

SHEET	DESCRIPTION
1	FRONT PAGE
2	OPTIONAL EQUIPMENTS
3	POWER COMPRESSOR 1-2
4	OIL SEPARATOR AN COMPRESSORS CRANCASE HEATERS
5	KIT CAPACITOR
6	UNIT CONTROL CIRCUIT POWER SUPPLY
7	ANALOG INPUTS-OUTPUT BOARD
8	DIGITAL INPUTS BOARD
9	DIGITAL OUTPUTS BOARD
10	EXPANSION CONTROL COMPRESSOR 1
11	EXPANSION CONTROL COMPRESSOR 1
12	EEXV COMPRESSOR 1
13	HEAT PUMP BOARD (OPTIONAL)
14	COMMUNICATION MODULES (OPTIONAL)
15	MORSETTIERA M400 - M115
16	MORSETTIERA M24 - M5
17	MORSETTIERA MC115 - MC24
18	LEGENDA
19	LEGENDA
20	NOTE
21	FIELD WIRING CONNECTION

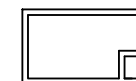
WIRING DIAGRAM

EWWD 370H ÷ 610H-XS

- VERSIONE STANDARD -

- STANDARD VERSION-

- MicroTech® III -



OPTIONAL EQUIPMENTS

----- FIELD WIRING CONNECTIONS

(*) REMOVE THIS WIRE OR MJ IF THE OPTION IS REQUESTED

⊙ MANUAL RESET



EQUIPMENT INSTALLED

REV.	DATE	HISTORY REVISIONS	DWG.	CHECK.	PASSED.

DIAGRAM N.:

180461

File: (180461/180461)

Code ID:

DATE: 04/01/13

REV: 0

DWG.

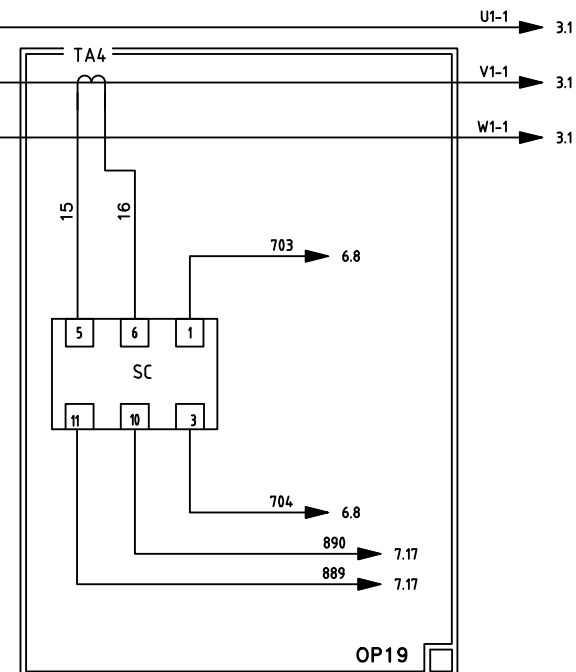
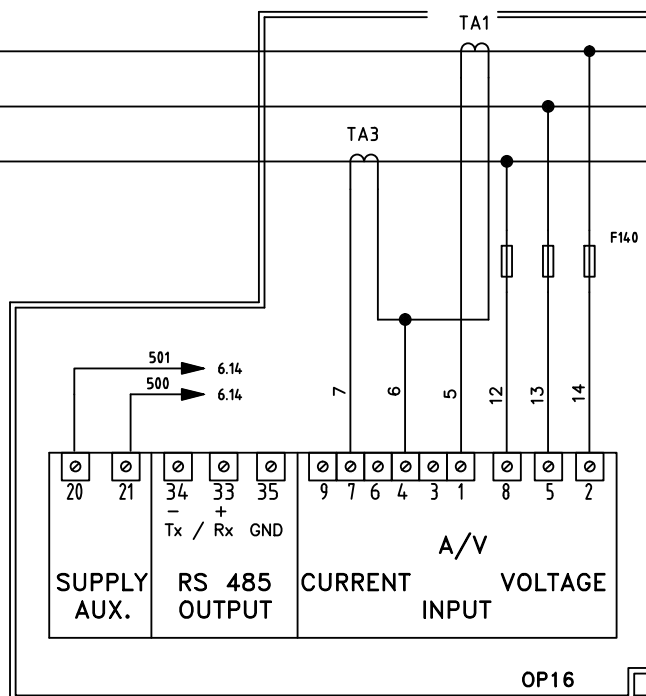
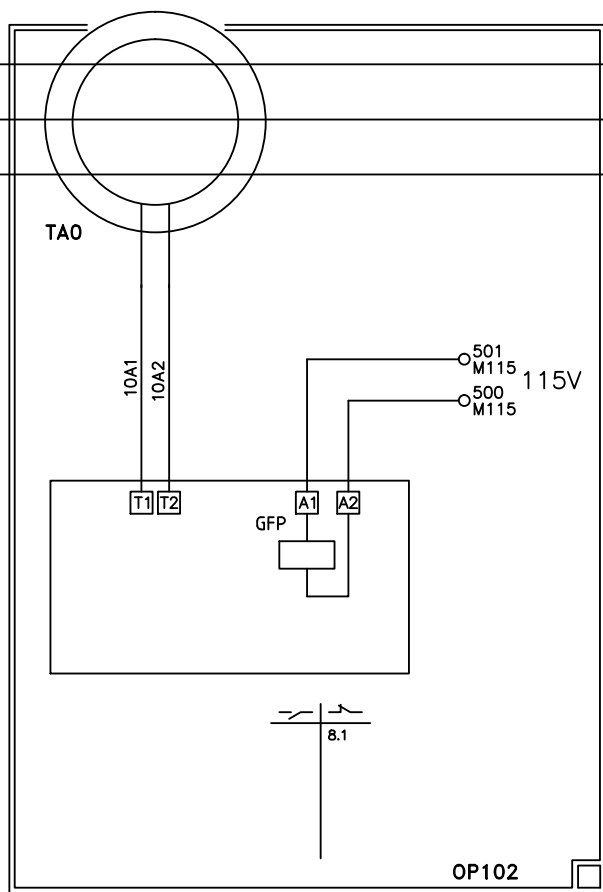
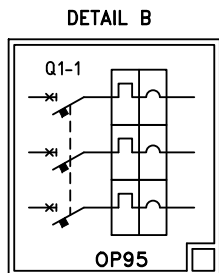
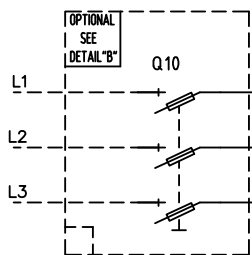
DAIKIN EUROPE NV

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CHECK.

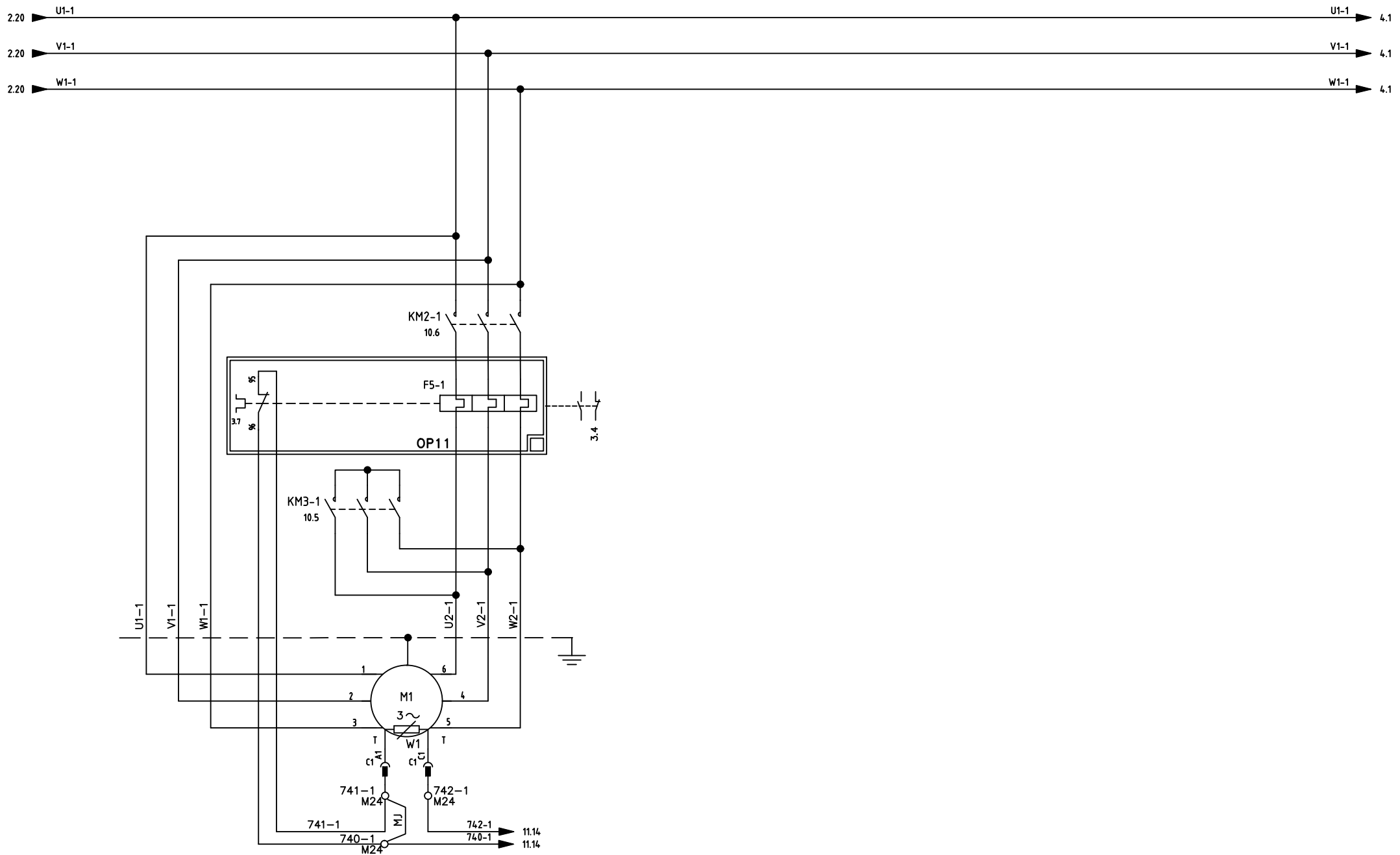
PASSED.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20



