ARCONIC

DANIELI AUTOMATION

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CUSTOMER ARCONIC UK HOLDINGS LIMITED

PROJECT DESCRIPTION **=MD01E10+PLC01**
Hot Mill drives upgrade - Automation system electrical diagram

DRAWING NUMBER **QPC7V9-MD01-A8100-ED101** *REVISION* **00**

JOB NO APC7V9A1 *REVISION DESCRIPTION* **FOR MANUFACTURING**

GENERAL NOTES			
REFERENCE STANDARDS	**EN 60204-1: 2018**		
WIRES MARKERS	**-COMPONENT:TERMINAL**	EXAMPLE	**-K01:A1**

TECHNICAL COMPLEMENTARY DOCUMENTS LIST		
AUTOMATION BLOCK DIAGRAM	QPC7V9-MD01-A8000-ED023	REV00
MOTOR AND SENSOR LIST		
EQUIPMENT LIST	QPC7V9-MD01-E9000-EL123	REV00
NETWORK DIAGRAM	QPC7V9-MD01-A8000-ED043	REV03
JOB SAFETY DOCUMENTS		

CIRCUIT	*VOLTAGE*	*WIRE COLOR*	*IEC 60757*	*WIRE TYPE*
POWER CIRCUIT	**1~ 230 VAC 50 Hz**	**BLACK**	**BK**	**FS17**
COMMAND CIRCUIT AC	**1~ 110 VAC 50 Hz**	**RED**	**RD**	**FS17 (H07V-K 2,5 mm²)**
COMMAND CIRCUIT DC	**24 V**	**BLUE**	**BU**	**FS17 (H05V-K 0,75 mm²)**
EXTERNAL CIRCUIT		**ORANGE**	**OG**	**FS17**
NEUTRAL		**WHITE**	**WH**	**FS17**
PROTECTIVE EARTH	**TN-C**	**GREEN-YELLOW**	**GN/YE**	**FS17**

0	1	2	3	4	5	6	7	8	9

=LAYOUT+PLC01/11.4

=MD01E10+PLC01

HOT MILL DRIVES UPGRADE
PLC SWITCHBOARD

=LAYOUT+PLC01/11.4

=MD01E10+PLC01

HOT MILL DRIVES UPGRADE
PLC SWITCHBOARD

Danieli Automation SpA
Via Bonaldo Stringher 4 - 33042 Buttrio (UD) - Italy

Serial No **QPC7V9-MD01-A8100-EM001**

Drawing No **QPC7V9-MD01-A8100-ED101**

	Rated Voltage	Phases No	Frequency	Full Load Current	Max Permissible Short-Circuit current
	(Un)		(fn)	(Inc)	(Max Icp)
Supply 1	**110 VAC**	**1 Ph**	**50 Hz**	**12 A**	**10 kA**
Supply 2	**110 VAC**	**1 Ph**	**50 Hz**	**5 A**	**10 kA**
Supply 3	**230 VAC**	**1 Ph**	**50 Hz**	**4 A**	**10 kA**

Manufacturing Year **2024**

Ref. Std.: EN 60204-1

CE

=LAYOUT+RIO01/15.5

=MD01E10+RIO01

MILL PULPIT OPERATOR STATION
REMOTE I/O SWITCHBOARD

=LAYOUT+RIO02/19.0

=MD01E10+RIO02

SHEAR OPERATOR STATION
REMOTE I/O PLATE

=LAYOUT+RIO01/15.5

=MD01E10+RIO01

MILL PULPIT OPERATOR STATION
REMOTE I/O SWITCHBOARD

Danieli Automation SpA
Via Bonaldo Stringher 4 - 33042 Buttrio (UD) - Italy

Serial No **QPC7V9-MD01-A8100-EM002**

Drawing No **QPC7V9-MD01-A8100-ED101**

	Rated Voltage	Phases No	Frequency	Full Load Current	Max Permissible Short-Circuit current
	(Un)		(fn)	(Inc)	(Max Icp)
Supply 1	**110 VAC**	**1 Ph**	**50 Hz**	**4 A**	**10 kA**
Supply 2	**110 VAC**	**1 Ph**	**50 Hz**	**1 A**	**10 kA**
Supply 3	**230 VAC**	**1 Ph**	**50 Hz**	**4 A**	**10 kA**

Manufacturing Year **2024**

Ref. Std.: EN 60204-1

CE

=LAYOUT+RIO02/19.1

=MD01E10+RIO02

SHEAR OPERATOR STATION
REMOTE I/O PLATE

Danieli Automation SpA
Via Bonaldo Stringher 4 - 33042 Buttrio (UD) - Italy

Serial No **QPC7V9-MD01-A8100-EM003**

Drawing No **QPC7V9-MD01-A8100-ED101**

	Rated Voltage	Phases No	Frequency	Full Load Current	Max Permissible Short-Circuit current
	(Un)		(fn)	(Inc)	(Max Icp)
Supply 1	**110 VAC**	**1 Ph**	**50 Hz**	**4 A**	**10 kA**
Supply 2	**110 VAC**	**1 Ph**	**50 Hz**	**1 A**	**10 kA**
Supply 3					

Manufacturing Year **2024**

Ref. Std.: EN 60204-1

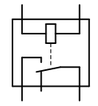
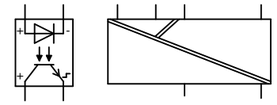
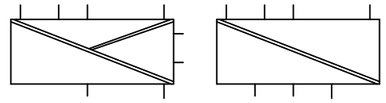
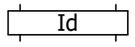
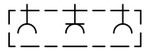
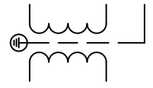
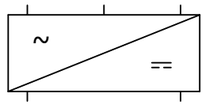
CE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	EQUIPMENT LIST	Hot Mill drives upgrade - Automation system electrical diagram	=
				Drawn	TeraWatt					+
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **2.a**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 3.a

LAYOUT SYMBOLS	DESCRIPTION
	LAMP
	PUSHBUTTON
	LIGHT PUSHBUTTON
	SELECTOR FIXED POSITIONS
	SELECTOR SWITCHING POSITIONS
	SELECTOR WITH KEY
	FAST STOP MUSHROOM PUSHBUTTON
	EMERGENCY MUSHROOM PUSHBUTTON
	EMERGENCY MUSHROOM PUSHBUTTON WITH KEY
	EMERGENCY LOCKABLE MUSHROOM PUSHBUTTON
	EMERGENCY LOCKABLE MUSHROOM PUSHBUTTON WITH KEY
	LIGHT MUSHROOM PUSHBUTTON WITH KEY
	LIGHT MUSHROOM PUSHBUTTON
	JOYSTICK
	POTENTIOMETER
	COVER
	BAR GRAPH
8.8	DISPLAY BCD
8888	ANALOG DISPLAY

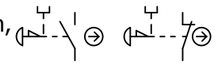
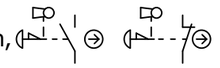
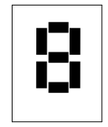
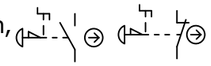
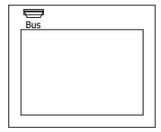
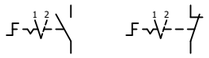
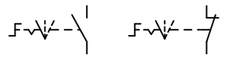
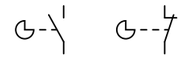
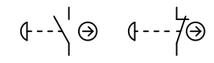
GRAPHICAL SYMBOLS STANDARDS ISO 7000 IEC 60417	DESCRIPTION	GRAPHICAL SYMBOLS STANDARDS ISO 7000 IEC 60417	DESCRIPTION
	LAMP TEST		RUN FORWARD NORMAL SPEED
	MANUAL		RUN BACKWARD NORMAL SPEED
	READY		RUN FORWARD FAST SPEED
	ON (POWER ON)		RUN BACKWARD FAST SPEED
	OFF (POWER OFF)		JOG FORWARD
	STAND BY		JOG BACKWARD
	ON-OFF		INCREASE
	START		DECREASE
	STOP		LIFTING TO SET POSITION
	FAST STOP		FORWARD TO SET POSITION
	LOCK		LOWERING TO SET POSITION
	UNLOCK		BACKWARD TO SET POSITION
	MOTOR SIDE		CLOCKWISE ROTATION
	OPERATOR SIDE		COUNTERCLOCKWISE ROTATION
	SETUP		ROTATION IN BOTH DIRECTION
	RESET		LIFTING
	CALL FOR MAINTENANCE		LIFTING-RIGHT
	GENERAL FAULT		FORWARD
	CLAMPING (CLOSE)		LOWERING-RIGHT
	UNCLAMPING (OPEN)		LOWERING
	TEST CYCLE (ONE CYCLE)		LOWERING-LEFT
	AUTOMATIC CYCLE		BACKWARD
	HOME POSITION		LIFTING-LEFT
+	PLUS (INCREASE)		LIFTING FAST SPEED
–	MINUS (DECREASE)		LOWERING FAST SPEED
	CAUTION		EMERGENCY STOP

0	1	2	3	4	5	6	7	8	9

Terminal 	Coil 	Relay module (example) 
Disconnecting terminal	NO contact, NC contact 	Optocouplers 
Fused terminal	Power NO contact 	Signal converter / adapter 
Fused terminal with LED 	Fuse 	
Fused disconnecting terminal with LED 	Switch disconnector 	
Female and male pin connection 	Thermal-magnetic circuit breaker 	
Drawers power clamp (withdrawable terminal) 	Residual-current device 	
Socket with PE, three-pole 	Transformer 	
	Power supply unit 	

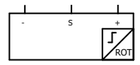
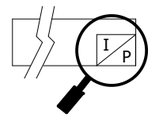
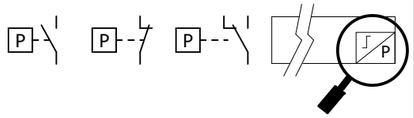
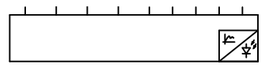
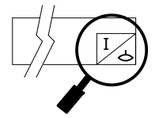
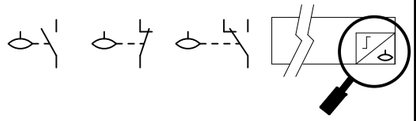
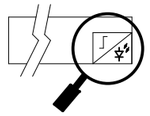
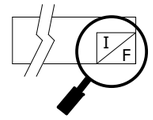
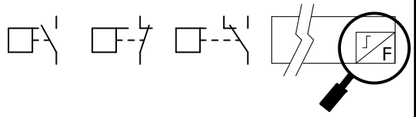
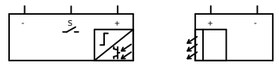
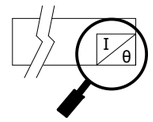
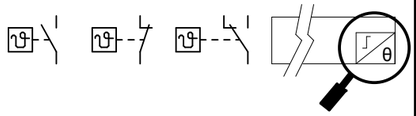
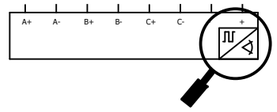
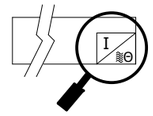
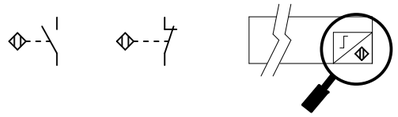
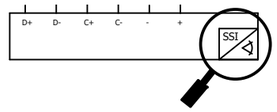
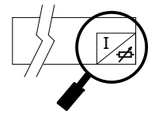
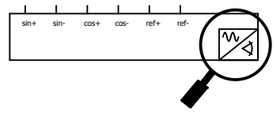
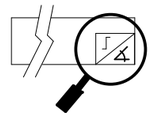
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SYMBOLS LEGEND	Hot Mill drives upgrade - Automation system electrical diagram	=
				Drawn	TeraWatt					+
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **3.b** Follow 3.c

0	1	2	3	4	5	6	7	8	9

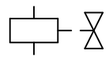
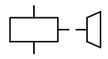
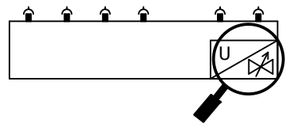
Pushbutton operated by pushing 	Emergency stop switch / Emergency stop pushbutton, with pull-to-reset 	Lamp / indicator light 
Pushbutton operated by turning 	Emergency stop switch / Emergency stop pushbutton, key release 	Display 
Switch, operated by turning 	Emergency stop switch / Emergency stop pushbutton, with turn-to-reset 	Operator panel 
Two positions Switch, operated by turning 	Pushbutton, pedal-operated 	Instrument 
3 switching positions Switch, operated by turning 	Cam switch, NO contact, NC contact 	
3 switching positions Switch, operated by turning 	Emergency stop switch / Emergency stop pushbutton 	
Switch, operated by key 	Auxiliary NO contact, NC contact 	

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SYMBOLS LEGEND	Hot Mill drives upgrade - Automation system electrical diagram	=
				Drawn	TeraWatt					+
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **3.c** Follow 3.d

0	1	2	3	4	5	6	7	8	9

Limit switch  (SHE)	Motor overspeed switch  	Pressure transducer  (BD)
Pressure switch  (FD)	Edge position detector  (BLS)	Level transducer  (BH)
Level switch  (FH)	Photocell  (BFZI)	Flow transducer  (BQ)
Flow switch  (FQ)	Photocell, light barrier  (BLST)	Temperature transducer  (BT)
Temperature switch  (FT)	Incremental encoder  (BN)	Pyrometer  (BP)
Proximity switch  (SBE)	Absolute encoder  (BS)	Linear transducer  (BS_L)
Magnetic proximity switch 	Resolver  	Thermocouple  (BT_TC)
	Angular position transducer 	Humidity sensor 
		Load cell 

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SYMBOLS LEGEND	Hot Mill drives upgrade - Automation system electrical diagram	=
				Drawn	TeraWatt					+
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page 3.d
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 3.e

Solenoid valve 	Heating element	Protective ground 
Motor 	Light-emitting diode (LED) 	Ground, low-noise 
Solenoid brake 	Diode 	Ground 
Proportional valve 	Capacitor 	
Fan 	Battery 	
Horn 		
Resistor		

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SYMBOLS LEGEND	Hot Mill drives upgrade - Automation system electrical diagram	=	
				Drawn	TeraWatt					+	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page 3.e
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 4

Mounting location	Page	Rev	Page description
=MD01E10+MP→D	233	00	MILL PULPIT INTERFACE PANEL D
=MD01E10+MP→D	235	00	MILL PULPIT INTERFACE PANEL D
=MD01E10+MP→C	237	00	MILL PULPIT INTERFACE PANEL C
=MD01E10+MP→C	239	00	MILL PULPIT INTERFACE PANEL C
=MD01E10+MP→C	241	00	MILL PULPIT INTERFACE PANEL C
=MD01E10+MP→C	243	00	MILL PULPIT INTERFACE PANEL C
=MD01E10+MP→C	245	00	MILL PULPIT INTERFACE PANEL C
=MD01E10+MP→T	247	00	MILL PULPIT INTERFACE PANEL T
=MD01E10+SP→C	249	00	SHEAR PULPIT INTERFACE PANEL C
=MD01E10+SP→C	251	00	SHEAR PULPIT INTERFACE PANEL C
=MD01E10+SP→C	253	00	SHEAR PULPIT INTERFACE PANEL C
=MD01E10+SP→C	255	00	SHEAR PULPIT INTERFACE PANEL C
=MD01E10+EMG	257	00	PANEL C EMERGENCY
=MD01E10+EMG	259	00	SPARE EMERGENCY
=MD01E10+C2	261	00	PANEL C SECTION 2
=MD01E10+C3	263	00	PANEL C SECTION 3
=MD01E10+C3	265	00	PANEL C SECTION 3
=MD01E10+C4	267	00	PANEL C SECTION 4
=MD01E10+C4	269	00	PANEL C SECTION 4
=MD01E10+C4	271	00	PANEL C SECTION 4
=MD01E10+C5	273	00	PANEL C SECTION 5
=MD01E10+C5	275	00	PANEL C SECTION 5
=MD01E10+SPARES	277	00	SPARES
=MD01E10+SPARES	279	00	SPARES
=MD01E10+SPARES	281	00	SPARES

Mounting location	Page	Rev	Page description
=MD01E10+SPARES	283	00	SPARES
=MD01E10+SPARES	285	00	SPARES
=MD01E10+SPARES	287	00	SPARES
=MD01E10+SPARES	289	00	SPARES
=MD01E10+SPARES	291	00	SPARES
=MD01E10+SPARES	293	00	SPARES
=MD01E10+SPARES	295	00	SPARES
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=MD01E10+SPARES	311	00	SPARES
=MD01E10+SPARES	313	00	SPARES
=REPORTS+TERMINAL STRIPS	2001	00	TERMINAL STRIP =MD01E10+PLC01-X1
=REPORTS+TERMINAL STRIPS	2002	00	TERMINAL STRIP =MD01E10+PLC01-X11
=REPORTS+TERMINAL STRIPS	2003	00	TERMINAL STRIP =MD01E10+PLC01-X12.1
=REPORTS+TERMINAL STRIPS	2004	00	TERMINAL STRIP =MD01E10+PLC01-X12.2
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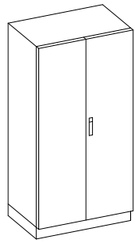
=REPORTS+TERMINAL STRIPS	2008	00	TERMINAL STRIP =MD01E10+PLC01-X35
=REPORTS+TERMINAL STRIPS	2009	00	TERMINAL STRIP =MD01E10+PLC01-X36

Structure identifier overview

F24_004

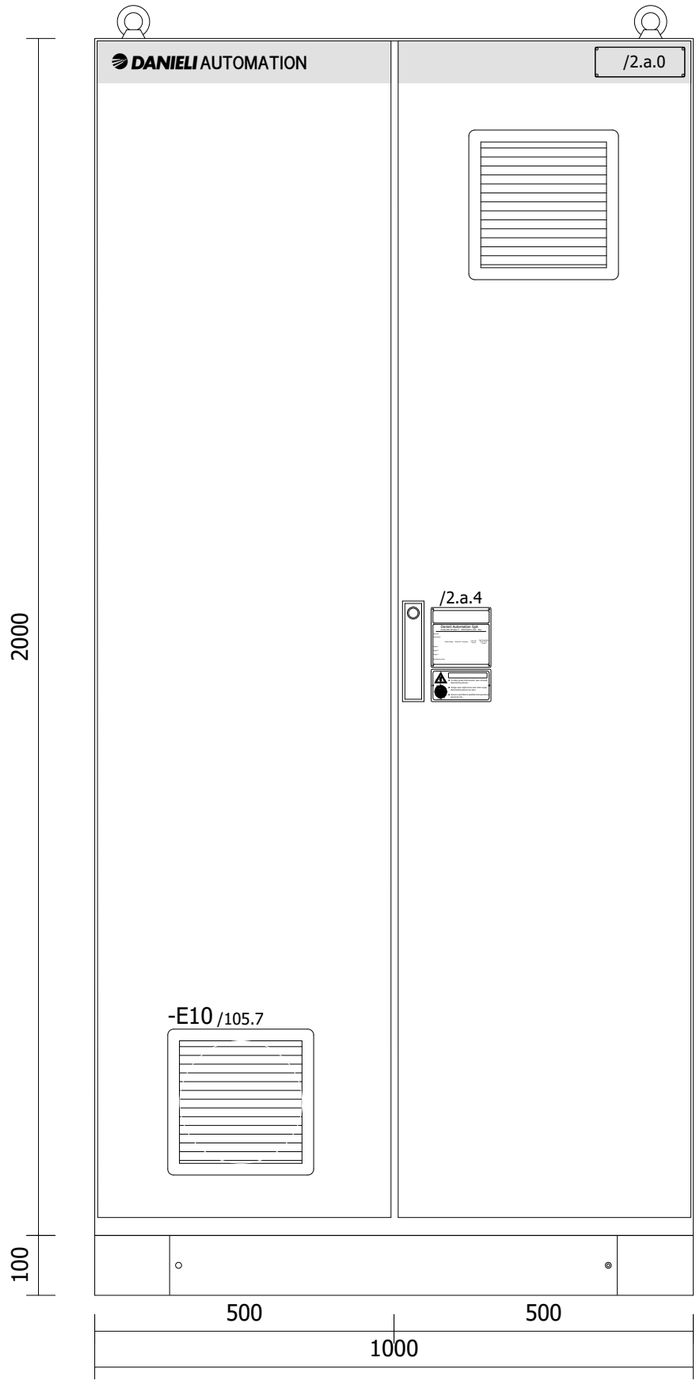
Plant identifier	Plant description	Mounting location identifier	Mounting location description
MD01E10	HOT MILL DRIVES UPGRADE (NEW EQUIPMENT)	PLC01	HOT MILL DRIVES UPGRADE PLC SWITCHBOARD (NEW)
EXISTING	EXISTING EQUIPMENT	RIO01	MILL PULPIT OPERATOR STATION REMOTE I/O SWITCHBOARD (NEW)
		RIO02	SHEAR OPERATOR STATION REMOTE I/O PLATE (NEW)
		DRM01	HOT MILL MOTOR MAIN DRIVE SWITCHBOARD (NEW)
		DRM02	SHEARS & EDGER MAIN DRIVE SWITCHBOARD (NEW)
		DRM03	MILL MOTOR #1 FIELD EXCITATION MAIN DRIVE SWITCHBOARD (NEW)
		DRM04	MILL MOTOR #2 FIELD EXCITATION MAIN DRIVE SWITCHBOARD (NEW)
		DRA01	HOT MILL AUXILIARY DRIVE SWITCHBOARD (NEW)
		MCS01	AUXILIARIES MOTORS CONTROL SWITCHBOARD (FUTURE)
		WSU02	MILL ENGINEERINIG HMI WORKSTATION (NEW)
		MP	MILL PULPIT OPERATOR STATION (EXISTING)
		SP	SHEAR PULPIT OPERATOR STATION (EXISTING)
		PANEL_A	PANEL A POWER DISTRIBUTION (EXISTING)
		PANEL_H	PANEL H EDGER ENTRY ROLLS (EXISTING)
		PANEL_K	PANEL K MILL EXIT ROLLS (EXISTING)
		PANEL_L	PANEL L MILL RUNOUT ROLLS (EXISTING)
		PANEL_M	PANEL M SHEAR RUNOUT ROLLS (EXISTING)
		PANEL_P	PANEL P 148" HOT MILL PLC (EXISTING)
		PANEL_T	PANEL T COOLANT PULPIT (EXISTING)
		LOCAL	SHEAR LOCAL DESK (EXISTING)

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	STRUCTURE IDENTIFIER OVERVIEW	Hot Mill drives upgrade - Automation system electrical diagram	=	
				Drawn	TeraWatt					+	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page 5
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow =LAYOUT+PLC01/11

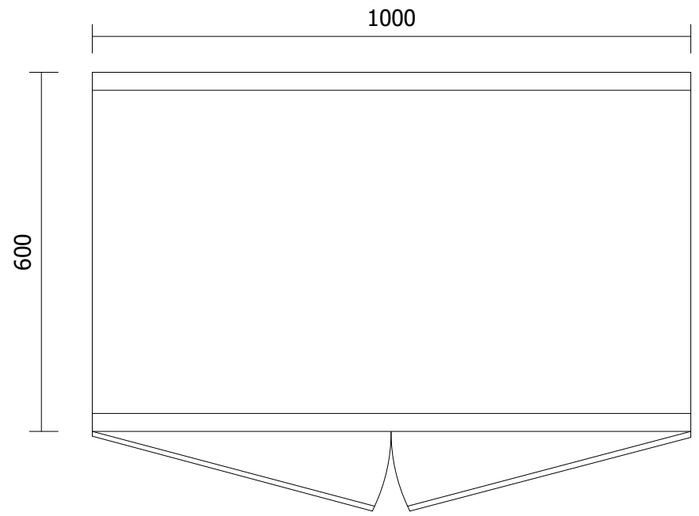


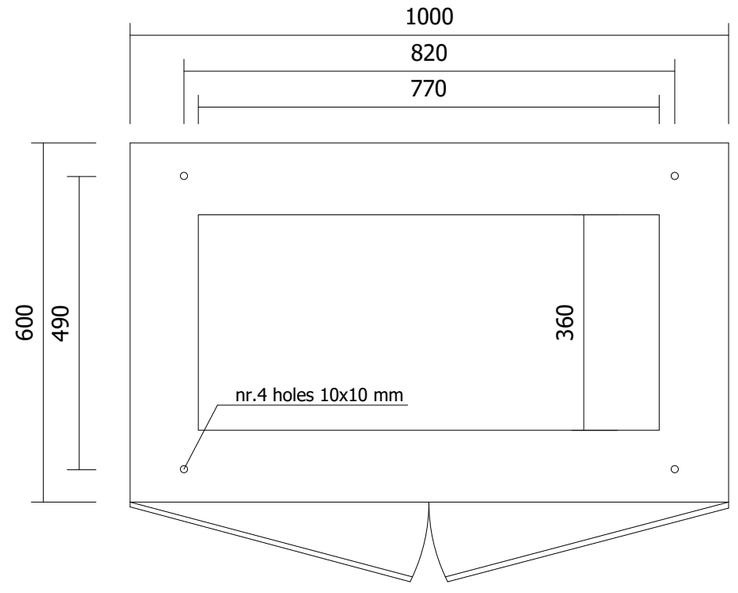
DIMENSIONS	**W1000xH2000+100xD600 mm**
WEIGHT	**NN kg**
TYPE OF INSTALLATION	**ON FLOOR**
POWER LOSSES	**NN W**
PROT. DEGREE EXT./INT.	**IP32** **IP20**
MECHANICAL PROT.	**IK10**
FORM SEPARATIONS	**1**
POLLUTION DEGREE	**3**
SERVICE CONDITIONS	**N.A.**
INSTALL. ENVIRONMENT	**ELECTRICAL ROOM**
ALTITUDE	**0m**
H24 AVS MAX TEMP.	**-**
MIN. TEMPERATURE	**5°C**
MAX TEMPERATURE	**35°C**
MAX HUMIDITY	**70%**
PAINTING	**RAL7035**
LOCK INSERTED	**DOUBLE-BIT** **3mm INSERT**
CARPENTRY MANUF.	**-**
CARPENTRY CODE	**-**

EXTERNAL VIEW



TOP VIEW

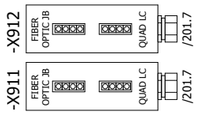


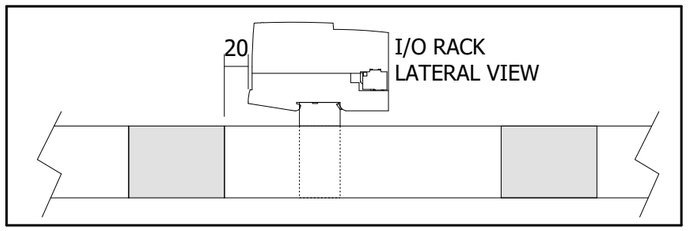


BED PLATE

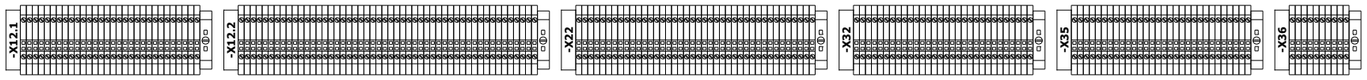
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PLC SWITCHBOARD - EXTERNAL VIEW	Hot Mill drives upgrade - Automation system electrical diagram	= LAYOUT	
				Drawn	TeraWatt					+ **PLC01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **11**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 13

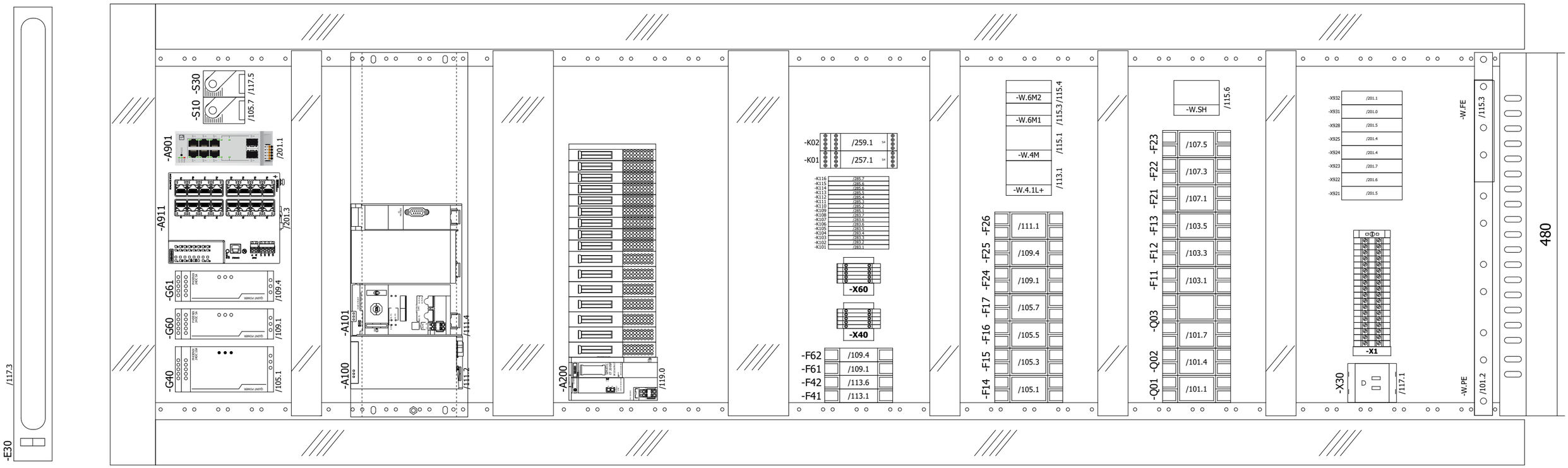
0	1	2	3	4	5	6	7	8	9

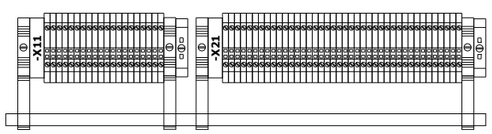




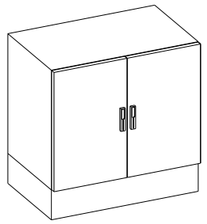
MOUNTED ON DOOR





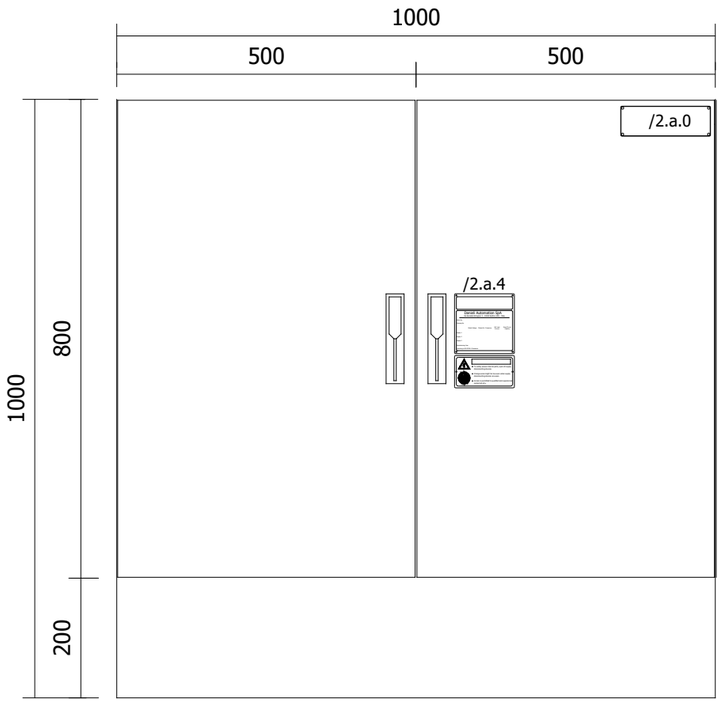


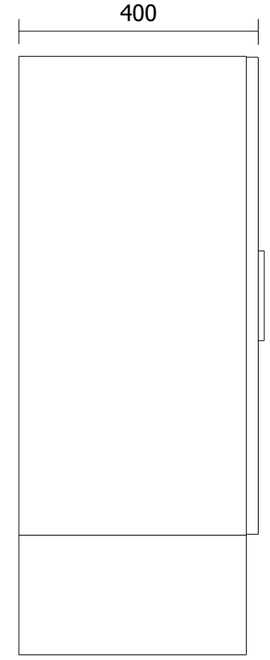
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PLC SWITCHBOARD - INTERNAL VIEW	Hot Mill drives upgrade - Automation system electrical diagram
				Drawn	TeraWatt				= LAYOUT
				Check	DiMaioD				+ **PLC01**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	Job Nr. APC7V9A1 / Dwg.Nr. QPC7V9-MD01-A8100-ED101 / Page **13** / Follow +RIO01/15



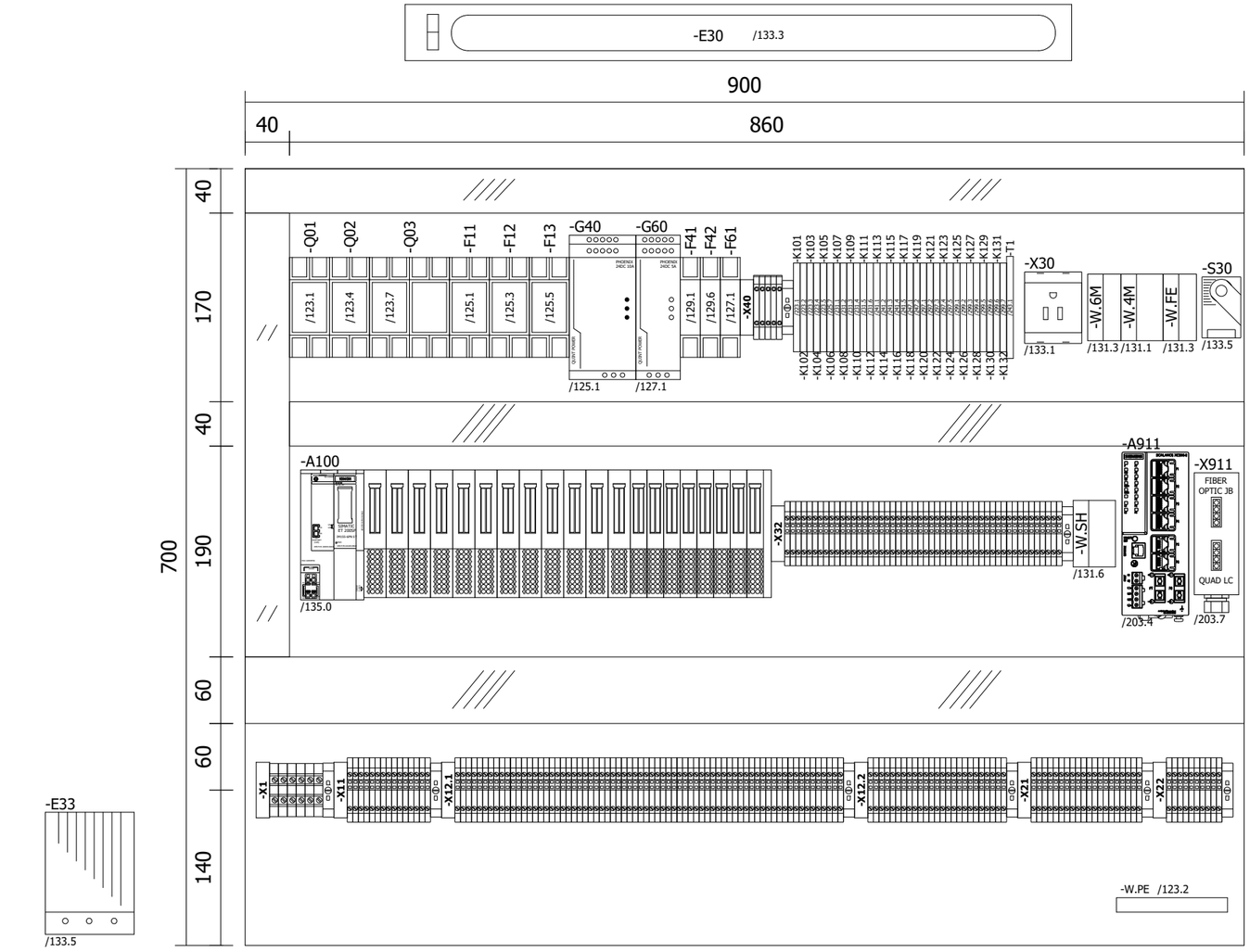
External view

DIMENSIONS	**W1000xH800+200xD400 mm**
WEIGHT	**NN kg**
TYPE OF INSTALLATION	**ON FLOOR**
POWER LOSSES	**NN W**
PROT. DEGREE EXT./INT.	**IP32 IP20**
MECHANICAL PROT.	**IK10**
FORM SEPARATIONS	**1**
POLLUTION DEGREE	**3**
SERVICE CONDITIONS	**N.A.**
INSTALL. ENVIRONMENT	**CONTROL ROOM**
ALTITUDE	**0m**
H24 AVS MAX TEMP.	**-**
MIN. TEMPERATURE	**10°C**
MAX TEMPERATURE	**25°C**
MAX HUMIDITY	**70%**
PAINTING	**RAL7035**
LOCK INSERTED	**DOUBLE-BIT 3mm INSERT**
CARPENTRY MANUF.	**-**
CARPENTRY CODE	**-**



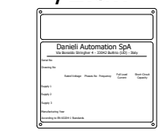


00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	REMOTE I/O SWITCHBOARD - EXTERNAL VIEW	Hot Mill drives upgrade - Automation system electrical diagram = LAYOUT + **RIO01**
				Drawn	TeraWatt				Job Nr. APC7V9A1 / Dwg.Nr. QPC7V9-MD01-A8100-ED101 / Page **15**
				Check	DiMaioD				Follow 17
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	



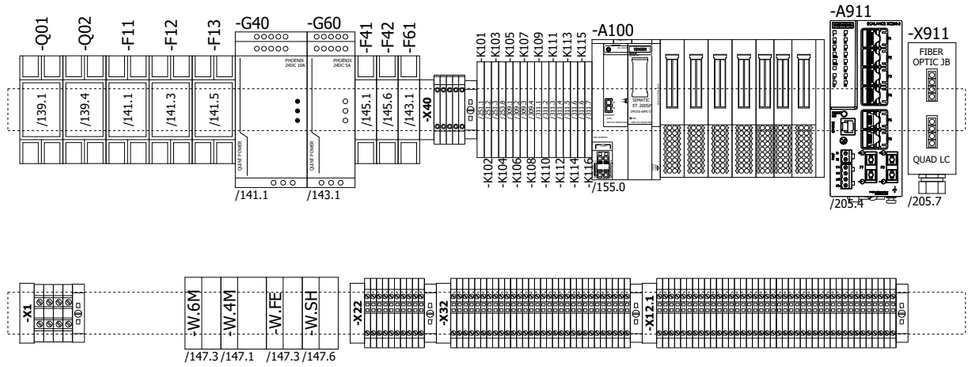
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	REMOTE I/O SWITCHBOARD - INTERNAL VIEW	Hot Mill drives upgrade - Automation system electrical diagram	= LAYOUT		
				Drawn	TeraWatt					+ **RIO01**		
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page	**17**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow	+RIO02/19

