuitos Control - M0-T11
12	0	21/01/2025	farroyo	Control Circuits - M0-T12-T13	Circuitos Control - M0-T12-T13
13	0	21/01/2025	farroyo	Control Circuits - M0-T7 - EEV	Circuitos Control - M0-T7 - VEE
14	0	21/01/2025	farroyo	Control Circuits - M0 - Network connections	Circuitos Control - M0 - Comunicaciones
15	0	21/01/2025	farroyo	Conections	Conexiones
16	0	21/01/2025	farroyo	External Conections	Conexiones External
17	0	21/01/2025	farroyo	Compressors & Fans Position KWG4	Posición Ventiladores y Compresores KWG4
18	0	21/01/2025	farroyo	Electrical Panel Layout KWG 4	Implantación KWG 4
19	0	21/01/2025	farroyo	X1-(1/2)	X1-(1/2)
20	0	21/01/2025	farroyo	X1-(2/2)	X1-(2/2)
21	0	21/01/2025	farroyo	Legend	Leyenda



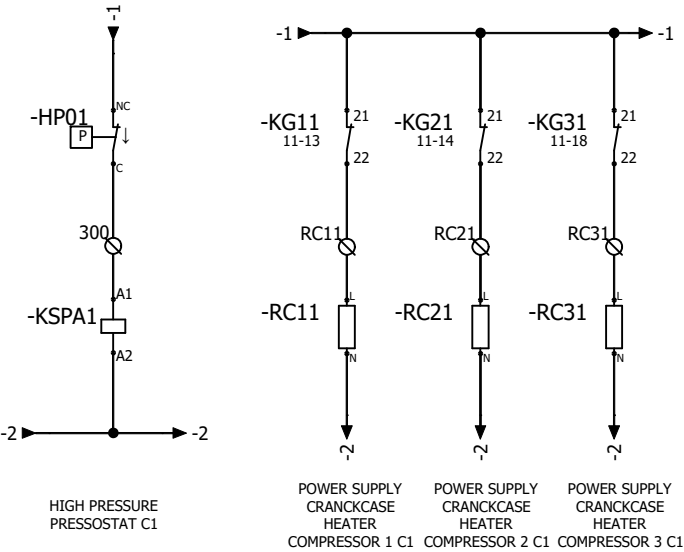
	MHA_1C_E_R06K Power Circuits - Compressor Circuits 1 Circuitos Fuerza - Compresores Circuitos 1				0	21/01/2025	farroyo			0 02/21
					Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits				Voltage: 400V / III / 50Hz					



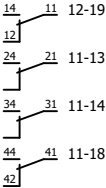
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			Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits		Voltage: 400V / III / 50Hz					



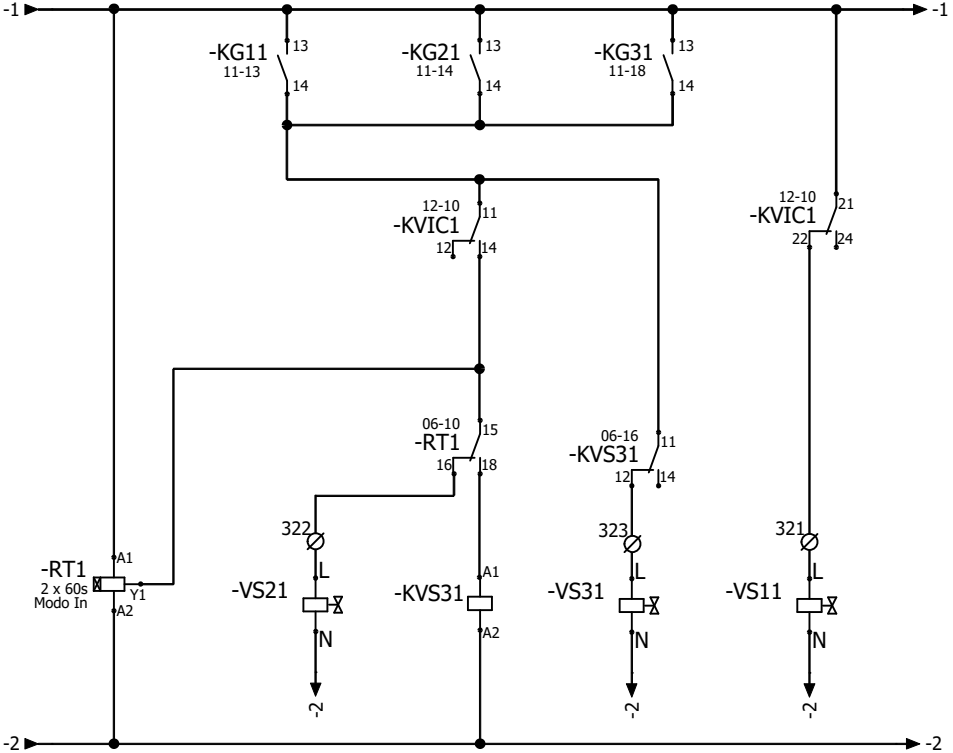
	MHA_1C_E_R06K Control Circuits - Supply 230V Circuitos Control - Alimentación 230V	0	21/01/2025	farroyo			0	
		Rev.	Date	Author	Checked	Approved		
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits					Voltage: 400V / III / 50Hz		04/21



