



TESTED VALIDATED

DOCUMENTED ARCHITECTURE : Distributed / Modbus TCP / Logic Controller M251

PLANT DESIGNATION : TVDA

DRAWING NUMBER : EIO0000001822.01

DEPARTMENT : Industry Business

PRODUCT DOMAIN : TVDA

CAE SYSTEM : ePlan P8 V 2.4.4

RELATED PRODUCTS : Logic Controller M251; Magelis HMIGTO; TM3 I/O-Expansion;  
iEM3150; Harmony ZBRN1; Altivar 32; Lexium 32M; TeSysU

INCOMING SUPPLY : 400V 3~, N, PE, 50Hz

FEEDER : Oelflex Classic 100 5G2,5mm<sup>2</sup>

POWER INPUT : 3,90 kW

CONTROL VOLTAGE : 24V dc

MANUFACTURING DATE : 2013

CABINET TYPE : Spacial, RAL 7035

CHECKED TO : IEC 60364

RESPONSIBLE FOR PROJECT : Machine Solutions

CREATOR : TVDA

DATE CHANGED : 2015/11/13

REVISION DATE :

VERSION INDEX

0

This document is based on European standards and is not valid for use in U.S.A.


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				Ed.	kJakob	TVDA							
				Appr									
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# Structure identifier overview

First Level	Structure description	Second Level	Structure description	Third Level	Structure description
=COMM	Common pages	+COVER	Cover page	#PSD	Power Supply Distribution
=WIRD	Wiring diagramm	+CONT	Table of Content	#SAF	Safety
		+INFO	Informations	#PLC	PLC Pages
		+DEF	Definitions	#HMI	Human Machine Interface
		+LAYOUT	Layout Pages	#CTRL	Control
		+LOC	Local Equipments	#MOV	Movement
		+MC	Main Cabinet	#COM	Communication
		+RC1	Remote Cabinet 1		

+COVER/1

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			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Structure identifier overview		=COMM	+CONT
			Ed.	kJakob	TVDA					
			Appr							
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<b>=COMM +COVER</b>				
Cover page				
	1	Cover Page	2015/10/13	kJakob
<b>=COMM +CONT</b>				
Table of Content				
	1	Structure identifier overview	2015/11/13	kJakob
	2	Table of contents	2015/11/13	kJakob
	3	Table of contents	2015/11/13	kJakob
	4	Table of contents	2015/11/13	kJakob
	5	Table of contents	2015/11/13	kJakob
	6	Table of contents	2015/11/13	kJakob
<b>=COMM +INFO</b>				
Informations				
	1	Disclaimer	2015/10/19	kJakob
	2	Safety Information 1	2015/10/13	kJakob
	3	Safety Information 2	2015/10/13	kJakob
	4	Informations about changes	2015/10/13	kJakob
<b>=COMM +DEF</b>				
Definitions				
	1	Wiring, Plug and Terminal definitions	2015/11/13	kJakob
<b>=COMM +LAYOUT</b>				
Layout Pages				
	1	Plant Layout Main Cabinet	2015/10/13	kJakob
	2	Plant Layout Remote Cabinet	2015/10/13	kJakob
<b>=WIRD +MC #PSD</b>				
Main Cabinet / Power Supply Distribution				
	1	Power supply feed in	2015/11/13	kJakob
	2	Cabinet Lamp, Socket, Fan	2015/11/13	kJakob
	3	Energy Measurement - iEM3150	2015/11/13	kJakob
	4	Emergency Stop Main Power Supply	2015/11/13	kJakob
	5	Power Supply 24V dc	2015/11/13	kJakob
	6	Power Supply 24V dc	2015/11/13	kJakob
	7	Power Supply 24V dc	2015/11/13	kJakob
	8	Power Supply 24V dc	2015/11/13	kJakob
	9	Power Supply 24V dc	2015/11/13	kJakob

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=WIRD +MC #PSD	Main Cabinet / Power Supply Distribution			
	10	Power Supply 0V dc	2015/11/13	kJakob
=WIRD +MC #SAF	Main Cabinet / Safety			
	1	Emergency Stop - Main Contactors	2015/11/13	kJakob
	2	TM3-Safety module E-Stop - Power Supply + Safety Channels	2015/11/13	kJakob
=WIRD +MC #PLC	Main Cabinet / PLC Pages			
	1	Assembly layout M251	2015/10/13	kJakob
	2	Overview M251	2015/10/13	kJakob
	3	Overview TM3 Expansion	2015/10/13	kJakob
	4	Overview ETB I/O Module	2015/10/13	kJakob
	5	Power supply M251	2015/11/13	kJakob
	6	Power Supply TM3 Expansion	2015/11/13	kJakob
=WIRD +MC #HMI	Main Cabinet / Human Machine Interface			
	1	HMI Magelis Panel Power Supply	2015/11/13	kJakob
=WIRD +MC #CTRL	Main Cabinet / Control			
	1	Digital inputs TM3	2015/11/13	kJakob
	2	Digital inputs TM3	2015/11/13	kJakob
	3	Digital outputs TM3	2015/11/13	kJakob
	4	Digital outputs TM3	2015/11/13	kJakob
	5	Digital outputs TM3	2015/11/13	kJakob
	6	ETB Digital I/Os	2015/11/13	kJakob
	7	ETB Digital I/Os	2015/11/13	kJakob
	8	ETB Digital I/Os	2015/11/13	kJakob
	9	ETB Digital I/Os	2015/11/13	kJakob
	10	Wireless Push-Buttons	2015/11/13	kJakob
	11	Absolute Multiturn Encoder	2015/11/13	kJakob
12	RFID Antennas	2015/11/13	kJakob	

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<b>=WIRD +MC #CTRL</b>		<b>Main Cabinet / Control</b>		
	13	Drive 1 Control Terminals Altivar 32	2015/11/13	kJakob
	14	Drive 2 Control Terminals Altivar 32	2015/11/13	kJakob
	15	Drive 3 Control Terminals Lexium 32M	2015/11/13	kJakob
	16	Drive 4 Control Terminals Lexium 32M	2015/11/13	kJakob
<b>=WIRD +MC #MOV</b>		<b>Main Cabinet / Movement</b>		
	1	Drive 1 Variable speed drive Altivar 32	2015/11/13	kJakob
	2	Drive 2 Variable speed drive Altivar 32	2015/11/13	kJakob
	3	Drive 3 Servo drive Lexium 32M	2015/11/13	kJakob
	4	Drive 4 Servo drive Lexium 32M	2015/11/13	kJakob
<b>=WIRD +MC #COM</b>		<b>Main Cabinet / Communication</b>		
	1	Power Supply Ethernet Switch	2015/11/13	kJakob
	2	Power Supply Ethernet Switch	2015/11/13	kJakob
	3	Ethernet topology - Ethernet network 1	2015/11/13	kJakob
	4	Ethernet topology - Modbus TCP Fieldbus	2015/11/13	kJakob
	5	Ethernet topology - Modbus TCP Fieldbus LOCAL	2015/11/13	kJakob
	6	Modbus topology	2015/11/13	kJakob
<b>=WIRD +RC1 #PSD</b>		<b>Remote Cabinet 1 / Power Supply Distribution</b>		
	1	Power Supply 400V ac	2015/11/13	kJakob
	2	Power Supply 400V ac	2015/11/13	kJakob
	3	Cabinet Lamp, Socket, Fan	2015/11/13	kJakob
	4	Power Supply 24V dc	2015/11/13	kJakob
	5	Power Supply 24 V dc	2015/11/13	kJakob
	6	Power Supply 24 V dc	2015/11/13	kJakob
	7	Power Supply 0 V dc	2015/11/13	kJakob
<b>=WIRD +RC1 #SAF</b>		<b>Remote Cabinet 1 / Safety</b>		
	1	Emergency Stop	2015/11/13	kJakob
<b>=WIRD +RC1 #PLC</b>		<b>Remote Cabinet 1 / PLC Pages</b>		
	1	Assembly layout OTB I/O island	2015/10/13	kJakob

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=WIRD +RC1 #PLC		Remote Cabinet 1 / PLC Pages		
	2	Overview OTB + TM2 Expansion	2015/10/13	kJakob
	3	Overview TM2 Expansion	2015/10/13	kJakob
	4	Power supply OTB	2015/11/13	kJakob
	5	Power Supply TM2	2015/11/13	kJakob
=WIRD +RC1 #HMI		Remote Cabinet 1 / Human Machine Interface		
	1	HMI Magelis Panel Power Supply	2015/11/13	kJakob
=WIRD +RC1 #CTRL		Remote Cabinet 1 / Control		
	1	Digital Inputs OTB	2015/11/13	kJakob
	2	Digital Inputs OTB	2015/11/13	kJakob
	3	Digital Outputs OTB	2015/11/13	kJakob
	4	Digital Inputs TM2	2015/11/13	kJakob
	5	Digital Inputs TM2	2015/11/13	kJakob
	6	Digital Outputs TM2	2015/11/13	kJakob
	7	TeSys Splitterbox	2015/11/13	kJakob
	8	TeSys Splitterbox - unused wires	2015/11/13	kJakob
	9	Digital Inputs TM2	2015/11/13	kJakob
	10	Digital Inputs TM2	2015/11/13	kJakob
	11	Digital Outputs TM2	2015/11/13	kJakob
	12	Digital inputs TM2	2015/11/13	kJakob
	13	Digital inputs TM2	2015/11/13	kJakob
	14	Motor 6+7 Control Contactors	2015/11/13	kJakob
	15	Digital Outputs TM2	2015/11/13	kJakob
=WIRD +RC1 #MOV		Remote Cabinet 1 / Movement		
	1	Motor 1 TeSys Direct Starter + Softstart	2015/11/13	kJakob
	2	Motor 2 TeSys Direct Starter + Softstart	2015/11/13	kJakob
	3	Motor 3 TeSys Direct Starter + Softstart	2015/11/13	kJakob
	4	Motor 4 TeSysU Starter Controller	2015/11/13	kJakob
	5	Motor 5 TeSysU Starter Controller	2015/11/13	kJakob



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\*\*\*\*\*

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				Date	2015/10/19	Distributed / Modbus TCP / Logic Controller M251			Disclaimer	=COMM		+INFO	
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				Appr		TVDA							
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## General project information

### Equipment Grounding

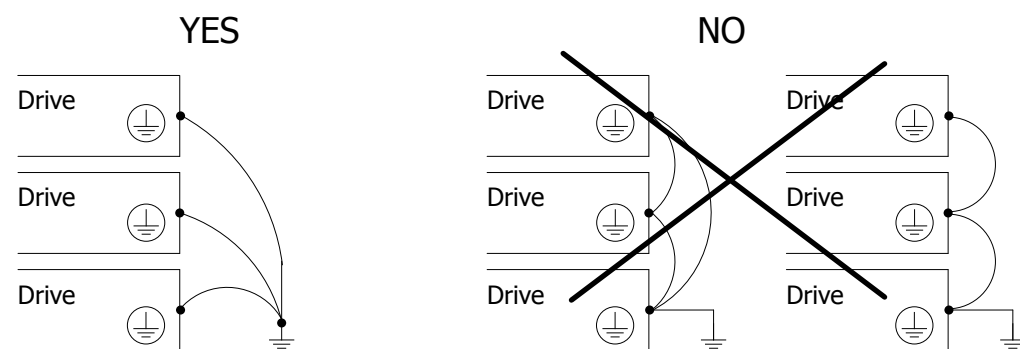
Secure the ground connection of the devices to the protective ground (PE) of your panel at a single point and in conformance with local and national electrical code requirements. Depending on these local and national code requirements, a minimum wire section (gauge) of 10 mm<sup>2</sup> (6 AWG) may be required to meet standards limiting leakage current.

**⚡ ⚠ DANGER**

### ELECTRIC SHOCK

- Properly ground your panel and equipment before applying power.
- Always comply with local wiring requirements regarding grounding cables and grounding cable shields.
- Ground devices independently at a single point.

**Failure to follow these instructions will result in death or serious injury.**



- Ensure that the resistance of ground is one ohm or less.
- When grounding several drives, you must connect each one directly, as as shown in the figure to the left.
- Do not loop the ground cables or connect them in series.

## General project information

# DANGER

### LOSS OF CONTROL, ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- The designer of the machine and its control system must consider their potential failure modes and provide a means to achieve a safe state during and after a failure by installing and thoroughly testing security control devices.
- Power line and output circuits must be wired and fused in compliance with local and national regulatory requirements for the rated current and voltage of the particular equipment.
- The designer of the machine and its control system is responsible for compliance with all international and national electrical standards in force concerning protective grounding of all equipment.


**Failure to follow these instructions will result in death or serious injury.**

# WARNING

### REGULATORY INCOMPATIBILITY

Be sure that all equipment applied and systems designed comply with all applicable local, regional, and national regulations and standards.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

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# INFORMATIONS ABOUT CHANGES

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-	-	-	-	-	-	-
01	2015/10/13	kJakob	Changes for SoMachine V4.1 SP2 (Ethernet topology)	all	all	all

## Wiring Definitions

Main circuit	Black	1,5/2,5mm <sup>2</sup>
Neutral wire	Light-blue	1,5/2,5mm <sup>2</sup>
Control circuit 230V ac	Red	0,75-2,5mm <sup>2</sup>
Control circuit 120V ac	Red	0,75-2,5mm <sup>2</sup>
Control circuit 24V dc	Dark-blue	0,75-2,5mm <sup>2</sup>
Control circuit 0V dc	Dark-blue/white	0,75-2,5mm <sup>2</sup>
Control circuit ±15V dc	Violet	0,75mm <sup>2</sup>
External voltage	Orange	0,75-2,5mm <sup>2</sup>

Cable glands: If shielded cable use metal!

### Plugdefinitions


+MC-XSETH01 = RJ45/M12 adapter - Ethernet  
 +MC-XSETH02 = RJ45/M12 adapter - Ethernet  
 +MC-XSETH03 = RJ45/M12 adapter - Ethernet  
 +MC-XSETH04 = RJ45/M12 adapter - Ethernet  
 +RC1-XSETH01 = RJ45/M12 adapter - Ethernet  
 +RC1-XSETH02 = RJ45/M12 adapter - Ethernet

### Terminaldefinitions

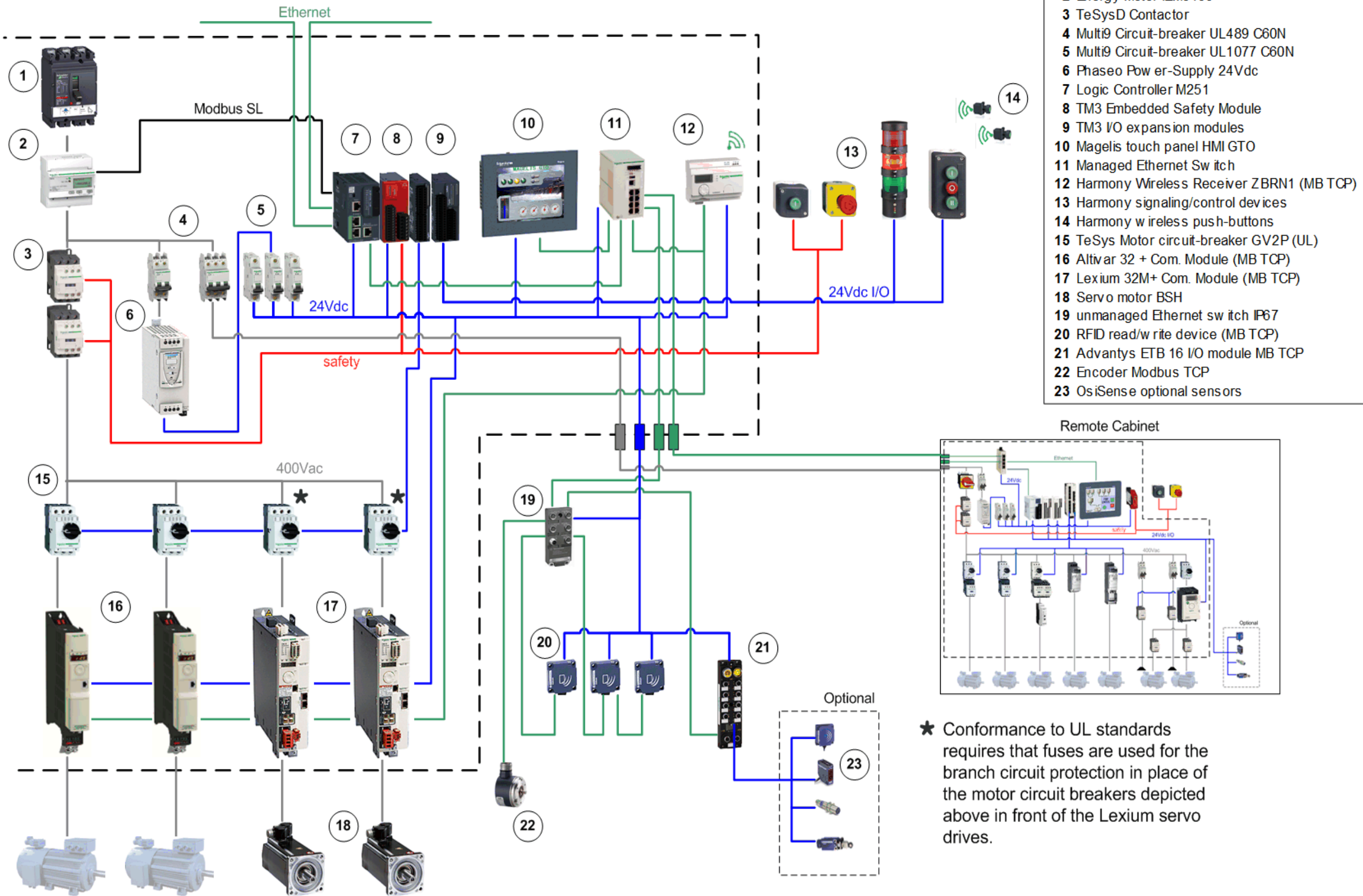
+MC-XD01 = Power Supply 400V ac  
 +MC-XD02 = Power Supply 400V ac Remote Cabinet  
 +MC-X01 = Power Supply 24V dc Distribution intern  
 +RC1-XD01 = Power Supply 400V ac  
 +RC1-X01 = Power Supply 24V dc Distribution intern

+INFO/4

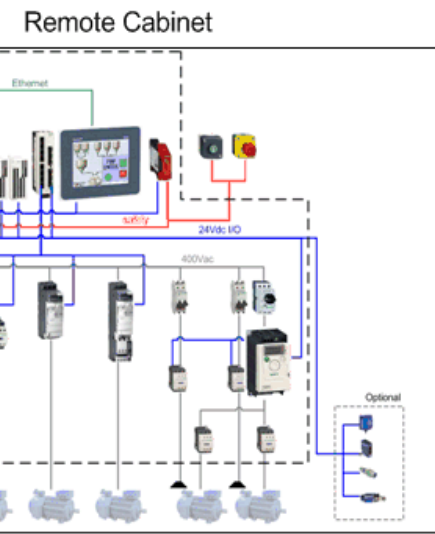
+LAYOUT/1

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# Distributed / Modbus TCP / Logic Controller M251



- 1 PowerPact circuit breaker
- 2 Energy Meter iEM3150
- 3 TeSysD Contactor
- 4 Multi9 Circuit-breaker UL489 C60N
- 5 Multi9 Circuit-breaker UL1077 C60N
- 6 Phaseo Power-Supply 24Vdc
- 7 Logic Controller M251
- 8 TM3 Embedded Safety Module
- 9 TM3 I/O expansion modules
- 10 Magelis touch panel HMI GTO
- 11 Managed Ethernet Switch
- 12 Harmony Wireless Receiver ZBRN1 (MB TCP)
- 13 Harmony signaling/control devices
- 14 Harmony wireless push-buttons
- 15 TeSys Motor circuit-breaker GV2P (UL)
- 16 Altivar 32 + Com. Module (MB TCP)
- 17 Lexium 32M+ Com. Module (MB TCP)
- 18 Servo motor BSH
- 19 unmanaged Ethernet switch IP67
- 20 RFID read/write device (MB TCP)
- 21 Advantys ETB 16 I/O module MB TCP
- 22 Encoder Modbus TCP
- 23 Os iSense optional sensors



★ Conformance to UL standards requires that fuses are used for the branch circuit protection in place of the motor circuit breakers depicted above in front of the Lexium servo drives.

+DEF/1

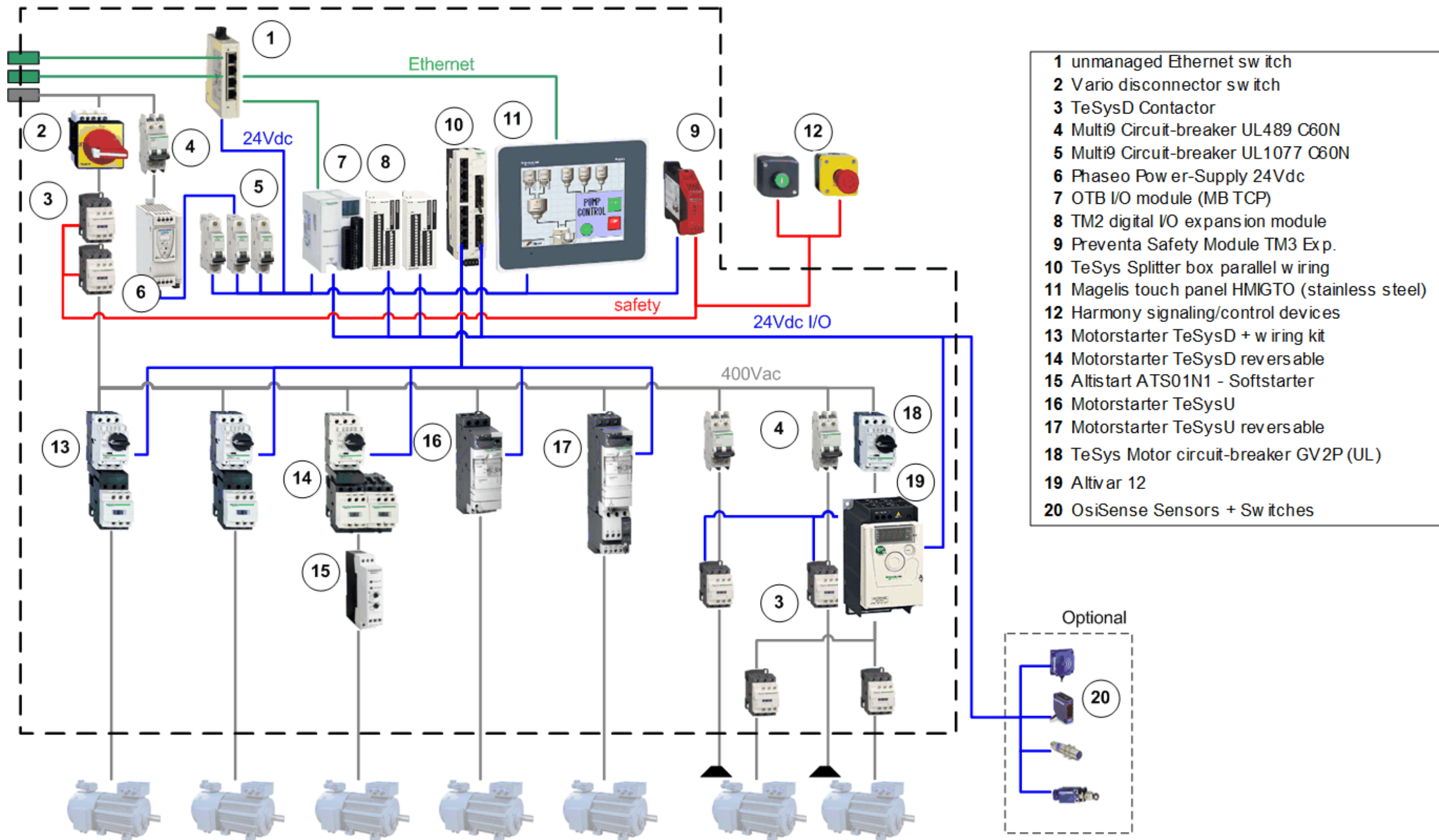
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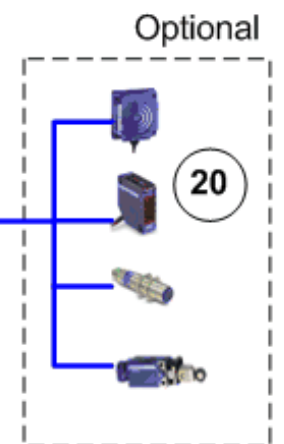
Plant Layout Main Cabinet