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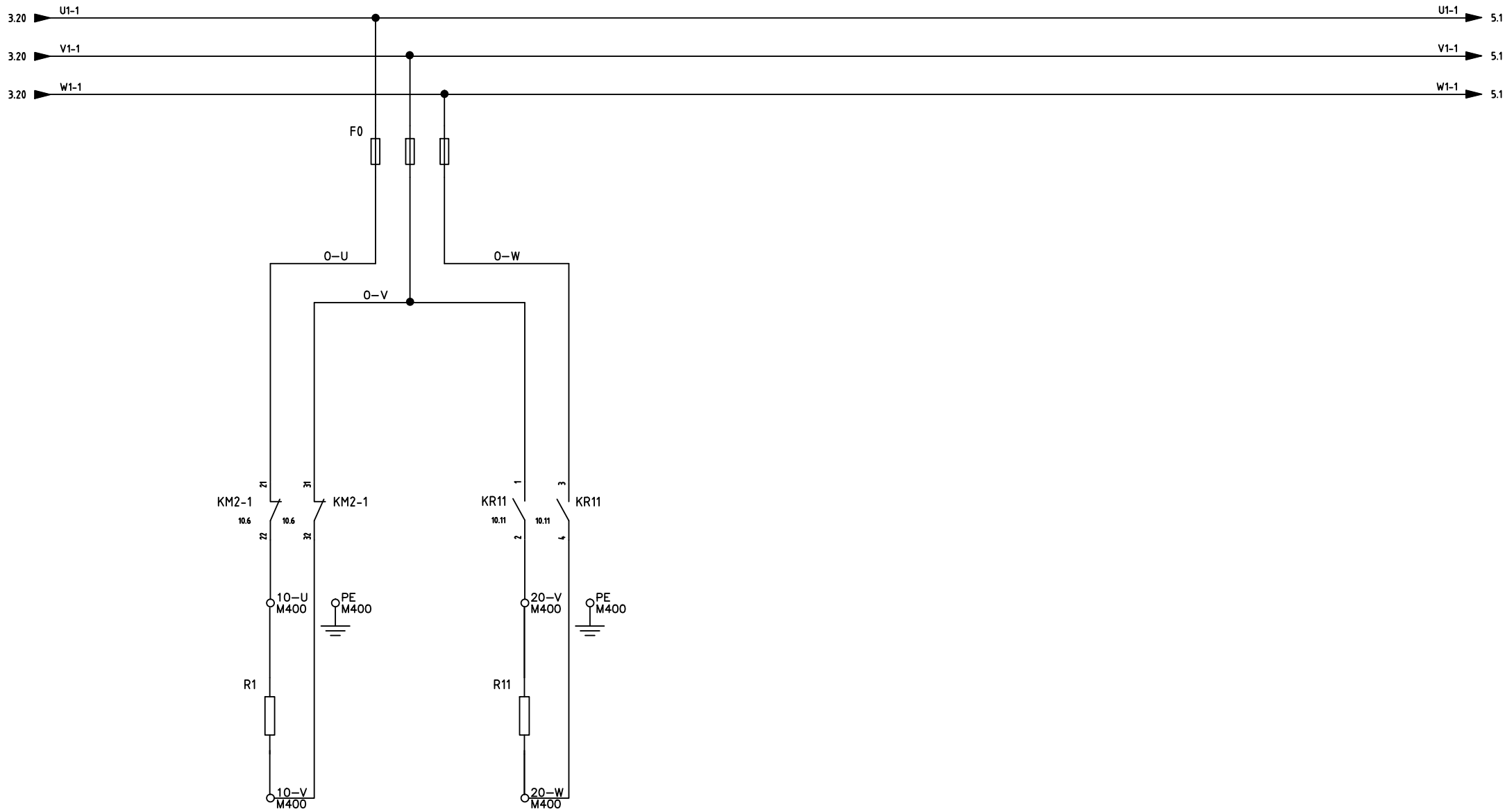
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Remove "MJ" with "OP11"