-KSPA1



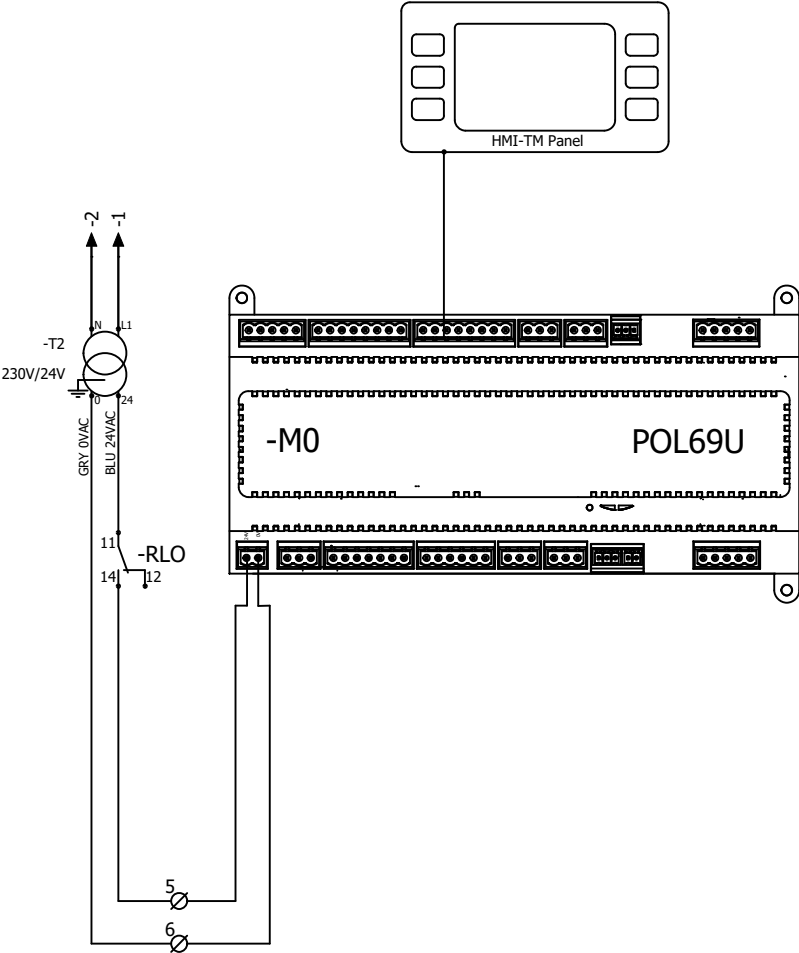
PRESSURE SWITCH PRESOSTATO		
REFRIGERANT REFRIGERANTE	HIGH PRESSURE(Reset)[bar] ALTA PRESIÓN(Rearme)[bar]	LOW PRESSURE(Reset)[bar] BAJA PRESIÓN(Rearme)[bar]
R410A-R452B-R454B	43,4(33,1)	2 - 1,7(4,5)
R134A-R513A-R450A	20(15)	0,5(1,5)
R290	30(24)	0,5(1,5)



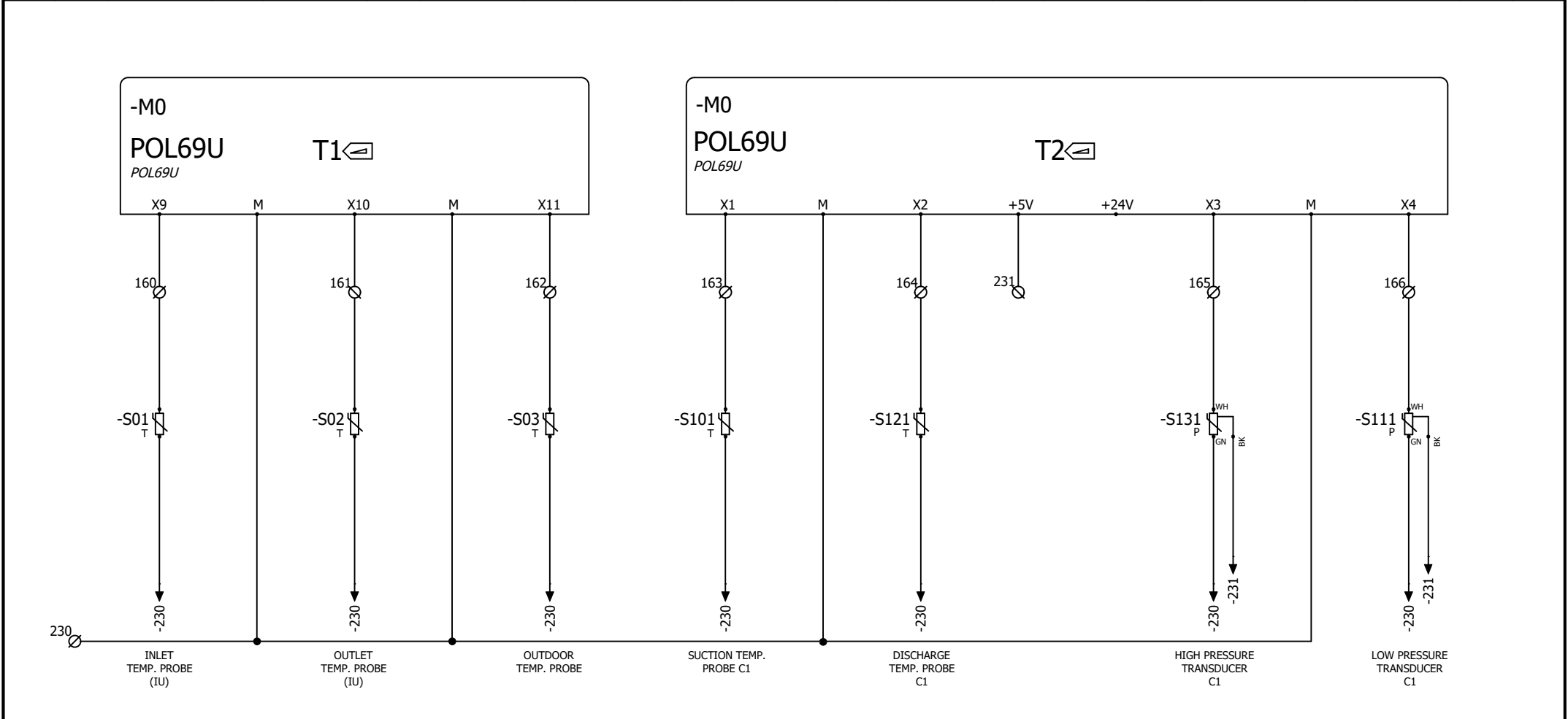
Mark Etiqueta	Description Descripción
VS11	LIQUID BYPASS SOLENOID C1 VÁLVULA BYPASS LÍQUIDO C1
VS21	DRAINAGE BYPASS EXPAND TANK SOLENOID C1 VÁLVULA BYPASS DRENAJE CALDERÍN C1
VS31	HOT GAS BYPASS SOLENOID C1 VÁLVULA BYPASS GAS CALIENTE C1



	MHA_1C_E_R06K Control Circuits - Electrical Control I 1 Circuitos Control - Maniobra I 1	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	06/21
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits					Voltage: 400V / III / 50Hz	