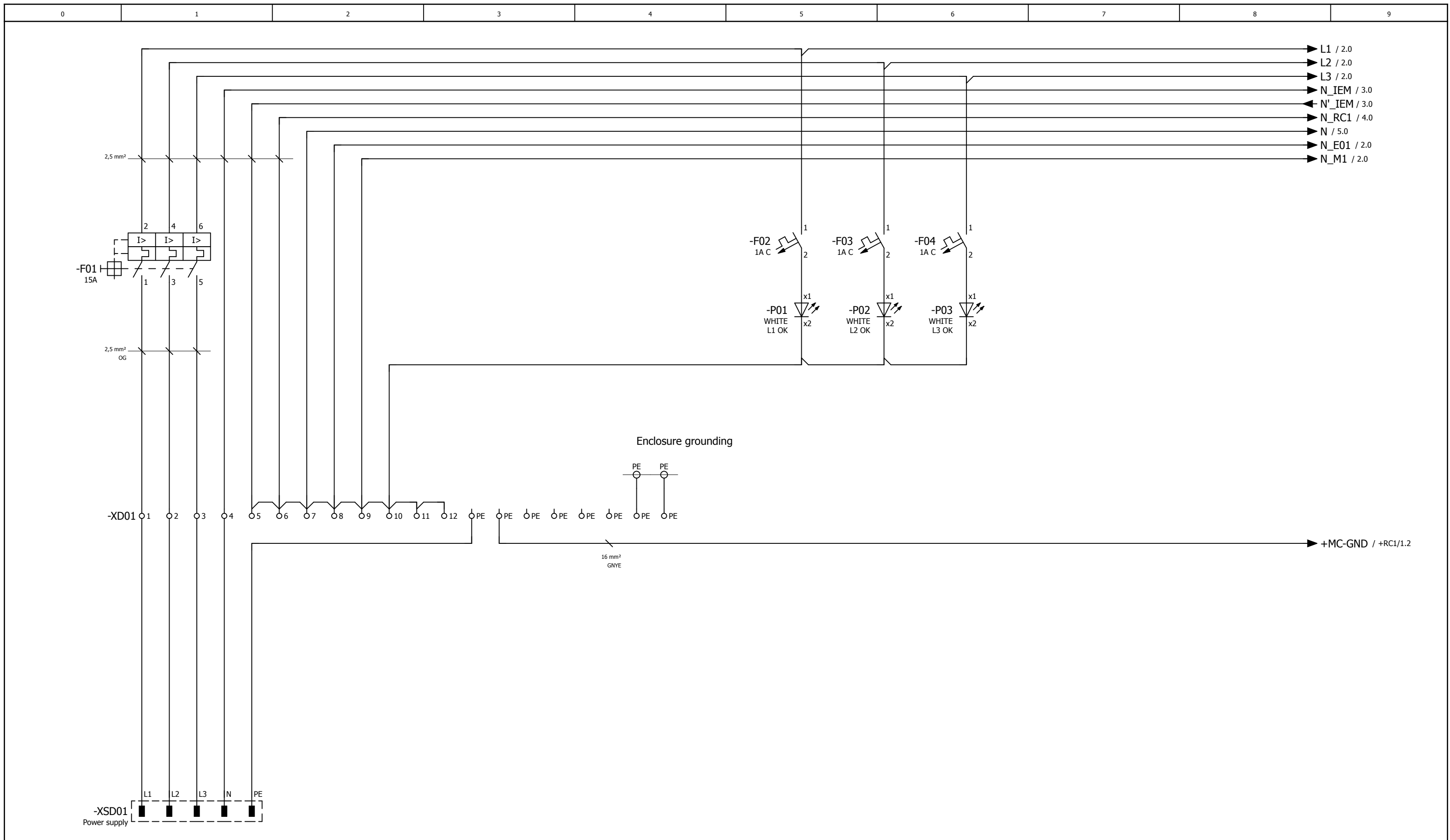
=COMM		+LAYOUT	
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# Distributed / Modbus TCP / Logic Controller M251 – Remote cabinet



- 1 unmanaged Ethernet switch
- 2 Vario disconnect switch
- 3 TeSysD Contactor
- 4 Multi9 Circuit-breaker UL489 C60N
- 5 Multi9 Circuit-breaker UL1077 C60N
- 6 Phaseo Power-Supply 24Vdc
- 7 OTB I/O module (MB TCP)
- 8 TM2 digital I/O expansion module
- 9 Preventa Safety Module TM3 Exp.
- 10 TeSys Splitter box parallel wiring
- 11 Magelis touch panel HMIGTO (stainless steel)
- 12 Harmony signaling/control devices
- 13 Motorstarter TeSysD + wiring kit
- 14 Motorstarter TeSysD reversible
- 15 Altistart ATS01N1 - Softstarter
- 16 Motorstarter TeSysU
- 17 Motorstarter TeSysU reversible
- 18 TeSys Motor circuit-breaker GV2P (UL)
- 19 Altivar 12
- 20 OsiSense Sensors + Switches





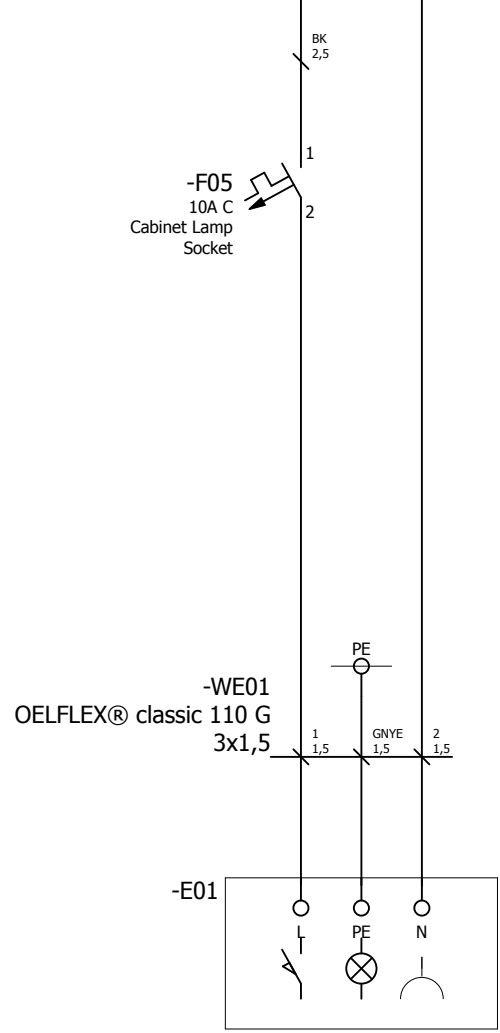
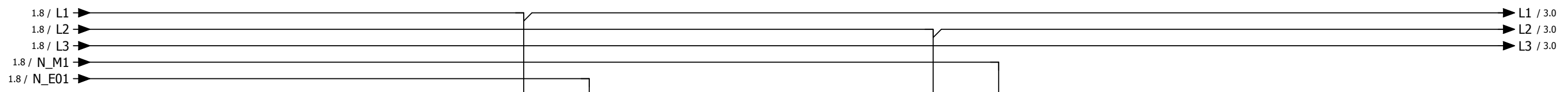
Note: In feed power supply must be adapted accordingly to the power consumption of the final plant.

Power supply

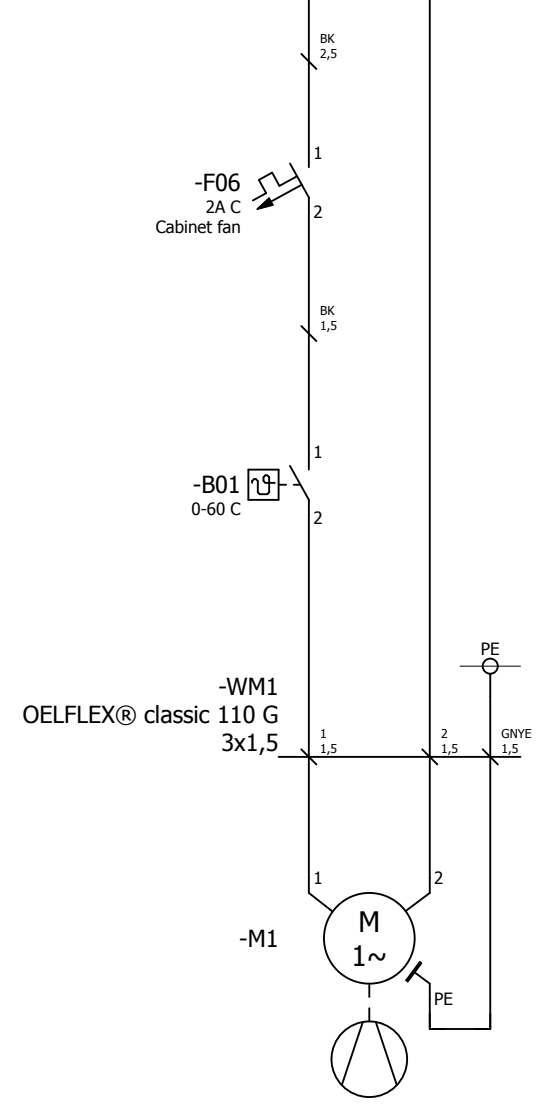
Phase control

=COMM+LAYOUT/2

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Cabinet Lamp, Socket

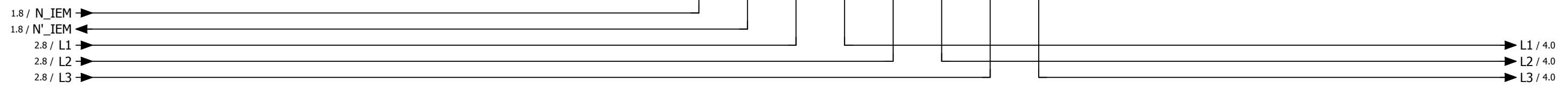
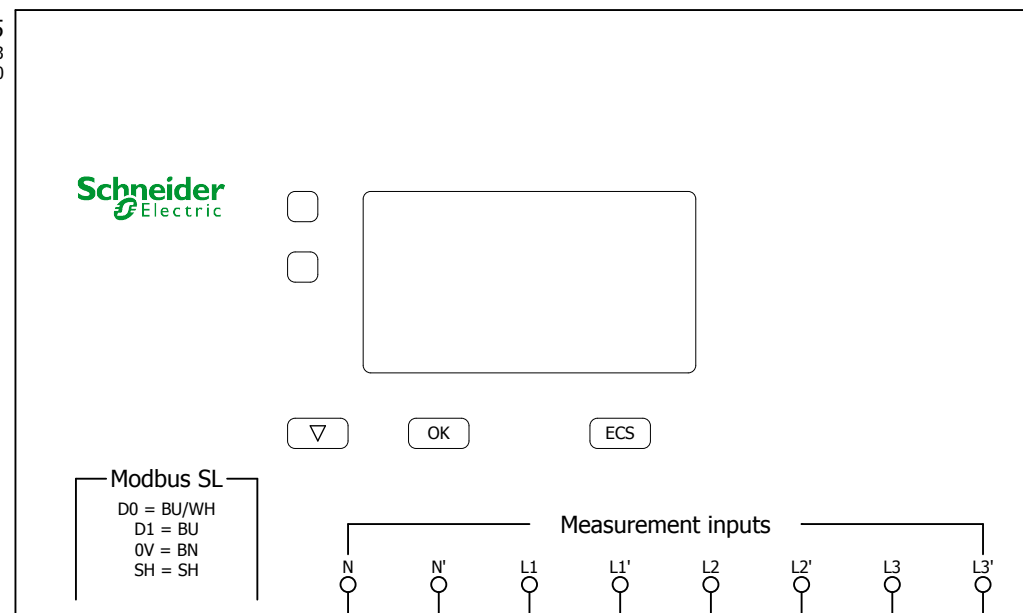


Cabinet fan

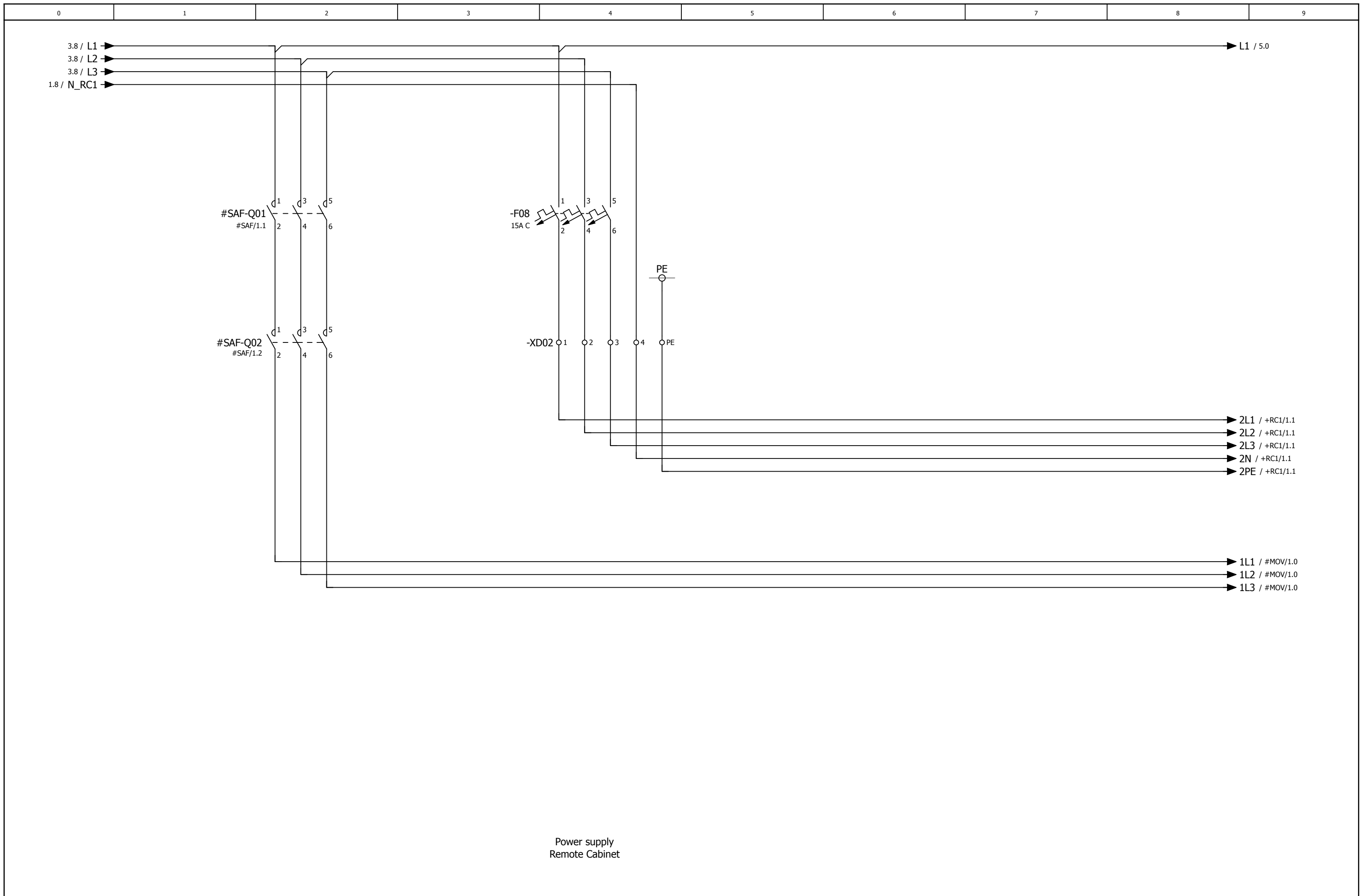
		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric	Cabinet Lamp, Socket, Fan		=WIRD +MC	
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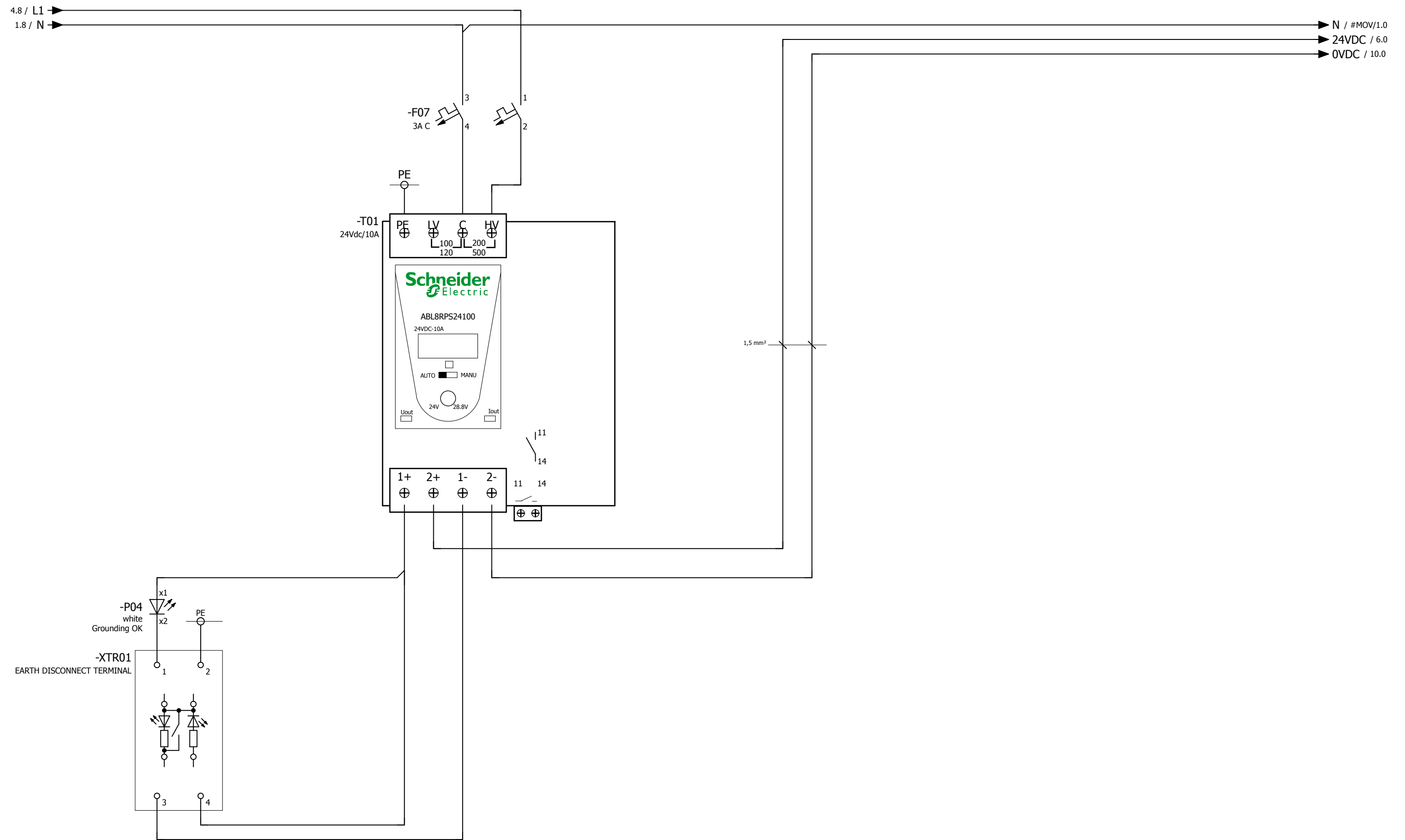
-P05  
/3.3  
Energy meter iEM3150



Energy Meter



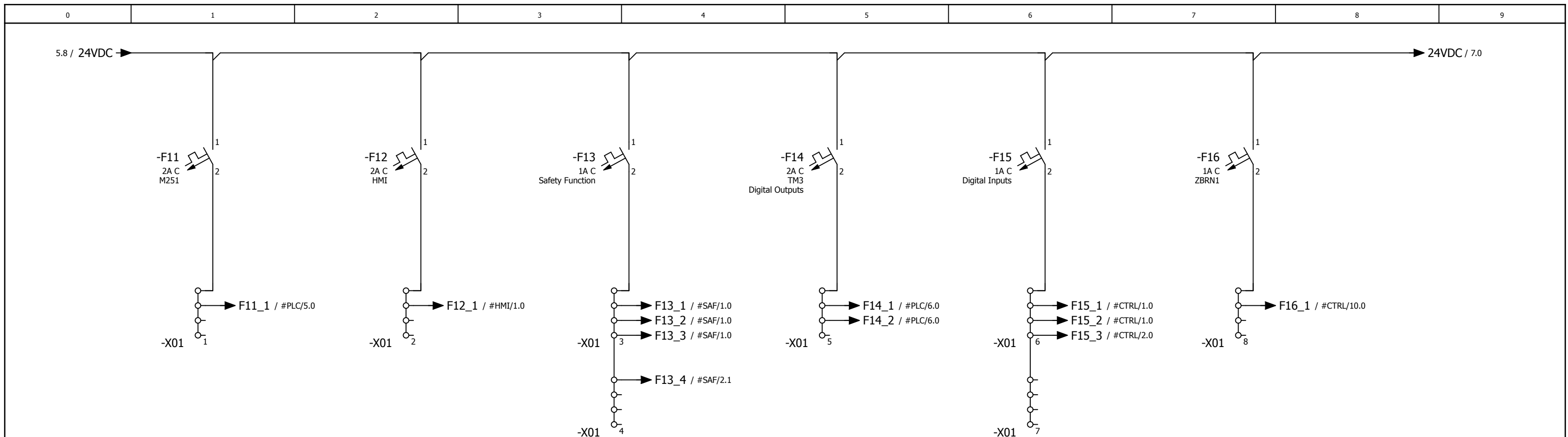
3		5	
Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	+MC
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Earth disconnect terminal

Power Supply

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Modification	Date	Name	Original	Replacement of	Replaced by	Schneider Electric		Power Supply 24V dc		EIO0000001822.01	=WIRD+MC#PSD/5 of 10



M251  
power supply 24V dc

HMI  
power supply 24V dc

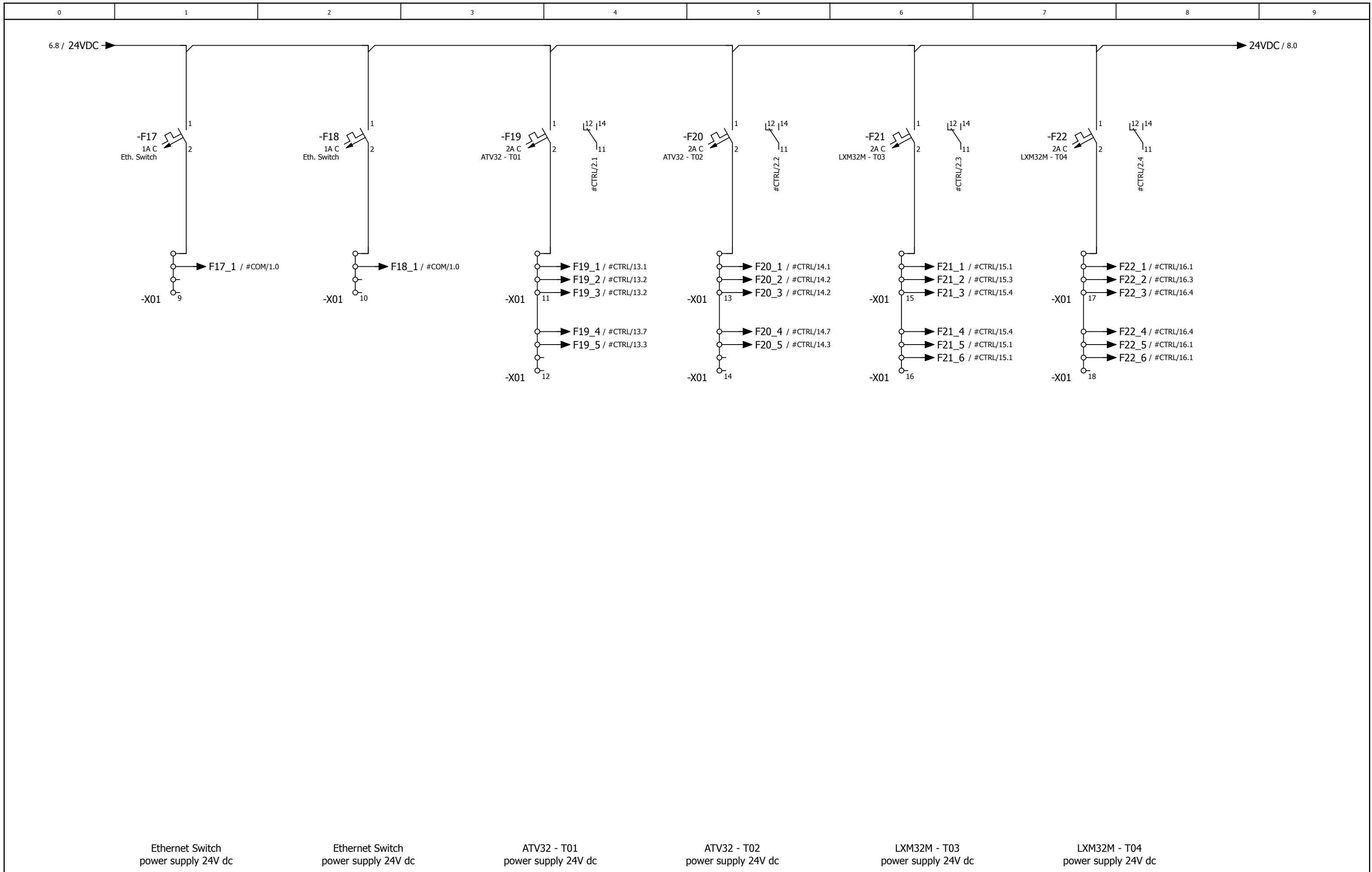
Safety Function  
power supply 24V dc

TM3 Digital Outputs  
power supply 24V dc

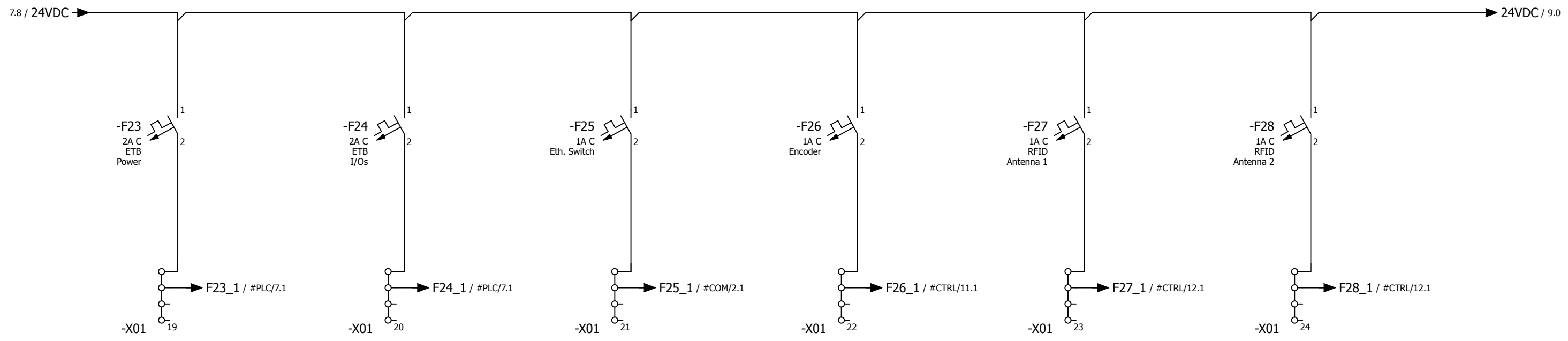
Digital Inputs  
power supply 24V dc

ZBRN1  
power supply 24V dc

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Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	+MC
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		Power Supply 24V dc	
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ETB  
power supply 24V dc