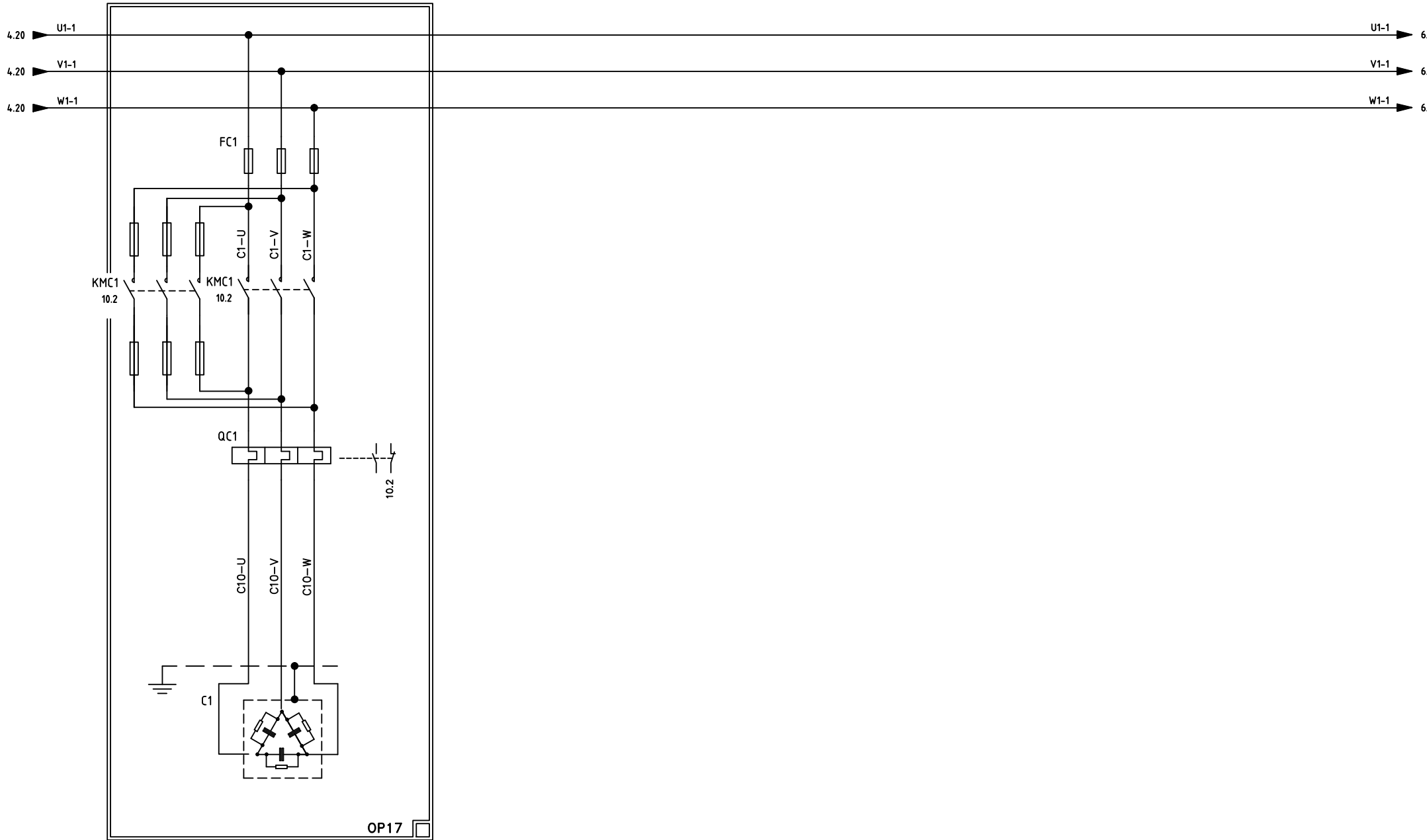
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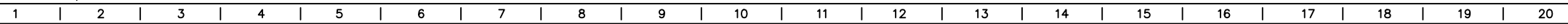
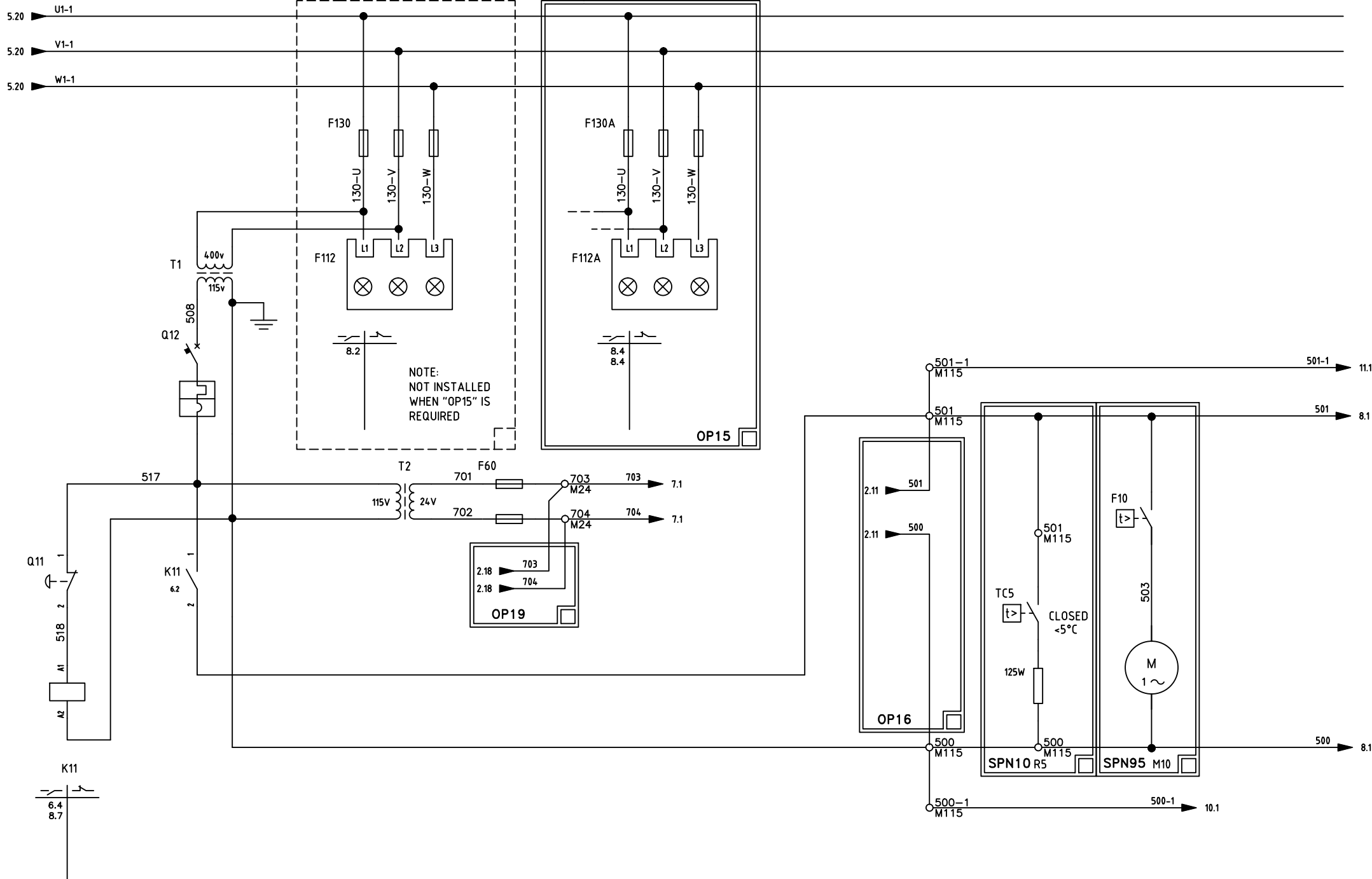
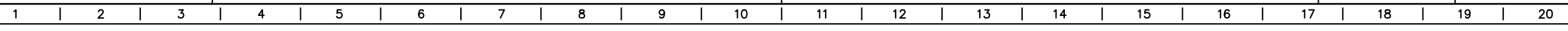


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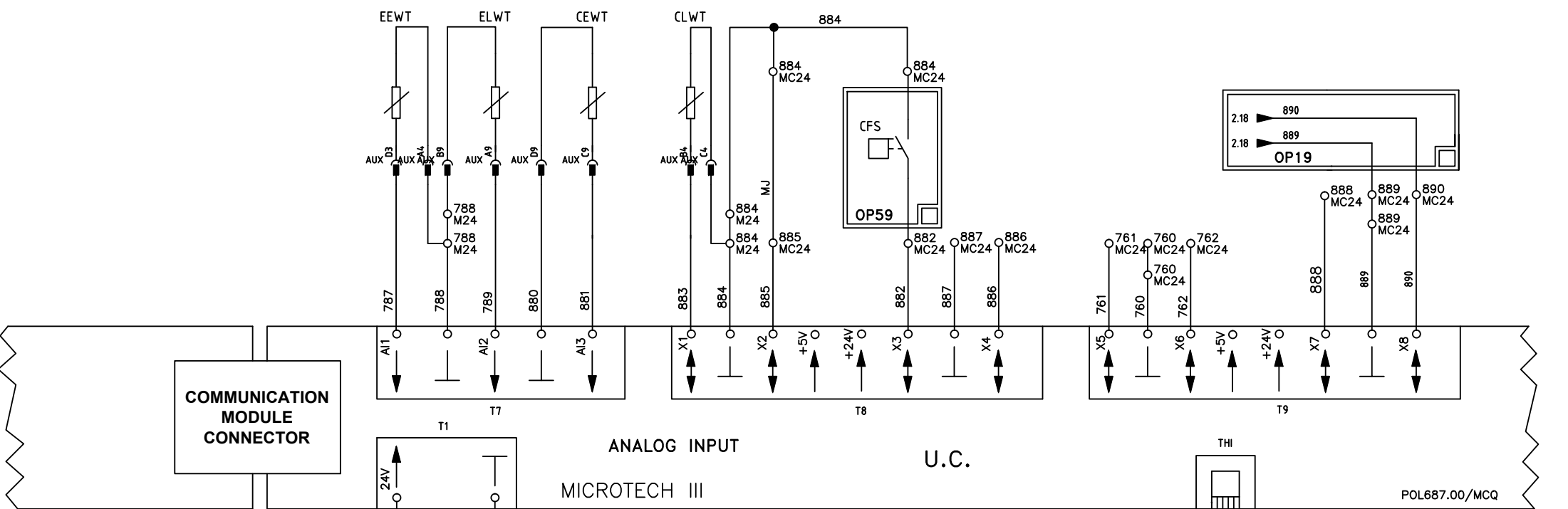
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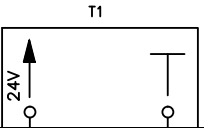
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COMMUNICATION
MODULE
CONNECTOR

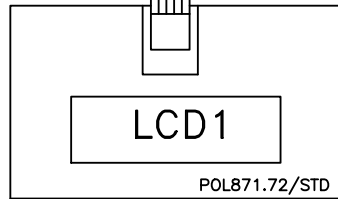
ANALOG INPUT

U.C.