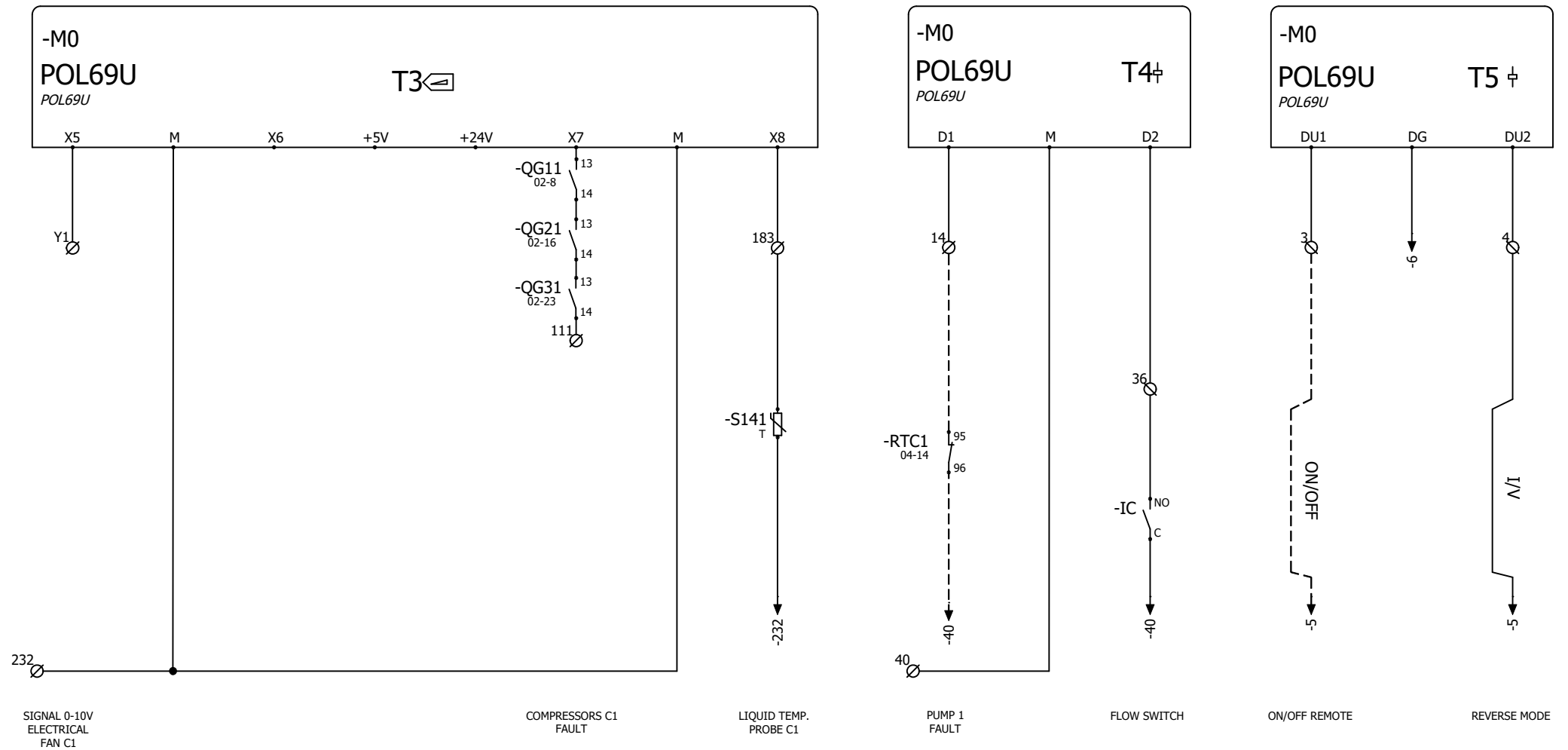
	MHA_1C_E_R06K Control Circuits - Supply 24V Circuitos Control - Alimentación 24V	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	07/21
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits				Voltage: 400V / III / 50Hz		



Mark Etiqueta	Description Descripción
S01	INLET TEMP. PROBE (IU) SONDA TEMP. RETORNO (UI)
S02	OUTLET TEMP. PROBE (IU) SONDA TEMP. IMPULSIÓN (UI)
S03	OUTDOOR TEMP. PROBE SONDA TEMP. EXTERIOR
S101	SUCTION TEMP. PROBE C1 SONDA TEMP. ASPIRACIÓN C1

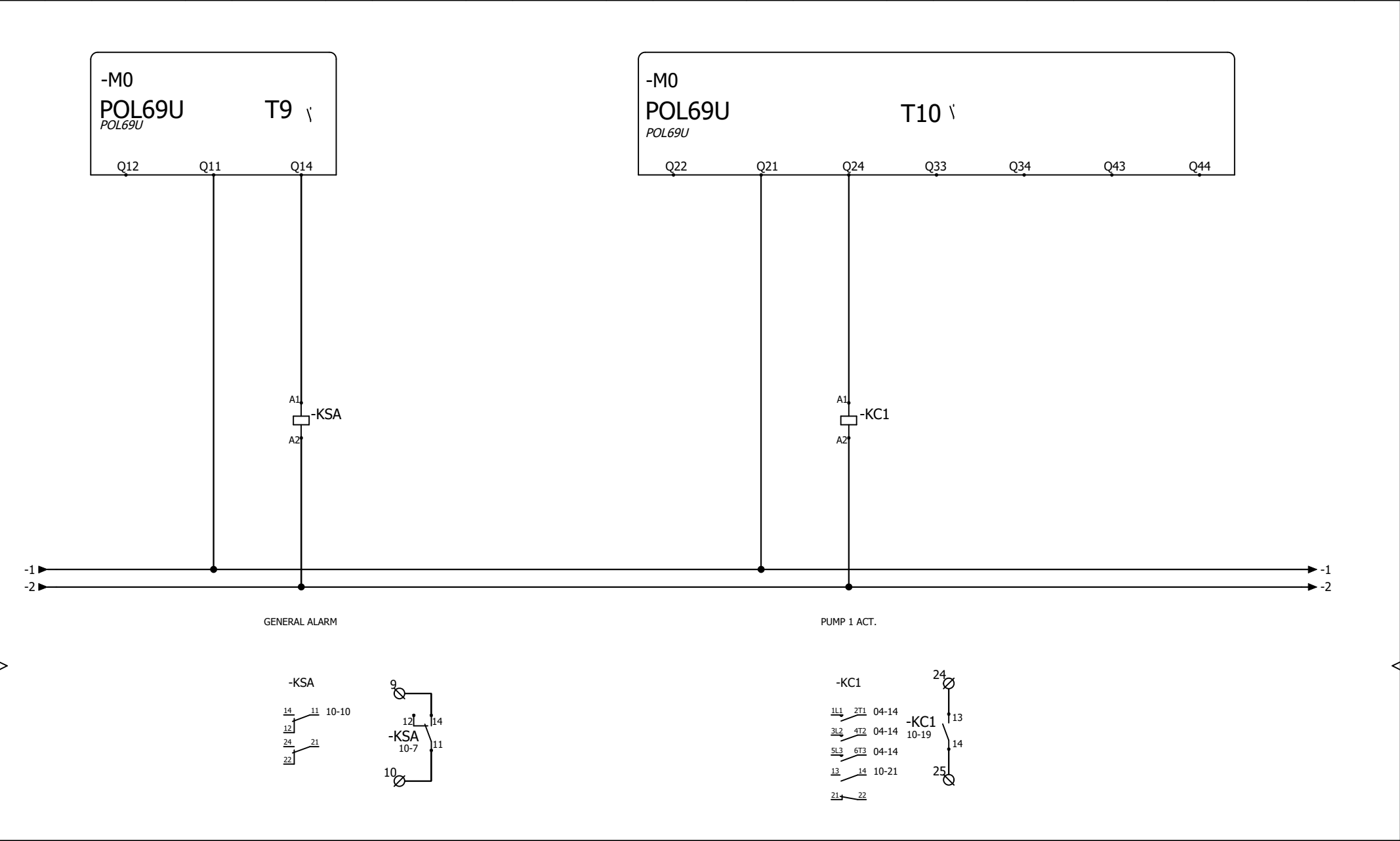
Mark Etiqueta	Description Descripción
S111	LOW PRESSURE TRANSDUCER C1 TRANSDUCTOR PRESIÓN BAJA C1
S121	DISCHARGE TEMP. PROBE C1 SONDA TEMP. DESCARGA C1
S131	HIGH PRESSURE TRANSDUCER C1 TRANSDUCTOR PRESIÓN ALTA C1