/2.a.7

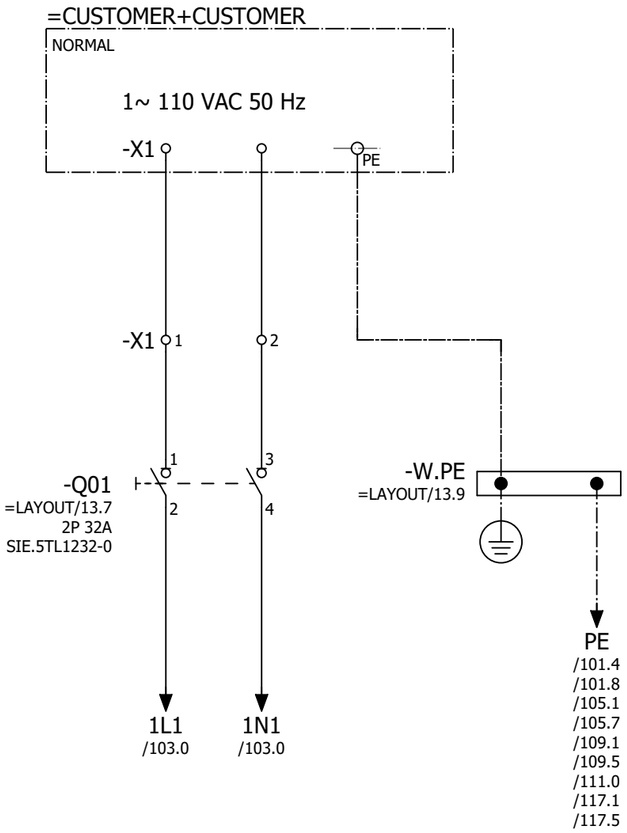


/2.a.0

COMPONENTS TO BE INSTALLED IN EXISTING SHEAR PULPIT

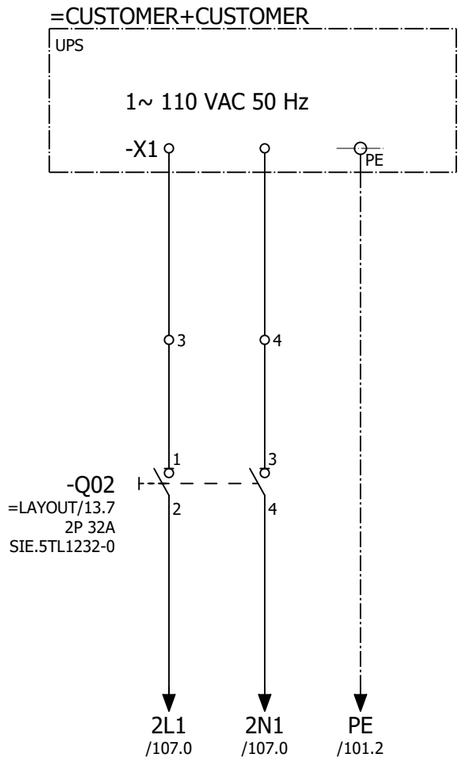


00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	REMOTE I/O PLATE - INTERNAL VIEW	Hot Mill drives upgrade - Automation system electrical diagram	= LAYOUT	
				Drawn	TeraWatt					+ **RIO02**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **19**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow =MD01E10+PLC01/101



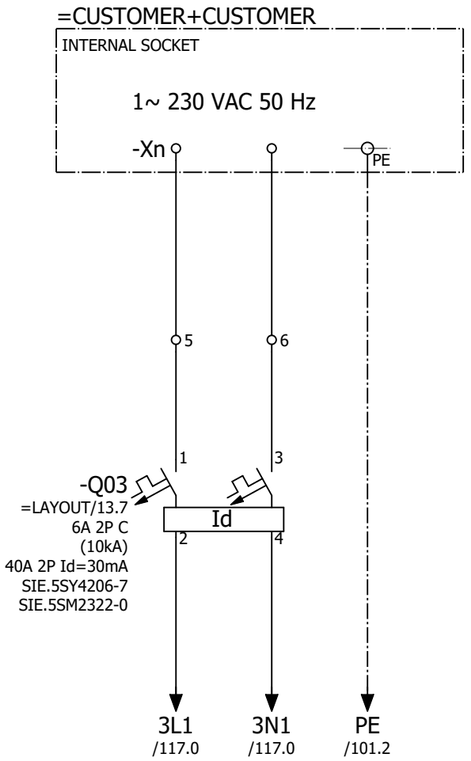
Full load current
12A

MAIN INCOMING LINE



Full load current
5A

UPS INCOMING LINE



Full load current
4A

SERVICE INCOMING LINE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	INCOMING LINE	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **PLC01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **101**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 103

1~ 110VAC 50Hz (MAIN LINE)

101.1 / 1L1
101.1 / 1N1

1L1 / 105.0
1N1 / 105.0

-F11
=LAYOUT/13.7
16A 2P C
(10kA)
SIE.5SY4216-7

-F12
=LAYOUT/13.7
16A 2P C
(10kA)
SIE.5SY4216-7

-F13
=LAYOUT/13.7
10A 2P C
(10kA)
SIE.5SY4210-7

PE

-X1 7 8 9 10 11 12

=MD01E10+RIO01
MILL PULPIT
OPERATOR STATION
REMOTE I/O SWITCHBOARD
1L1M
+RIO01/123.1
1N1M
+RIO01/123.1

=MD01E10+RIO02
SHEAR OPERATOR STATION
REMOTE I/O PLATE
1L1M
+RIO02/139.1
1N1M
+RIO02/139.1

AVAILABLE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MAIN POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **PLC01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **103**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 105

1~ 110VAC 50Hz (MAIN LINE)

103.9 / 1L1
103.9 / 1N1

-F14
=LAYOUT/13.6
10A 2P C
(10kA)
SIE.5SY4210-7

-F15
=LAYOUT/13.6
10A 2P C
(10kA)
SIE.5SY4210-7

-F16
=LAYOUT/13.6
10A 2P C
(10kA)
SIE.5SY4210-7

-F17
=LAYOUT/13.6
4A 2P C
(10kA)
SIE.5SY4204-7

/101.2
PE

-G40
=LAYOUT/13.1
POWER SUPPLY UNIT
100-240VAC 24VDC/10A
QUINT4-PS/1AC/24DC/10
2904601
POWER USAGE 50%

-S10
=LAYOUT/13.1
0...+60°C 1NO
STE.KTS 011

4L+
/113.0

4M
/115.1

1L1.1
/119.1

1N1.1
/119.2

1L1.2
+SPARES/283.0

1N1.2
+SPARES/283.0

-E10
=LAYOUT/11.3
115V 50-60Hz
TEX.FAN25CN0B

PE
/101.2

24VDC
POWER SUPPLY

RACK -A200
110VAC
POWER SUPPLY

LOCAL CONTROL STATIONS
110VAC
POWER SUPPLY

CABINET FAN

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **PLC01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **105**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 107

1~ 110VAC 50Hz (UPS LINE)

101.4 / 2L1
101.4 / 2N1

2L1 / 109.0
2N1 / 109.0

-F21
=LAYOUT/13.7
10A 2P C
(10kA)
SIE.5SY4210-7

-F22
=LAYOUT/13.7
10A 2P C
(10kA)
SIE.5SY4210-7

-F23
=LAYOUT/13.7
6A 2P C
(10kA)
SIE.5SY4206-7

PE

-X1 13 14 15 16 17 18

=MD01E10+RIO01
MILL PULPIT
OPERATOR STATION
REMOTE I/O SWITCHBOARD
2L1M
+RIO01/123.4
2N1M
+RIO01/123.4

=MD01E10+RIO02
SHEAR OPERATOR STATION
REMOTE I/O PLATE
2L1M
+RIO02/139.4
2N1M
+RIO02/139.4

AVAILABLE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	UPS POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **PLC01**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **107** Follow 109

1~ 110VAC 50Hz (UPS LINE)

107.9 / 2L1
107.9 / 2N1

2L1 / 111.0
2N1 / 111.0

-F24
=LAYOUT/13.6
6A 2P C
(10kA)
SIE.5SY4206-7

/101.2
PE

-G60
=LAYOUT/13.1
POWER SUPPLY UNIT
100-240VAC 24VDC/5A
QUINT4-PS/1AC/24DC/5
2904600
POWER USAGE 50%

6M1
/115.3

-F61
=LAYOUT/13.5
4A 1P C
(10kA)
SIE.5SY4104-7

6.1L+
/119.0
+NET/201.2
+NET/201.3

-F25
=LAYOUT/13.6
6A 2P C
(10kA)
SIE.5SY4206-7

101.2
PE

-G61
=LAYOUT/13.1
POWER SUPPLY UNIT
100-240VAC 24VDC/5A
QUINT4-PS/1AC/24DC/5
2904600
POWER USAGE 25%

6M2
/115.4

-F62
=LAYOUT/13.5
4A 1P C
(10kA)
SIE.5SY4104-7

-X60
1A 1A 1A 1A 1A

+EMG/257.0 / 6.2.1L+

+EMG/259.0 / 6.2.2L+

NETWORK DEVICES
POWER SUPPLY

SAFETY DEVICES
POWER SUPPLY

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	UPS POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **PLC01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **109**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 111

1~ 110VAC 50Hz (UPS LINE)

109.9 / 2L1

109.9 / 2N1

-F26
=LAYOUT/13.6
4A 2P C
(10kA)
SIE.5SY4204-7

1 2 3 4

=LAYOUT/13.2
-A100

PS 60W 120/230V AC/DC
6ES7507-0RA00-0AB0

PS 1507
6ES7507-0RA00-0AB0

+NET/201.0
=LAYOUT/13.2
-A101

MD011F1

CPU 1518F-4PN/DP
6ES7518-4FP00-0AB0

X50
MC
PUSH

SIE.6ES7954-8LL04-0AA0

RUN
STOP
MRES

X2 P1
X3 P1
X1 P1 LINK
X1 P2 TX/RX

MAC ADD4
MAC ADD1
MAC ADD6

X80
DC24V
1L+
2L+
1M
2M

PROFINET
(LAN)
X2 P1
X3 P1
PROFIsafe
X1 P1 R
X1 P2 R

X4
PROFIBUS

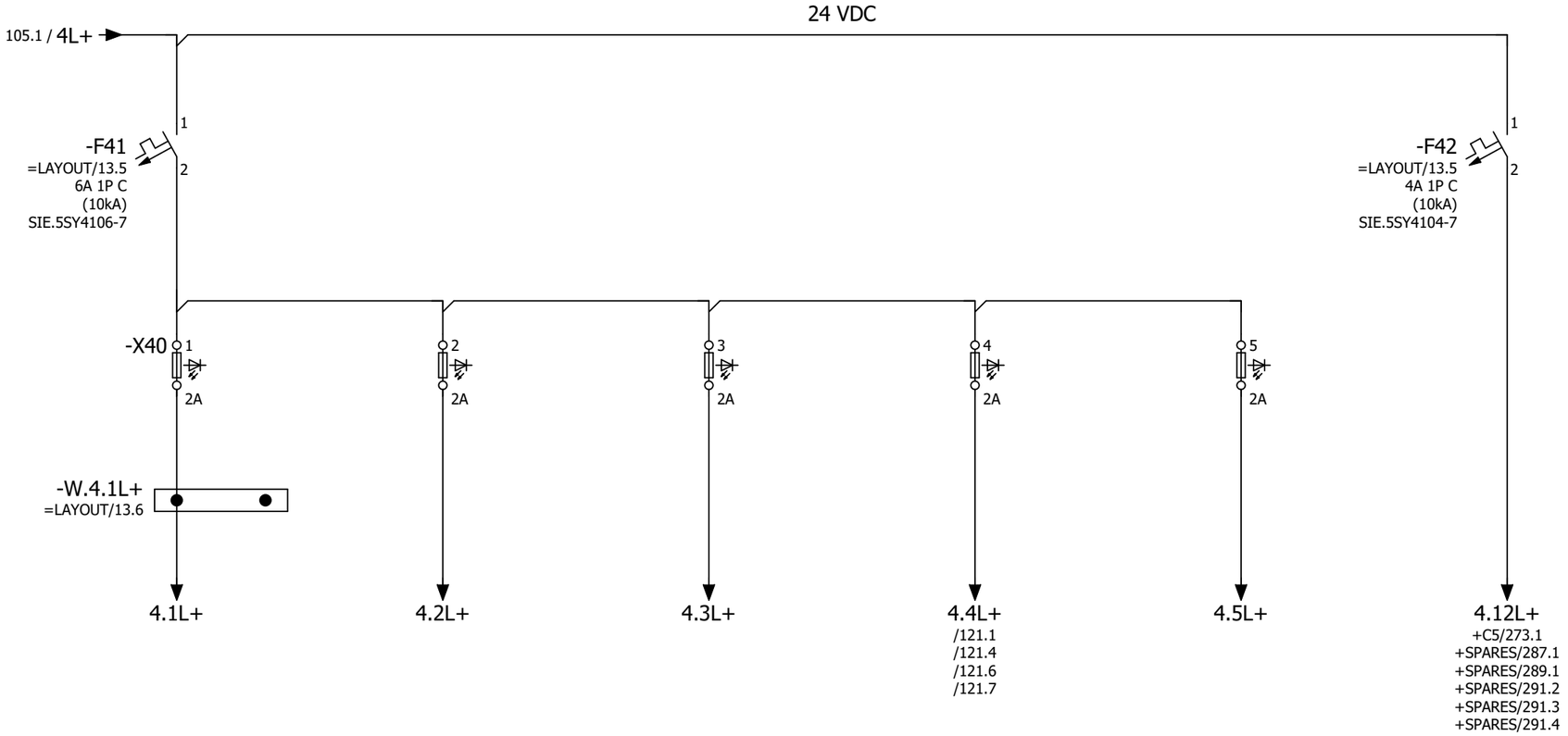
X80

-X80 1 2 3
L N PE

1 2 3 4
1L+ 1M 2M 2L+

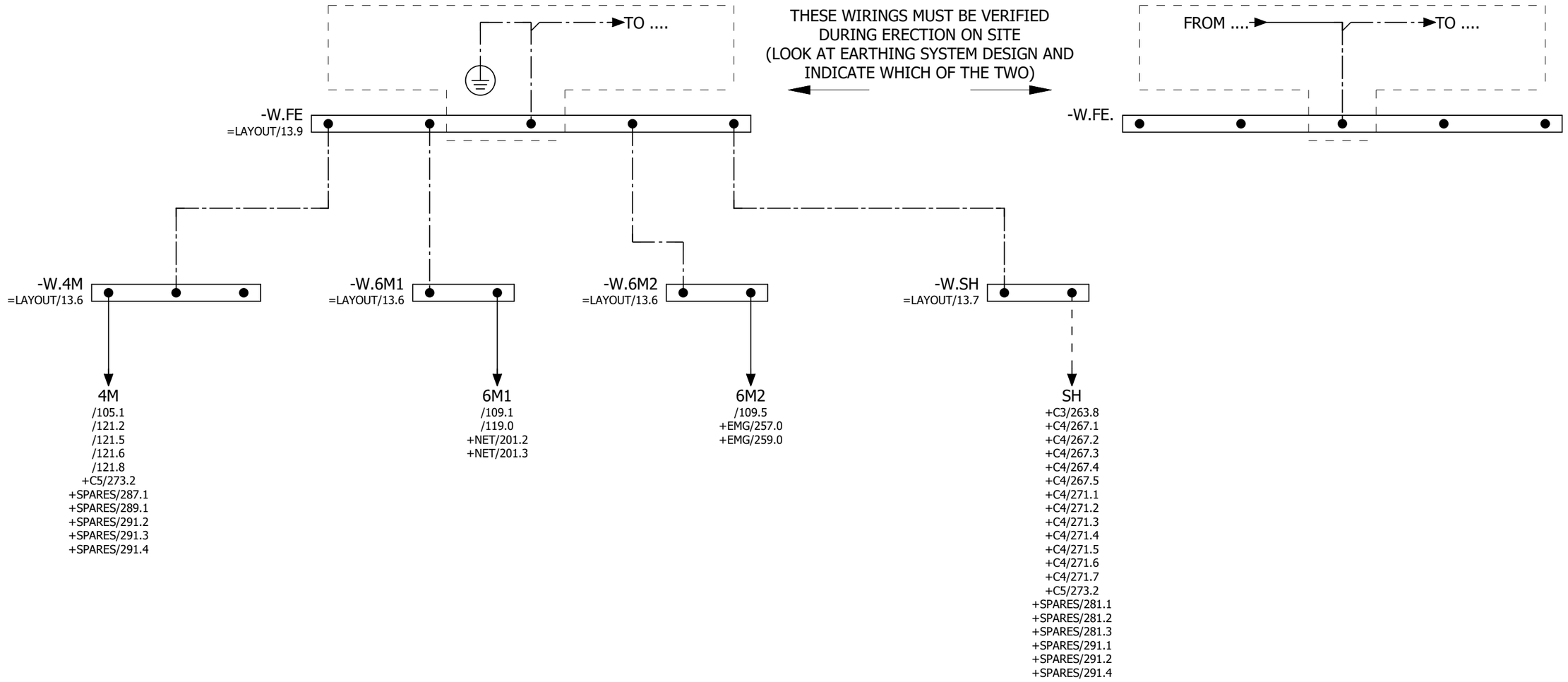
101.2 / PE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	CPU POWER SUPPLY	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **PLC01**	
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **111**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 113



INTERNAL CIRCUITS POWER SUPPLY	INTERNAL EMERGENCY CIRCUITS POWER SUPPLY	AVAILABLE	RACK -A200 POWER SUPPLY	AVAILABLE	FIELD DEVICES POWER SUPPLY

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	24VDC POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **PLC01**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **113**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 115



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	0V DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **PLC01**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **115**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 117

2~ 110VAC 50Hz (SERVICE LINE)

101.7 / 3L1
101.7 / 3N1

-E30
=LAYOUT/13.0
5W 100-240V 50/60Hz
STE.02540.3-11

-S30
=LAYOUT/13.1
-10...+50°C 1NC
STE.KTO 011-UL

/101.2
PE

-X30
=LAYOUT/13.8

/101.2
PE

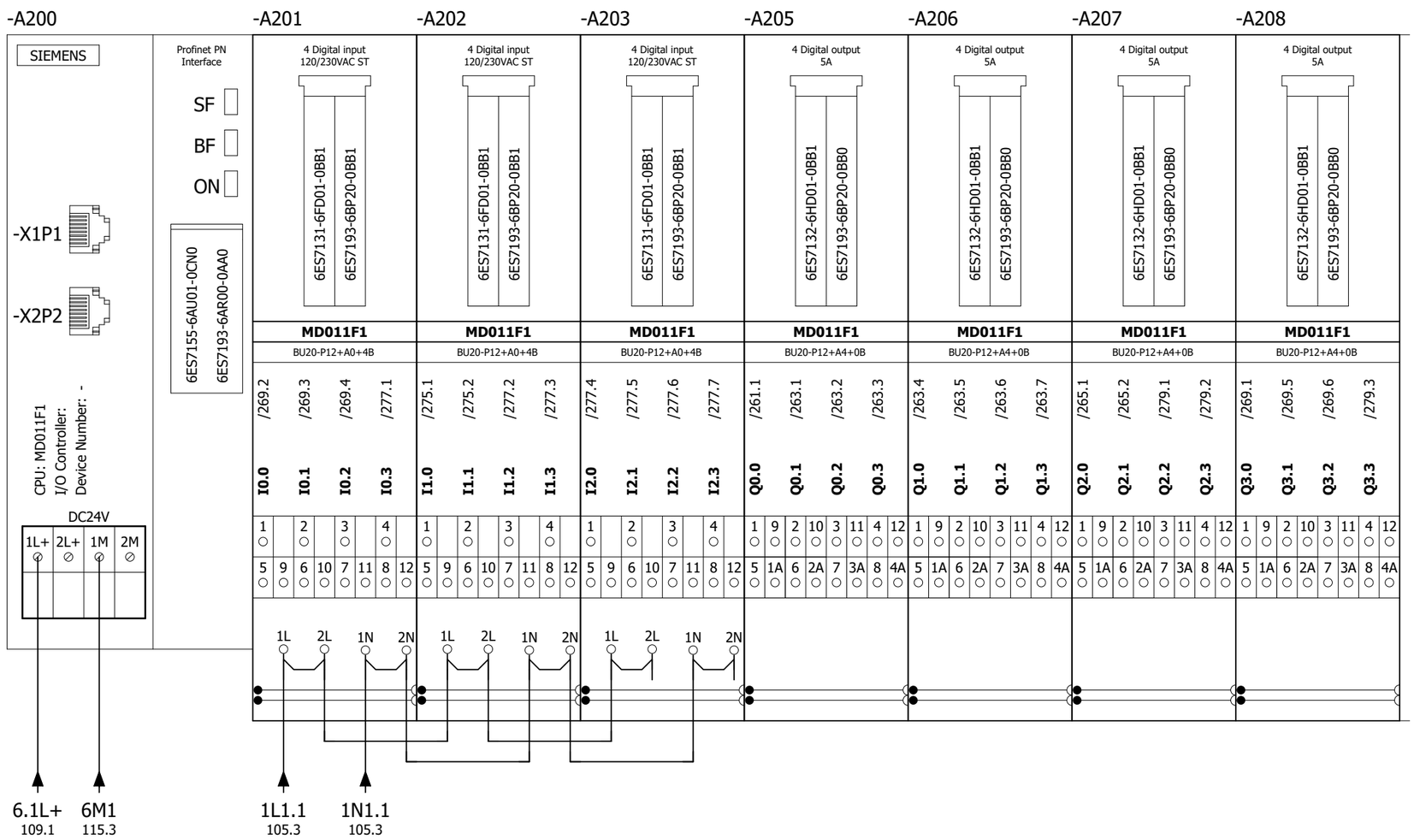
-E33
=LAYOUT/13.8
100W 120-240V AC/DC
STE.HG 140 100W

SOCKET

INTERNAL LIGHTING

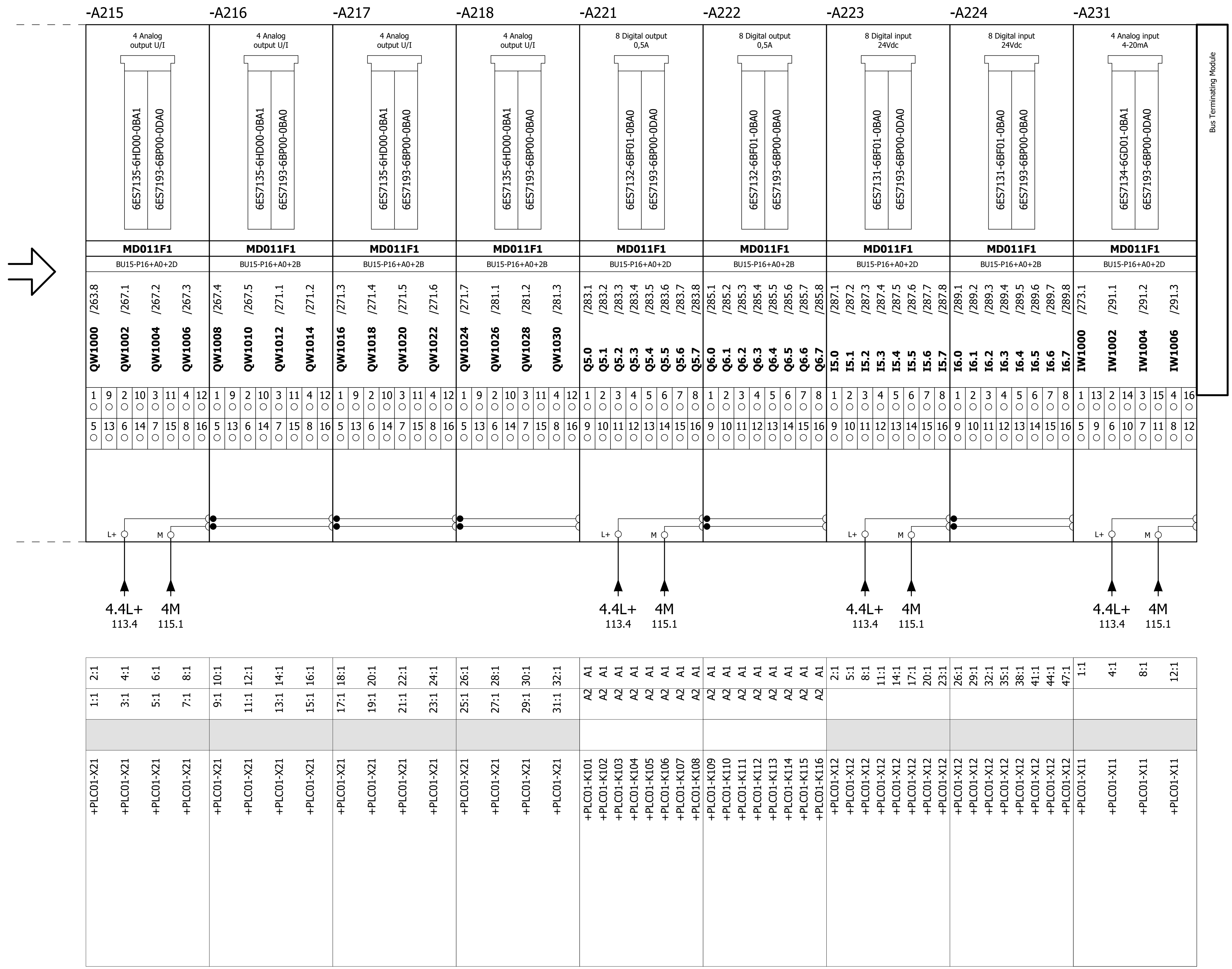
SPACE HEATER

0	1	2	3	4	5	6	7	8	9



1:1	3:1	5:1	11:1	7:1	9:1	13:1	15:1	17:1	19:1	21:1	23:1	2:1	4:1	6:1	8:1	10:1	12:1	14:1	16:1	18:1	20:1	28:1	30:1	22:1	24:1	26:1	32:1				
2:1	4:1	6:1	12:1	8:1	10:1	14:1	16:1	18:1	20:1	22:1	24:1	1:1	3:1	5:1	7:1	9:1	11:1	13:1	15:1	17:1	19:1	27:1	29:1	21:1	23:1	25:1	31:1				
+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X12	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22	+PLC01-X22				

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	CARDS ARRANGEMENT RACK	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **PLC01**
				Check	DiMaioD				Job Nr.	Dwg.Nr. / Page
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101 / **119** / Follow 121



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024
				Drawn	TeraWatt
				Check	DiMaioD
Rev.	Descript.	Date	Name	Original	

ARCONIC — Replaced by

DANIELI AUTOMATION — Replaced by

CARDS ARRANGEMENT RACK

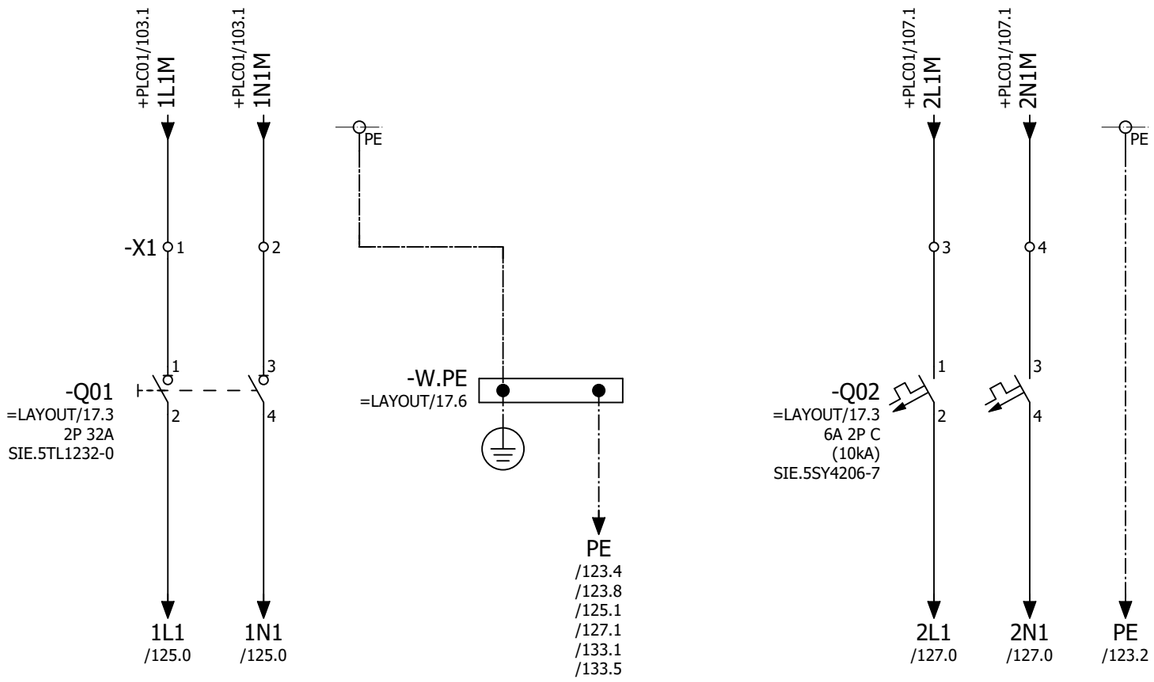
Descript.

Hot Mill drives upgrade - Automation system electrical diagram

= MD01E10

+ **PLC01**

Job Nr.	Dwg.Nr.	Page	**121**
APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow	+RIO01/123

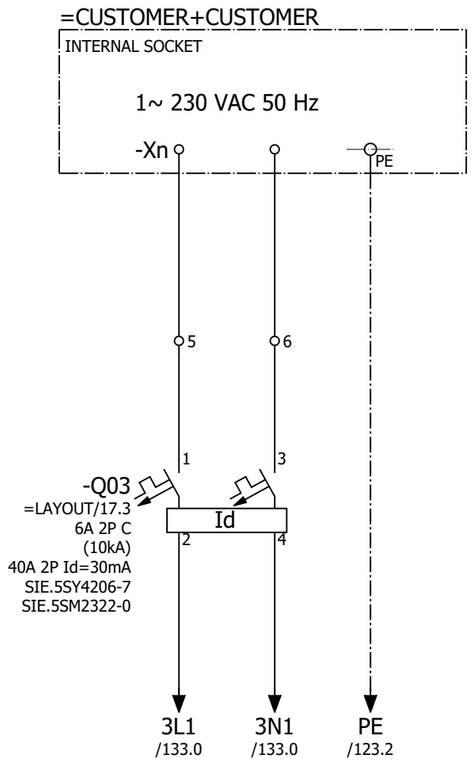


Full load current
4A

MAIN INCOMING
LINE

Full load current
1A

UPS INCOMING LINE



Full load current
4A

SERVICE INCOMING
LINE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	INCOMING LINE	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **RIO01**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **123**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 125

1~ 110VAC 50Hz (MAIN LINE)

123.1 / 1L1
123.1 / 1N1

-F11
=LAYOUT/17.4
10A 2P C
(10kA)
SIE.5SY4210-7

-F12
=LAYOUT/17.4
10A 2P C
(10kA)
SIE.5SY4210-7

-F13
=LAYOUT/17.4
4A 2P C
(10kA)
SIE.5SY4204-7

/123.2
PE

-G40
=LAYOUT/17.4
POWER SUPPLY UNIT
100-240VAC 24VDC/10A
QUINT4-PS/1AC/24DC/10
2904601
POWER USAGE 50%

4L+
/129.0

4M
/131.1

1L1.1
/135.1

1N1.1
/135.2

1L1.2
+MP→F/223.0
+MP→D/231.0
+SPARES/299.0

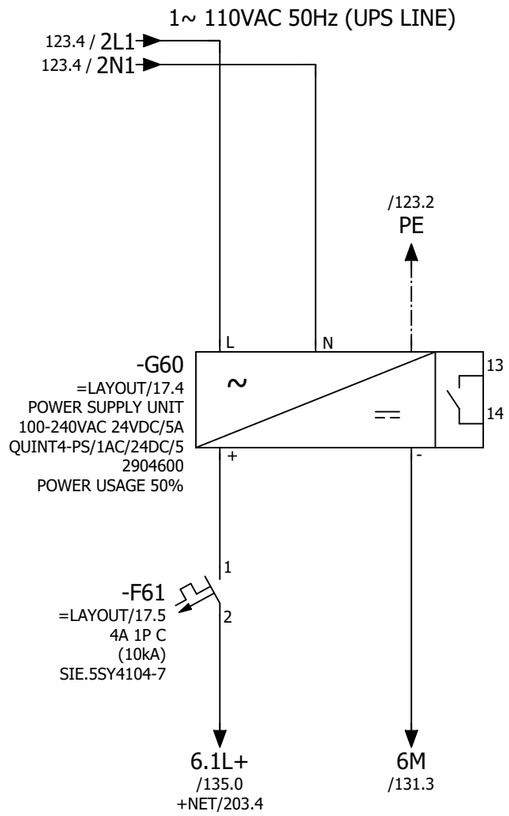
1N1.2
+MP→F/223.0
+MP→D/231.0
+SPARES/299.0

24VDC
POWER SUPPLY

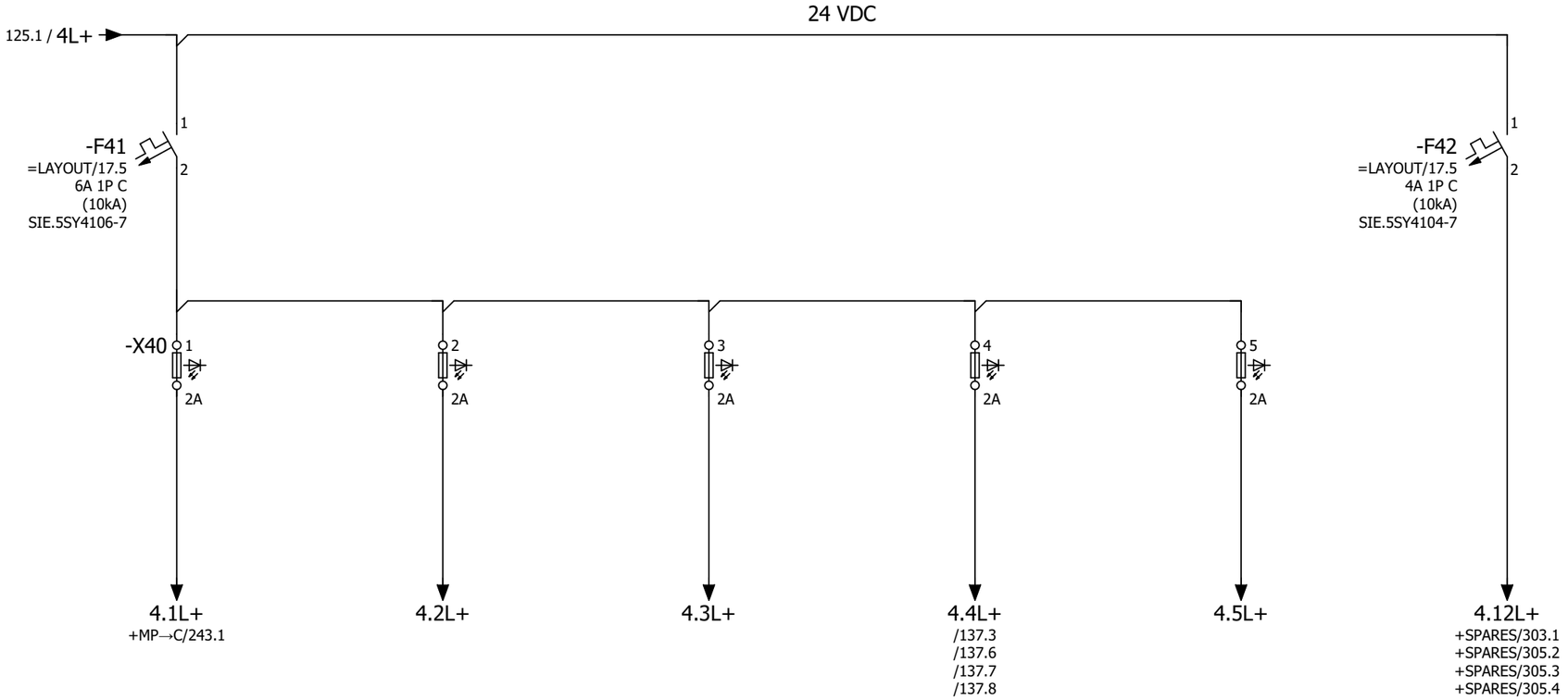
RACK -A100
110VAC
POWER SUPPLY

LOCAL CONTROL STATIONS
110VAC
POWER SUPPLY

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **RIO01**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **125**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 127