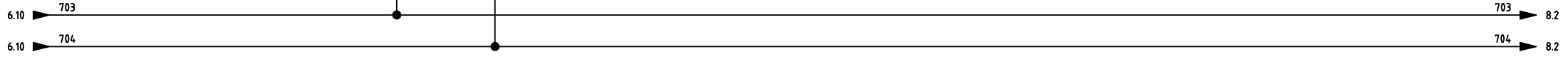


MICROTECH III

THI

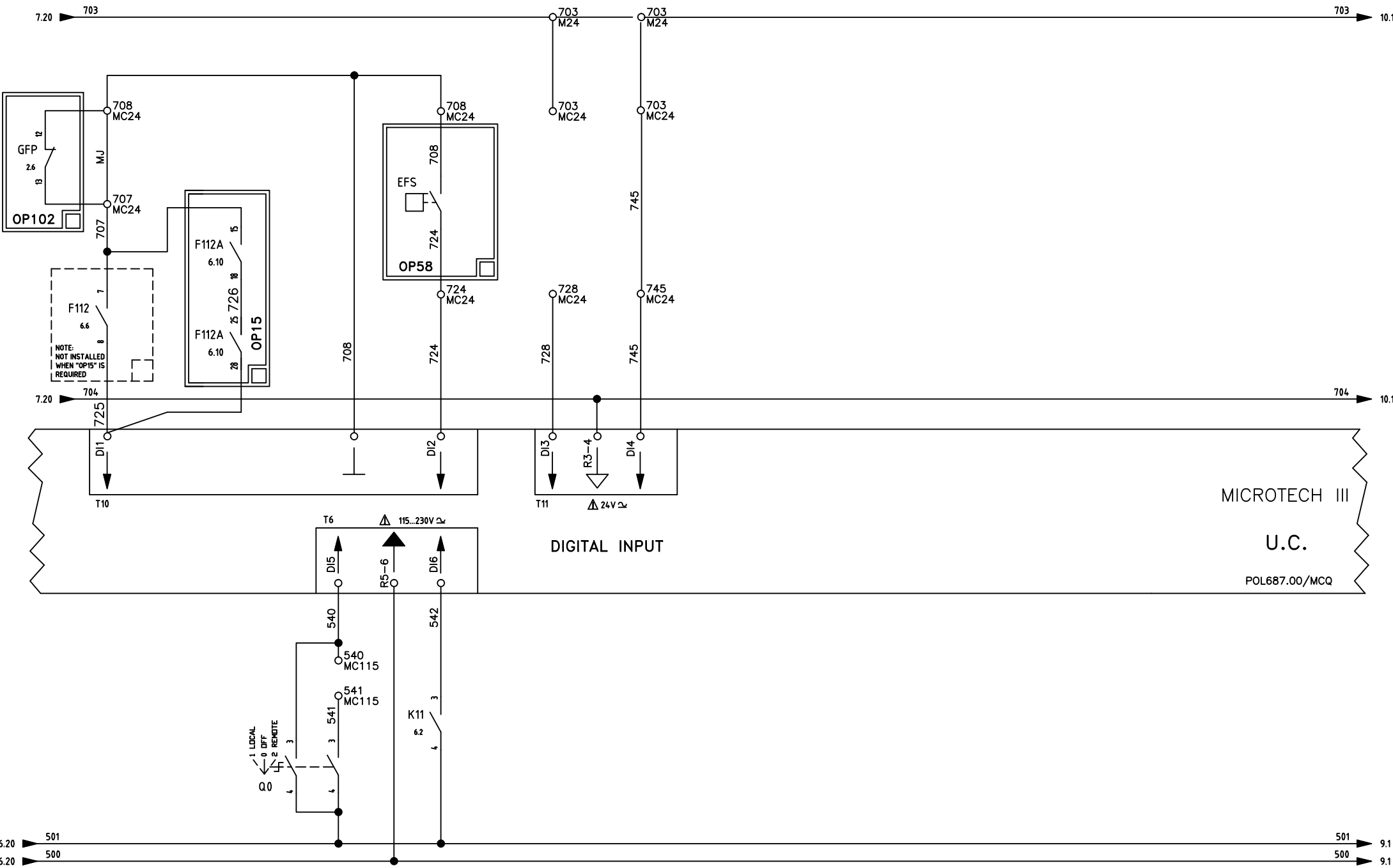


NOTE:
COMMUNICATION MODULE
(SEE SHEET 22)