TRANSDUCER TRANSDUCTOR		
REFRIGERANT REFRIGERANTE	HIGH PRESSURE(Limit)[bar] ALTA PRESIÓN(Límites)[bar]	LOW PRESSURE(Limit)[bar] BAJA PRESIÓN(Límites)[bar]
R410A-R452B-R454B	[0;45]	[0;17,3]
R134A-R513A-R450A	[0;45]	[0;17,3]
R290	[0;45]	[0;10]

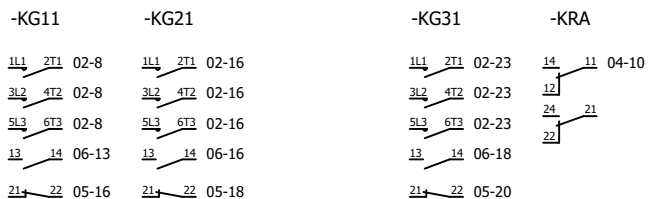
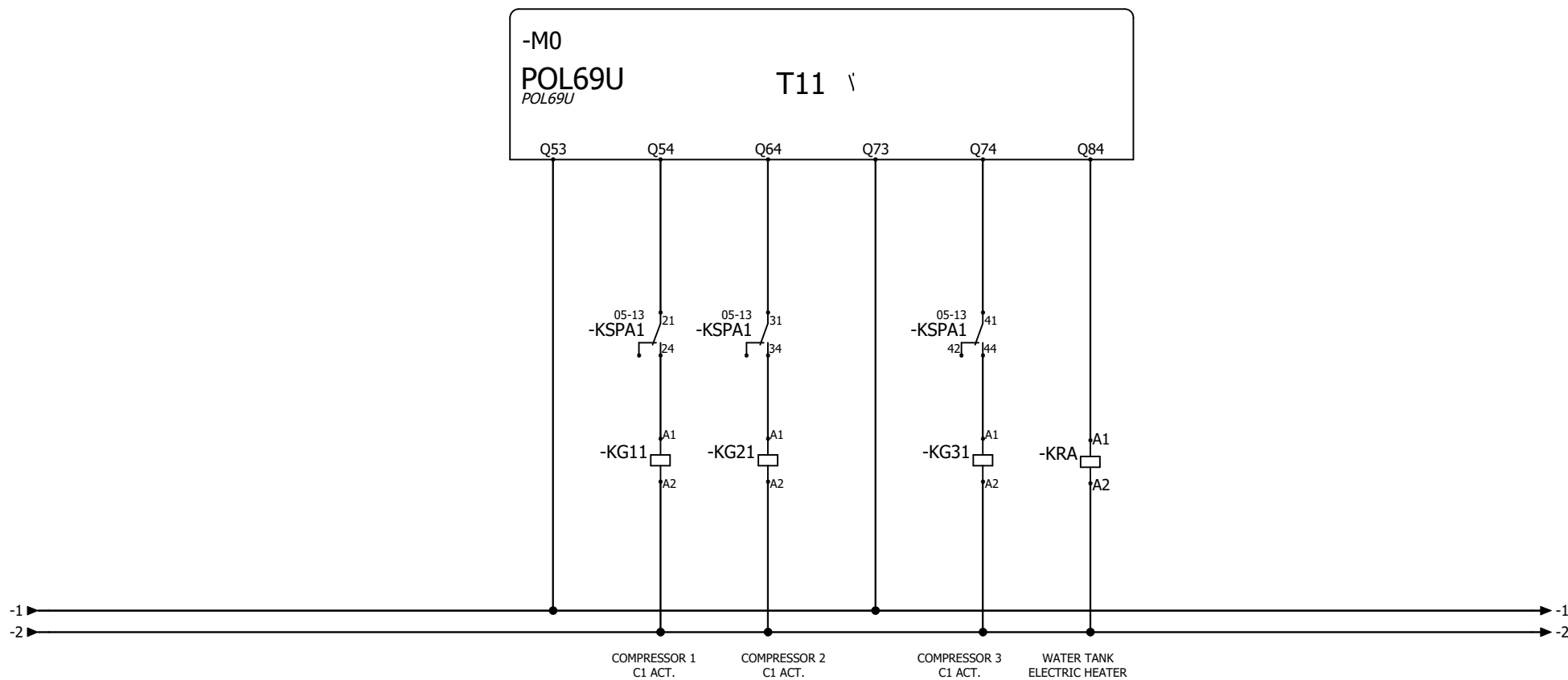


Mark Etiqueta	Description Descripción
S141	LIQUID TEMP. PROBE C1 SONDA TEMP. LÍQUIDO C1