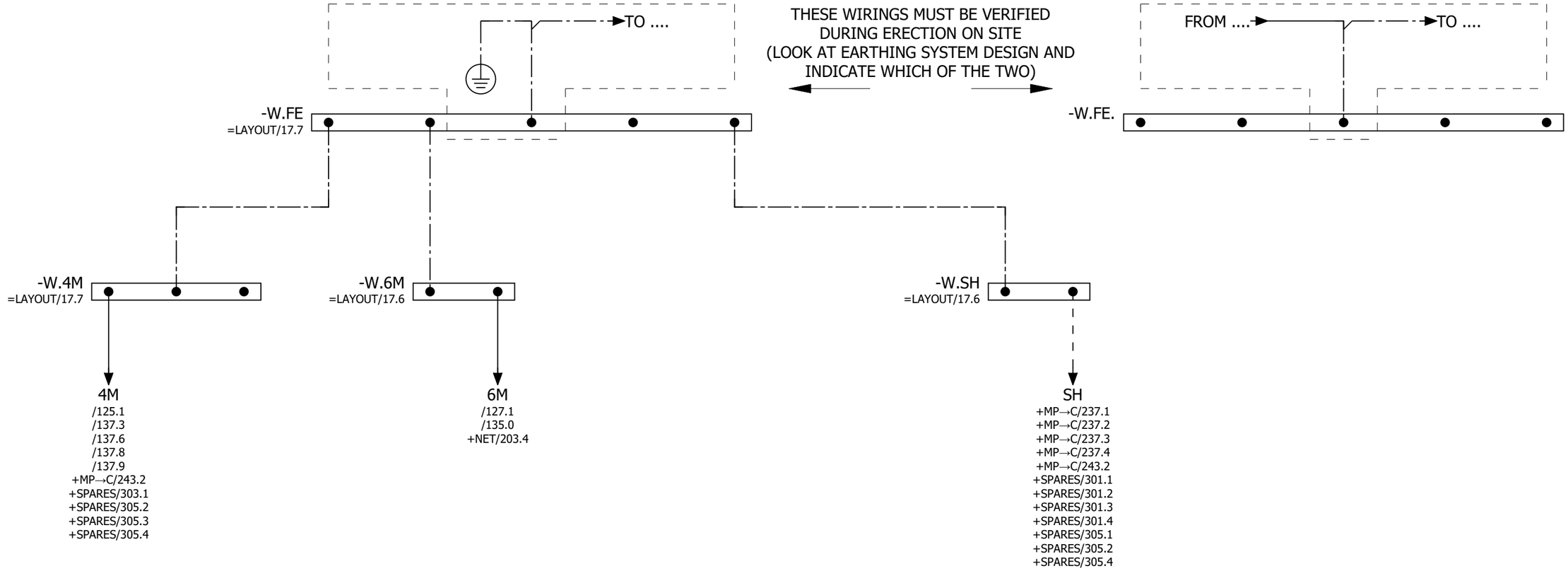


NETWORK DEVICES
POWER SUPPLY



INTERNAL CIRCUITS POWER SUPPLY | INTERNAL EMERGENCY CIRCUITS POWER SUPPLY | AVAILABLE | RACK -A100 POWER SUPPLY | AVAILABLE | FIELD DEVICES POWER SUPPLY

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	24VDC POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **RIO01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **129**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 131



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	0V DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **RIO01**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **131**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 133

2~ 110VAC 50Hz (SERVICE LINE)

123.7 / 3L1
123.7 / 3N1

-E30
=LAYOUT/17.3
5W 100-240V 50/60Hz
STE.02540.3-11

-S30
=LAYOUT/17.7
-10...+50°C 1NC
STE.KTO 011-UL

-E33
=LAYOUT/17.2
100W 120-240V AC/DC
STE.HG 140 100W

/123.2
PE

-X30
=LAYOUT/17.6

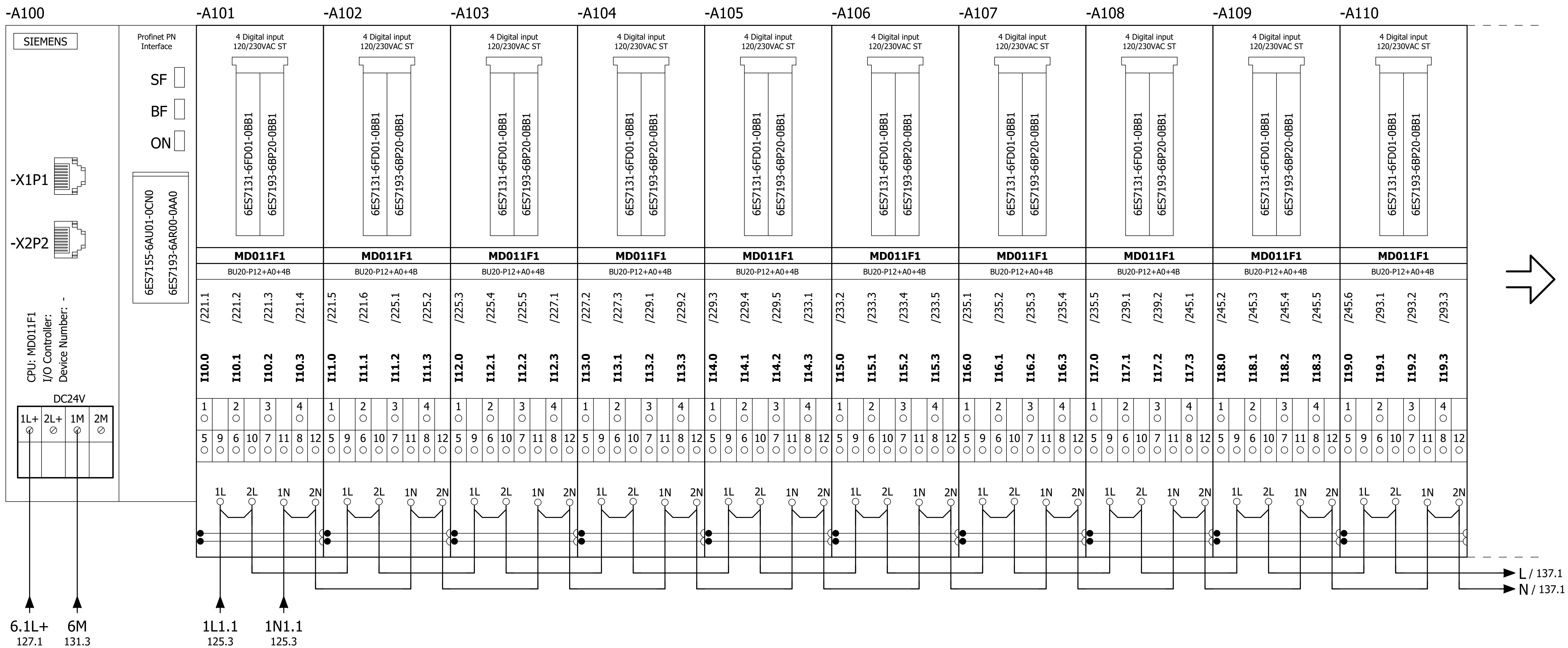
SOCKET

INTERNAL LIGHTING

SPACE HEATER

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SERVICE LINE POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **RIO01**	
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **133**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 135

0	1	2	3	4	5	6	7	8	9



1:1	3:1	5:1	6:1	7:1	8:1	10:1	12:1	13:1	14:1	15:1	17:1	18:1	20:1	22:1	23:1	24:1	25:1	26:1	28:1
2:1	4:1				9:1	11:1				16:1		19:1	21:1					27:1	29:1
+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12

30:1	31:1	32:1	33:1	34:1	35:1	36:1	37:1	38:1	40:1	41:1	43:1	44:1	46:1	48:1	50:1	52:1	54:1	56:1	58:1
								39:1		42:1		45:1	47:1	49:1	51:1	53:1	55:1	57:1	59:1
+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12	+RIO01-X12

Rev.	Descript.	Date	Name		
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024
				Drawn	TeraWatt
				Check	DiMaioD
				Original	

ARCONIC — Replaced by

DANIELI AUTOMATION — Replaced by

Descript.: CARDS ARRANGEMENT RACK

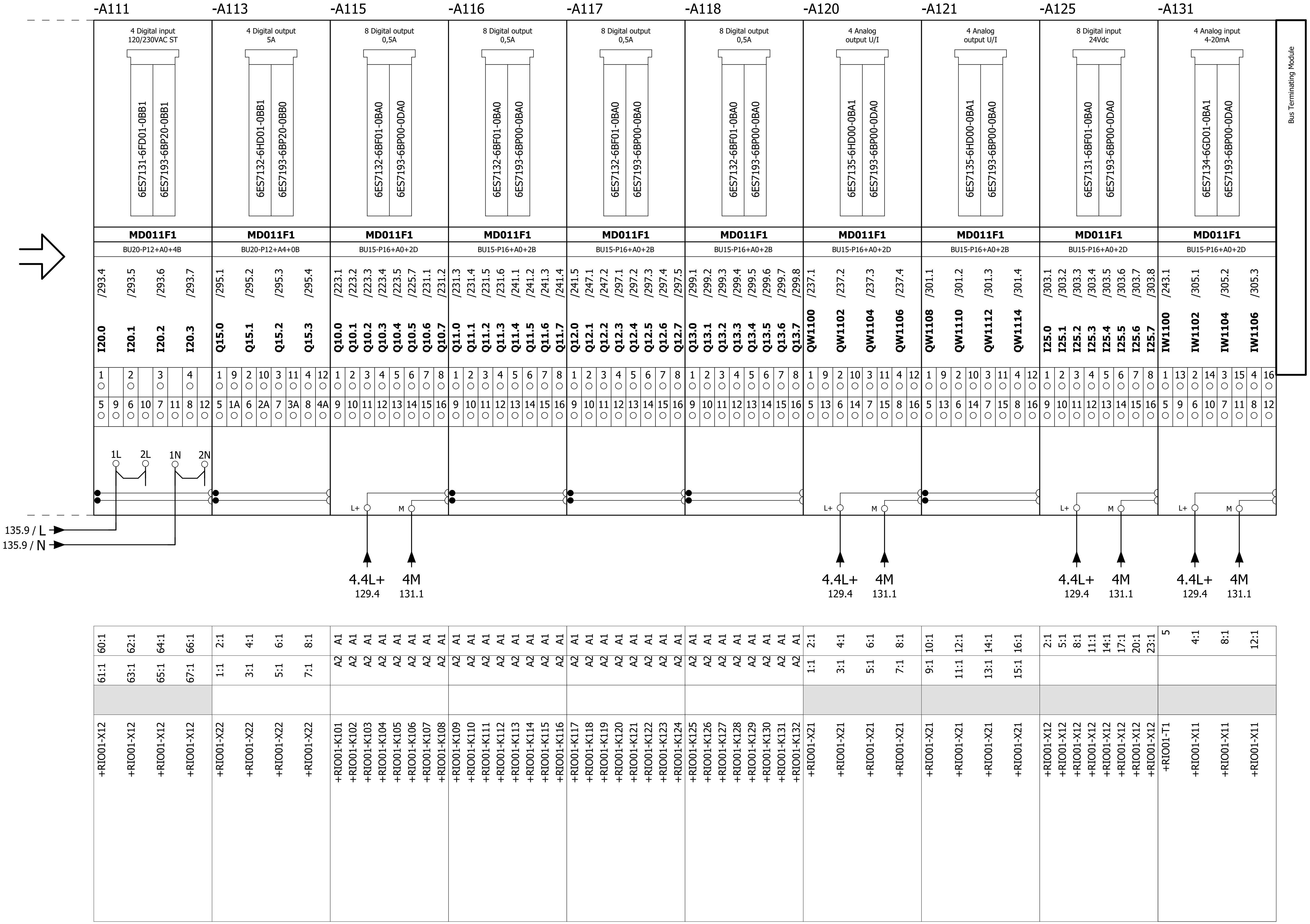
Hot Mill drives upgrade - Automation system electrical diagram

= MD01E10

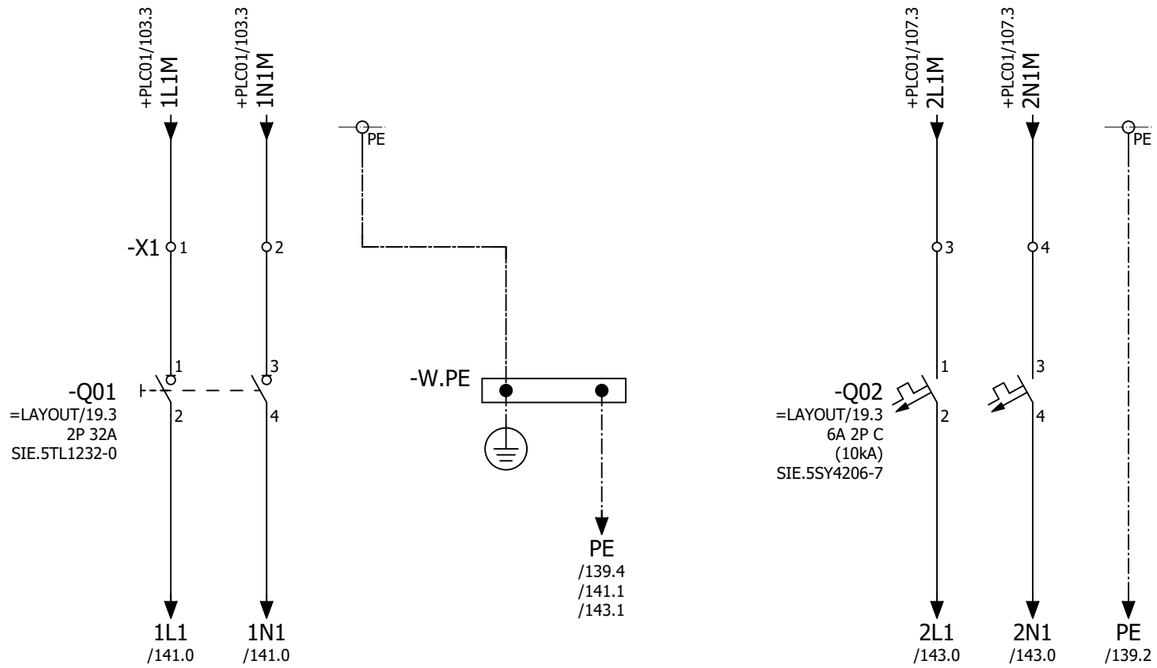
+ **RIO01**

Job Nr.	Dwg.Nr.	Page	Follow
APC7V9A1	QPC7V9-MD01-A8100-ED101	**135**	137

0	1	2	3	4	5	6	7	8	9



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	CARDS ARRANGEMENT RACK	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **RIO01**
				Check	DiMaioD				Job Nr. APC7V9A1 / Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **137**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Follow +RIO02/139



Full load current
4A

Full load current
1A

MAIN INCOMING LINE

UPS INCOMING LINE

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	INCOMING LINE	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **RIO02**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **139**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 141

1~ 110VAC 50Hz (MAIN LINE)

139.1 / 1L1
139.1 / 1N1

-F11
=LAYOUT/19.3
10A 2P C
(10kA)
SIE.5SY4210-7

-F12
=LAYOUT/19.4
10A 2P C
(10kA)
SIE.5SY4210-7

-F13
=LAYOUT/19.4
4A 2P C
(10kA)
SIE.5SY4204-7

/139.2
PE

-G40
=LAYOUT/19.4
POWER SUPPLY UNIT
100-240VAC 24VDC/10A
QUINT4-PS/1AC/24DC/10
2904601
POWER USAGE 50%

4L+
/145.0

4M
/147.1

1L1.1
/155.1

1N1.1
/155.2

1L1.2
+SP→C/251.0
+SP→C/253.8
+SPARES/309.0

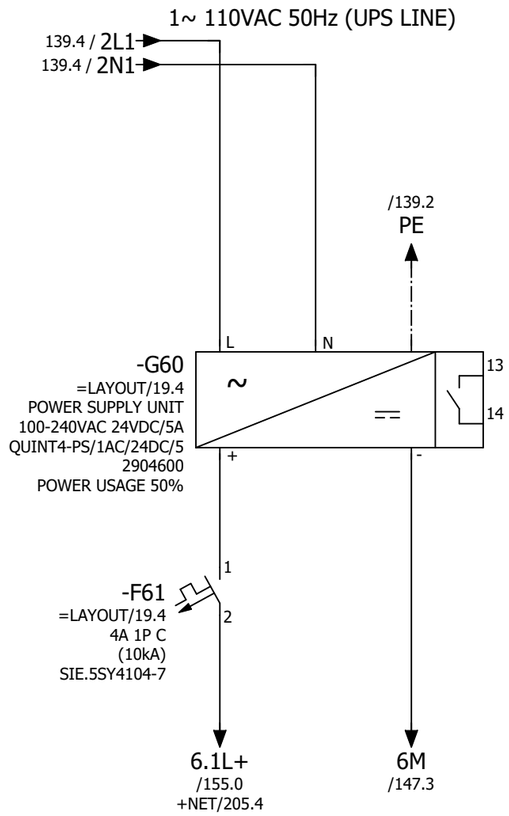
1N1.2
+SP→C/251.0
+SPARES/309.0

24VDC
POWER SUPPLY

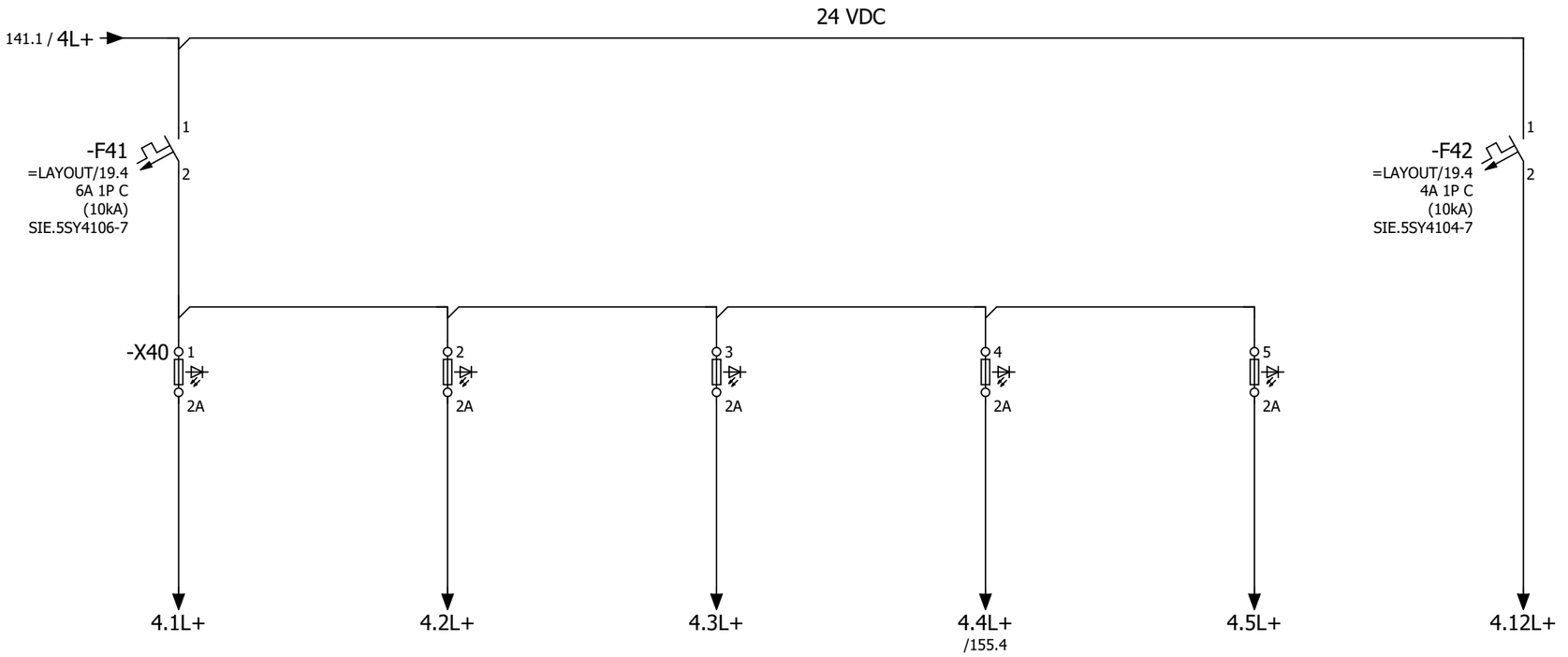
RACK -A100
110VAC
POWER SUPPLY

LOCAL CONTROL STATIONS
110VAC
POWER SUPPLY

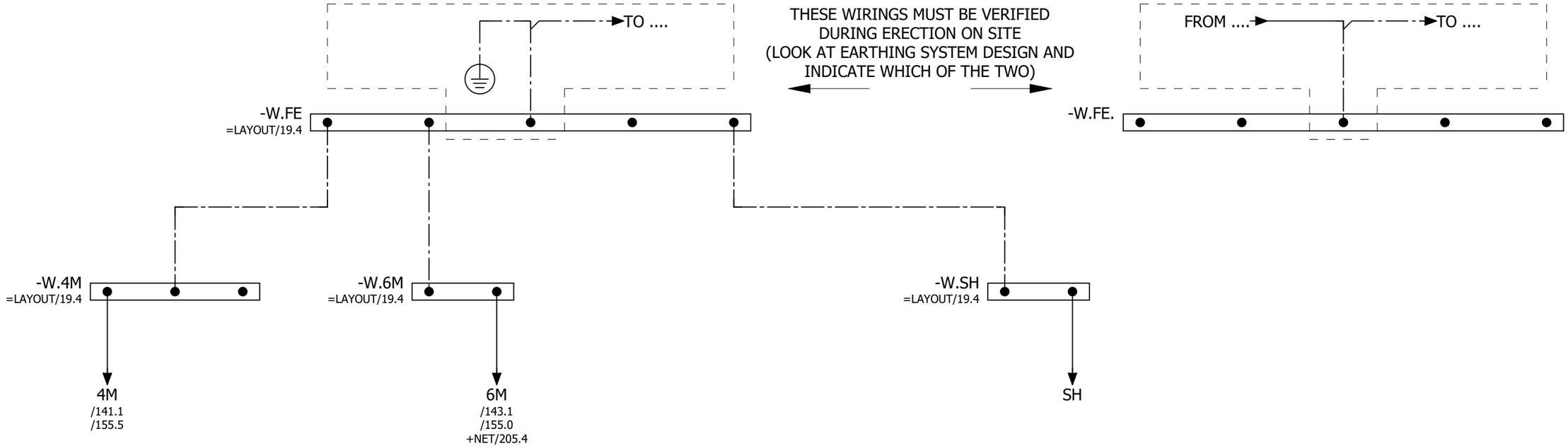
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	POWER SUPPLY DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **RIO02**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **141** / Follow 143



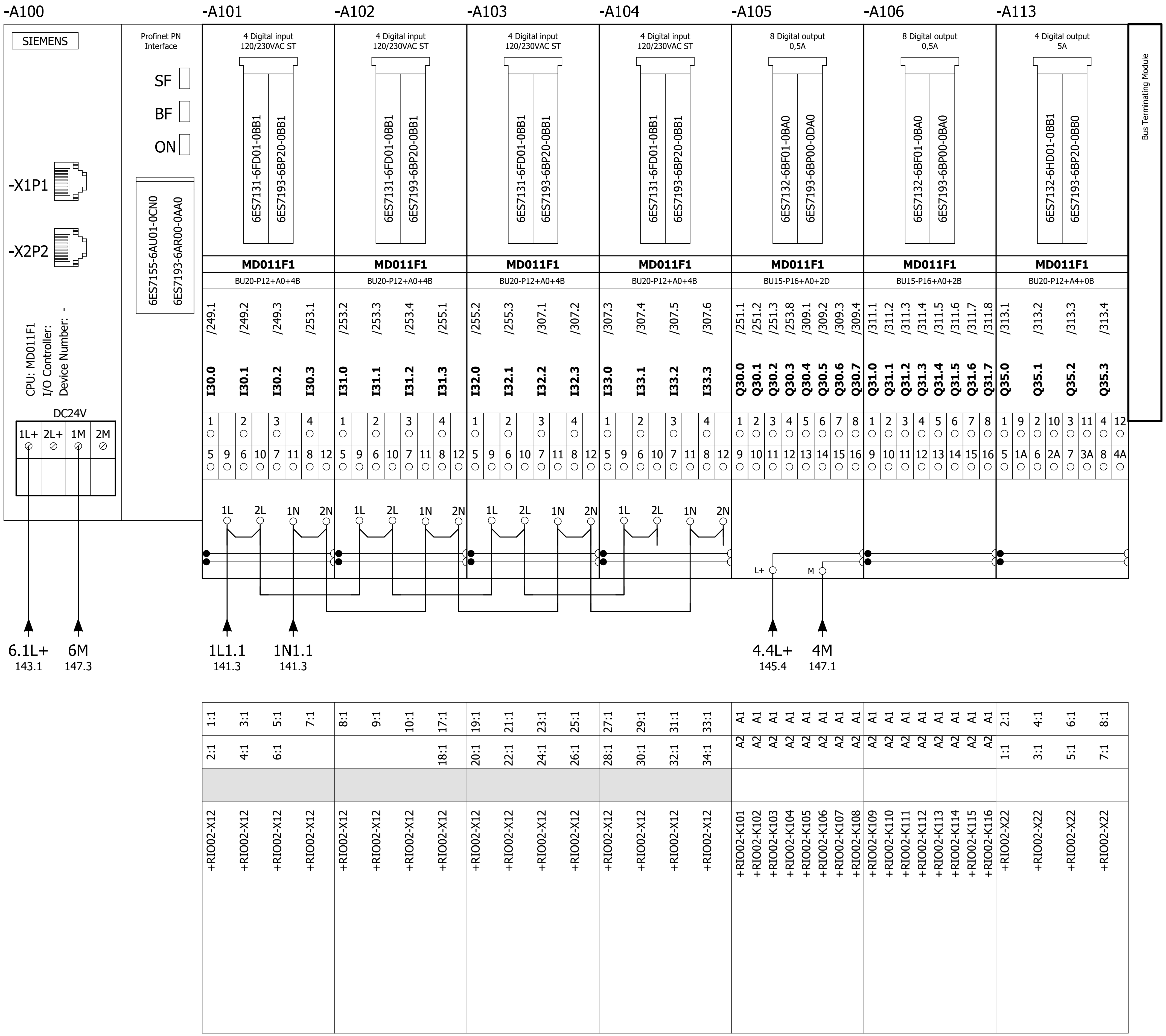
NETWORK DEVICES
POWER SUPPLY



INTERNAL CIRCUITS POWER SUPPLY	INTERNAL EMERGENCY CIRCUITS POWER SUPPLY	AVAILABLE
RACK -A100 POWER SUPPLY	AVAILABLE	FIELD DEVICES POWER SUPPLY



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	0V DISTRIBUTION	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **RIO02**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **147**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 155



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024
				Drawn	TeraWatt
				Check	DiMaioD
Rev.	Descript.	Date	Name	Original	

ARCONIC — Replaced by

DANIELI AUTOMATION — Replaced by

CARDS ARRANGEMENT RACK

Descript.

Hot Mill drives upgrade - Automation system electrical diagram

= MD01E10

+ **RIO02**

Job Nr.	Dwg.Nr.	Page	155
APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow	+NET/201

0	1	2	3	4	5	6	7	8	9

+PLC01/111.4
+PLC01-A101
6ES7518-4FP00-0AB0 MD011F1
CPU 1518F-4PN/DP
X2P1 X3P1 X1P1 R X1P2 R X4

+PLC01/119.0
+PLC01-A200
6ES7155-6AU01-0CN0 MD011F1
IM 155-5 INTERFACE MODULE
P1 P2

=MD01E10+DRM02-X921
SHEARS & EDGER MAIN DRIVE SWITCHBOARD

=MD01E10+DRM04-X921
MILL MOTOR #2 FIELD EXCITATION MAIN DRIVE SWITCHBOARD

=MD01E10+DRM03-X921
MILL MOTOR #1 FIELD EXCITATION MAIN DRIVE SWITCHBOARD

+PLC01 -X921 =LAYOUT+PLC01/13.8 OUT
+PLC01 -X922 =LAYOUT+PLC01/13.8 OUT
+PLC01 -X923 =LAYOUT+PLC01/13.8 OUT IN

=LAYOUT+PLC01/13.1
+PLC01-A901
FL SWITCH 2306-2SFP
XF1 XF2 XF3 XF4 XF5 XF6 XF7 XF8 SFP1 SFP1
XD1 US1 GND1 US2 GND2 1 2 3 4

=LAYOUT+PLC01/13.1
+PLC01-A911
F1 F2
P1 C P2 C P3 C P4 C P5 P6 P7 P8
6GK5216-4BS00-2AC2 SWITCH SCALANCE XC216-4C
L1+ M1 L2+ M2
P9 P10 P11 P12 P13 P14 P15 P16
P1 P2 P3 P4 BFOC BFOC BFOC BFOC

+PLC01 -X931 =LAYOUT+PLC01/13.8 IN OUT
+PLC01 -X932 =LAYOUT+PLC01/13.8 IN OUT
=MD01E10+WSU02-A01
MILL ENGINEERING HMI WORKSTATION
CUSTOMER
EXISTING SWITCH

+PLC01/109.1 +PLC01-6.1L+
+PLC01/115.3 +PLC01-6M1
+PLC01/109.1 /1+PLC01-6.1L+
+PLC01/115.3 /+PLC01-6M1

+PLC01 -X924 =LAYOUT+PLC01/13.8 IN OUT
=MD01E10+DRA01-X921
HOT MILL AUXILIARY DRIVE SWITCHBOARD

+PLC01 -X925 =LAYOUT+PLC01/13.8 IN OUT
=MD01E10+MCS01-X921
AUXILIARIES MOTORS CONTROL SWITCHBOARD
FUTURE (PHASE 2)

+PLC01 -X928 =LAYOUT+PLC01/13.8 IN OUT
=MD01E10+DRM01-X921
HOT MILL MOTOR MAIN DRIVE SWITCHBOARD

+PLC01-X912
=LAYOUT+PLC01/13.1
FIBER OPTIC
JUNCTION BOX
2 Port Quad (8-Core)
Multimode
LC 1A 1B 2A 2B
LC 3A 3B 4A 4B

=MD01E10+RIO02-X911 / 205.7
SHEAR OPERATOR STATION REMOTE I/O PLATE

+PLC01-X911
=LAYOUT+PLC01/13.1
FIBER OPTIC
JUNCTION BOX
2 Port Quad (8-Core)
Multimode
LC 1A 1B 2A 2B
LC 3A 3B 4A 4B

=MD01E10+RIO01-X911 / 203.7
MILL PULPIT OPERATOR STATION
REMOTE I/O SWITCHBOARD

FOR DETAILS SEE DWG QPC7V9-MD01-A8000-ED043

Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	NETWORK DIAGRAM
				Drawn	TeraWatt			
				Check	DiMaioD			

Hot Mill drives upgrade - Automation system electrical diagram
= MD01E10
+ **NET**
Job Nr. APC7V9A1
Dwg.Nr. QPC7V9-MD01-A8100-ED101
Page **201**
Follow 203

0	1	2	3	4	5	6	7	8	9

+RIO01/135.0

+RIO01-A100

6ES7155-6AU01-0CN0	MD011F1
IM 155-5 INTERFACE MODULE	
P1 P2	

=LAYOUT+RIO01/17.7

+RIO01-A911

6GK5206-2BB00-2AC2

SWITCH SCALANCE X206-2

P1 P2 P3 P4 P5 P6

P7 BFOC BFOC

P8 BFOC BFOC

F2

F1

L1+ M1 M2 L2+

+RIO01/127.1 / +RIO01-6.1L+

+RIO01/131.3 / +RIO01-6M

+RIO01-X911
=LAYOUT+RIO01/17.7
FIBER OPTIC
JUNCTION BOX
2 Port Quad (8-Core)
Multimode

LC 1A 1B 2A 2B

LC 3A 3B 4A 4B

201.8 / =MD01E10+PLC01-X911
HOT MILL DRIVES UPGRADE PLC SWITCHBOARD

FOR DETAILS SEE DWG QPC7V9-MD01-A8000-ED043

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	NETWORK DIAGRAM	Hot Mill drives upgrade - Automation system electrical diagram / = MD01E10 / + **NET**
				Drawn	TeraWatt				
				Check	DiMaioD				Job Nr. APC7V9A1 / Dwg.Nr. QPC7V9-MD01-A8100-ED101 / Page **203** / Follow 205
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	

0	1	2	3	4	5	6	7	8	9

+RIO02/155.0
+RIO02-A100

6ES7155-6AU01-0CN0	MD011F1
IM 155-5 INTERFACE MODULE	
P1 P2	

=LAYOUT+RIO02/19.6
+RIO02-A911

6GK5206-2BB00-2AC2

P1 P2 P3 P4 P5 P6

SWITCH SCALANCE X206-2

P7 BFOC BFOC

P8 BFOC BFOC

F2 F1

L1+ M1 M2 L2+

+RIO02/143.1 / +RIO02-6.1L+

+RIO02/147.3 / +RIO02-6M

+RIO02-X911
=LAYOUT+RIO02/19.7
FIBER OPTIC
JUNCTION BOX
2 Port Quad (8-Core)
Multimode

LC 1A 1B 2A 2B
LC 3A 3B 4A 4B

201.8 / =MD01E10+PLC01-X911
HOT MILL DRIVES UPGRADE PLC SWITCHBOARD

FOR DETAILS SEE DWG QPC7V9-MD01-A8000-ED043

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	NETWORK DIAGRAM	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **NET**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **205** Follow +MP→F/221

0	1	2	3	4	5	6	7	8	9

+RIO01/135.1
+RIO01-A101
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I10.0
DI0 L1
1 5

+RIO01/135.1
+RIO01-A101
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I10.1
DI1 L1
2 6

+RIO01/135.1
+RIO01-A101
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I10.2
DI2 L1
3 7

+RIO01/135.1
+RIO01-A101
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I10.3
DI3 L1
4 8

+RIO01/135.2
+RIO01-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I11.0
DI0 L1
1 5

+RIO01/135.2
+RIO01-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I11.1
DI1 L1
2 6

+RIO01-X12.1 ⌀1 ⌀3 ⌀5 ⌀6 ⌀7 ⌀8

⌀1 — 2 — 1A

⌀3 — 4 — 1A

⌀8 — 9 — 1A

=EXISTING

+MP F50 F51 F65 F66 F150 F151 F153 F154 F160

+MP-RL1

+MP-RL1

+MP-JOYSTICK-F15

BREAST ROLL 1.
START .

BREAST ROLL 2.
START .

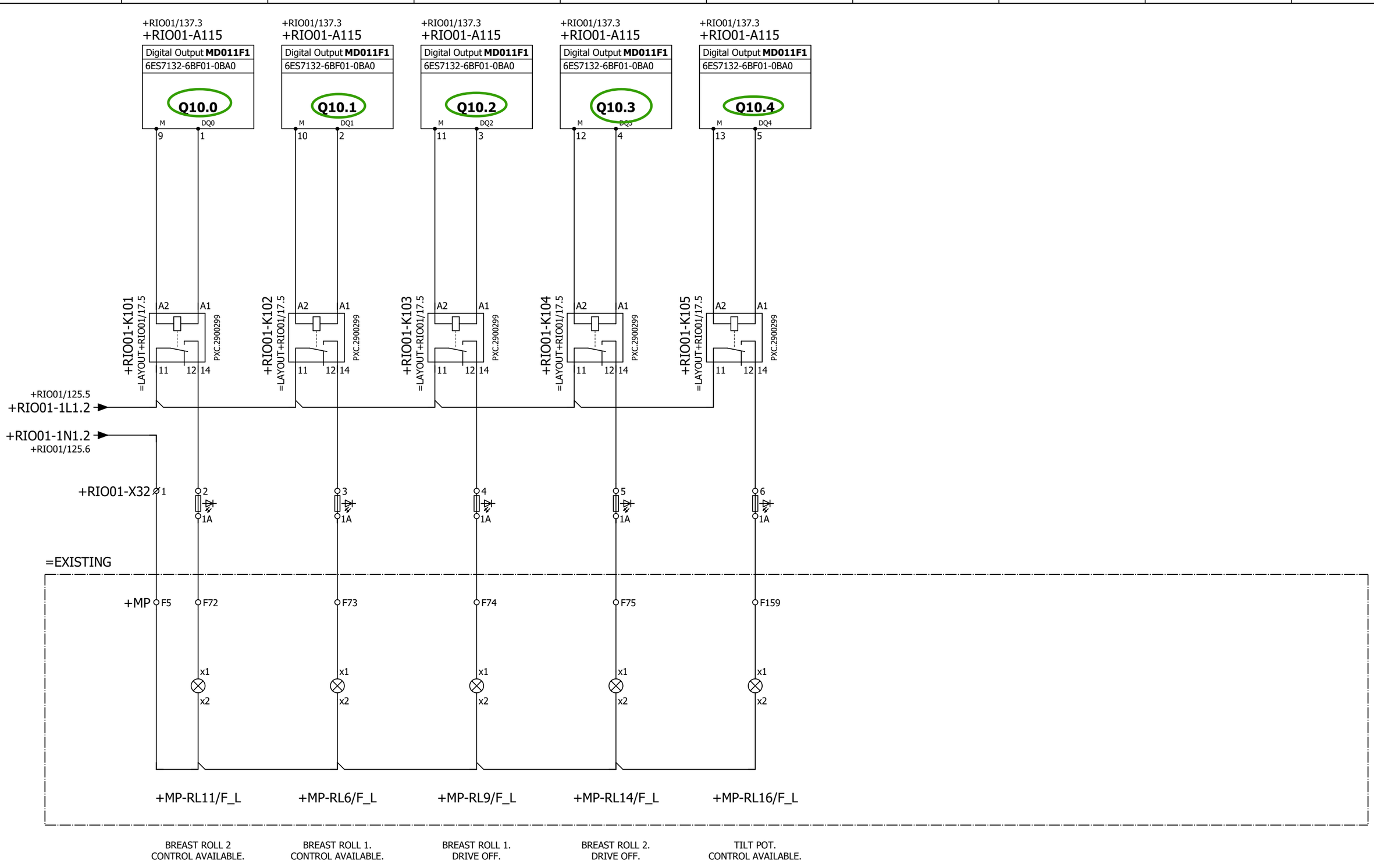
TILT POT CONTROL.
NEUTRAL-RAISE.

TILT POT CONTROL.
RAISE.

TILT POT CONTROL.
NEUTRAL-LOWER.

TILT POT CONTROL.
LOWER.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL F	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **MP→F**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **221**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Follow 223



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL F	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **MP→F**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **223**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow +MP→D/225

+RIO01/135.2
+RIO01-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I11.2 DI2 L1 3 7

+RIO01/135.2
+RIO01-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I11.3 DI3 L1 4 8

+RIO01/135.3
+RIO01-A103
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I12.0 DI0 L1 1 5

+RIO01/135.3
+RIO01-A103
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I12.1 DI1 L1 2 6

+RIO01/135.3
+RIO01-A103
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I12.2 DI2 L1 3 7

+RIO01/137.3
+RIO01-A115
Digital Output **MD011F1**
6ES7132-6BF01-0BA0
Q10.5 M DQ5 14 6

+RIO01-X12.1 ø10 ø11 1A ø12 ø13 ø14 ø15 ø16 1A

+RIO01-K106
=LAYOUT+RIO01/17.5
A2 A1 11 12 14 PXC.2900299

+RIO01-X32 ø7 ø8

=EXISTING

+MP D113 D110 D114 D116 D119 D131 D1

D5 D131

+MP-JOYSTICK-D1

+PANEL_P

MILL SCREWDOWN CONTROLLER. MANUAL SPEED. HIGH.

MILL SCREWDOWN CONTROLLER. MANUAL SPEED. MEDIUM.

MILL SCREWDOWN CONTROLLER. MANUAL SPEED. LOW.

MILL SCREWDOWN CONTROLLER. DIRECTION DOWN.

MILL SCREWDOWN CONTROLLER. MILL SCREW OVER-RIDE.