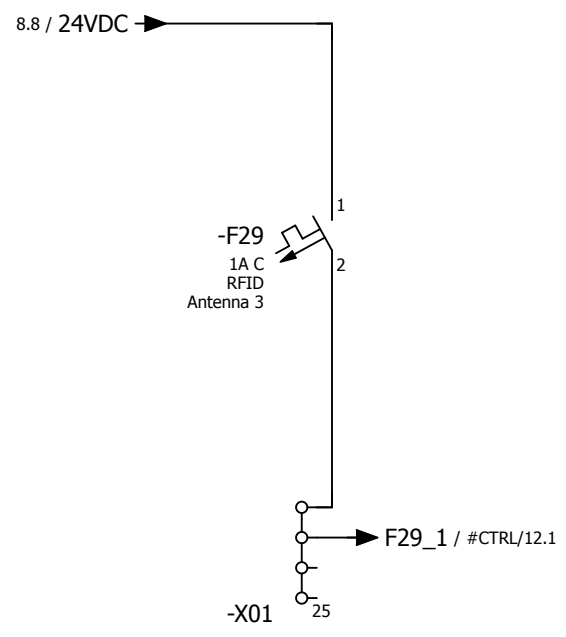
ETB I/O  
power supply 24V dc

Ethernet Switch  
power supply 24V dc


Encoder  
power supply 24V dc

RFID Antenna 1  
power supply 24V dc

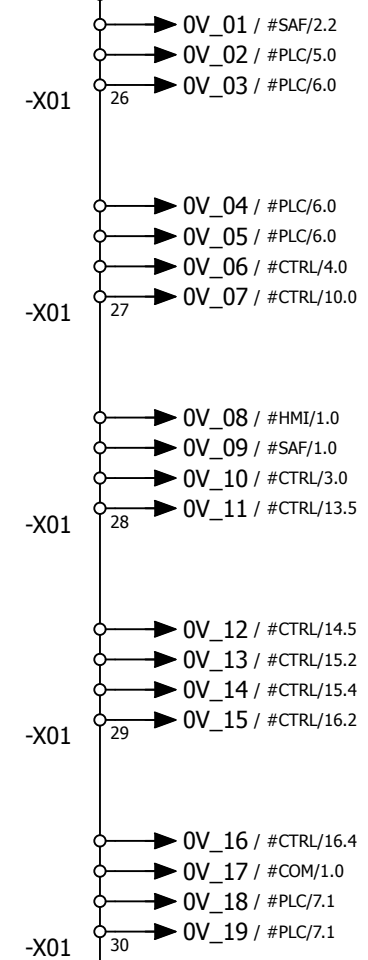
RFID Antenna 2  
power supply 24V dc



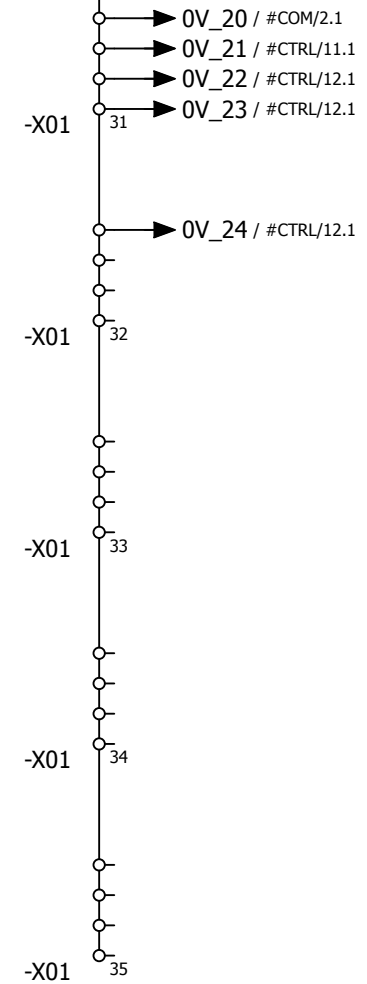
RFID Antenna 3  
power supply 24V dc

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251			Power Supply 24V dc			=WIRD	+MC
		Ed.	kJakob	TVDA							#PSD
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	9	
								=WIRD+MC#PSD/9		of	10

5.8 / 0VDC →

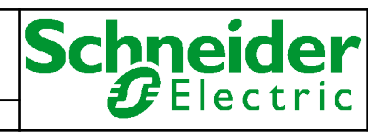


Power supply 0V dc



Power supply 0V dc

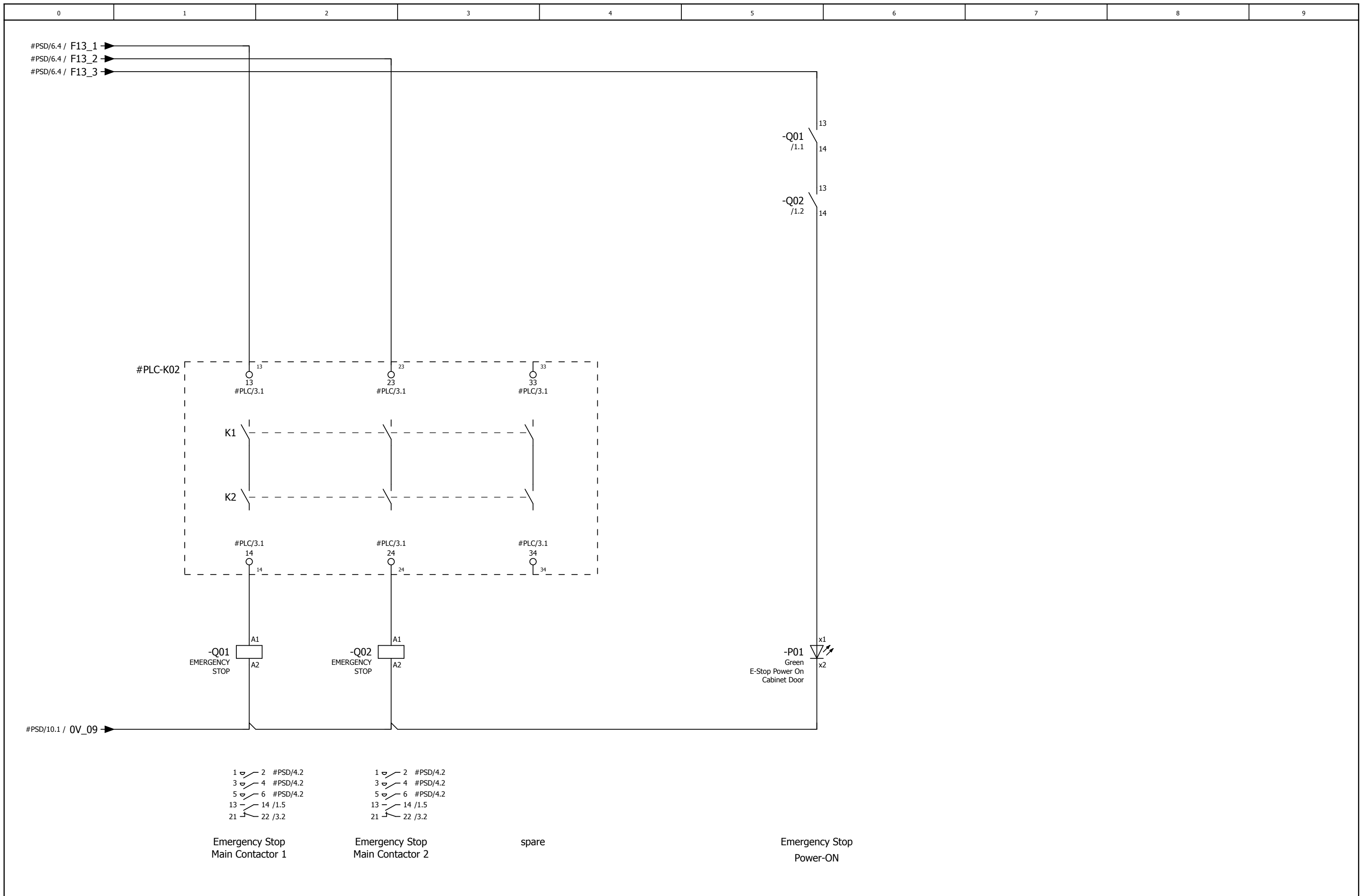
Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251
Ed.	kJakob	
Appr		TVDA
Modification	Date	Name
		Original
		Replacement of
		Replaced by



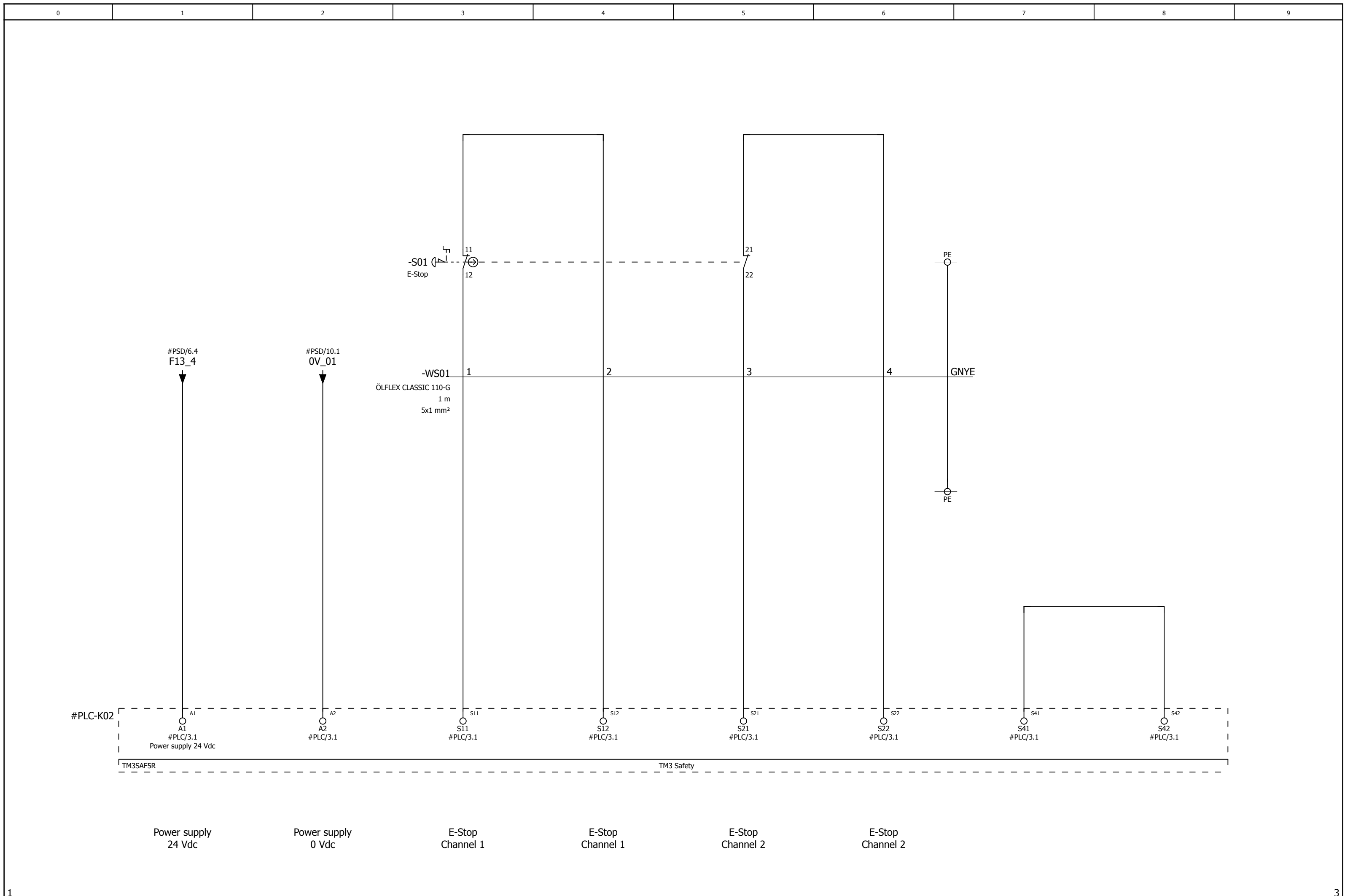
Power Supply 0V dc

		=WIRD	+MC
		#PSD	
EIO0000001822.01	Page	10	
		=WIRD+MC#PSD/10	of 10





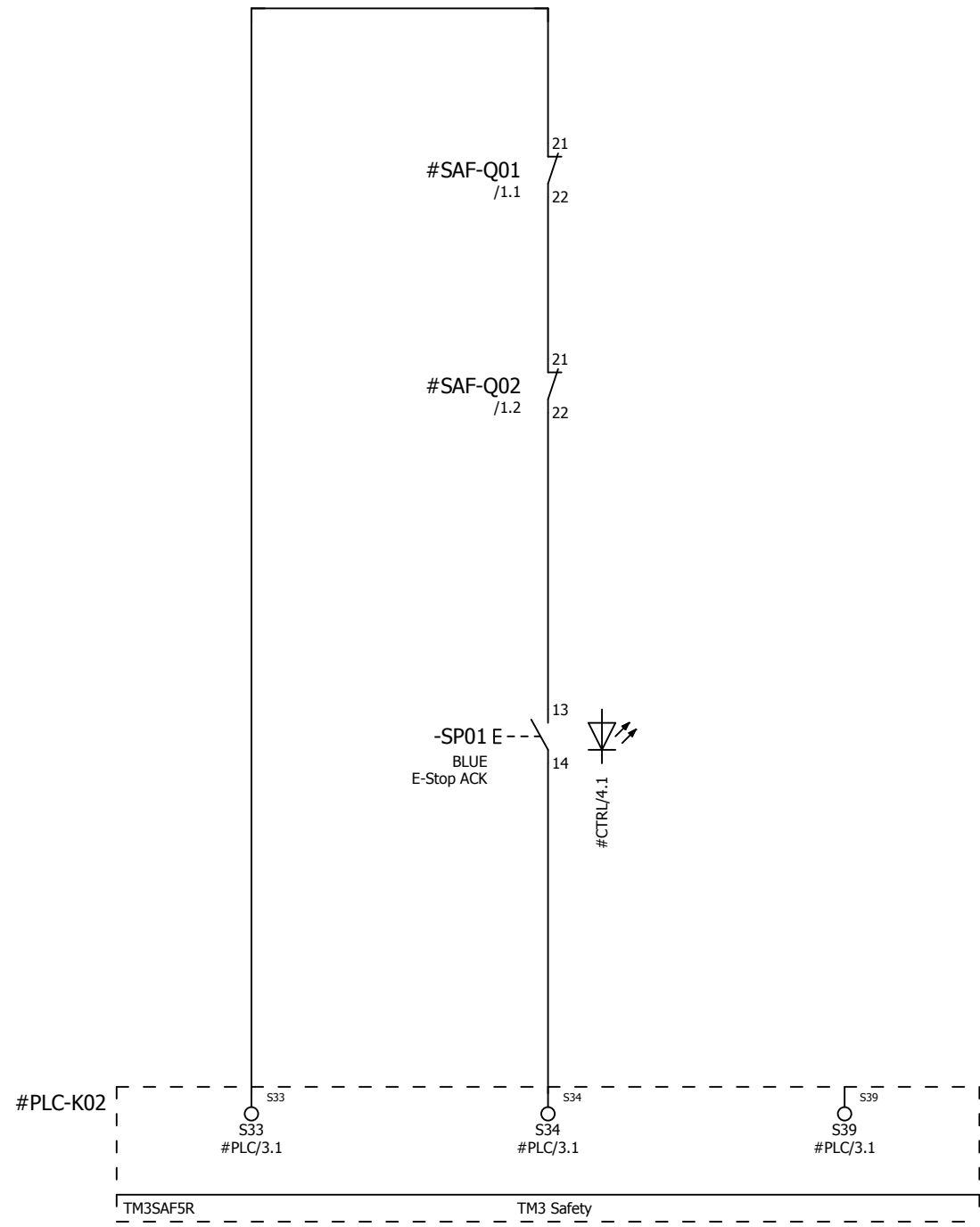
#PSD/10		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Emergency Stop - Main Contactors	=WIRD +MC	Page 1	of 3
		Ed.	kJakob	TVDA					
Modification	Date	Name	Original	Replacement of	Replaced by				



		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251				=WIRD		+MC	
		Ed.	kJakob	TVDA						#SAF	
		Appr		Replacement of		Replaced by		EIO0000001822.01		Page	2
Modification	Date	Name	Original					=WIRD+MC#SAF/2		of	3



TM3-Safety module E-Stop - Power Supply + Safety Channels



Start  
with  
monitoring

Start  
without  
monitoring

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric	TM3-Safety module E-Stop - Feedback + Acknowledge	=WIRD +MC	
		Ed.	kJakob	TVDA				#SAF	
		Appr						EIO0000001822.01	Page 3
Modification	Date	Name	Original	Replacement of	Replaced by			=WIRD+MC#SAF/3	of 3



#SAF/3

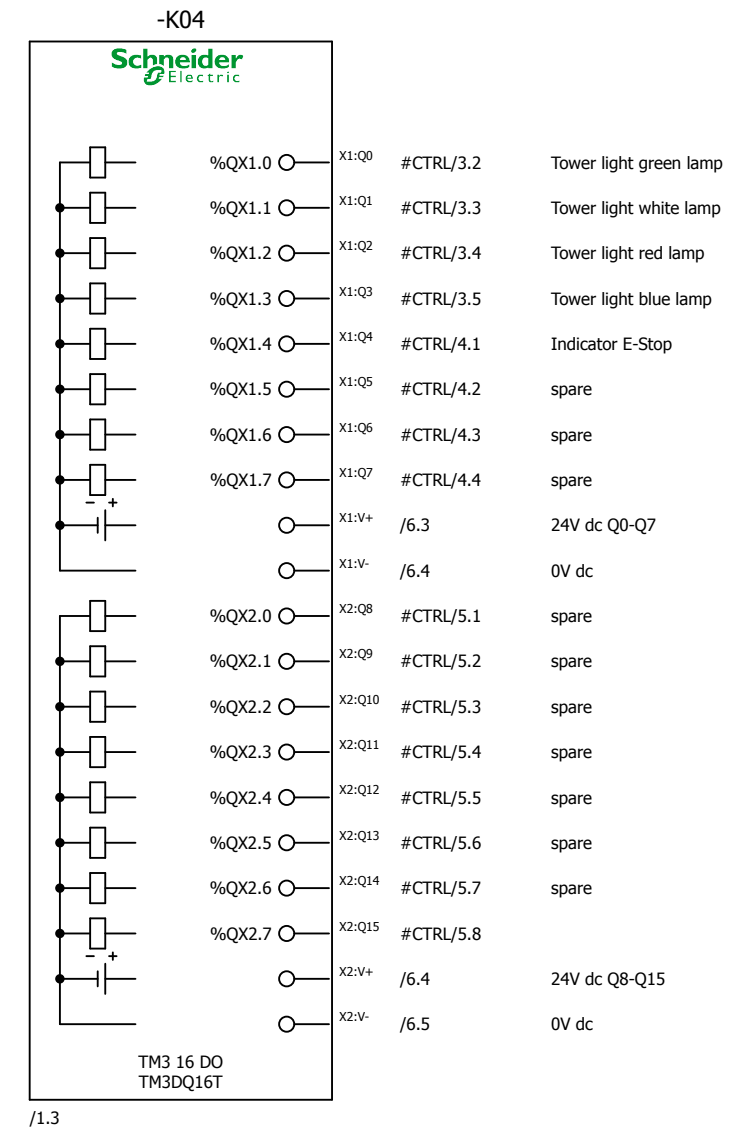
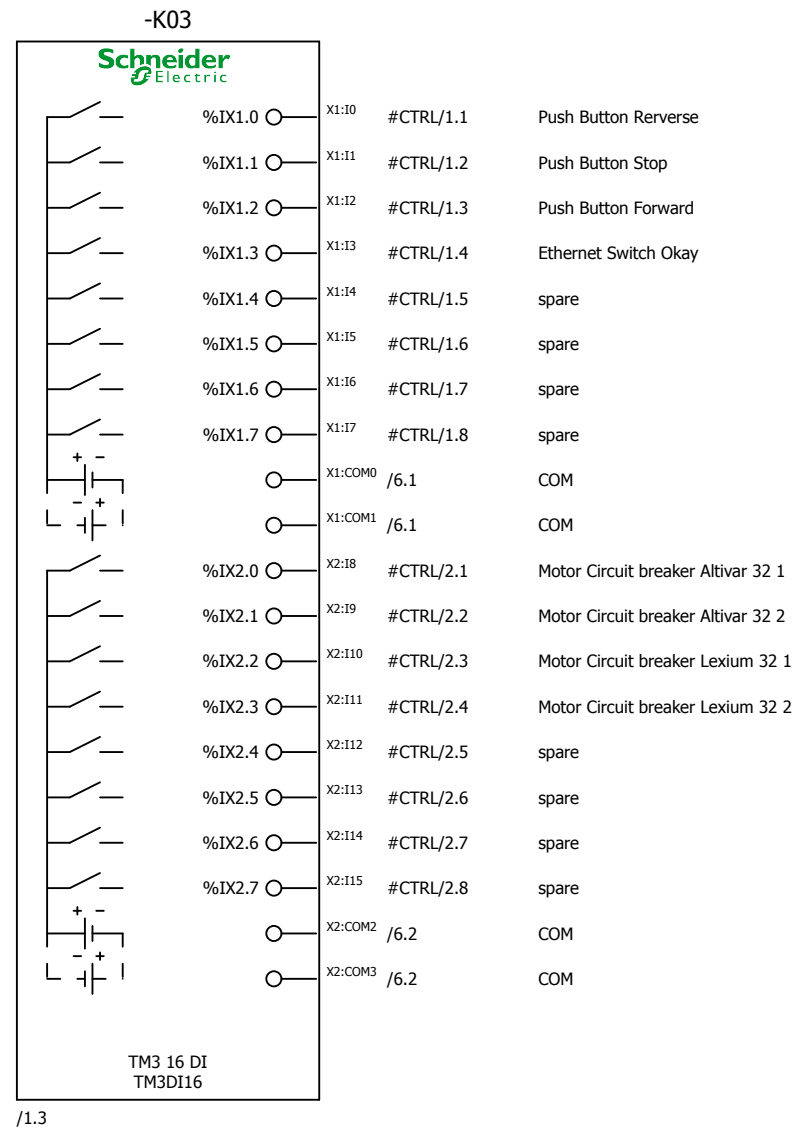
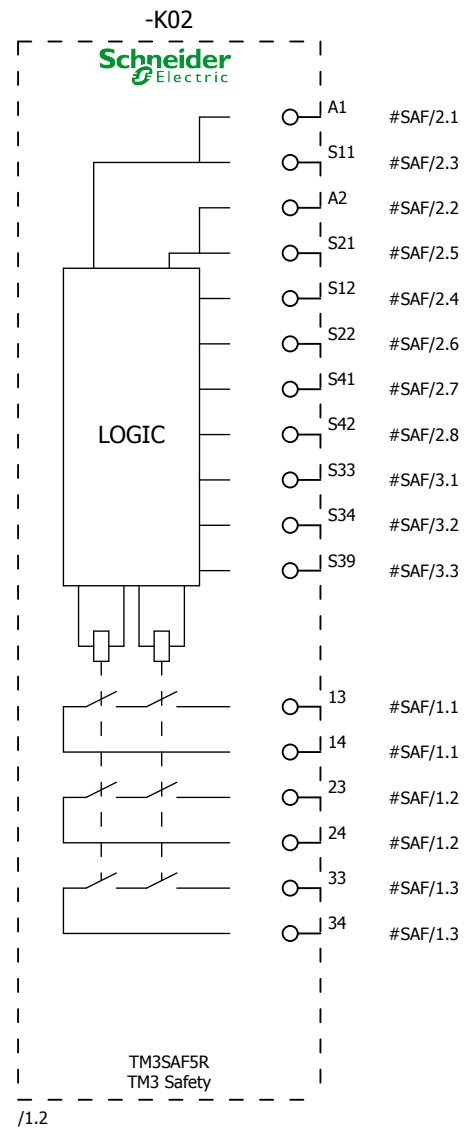
Date	2015/10/13	Distributed / Modbus TCP / Logic Controller M251
Ed.	kJakob	
Appr		TVDA
Modification	Date	Name
	Original	Replacement of
		Replaced by