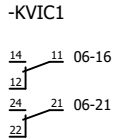
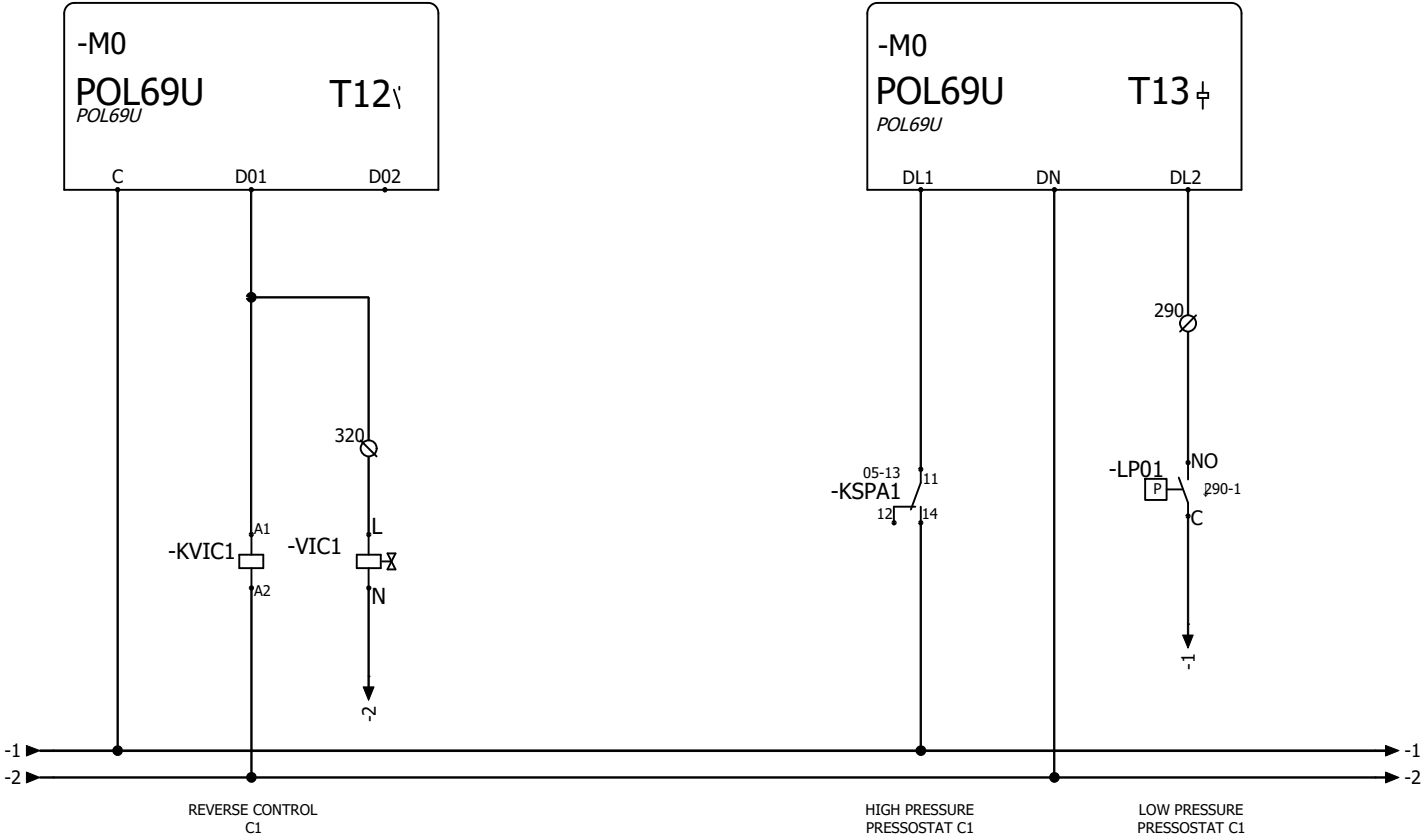
	MHA_1C_E_R06K Control Circuits - M0-T3-T4-T5 Circuitos Control - M0-T3-T4-T5	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	09/21
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits			Voltage: 400V / III / 50Hz			



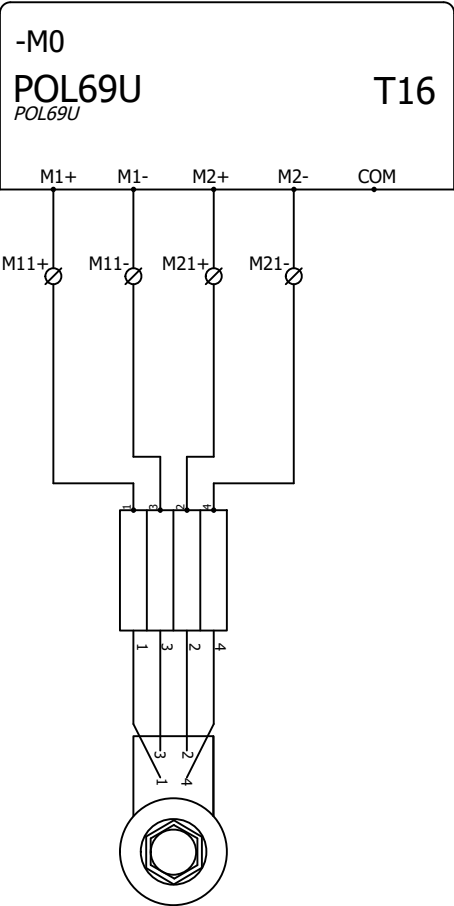
	MHA_1C_E_R06K Control Circuits - M0-T9-T10 Circuitos Control - M0-T9-T10	0	21/01/2025	farroyo			0	
		Rev.	Date	Author	Checked	Approved		
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits					Voltage: 400V / III / 50Hz		10/21



	MHA_1C_E_R06K Control Circuits - M0-T11 Circuitos Control - M0-T11	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits				Voltage: 400V / III / 50Hz		11/21



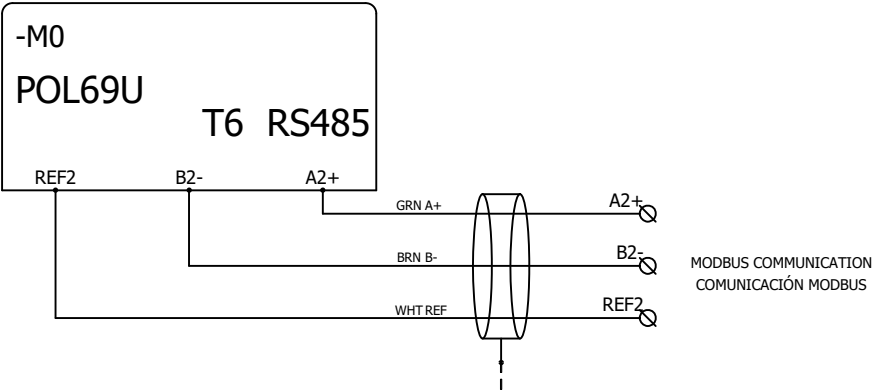
PRESSURE SWITCH PRESOSTATO		
REFRIGERANT REFRIGERANTE	HIGH PRESSURE(Reset)[bar] ALTA PRESIÓN(Rearme)[bar]	LOW PRESSURE(Reset)[bar] BAJA PRESIÓN(Rearme)[bar]
R410A-R452B-R454B	43,4(33,1)	2 - 1,7(4,5)
R134A-R513A-R450A	20(15)	0,5(1,5)
R290	30(24)	0,5(1,5)