MILL SCREWDOWN CONTROLLER. MILL SCREW OVER-RIDE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL D	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **MP→D**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **225** Follow 227

+RIO01/135.3
+RIO01-A103
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I12.3
DI3 L1
4 8

+RIO01/135.3
+RIO01-A104
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I13.0
DI0 L1
1 5

+RIO01/135.3
+RIO01-A104
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I13.1
DI1 L1
2 6

+RIO01-X12.1 17 18 19 20 21

1A 1A

=EXISTING

+MP D123 D124 D122 D47 D76

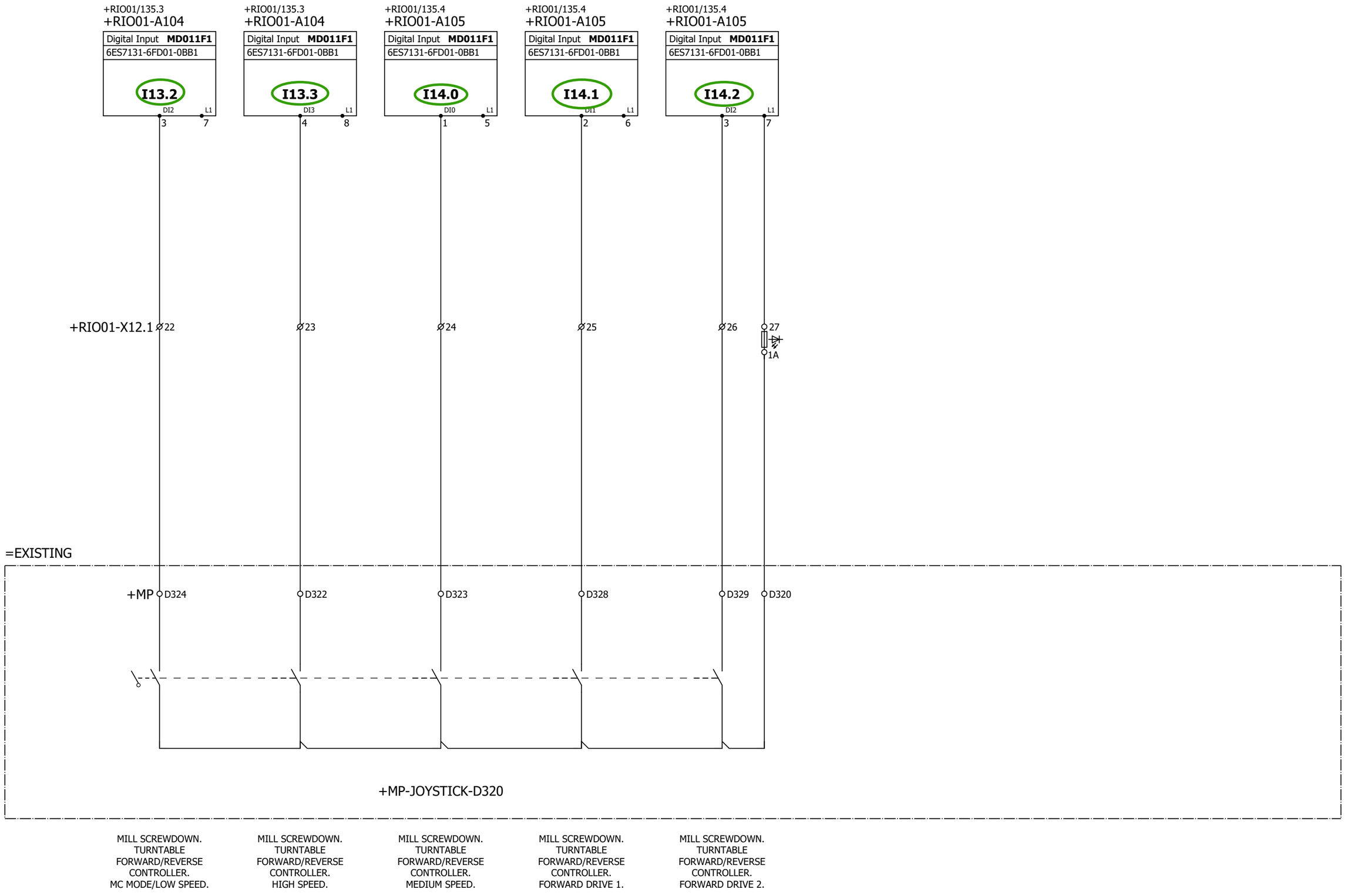
+MP-JOYSTICK-D122

MILL SCREWS.
DRIVE START. BOTH.

MILL SCREWS.
DRIVE START. RIGHT ONLY.

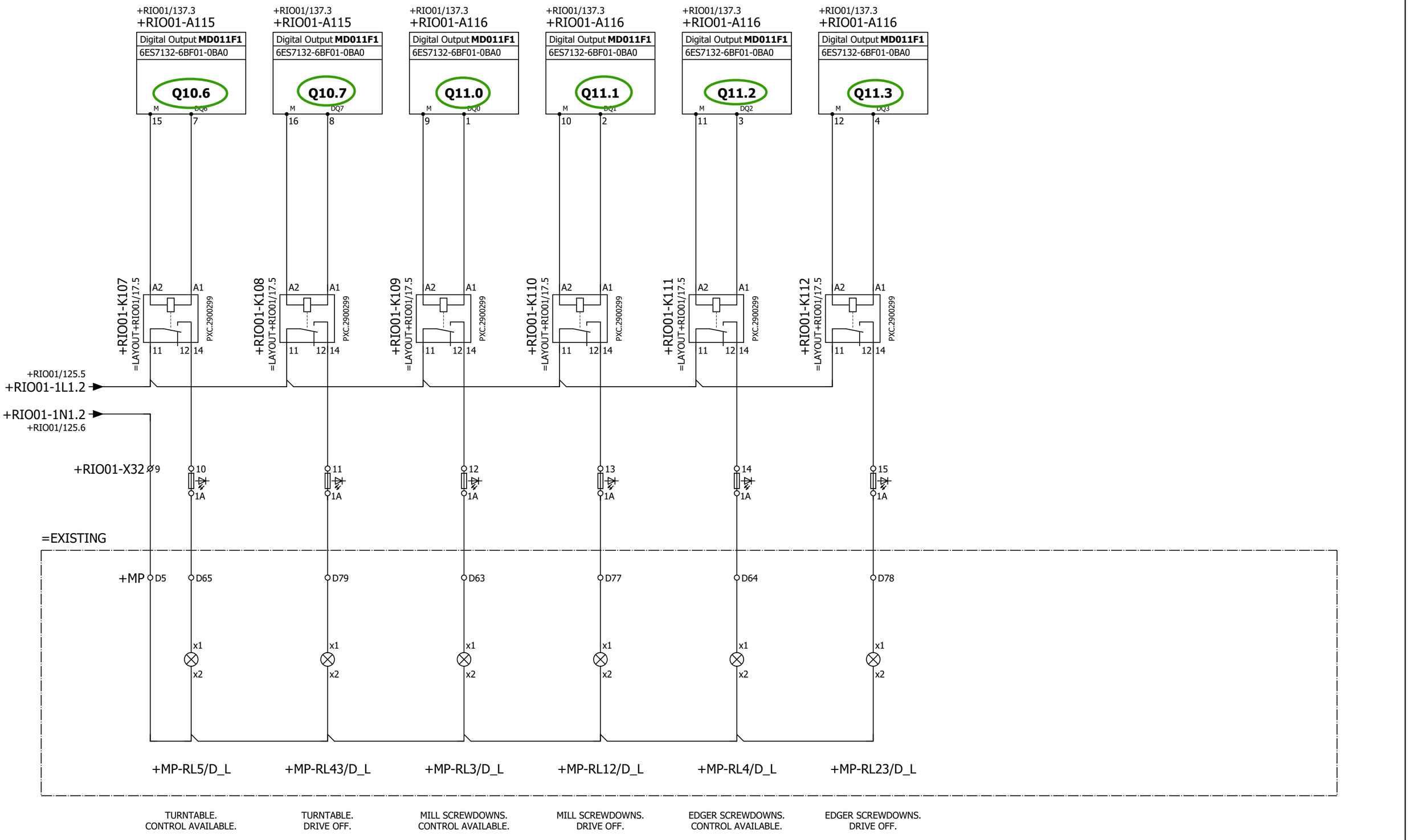
MILL SCREWS.
DRIVE START. OFF.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL D	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **MP→D**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **227**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 229

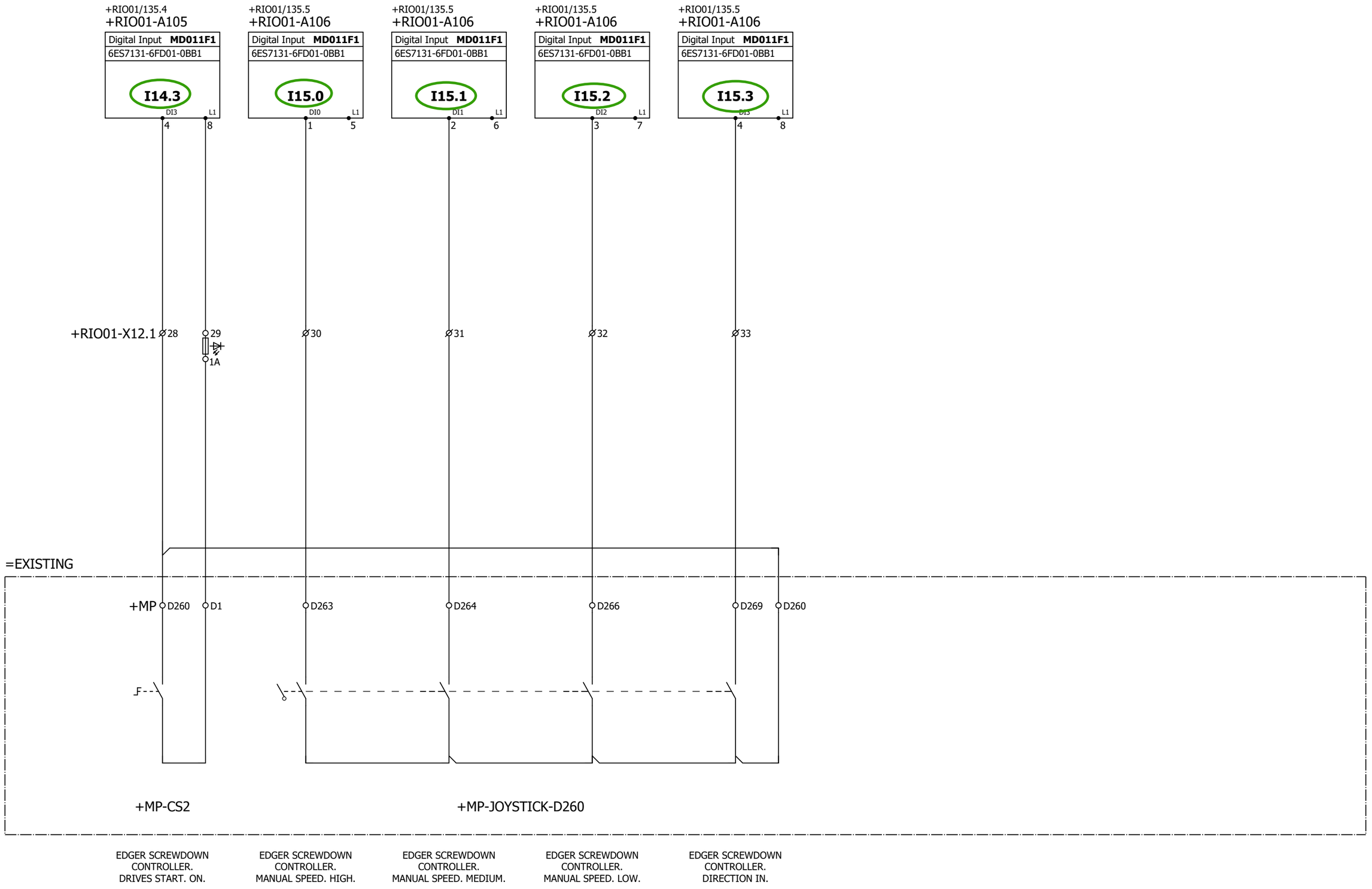


00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL D	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **MP→D**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101 — Page **229** — Follow 231
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		

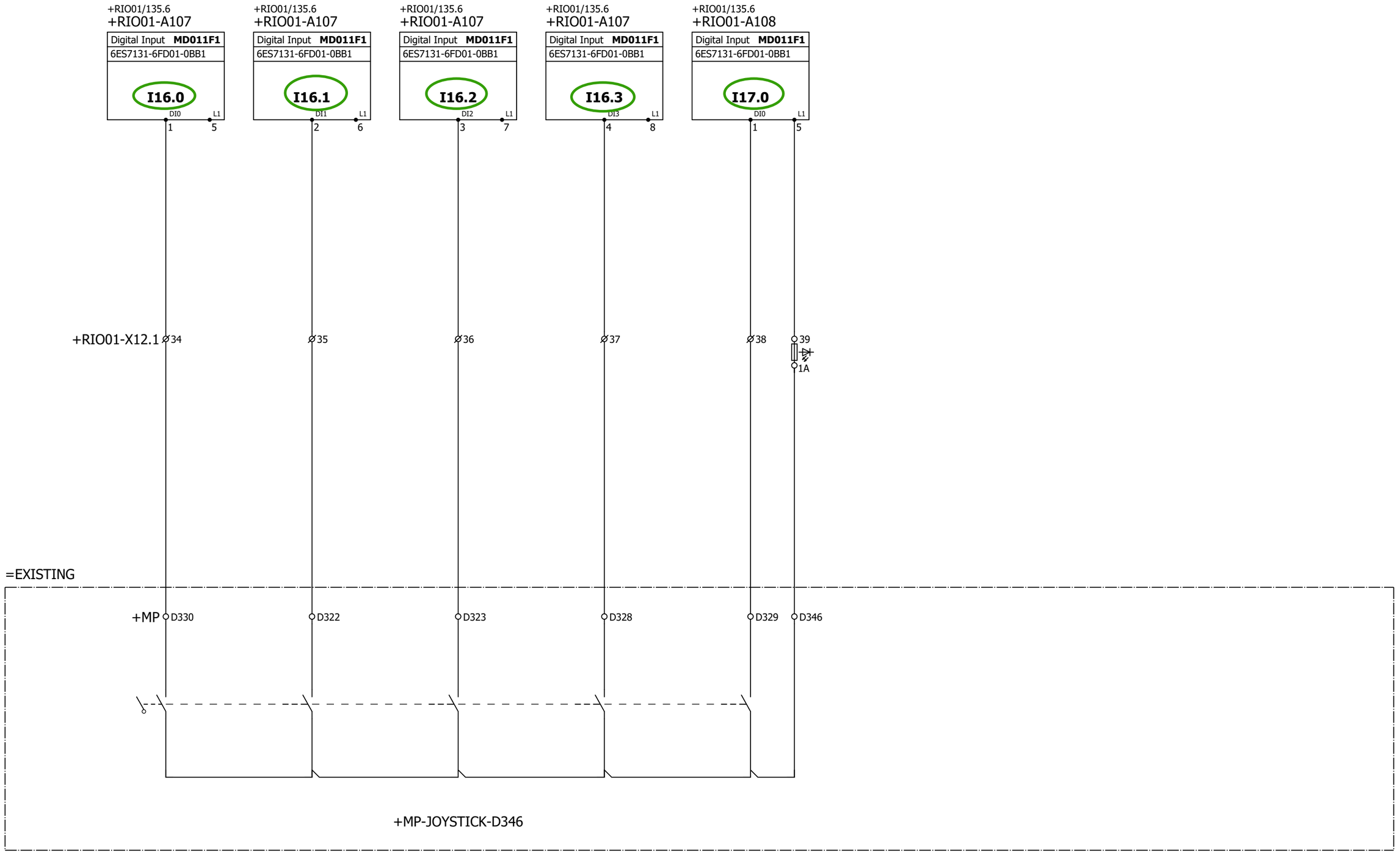
0	1	2	3	4	5	6	7	8	9



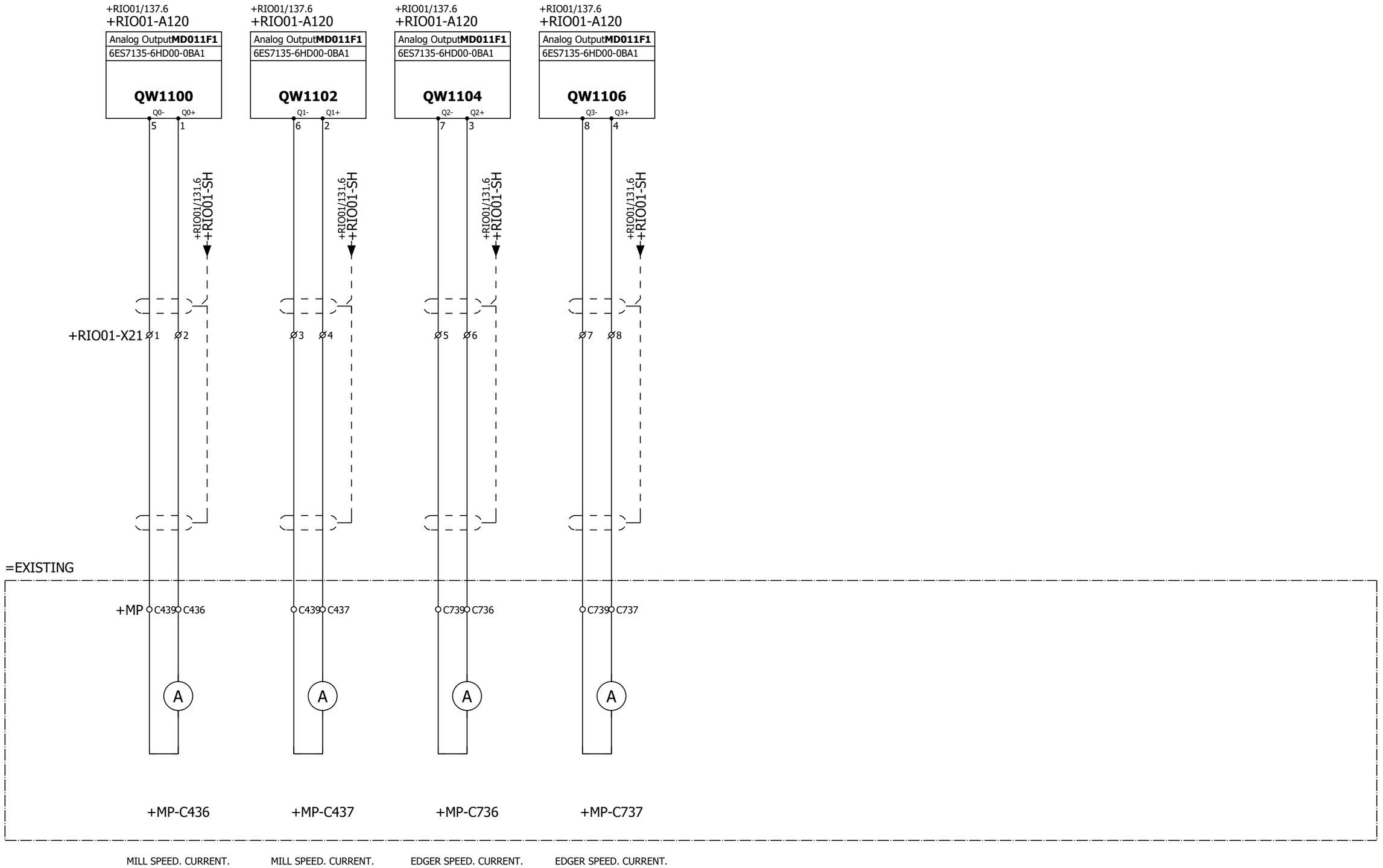
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL D	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **MP→D**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **231** / Follow 233



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL D	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **MP→D**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **233**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 235



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL D	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **MP→D**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **235** / Follow +MP→C/237



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **MP→C**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **237**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 239

+RIO01/135.6
+RIO01-A108

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I17.1
DI1 2 — L1 6

+RIO01/135.6
+RIO01-A108

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I17.2
DI2 3 — L1 7

+RIO01-X12.1 ⌀40 ⌀41 ○42 — 1A

=EXISTING

+MP ○C55 ○C56 ○C1

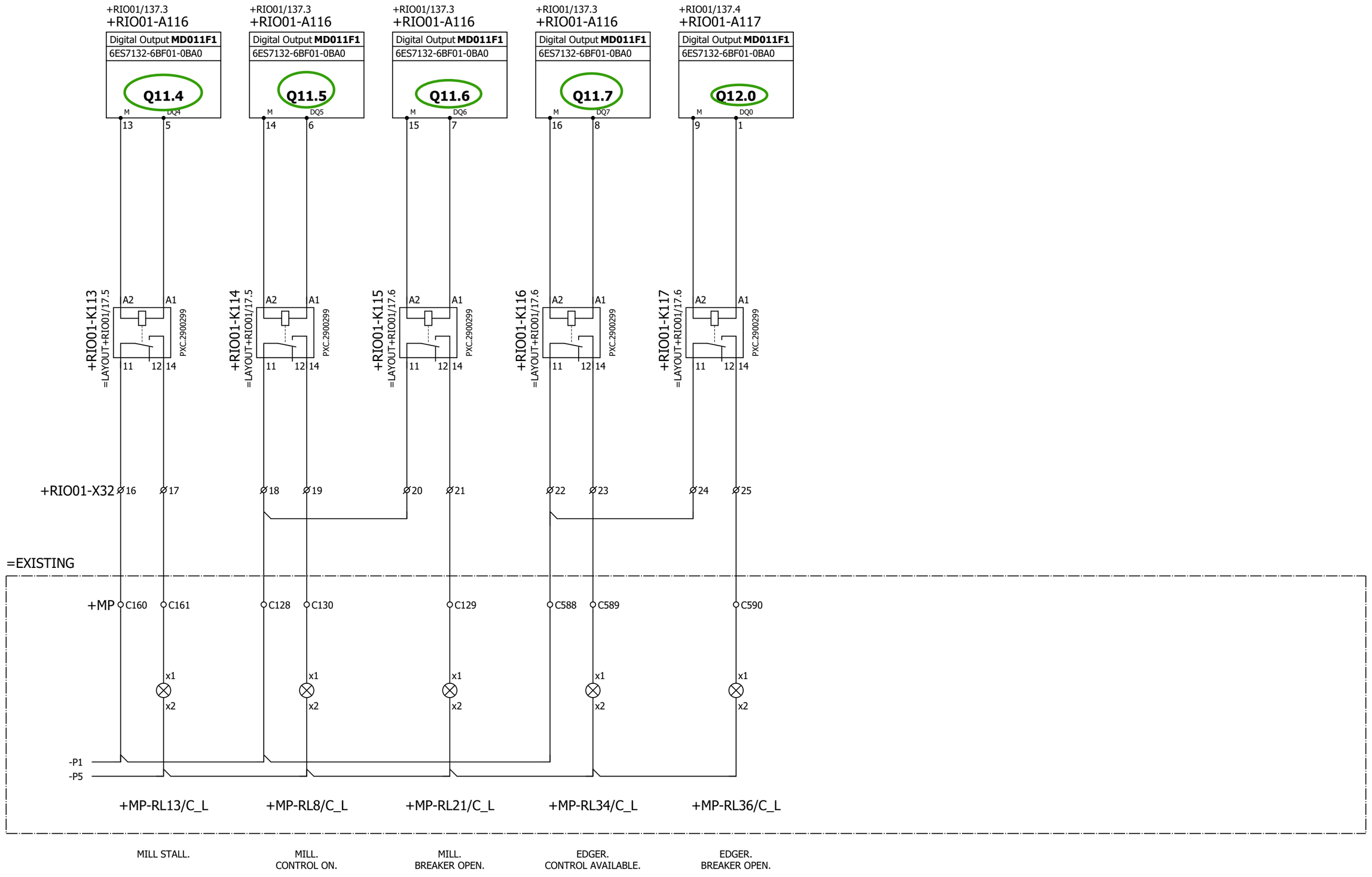
+MP-CS7

SPEED LIMIT SELECT
60 MPM.
SPEED LIMIT 1.

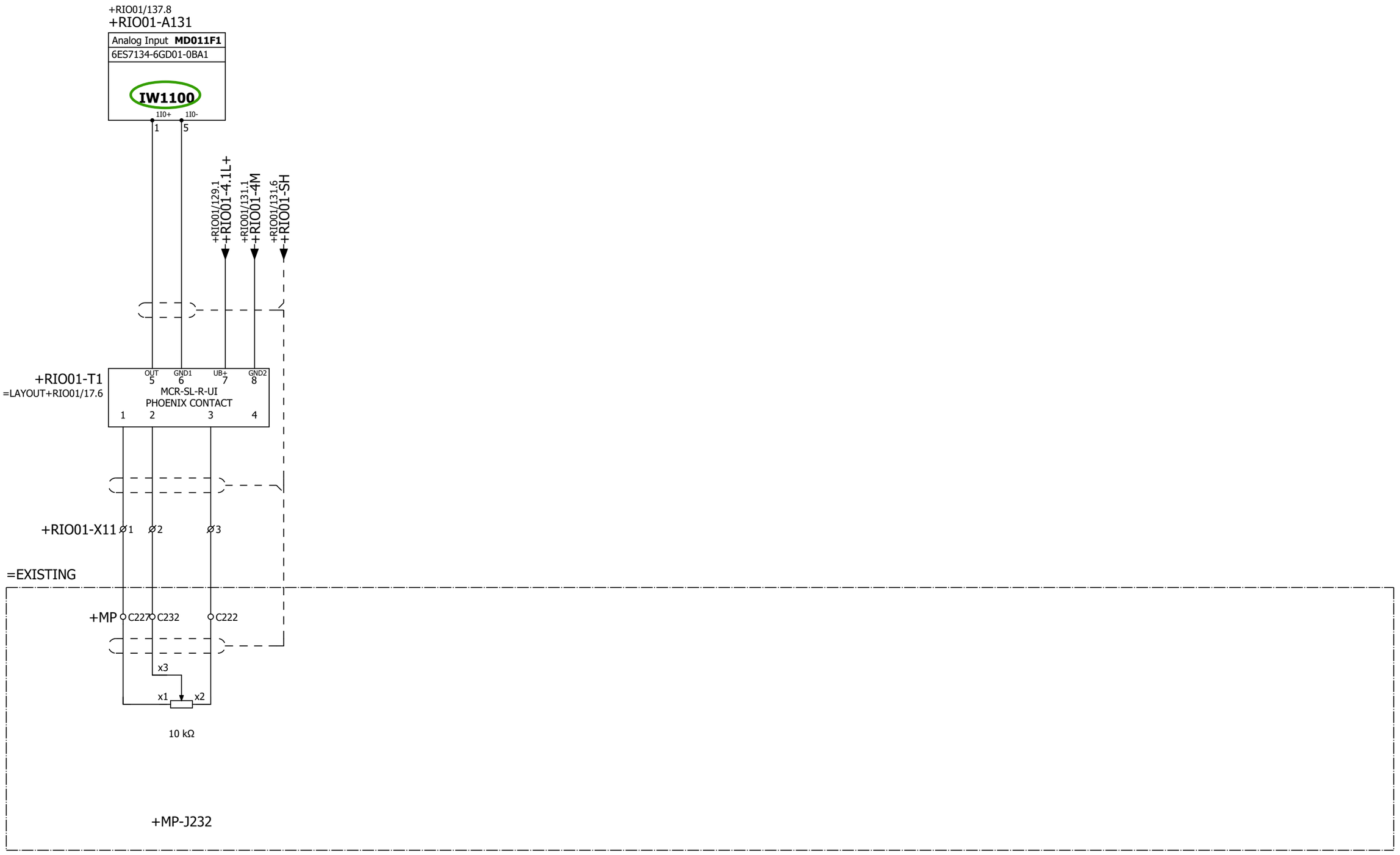
SPEED LIMIT SELECT
90 MPM.
SPEED LIMIT 2.

Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	Job Nr.	Dwg.Nr.	Page
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL C	APC7V9A1	QPC7V9-MD01-A8100-ED101	**239**
				Drawn	TeraWatt						Follow 241
				Check	DiMaioD						

Hot Mill drives upgrade - Automation system electrical diagram
= MD01E10
+ **MP→C**



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **MP→C**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **241** Follow 243



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **MP→C**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **243**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 245

0	1	2	3	4	5	6	7	8	9

+RIO01/135.6
+RIO01-A108

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I17.3 DI3 L1
4 8

+RIO01/135.7
+RIO01-A109

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I18.0 DI0 L1
1 5

+RIO01/135.7
+RIO01-A109

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I18.1 DI1 L1
2 6

+RIO01/135.7
+RIO01-A109

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I18.2 DI2 L1
3 7

+RIO01/135.7
+RIO01-A109

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I18.3 DI3 L1
4 8

+RIO01/135.8
+RIO01-A110

Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I19.0 DI0 L1
1 5

+RIO01-X12.1 ⌀43 ⌀44 45 1A ⌀46 47 1A ⌀48 49 1A ⌀50 51 1A ⌀52 53 1A

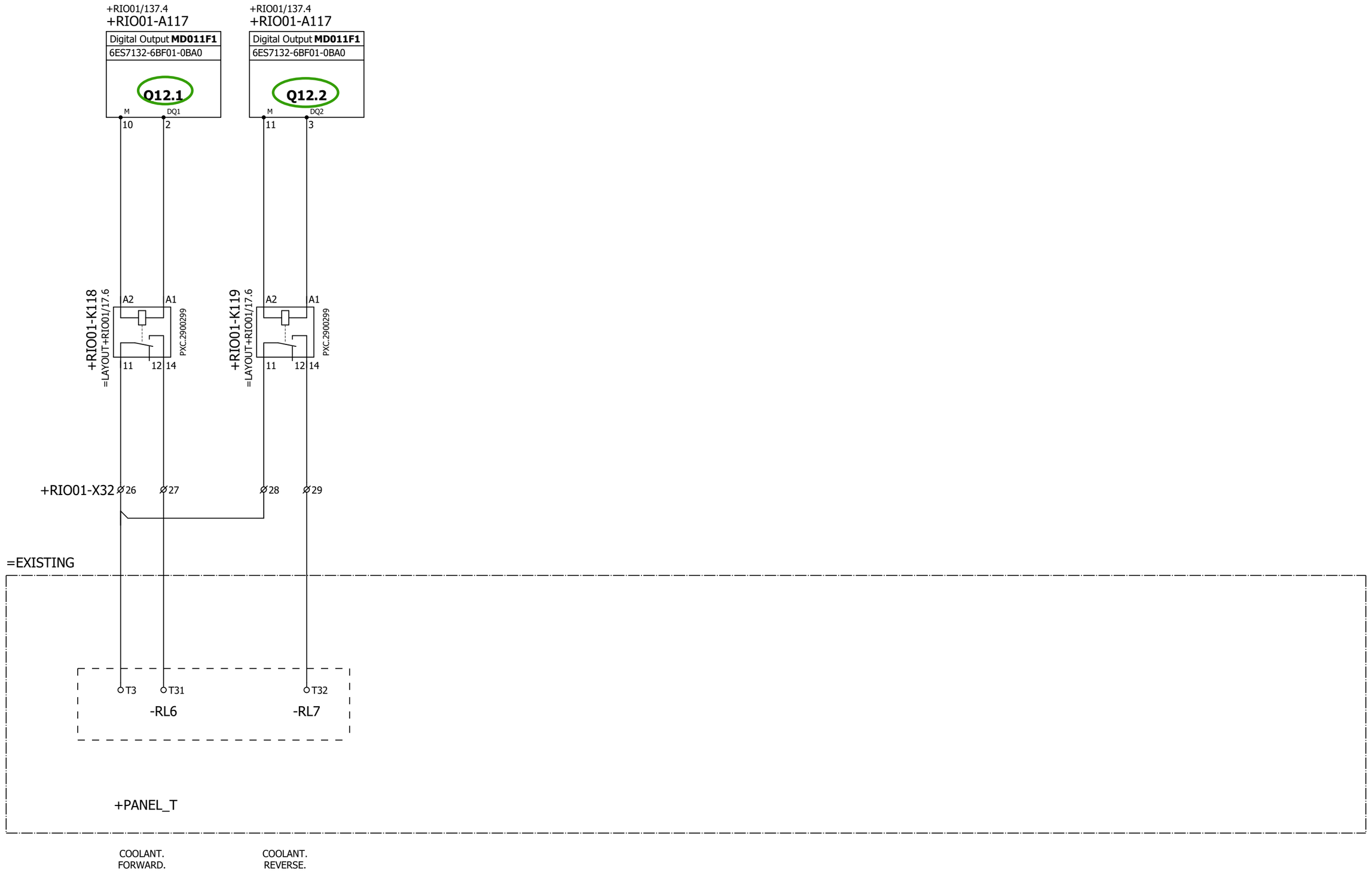
=EXISTING

+MP C57 C80 C1 C101 C98 C102 C104 C595 C592 C597 C596

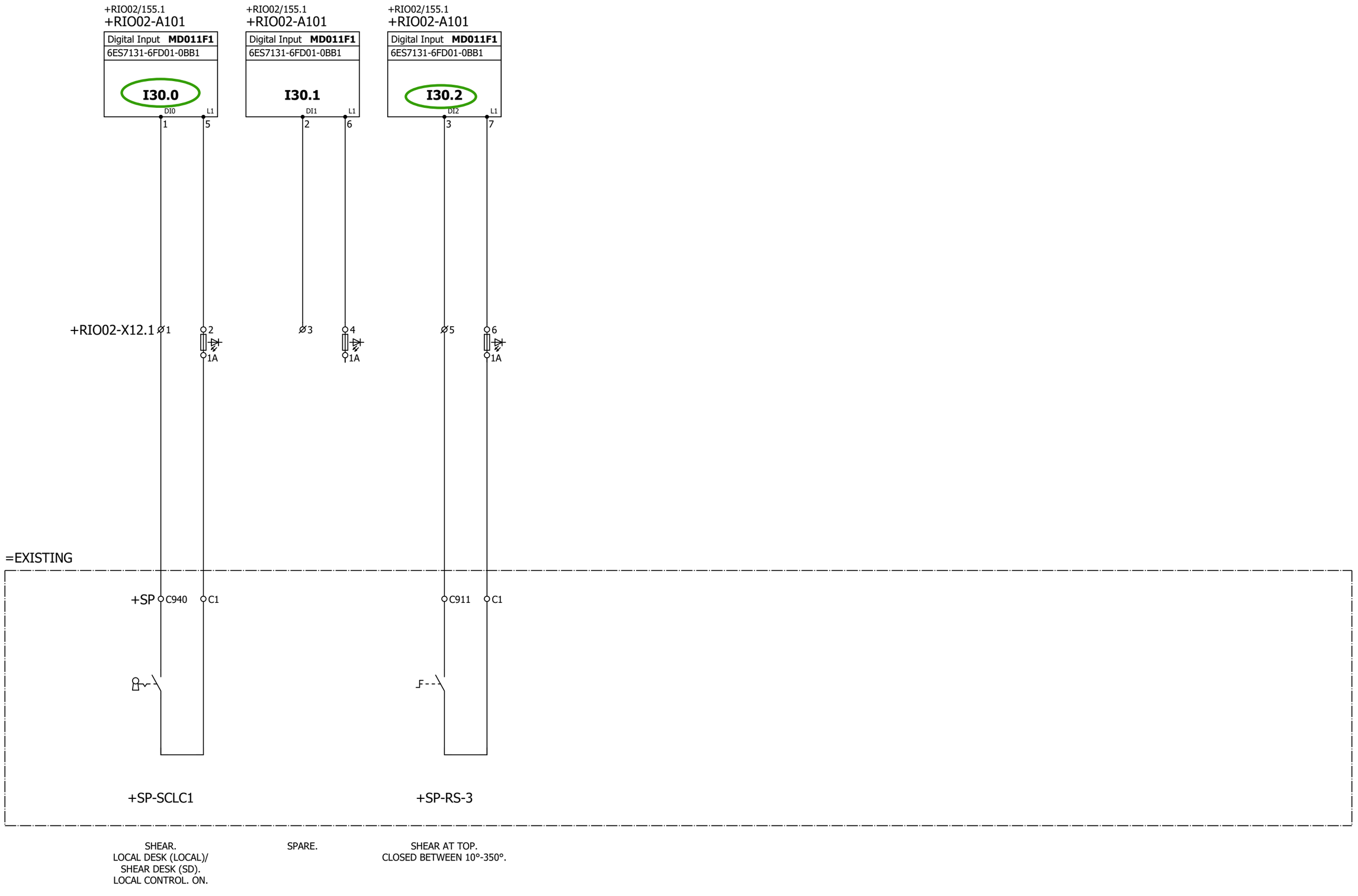
+MP-CS2 +MP-CS4 +MP-CS4

ROLLING/INCH. INCHING. | ROLLING/INCH. | MILL BREAKER. N. | MILL BREAKER. CLOSE. | EDGER BREAKER. N. | EDGER BREAKER. CLOSE.