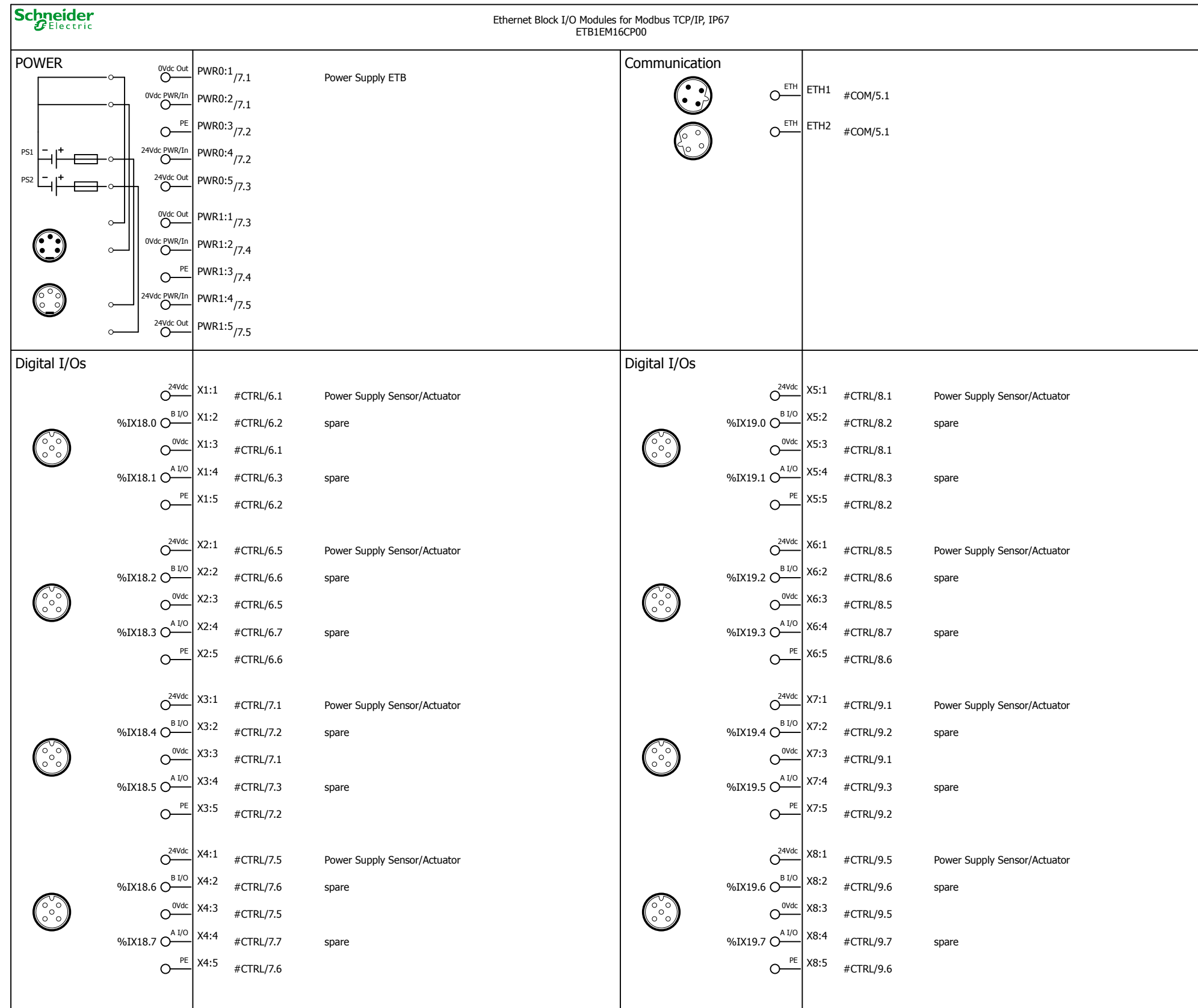
Assembly layout M251

		=WIRD	+MC
		#PLC	
EIO0000001822.01	Page	1	
		=WIRD+MC#PLC/1	of 7



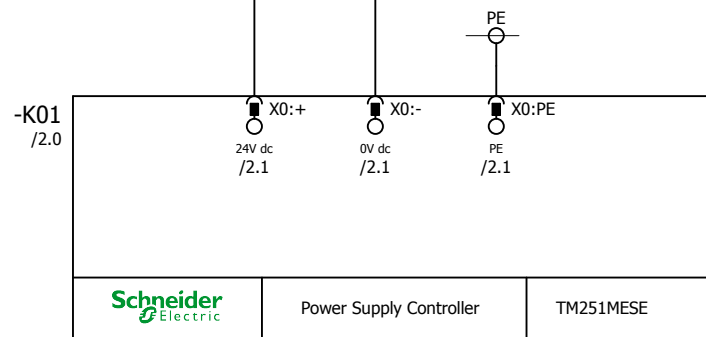


+LOC-A03



#COM/5.0  
/4.4

#PSD/6.1 / F11\_1 →  
 #PSD/10.1 / OV\_02 →

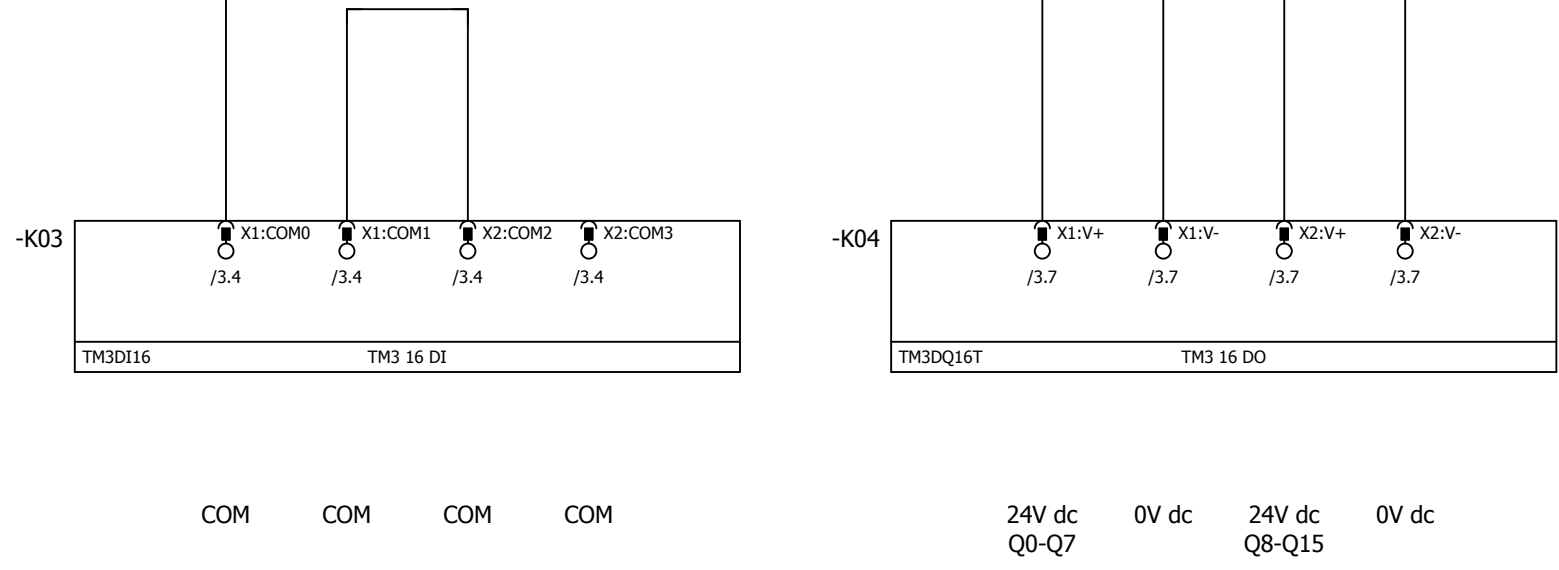


Power Supply PLC M251

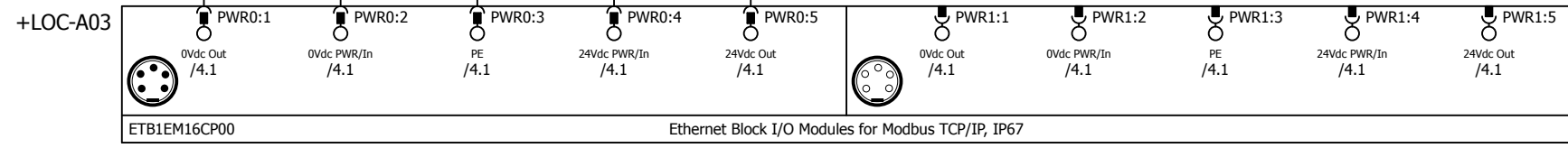
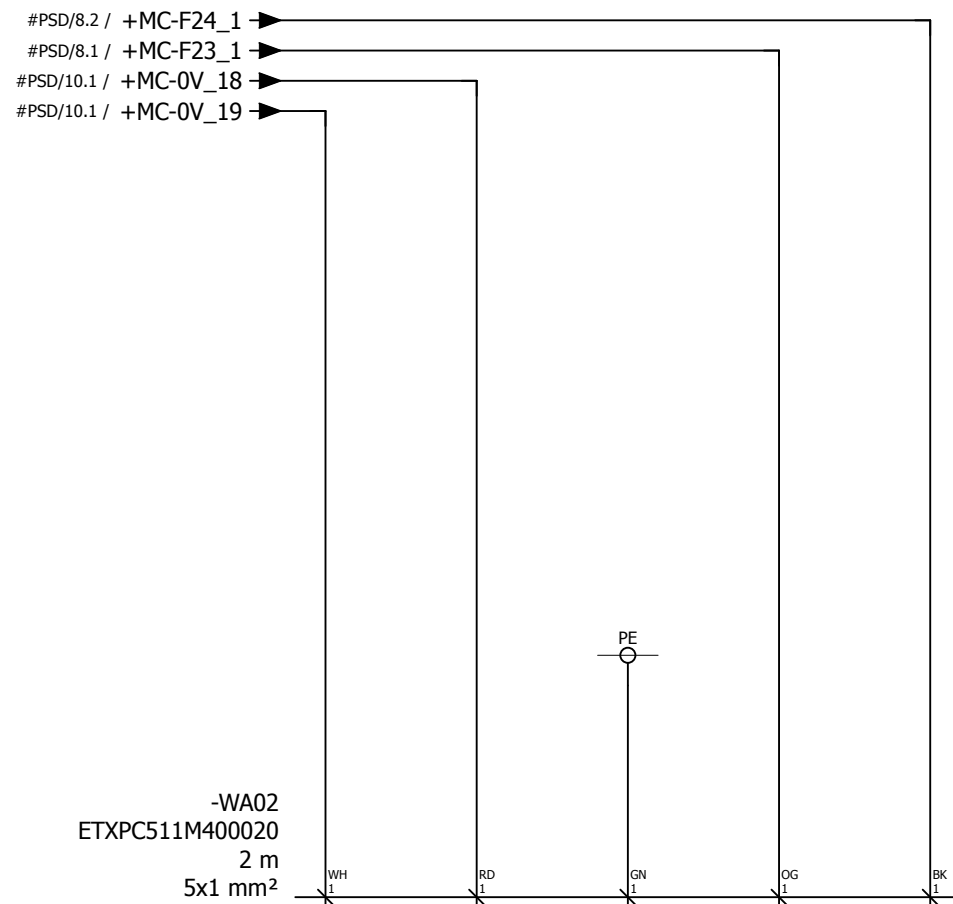
4			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Power supply M251			+MC
			Ed.	kJakob						#PLC
			Appr		TVDA					Page 5
Modification	Date	Name	Original		Replacement of	Replaced by		EIO0000001822.01		=WIRD+MC#PLC/5 of 7



#PSD/6.5 / F14\_1 →  
 #PSD/6.5 / F14\_2 →  
 #PSD/10.1 / OV\_03 →  
 #PSD/10.1 / OV\_04 →  
 #PSD/10.1 / OV\_05 →



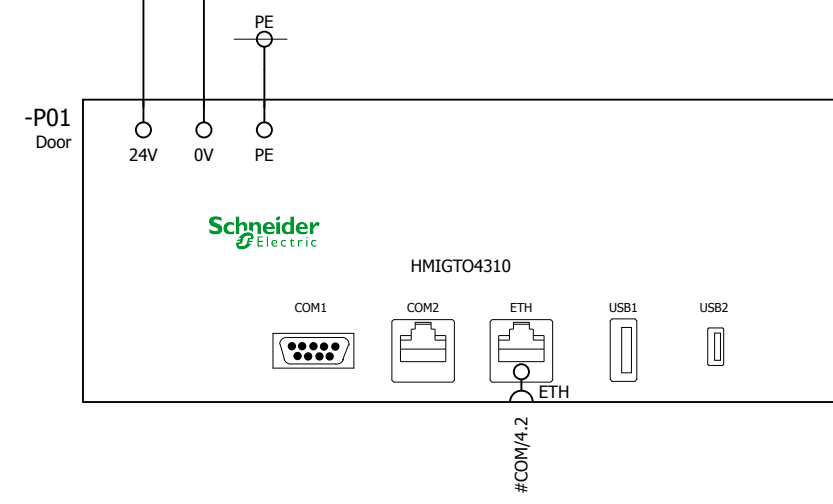
0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---



Power Supply ETB

6								#HMI/1			
		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric		Power Supply ETB I/O Module		=WIRD +MC	
		Ed.	kJakob	TVDA						#PLC	
		Appr		Replacement of						Page 7	
Modification	Date	Name	Original	Replaced by				EIO0000001822.01		=WIRD+MC#PLC/7 of 7	

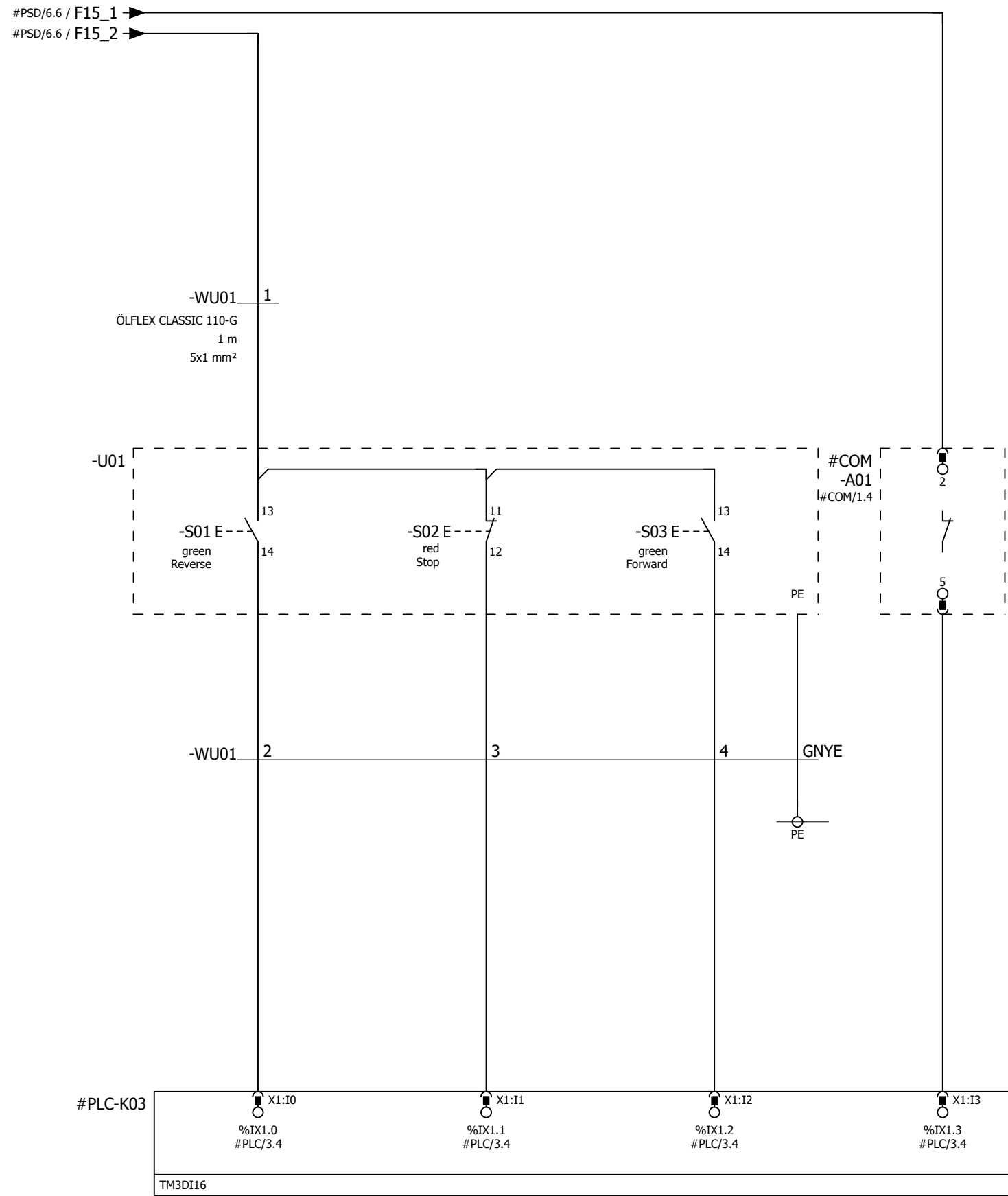
#PSD/6.2 / F12\_1 →  
 #PSD/10.1 / OV\_08 →



#PLC/7

#CTRL/1

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		HMI Magelis Panel Power Supply		=WIRD +MC
			Ed.	kJakob	TVDA				#HMI
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page 1
								=WIRD+MC#HMI/1	of 1



Push Button  
Rerverse

Push Button  
Stop

Push Button  
Forward

Ethernet Switch Okay

spare

spare

spare

spare

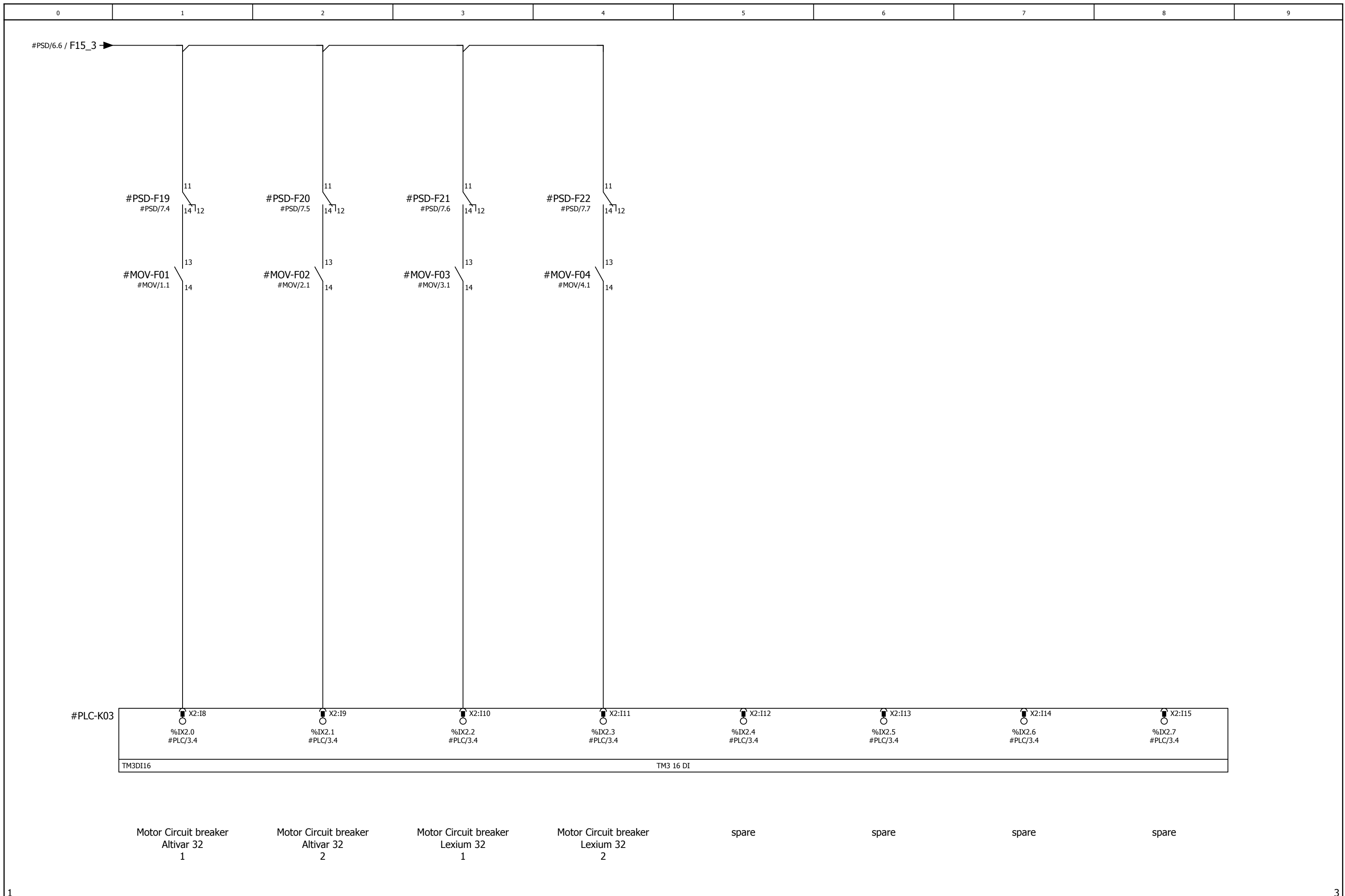
#HMI/1

Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251			
Ed.	kJakob				
Appr		TVDA			
Modification	Date	Name	Original	Replacement of	Replaced by

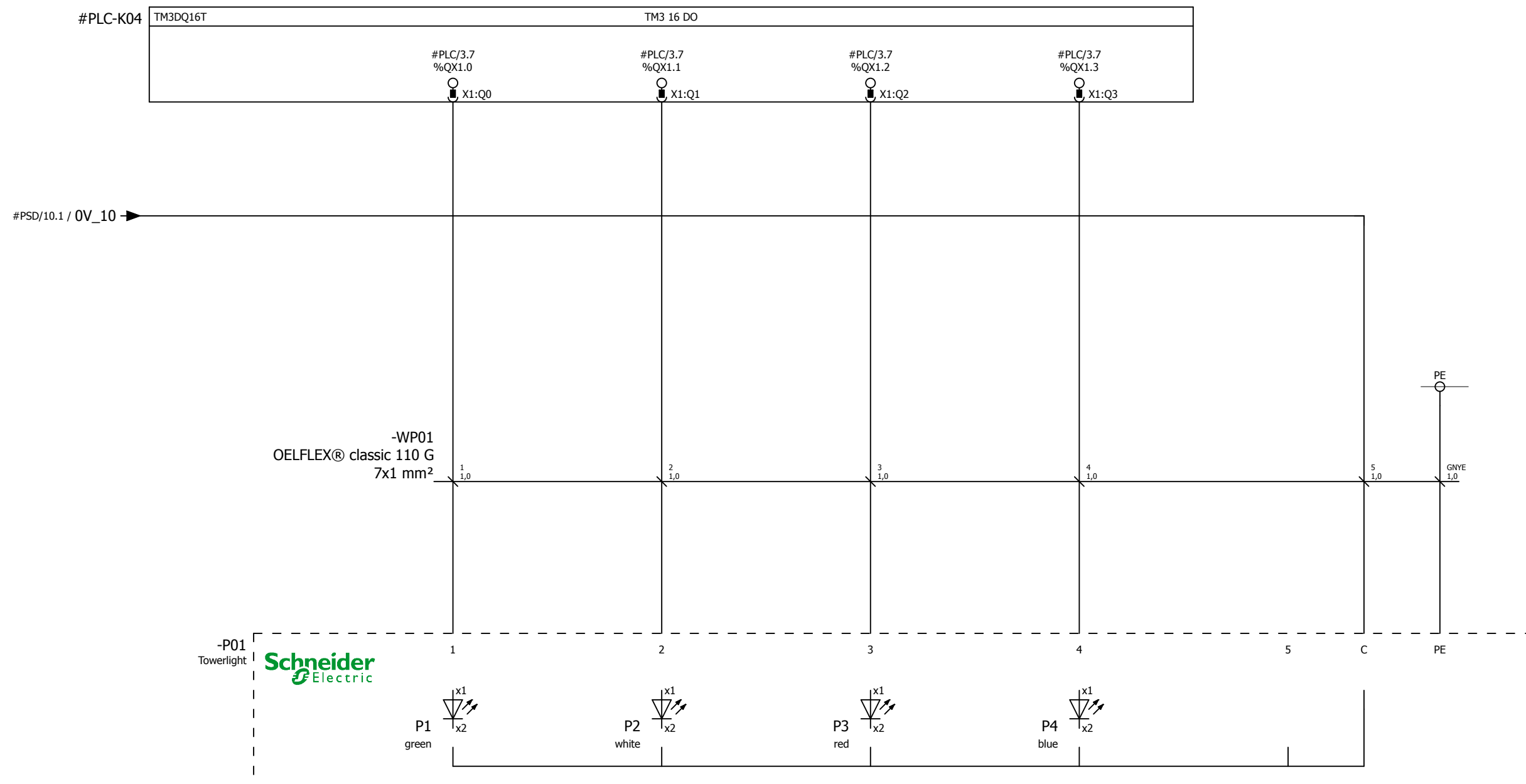


Digital inputs TM3

EIO0000001822.01



1		Date		2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric		Digital inputs TM3		=WIRD		+MC	
		Ed.		kJakob	TVDA						#CTRL			
Modification		Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01		Page	2		
											=WIRD+MC#CTRL/2		of	16



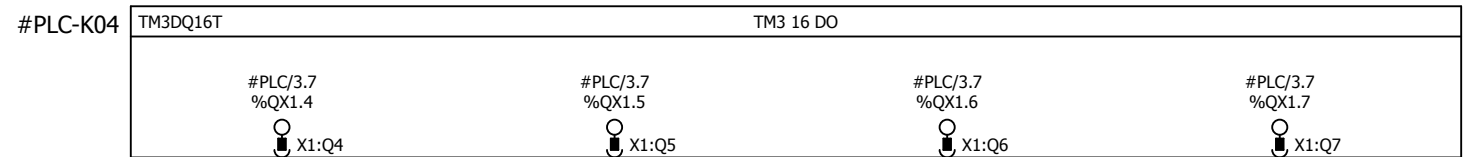
Tower light green lamp

Tower light white lamp

Tower light red lamp

Tower light blue lamp

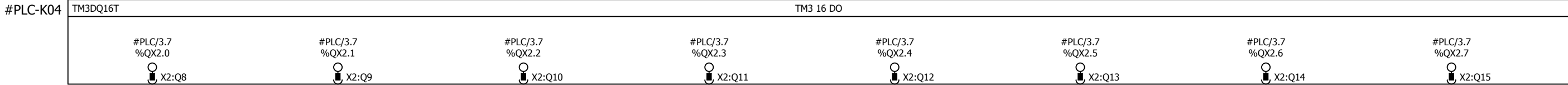
Towerlight spare



#PSD/10.1 / OV\_06

Indicator E-Stop                      spare                      spare                      spare

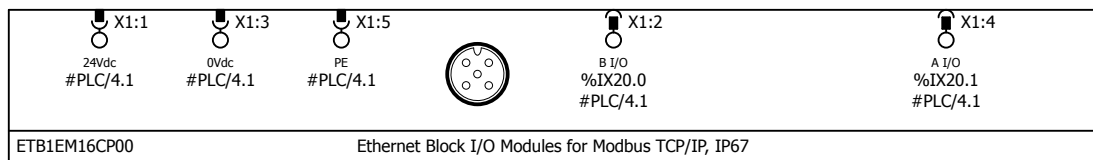




spare          spare          spare          spare          spare          spare          spare          spare