DANFOSS COLIBRI
1 BLANCO/WHITE
3 NEGRO/BLACK
2 ROJO/RED
4 VERDE/GREEN

	MHA_1C_E_R06K Control Circuits - M0-T7 - EEV Circuitos Control - M0-T7 - VEE		0	21/01/2025	farroyo			0
			Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits						Voltage: 400V / III / 50Hz	13/21

SUPERVISOR CONNECTION
CONEXIÓN SUPERVISOR



	MHA_1C_E_R06K Control Circuits - M0 - Network connections Circuitos Control - M0 - Comunicaciones	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	14/21
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits					Voltage: 400V / III / 50Hz	

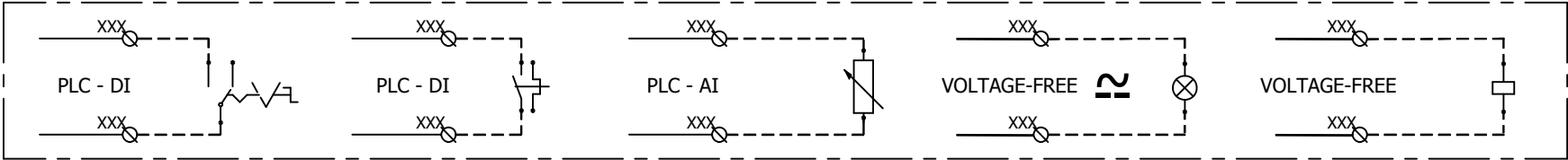
Mark Etiqueta	Description Descripción	Borne Borna
HP01	HIGH PRESSURE PRESOSTAT C1 PRESOSTATO ALTA PRESION C1	300-1
IC	FLOW SWITCH INTERRUPTOR FLUJO	36-40
KLVE11	OUTDOOR FAN 1 C1 FAULT FALLO VENTILADOR EXTERIOR 1 C1	111-112
KLVE21	OUTDOOR FAN 2 C1 FAULT FALLO VENTILADOR EXTERIOR 2 C1	112-232
LP01	LOW PRESSURE PRESOSTAT C1 PRESOSTATO BAJA C1	290-1
PE	GROUND PUESTA A TIERRA	PE
RC11	CRANKCASE HEATER COMPRESSOR 1 C1 RESISTENCIA CARTER COMPRESOR 1 C1	RC11-2
RC21	CRANKCASE HEATER COMPRESSOR 2 C1 RESISTENCIA CARTER COMPRESOR 2 C1	RC21-2
RC31	CRANKCASE HEATER COMPRESSOR 3 C1 RESISTENCIA CARTER COMPRESOR 3 C1	RC31-2
RTC1	THERMAL PROTECTION PUMP 1 RELÉ TÉRMICO BOMBA 1	14-40
S01	INLET TEMP. PROBE (IU) SONDA TEMP. RETORNO (UI)	160-230
S02	OUTLET TEMP. PROBE (IU) SONDA TEMP. IMPULSIÓN (UI)	161-230
S03	OUTDOOR TEMP. PROBE SONDA TEMP. EXTERIOR	162-230
S101	SUCTION TEMP. PROBE C1 SONDA TEMP. ASPIRACIÓN C1	163-230
S111	LOW PRESSURE TRANSDUCER C1 TRANSDUCTOR PRESIÓN BAJA C1	166-230
S121	DISCHARGE TEMP. PROBE C1 SONDA TEMP. DESCARGA C1	164-230
S131	HIGH PRESSURE TRANSDUCER C1 TRANSDUCTOR PRESIÓN ALTA C1	165-230
S141	LIQUID TEMP. PROBE C1 SONDA TEMP. LÍQUIDO C1	183-232
T2	230VAC/24VAC TRANSFORMER TRANSFORMADOR 230VAC/24VAC	5-6
VIC1	REVERSE CYCLE SOLENOID C1 SOLENOIDE INVERSION CICLO C1	320-2
VS11	LIQUID BYPASS SOLENOID C1 VÁLVULA BYPASS LÍQUIDO C1	321-2
VS21	DRAINAGE BYPASS EXPAND TANK SOLENOID C1 VÁLVULA BYPASS DRENAJE CALDERÍN C1	322-2

Mark Etiqueta	Description Descripción	Borne Borna
VS31	HOT GAS BYPASS SOLENOID C1 VÁLVULA BYPASS GAS CALIENTE C1	323-2

CODIGO COLORES COLOR CODE	ENGLISH	ESPAÑOL
BRN	BROWN	MARRON
BLK	BLACK	NEGRO
YEL	YELLOW	AMARILLO
PNK	PINK	ROSA
WHT	WHITE	BLANCO
RED	RED	ROJO
BLU	BLUE	AZUL
ORG	ORANGE	NARANJA
GRY	GREY	GRIS
VIL	VIOLET	VIOLETA
GRN	GREEN	VERDE
GRN / YEL	GREEN / YELLOW	VERDE / AMARILLO

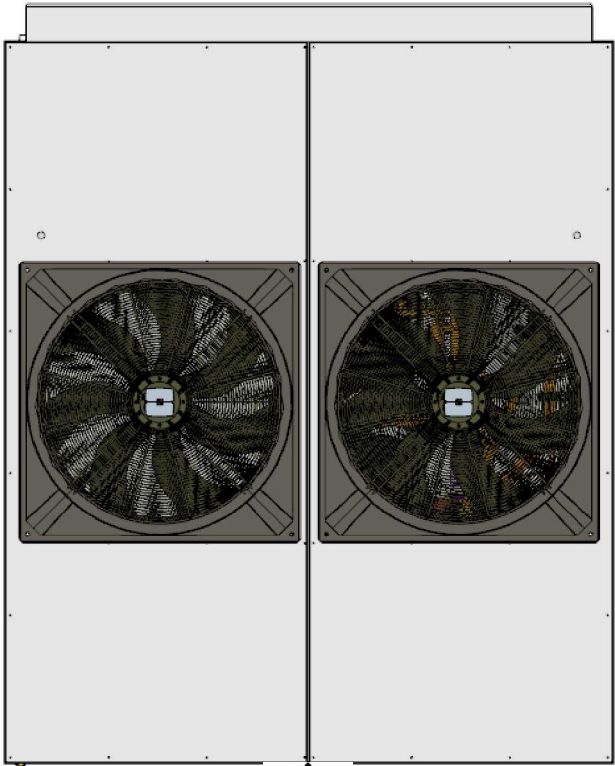
Mark Etiqueta	Description Descripción	Borne Borna	Color Wire Color Cable	Signal Type Tipo Señal	Voltage Voltaje
I/V	REVERSE CYCLE REMOTE SWITCH INTERRUPTOR REMOTO INVERSION CICLO	4-5	ORG	PLC-DI	24VAC
KC1	PUMP 1 ACTIVATION/STATUS ACTIVACION/ESTADO BOMBA 1	24-25	ORG	VOLTAGE-FREE	230VAC-3A
KSA	ALARM RELAY RELE ALARMA	9-10	ORG	VOLTAGE-FREE	230VAC-3A
ON/OFF	ON/OFF REMOTE SWITCH INTERRUPTOR REMOTO ON/OFF	3-5	ORG	PLC-DI	24VAC