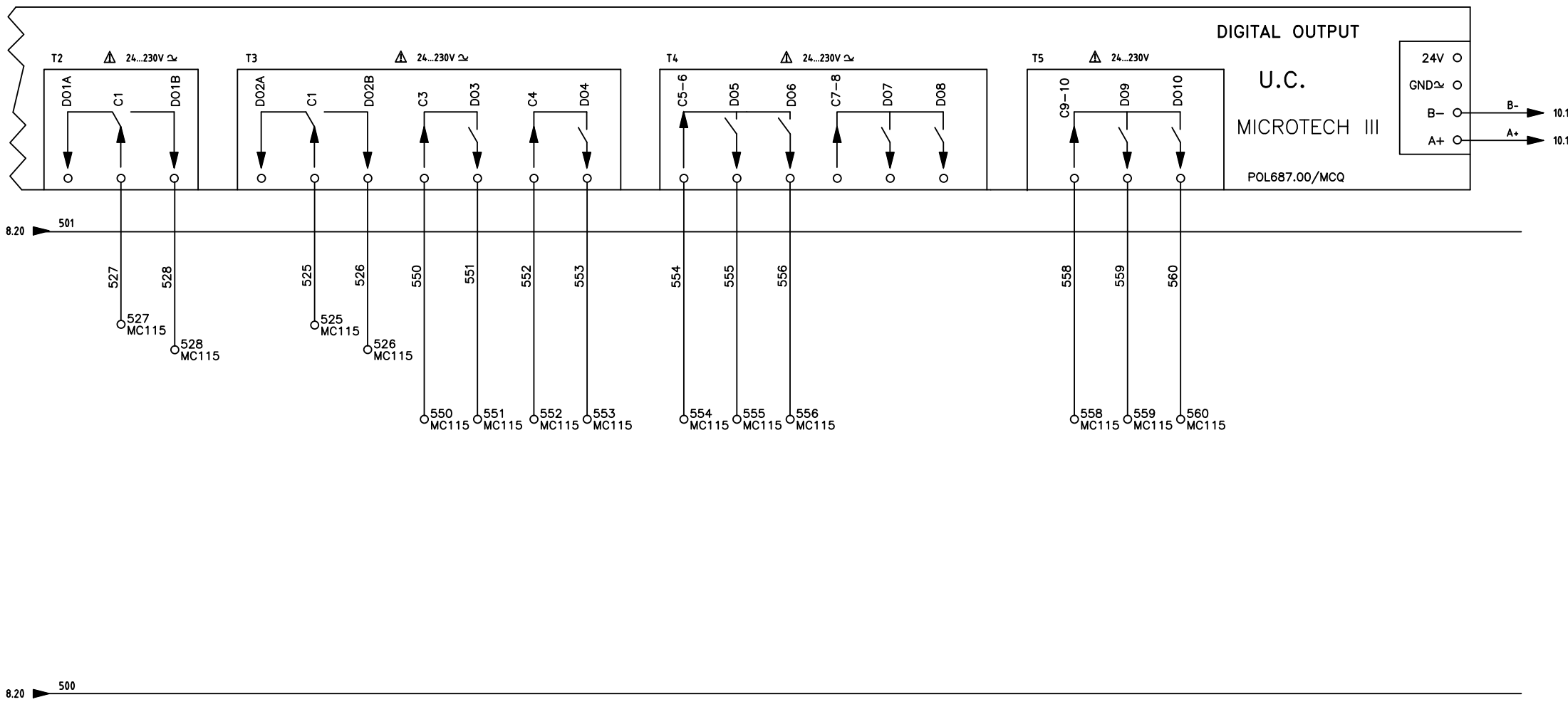


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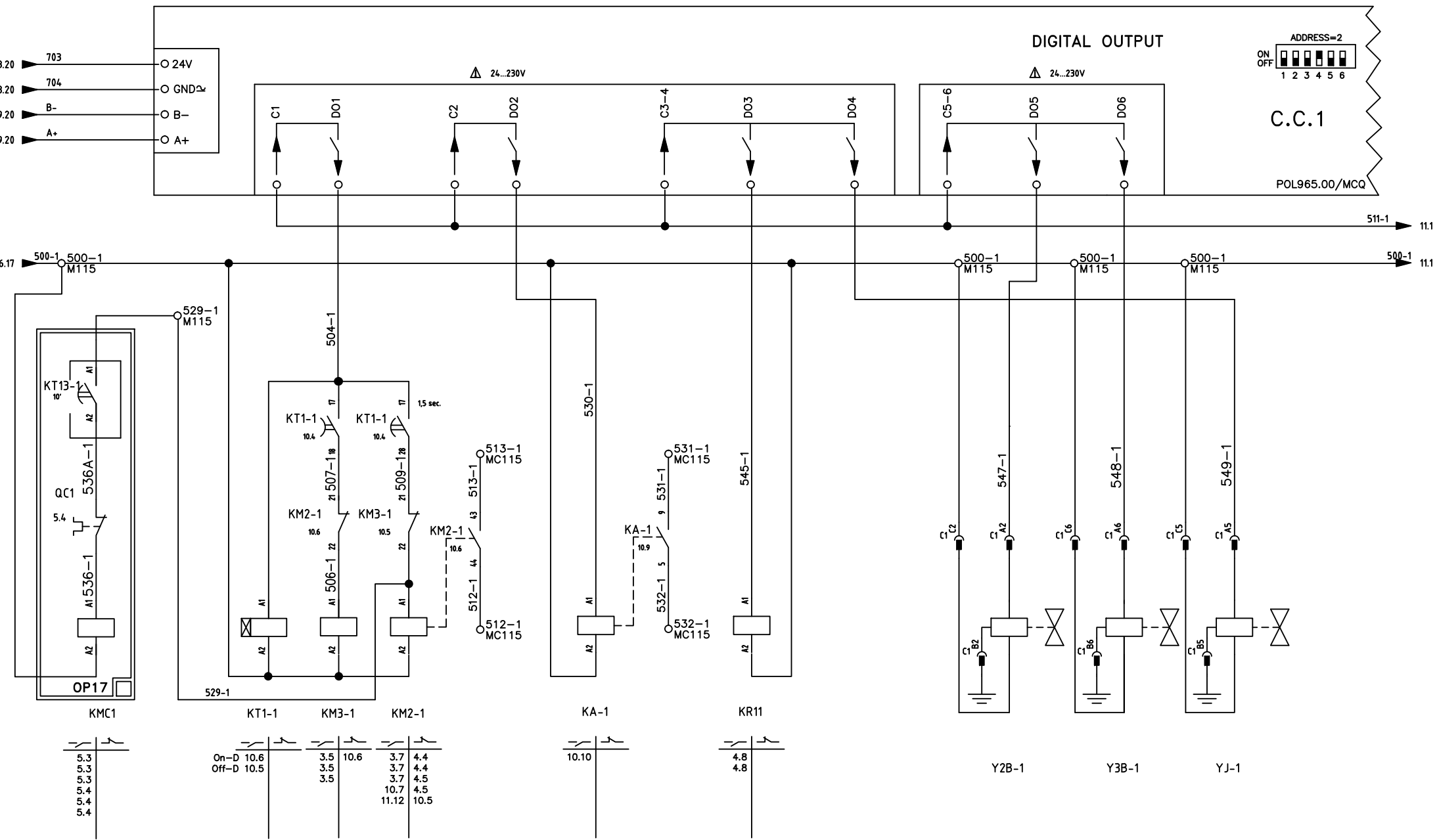
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1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20



DIGITAL OUTPUT



C.C.1

POL965.00/MCQ

5.3	5.3
5.3	5.3
5.3	5.3
5.4	5.4
5.4	5.4
5.4	5.4

On-D	10.6	3.5	10.6	3.7	4.4
Off-D	10.5	3.5		3.7	4.4
		3.5		3.7	4.5
				10.7	4.5
				11.12	10.5

10.10	
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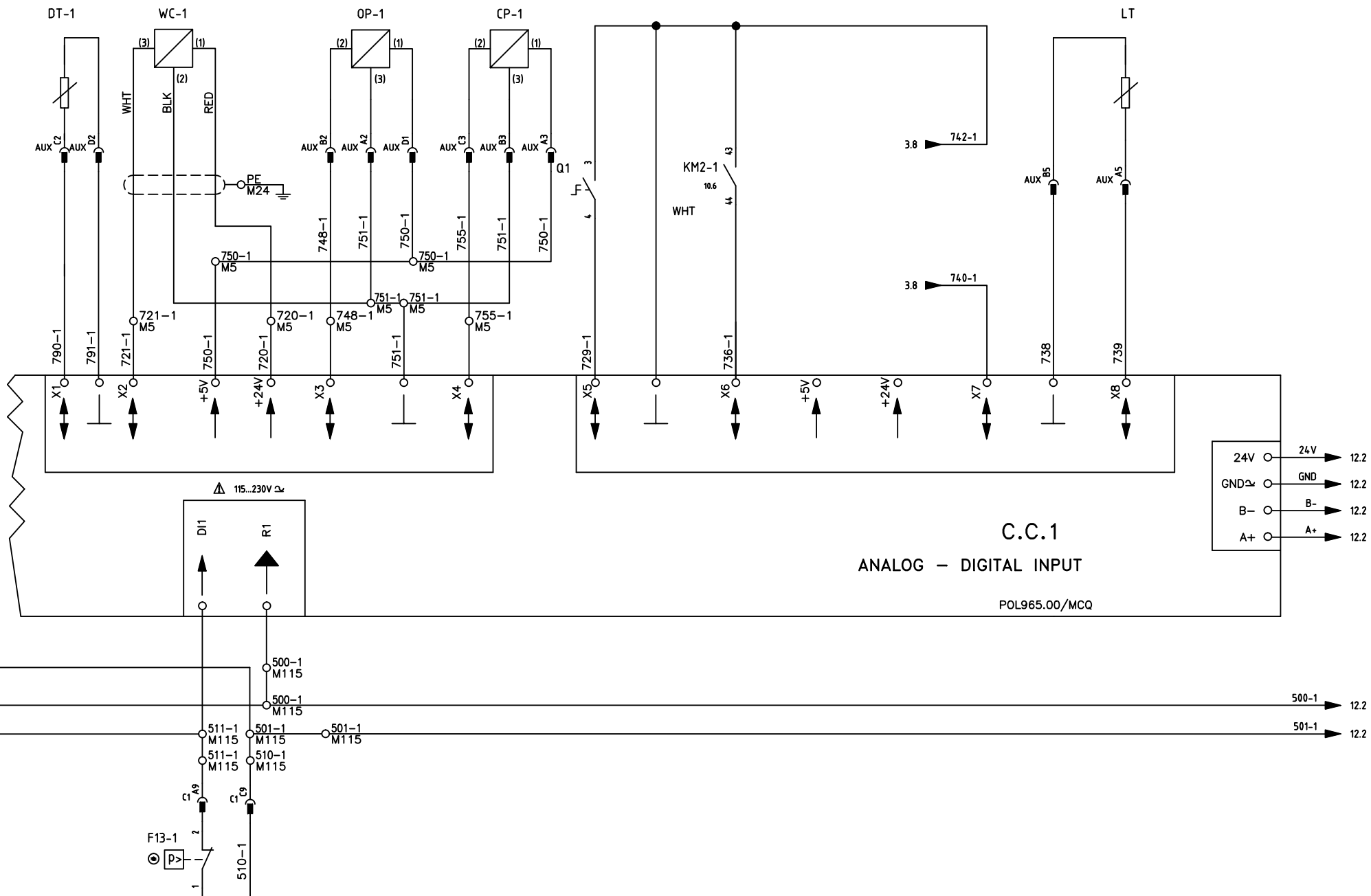
4.8	4.8
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Y2B-1