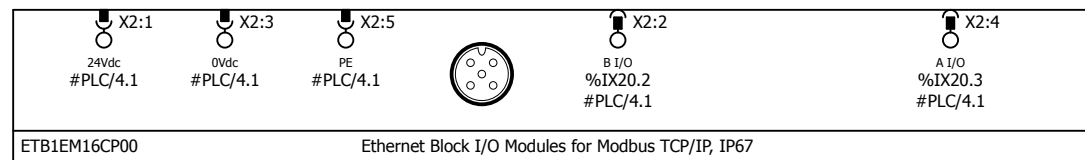
+LOC#PLC-A03



Power Supply  
Sensor/Actuator

spare

spare



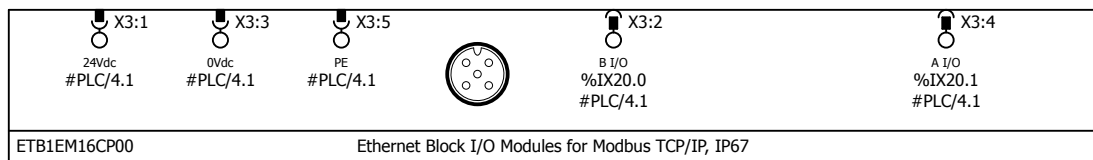
Power Supply  
Sensor/Actuator

spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		ETB Digital I/Os		=WIRD	+MC	
			Ed.	kJakob	TVDA					#CTRL	
Modification	Date	Name	Original		Replacement of	Replaced by		EIO0000001822.01	Page	6	
									=WIRD+MC#CTRL/6	of	16

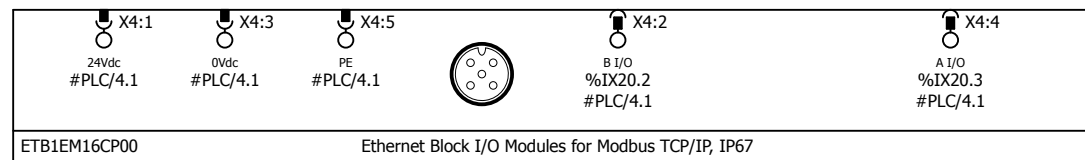
+LOC#PLC-A03



Power Supply  
Sensor/Actuator

spare

spare



Power Supply  
Sensor/Actuator

spare

spare

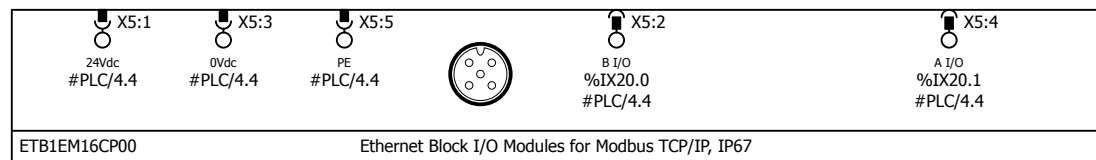
			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251
			Ed.	kJakob	
			Appr		TVDA
Modification	Date	Name	Original	Replacement of	Replaced by



ETB Digital I/Os

	=WIRD	+MC
		#CTRL
EIO0000001822.01	Page	7
	=WIRD+MC#CTRL/7	of 16

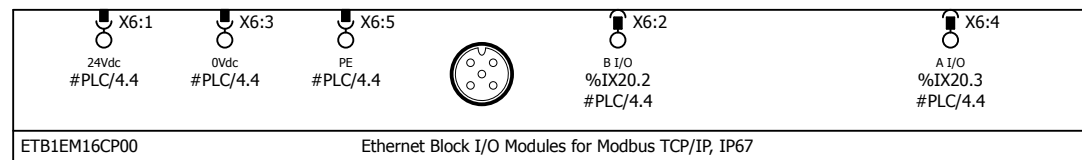
+LOC#PLC-A03



Power Supply  
Sensor/Actuator

spare

spare



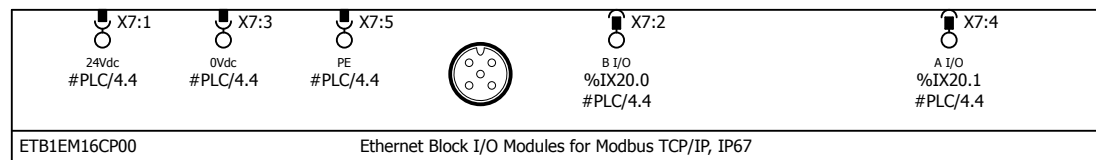
Power Supply  
Sensor/Actuator

spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Ed.	kjacob	ETB Digital I/Os		=WIRD	+MC	
			Appr		TVDA								#CTRL
Modification	Date	Name	Original		Replacement of	Replaced by						EIO0000001822.01	Page 8
											=WIRD+MC#CTRL/8 of 16		

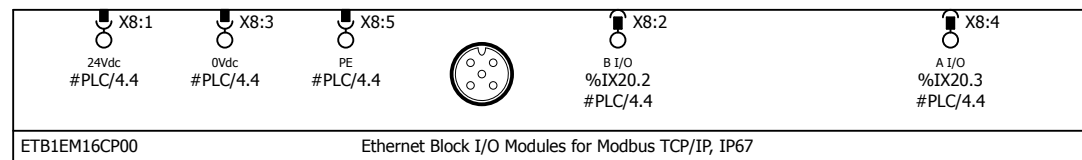
+LOC#PLC-A03



Power Supply  
Sensor/Actuator

spare

spare



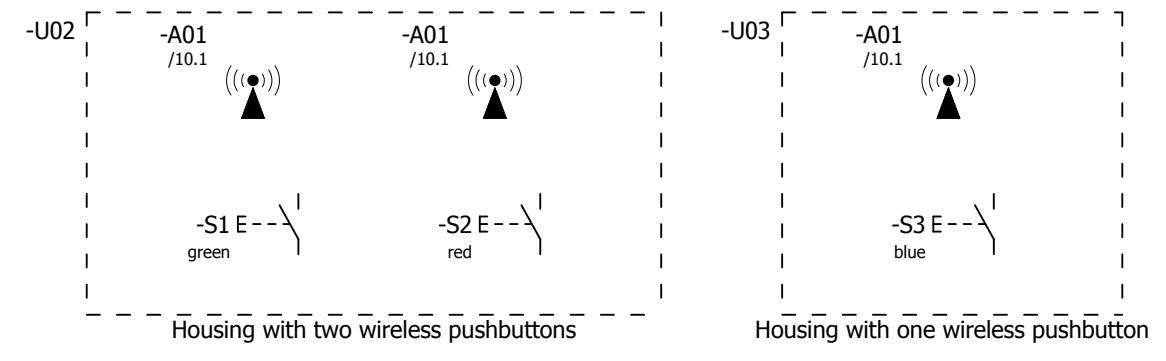
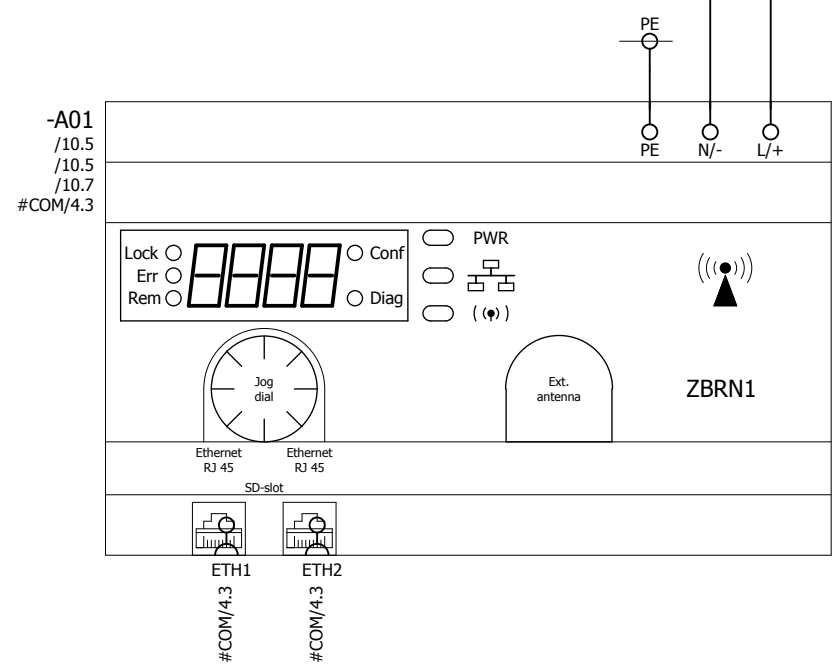
Power Supply  
Sensor/Actuator

spare

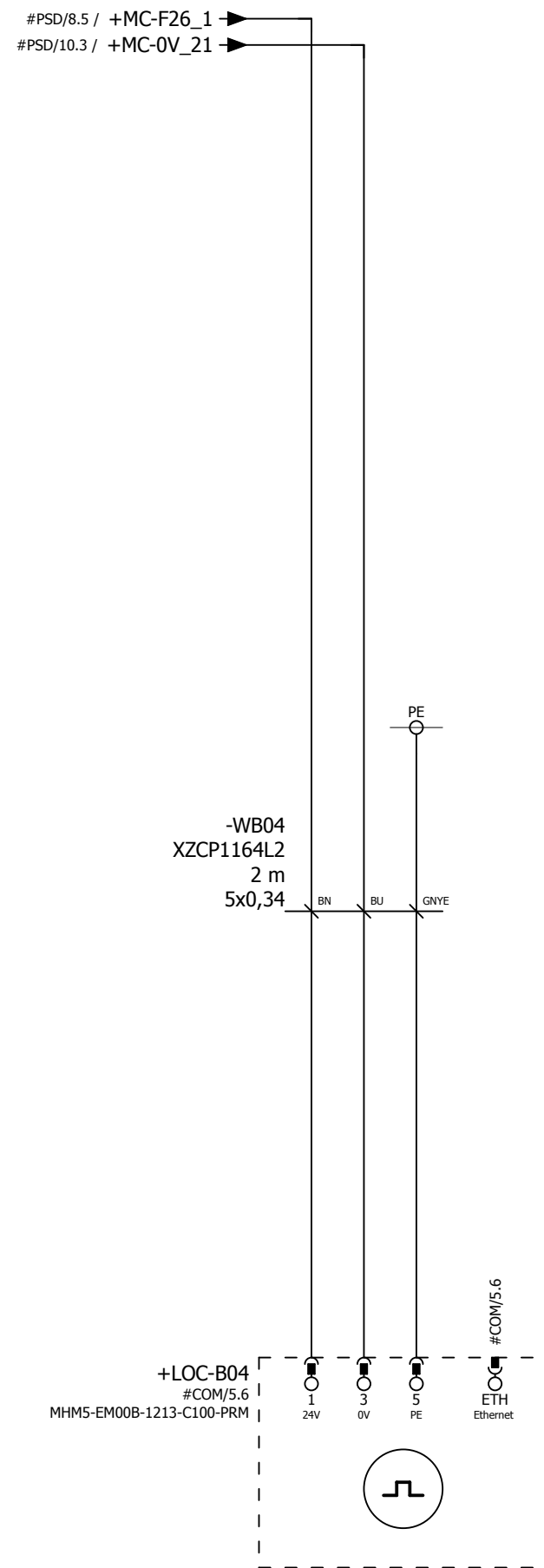
spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Ed.	kjacob	ETB Digital I/Os		=WIRD	+MC
			Appr		TVDA							
Modification	Date	Name	Original		Replacement of	Replaced by					EIO0000001822.01	Page 9
											=WIRD+MC#CTRL/9	of 16

#PSD/6.7 / F16\_1 →  
 #PSD/10.1 / OV\_07 →

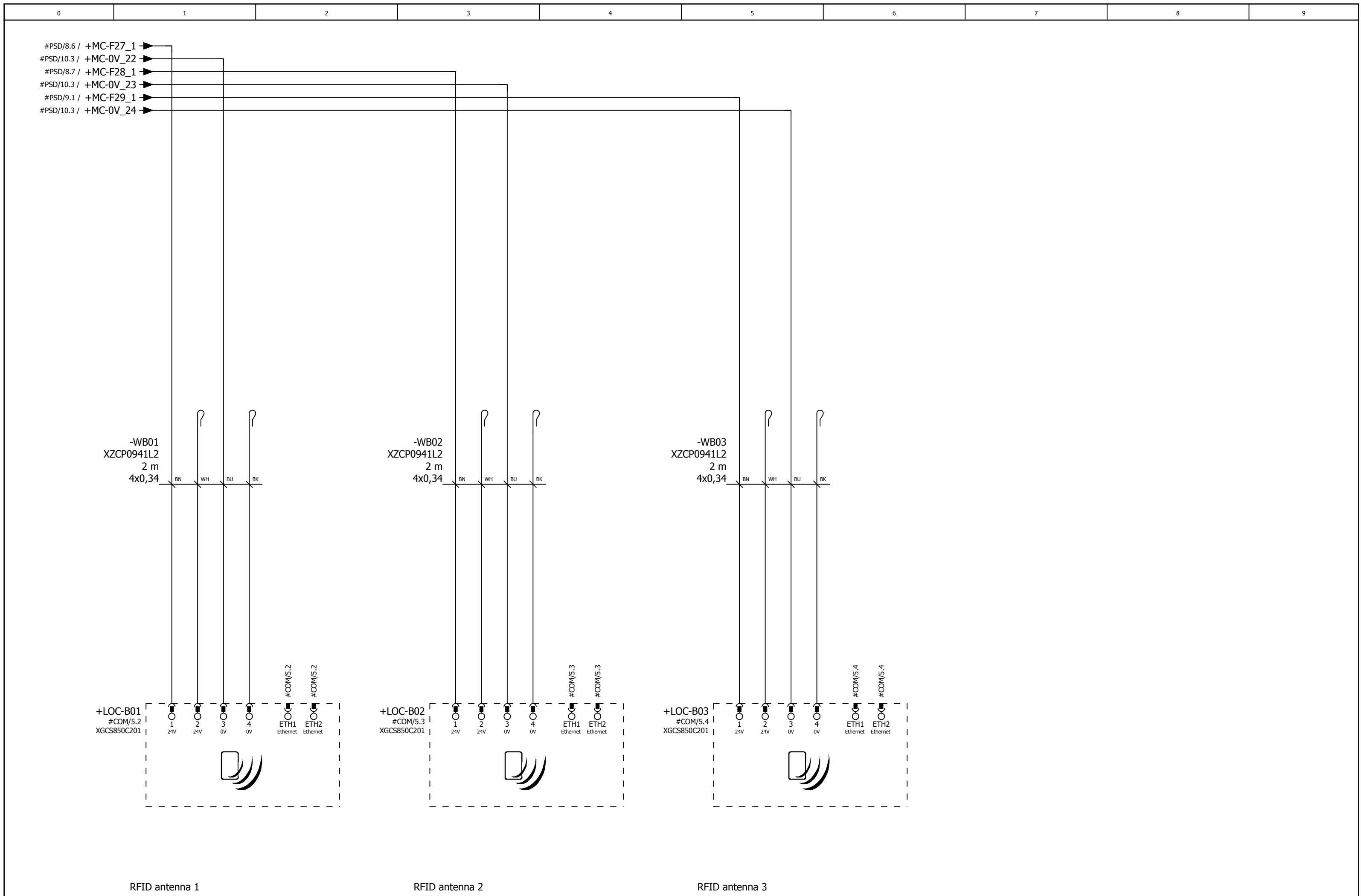


Receiver  
wireless pushbuttons

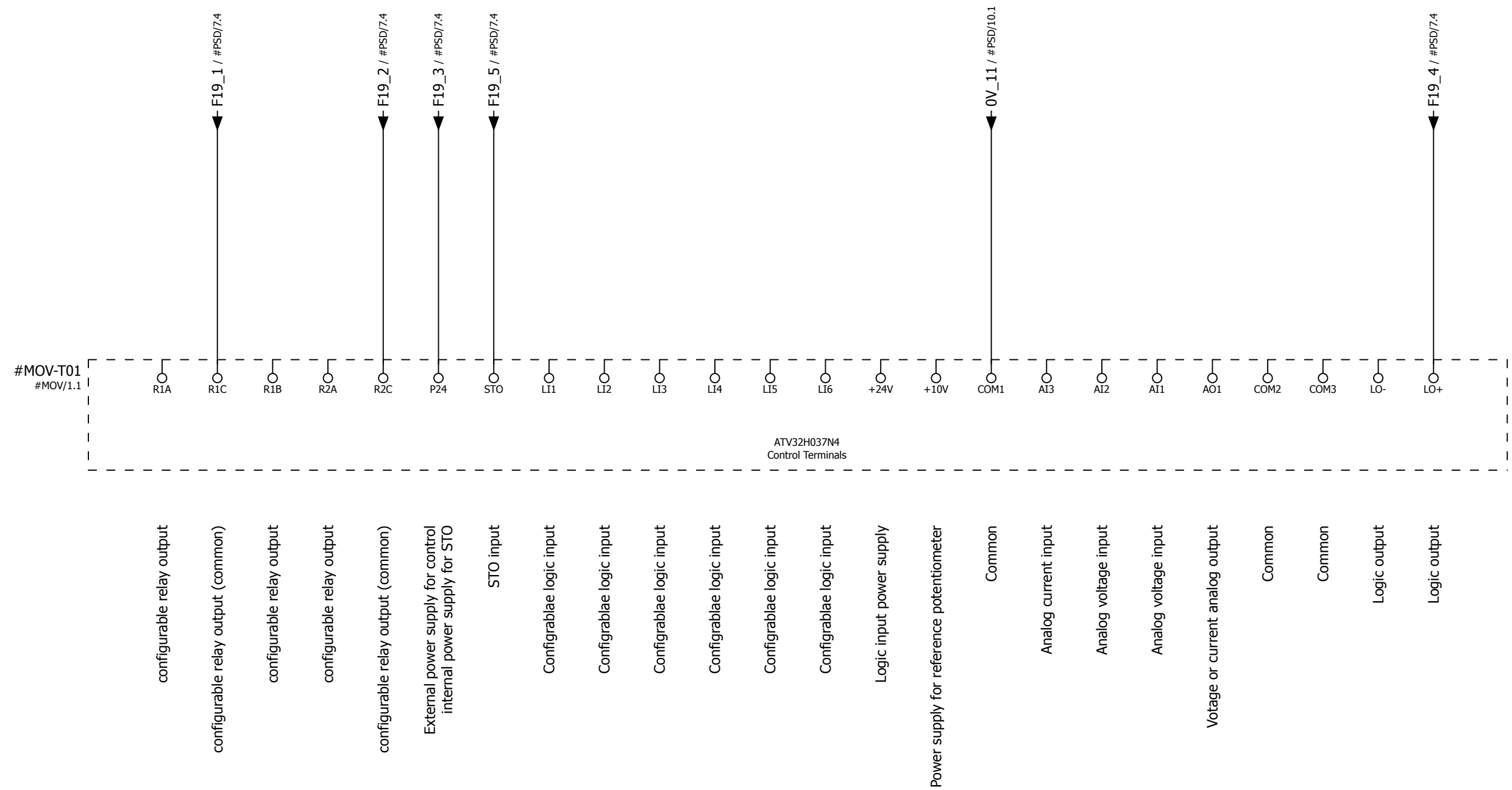


ENCODER 1

10										12											
					Date					2015/11/13					Distributed / Modbus TCP / Logic Controller M251						
					Ed.					kJakob					Schneider Electric Absolute Multiturn Encoder						
					Appr					TVDA											
Modification		Date		Name		Original		Replacement of		Replaced by							=WIRD +MC #CTRL				
										EIO0000001822.01					Page 11						
										=WIRD+MC#CTRL/11 of 16											

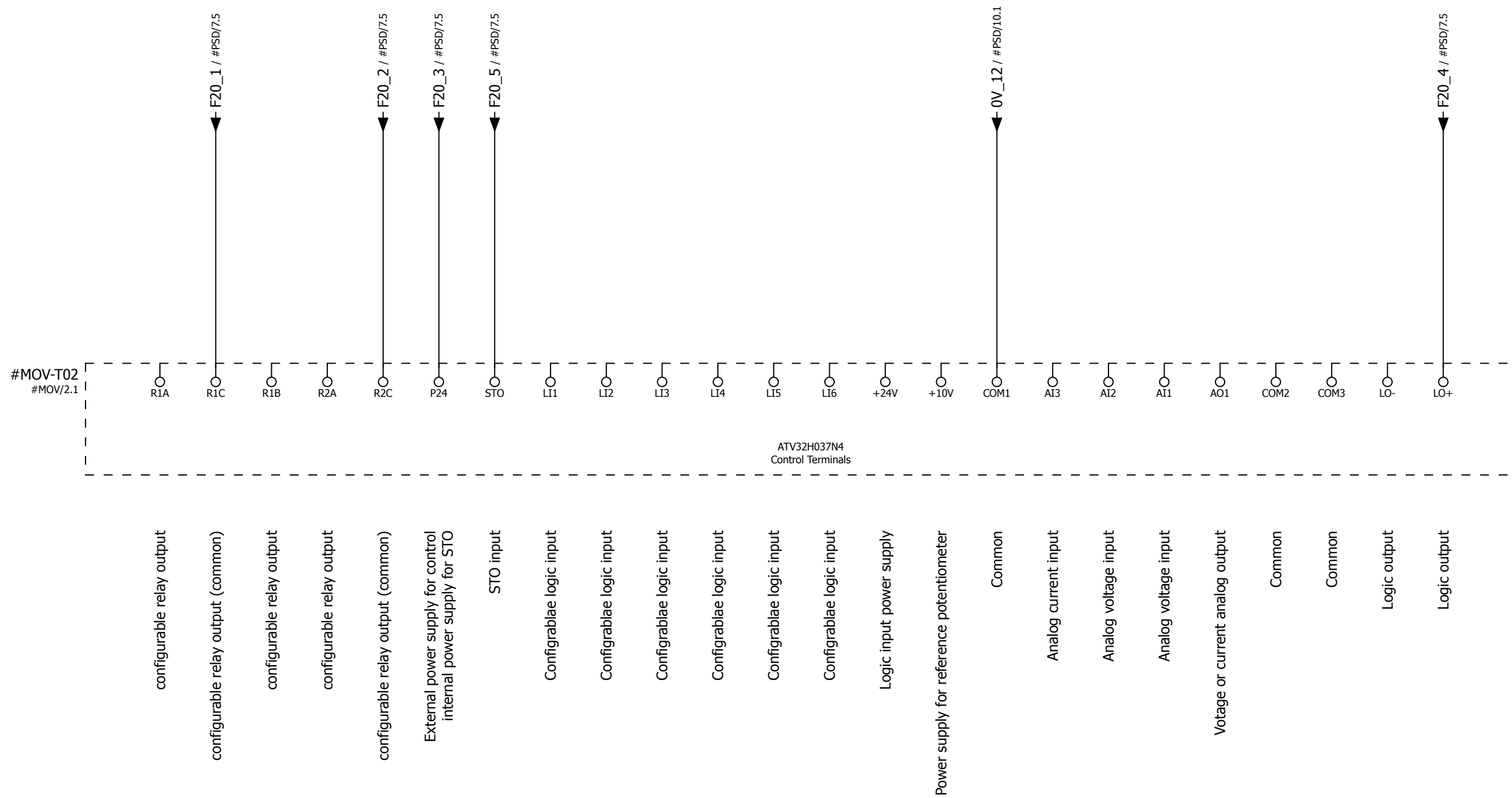


		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric	RFID Antennas			=WIRD	+MC	
		Ed.	kJakob	TVDA						#CTRL		
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	12		
										=WIRD+MC#CTRL/12	of	16



			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Drive 1 Control Terminals Altivar 32		=WIRD +MC
			Ed.	kJakob	TVDA				#CTRL
Modification	Date	Name	Original		Replacement of		Replaced by		EIO0000001822.01
								Page 13	=WIRD+MC#CTRL/13 of 16





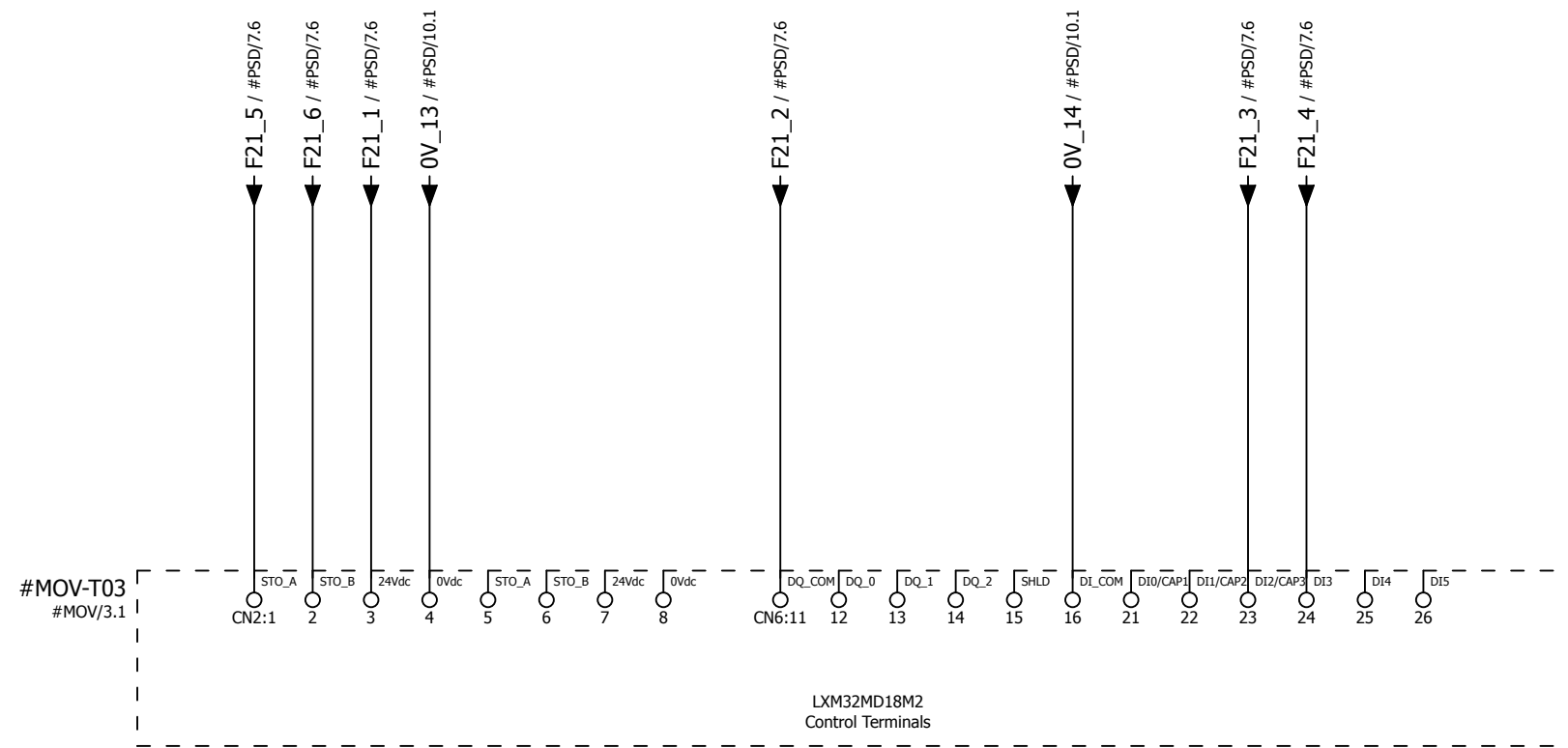
			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251
			Ed.	kJakob	
			Appr		TVDA
Modification	Date	Name	Original	Replacement of	Replaced by