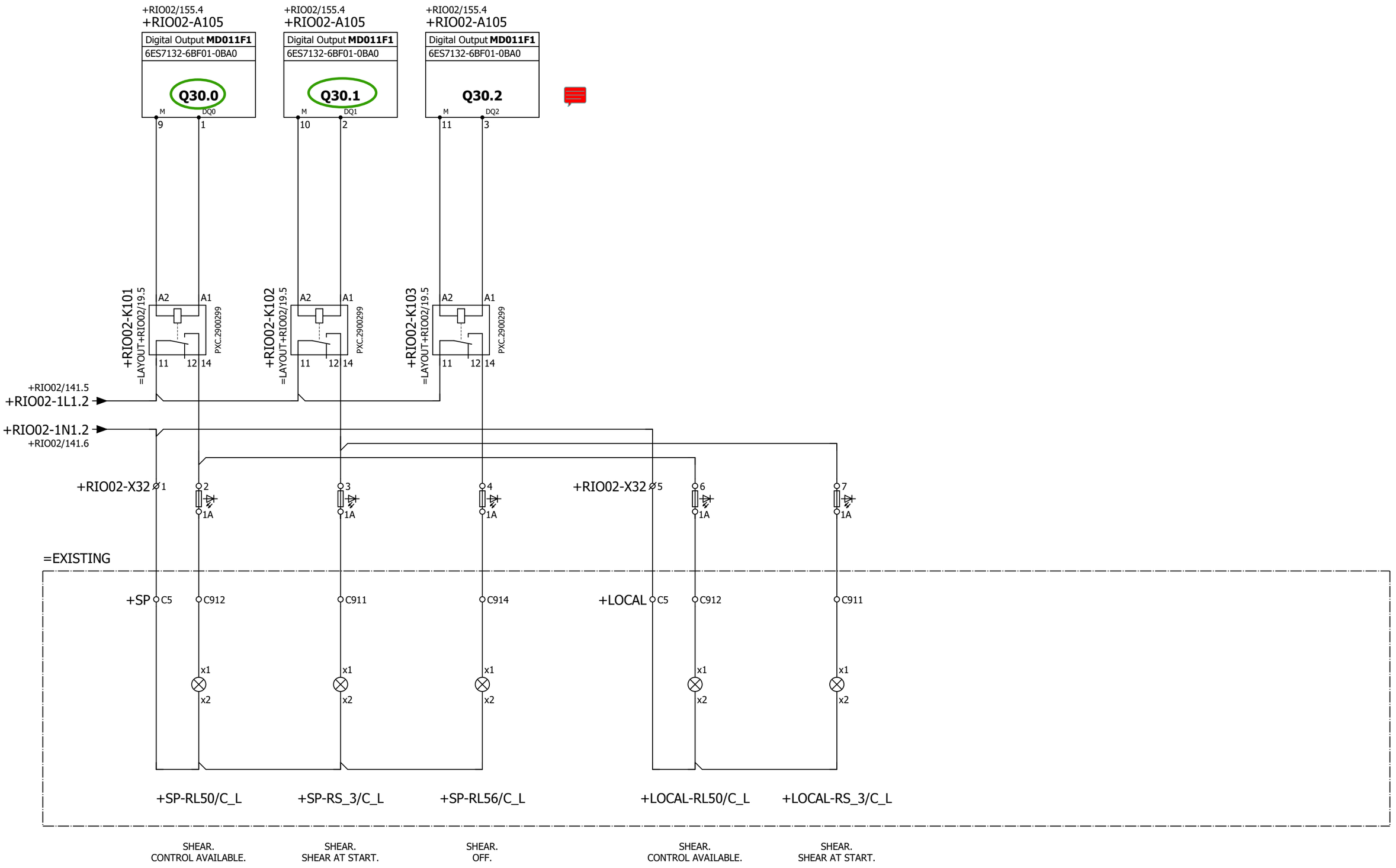
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **MP→C**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **245**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow +MP→T/247



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	MILL PULPIT INTERFACE PANEL T	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **MP→T**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **247**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow +SP→C/249



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SHEAR PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SP→C**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **249**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 251



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SHEAR PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram / = MD01E10 / + **SP→C**
				Drawn	TeraWatt				
				Check	DiMaioD				Job Nr. APC7V9A1 / Dwg.Nr. QPC7V9-MD01-A8100-ED101 / Page **251** / Follow 253
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	

+RIO02/155.1
+RIO02-A101
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I30.3
DI3 L1
4 8

+RIO02/155.2
+RIO02-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I31.0
DI0 L1
1 5

+RIO02/155.2
+RIO02-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I31.1
DI1 L1
2 6

+RIO02/155.2
+RIO02-A102
Digital Input **MD011F1**
6ES7131-6FD01-0BB1
I31.2
DI2 L1
3 7

+RIO02/155.4
+RIO02-A105
Digital Output **MD011F1**
6ES7132-6BF01-0BA0
Q30.3
M DQ3
12 4

+RIO02-K104
=LAYOUT+RIO02/19.5
A2 A1
PXC.2900299
14 12 11

+RIO02/141.5
+RIO02-1L1.2

+RIO02-X12.1 7 8 9 10 11 12 13 14 15 16
1A
1A

=EXISTING

+SP C956 C957 C958 C959 C1A C1B

+SP-JOYSTICK-1A

+LOCAL-JOYSTICK-1B

SHEAR CONTROLLERS.
SHEAR OFF.

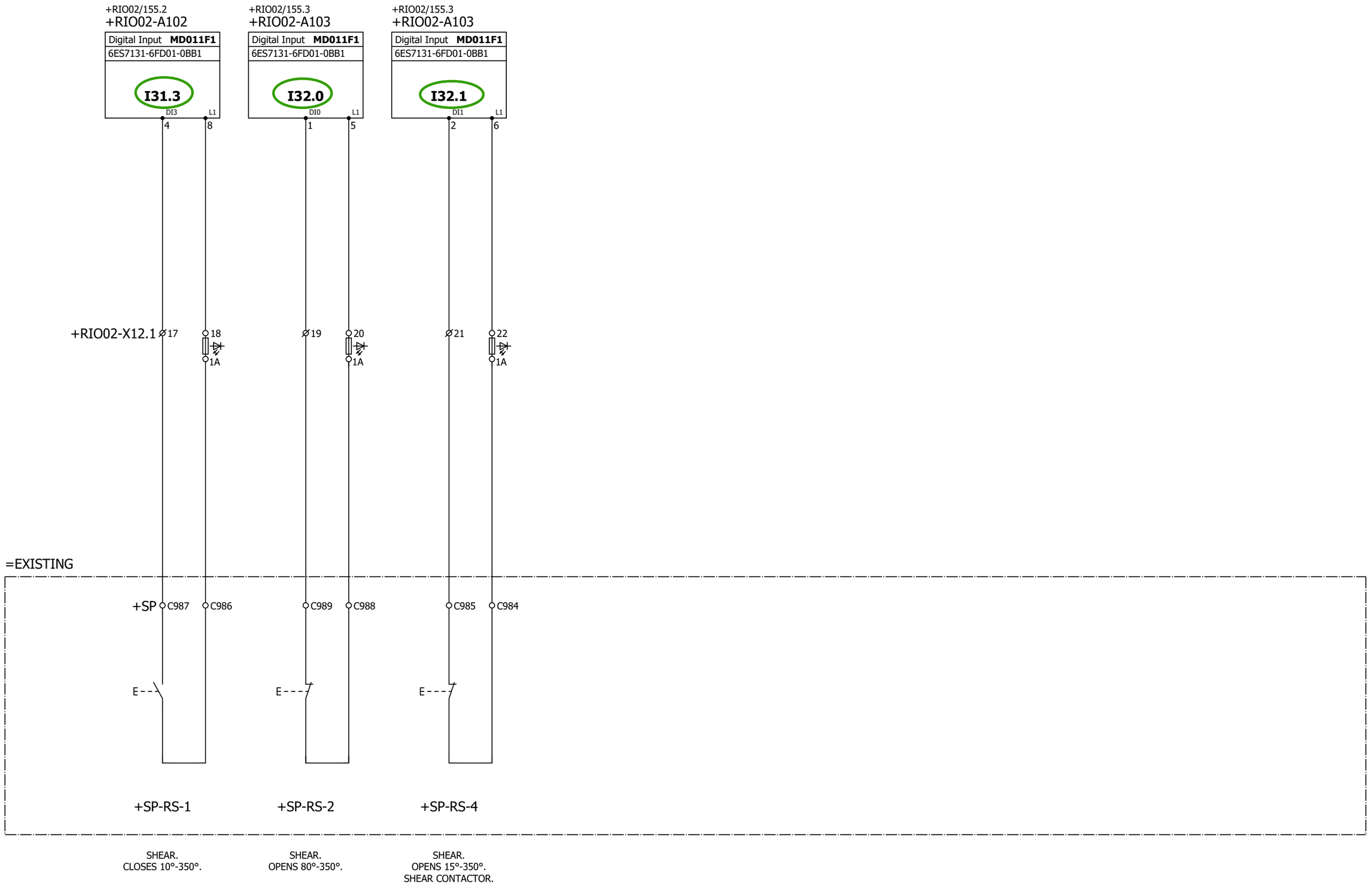
SHEAR CONTROLLERS.
INCH REVERSE.

SHEAR CONTROLLERS.
INCH FORWARD.

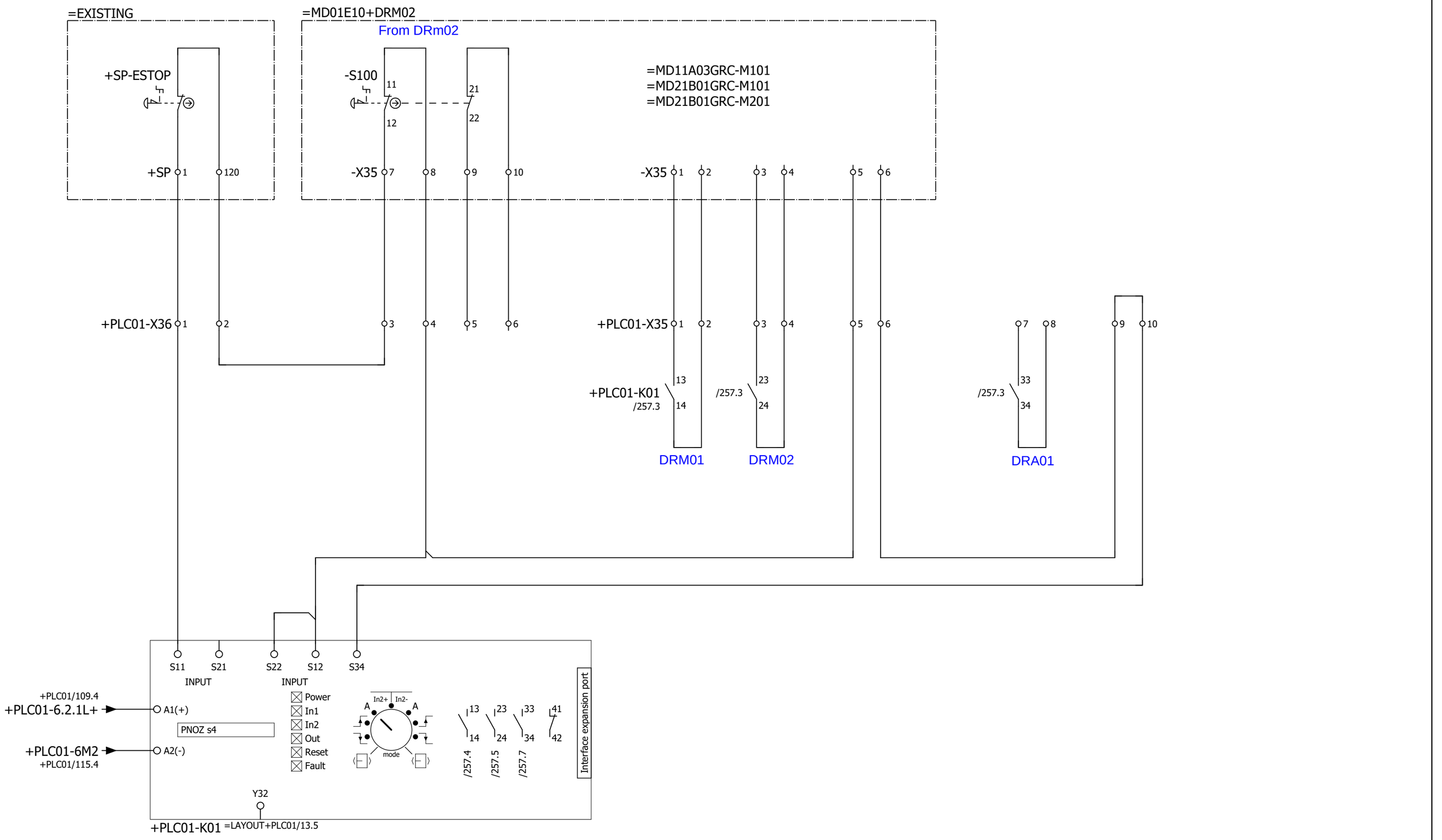
SHEAR CONTROLLERS.
SHEAR RUN.

SHEAR ON LOCAL CONTROL.

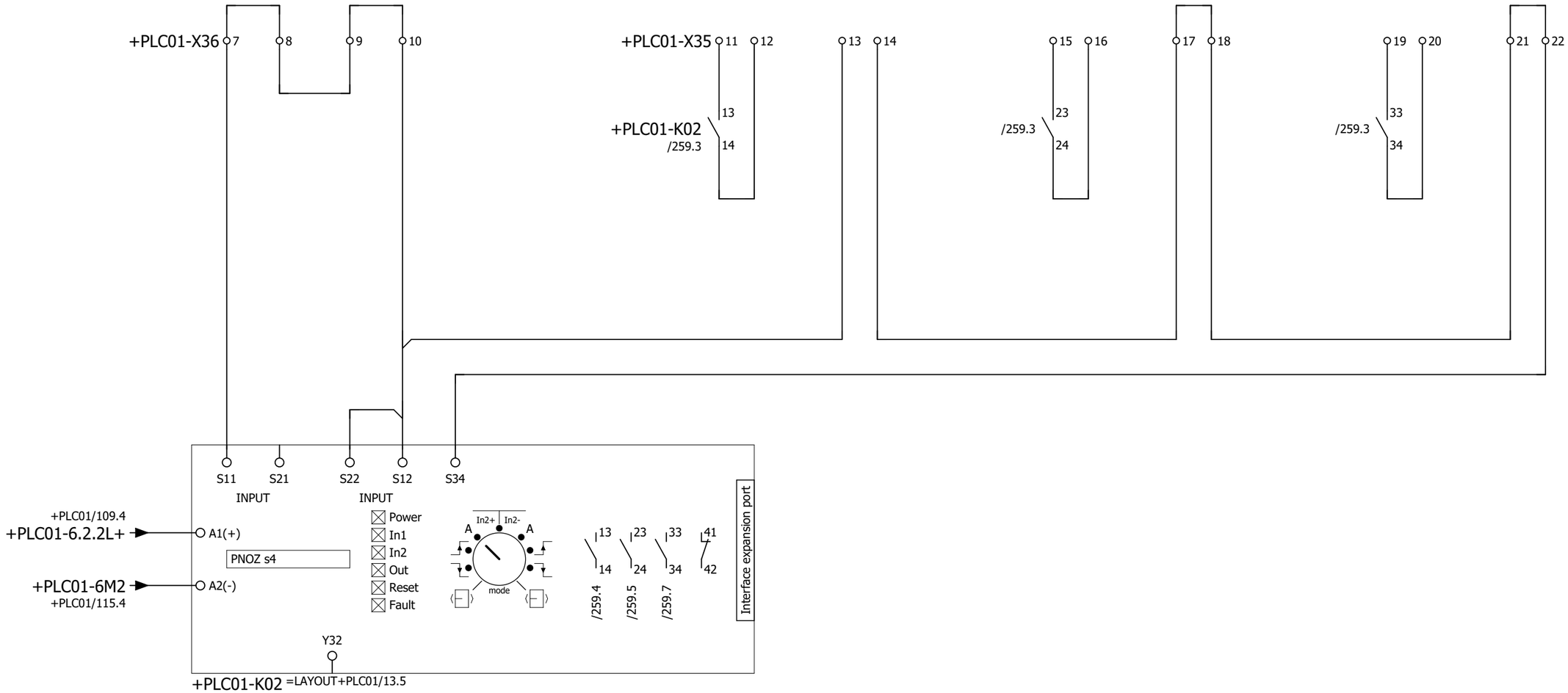
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SHEAR PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SP→C**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **253**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 255



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SHEAR PULPIT INTERFACE PANEL C	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **SP→C**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **255** / Follow +EMG/257



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C EMERGENCY	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **EMG**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **257**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 259



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARE EMERGENCY	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **EMG**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **259**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow +C2/261

+PLC01/119.3

+PLC01-A205

Digital Output **MD011F1**
6ES7132-6HD01-0BB1
Q0.0
RQ0- 5 RQ0+ 1

+PLC01-X22 ⌀1 ⌀2

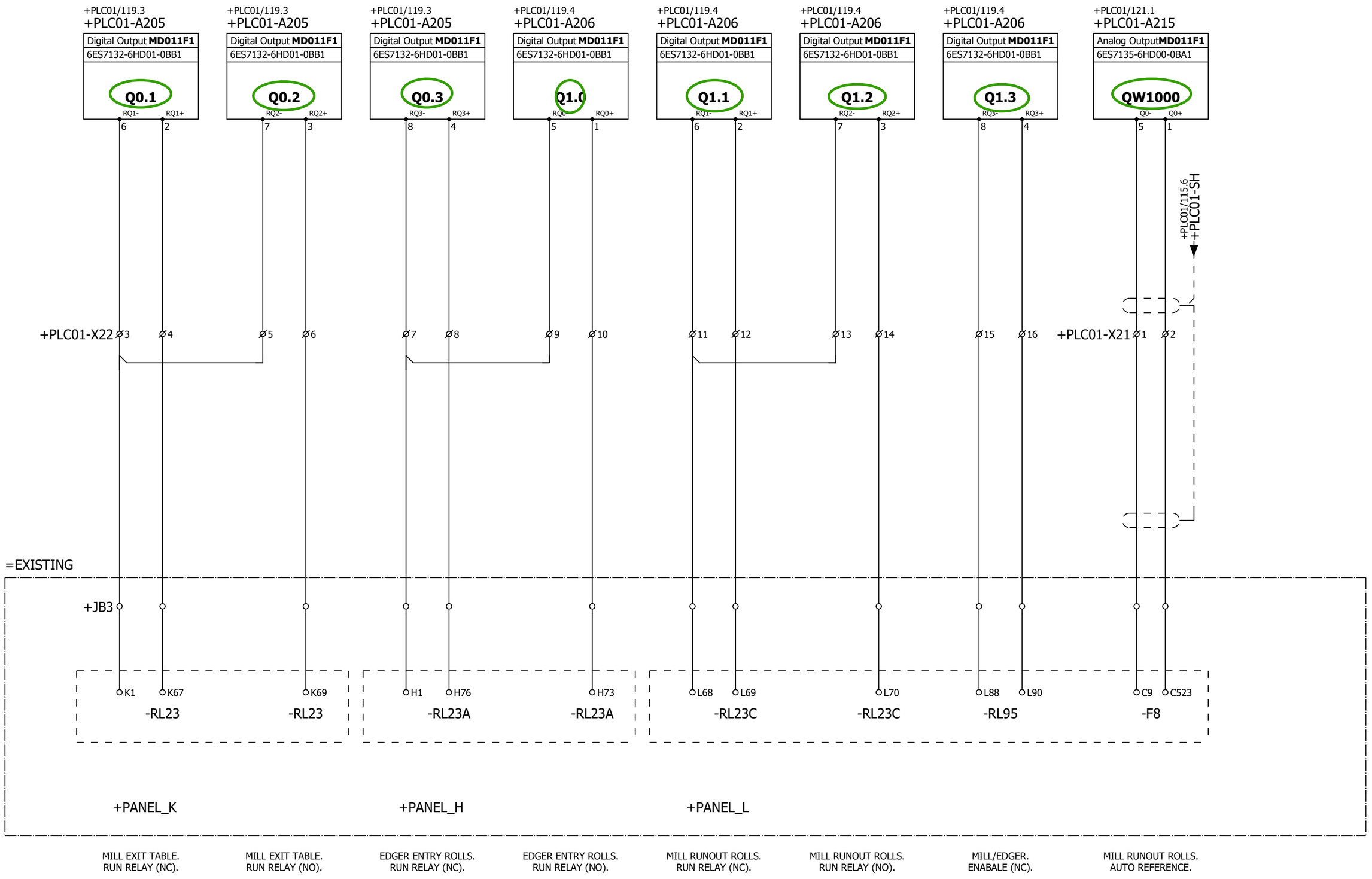
=EXISTING

+JB2

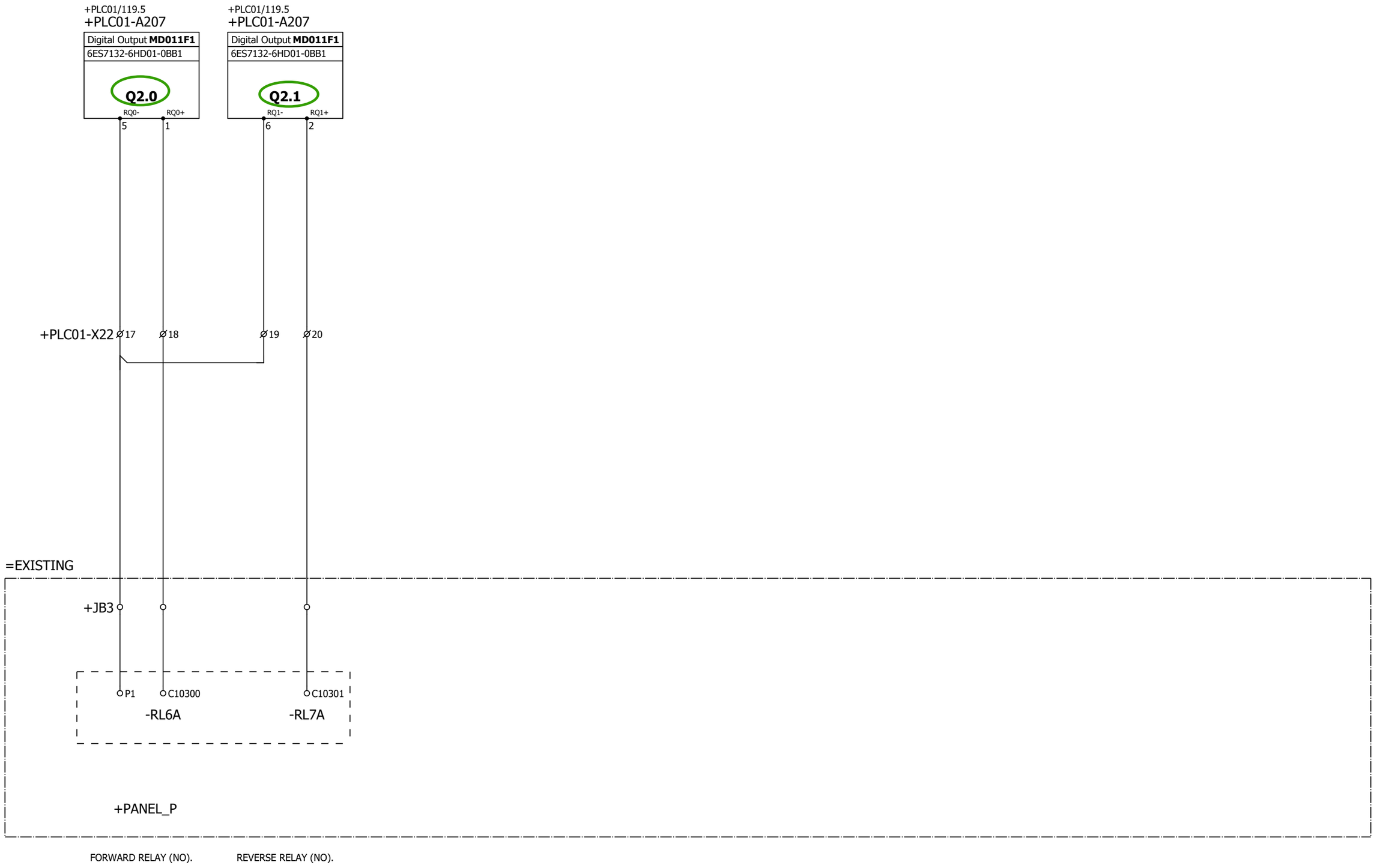
-RL7A

+PANEL_H

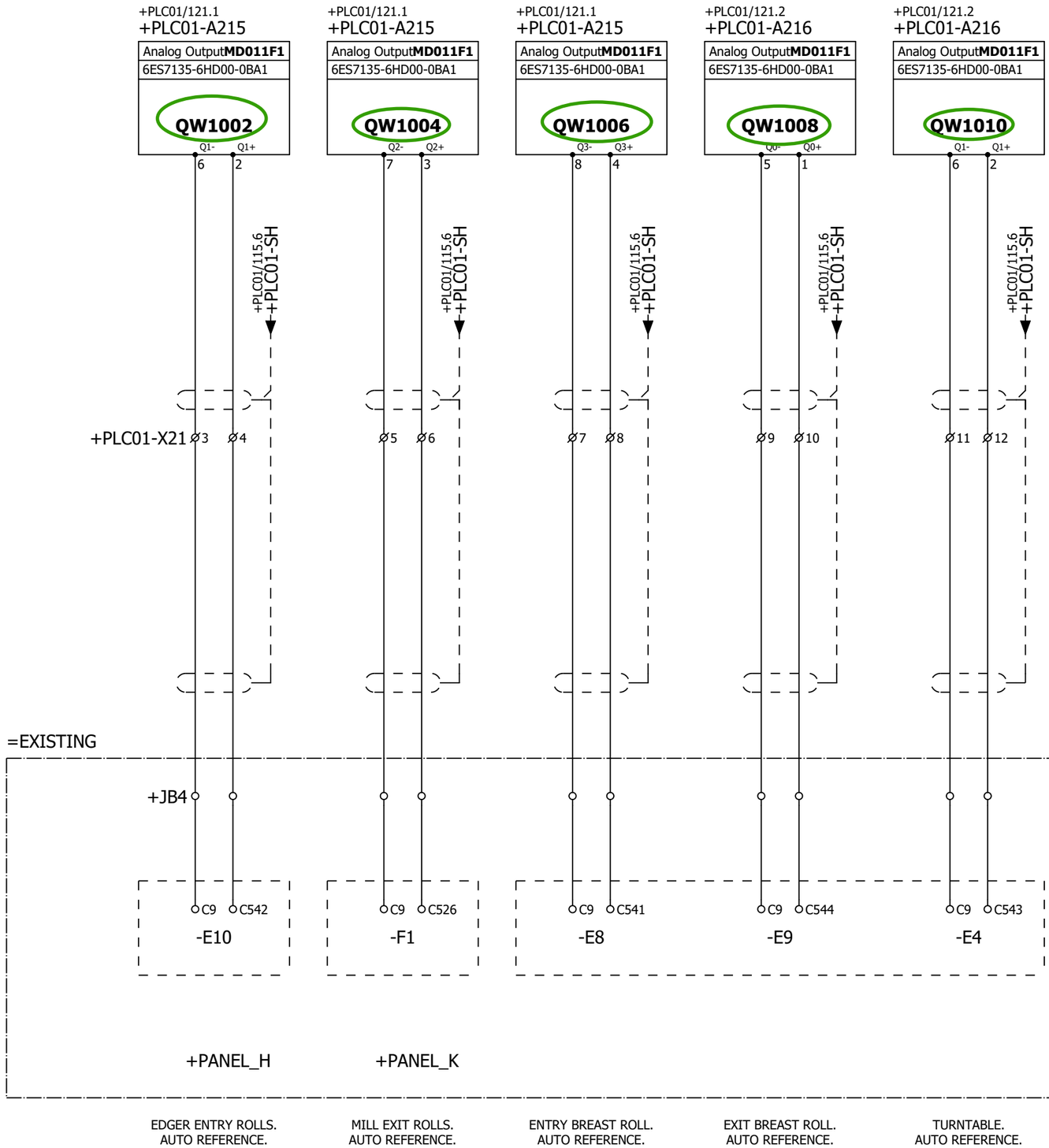
REVERSE RELAY.



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 3	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **C3**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **263**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 265



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 3	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **C3**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **265**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow +C4/267

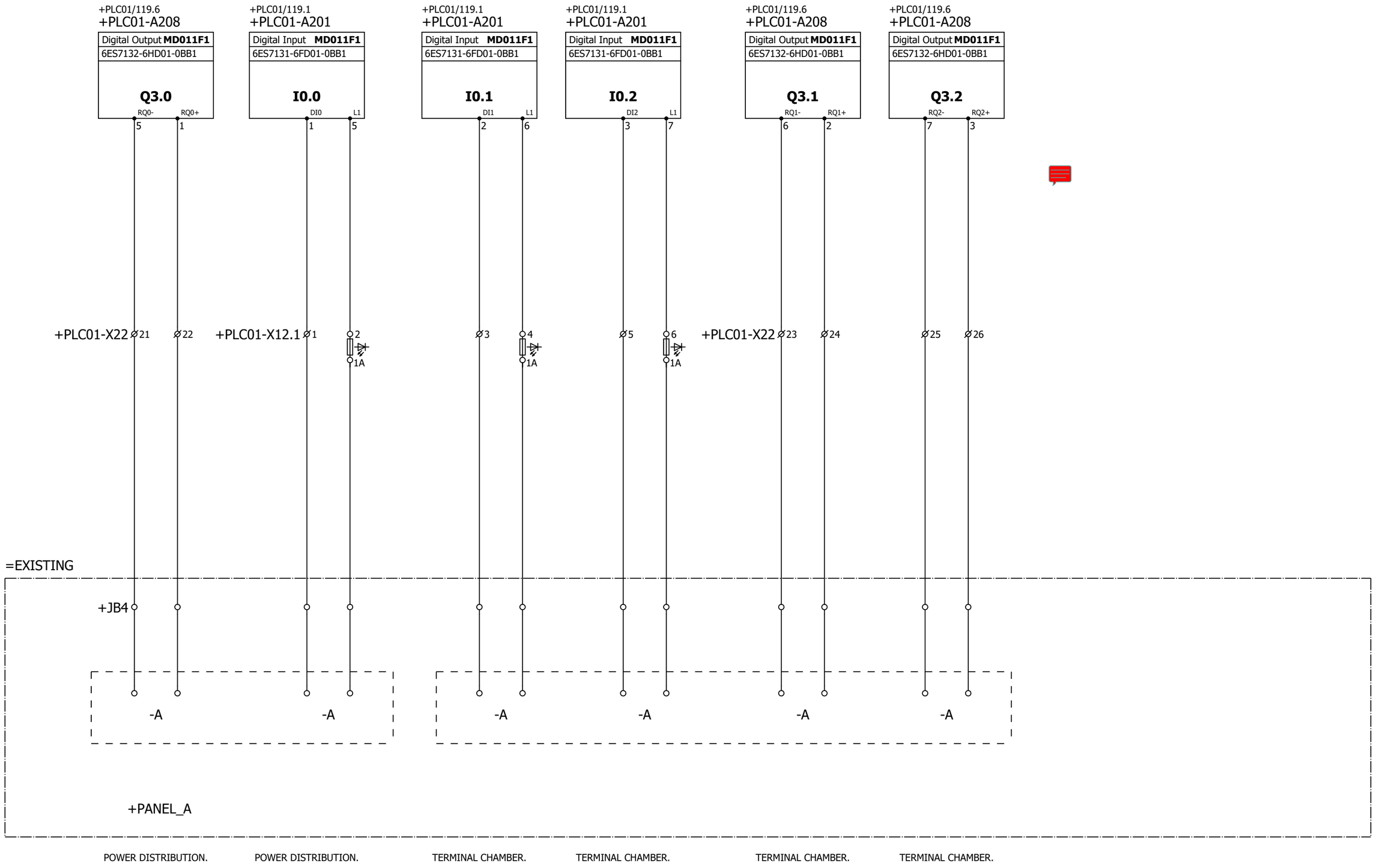


QW1006 may be could be deleted, because is control direct from PLC! Breast Roll Entry1 - panel F

QW1010 may be could be deleted, because is control direct from PLC! Breast Roll Entry1 - panel D

QW1008 may be could be deleted, because is control direct from PLC! Breast Roll Entry1 - panel F

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 4	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **C4**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **267**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 269



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 4	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **C4**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Page **269** Follow 271

0	1	2	3	4	5	6	7	8	9

+PLC01/121.2
+PLC01-A216
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1012
Q2- Q2+
7 3
+PLC01/115.6 +PLC01-SH

+PLC01/121.2
+PLC01-A216
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1014
Q3- Q3+
8 4
+PLC01/115.6 +PLC01-SH

+PLC01/121.3
+PLC01-A217
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1016
Q0- Q0+
5 1
+PLC01/115.6 +PLC01-SH

+PLC01/121.3
+PLC01-A217
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1018
Q1- Q1+
6 2
+PLC01/115.6 +PLC01-SH

+PLC01/121.3
+PLC01-A217
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1020
Q2- Q2+
7 3
+PLC01/115.6 +PLC01-SH

+PLC01/121.3
+PLC01-A217
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1022
Q3- Q3+
8 4
+PLC01/115.6 +PLC01-SH

+PLC01/121.3
+PLC01-A218
Analog Output **MD011F1**
6ES7135-6HD00-0BA1
QW1024
Q0- Q0+
5 1
+PLC01/115.6 +PLC01-SH

QW1020 may be we need it?
Tagogenerator for what?

+PLC01-X21 ⌀13 ⌀14 ⌀15 ⌀16 ⌀17 ⌀18 ⌀19 ⌀20 ⌀21 ⌀22 ⌀23 ⌀24 ⌀25 ⌀26

=EXISTING

+JB4

C1503 C1511 C1505 C1512 C1507 C1513 C1509 C1514 C9 C520

-AMP 1 -AMP 2 -AMP 3 -AMP 4 -TG -TBD -TBD

+PANEL_P

ARMATURE (amps)
TO MILL MODEL
TB-5 CH No 3.
0-10V

ARMATURE (volts)
TO MILL MODEL
TB-5 CH No 2.
0-10V

MAIN DRIVE (roll speed)
TO MILL MODEL
TB-5 CH No 4.
0-10V

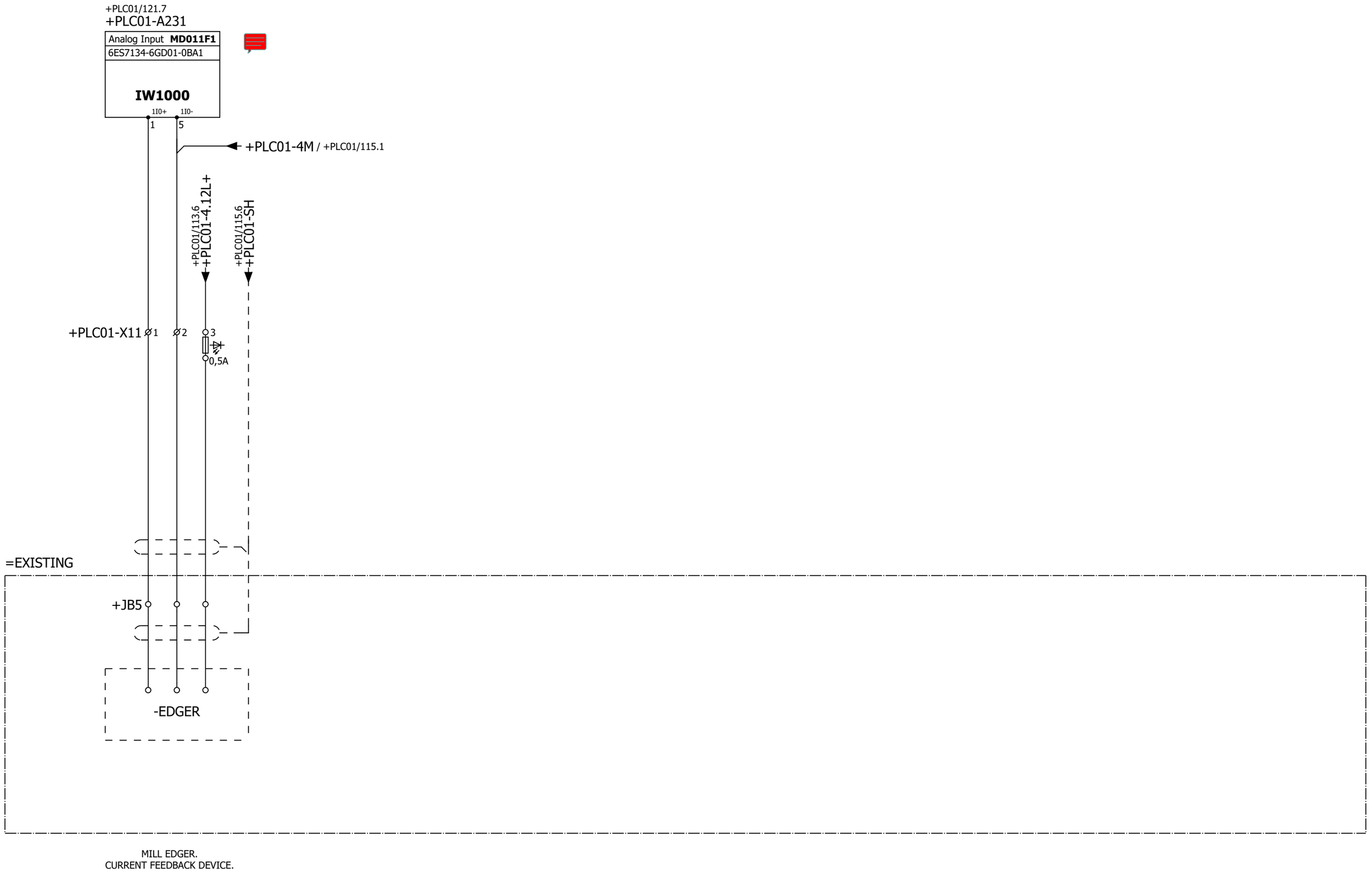
MAIN MOTOR (field current)
TO MILL MODEL
TB-5 CH No 5.
0-10V

LINE MASTER TACHO.

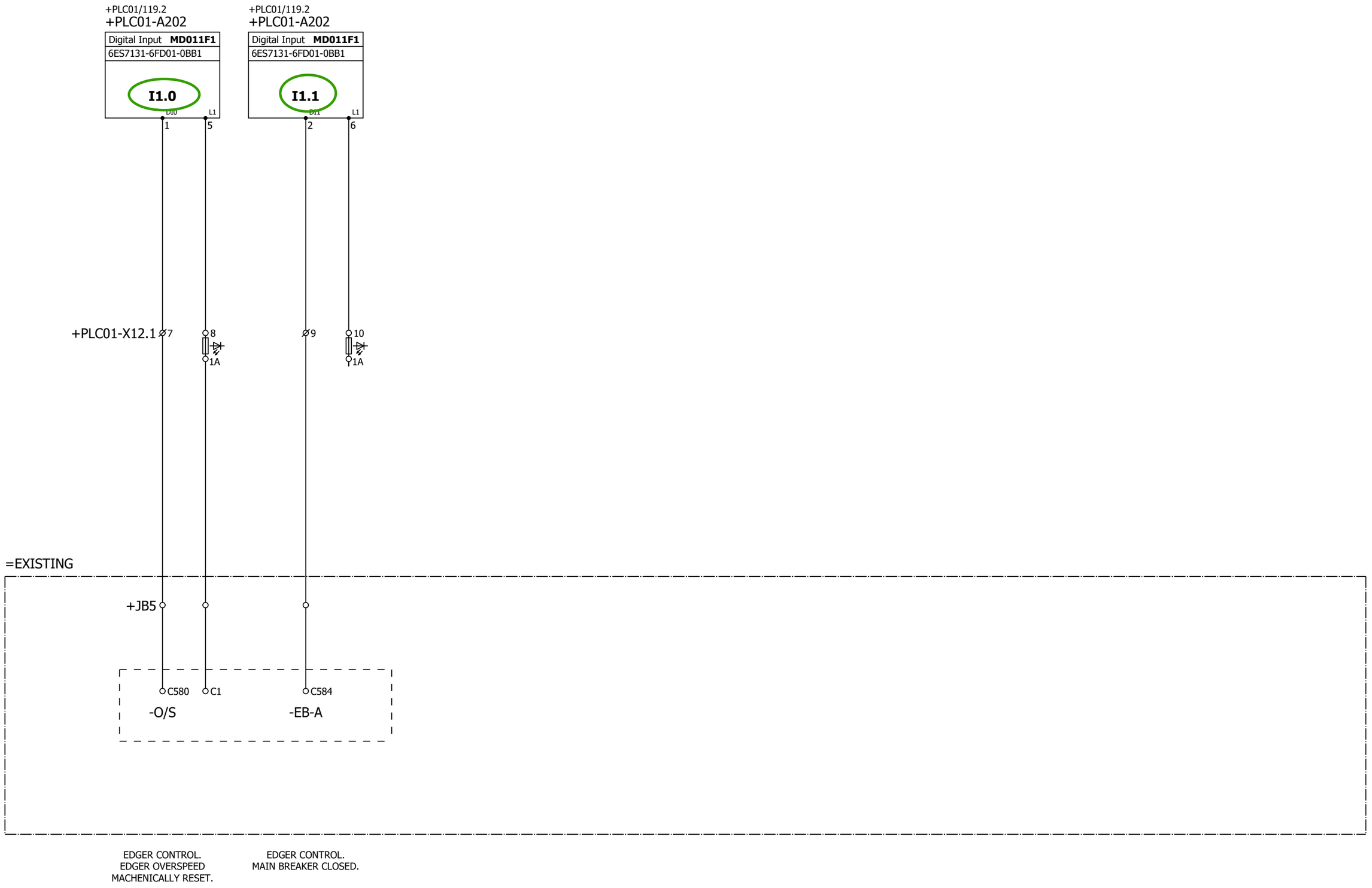
ROLL MOTOR M20.