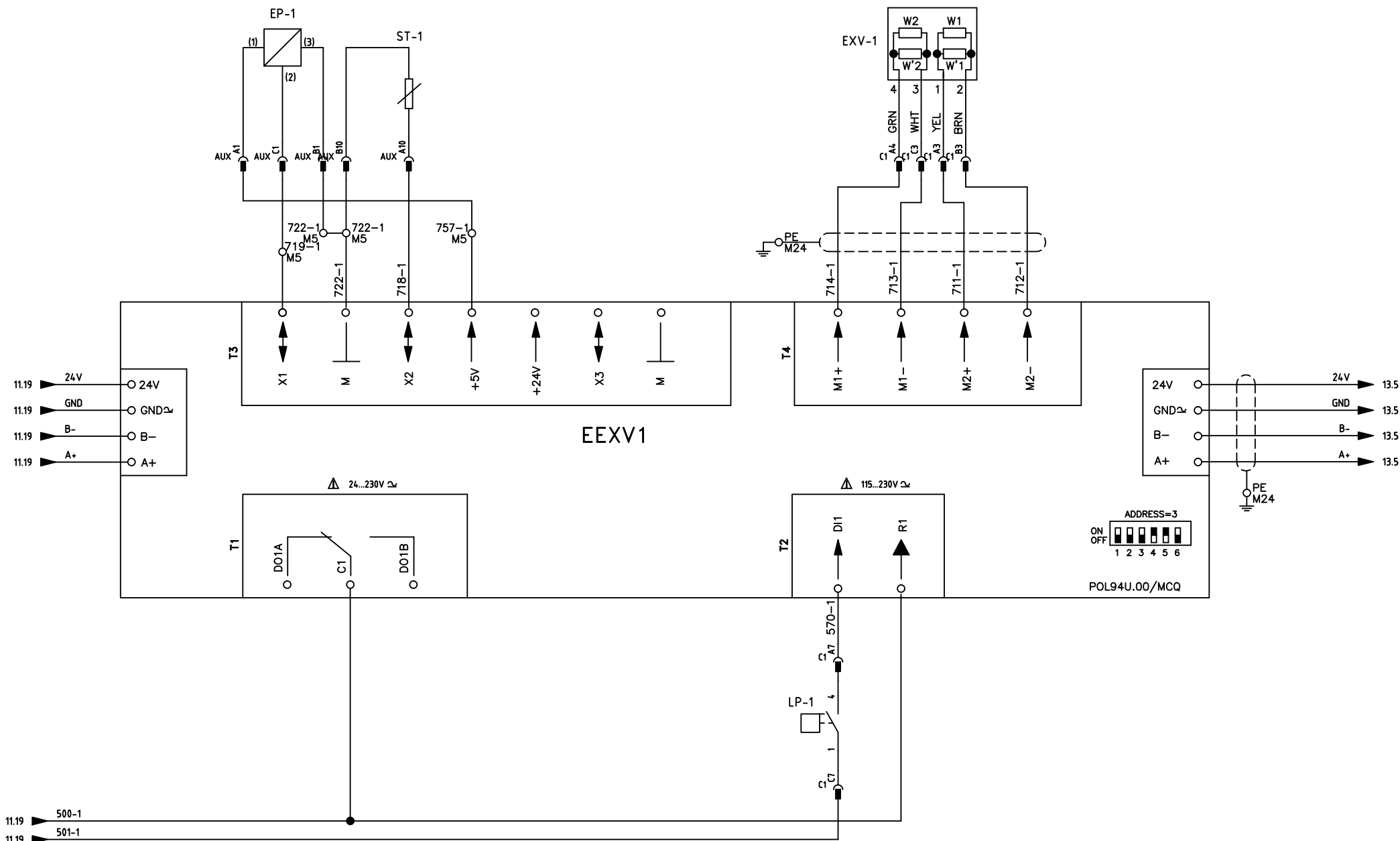
Y3B-1

YJ-1

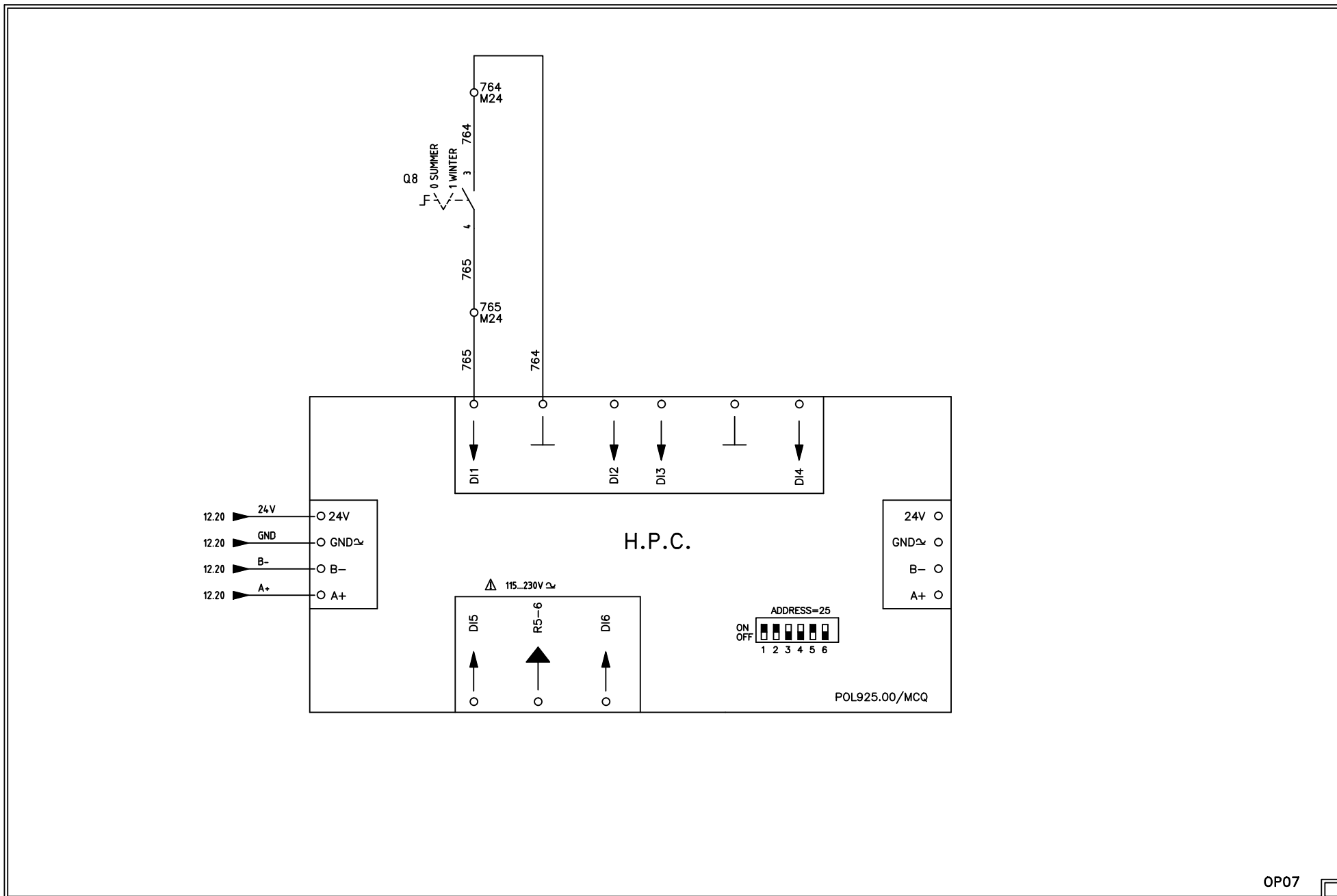
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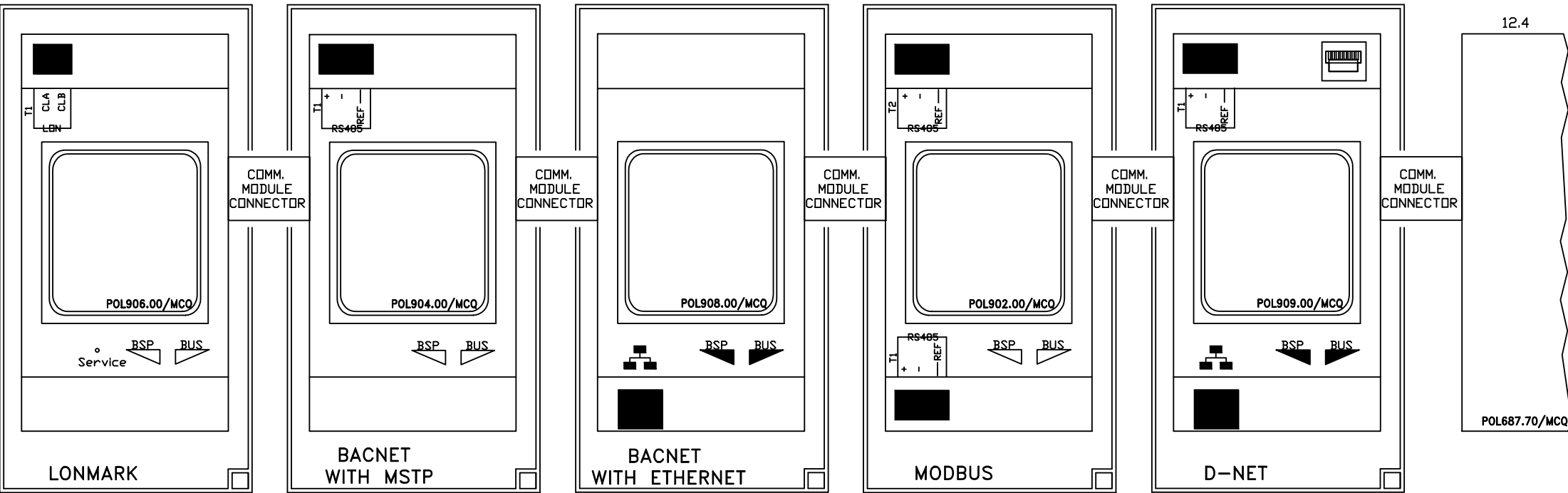
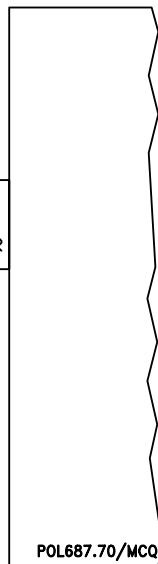


1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20



UNIT CONTR.