Drive 2 Control Terminals Altivar 32

	=WIRD	+MC
	#CTRL	
	EIO0000001822.01	Page 14
	=WIRD+MC#CTRL/14 of 16	

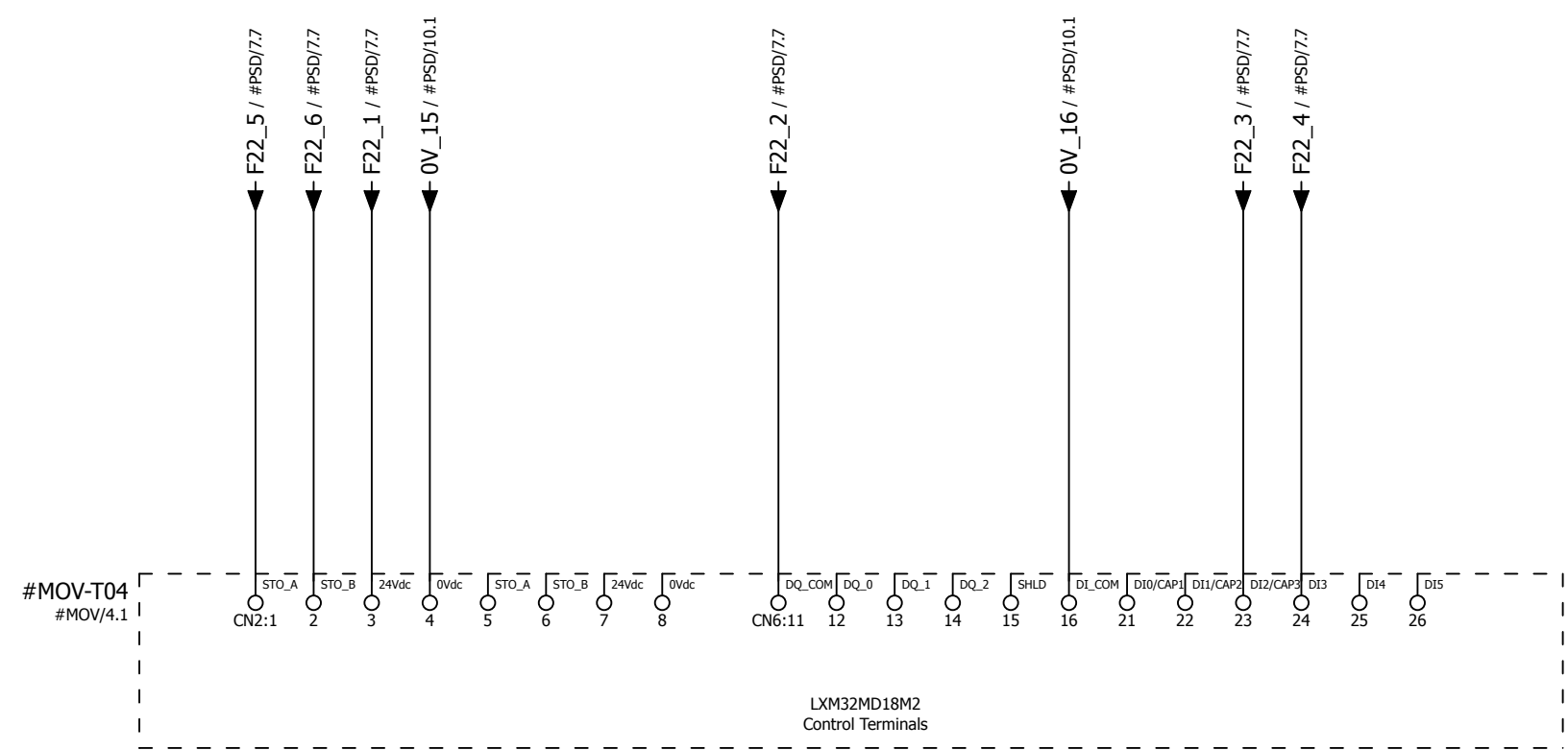
The axes in this architecture are used as modulo type, therefore the inputs for limit switches are connected to 24V dc permanently.



- dual channel (A) safety function STO - in
- dual channel (B) safety function STO - in
- 24Vdc controller power supply
- 0Vdc controller power supply
- dual channel (A) safety function STO - out
- dual channel (B) safety function STO - out
- 24Vdc controller power supply
- 0Vdc controller power supply
- reference potential digital outputs
- Configurable logic output
- Configurable logic output
- Configurable logic output
- Shield connection
- reference potential digital inputs
- Configurable logic input
- Configurable logic input
- Positive Limit Switch
- Negative Limit Switch
- Configurable logic input
- Configurable logic input

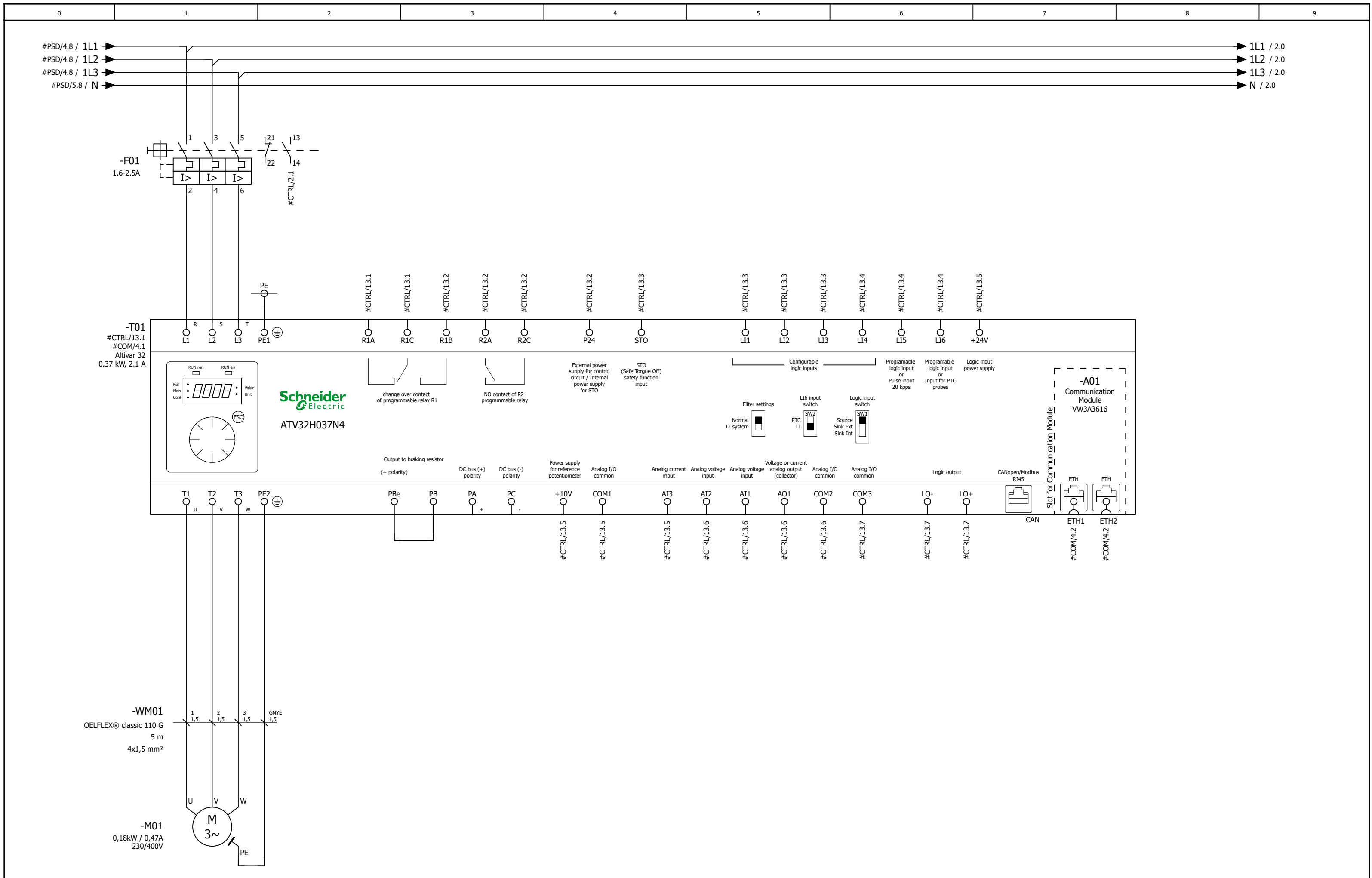
		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251			Drive 3 Control Terminals Lexium 32M		=WIRD +MC		
		Ed.	kJakob	TVDA					#CTRL		
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	15	
								=WIRD+MC#CTRL/15		of	16

The axes in this architecture are used as modulo type, therefore the inputs for limit switches are connected to 24V dc permanently.



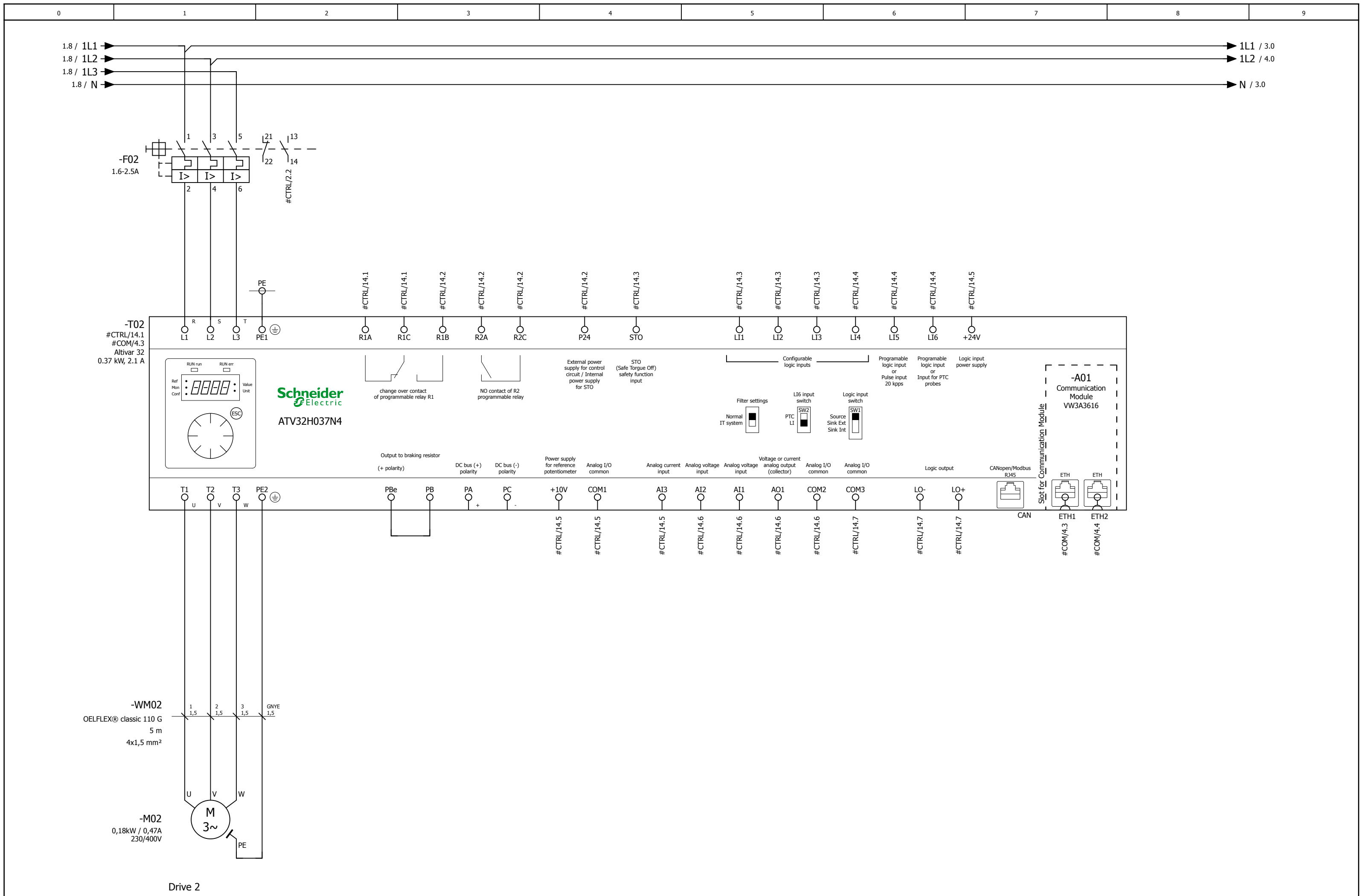
- dual channel (A) safety function STO - in
- dual channel (B) safety function STO - in
- 24Vdc controller power supply
- 0Vdc controller power supply
- dual channel (A) safety function STO - out
- dual channel (B) safety function STO - out
- 24Vdc controller power supply
- 0Vdc controller power supply
- reference potential digital outputs
- Configurable logic output
- Configurable logic output
- Configurable logic output
- Shield connection
- reference potential digital inputs
- Configurable logic input
- Configurable logic input
- Positive Limit Switch
- Negative Limit Switch
- Configurable logic input
- Configurable logic input

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric	Drive 4 Control Terminals Lexium 32M		=WIRD +MC		
		Ed.	kJakob	TVDA					#CTRL		
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	16	
								=WIRD+MC#CTRL/16		of	16



Drive 1

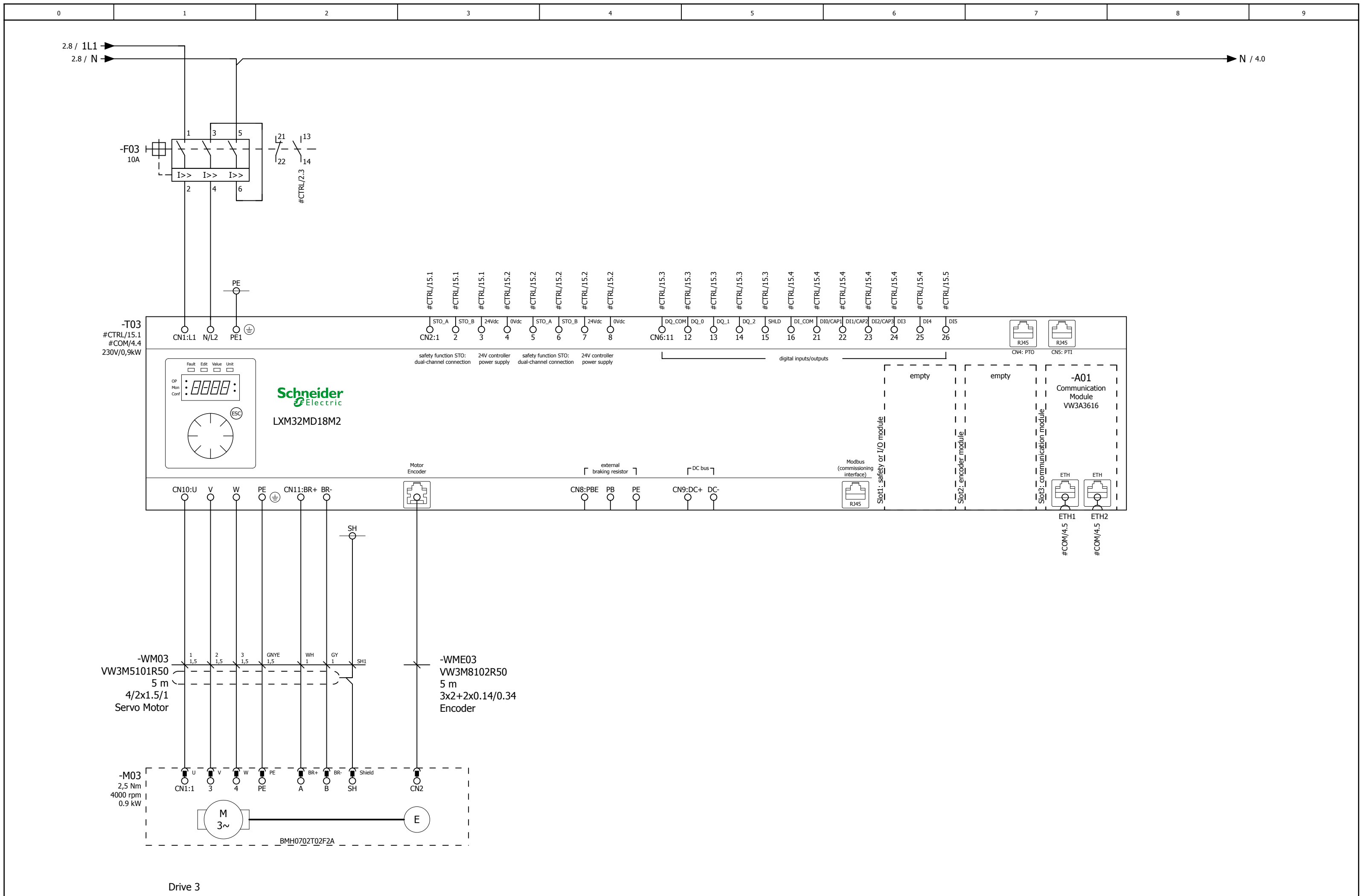
#CTRL/16		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Drive 1 Variable speed drive Altivar 32	=WIRD +MC	Page 1	of 4
		Ed.	kJakob	TVDA					
Modification	Date	Name	Original	Replacement of	Replaced by		=WIRD+MC#MOV/1		



		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251				=WIRD +MC	
		Ed.	kJakob	TVDA				#MOV	
		Appr		Replacement of		Replaced by		EIO0000001822.01	
Modification	Date	Name	Original					=WIRD+MC#MOV/2 of	

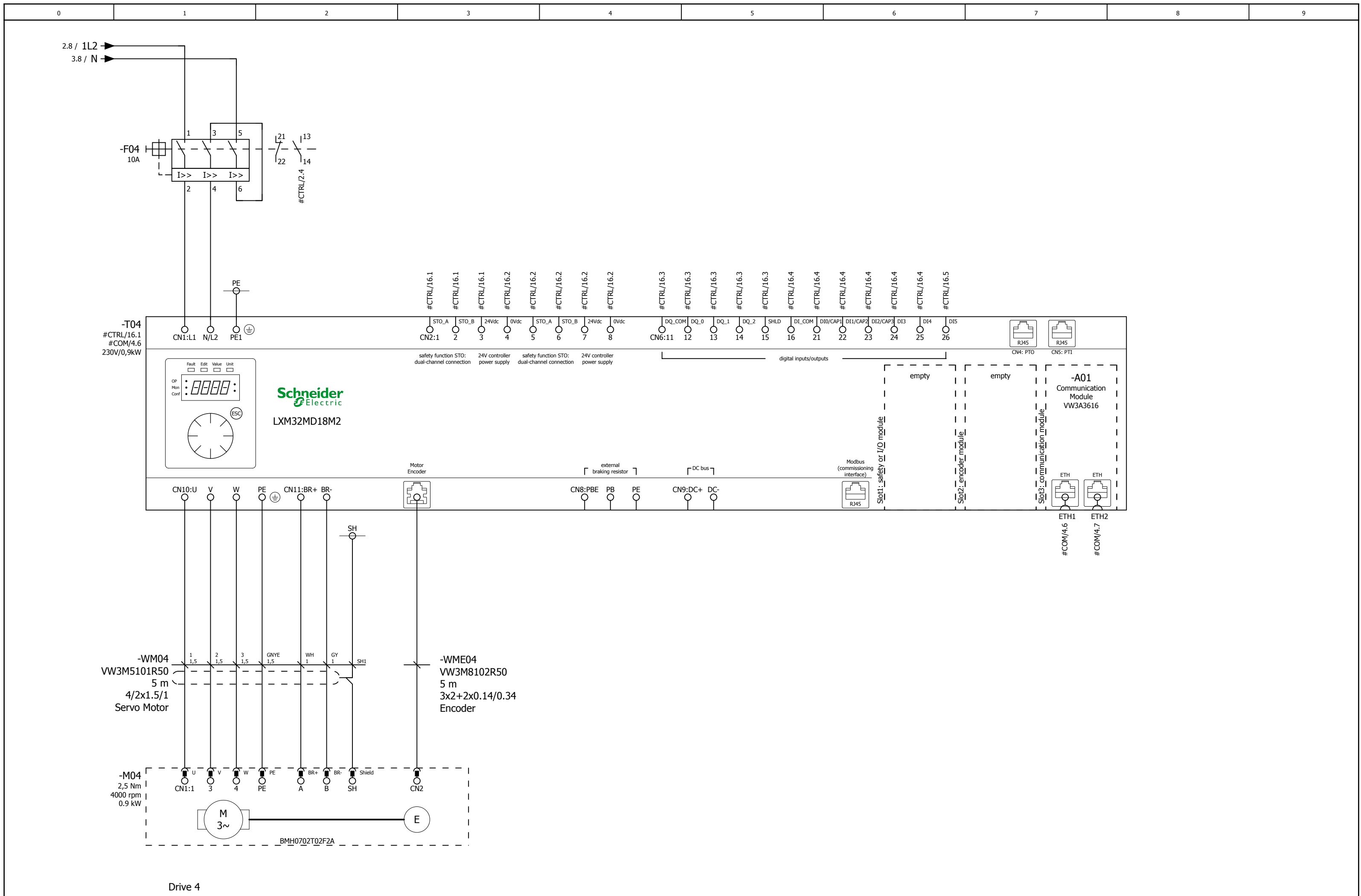


Drive 2  
Variable speed drive Altivar 32



Drive 3

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251						=WIRD		+MC
		Ed.	kJakob	TVDA		Schneider Electric		Drive 3 Servo drive Lexium 32M				#MOV
		Appr		Replacement of						EIO0000001822.01		Page 3
Modification	Date	Name	Original	Replaced by						=WIRD+MC#MOV/3		of 4



Drive 4

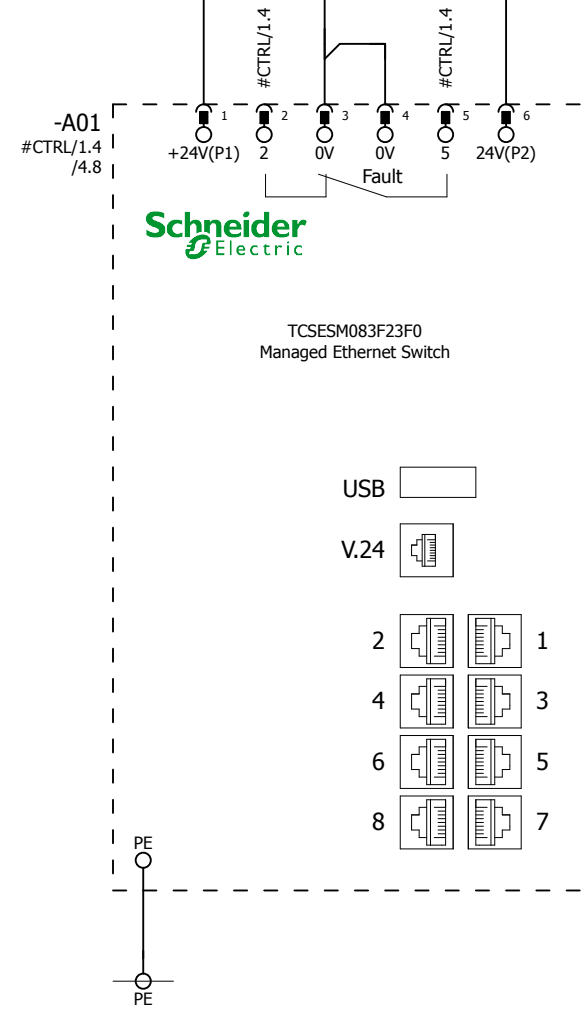
		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251				=WIRD +MC	
		Ed.	kJakob	TVDA				#MOV	
		Appr		Replacement of		Replaced by		EIO0000001822.01 Page 4	
Modification	Date	Name	Original					=WIRD+MC#MOV/4 of 4	



Drive 4  
Servo drive Lexium 32M

#COM/1

#PSD/7.1 / F17\_1 →  
 #PSD/7.2 / F18\_1 →  
 #PSD/10.1 / OV\_17 →



#MOV/4

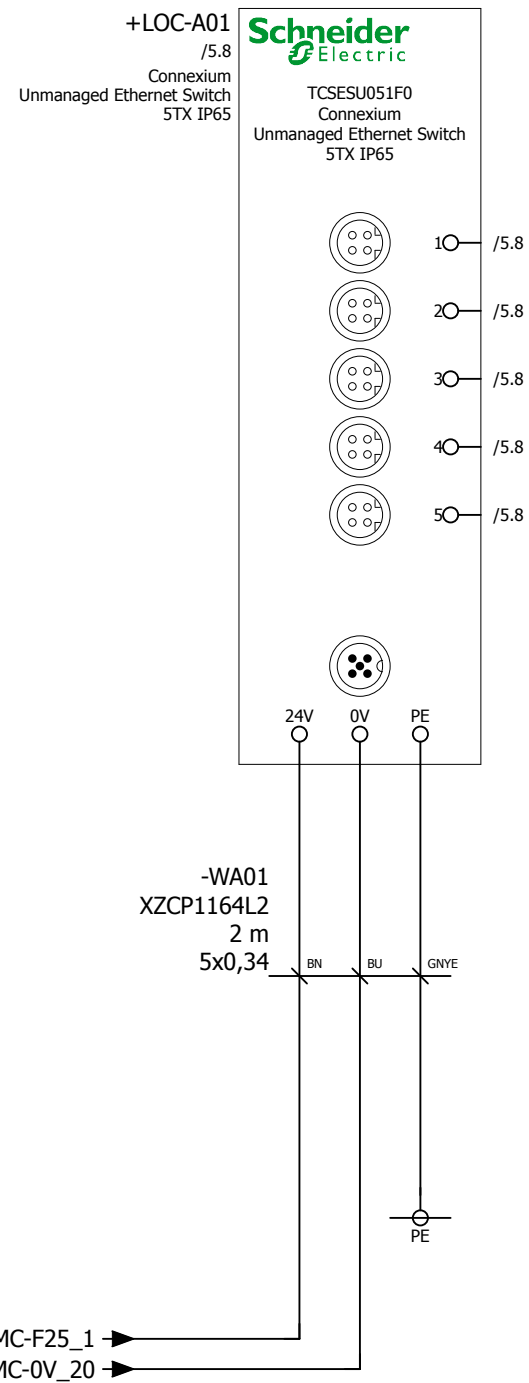
		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	
		Ed.	kJakob		
		Appr		TVDA	
Modification	Date	Name	Original	Replacement of	Replaced by