CONNECTIONS EXAMPLES
EJEMPLOS CONEXIONES



	MHA_1C_E_R06K External Conections Conexiones External	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits		Voltage: 400V / III / 50Hz				16/21

MVE21



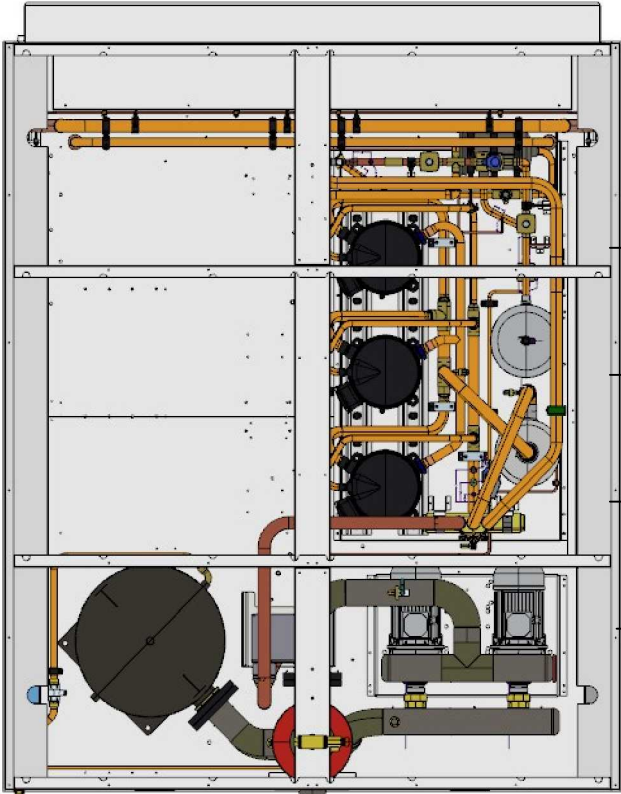
MVE11



CUADRO ELÉCTRICO
ELECTRICAL CABINET

Leyenda Especial/Special Codification

MVE(A)	Ventilador (A) Fan (A)
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MG11

MG21

MG31

MC1

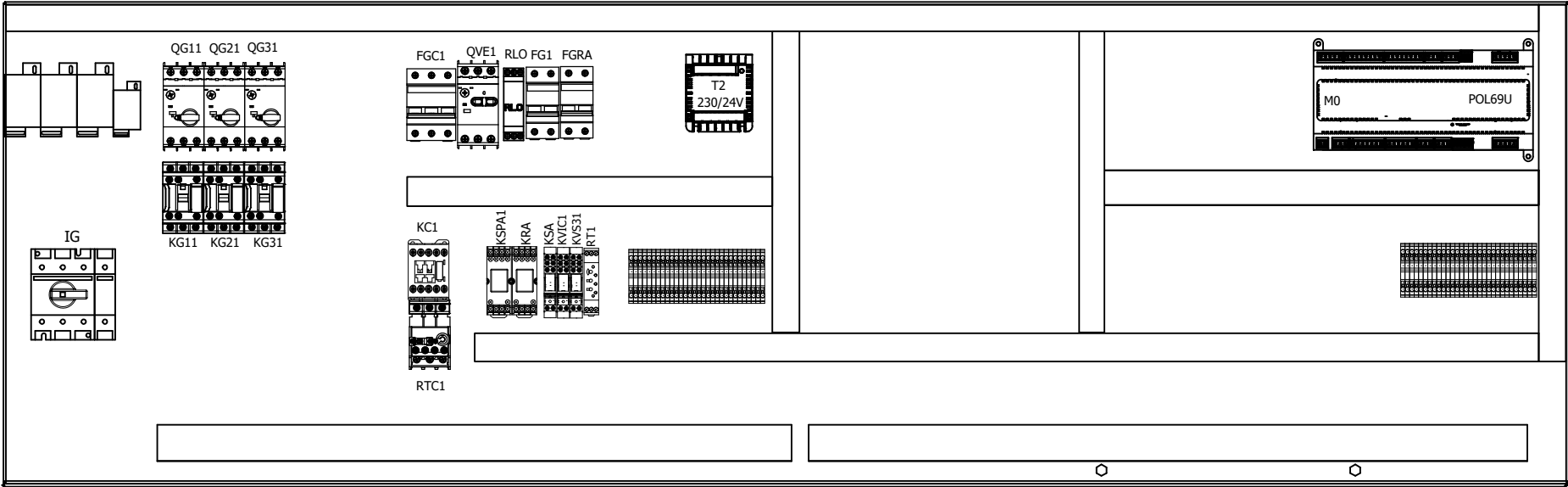


CUADRO ELÉCTRICO
ELECTRICAL CABINET

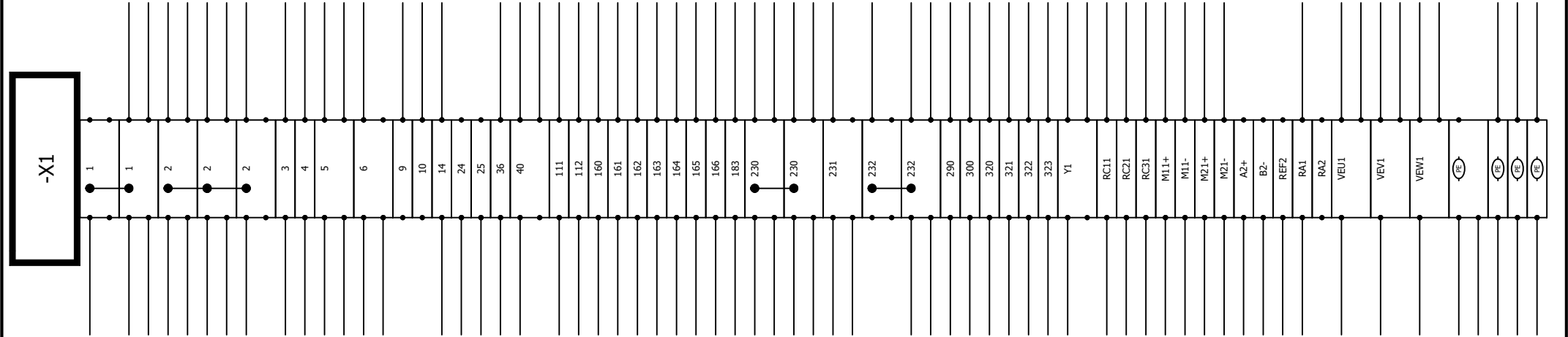
Leyenda Especial/Special Codification

MG(A)(B)	Compresor (A) Circuito (B) Compressor (A) Circuit (B)
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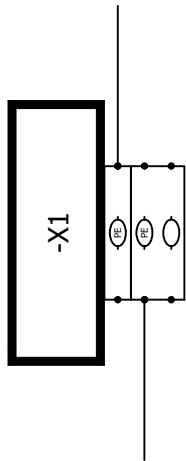
EE_MHA_1C_E_R06K_202501070030-31	MHA_1C_E_R06K Compressors & Fans Position KWG4 Posición Ventiladores y Compresores KWG4 Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	
						Voltage: 400V / III / 50Hz	17/21