ROLL MOTOR M20.

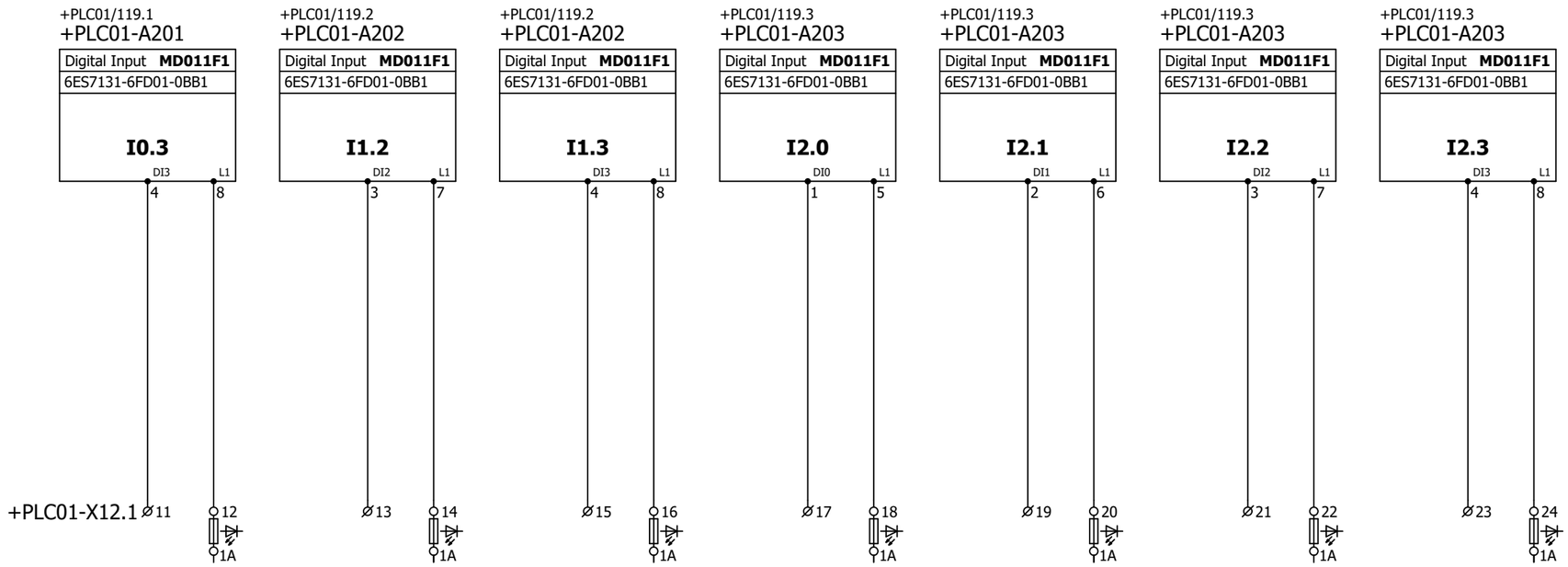
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 4	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **C4**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **271**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow +C5/273



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 5	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **C5**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **273**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 275

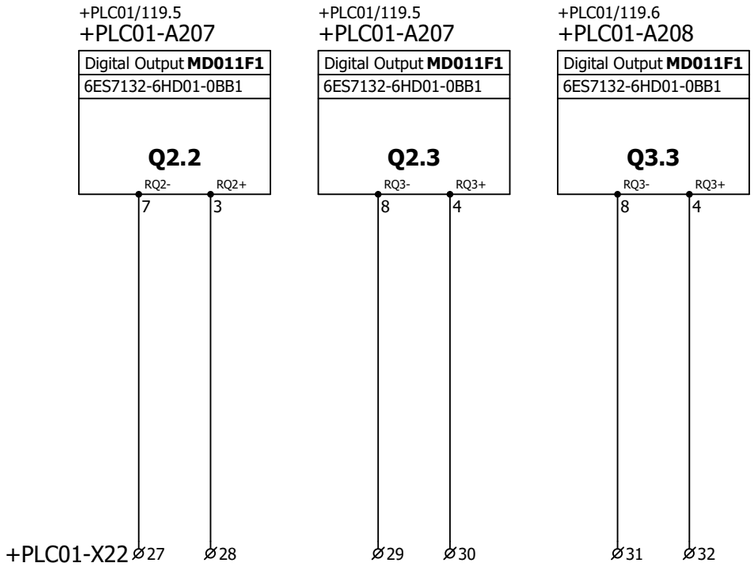


00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	PANEL C SECTION 5	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **C5**	
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **275**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow +SPARES/277



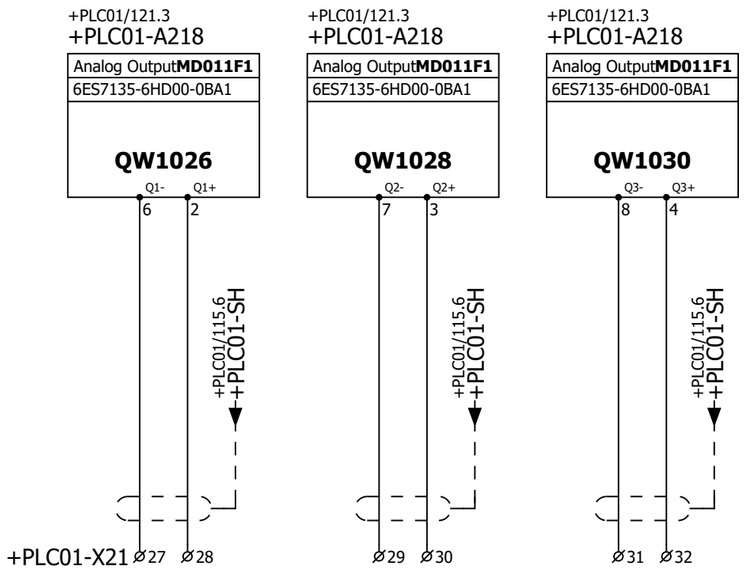
SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **277**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 279



SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **279**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 281

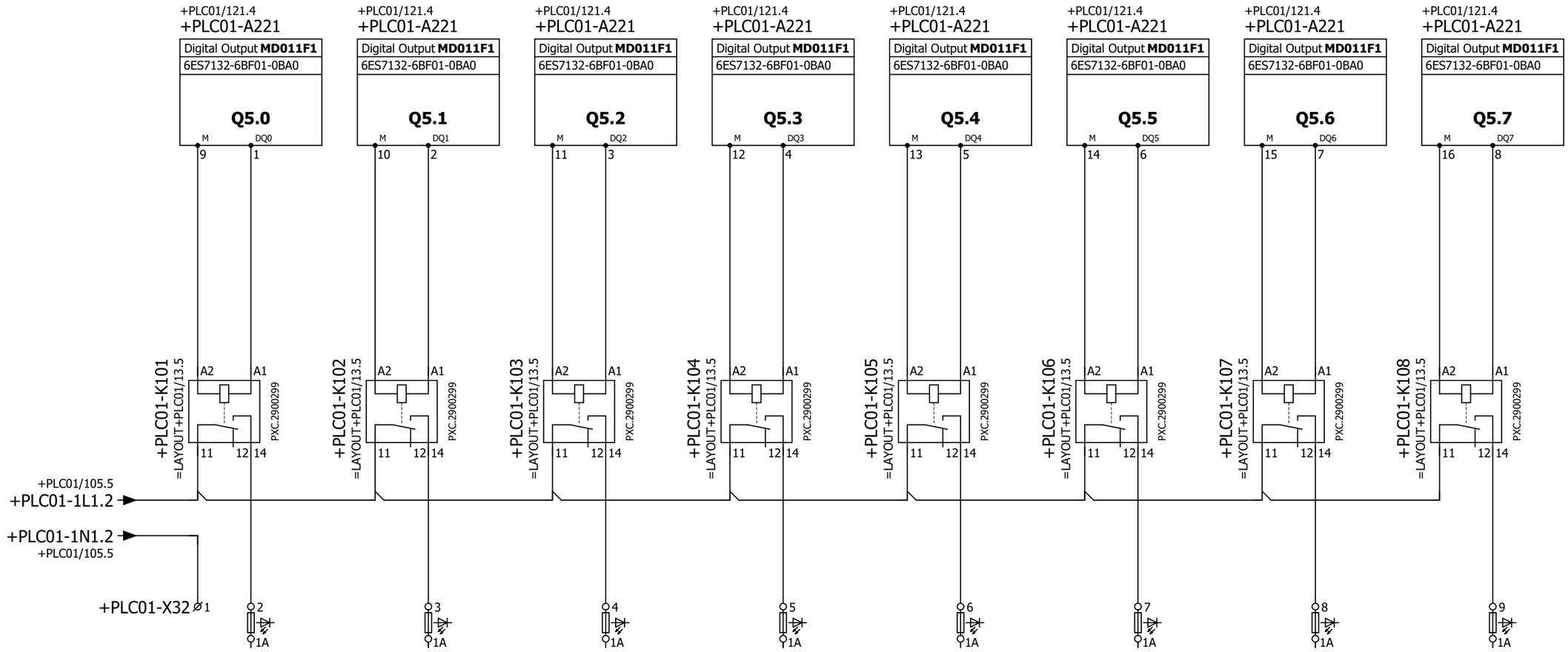


ARMATURE (amps)
TO MILL MODEL
TB-5 CH No 3.
0-10V

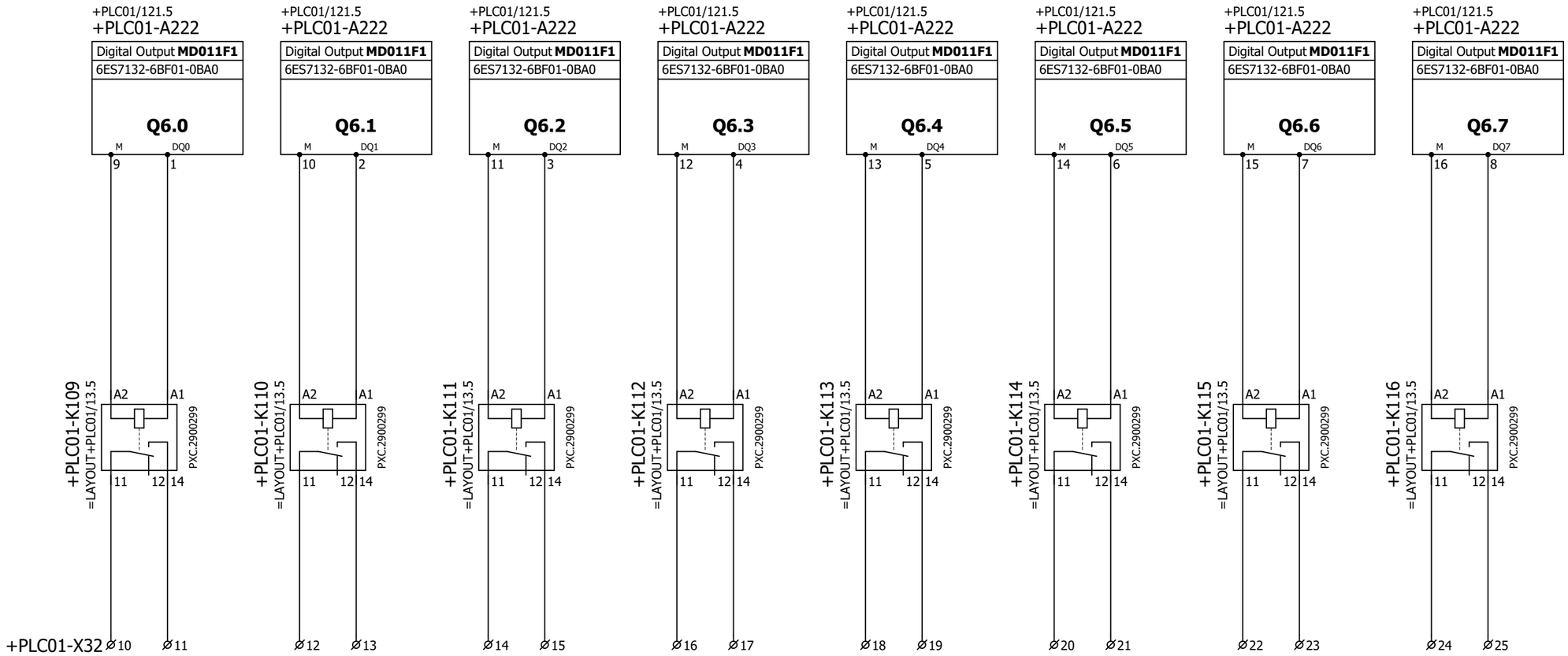
ARMATURE (amps)
TO MILL MODEL
TB-5 CH No 3.
0-10V

ARMATURE (amps)
TO MILL MODEL
TB-5 CH No 3.
0-10V

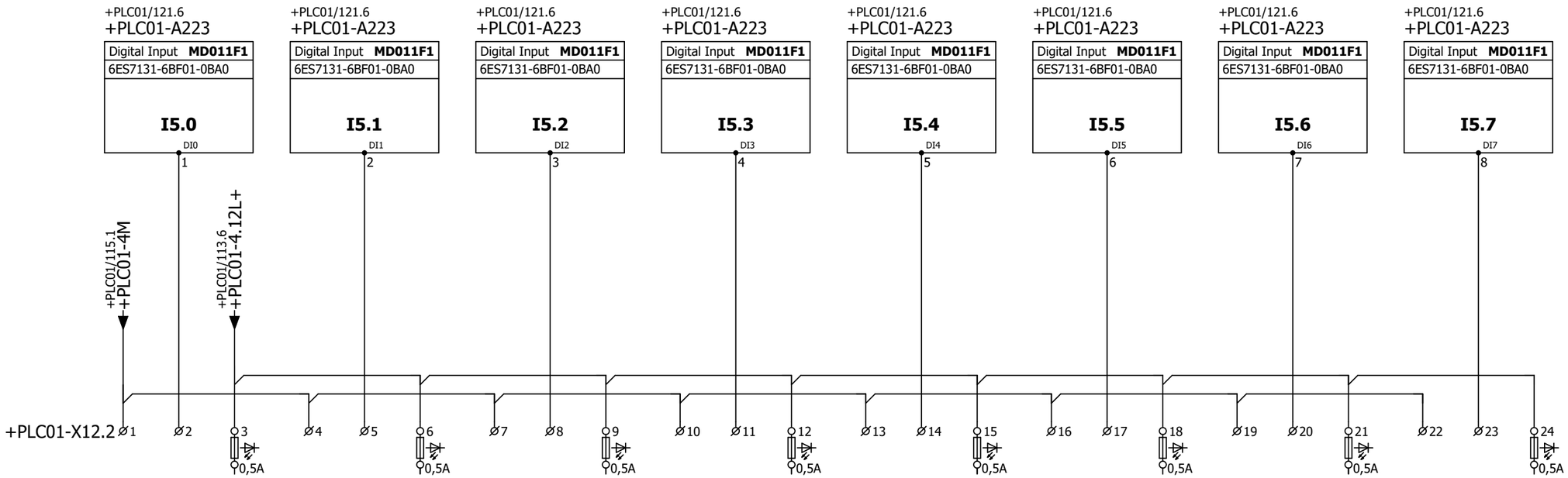
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **281**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 283



00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **283**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 285

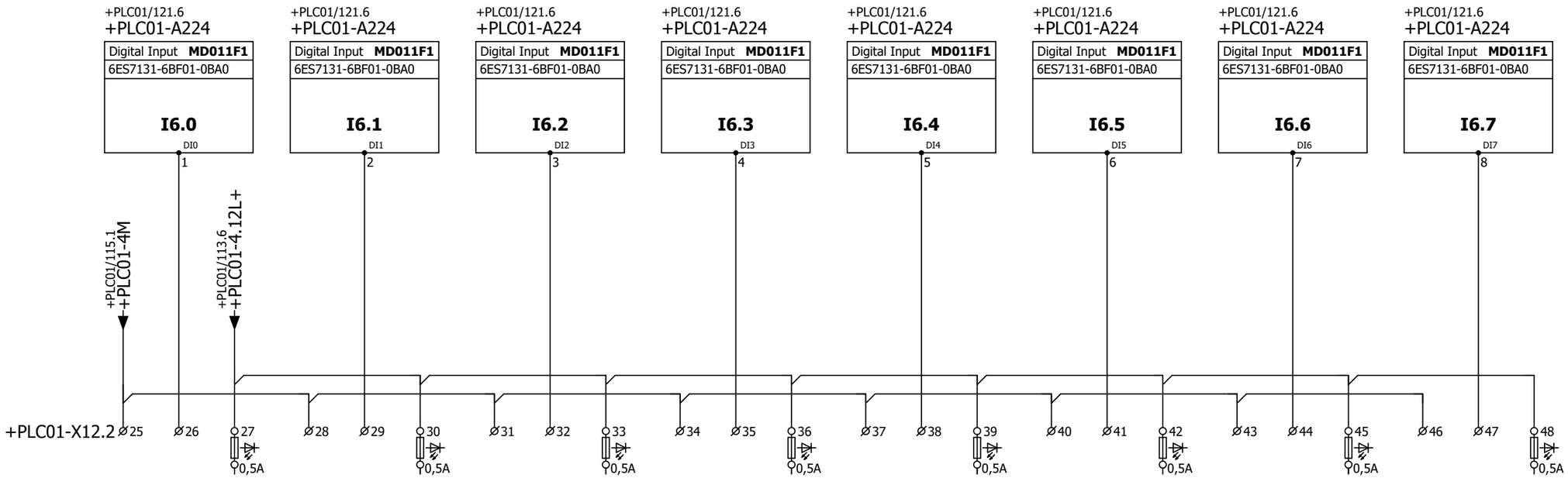


00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10
				Drawn	TeraWatt					+ **SPARES**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **285**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 287



SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **287**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 289



SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
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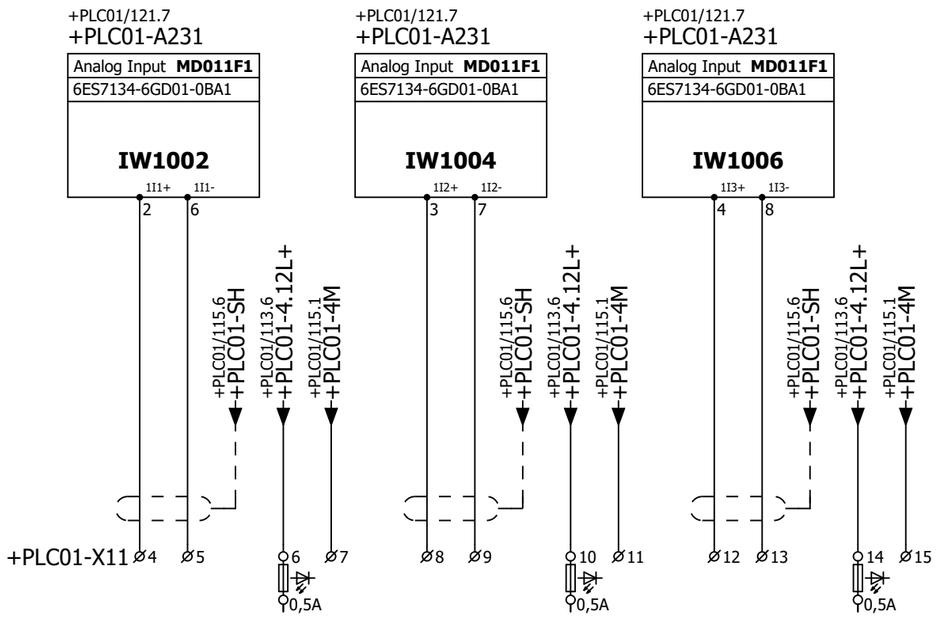
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **289**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 291



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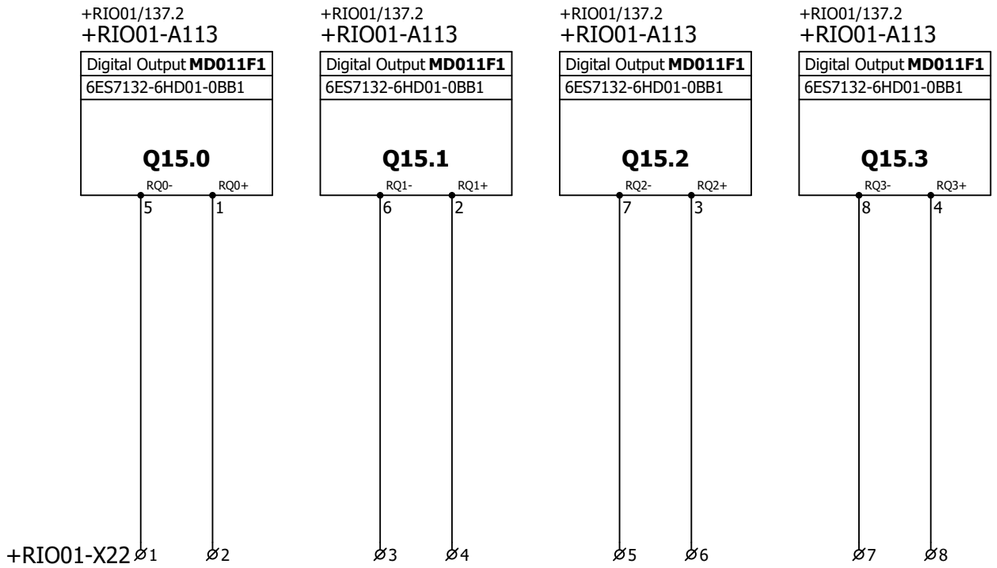
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **291**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 293

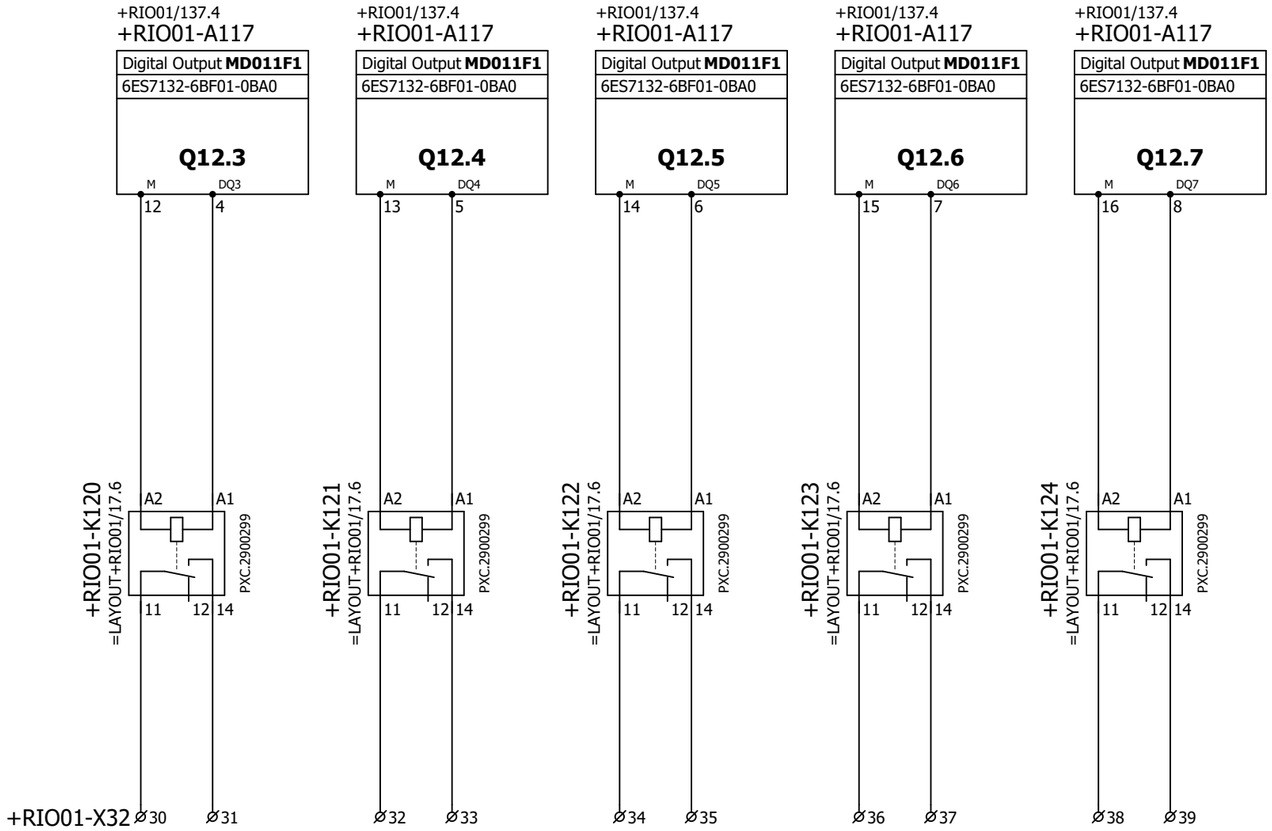
SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **293**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 295

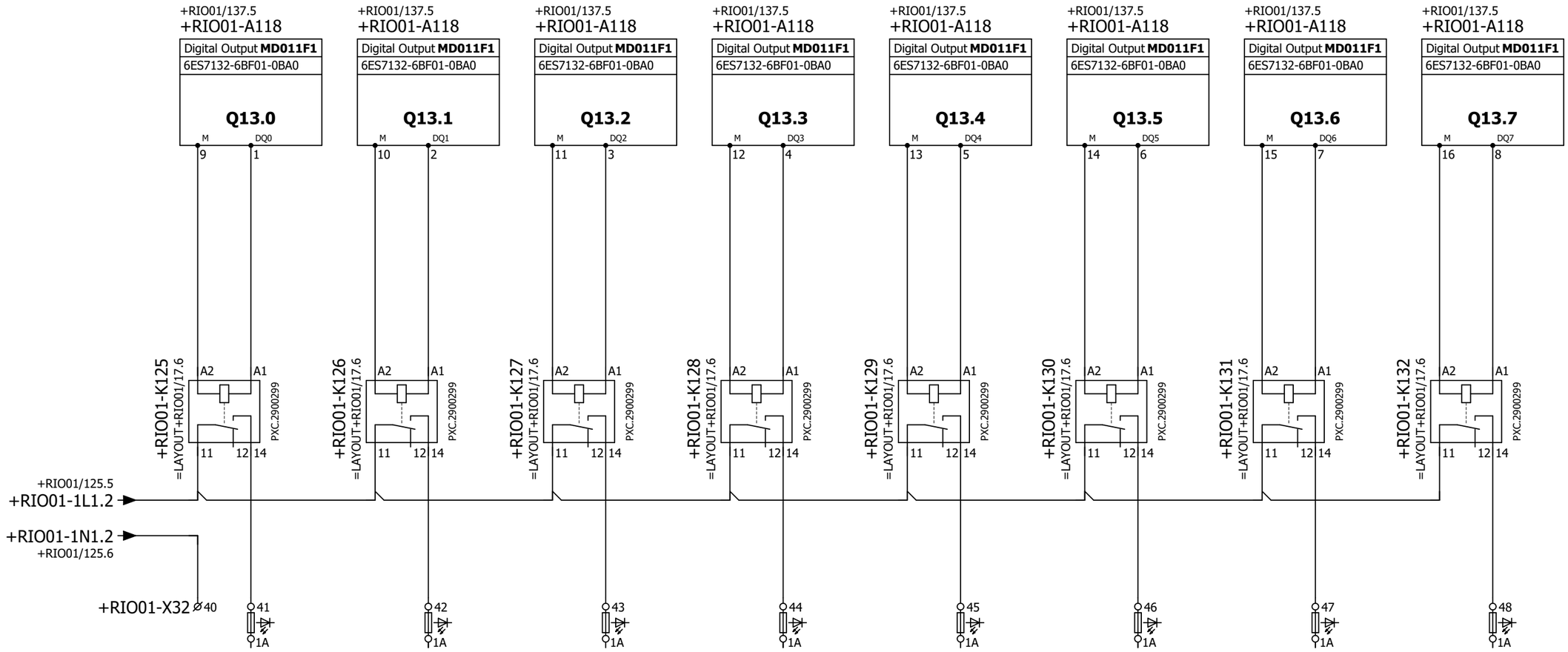


SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **295**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 297

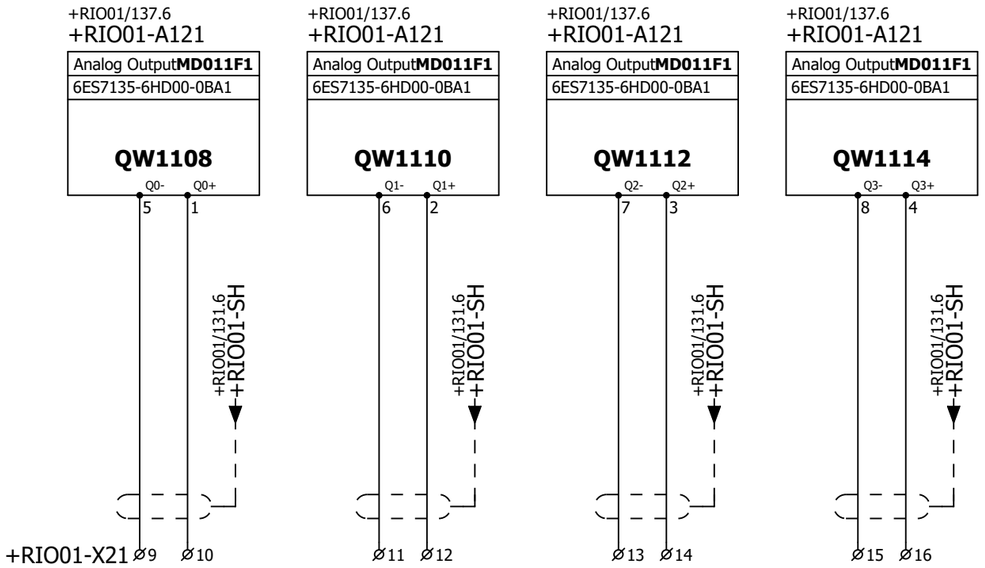


00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **297**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 299



SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **299**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 301



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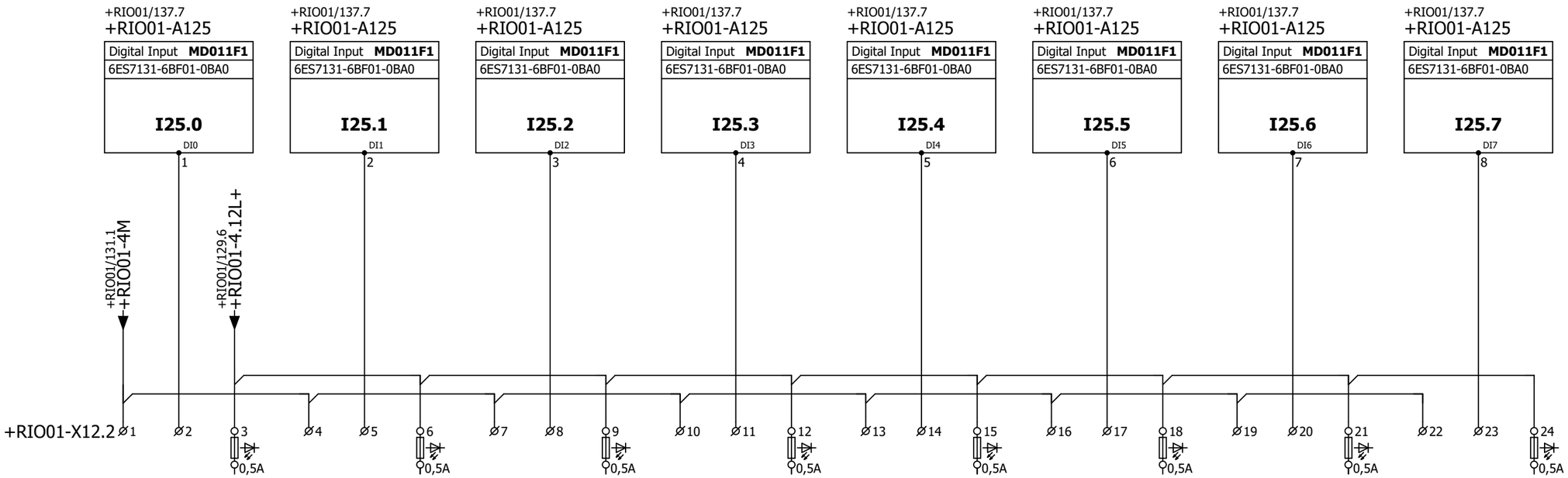
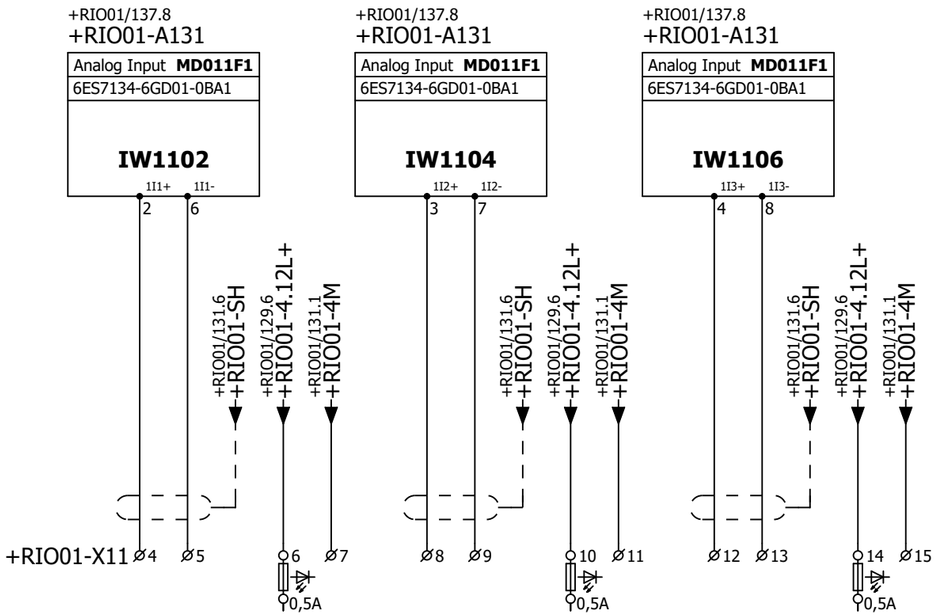
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **301**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 303



SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **303**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 305



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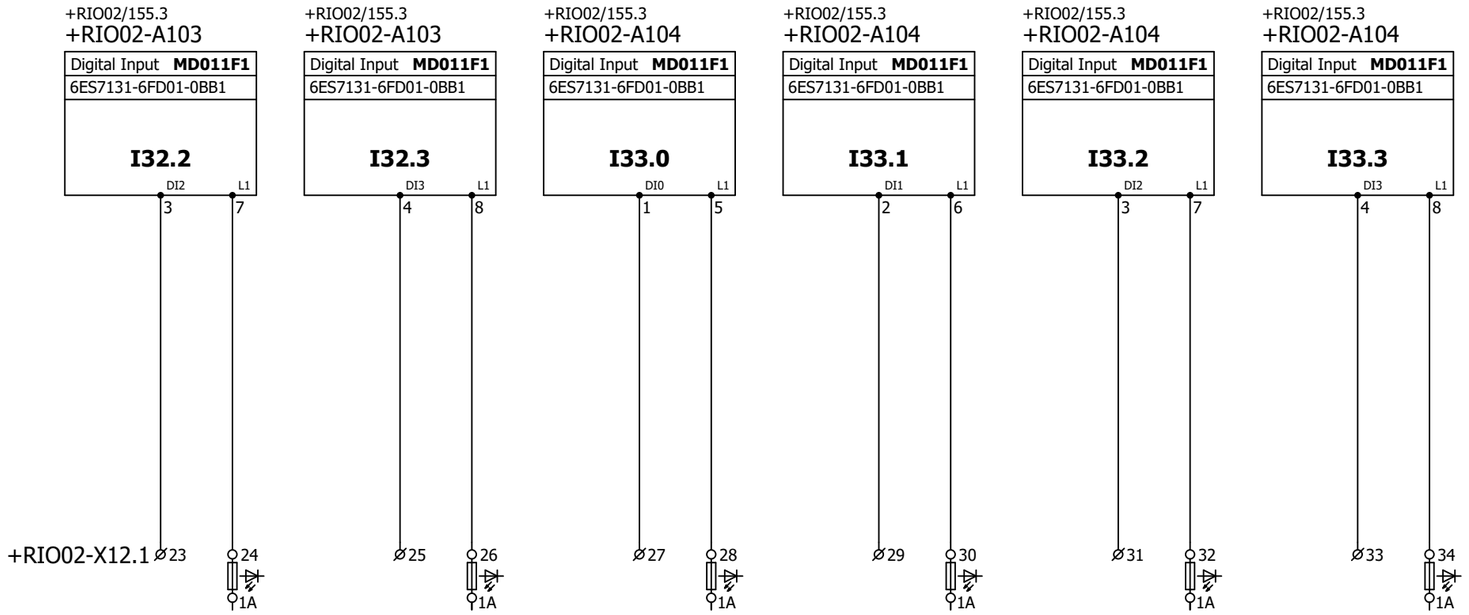
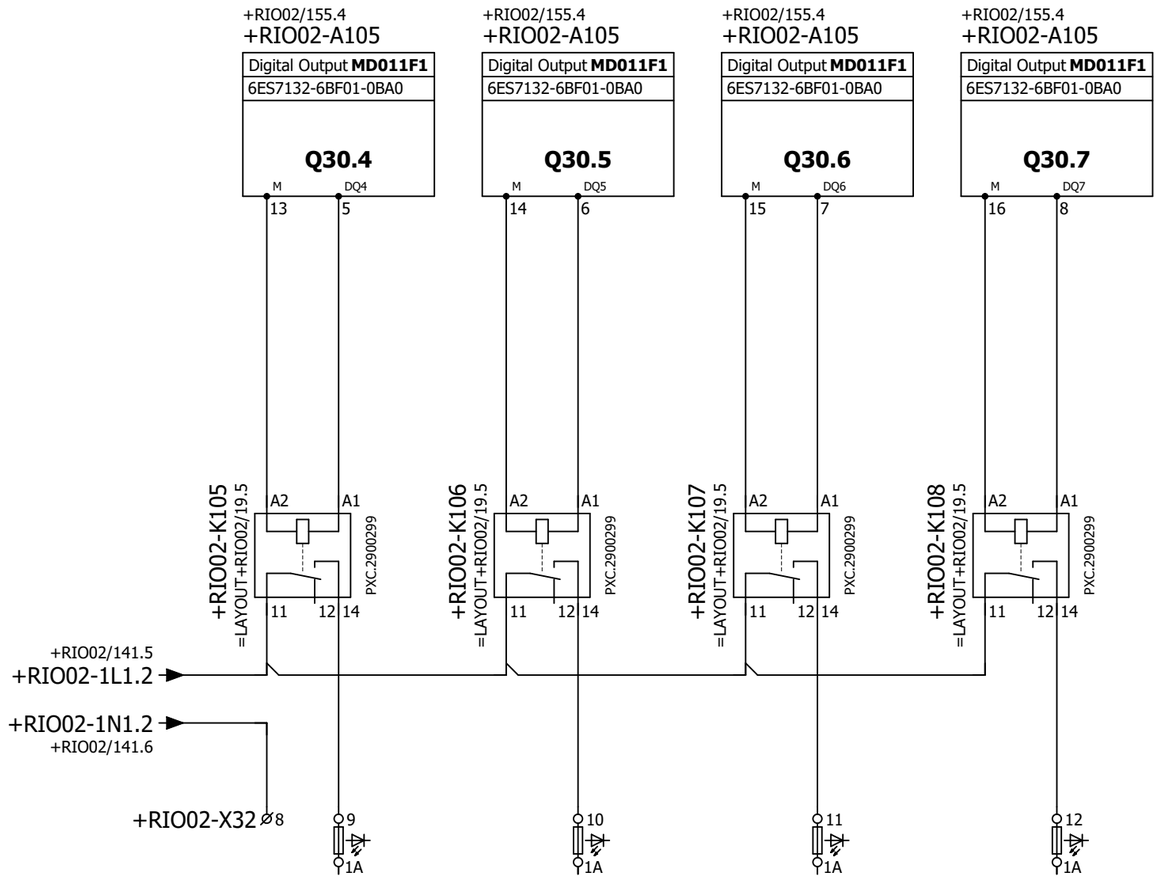
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram		= MD01E10
				Drawn	TeraWatt						+ **SPARES**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **305**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 307



SPARE. SPARE. SPARE. SPARE. SPARE. SPARE.