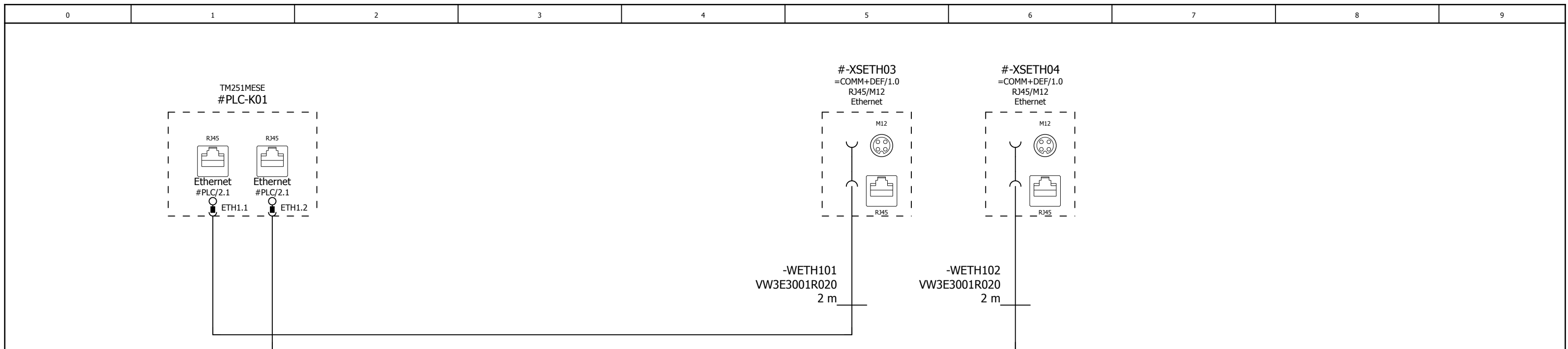
Power Supply Ethernet Switch


			=WIRD	+MC
				#COM
		EIO0000001822.01	Page	1
			=WIRD+MC#COM/1	of 6

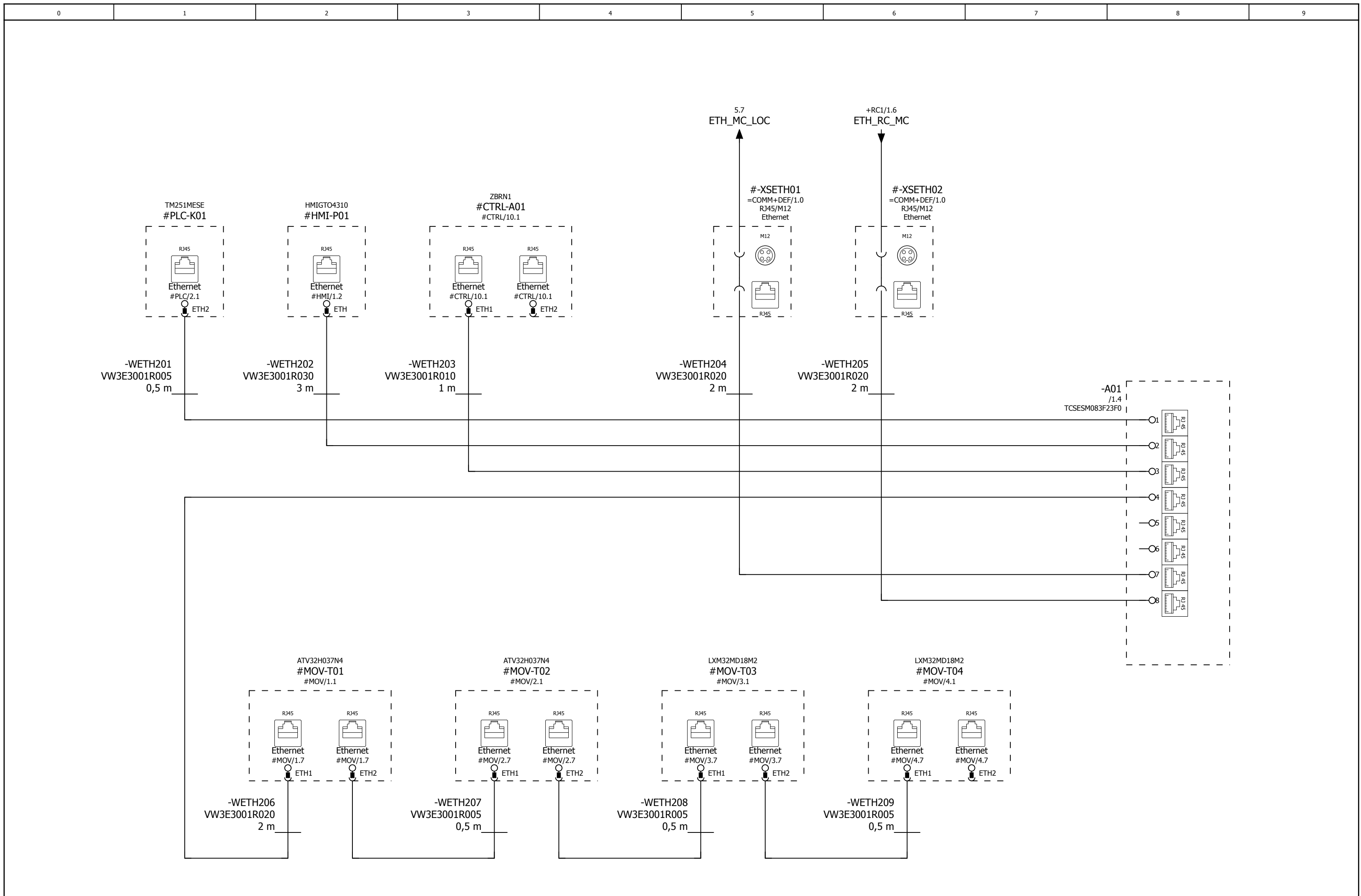


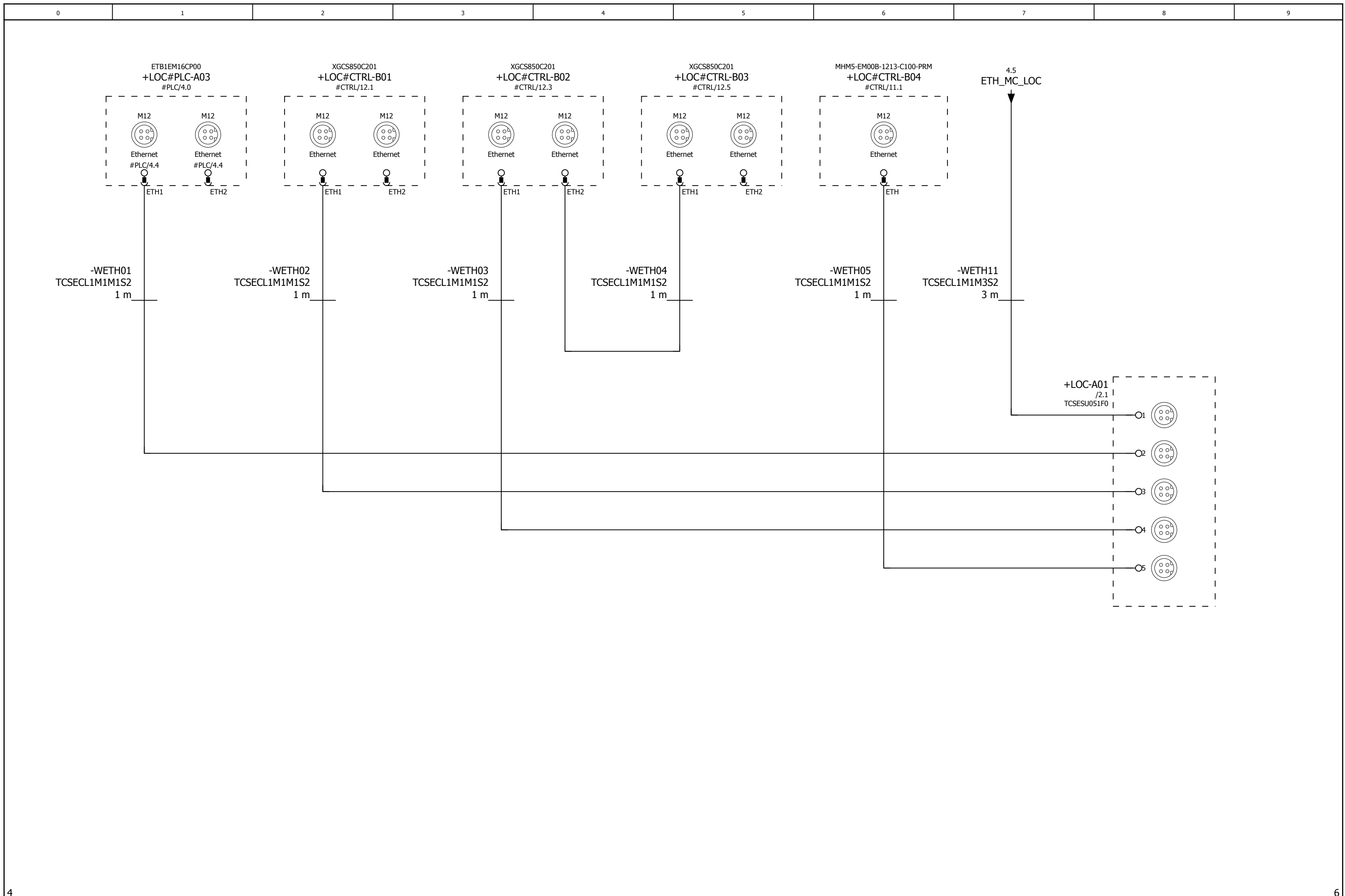


			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Power Supply Ethernet Switch		=WIRD	+MC	
			Ed.	kJakob	TVDA					#COM	
			Appr					EIO0000001822.01	Page	2	
Modification	Date	Name	Original		Replacement of	Replaced by			=WIRD+MC#COM/2	of	6

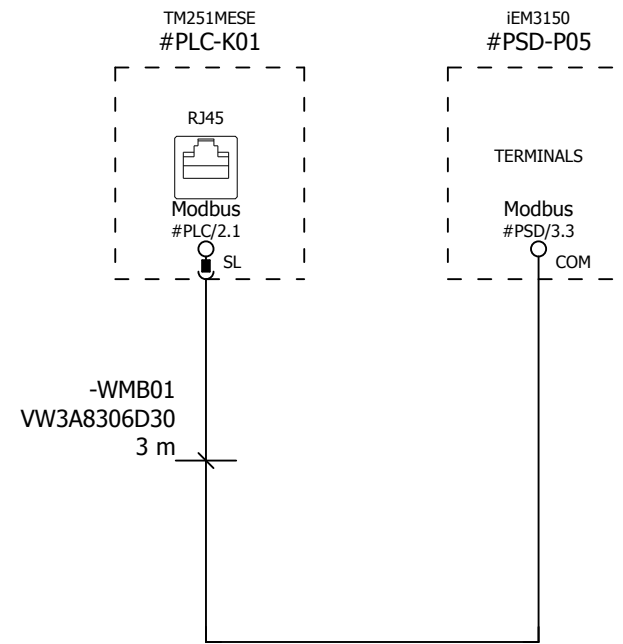


			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Ethernet topology - Ethernet network 1	=WIRD +MC	
			Ed.	kJakob	TVDA			#COM	
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page 3
								=WIRD+MC#COM/3 of 6	



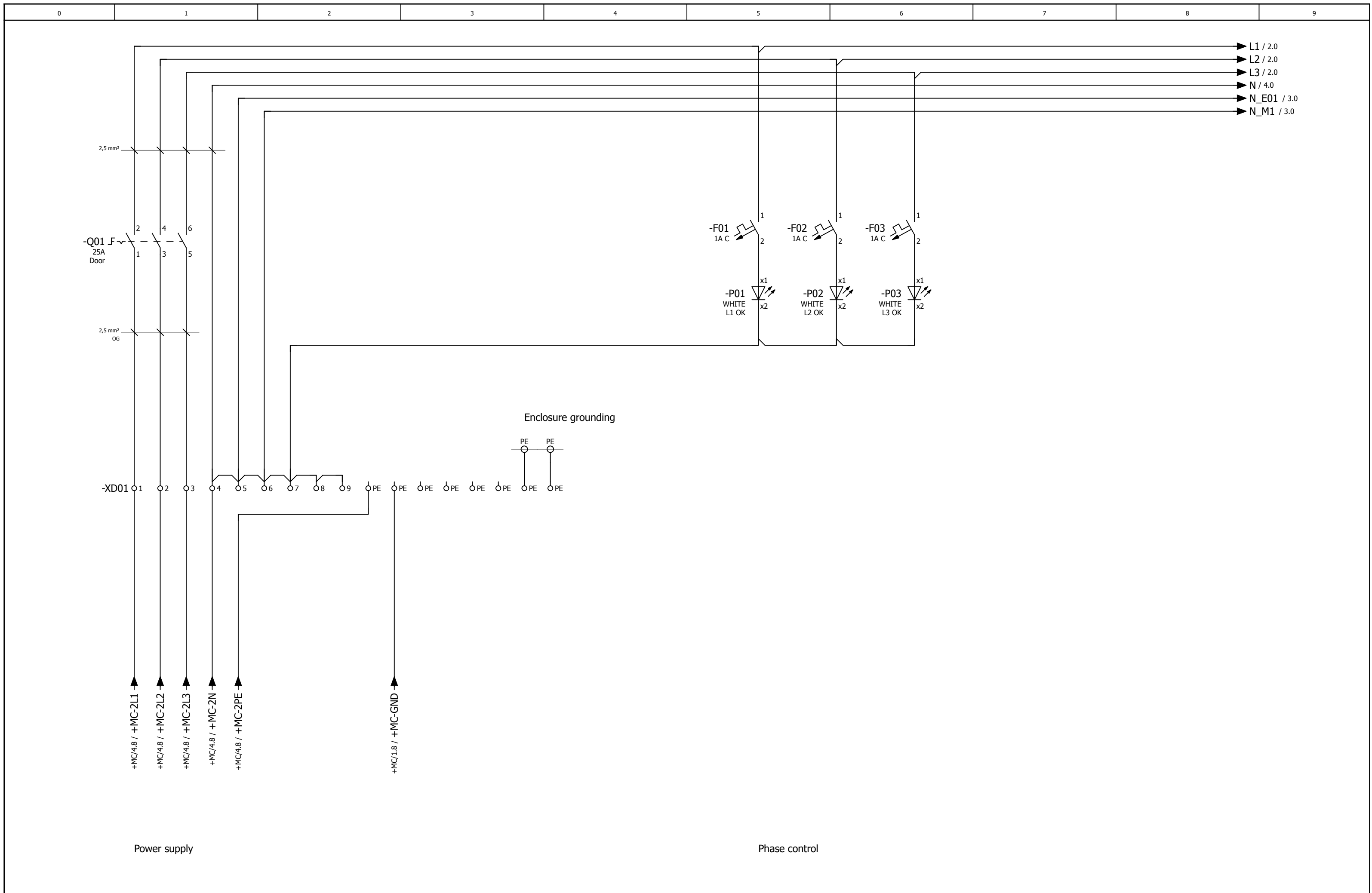


Date		2015/11/13		Distributed / Modbus TCP / Logic Controller M251		Schneider Electric		Ethernet topology - Modbus TCP Fieldbus LOCAL		=WIRD +MC	
Ed.		kJakob		TVDA						#COM	
Appr				Replacement of		Replaced by		EIO0000001822.01		Page 5	
Modification	Date	Name	Original							=WIRD+MC#COM/5 of 6	



VW3A8603D30 - wiring		
RJ45	color	iEM3150
1	wh/gn	nc
2	gn	nc
3	wh/or	nc
4	bu	D1
5	wh/bu	D0
6	or	nc
7	wh/bn	nc
8	bn	GND

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Modbus topology	=WIRD	+MC	
			Ed.	kJakob	TVDA					EIO0000001822.01
Modification	Date	Name	Original		Replacement of	Replaced by			#COM	
								=WIRD+MC#COM/6	of	6

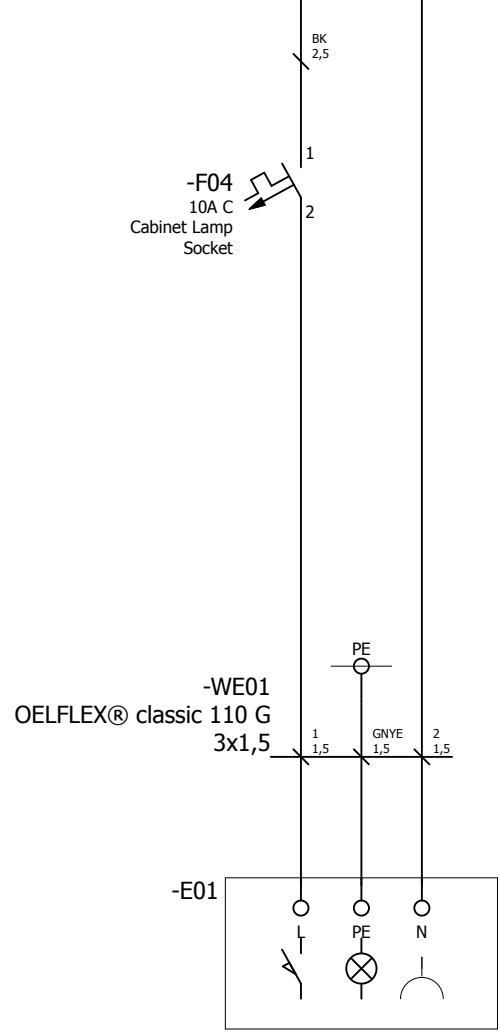
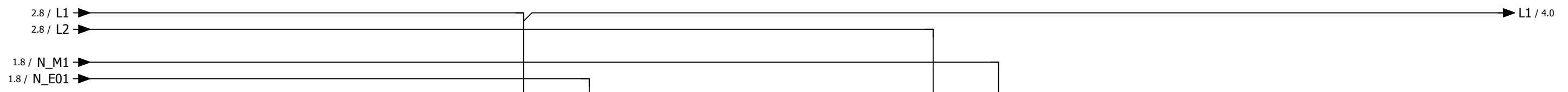


+MC#COM/6				Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Power Supply 400V ac	=WIRD	+RC1
				Ed.	kJakob	TVDA				
				Appr		Replacement of		=WIRD+RC1#PSD/1	of	7
Modification	Date	Name	Original			Replaced by				

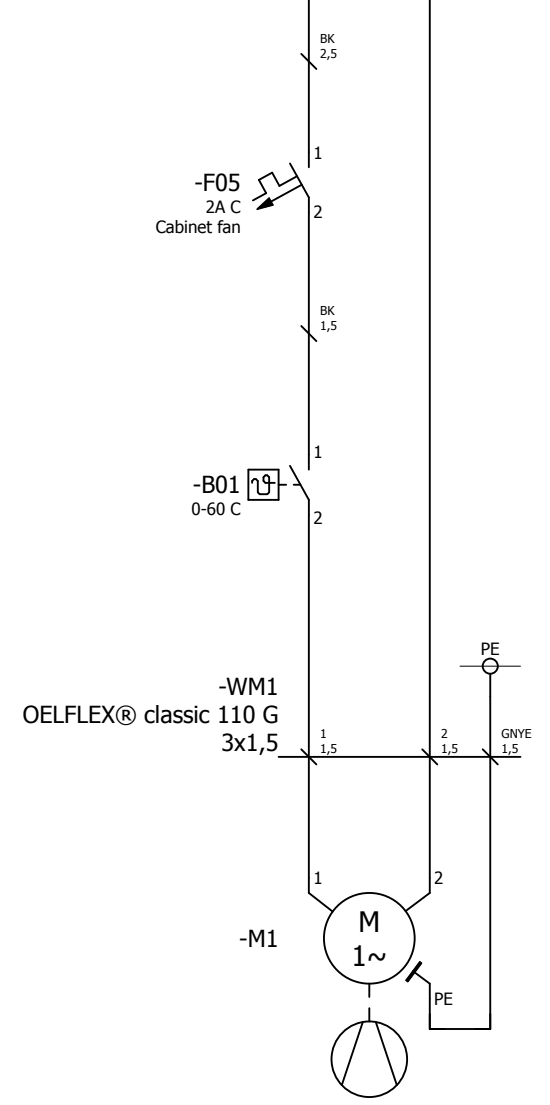


Main Contactors

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251			Power Supply 400V ac			=WIRD	+RC1	
		Ed.	kJakob	TVDA								#PSD
		Appr										
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	2		
								=WIRD+RC1#PSD/2		of 7		



Cabinet Lamp, Socket

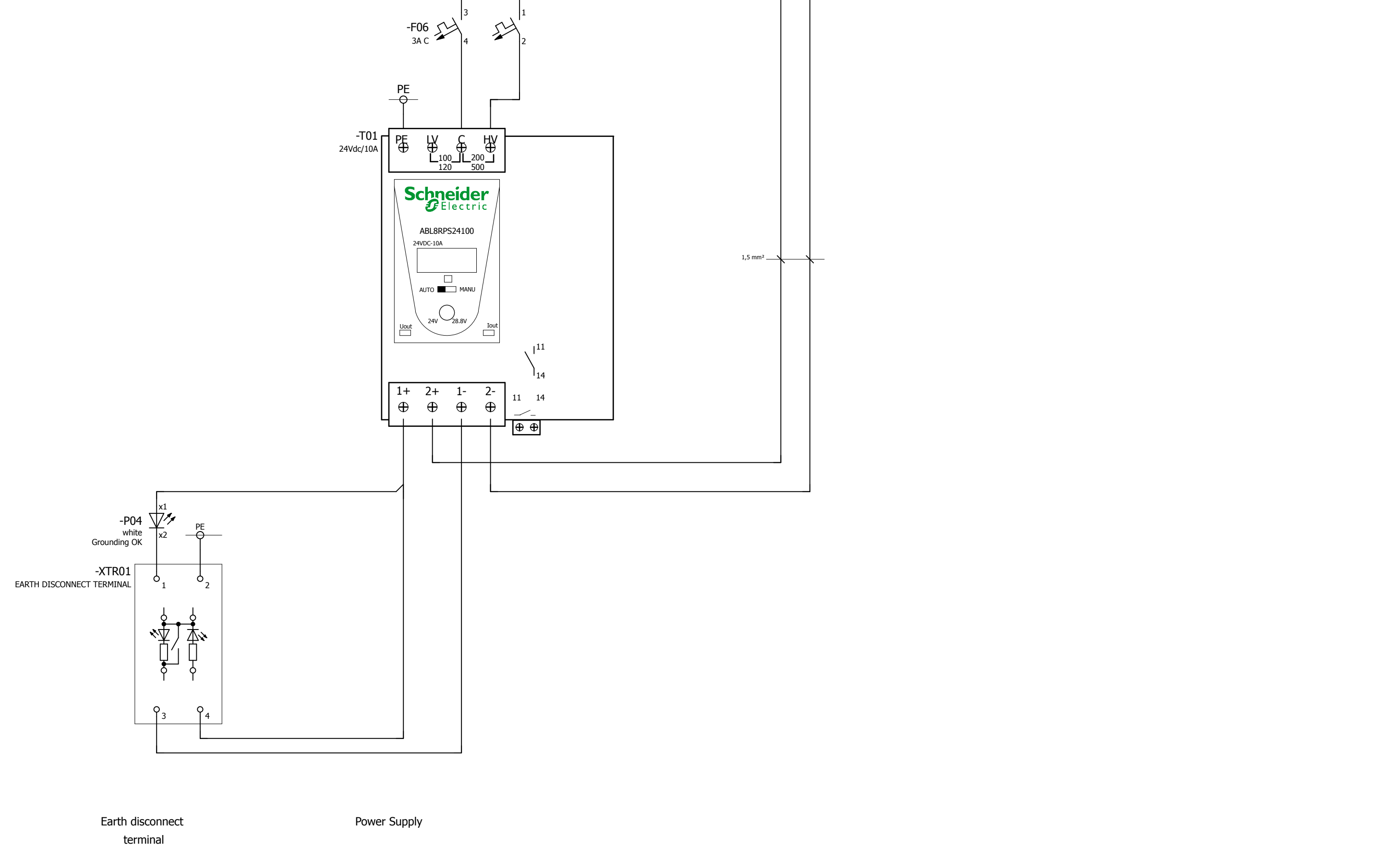


Cabinet fan

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric	Cabinet Lamp, Socket, Fan		=WIRD +RC1		
		Ed.	kJakob	TVDA					#PSD		
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	3	
								=WIRD+RC1#PSD/3		of	7