	MHA_1C_E_R06K Electrical Panel Layout KWG 4 Implantación KWG 4					0	21/01/2025	farroyo			0
						Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits					Voltage: 400V / III / 50Hz					18/21



	MHA_1C_E_R06K X1-(1/2) X1-(1/2)	0	21/01/2025	farroyo			0
		Rev.	Date	Author	Checked	Approved	
EE_MHA_1C_E_R06K_202501070030-31	Series: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits				Voltage: 400V / III / 50Hz		19/21



	MHA_1C_E_R06K X1-(2/2) X1-(2/2)	0	21/01/2025	farroyo			0	
		Rev.	Date	Author	Checked	Approved		
EE_MHA_1C_E_R06K_202501070030-31	Serie: MHA Model: 1 Version: 1S 3 Compressors/ 1 Circuits					Voltage: 400V / III / 50Hz		20/21

Mark Etiqueta	Description Descripción
FG1	230VAC CIRCUIT BREAKER 1 MAGNETOTERMICO 1 230VAC
FGC1	PUMP 1 CIRCUIT BREAKER MAGNETOTERMICO BOMBA 1
FGRA	WATER TANK HEATER 1 CIRCUIT BREAKER MAGNETOTERMICO RESISTENCIA DEPOSITO AGUA 1
HP01	HIGH PRESSURE PRESOSTAT C1 PRESOSTATO ALTA PRESION C1
I/V	REVERSE CYCLE REMOTE SWITCH INTERRUPTOR REMOTO INVERSION CICLO
IC	FLOW SWITCH INTERRUPTOR FLUJO
IG	MAIN SWITCH INTERRUPTOR GENERAL
KC1	PUMP 1 ACTIVATION/STATUS ACTIVACION/ESTADO BOMBA 1
KG11	COMPRESOR 1 C1 ACTIVATION ACTIVACIÓN COMPRESOR 1 C1
KG21	COMPRESOR 2 C1 ACTIVATION ACTIVACIÓN COMPRESOR 2 C1
KG31	COMPRESOR 3 C1 ACTIVATION ACTIVACIÓN COMPRESOR 3 C1
KLVE11	OUTDOOR FAN 1 C1 FAULT FALLO VENTILADOR EXTERIOR 1 C1
KLVE21	OUTDOOR FAN 2 C1 FAULT FALLO VENTILADOR EXTERIOR 2 C1
KRA	WATER TANK HEATER 1 ACTIVATION ACTIVACION RESISTENCIA DEPOSITO AGUA 1
KSA	ALARM RELAY RELE ALARMA
KSPA1	HIGH PRESSURE RELAY C1 RELE PRESION ALTA C1
KVIC1	REVERSE CYCLE RELAY C1 RELÉ INVERSION CICLO C1
KVS31	REVERSE CYCLE SOLENOID 3 C1 ACTIVATION ACTIVACION SOLENOIDE 3 INVERSION CICLO C1
LP01	LOW PRESSURE PRESOSTAT C1 PRESOSTATO BAJA C1
MC1	PUMP 1 BOMBA 1
MG11	COMPRESSOR 1 C1 COMPRESOR 1 C1
MG21	COMPRESSOR 2 C1 COMPRESOR 2 C1
MG31	COMPRESSOR 3 C1 COMPRESOR 3 C1
MVE11	OUTDOOR FAN 1 C1 VENTILADOR 1 C1
MVE21	OUTDOOR FAN 2 C1 VENTILADOR 2 C1
ON/OFF	ON/OFF REMOTE SWITCH INTERRUPTOR REMOTO ON/OFF

Mark Etiqueta	Description Descripción
PE	GROUND PUESTA A TIERRA
QG11	THERMAL PROTECTION SWITCH COMPRESSOR 1 C1 DISYUNTOR COMPRESOR 1 C1
QG21	THERMAL PROTECTION SWITCH COMPRESSOR 2 C1 DISYUNTOR COMPRESOR 2 C1
QG31	THERMAL PROTECTION SWITCH COMPRESSOR 3 C1 DISYUNTOR COMPRESOR 3 C1
QVE1	THERMAL PROTECTION SWITCH OUTDOOR FANS 1 DISYUNTOR VENTILADORES EXTERIORES 1
RA	WATER TANK HEATER RESISTENCIA DEPOSITO AGUA
RC11	CRANKCASE HEATER COMPRESSOR 1 C1 RESISTENCIA CARTER COMPRESOR 1 C1
RC21	CRANKCASE HEATER COMPRESSOR 2 C1 RESISTENCIA CARTER COMPRESOR 2 C1
RC31	CRANKCASE HEATER COMPRESSOR 3 C1 RESISTENCIA CARTER COMPRESOR 3 C1
RLO	PHASE RELAY RELÉ DE FASES
RT1	REVERSE CYCLE TIMER RELAY C1 RELÉ TEMPORIZADO INVERSION CICLO C1
RTC1	THERMAL PROTECTION PUMP 1 RELÉ TÉRMICO BOMBA 1
T2	230VAC/24VAC TRANSFORMER TRANSFORMADOR 230VAC/24VAC
VEE-C1	ELECTRONIC VALVE EXPANSION C1 VALVULA EXPANSION ELECTRONICA C1
VIC1	REVERSE CYCLE SOLENOID C1 SOLENOIDE INVERSION CICLO C1
VS11	LIQUID BYPASS SOLENOID C1 VÁLVULA BYPASS LÍQUIDO C1
VS21	DRAINAGE BYPASS EXPAND TANK SOLENOID C1 VÁLVULA BYPASS DRENAJE CALDERÍN C1
VS31	HOT GAS BYPASS SOLENOID C1 VÁLVULA BYPASS GAS CALIENTE C1