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **307**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 309



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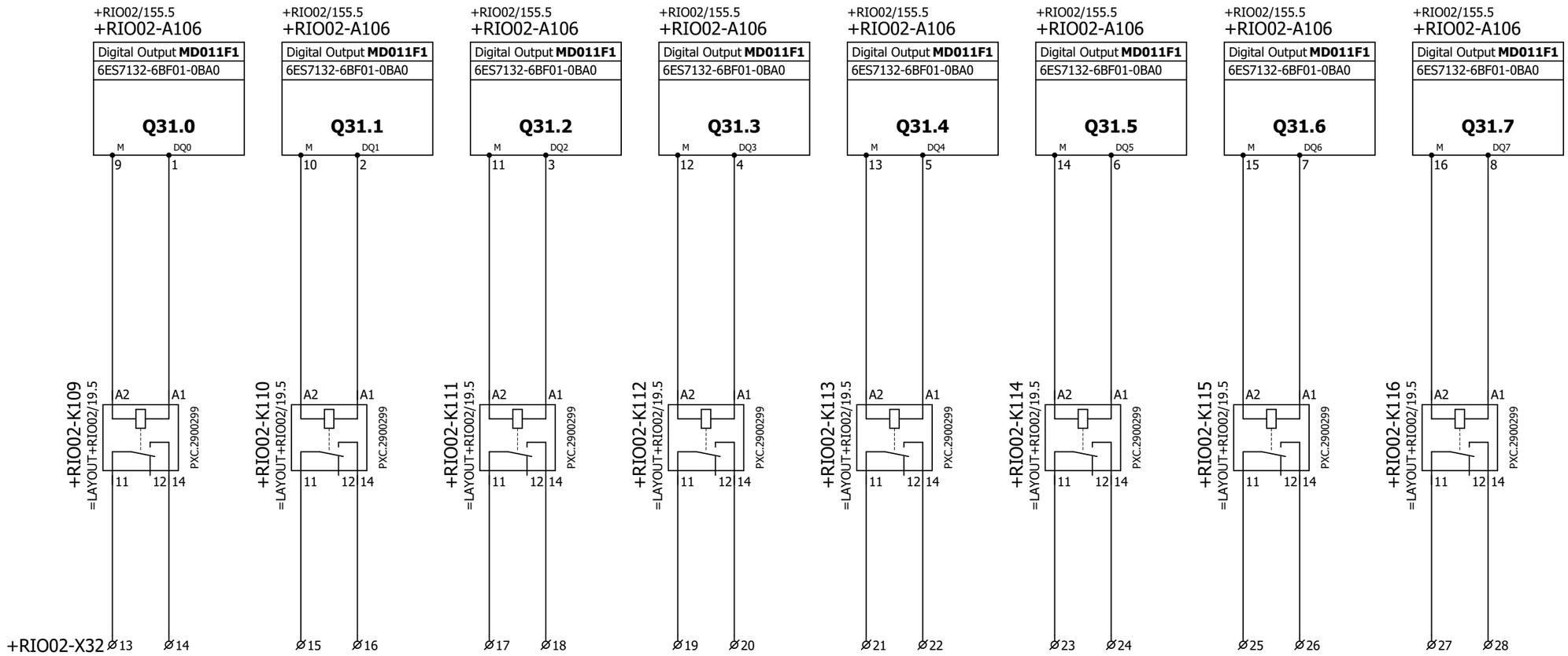
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **309**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 311



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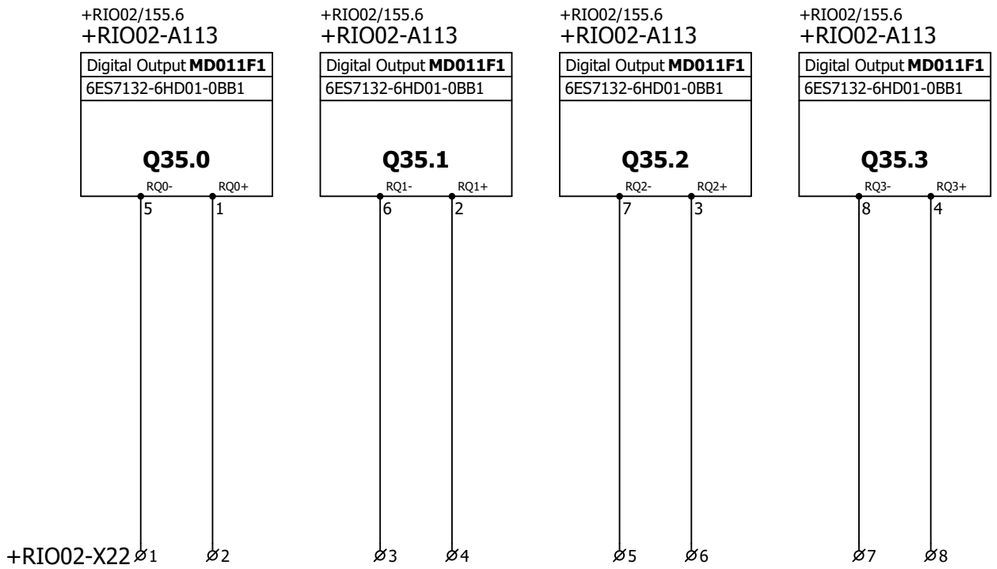
				Drawn	TeraWatt						+ **SPARES**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **311**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 313



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00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	SPARES	Hot Mill drives upgrade - Automation system electrical diagram	= MD01E10	
				Drawn	TeraWatt					+ **SPARES**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **313**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	=REPORTS+TERMINAL STRIPS/2001

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X1								
=CUSTOMER+CUSTOMER-X1			'	**1**	PT 6	-Q01	1	/101,1
=CUSTOMER+CUSTOMER-X1			'	**2**	PT 6	-Q01	3	/101,1
=CUSTOMER+CUSTOMER-X1			'	**3**	PT 6	-Q02	1	/101,4
=CUSTOMER+CUSTOMER-X1			'	**4**	PT 6	-Q02	3	/101,4
=CUSTOMER+CUSTOMER-Xn			'	**5**	PT 6	-Q03	1	/101,7
=CUSTOMER+CUSTOMER-Xn			'	**6**	PT 6	-Q03	3	/101,7
+RIO01-X1	1:2		'	**7**	PT 6	-F11	2	/103,1
+RIO01-X1	2:2		'	**8**	PT 6	-F11	4	/103,1
+RIO02-X1	1:2		'	**9**	PT 6	-F12	2	/103,3
+RIO02-X1	2:2		'	**10**	PT 6	-F12	4	/103,3
			'	**11**	PT 6	-F13	2	/103,5
			'	**12**	PT 6	-F13	4	/103,5
+RIO01-X1	3:2		'	**13**	PT 6	-F21	2	/107,1
+RIO01-X1	4:2		'	**14**	PT 6	-F21	4	/107,1
+RIO02-X1	3:2		'	**15**	PT 6	-F22	2	/107,3
+RIO02-X1	4:2		'	**16**	PT 6	-F22	4	/107,3
			'	**17**	PT 6	-F23	2	/107,5
			'	**18**	PT 6	-F23	4	/107,5

0	1	2	3	4	5	6	7	8	9

Plant		Equipment							
Destination device		Terminal				Destination device			
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.	
=MD01E10+PLC01-X11									
=EXISTING+JB5				**1**	PT 2,5-MT	-A231	1	/273,1	
=EXISTING+JB5				**2**	PT 2,5-MT	-A231	5	/273,1	
						-W.4M			
=EXISTING+JB5			'	**3**	PT 4-HESILED 24 (5X20)	-F42	2	/273,1	
				4	PT 2,5-MT	-A231	2	/291,1	
				5	PT 2,5-MT	-A231	6	/291,1	
			'	**6**	PT 4-HESILED 24 (5X20)	-F42	2	/291,2	
				7	PT 2,5-MT	-W.4M		/291,2	
				8	PT 2,5-MT	-A231	3	/291,2	
				9	PT 2,5-MT	-A231	7	/291,2	
			'	**10**	PT 4-HESILED 24 (5X20)	-F42	2	/291,3	
				11	PT 2,5-MT	-W.4M		/291,3	
				12	PT 2,5-MT	-A231	4	/291,3	
				13	PT 2,5-MT	-A231	8	/291,3	
			'	**14**	PT 4-HESILED 24 (5X20)	-F42	2	/291,4	
				15	PT 2,5-MT	-W.4M		/291,4	

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X12.1								
=EXISTING+JB4				**1**	PT 2,5-MT	-A201	1	/269,2
=EXISTING+JB4			'	**2**	PT 4-HESILA 250 (5X20)	-A201	5	/269,2
=EXISTING+JB4				**3**	PT 2,5-MT	-A201	2	/269,3
=EXISTING+JB4			'	**4**	PT 4-HESILA 250 (5X20)	-A201	6	/269,3
=EXISTING+JB4				**5**	PT 2,5-MT	-A201	3	/269,4
=EXISTING+JB4			'	**6**	PT 4-HESILA 250 (5X20)	-A201	7	/269,4
=EXISTING+JB5				**7**	PT 2,5-MT	-A202	1	/275,1
=EXISTING+JB5			'	**8**	PT 4-HESILA 250 (5X20)	-A202	5	/275,1
=EXISTING+JB5				**9**	PT 2,5-MT	-A202	2	/275,2
			'	**10**	PT 4-HESILA 250 (5X20)	-A202	6	/275,2
				11	PT 2,5-MT	-A201	4	/277,1
			'	**12**	PT 4-HESILA 250 (5X20)	-A201	8	/277,1
				13	PT 2,5-MT	-A202	3	/277,2
			'	**14**	PT 4-HESILA 250 (5X20)	-A202	7	/277,2
				15	PT 2,5-MT	-A202	4	/277,3
			'	**16**	PT 4-HESILA 250 (5X20)	-A202	8	/277,3
				17	PT 2,5-MT	-A203	1	/277,4
			'	**18**	PT 4-HESILA 250 (5X20)	-A203	5	/277,4
				19	PT 2,5-MT	-A203	2	/277,5
			'	**20**	PT 4-HESILA 250 (5X20)	-A203	6	/277,5
				21	PT 2,5-MT	-A203	3	/277,6
			'	**22**	PT 4-HESILA 250 (5X20)	-A203	7	/277,6
				23	PT 2,5-MT	-A203	4	/277,7
			'	**24**	PT 4-HESILA 250 (5X20)	-A203	8	/277,7

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X12.2								
				1	PT 2,5-MT	-W.4M		/287,1
				2	PT 2,5-MT	-A223	1	/287,1
				3	PT 4-HESILED 24 (5X20)	-F42	2	/287,1
				4	PT 2,5-MT			/287,2
				5	PT 2,5-MT	-A223	2	/287,2
				6	PT 4-HESILED 24 (5X20)			/287,2
				7	PT 2,5-MT			/287,3
				8	PT 2,5-MT	-A223	3	/287,3
				9	PT 4-HESILED 24 (5X20)			/287,3
				10	PT 2,5-MT			/287,4
				11	PT 2,5-MT	-A223	4	/287,4
				12	PT 4-HESILED 24 (5X20)			/287,4
				13	PT 2,5-MT			/287,5
				14	PT 2,5-MT	-A223	5	/287,5
				15	PT 4-HESILED 24 (5X20)			/287,5
				16	PT 2,5-MT			/287,6
				17	PT 2,5-MT	-A223	6	/287,6
				18	PT 4-HESILED 24 (5X20)			/287,6
				19	PT 2,5-MT			/287,6
				20	PT 2,5-MT	-A223	7	/287,7
				21	PT 4-HESILED 24 (5X20)			/287,7
				22	PT 2,5-MT			/287,7
				23	PT 2,5-MT	-A223	8	/287,8
				24	PT 4-HESILED 24 (5X20)			/287,8
				25	PT 2,5-MT	-W.4M		/289,1
				26	PT 2,5-MT	-A224	1	/289,1
				27	PT 4-HESILED 24 (5X20)	-F42	2	/289,1
				28	PT 2,5-MT			/289,2
				29	PT 2,5-MT	-A224	2	/289,2
				30	PT 4-HESILED 24 (5X20)			/289,2
				31	PT 2,5-MT			/289,3
				32	PT 2,5-MT	-A224	3	/289,3
				33	PT 4-HESILED 24 (5X20)			/289,3
				34	PT 2,5-MT			/289,4
				35	PT 2,5-MT	-A224	4	/289,4
				36	PT 4-HESILED 24 (5X20)			/289,4
				37	PT 2,5-MT			/289,5
				38	PT 2,5-MT	-A224	5	/289,5
				39	PT 4-HESILED 24 (5X20)			/289,5
				40	PT 2,5-MT			/289,6
				41	PT 2,5-MT	-A224	6	/289,6
				42	PT 4-HESILED 24 (5X20)			/289,6
				43	PT 2,5-MT			/289,6
				44	PT 2,5-MT	-A224	7	/289,7
				45	PT 4-HESILED 24 (5X20)			/289,7
				46	PT 2,5-MT			/289,7
				47	PT 2,5-MT	-A224	8	/289,8
				48	PT 4-HESILED 24 (5X20)			/289,8

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+PLC01-X12.2
				Drawn	TeraWatt			
				Check	DiMaioD			
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.

Hot Mill drives upgrade - Automation system electrical diagram		= REPORTS	
		+ **TERMINAL STRIPS**	
Job Nr.	Dwg.Nr.	Page	**2004**
APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow	2005

0	1	2	3	4	5	6	7	8	9

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X21								
=EXISTING+JB3				**1**	PT 2,5-MT	-A215	5	/263,8
=EXISTING+JB3				**2**	PT 2,5-MT	-A215	1	/263,8
=EXISTING+JB4				**3**	PT 2,5-MT	-A215	6	/267,1
=EXISTING+JB4				**4**	PT 2,5-MT	-A215	2	/267,1
=EXISTING+JB4				**5**	PT 2,5-MT	-A215	7	/267,2
=EXISTING+JB4				**6**	PT 2,5-MT	-A215	3	/267,2
=EXISTING+JB4				**7**	PT 2,5-MT	-A215	8	/267,3
=EXISTING+JB4				**8**	PT 2,5-MT	-A215	4	/267,3
=EXISTING+JB4				**9**	PT 2,5-MT	-A216	5	/267,4
=EXISTING+JB4				**10**	PT 2,5-MT	-A216	1	/267,4
=EXISTING+JB4				**11**	PT 2,5-MT	-A216	6	/267,5
=EXISTING+JB4				**12**	PT 2,5-MT	-A216	2	/267,5
=EXISTING+JB4				**13**	PT 2,5-MT	-A216	7	/271,1
=EXISTING+JB4				**14**	PT 2,5-MT	-A216	3	/271,1
=EXISTING+JB4				**15**	PT 2,5-MT	-A216	8	/271,2
=EXISTING+JB4				**16**	PT 2,5-MT	-A216	4	/271,2
=EXISTING+JB4				**17**	PT 2,5-MT	-A217	5	/271,3
=EXISTING+JB4				**18**	PT 2,5-MT	-A217	1	/271,3
=EXISTING+JB4				**19**	PT 2,5-MT	-A217	6	/271,4
=EXISTING+JB4				**20**	PT 2,5-MT	-A217	2	/271,4
=EXISTING+JB4				**21**	PT 2,5-MT	-A217	7	/271,5
=EXISTING+JB4				**22**	PT 2,5-MT	-A217	3	/271,5
=EXISTING+JB4				**23**	PT 2,5-MT	-A217	8	/271,6
=EXISTING+JB4				**24**	PT 2,5-MT	-A217	4	/271,6
=EXISTING+JB4				**25**	PT 2,5-MT	-A218	5	/271,7
=EXISTING+JB4				**26**	PT 2,5-MT	-A218	1	/271,7
				27	PT 2,5-MT	-A218	6	/281,1
				28	PT 2,5-MT	-A218	2	/281,1
				29	PT 2,5-MT	-A218	7	/281,2
				30	PT 2,5-MT	-A218	3	/281,2
				31	PT 2,5-MT	-A218	8	/281,3
				32	PT 2,5-MT	-A218	4	/281,3

Rev.	Descript.	Date	Name
00	FOR MANUFACT.	NOV-24	TeraWatt

Date	29-11-2024
Drawn	TeraWatt
Check	DiMaioD
Original	

ARCONIC

Replaced by

DANIELI AUTOMATION

Replaced by

TERMINAL STRIP =MD01E10+PLC01-X21

Descript.

Hot Mill drives upgrade - Automation system electrical diagram

= REPORTS

+ **TERMINAL STRIPS**

Job Nr.	Dwg.Nr.	Page
APC7V9A1	QPC7V9-MD01-A8100-ED101	**2005**
		Follow 2006

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Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X22								
=EXISTING+JB2				**1**	PT 2,5	-A205	5	/261,1
=EXISTING+JB2				**2**	PT 2,5	-A205	1	/261,1
=EXISTING+JB3				**3**	PT 2,5	-A205	6	/263,1
=EXISTING+JB3				**4**	PT 2,5	-A205	2	/263,1
				5	PT 2,5	-A205	7	/263,2
=EXISTING+JB3				**6**	PT 2,5	-A205	3	/263,2
=EXISTING+JB3				**7**	PT 2,5	-A205	8	/263,3
=EXISTING+JB3				**8**	PT 2,5	-A205	4	/263,3
				9	PT 2,5	-A206	5	/263,4
=EXISTING+JB3				**10**	PT 2,5	-A206	1	/263,4
=EXISTING+JB3				**11**	PT 2,5	-A206	6	/263,5
=EXISTING+JB3				**12**	PT 2,5	-A206	2	/263,5
				13	PT 2,5	-A206	7	/263,6
=EXISTING+JB3				**14**	PT 2,5	-A206	3	/263,6
=EXISTING+JB3				**15**	PT 2,5	-A206	8	/263,6
=EXISTING+JB3				**16**	PT 2,5	-A206	4	/263,7
=EXISTING+JB3				**17**	PT 2,5	-A207	5	/265,1
=EXISTING+JB3				**18**	PT 2,5	-A207	1	/265,1
				19	PT 2,5	-A207	6	/265,2
=EXISTING+JB3				**20**	PT 2,5	-A207	2	/265,2
=EXISTING+JB4				**21**	PT 2,5	-A208	5	/269,1
=EXISTING+JB4				**22**	PT 2,5	-A208	1	/269,1
=EXISTING+JB4				**23**	PT 2,5	-A208	6	/269,5
=EXISTING+JB4				**24**	PT 2,5	-A208	2	/269,5
=EXISTING+JB4				**25**	PT 2,5	-A208	7	/269,6
=EXISTING+JB4				**26**	PT 2,5	-A208	3	/269,6
				27	PT 2,5	-A207	7	/279,1
				28	PT 2,5	-A207	3	/279,1
				29	PT 2,5	-A207	8	/279,2
				30	PT 2,5	-A207	4	/279,2
				31	PT 2,5	-A208	8	/279,3
				32	PT 2,5	-A208	4	/279,3

Rev.	Descript.	Date	Name					
00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+PLC01-X22
				Drawn	TeraWatt			
				Check	DiMaioD			
				Original		Replaced by	Replaced by	Descript.

Hot Mill drives upgrade - Automation system electrical diagram

= REPORTS
+ **TERMINAL STRIPS**

Job Nr.	Dwg.Nr.	Page	**2006**
APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow	2007

0	1	2	3	4	5	6	7	8	9

Plant		Equipment							
Destination device		Terminal				Destination device			
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.	
=MD01E10+PLC01-X32									
			'	**1**	PT 2,5	-F16	4	/283,1	
			'	**2**	PT 4-HESILA 250 (5X20)	-K101	14	/283,1	
			'	**3**	PT 4-HESILA 250 (5X20)	-K102	14	/283,2	
			'	**4**	PT 4-HESILA 250 (5X20)	-K103	14	/283,3	
			'	**5**	PT 4-HESILA 250 (5X20)	-K104	14	/283,4	
			'	**6**	PT 4-HESILA 250 (5X20)	-K105	14	/283,5	
			'	**7**	PT 4-HESILA 250 (5X20)	-K106	14	/283,6	
			'	**8**	PT 4-HESILA 250 (5X20)	-K107	14	/283,7	
			'	**9**	PT 4-HESILA 250 (5X20)	-K108	14	/283,8	
			'	**10**	PT 2,5	-K109	11	/285,1	
			'	**11**	PT 2,5	-K109	14	/285,1	
			'	**12**	PT 2,5	-K110	11	/285,2	
			'	**13**	PT 2,5	-K110	14	/285,2	
			'	**14**	PT 2,5	-K111	11	/285,3	
			'	**15**	PT 2,5	-K111	14	/285,3	
			'	**16**	PT 2,5	-K112	11	/285,4	
			'	**17**	PT 2,5	-K112	14	/285,4	
			'	**18**	PT 2,5	-K113	11	/285,5	
			'	**19**	PT 2,5	-K113	14	/285,5	
			'	**20**	PT 2,5	-K114	11	/285,6	
			'	**21**	PT 2,5	-K114	14	/285,6	
			'	**22**	PT 2,5	-K115	11	/285,6	
			'	**23**	PT 2,5	-K115	14	/285,7	
			'	**24**	PT 2,5	-K116	11	/285,7	
			'	**25**	PT 2,5	-K116	14	/285,8	

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X35								
+DRM02-X35	1	2		**1**	PT 2,5	-K01	13	/257,4
+DRM02-X35	2	2		**2**	PT 2,5	-K01	14	/257,4
+DRM02-X35	3	2		**3**	PT 2,5	-K01	23	/257,5
+DRM02-X35	4	2		**4**	PT 2,5	-K01	24	/257,5
+DRM02-X35	5	2		**5**	PT 2,5	-X36	4:1	/257,6
+DRM02-X35	6	2		**6**	PT 2,5			/257,6
		2		**7**	PT 2,5	-K01	33	/257,7
		2		**8**	PT 2,5	-K01	34	/257,7
		2		**9**	PT 2,5			/257,7
		2		**10**	PT 2,5	-K01	S34	/257,8
		2		**11**	PT 2,5	-K02	13	/259,4
		2		**12**	PT 2,5	-K02	14	/259,4
		2		**13**	PT 2,5	-K02	S12	/259,4
		2		**14**	PT 2,5			/259,4
		2		**15**	PT 2,5	-K02	23	/259,5
		2		**16**	PT 2,5	-K02	24	/259,6
		2		**17**	PT 2,5			/259,6
		2		**18**	PT 2,5			/259,6
		2		**19**	PT 2,5	-K02	33	/259,7
		2		**20**	PT 2,5	-K02	34	/259,7
		2		**21**	PT 2,5			/259,8
		2		**22**	PT 2,5	-K02	S34	/259,8

0	1	2	3	4	5	6	7	8	9

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X36								
=EXISTING+SP	1	2		**1**	PT 2,5	-K01	S11	/257,1
=EXISTING+SP	120	2		**2**	PT 2,5			/257,1
+DRM02-X35	7	2		**3**	PT 2,5			/257,2
+DRM02-X35	9	2		**5**	PT 2,5			/257,3
+DRM02-X35	8	2		**4**	PT 2,5	-K01	S12	/257,3
						-X35	5:1	
+DRM02-X35	10	2		**6**	PT 2,5			/257,3
		2		**7**	PT 2,5	-K02	S11	/259,1
		2		**8**	PT 2,5			/259,1
		2		**9**	PT 2,5			/259,2
		2		**10**	PT 2,5	-K02	S12	/259,2

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+PLC01-X36	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS
				Drawn	TeraWatt					+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **2009**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 2010

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X40								
-W.4.1L+		3		**1**	PT 4-HESILED 24 (5X20)	-F41	2	/113,1
		3		**2**	PT 4-HESILED 24 (5X20)			/113,2
		3		**3**	PT 4-HESILED 24 (5X20)			/113,3
-A215	L+	3		**4**	PT 4-HESILED 24 (5X20)			/113,4
-A221	L+							
-A223	L+							
-A231	L+							
		3		**5**	PT 4-HESILED 24 (5X20)			/113,5

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+PLC01-X40	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS	
				Drawn	TeraWatt					+ **TERMINAL STRIPS**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **2010**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 2011

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+PLC01-X60								
-K01	A1(+)	3		**1**	PT 4-HESILED 24 (5X20)	-F62	2	/109,4
-K02	A1(+)	3		**2**	PT 4-HESILED 24 (5X20)	-F62	2	/109,4
		3		**3**	PT 4-HESILED 24 (5X20)			/109,4
		3		**4**	PT 4-HESILED 24 (5X20)			/109,4
		3		**5**	PT 4-HESILED 24 (5X20)			/109,5

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+PLC01-X60	Hot Mill drives upgrade - Automation system electrical diagram		= REPORTS
				Drawn	TeraWatt						+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **2011**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 2012

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X1								
+PLC01-X1	7:2		'	**1**	PT 6	-Q01	1	/123,1
+PLC01-X1	8:2		'	**2**	PT 6	-Q01	3	/123,1
+PLC01-X1	13:2		'	**3**	PT 6	-Q02	1	/123,4
+PLC01-X1	14:2		'	**4**	PT 6	-Q02	3	/123,4
=CUSTOMER+CUSTOMER-Xn			'	**5**	PT 6	-Q03	1	/123,7
=CUSTOMER+CUSTOMER-Xn			'	**6**	PT 6	-Q03	3	/123,7

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO01-X1	Hot Mill drives upgrade - Automation system electrical diagram		= REPORTS
				Drawn	TeraWatt						+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **2012**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 2013

0	1	2	3	4	5	6	7	8	9

Plant		Equipment							
Destination device		Terminal				Destination device			
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.	
=MD01E10+RIO01-X11									
=EXISTING+MP	C227		'	**1**	PT 2,5			/243,1	
=EXISTING+MP	C232		'	**2**	PT 2,5			/243,1	
=EXISTING+MP	C222		'	**3**	PT 2,5			/243,1	
				4	PT 2,5-MT	-A131	2	/305,1	
				5	PT 2,5-MT	-A131	6	/305,1	
			'	**6**	PT 4-HESILED 24 (5X20)	-F42	2	/305,2	
				7	PT 2,5-MT	-W.4M		/305,2	
				8	PT 2,5-MT	-A131	3	/305,2	
				9	PT 2,5-MT	-A131	7	/305,2	
			'	**10**	PT 4-HESILED 24 (5X20)	-F42	2	/305,3	
				11	PT 2,5-MT	-W.4M		/305,3	
				12	PT 2,5-MT	-A131	4	/305,3	
				13	PT 2,5-MT	-A131	8	/305,3	
			'	**14**	PT 4-HESILED 24 (5X20)	-F42	2	/305,4	
				15	PT 2,5-MT	-W.4M		/305,4	

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO01-X11	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS
				Drawn	TeraWatt					+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **2013**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Follow 2014

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Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X12.1								
=EXISTING+MP	F50			**1**	PT 2,5-MT	-A101	1	/221,1
=EXISTING+MP	F51		'	**2**	PT 4-HESILA 250 (5X20)	-A101	5	/221,1
=EXISTING+MP	F65			**3**	PT 2,5-MT	-A101	2	/221,2
=EXISTING+MP	F66		'	**4**	PT 4-HESILA 250 (5X20)	-A101	6	/221,2
=EXISTING+MP	F150			**5**	PT 2,5-MT	-A101	3	/221,3
=EXISTING+MP	F151			**6**	PT 2,5-MT	-A101	4	/221,4
=EXISTING+MP	F153			**7**	PT 2,5-MT	-A102	1	/221,5
=EXISTING+MP	F154			**8**	PT 2,5-MT	-A102	2	/221,6
=EXISTING+MP	F160		'	**9**	PT 4-HESILA 250 (5X20)	-A102	6	/221,6
=EXISTING+MP	D113			**10**	PT 2,5-MT	-A102	3	/225,1
=EXISTING+MP	D110		'	**11**	PT 4-HESILA 250 (5X20)	-A102	7	/225,1
=EXISTING+MP	D114			**12**	PT 2,5-MT	-A102	4	/225,2
=EXISTING+MP	D116			**13**	PT 2,5-MT	-A103	1	/225,3
=EXISTING+MP	D119			**14**	PT 2,5-MT	-A103	2	/225,4
=EXISTING+MP	D131			**15**	PT 2,5-MT	-A103	3	/225,5
=EXISTING+MP	D1		'	**16**	PT 4-HESILA 250 (5X20)	-A103	7	/225,5
=EXISTING+MP	D123			**17**	PT 2,5-MT	-A103	4	/227,1
=EXISTING+MP	D124			**18**	PT 2,5-MT	-A104	1	/227,2
=EXISTING+MP	D122		'	**19**	PT 4-HESILA 250 (5X20)	-A104	5	/227,2
=EXISTING+MP	D47			**20**	PT 2,5-MT	-A104	2	/227,3
=EXISTING+MP	D76		'	**21**	PT 4-HESILA 250 (5X20)	-A104	6	/227,3
=EXISTING+MP	D324			**22**	PT 2,5-MT	-A104	3	/229,1
=EXISTING+MP	D322			**23**	PT 2,5-MT	-A104	4	/229,2
=EXISTING+MP	D323			**24**	PT 2,5-MT	-A105	1	/229,3
=EXISTING+MP	D328			**25**	PT 2,5-MT	-A105	2	/229,4
=EXISTING+MP	D329			**26**	PT 2,5-MT	-A105	3	/229,5
=EXISTING+MP	D320		'	**27**	PT 4-HESILA 250 (5X20)	-A105	7	/229,5
=EXISTING+MP	D260			**28**	PT 2,5-MT	-A105	4	/233,1
=EXISTING+MP	D1		'	**29**	PT 4-HESILA 250 (5X20)	-A105	8	/233,1
=EXISTING+MP	D263			**30**	PT 2,5-MT	-A106	1	/233,2
=EXISTING+MP	D264			**31**	PT 2,5-MT	-A106	2	/233,3
=EXISTING+MP	D266			**32**	PT 2,5-MT	-A106	3	/233,4
=EXISTING+MP	D269			**33**	PT 2,5-MT	-A106	4	/233,5
=EXISTING+MP	D330			**34**	PT 2,5-MT	-A107	1	/235,1
=EXISTING+MP	D322			**35**	PT 2,5-MT	-A107	2	/235,2
=EXISTING+MP	D323			**36**	PT 2,5-MT	-A107	3	/235,3
=EXISTING+MP	D328			**37**	PT 2,5-MT	-A107	4	/235,4
=EXISTING+MP	D329			**38**	PT 2,5-MT	-A108	1	/235,5
=EXISTING+MP	D346		'	**39**	PT 4-HESILA 250 (5X20)	-A108	5	/235,5
=EXISTING+MP	C55			**40**	PT 2,5-MT	-A108	2	/239,1
=EXISTING+MP	C56			**41**	PT 2,5-MT	-A108	3	/239,2
=EXISTING+MP	C1		'	**42**	PT 4-HESILA 250 (5X20)	-A108	7	/239,2
=EXISTING+MP	C57			**43**	PT 2,5-MT	-A108	4	/245,1
=EXISTING+MP	C80			**44**	PT 2,5-MT	-A109	1	/245,2
=EXISTING+MP	C1		'	**45**	PT 4-HESILA 250 (5X20)	-A109	5	/245,2
=EXISTING+MP	C101			**46**	PT 2,5-MT	-A109	2	/245,3
=EXISTING+MP	C98		'	**47**	PT 4-HESILA 250 (5X20)	-A109	6	/245,3
=EXISTING+MP	C102			**48**	PT 2,5-MT	-A109	3	/245,4
=EXISTING+MP	C104		'	**49**	PT 4-HESILA 250 (5X20)	-A109	7	/245,4
=EXISTING+MP	C595			**50**	PT 2,5-MT	-A109	4	/245,5
=EXISTING+MP	C592		'	**51**	PT 4-HESILA 250 (5X20)	-A109	8	/245,5
=EXISTING+MP	C597			**52**	PT 2,5-MT	-A110	1	/245,6
=EXISTING+MP	C596		'	**53**	PT 4-HESILA 250 (5X20)	-A110	5	/245,6
				54	PT 2,5-MT	-A110	2	/293,1
			'	**55**	PT 4-HESILA 250 (5X20)	-A110	6	/293,1
				56	PT 2,5-MT	-A110	3	/293,2
			'	**57**	PT 4-HESILA 250 (5X20)	-A110	7	/293,2
				58	PT 2,5-MT	-A110	4	/293,3
			'	**59**	PT 4-HESILA 250 (5X20)	-A110	8	/293,3

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO01-X12.1	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS
				Drawn	TeraWatt					+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **2014**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 2015

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Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X12.1								
				60	PT 2,5-MT	-A111	1	/293,4
			'	**61**	PT 4-HESILA 250 (5X20)	-A111	5	/293,4
				62	PT 2,5-MT	-A111	2	/293,5
			'	**63**	PT 4-HESILA 250 (5X20)	-A111	6	/293,5
				64	PT 2,5-MT	-A111	3	/293,6
			'	**65**	PT 4-HESILA 250 (5X20)	-A111	7	/293,6
				66	PT 2,5-MT	-A111	4	/293,7
			'	**67**	PT 4-HESILA 250 (5X20)	-A111	8	/293,7

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO01-X12.1	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS
				Drawn	TeraWatt					+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr. / Dwg.Nr.	Page **2015**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1 / QPC7V9-MD01-A8100-ED101	Follow 2016

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X12.2								
				1	PT 2,5-MT	-W.4M		/303,1
				2	PT 2,5-MT	-A125	1	/303,1
				3	PT 4-HESILED 24 (5X20)	-F42	2	/303,1
				4	PT 2,5-MT			/303,2
				5	PT 2,5-MT	-A125	2	/303,2
				6	PT 4-HESILED 24 (5X20)			/303,2
				7	PT 2,5-MT			/303,3
				8	PT 2,5-MT	-A125	3	/303,3
				9	PT 4-HESILED 24 (5X20)			/303,3
				10	PT 2,5-MT			/303,4
				11	PT 2,5-MT	-A125	4	/303,4
				12	PT 4-HESILED 24 (5X20)			/303,4
				13	PT 2,5-MT			/303,5
				14	PT 2,5-MT	-A125	5	/303,5
				15	PT 4-HESILED 24 (5X20)			/303,5
				16	PT 2,5-MT			/303,6
				17	PT 2,5-MT	-A125	6	/303,6
				18	PT 4-HESILED 24 (5X20)			/303,6
				19	PT 2,5-MT			/303,6
				20	PT 2,5-MT	-A125	7	/303,7
				21	PT 4-HESILED 24 (5X20)			/303,7
				22	PT 2,5-MT			/303,7
				23	PT 2,5-MT	-A125	8	/303,8
				24	PT 4-HESILED 24 (5X20)			/303,8

0	1	2	3	4	5	6	7	8	9

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X21								
=EXISTING+MP	C439			**1**	PT 2,5-MT	-A120	5	/237,1
=EXISTING+MP	C436			**2**	PT 2,5-MT	-A120	1	/237,1
=EXISTING+MP	C439			**3**	PT 2,5-MT	-A120	6	/237,2
=EXISTING+MP	C437			**4**	PT 2,5-MT	-A120	2	/237,2
=EXISTING+MP	C739			**5**	PT 2,5-MT	-A120	7	/237,3
=EXISTING+MP	C736			**6**	PT 2,5-MT	-A120	3	/237,3
=EXISTING+MP	C739			**7**	PT 2,5-MT	-A120	8	/237,4
=EXISTING+MP	C737			**8**	PT 2,5-MT	-A120	4	/237,4
				9	PT 2,5-MT	-A121	5	/301,1
				10	PT 2,5-MT	-A121	1	/301,1
				11	PT 2,5-MT	-A121	6	/301,2
				12	PT 2,5-MT	-A121	2	/301,2
				13	PT 2,5-MT	-A121	7	/301,3
				14	PT 2,5-MT	-A121	3	/301,3
				15	PT 2,5-MT	-A121	8	/301,4
				16	PT 2,5-MT	-A121	4	/301,4

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X22								
			'	**1**	PT 2,5	-A113	5	/295,1
			'	**2**	PT 2,5	-A113	1	/295,1
			'	**3**	PT 2,5	-A113	6	/295,2
			'	**4**	PT 2,5	-A113	2	/295,2
			'	**5**	PT 2,5	-A113	7	/295,3
			'	**6**	PT 2,5	-A113	3	/295,3
			'	**7**	PT 2,5	-A113	8	/295,4
			'	**8**	PT 2,5	-A113	4	/295,4

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X32								
=EXISTING+MP	F5			**1**	PT 2,5	-F13	4	/223,1
=EXISTING+MP	F72			**2**	PT 4-HESILA 250 (5X20)	-K101	14	/223,1
=EXISTING+MP	F73			**3**	PT 4-HESILA 250 (5X20)	-K102	14	/223,2
=EXISTING+MP	F74			**4**	PT 4-HESILA 250 (5X20)	-K103	14	/223,3
=EXISTING+MP	F75			**5**	PT 4-HESILA 250 (5X20)	-K104	14	/223,4
=EXISTING+MP	F159			**6**	PT 4-HESILA 250 (5X20)	-K105	14	/223,5
=EXISTING+PANEL_P	D5			**7**	PT 2,5	-K106	11	/225,7
=EXISTING+PANEL_P	D131			**8**	PT 2,5	-K106	14	/225,7
=EXISTING+MP	D5			**9**	PT 2,5	-F13	4	/231,1
=EXISTING+MP	D65			**10**	PT 4-HESILA 250 (5X20)	-K107	14	/231,1
=EXISTING+MP	D79			**11**	PT 4-HESILA 250 (5X20)	-K108	14	/231,2
=EXISTING+MP	D63			**12**	PT 4-HESILA 250 (5X20)	-K109	14	/231,3
=EXISTING+MP	D77			**13**	PT 4-HESILA 250 (5X20)	-K110	14	/231,4
=EXISTING+MP	D64			**14**	PT 4-HESILA 250 (5X20)	-K111	14	/231,5
=EXISTING+MP	D78			**15**	PT 4-HESILA 250 (5X20)	-K112	14	/231,6
=EXISTING+MP	C160			**16**	PT 2,5	-K113	11	/241,1
=EXISTING+MP	C161			**17**	PT 2,5	-K113	14	/241,1
=EXISTING+MP	C128			**18**	PT 2,5	-K114	11	/241,2
=EXISTING+MP	C130			**19**	PT 2,5	-K114	14	/241,2
				20	PT 2,5	-K115	11	/241,3
=EXISTING+MP	C129			**21**	PT 2,5	-K115	14	/241,3
=EXISTING+MP	C588			**22**	PT 2,5	-K116	11	/241,4
=EXISTING+MP	C589			**23**	PT 2,5	-K116	14	/241,4
				24	PT 2,5	-K117	11	/241,5
=EXISTING+MP	C590			**25**	PT 2,5	-K117	14	/241,5
=EXISTING+PANEL_T	T3			**26**	PT 2,5	-K118	11	/247,1
=EXISTING+PANEL_T	T31			**27**	PT 2,5	-K118	14	/247,1
				28	PT 2,5	-K119	11	/247,2
=EXISTING+PANEL_T	T32			**29**	PT 2,5	-K119	14	/247,2
				30	PT 2,5	-K120	11	/297,1
				31	PT 2,5	-K120	14	/297,1
				32	PT 2,5	-K121	11	/297,2
				33	PT 2,5	-K121	14	/297,2
				34	PT 2,5	-K122	11	/297,3
				35	PT 2,5	-K122	14	/297,3
				36	PT 2,5	-K123	11	/297,4
				37	PT 2,5	-K123	14	/297,4
				38	PT 2,5	-K124	11	/297,5
				39	PT 2,5	-K124	14	/297,5
				40	PT 2,5	-F13	4	/299,1
				41	PT 4-HESILA 250 (5X20)	-K125	14	/299,1
				42	PT 4-HESILA 250 (5X20)	-K126	14	/299,2
				43	PT 4-HESILA 250 (5X20)	-K127	14	/299,3
				44	PT 4-HESILA 250 (5X20)	-K128	14	/299,4
				45	PT 4-HESILA 250 (5X20)	-K129	14	/299,5
				46	PT 4-HESILA 250 (5X20)	-K130	14	/299,6
				47	PT 4-HESILA 250 (5X20)	-K131	14	/299,7
				48	PT 4-HESILA 250 (5X20)	-K132	14	/299,8

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO01-X32
				Drawn	TeraWatt			
				Check	DiMaioD			
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.