12.4



NOTES:

1. ANY OF THESE COMMUNICATION MODULES CAN DIRECTLY CONNECT TO THE LEFT SIDE OF THE UNIT CONTROLLER.
2. COMMUNICATION MODULES CAN CONNECT TO EACH OTHER.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

QG - M400

QG	-	M400	400V	PE	⊙	PE	PE	4.8
QG	-	M400	400V	PE	⊙	PE	PE	4.5
QG	-	M400	400V	10-U	⊙	10-U	10-U	4.4
QG	-	M400	400V	10-V	⊙	10-V	10-V	4.4
QG	-	M400	400V	20-V	⊙	20-V	20-V	4.8
QG	-	M400	400V	20-W	⊙	20-W	20-W	4.8

QG - M115

QG	-	M115	115V	500	⊙	500	500	6.15
QG	-	M115	115V	500	⊙	500	500	6.14
QG	-	M115	115V	500	⊙	500	500	2.8
QG	-	M115	115V	500-1	⊙	500-1	500-1	6.14
QG	-	M115	115V	500-1	⊙	500-1	500-1	10.1
QG	-	M115	115V	500-1	⊙	500-1	500-1	10.14
QG	-	M115	115V	500-1	⊙	500-1	500-1	10.15
QG	-	M115	115V	500-1	⊙	500-1	500-1	10.17
QG	-	M115	115V	500-1	⊙	500-1	500-1	11.6
QG	-	M115	115V	500-1	⊙	500-1	500-1	11.6
QG	-	M115	115V	501	⊙	501	501	6.15
QG	-	M115	115V	501	⊙	501	501	6.14
QG	-	M115	115V	501	⊙	501	501	2.8
QG	-	M115	115V	501-1	⊙	501-1	501-1	6.14
QG	-	M115	115V	501-1	⊙	501-1	501-1	11.6
QG	-	M115	115V	501-1	⊙	501-1	501-1	11.5
QG	-	M115	115V	510-1	⊙	510-1	510-1	11.5
QG	-	M115	115V	511-1	⊙	511-1	511-1	11.5
QG	-	M115	115V	511-1	⊙	511-1	511-1	11.5
QG	-	M115	115V	529-1	⊙	529-1	529-1	10.3

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

QG - M24

QG	-	M24	24V	SHEilded	⊙	PE	SHEilded	115
QG	-	M24	24V	SHEilded	⊙	PE	SHEilded	1212
QG	-	M24	24V	SHEilded	⊙	PE	SHEilded	1218
QG	-	M24	24V	703	⊙	703	703	69
QG	-	M24	24V	703	⊙	703	703	810
QG	-	M24	24V	703	⊙	703	703	88
QG	-	M24	24V	704	⊙	704	704	69
QG	-	M24	24V	740-1	⊙	740-1	740-1	36
QG	-	M24	24V	741-1	⊙	741-1	741-1	36
QG	-	M24	24V	742-1	⊙	742-1	742-1	37
QG	-	M24	24V	788	⊙	788	788	76
QG	-	M24	24V	788	⊙	788	788	76
QG	-	M24	24V	884	⊙	884	884	710
QG	-	M24	24V	884	⊙	884	884	710
QG	-	M24	24V	764	⊙	764	764	188
QG	-	M24	24V	765	⊙	765	765	188

QG - M5

QG	-	M5	5V	720-1	⊙	720-1	720-1	116
QG	-	M5	5V	721-1	⊙	721-1	721-1	114
QG	-	M5	5V	748-1	⊙	748-1	748-1	116
QG	-	M5	5V	750-1	⊙	750-1	750-1	118
QG	-	M5	5V	750-1	⊙	750-1	750-1	115
QG	-	M5	5V	751-1	⊙	751-1	751-1	117
QG	-	M5	5V	751-1	⊙	751-1	751-1	117
QG	-	M5	5V	755-1	⊙	755-1	755-1	118
QG	-	M5	15	719-1	⊙	719-1	719-1	125
QG	-	M5	15	722-1	⊙	722-1	722-1	126
QG	-	M5	15	722-1	⊙	722-1	722-1	126
QG	-	M5	15	757-1	⊙	757-1	757-1	128

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

QG - MC115

QG	-	MC115	115V	512-1	512-1	107
QG	-	MC115	115V	513-1	513-1	107
QG	-	MC115	115V	525	525	95
QG	-	MC115	115V	526	526	95
QG	-	MC115	115V	527	527	92
QG	-	MC115	115V	528	528	93
QG	-	MC115	115V	531-1	531-1	10.10
QG	-	MC115	115V	532-1	532-1	10.10
QG	-	MC115	115V	541	541	85
QG	-	MC115	115V	550	550	96
QG	-	MC115	115V	551	551	97
QG	-	MC115	115V	552	552	97
QG	-	MC115	115V	553	553	98
QG	-	MC115	115V	554	554	99
QG	-	MC115	115V	555	555	9.10
QG	-	MC115	115V	556	556	9.11
QG	-	MC115	115V	558	558	9.14
QG	-	MC115	115V	559	559	9.15
QG	-	MC115	115V	560	560	9.15
QG	-	MC115	115V	540	540	85

QG - MC24

QG	-	MC24	24V	747	747	8.10
QG	-	MC24	24V	746	746	8.8
QG	-	MC24	24V	707	707	8.2
QG	-	MC24	24V	708	708	8.7
QG	-	MC24	24V	708	708	8.2
QG	-	MC24	24V	724	724	8.7
QG	-	MC24	24V	728	728	8.8
QG	-	MC24	24V	745	745	8.10
QG	-	MC24	24V	760	760	7.15
QG	-	MC24	24V	761	761	7.15
QG	-	MC24	24V	762	762	7.16
QG	-	MC24	24V	882	882	7.12
QG	-	MC24	24V	884	884	7.12
QG	-	MC24	24V	884	884	7.10
QG	-	MC24	24V	885	885	7.10
QG	-	MC24	24V	886	886	7.11
QG	-	MC24	24V	887	887	7.11
QG	-	MC24	24V	888	888	7.17
QG	-	MC24	24V	889	889	7.18
QG	-	MC24	24V	890	890	7.18
QG	-	MC24	24V	703	703	8.10
QG	-	MC24	24V	707	707	8.8
QG	-	MC24	24V	708	708	8.2
QG	-	MC24	24V	708	708	8.7
QG	-	MC24	24V	724	724	8.2
QG	-	MC24	24V	728	728	8.7
QG	-	MC24	24V	745	745	8.8
QG	-	MC24	24V	760	760	8.10
QG	-	MC24	24V	761	761	7.15
QG	-	MC24	24V	762	762	7.15
QG	-	MC24	24V	882	882	7.12
QG	-	MC24	24V	884	884	7.12
QG	-	MC24	24V	884	884	7.10
QG	-	MC24	24V	885	885	7.10
QG	-	MC24	24V	886	886	7.11
QG	-	MC24	24V	887	887	7.11
QG	-	MC24	24V	888	888	7.17
QG	-	MC24	24V	889	889	7.18
QG	-	MC24	24V	890	890	7.18

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

ITEM	DESCRIPTION	SHEET	Q.ty
A/V	ENERGY METER	2	1
C1	POWER FACTOR CORRECTION 1	5	1
C.C.1	CONTROL COMPRESSOR 1	10	1
CEWT	CONDENSATOR ENTERING WATER TEMPERATURE	7	1
CFS	CONDENSATOR FLOW SWITCH	7	1
CLWT	CONDENSATOR LEAVING WATER TEMPERATURE	7	1
CP-1	CONDENSER PRESSURE TRANSDUCER 1	11	1
DT-1	DISCHARGE TEMP. SENSOR 1	11	1
EEWT	EVAPORATOR ENTERING WATER TEMPERATURE	7	1
EEXV1	EXPANSION COMPRESSOR 1	12	1
EFS	EVAPORATOR FLOW SWITCH	8	1
ELWT	EVAPORATOR LEAVING WATER TEMPERATURE	7	1
EP-1	EVAPORATOR PRESSURE TRANSDUCER 1	12	1
EXV-1	ELECTRONIC EXPANSION VALVE 1	12	1
F0	COMPRESSOR FUSES	4	1
F5-1	COMPRESSOR 1 THERMAL RELAY	3	1
F10	TERMOSTAT (CLOSED >30°C)	6	1
F13-1	MECH. HIGH PRESSURE SWITCH 1	11	1
F60	PROTECTION FUSE	6	1
F112	PHASE VOLT MONITOR	6	1
F112A	UNDER/OVERVOLTAGE CONTROL	6	1
F130	AUXILIARY PROTECTION FUSES	6	1
F130A	UNDER/OVERVOLTAGE CONTROL FUSE	6	1
F140	PHASE VOLT MONITOR FUSE	2	1
FC1	POWER FACTOR CORRECTION FUSES 1	5	1
GFP	GROUND FAULT PROTECTION	2	1
H.P.C.	HEAT PUMP CONTROLLER	13	1
K11	CONTACTOR	6	1
KA-1	COMPRESSOR 1 ALARM RELAY	10	1
KM2-1	CONTACTOR	10	1
KM3-1	CONTACTOR	10	1
KMC1	POWER FACTOR CORRECTION CONTACTORS CIR.1	10	1
KR11	AUXILIARY RELAY	10	1
KT1-1	DELAY RELAY	10	1
KT13-1	TIME DELAY RELAY	10	1
LCD1	KEY PAD SWITCH AND DISPLAY	7	1
LP-1	LOW PRESSURE SWITCH 1	12	1
LT	LIQUID TEMP. SENSOR	11	1
M1	COMPRESSOR 1	3	1
M10	FORCED VENTILATION	6	1
OP07	HEAT PUMP VERSION	13	1
OP11	THERMAL RELAY	3	1
OP15	VARIABLE PHASE MONITOR	6	1
OP16	ENERGY METER	2	1
OP17	POWER FACTOR CORRECTION	5	1