Hot Mill drives upgrade - Automation system electrical diagram		= REPORTS	
		+ **TERMINAL STRIPS**	
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Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO01-X40								
		3		**1**	PT 4-HESILED 24 (5X20)	-F41	2	/129,1
		3		**2**	PT 4-HESILED 24 (5X20)			/129,2
		3		**3**	PT 4-HESILED 24 (5X20)			/129,3
-A115	L+	3		**4**	PT 4-HESILED 24 (5X20)			/129,4
-A120	L+							
-A125	L+							
-A131	L+							
		3		**5**	PT 4-HESILED 24 (5X20)			/129,5

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO01-X40	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS	
				Drawn	TeraWatt					+ **TERMINAL STRIPS**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **2020**
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Plant		**Equipment**						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO02-X1								
+PLC01-X1	9:2		'	**1**	PT 6	-Q01	1	/139,1
+PLC01-X1	10:2		'	**2**	PT 6	-Q01	3	/139,1
+PLC01-X1	15:2		'	**3**	PT 6	-Q02	1	/139,4
+PLC01-X1	16:2		'	**4**	PT 6	-Q02	3	/139,4

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO02-X1	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS	
				Drawn	TeraWatt					+ **TERMINAL STRIPS**	
				Check	DiMaioD				Job Nr.	Dwg.Nr.	Page **2021**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.	APC7V9A1	QPC7V9-MD01-A8100-ED101	Follow 2022

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO02-X12.1								
=EXISTING+SP	C940			**1**	PT 2,5-MT	-A101	1	/249,1
=EXISTING+SP	C1		'	**2**	PT 4-HESILA 250 (5X20)	-A101	5	/249,1
				3	PT 2,5-MT	-A101	2	/249,2
			'	**4**	PT 4-HESILA 250 (5X20)	-A101	6	/249,2
=EXISTING+SP	C911			**5**	PT 2,5-MT	-A101	3	/249,3
=EXISTING+SP	C1		'	**6**	PT 4-HESILA 250 (5X20)	-A101	7	/249,3
=EXISTING+SP	C956			**7**	PT 2,5-MT	-A101	4	/253,1
=EXISTING+SP	C957			**8**	PT 2,5-MT	-A102	1	/253,2
=EXISTING+SP	C958			**9**	PT 2,5-MT	-A102	2	/253,3
=EXISTING+SP	C959			**10**	PT 2,5-MT	-A102	3	/253,4
=EXISTING+SP	C1A		'	**11**	PT 4-HESILA 250 (5X20)	-K104	12	/253,4
				12	PT 2,5-MT			/253,5
				13	PT 2,5-MT			/253,6
				14	PT 2,5-MT			/253,7
				15	PT 2,5-MT			/253,8
=EXISTING+SP	C1B		'	**16**	PT 4-HESILA 250 (5X20)	-K104	14	/253,8
=EXISTING+SP	C987			**17**	PT 2,5-MT	-A102	4	/255,1
=EXISTING+SP	C986		'	**18**	PT 4-HESILA 250 (5X20)	-A102	8	/255,1
=EXISTING+SP	C989			**19**	PT 2,5-MT	-A103	1	/255,2
=EXISTING+SP	C988		'	**20**	PT 4-HESILA 250 (5X20)	-A103	5	/255,2
=EXISTING+SP	C985			**21**	PT 2,5-MT	-A103	2	/255,3
=EXISTING+SP	C984		'	**22**	PT 4-HESILA 250 (5X20)	-A103	6	/255,3
				23	PT 2,5-MT	-A103	3	/307,1
			'	**24**	PT 4-HESILA 250 (5X20)	-A103	7	/307,1
				25	PT 2,5-MT	-A103	4	/307,2
			'	**26**	PT 4-HESILA 250 (5X20)	-A103	8	/307,2
				27	PT 2,5-MT	-A104	1	/307,3
			'	**28**	PT 4-HESILA 250 (5X20)	-A104	5	/307,3
				29	PT 2,5-MT	-A104	2	/307,4
			'	**30**	PT 4-HESILA 250 (5X20)	-A104	6	/307,4
				31	PT 2,5-MT	-A104	3	/307,5
			'	**32**	PT 4-HESILA 250 (5X20)	-A104	7	/307,5
				33	PT 2,5-MT	-A104	4	/307,6
			'	**34**	PT 4-HESILA 250 (5X20)	-A104	8	/307,6

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO02-X12.1	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS
				Drawn	TeraWatt					+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **2022**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.			Follow 2023

Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO02-X22								
			'	**1**	PT 2,5	-A113	5	/313,1
			'	**2**	PT 2,5	-A113	1	/313,1
			'	**3**	PT 2,5	-A113	6	/313,2
			'	**4**	PT 2,5	-A113	2	/313,2
			'	**5**	PT 2,5	-A113	7	/313,3
			'	**6**	PT 2,5	-A113	3	/313,3
			'	**7**	PT 2,5	-A113	8	/313,4
			'	**8**	PT 2,5	-A113	4	/313,4

0	1	2	3	4	5	6	7	8	9

Plant		Equipment							
Destination device		Terminal				Destination device			
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.	
=MD01E10+RIO02-X32									
=EXISTING+SP	C5			**1**	PT 2,5	-F13	4	/251,1	
=EXISTING+SP	C912			**2**	PT 4-HESILA 250 (5X20)	-K101	14	/251,1	
=EXISTING+SP	C911			**3**	PT 4-HESILA 250 (5X20)	-K102	14	/251,2	
=EXISTING+SP	C914			**4**	PT 4-HESILA 250 (5X20)	-K103	14	/251,3	
=EXISTING+LOCAL	C5			**5**	PT 2,5			/251,4	
=EXISTING+LOCAL	C912			**6**	PT 4-HESILA 250 (5X20)			/251,4	
=EXISTING+LOCAL	C911			**7**	PT 4-HESILA 250 (5X20)			/251,5	
				8	PT 2,5	-F13	4	/309,1	
				9	PT 4-HESILA 250 (5X20)	-K105	14	/309,1	
				10	PT 4-HESILA 250 (5X20)	-K106	14	/309,2	
				11	PT 4-HESILA 250 (5X20)	-K107	14	/309,3	
				12	PT 4-HESILA 250 (5X20)	-K108	14	/309,4	
				13	PT 2,5	-K109	11	/311,1	
				14	PT 2,5	-K109	14	/311,1	
				15	PT 2,5	-K110	11	/311,2	
				16	PT 2,5	-K110	14	/311,2	
				17	PT 2,5	-K111	11	/311,3	
				18	PT 2,5	-K111	14	/311,3	
				19	PT 2,5	-K112	11	/311,4	
				20	PT 2,5	-K112	14	/311,4	
				21	PT 2,5	-K113	11	/311,5	
				22	PT 2,5	-K113	14	/311,5	
				23	PT 2,5	-K114	11	/311,6	
				24	PT 2,5	-K114	14	/311,6	
				25	PT 2,5	-K115	11	/311,6	
				26	PT 2,5	-K115	14	/311,7	
				27	PT 2,5	-K116	11	/311,7	
				28	PT 2,5	-K116	14	/311,8	

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO02-X32
				Drawn	TeraWatt			
				Check	DiMaioD			
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.

Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS	
	+ **TERMINAL STRIPS**	
Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101	Page **2024**
		Follow 2025

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Plant		Equipment						
Destination device		Terminal				Destination device		
Designation	Connection	Noise level	Jumper	Terminal nr.	Type	Designation	Connection	Sheet ref.
=MD01E10+RIO02-X40								
		3		**1**	PT 4-HESILED 24 (5X20)	-F41	2	/145,1
		3		**2**	PT 4-HESILED 24 (5X20)			/145,2
		3		**3**	PT 4-HESILED 24 (5X20)			/145,3
-A105	L+	3		**4**	PT 4-HESILED 24 (5X20)			/145,4
		3		**5**	PT 4-HESILED 24 (5X20)			/145,5

00	FOR MANUFACT.	NOV-24	TeraWatt	Date	29-11-2024	ARCONIC	DANIELI AUTOMATION	TERMINAL STRIP =MD01E10+RIO02-X40	Hot Mill drives upgrade - Automation system electrical diagram	= REPORTS
				Drawn	TeraWatt					+ **TERMINAL STRIPS**
				Check	DiMaioD				Job Nr. APC7V9A1	Dwg.Nr. QPC7V9-MD01-A8100-ED101 / Page **2025**
Rev.	Descript.	Date	Name	Original		Replaced by	Replaced by	Descript.		Follow +PARTS LIST/3001

Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+PLC01-A100	S7-1500, PS 60W 120/230V AC/DC	Power supply module	1	Siemens	6ES7507-0RA00-0AB0	=MD01E10+PLC01/111.2
=MD01E10+PLC01-A100	MOUNTING RAIL 482MM (19")	Mounting rail	1	Siemens	6ES7590-1AE80-0AA0	=MD01E10+PLC01/111.2
=MD01E10+PLC01-A101	SIMATIC S7-1500 CPU 1518F-4PN/DP	Central processing unit	1	Siemens	6ES7518-4FP00-0AB0	=MD01E10+PLC01/111.4
=MD01E10+PLC01-A101	SIMATIC S7 Memory card 256 MB For S7-1x00 CPU		1	Siemens	6ES7954-8LL04-0AA0	=MD01E10+PLC01/111.4
=MD01E10+PLC01-A200	ET 200SP, IM155-6PN/2 HF	Interface module	1	Siemens	6ES7155-6AU01-0CN0	=MD01E10+PLC01/119.0
=MD01E10+PLC01-A200	ET 200SP, BUSADAPTER BA 2XRJ45	BA 2xRJ45	1	Siemens	6ES7193-6AR00-0AA0	=MD01E10+PLC01/119.0
=MD01E10+PLC01-A201	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+PLC01/119.1
=MD01E10+PLC01-A201	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+PLC01/119.1
=MD01E10+PLC01-A202	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+PLC01/119.2
=MD01E10+PLC01-A202	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+PLC01/119.2
=MD01E10+PLC01-A203	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+PLC01/119.3
=MD01E10+PLC01-A203	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+PLC01/119.3
=MD01E10+PLC01-A205	SIMATIC ET 200SP RQ 4x120 VDC ... 230 VAC/5 A NO ST	Relay module	1	Siemens	6ES7132-6HD01-0BB1	=MD01E10+PLC01/119.3
=MD01E10+PLC01-A205	SIMATIC ET 200SP BU type B0 BU20-P12+A4+0B	Base Unit	1	Siemens	6ES7193-6BP20-0BB0	=MD01E10+PLC01/119.3
=MD01E10+PLC01-A206	SIMATIC ET 200SP RQ 4x120 VDC ... 230 VAC/5 A NO ST	Relay module	1	Siemens	6ES7132-6HD01-0BB1	=MD01E10+PLC01/119.4
=MD01E10+PLC01-A206	SIMATIC ET 200SP BU type B0 BU20-P12+A4+0B	Base Unit	1	Siemens	6ES7193-6BP20-0BB0	=MD01E10+PLC01/119.4
=MD01E10+PLC01-A207	SIMATIC ET 200SP RQ 4x120 VDC ... 230 VAC/5 A NO ST	Relay module	1	Siemens	6ES7132-6HD01-0BB1	=MD01E10+PLC01/119.5
=MD01E10+PLC01-A207	SIMATIC ET 200SP BU type B0 BU20-P12+A4+0B	Base Unit	1	Siemens	6ES7193-6BP20-0BB0	=MD01E10+PLC01/119.5
=MD01E10+PLC01-A208	SIMATIC ET 200SP RQ 4x120 VDC ... 230 VAC/5 A NO ST	Relay module	1	Siemens	6ES7132-6HD01-0BB1	=MD01E10+PLC01/119.6
=MD01E10+PLC01-A208	SIMATIC ET 200SP BU type B0 BU20-P12+A4+0B	Base Unit	1	Siemens	6ES7193-6BP20-0BB0	=MD01E10+PLC01/119.6
=MD01E10+PLC01-A215	SIMATIC ET 200SP AQ 4xU/I ST	Analog output module	1	Siemens	6ES7135-6HD00-0BA1	=MD01E10+PLC01/121.1
=MD01E10+PLC01-A215	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+PLC01/121.1
=MD01E10+PLC01-A216	SIMATIC ET 200SP AQ 4xU/I ST	Analog output module	1	Siemens	6ES7135-6HD00-0BA1	=MD01E10+PLC01/121.2
=MD01E10+PLC01-A216	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+PLC01/121.2
=MD01E10+PLC01-A217	SIMATIC ET 200SP AQ 4xU/I ST	Analog output module	1	Siemens	6ES7135-6HD00-0BA1	=MD01E10+PLC01/121.3

Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+PLC01-A217	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+PLC01/121.3
=MD01E10+PLC01-A218	SIMATIC ET 200SP AQ 4xU/I ST	Analog output module	1	Siemens	6ES7135-6HD00-0BA1	=MD01E10+PLC01/121.3
=MD01E10+PLC01-A218	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+PLC01/121.3
=MD01E10+PLC01-A221	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+PLC01/121.4
=MD01E10+PLC01-A221	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+PLC01/121.4
=MD01E10+PLC01-A222	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+PLC01/121.5
=MD01E10+PLC01-A222	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+PLC01/121.5
=MD01E10+PLC01-A223	SIMATIC ET 200SP DI 8x 24V DC ST, PU 1	Digital input module	1	Siemens	6ES7131-6BF01-0BA0	=MD01E10+PLC01/121.6
=MD01E10+PLC01-A223	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+PLC01/121.6
=MD01E10+PLC01-A224	SIMATIC ET 200SP DI 8x 24V DC ST, PU 1	Digital input module	1	Siemens	6ES7131-6BF01-0BA0	=MD01E10+PLC01/121.6
=MD01E10+PLC01-A224	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+PLC01/121.6
=MD01E10+PLC01-A231	SIMATIC ET 200SP AI 4xI 2-/4-wire ST	Analog input module	1	Siemens	6ES7134-6GD01-0BA1	=MD01E10+PLC01/121.7
=MD01E10+PLC01-A231	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+PLC01/121.7
=MD01E10+PLC01-A901	Industrial Ethernet Switch	6 RJ45 ports 10/100/1000 Mbps, 2 SFP ports 100/1000 Mbps	1	Phoenix Contact	2702970	=MD01E10+NET/201.1
=MD01E10+PLC01-A911	SCALANCE XC216-4C	Manageable switch	1	Siemens	6GK5216-4BS00-2AC2	=MD01E10+NET/201.3
=MD01E10+PLC01-A911	SCALANCE X ACCESSORY, SFP992-1LD 1 X 1000MBIT/S LC-PORT	SFP992-1LD	2	Siemens	6GK5992-1AM00-8AA0	=MD01E10+NET/201.3
=MD01E10+PLC01-E10	COOLING FAN	115V 50-60Hz	1	TEXA	FAN25CN0B	=MD01E10+PLC01/105.7
=MD01E10+PLC01-E30	ECOLINE LED ENCLOSURE LAMP	5W 100-240V 50/60Hz	1	STEGO	02540.3-11	=MD01E10+PLC01/117.3
=MD01E10+PLC01-E33	ENCLOSURE HEATER	100W 120-240V AC/DC	1	STEGO	14007.0-00	=MD01E10+PLC01/117.5
=MD01E10+PLC01-F11	SENTRON Miniature circuit breaker	16A 2P C	1	Siemens	5SY4216-7	=MD01E10+PLC01/103.1
=MD01E10+PLC01-F12	SENTRON Miniature circuit breaker	16A 2P C	1	Siemens	5SY4216-7	=MD01E10+PLC01/103.3
=MD01E10+PLC01-F13	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+PLC01/103.5
=MD01E10+PLC01-F14	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+PLC01/105.1
=MD01E10+PLC01-F15	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+PLC01/105.3
=MD01E10+PLC01-F16	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+PLC01/105.5

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Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+PLC01-F17	SENTRON Miniature circuit breaker	4A 2P C	1	Siemens	5SY4204-7	=MD01E10+PLC01/105.7
=MD01E10+PLC01-F21	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+PLC01/107.1
=MD01E10+PLC01-F22	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+PLC01/107.3
=MD01E10+PLC01-F23	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+PLC01/107.5
=MD01E10+PLC01-F24	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+PLC01/109.1
=MD01E10+PLC01-F25	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+PLC01/109.4
=MD01E10+PLC01-F26	SENTRON Miniature circuit breaker	4A 2P C	1	Siemens	5SY4204-7	=MD01E10+PLC01/111.1
=MD01E10+PLC01-F41	SENTRON Miniature circuit breaker	6A 1P C	1	Siemens	5SY4106-7	=MD01E10+PLC01/113.1
=MD01E10+PLC01-F42	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+PLC01/113.6
=MD01E10+PLC01-F61	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+PLC01/109.1
=MD01E10+PLC01-F62	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+PLC01/109.4
=MD01E10+PLC01-G40	POWER SUPPLY UNIT	100-240VAC 24VDC/10A	1	Phoenix Contact	2904601	=MD01E10+PLC01/105.1
=MD01E10+PLC01-G60	POWER SUPPLY UNIT	100-240VAC 24VDC/5A	1	Phoenix Contact	2904600	=MD01E10+PLC01/109.1
=MD01E10+PLC01-G61	POWER SUPPLY UNIT	100-240VAC 24VDC/5A	1	Phoenix Contact	2904600	=MD01E10+PLC01/109.4
=MD01E10+PLC01-K01	PNOZsigma Safety relay (standalone)	PNOZ s4 24VDC 3 n/o 1 n/c	1	PILZ	750104	=MD01E10+EMG/257.1
=MD01E10+PLC01-K02	PNOZsigma Safety relay (standalone)	PNOZ s4 24VDC 3 n/o 1 n/c	1	PILZ	750104	=MD01E10+EMG/259.1
=MD01E10+PLC01-K101	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.1
=MD01E10+PLC01-K102	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.2
=MD01E10+PLC01-K103	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.3
=MD01E10+PLC01-K104	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.4
=MD01E10+PLC01-K105	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.5
=MD01E10+PLC01-K106	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.6
=MD01E10+PLC01-K107	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.6
=MD01E10+PLC01-K108	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/283.7
=MD01E10+PLC01-K109	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.1

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Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+PLC01-K110	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.2
=MD01E10+PLC01-K111	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.3
=MD01E10+PLC01-K112	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.4
=MD01E10+PLC01-K113	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.5
=MD01E10+PLC01-K114	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.6
=MD01E10+PLC01-K115	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.6
=MD01E10+PLC01-K116	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/285.7
=MD01E10+PLC01-Q01	ISOLATOR 32A DP	2P 32A	1	Siemens	5TL1232-0	=MD01E10+PLC01/101.1
=MD01E10+PLC01-Q02	ISOLATOR 32A DP	2P 32A	1	Siemens	5TL1232-0	=MD01E10+PLC01/101.4
=MD01E10+PLC01-Q03	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+PLC01/101.7
=MD01E10+PLC01-Q03	RC unit for 5SY	40A 2P 30mA	1	Siemens	5SM2322-0	=MD01E10+PLC01/101.7
=MD01E10+PLC01-S10	THERMOSTAT SWITCH	0...+60°C 1NO	1	STEGO	01141.0-00	=MD01E10+PLC01/105.7
=MD01E10+PLC01-S30	THERMOSTAT SWITCH	-10...+50°C 1NC	1	STEGO	01142.0-00	=MD01E10+PLC01/117.5
=MD01E10+PLC01-X911	FIBER OPTIC JUNCTION BOX	2 Port Quad (8-Core) Multimode	1	EXCEL	202-107	=MD01E10+NET/201.7
=MD01E10+PLC01-X912	FIBER OPTIC JUNCTION BOX	2 Port Quad (8-Core) Multimode	1	EXCEL	202-107	=MD01E10+NET/201.7
=MD01E10+PLC01-X921	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.5
=MD01E10+PLC01-X922	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.6
=MD01E10+PLC01-X923	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.7
=MD01E10+PLC01-X924	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.4
=MD01E10+PLC01-X925	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.4
=MD01E10+PLC01-X928	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.5
=MD01E10+PLC01-X931	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.0
=MD01E10+PLC01-X932	Mounting rail outlet TS45 AMJ-S incl. AMJ-S Module Cat.6A T568B	for mounting rail TH35	1	Telegärtner	100023004	=MD01E10+NET/201.1

Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+RIO01-A100	ET 200SP, IM155-6PN/2 HF	Interface module	1	Siemens	6ES7155-6AU01-0CN0	=MD01E10+RIO01/135.0
=MD01E10+RIO01-A100	ET 200SP, BUSADAPTER BA 2XRJ45	BA 2xRJ45	1	Siemens	6ES7193-6AR00-0AA0	=MD01E10+RIO01/135.0
=MD01E10+RIO01-A101	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.1
=MD01E10+RIO01-A101	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.1
=MD01E10+RIO01-A102	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.2
=MD01E10+RIO01-A102	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.2
=MD01E10+RIO01-A103	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.3
=MD01E10+RIO01-A103	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.3
=MD01E10+RIO01-A104	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.3
=MD01E10+RIO01-A104	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.3
=MD01E10+RIO01-A105	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.4
=MD01E10+RIO01-A105	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.4
=MD01E10+RIO01-A106	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.5
=MD01E10+RIO01-A106	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.5
=MD01E10+RIO01-A107	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.6
=MD01E10+RIO01-A107	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.6
=MD01E10+RIO01-A108	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.6
=MD01E10+RIO01-A108	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.6
=MD01E10+RIO01-A109	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.7
=MD01E10+RIO01-A109	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.7
=MD01E10+RIO01-A110	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/135.8
=MD01E10+RIO01-A110	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/135.8
=MD01E10+RIO01-A111	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO01/137.1
=MD01E10+RIO01-A111	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO01/137.1
=MD01E10+RIO01-A113	SIMATIC ET 200SP RQ 4x120 VDC ... 230 VAC/5 A NO ST	Relay module	1	Siemens	6ES7132-6HD01-0BB1	=MD01E10+RIO01/137.2

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Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+RIO01-A113	SIMATIC ET 200SP BU type B0 BU20-P12+A4+0B	Base Unit	1	Siemens	6ES7193-6BP20-0BB0	=MD01E10+RIO01/137.2
=MD01E10+RIO01-A115	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+RIO01/137.3
=MD01E10+RIO01-A115	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+RIO01/137.3
=MD01E10+RIO01-A116	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+RIO01/137.3
=MD01E10+RIO01-A116	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+RIO01/137.3
=MD01E10+RIO01-A117	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+RIO01/137.4
=MD01E10+RIO01-A117	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+RIO01/137.4
=MD01E10+RIO01-A118	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+RIO01/137.5
=MD01E10+RIO01-A118	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+RIO01/137.5
=MD01E10+RIO01-A120	SIMATIC ET 200SP AQ 4xU/I ST	Analog output module	1	Siemens	6ES7135-6HD00-0BA1	=MD01E10+RIO01/137.6
=MD01E10+RIO01-A120	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+RIO01/137.6
=MD01E10+RIO01-A121	SIMATIC ET 200SP AQ 4xU/I ST	Analog output module	1	Siemens	6ES7135-6HD00-0BA1	=MD01E10+RIO01/137.6
=MD01E10+RIO01-A121	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+RIO01/137.6
=MD01E10+RIO01-A125	SIMATIC ET 200SP DI 8x 24V DC ST, PU 1	Digital input module	1	Siemens	6ES7131-6BF01-0BA0	=MD01E10+RIO01/137.7
=MD01E10+RIO01-A125	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+RIO01/137.7
=MD01E10+RIO01-A131	SIMATIC ET 200SP AI 4xI 2-/4-wire ST	Analog input module	1	Siemens	6ES7134-6GD01-0BA1	=MD01E10+RIO01/137.8
=MD01E10+RIO01-A131	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+RIO01/137.8
=MD01E10+RIO01-A911	SCALANCE XC206-2 ST/BFOC	Manageable switch	1	Siemens	6GK5206-2BB00-2AC2	=MD01E10+NET/203.4
=MD01E10+RIO01-A911	SCALANCE X ACCESSORY, SFP992-1LD 1 X 1000MBIT/S LC-PORT	SFP992-1LD	1	Siemens	6GK5992-1AM00-8AA0	=MD01E10+NET/203.4
=MD01E10+RIO01-E30	ECOLINE LED ENCLOSURE LAMP	5W 100-240V 50/60Hz	1	STEGO	02540.3-11	=MD01E10+RIO01/133.3
=MD01E10+RIO01-E33	ENCLOSURE HEATER	100W 120-240V AC/DC	1	STEGO	14007.0-00	=MD01E10+RIO01/133.5
=MD01E10+RIO01-F11	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+RIO01/125.1
=MD01E10+RIO01-F12	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+RIO01/125.3
=MD01E10+RIO01-F13	SENTRON Miniature circuit breaker	4A 2P C	1	Siemens	5SY4204-7	=MD01E10+RIO01/125.5
=MD01E10+RIO01-F41	SENTRON Miniature circuit breaker	6A 1P C	1	Siemens	5SY4106-7	=MD01E10+RIO01/129.1

Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+RIO01-F42	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+RIO01/129.6
=MD01E10+RIO01-F61	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+RIO01/127.1
=MD01E10+RIO01-G40	POWER SUPPLY UNIT	100-240VAC 24VDC/10A	1	Phoenix Contact	2904601	=MD01E10+RIO01/125.1
=MD01E10+RIO01-G60	POWER SUPPLY UNIT	100-240VAC 24VDC/5A	1	Phoenix Contact	2904600	=MD01E10+RIO01/127.1
=MD01E10+RIO01-K101	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→F/223.1
=MD01E10+RIO01-K102	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→F/223.2
=MD01E10+RIO01-K103	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→F/223.3
=MD01E10+RIO01-K104	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→F/223.4
=MD01E10+RIO01-K105	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→F/223.5
=MD01E10+RIO01-K106	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/225.7
=MD01E10+RIO01-K107	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/231.1
=MD01E10+RIO01-K108	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/231.2
=MD01E10+RIO01-K109	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/231.3
=MD01E10+RIO01-K110	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/231.4
=MD01E10+RIO01-K111	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/231.5
=MD01E10+RIO01-K112	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→D/231.6
=MD01E10+RIO01-K113	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→C/241.1
=MD01E10+RIO01-K114	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→C/241.2
=MD01E10+RIO01-K115	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→C/241.3
=MD01E10+RIO01-K116	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→C/241.4
=MD01E10+RIO01-K117	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→C/241.5
=MD01E10+RIO01-K118	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→T/247.1
=MD01E10+RIO01-K119	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+MP→T/247.2
=MD01E10+RIO01-K120	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/297.1
=MD01E10+RIO01-K121	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/297.2

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Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+RIO01-K122	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/297.3
=MD01E10+RIO01-K123	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/297.4
=MD01E10+RIO01-K124	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/297.5
=MD01E10+RIO01-K125	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.1
=MD01E10+RIO01-K126	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.2
=MD01E10+RIO01-K127	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.3
=MD01E10+RIO01-K128	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.4
=MD01E10+RIO01-K129	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.5
=MD01E10+RIO01-K130	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.6
=MD01E10+RIO01-K131	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.6
=MD01E10+RIO01-K132	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/299.7
=MD01E10+RIO01-Q01	ISOLATOR 32A DP	2P 32A	1	Siemens	5TL1232-0	=MD01E10+RIO01/123.1
=MD01E10+RIO01-Q02	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+RIO01/123.4
=MD01E10+RIO01-Q03	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+RIO01/123.7
=MD01E10+RIO01-Q03	RC unit for 5SY	40A 2P 30mA	1	Siemens	5SM2322-0	=MD01E10+RIO01/123.7
=MD01E10+RIO01-S30	THERMOSTAT SWITCH	-10...+50°C 1NC	1	STEGO	01142.0-00	=MD01E10+RIO01/133.5
=MD01E10+RIO01-T1	Resistance/potiposition transducer	Input 0 Ω ... 100 Ω to 0 kΩ ... 100 kΩ	1	Phoenix Contact	2864095	=MD01E10+MP→C/243.1
=MD01E10+RIO01-X911	FIBER OPTIC JUNCTION BOX	2 Port Quad (8-Core) Multimode	1	EXCEL	202-107	=MD01E10+NET/203.7

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Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+RIO02-A100	ET 200SP, IM155-6PN/2 HF	Interface module	1	Siemens	6ES7155-6AU01-0CN0	=MD01E10+RIO02/155.0
=MD01E10+RIO02-A100	ET 200SP, BUSADAPTER BA 2XRJ45	BA 2xRJ45	1	Siemens	6ES7193-6AR00-0AA0	=MD01E10+RIO02/155.0
=MD01E10+RIO02-A101	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO02/155.1
=MD01E10+RIO02-A101	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO02/155.1
=MD01E10+RIO02-A102	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO02/155.2
=MD01E10+RIO02-A102	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO02/155.2
=MD01E10+RIO02-A103	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO02/155.3
=MD01E10+RIO02-A103	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO02/155.3
=MD01E10+RIO02-A104	SIMATIC ET 200SP DI 4x 120..230V AC ST	Digital input module	1	Siemens	6ES7131-6FD01-0BB1	=MD01E10+RIO02/155.3
=MD01E10+RIO02-A104	SIMATIC ET 200SP BU type B1 BU20-P12+A0+4B	Base Unit	1	Siemens	6ES7193-6BP20-0BB1	=MD01E10+RIO02/155.3
=MD01E10+RIO02-A105	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+RIO02/155.4
=MD01E10+RIO02-A105	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2D	BaseUnit	1	Siemens	6ES7193-6BP00-0DA0	=MD01E10+RIO02/155.4
=MD01E10+RIO02-A106	SIMATIC ET 200SP DQ 8x24VDC/0.5A ST	Digital output module	1	Siemens	6ES7132-6BF01-0BA0	=MD01E10+RIO02/155.5
=MD01E10+RIO02-A106	SIMATIC ET 200SP BU type A0 BU15-P16+A0+2B	BaseUnit	1	Siemens	6ES7193-6BP00-0BA0	=MD01E10+RIO02/155.5
=MD01E10+RIO02-A113	SIMATIC ET 200SP RQ 4x120 VDC ... 230 VAC/5 A NO ST	Relay module	1	Siemens	6ES7132-6HD01-0BB1	=MD01E10+RIO02/155.6
=MD01E10+RIO02-A113	SIMATIC ET 200SP BU type B0 BU20-P12+A4+0B	Base Unit	1	Siemens	6ES7193-6BP20-0BB0	=MD01E10+RIO02/155.6
=MD01E10+RIO02-A911	SCALANCE XC206-2 ST/BFOC	Manageable switch	1	Siemens	6GK5206-2BB00-2AC2	=MD01E10+NET/205.4
=MD01E10+RIO02-A911	SCALANCE X ACCESSORY, SFP992-1LD 1 X 1000MBIT/S LC-PORT	SFP992-1LD	1	Siemens	6GK5992-1AM00-8AA0	=MD01E10+NET/205.4
=MD01E10+RIO02-F11	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+RIO02/141.1
=MD01E10+RIO02-F12	SENTRON Miniature circuit breaker	10A 2P C	1	Siemens	5SY4210-7	=MD01E10+RIO02/141.3
=MD01E10+RIO02-F13	SENTRON Miniature circuit breaker	4A 2P C	1	Siemens	5SY4204-7	=MD01E10+RIO02/141.5
=MD01E10+RIO02-F41	SENTRON Miniature circuit breaker	6A 1P C	1	Siemens	5SY4106-7	=MD01E10+RIO02/145.1
=MD01E10+RIO02-F42	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+RIO02/145.6
=MD01E10+RIO02-F61	SENTRON Miniature circuit breaker	4A 1P C	1	Siemens	5SY4104-7	=MD01E10+RIO02/143.1
=MD01E10+RIO02-G40	POWER SUPPLY UNIT	100-240VAC 24VDC/10A	1	Phoenix Contact	2904601	=MD01E10+RIO02/141.1

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Device	Designation		Q.ty	Manufacturer	Part number	Sheet ref.
=MD01E10+RIO02-G60	POWER SUPPLY UNIT	100-240VAC 24VDC/5A	1	Phoenix Contact	2904600	=MD01E10+RIO02/143.1
=MD01E10+RIO02-K101	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SP→C/251.1
=MD01E10+RIO02-K102	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SP→C/251.2
=MD01E10+RIO02-K103	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SP→C/251.3
=MD01E10+RIO02-K104	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SP→C/253.8
=MD01E10+RIO02-K105	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/309.1
=MD01E10+RIO02-K106	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/309.2
=MD01E10+RIO02-K107	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/309.3
=MD01E10+RIO02-K108	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/309.4
=MD01E10+RIO02-K109	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.1
=MD01E10+RIO02-K110	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.2
=MD01E10+RIO02-K111	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.3
=MD01E10+RIO02-K112	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.4
=MD01E10+RIO02-K113	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.5
=MD01E10+RIO02-K114	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.6
=MD01E10+RIO02-K115	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.6
=MD01E10+RIO02-K116	RELAY MODULE	24VDC 1CO	1	Phoenix Contact	2900299	=MD01E10+SPARES/311.7
=MD01E10+RIO02-Q01	ISOLATOR 32A DP	2P 32A	1	Siemens	5TL1232-0	=MD01E10+RIO02/139.1
=MD01E10+RIO02-Q02	SENTRON Miniature circuit breaker	6A 2P C	1	Siemens	5SY4206-7	=MD01E10+RIO02/139.4
=MD01E10+RIO02-X911	FIBER OPTIC JUNCTION BOX	2 Port Quad (8-Core) Multimode	1	EXCEL	202-107	=MD01E10+NET/205.7