ITEM	DESCRIPTION	SHEET	Q.ty
OP19	CURRENT LIMIT	2	1
OP58	EVAPORATOR FLOW SWITCH (OPTIONAL)	8	1
OP59	CONDENSATOR FLOW SWITCH (OPTIONAL)	7	1
OP95	COMPRESSOR CIRCUIT BREAKER	2	1
OP102	GROUND FAULT PROTECTION RELAY	2	1
OP-1	OIL PRESSURE TRANSDUCER 1	11	1
Q0	UNIT ON - OFF	8	1
Q1	CIRCUIT SWITCH 1	11	1
Q1-1	MAIN CIRCUIT BREAKER	2	1
Q8	HEAT PUMP SWITCH	13	1
Q10	MAIN SWITCH	2	1
Q11	EMERGENCY STOP	6	1
Q12	AUTOMATIC CIRCUIT BREAKER	6	1
QC1	CAPACITOR 1 THERMAL RELAY	5	1
R1	COMPRESSOR CRANKCASE HEATER 1	4	1
R5	EVAPORATOR HEATER	6	1
R11	OIL SEPARATOR HEATER 1	4	1
SC	CURRENT LIMIT	2	1
SPN95	FORCED VENTILATION	6	1
ST-1	SUCTION TEMPERATURE SENSOR 1	12	1
T1	400/115v TRANSFORMER	6	1
T2	115V/24V TRANSFORMER	6	1
TA0	AMMETER TRANSFORMER	2	1
TA1	AMMETER TRANSFORMER	2	1
TA3	AMMETER TRANSFORMER	2	1
TA4	AMMETER TRANSFORMER	2	1
TC5	TERMOSTAT	6	1
U.C.	UNIT CONTROL	7	1
W1	COMPRESSOR THERMISTOR CIRC. 1	3	1
WC-1	SLIDE POSITION RELAY 1	11	1
Y2B-1	LOADER SOL. VALVE 1	10	1
Y3B-1	UNLOADER SOL. VALVE 1	10	1
YJ-1	LIQUID INJECTION SOLENOID VALVE 1	10	1

SCO = Standard Compressor Fuse + Overcurrent (STD Temperature)					
ITEM		4221-R134a	4222-R134a	4223-R134a	4224-R134a
		HSW205	HSW220	HSW235	
F1,F2,F3		200 A gG NH1	250 A gG NH1	250 A gG NH1	315A gG NH2
F5-1,2,3	Set (OP11)	89 A	106 A	121 A	144 A
F1,F2,F3	Set (OP95)	154 A	182 A	209 A	248 A
SCO = Standard Compressor Fuse + Overcurrent (High Temperature)					
ITEM		4221-R134a	4222-R134a	4223-R134a	4224-R134a
		HSW205	HSW220	HSW235	
F1,F2,F3		250 A gG NH1	315A gG NH2	355 A gG NH2	355A gG NH2
F5-1,2,3	Set (OP11)	120 A	144 A	168 A	192 A
F1,F2,F3	Set (OP95)	207 A	248 A	290 A	331 A

CF = Control Fuses + Transformer	
ITEM	1 Comp
F0	2 A gG E14
F140	2 A gG E14
F130/F130A	4 A gG E14
T1	500 VA
Q12	4 A 6kA - C
T2	200 VA
F60	4 A gG CH10

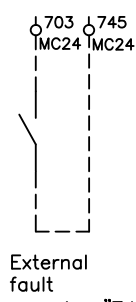
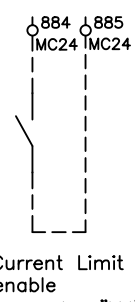
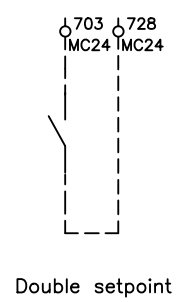
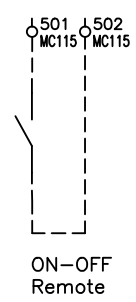
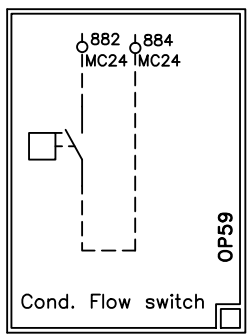
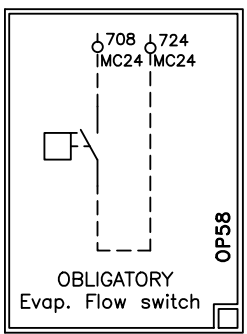
OP17 Power Factor Correction - Capacitor + Overcurrent (STD Temperature)				
ITEM	4221-R134a	4222-R134a	4223-R134a	4224-R134a
	HSW205	HSW220	HSW235	HSS4224
C1,C2,C3	20 kVAR	20 kVAR	20 kVAR	20 kVAR
FC1,2,3	50 A gG E18	50 A gG E18	50 A gG E18	50 A gG E18
QC1,2,3	30 A	30 A	30 A	30 A

OP17 Power Factor Correction - Capacitor + Overcurrent (High Temperature)				
ITEM	4221-R134a	4222-R134a	4223-R134a	4224-R134a
	HSA205	HSA220	HSA235	HSS4224
C1,C2,C3	20 kVAR	25 kVAR	25 kVAR	25 kVAR
FC1,2,3	50 A gG E18	63 A gG E18	63 A gG E18	63 A gG E18
QC1,2,3	30 A	40 A	40 A	40 A

Option	Description
OP07	Heat Pump Version
OP11	Thermal Relay
OP15	Variable Phase monitor
OP16	Energy Meter
OP17	Power Factor Correction
OP19	Current limit
OP58	Evaporator flow switch
OP59	Condensator flow switch
OP95	Compressor Circuit Breaker
OP102	Ground Fault Relay
SPN10	Evaporator Heater
SPN95	Forced Ventilatin

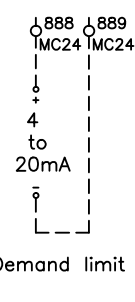
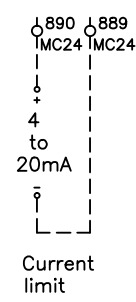
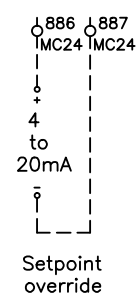
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

Digital input terminals



ON-OFF Remote Double setpoint Current Limit enable External fault
(remove wire "MJ") (remove wire "745")

Analog input terminals



Setpoint override Current limit Demand limit

Digital output terminals

Tower fan step#1
Remote fan step#1/1
free contact
Maximum load:
2A-230VAC

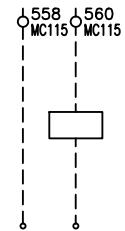
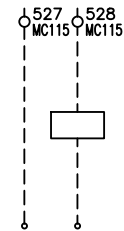
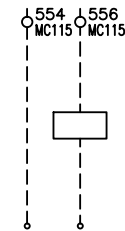
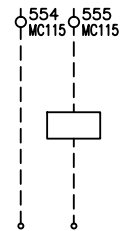
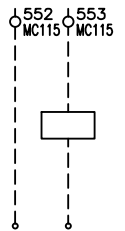
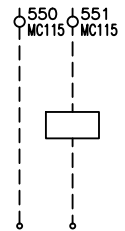
Tower fan step#2
Remote fan step#1/2
free contact
Maximum load:
2A-230VAC

Tower fan step#3
Remote fan step#1/3
free contact
Maximum load:
2A-230VAC

Tower fan step#4
Remote fan step#1/4
free contact
Maximum load:
2A-230VAC

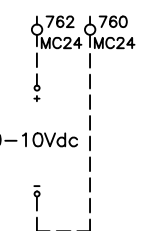
Evaporator
pump contact 1
Maximum load:
2A-230VAC

Evaporator
pump contact 2
Maximum load:
2A-230VAC



External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC)

Analog output terminals



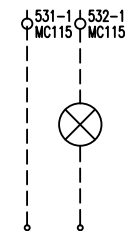
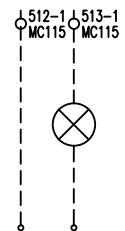
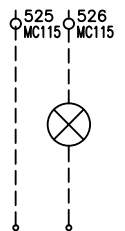
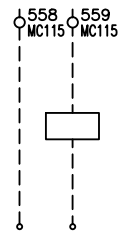
Condenser Pump VFD Condenser 3way valve

Condenser pump
free contact
Maximum load:
2A-230VAC

Alarm NO (default)
Maximum load:
2A-230VAC

Compressor#1
Status
Maximum load:
10A-230VAC

Compressor#1
alarm NO (default)
Maximum load:
2A-230VAC



External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC) External power supply (ex 24VAC or 230VAC)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20