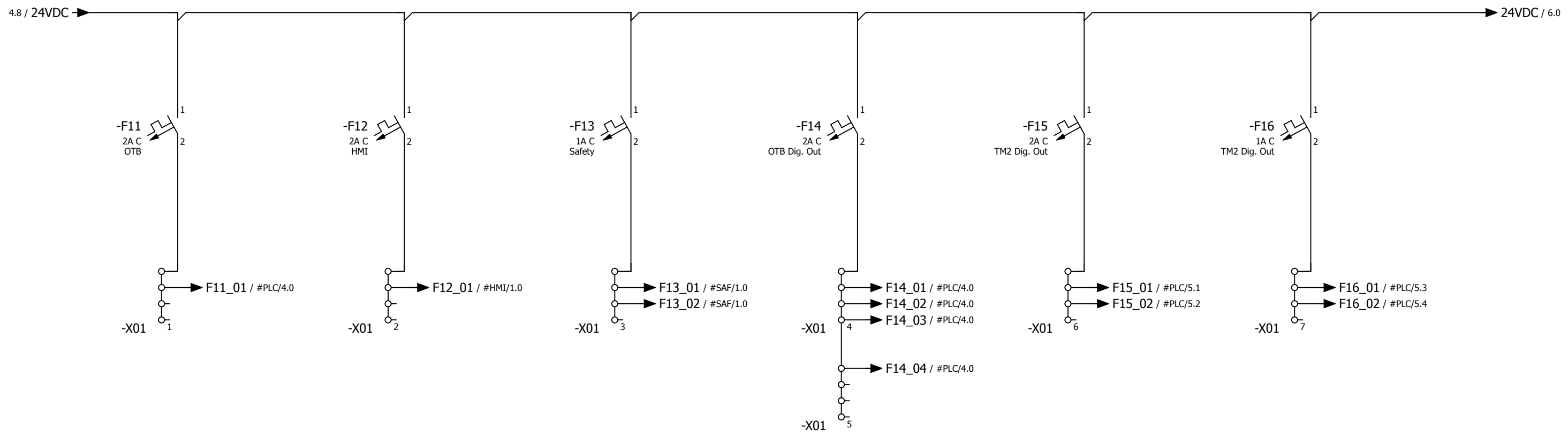
1.8 / N → N / #MOV/6.0  
 3.8 / L1 → 24VDC / 5.0  
 → 0VDC / 7.0



Earth disconnect terminal

Power Supply

3		5	
Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	+RC1
Ed.	kJakob		#PSD
Appr	TVDA	Power Supply 24V dc	
Modification	Date	Name	Original
		Replacement of	Replaced by
		Schneider Electric	
		EIO0000001822.01	
		=WIRD+RC1#PSD/4	
		Page	4
		of	7



OTB  
power supply 24V dc

HMI  
power supply 24V dc

Safety Function  
power supply 24V dc

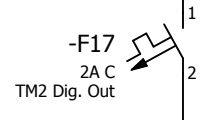
OTB Digital Outputs  
power supply 24V dc

TM2 Digital Outputs  
power supply 24V dc

TM2 Digital Outputs  
power supply 24V dc

4			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Power Supply 24 V dc		=WIRD +RC1
			Ed.	kJakob	TVDA				#PSD
			Appr					EIO0000001822.01	Page 5
Modification	Date	Name	Original		Replacement of	Replaced by		=WIRD+RC1#PSD/5	of 7

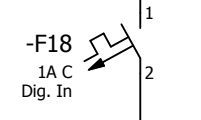
5.8 / 24VDC →



F17\_01 / #PLC/5.7

-X01 8

TM2 Digital Outputs  
power supply 24V dc

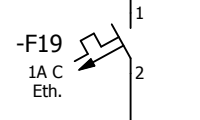


F18\_01 / #CTRL/4.0  
F18\_02 / #CTRL/7.1  
F18\_03 / #CTRL/7.2  
F18\_04 / #CTRL/12.0

-X01 9

-X01 10

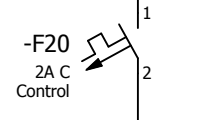
Digital Inputs  
power supply 24V dc



F19\_01 / #COM/1.0

-X01 11

Ethernet Switch  
power supply 24V dc

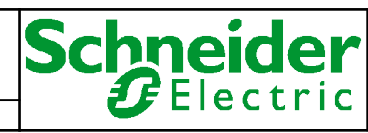


F20\_01 / #CTRL/14.0  
F20\_02 / #MOV/3.0

-X01 12

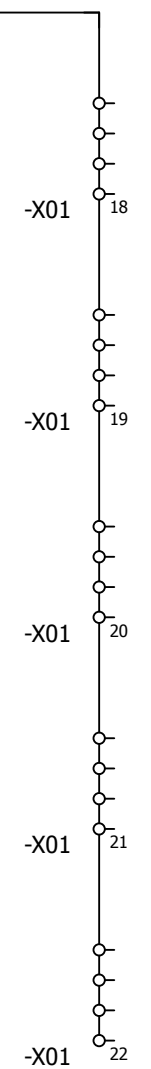
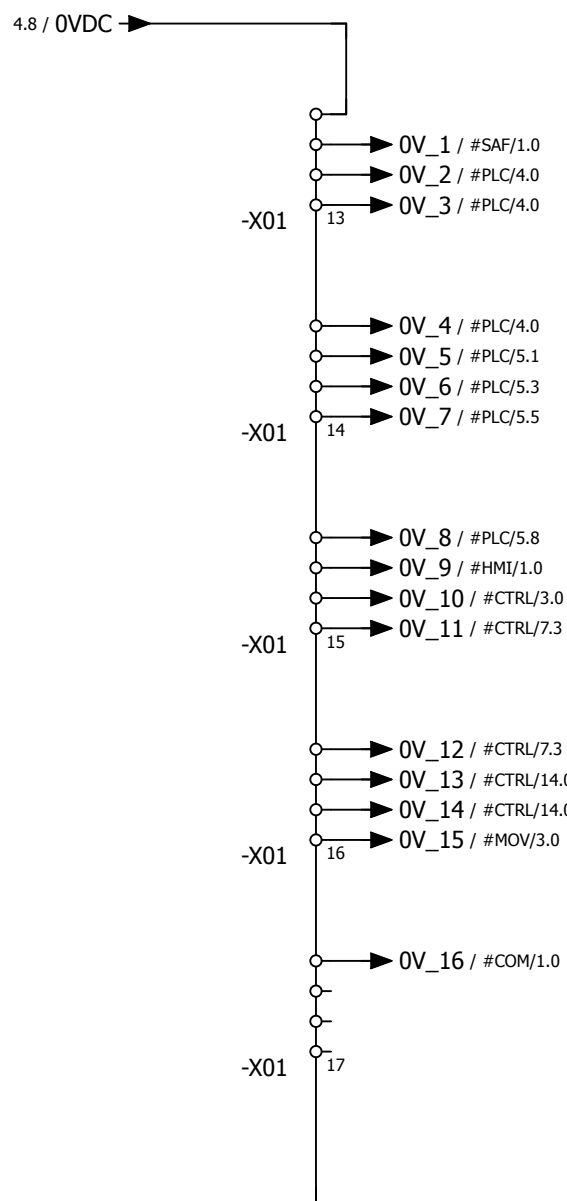
Control  
power supply 24V dc

Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251
Ed.	kJakob	
Appr		TVDA
Modification	Date	Name
		Original
		Replacement of
		Replaced by



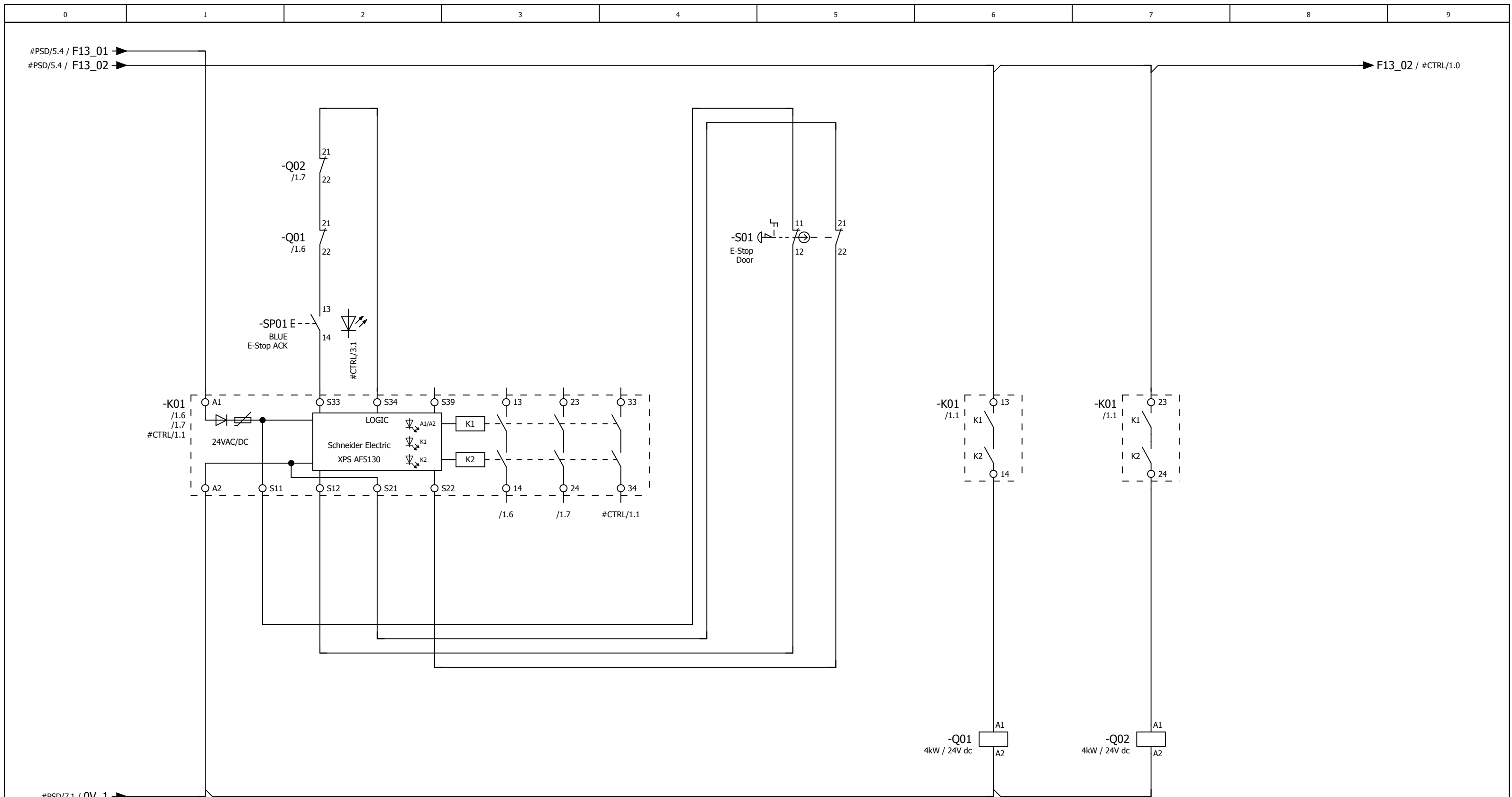
Power Supply 24 V dc

=WIRD		+RC1
		#PSD
EIO0000001822.01	Page	6
=WIRD+RC1#PSD/6		of
		7



			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Power Supply 0 V dc		=WIRD +RC1	
			Ed.	kJakob	TVDA				#PSD	
			Appr						EIO0000001822.01 Page 7	
Modification	Date	Name	Original		Replacement of	Replaced by			=WIRD+RC1#PSD/7 of 7	

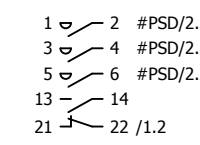
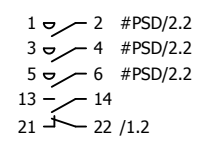




EMERGENCY STOP

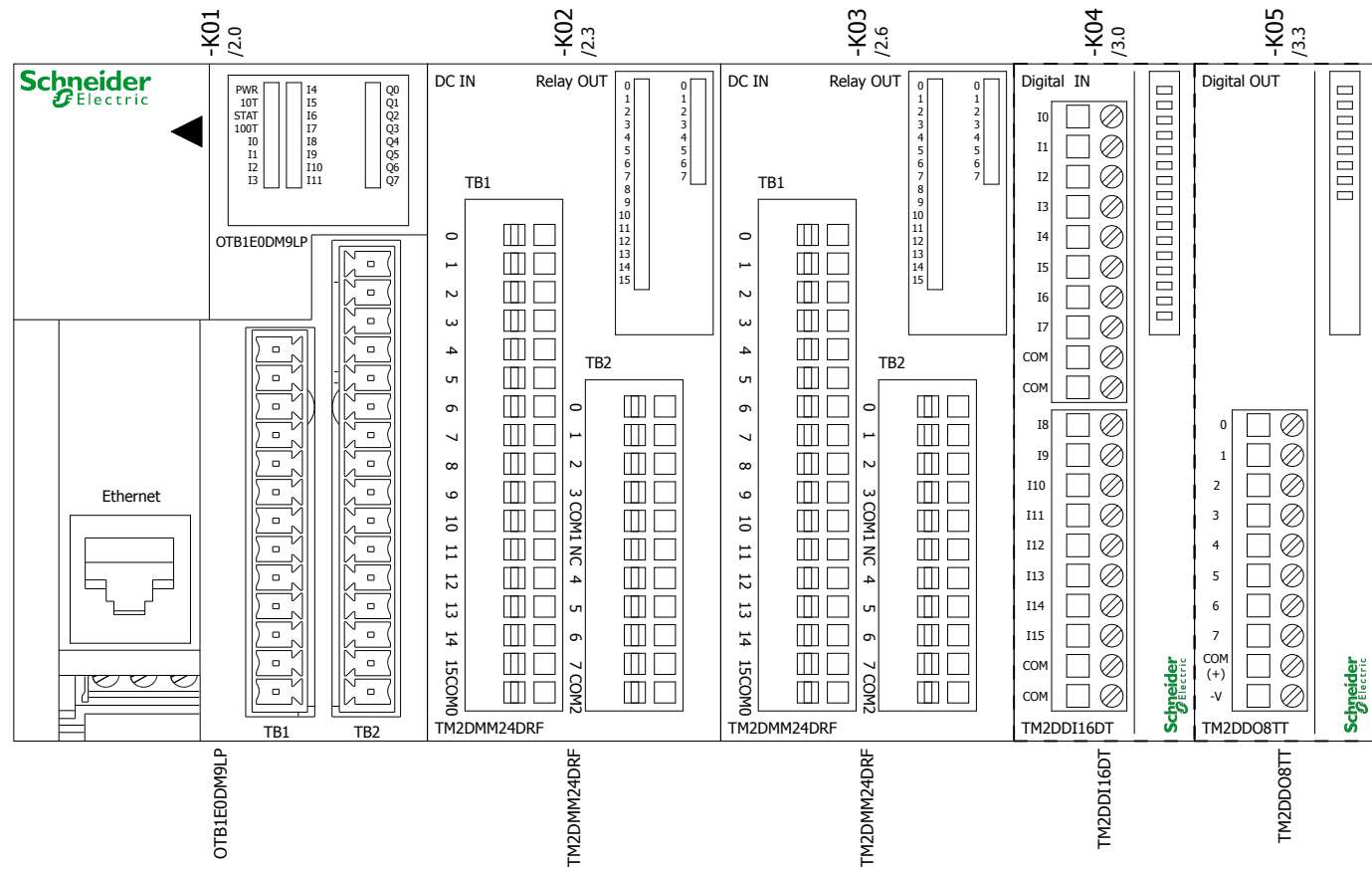
Outputchannel  
Main Contactor 1

Outputchannel  
Main Contactor 2



#PSD/7				#PLC/1			
Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Emergency Stop		=WIRD +RC1	
Ed.	kJakob	TVDA				=WIRD +RC1 #SAF	
Appr		Replacement of		Replaced by		EIO0000001822.01 Page 1	
Modification	Date	Name	Original			=WIRD+RC1#SAF/1 of 1	





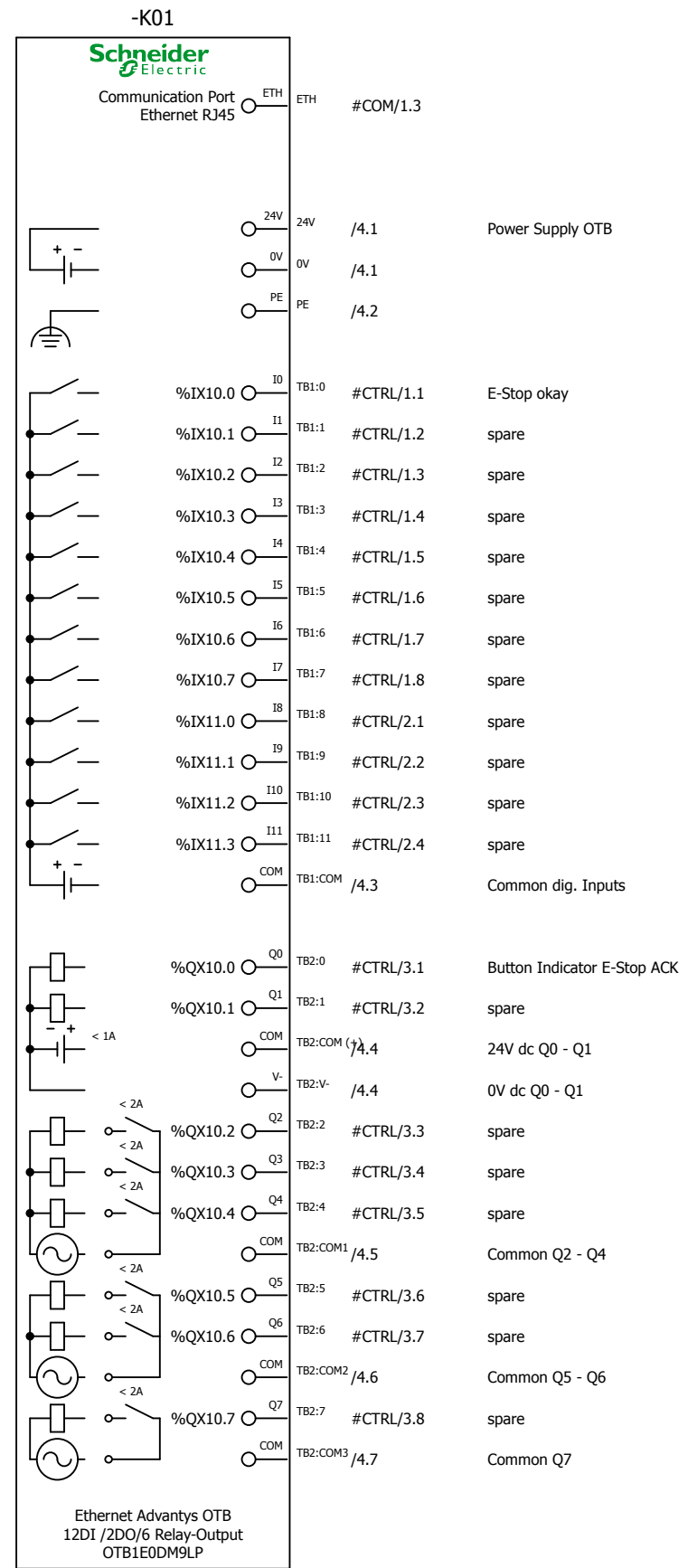
#SAF/1

2

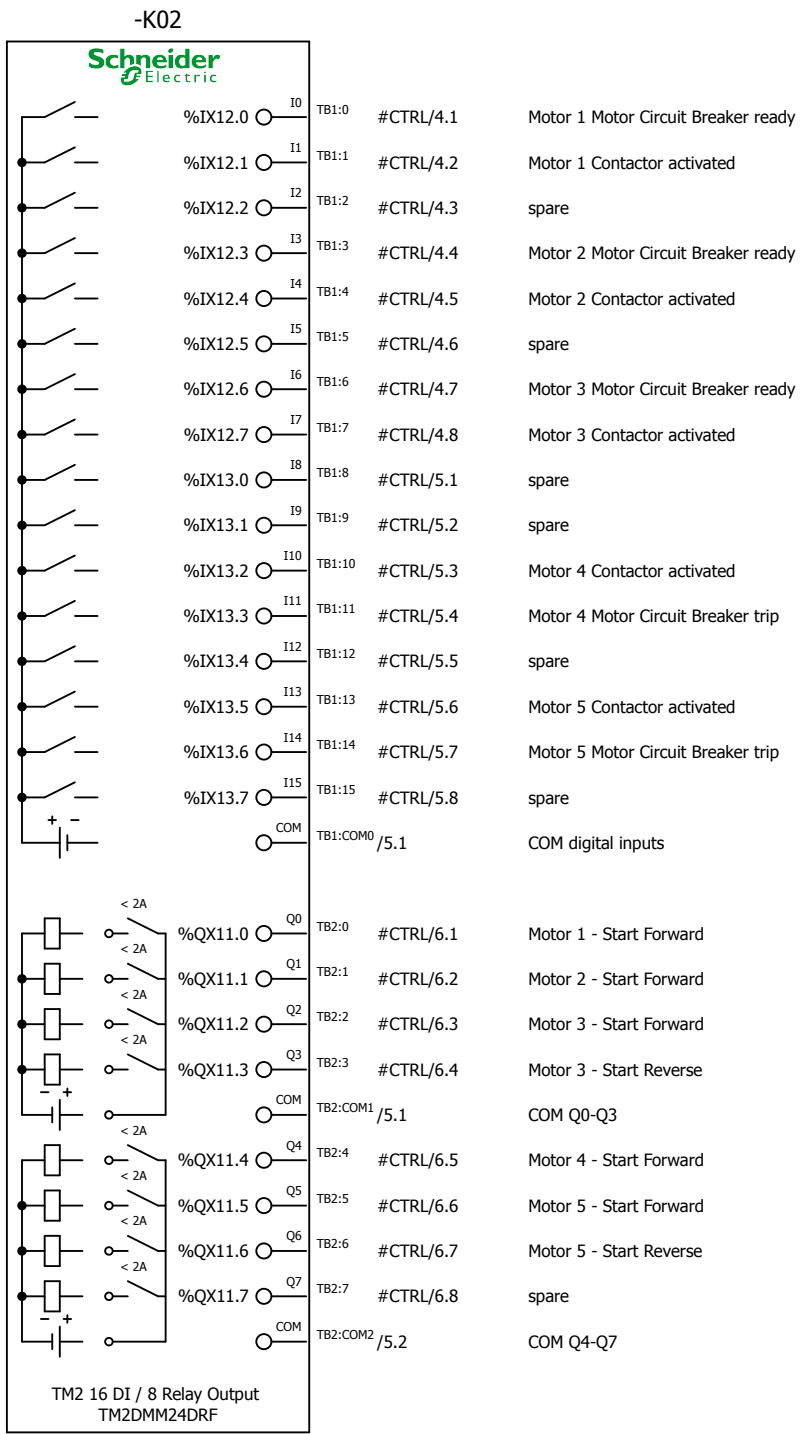
			Date	2015/10/13	Distributed / Modbus TCP / Logic Controller M251		Assembly layout OTB I/O island			=WIRD	+RC1	
			Ed.	kJakob	TVDA							
Modification	Date	Name	Original		Replacement of	Replaced by						Page 1
												of 5

EIO0000001822.01

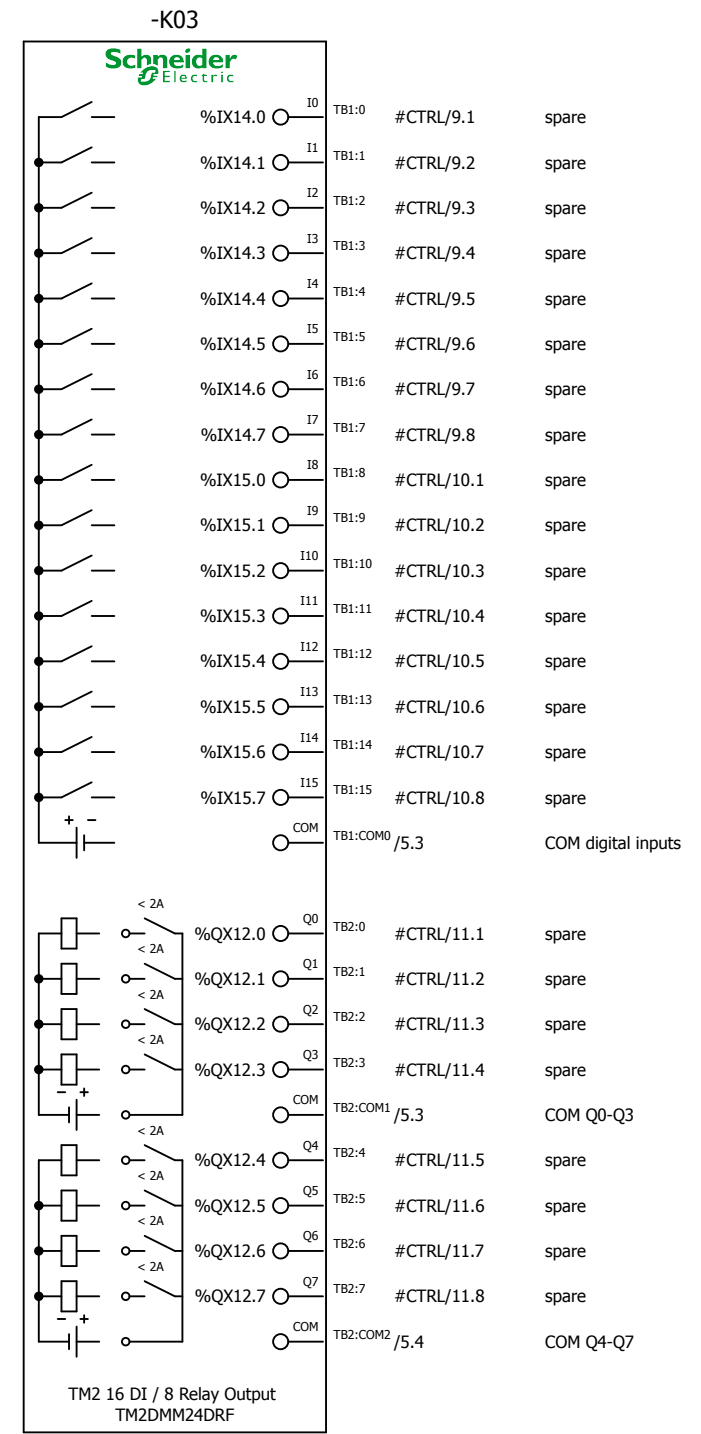
=WIRD+RC1#PLC/1



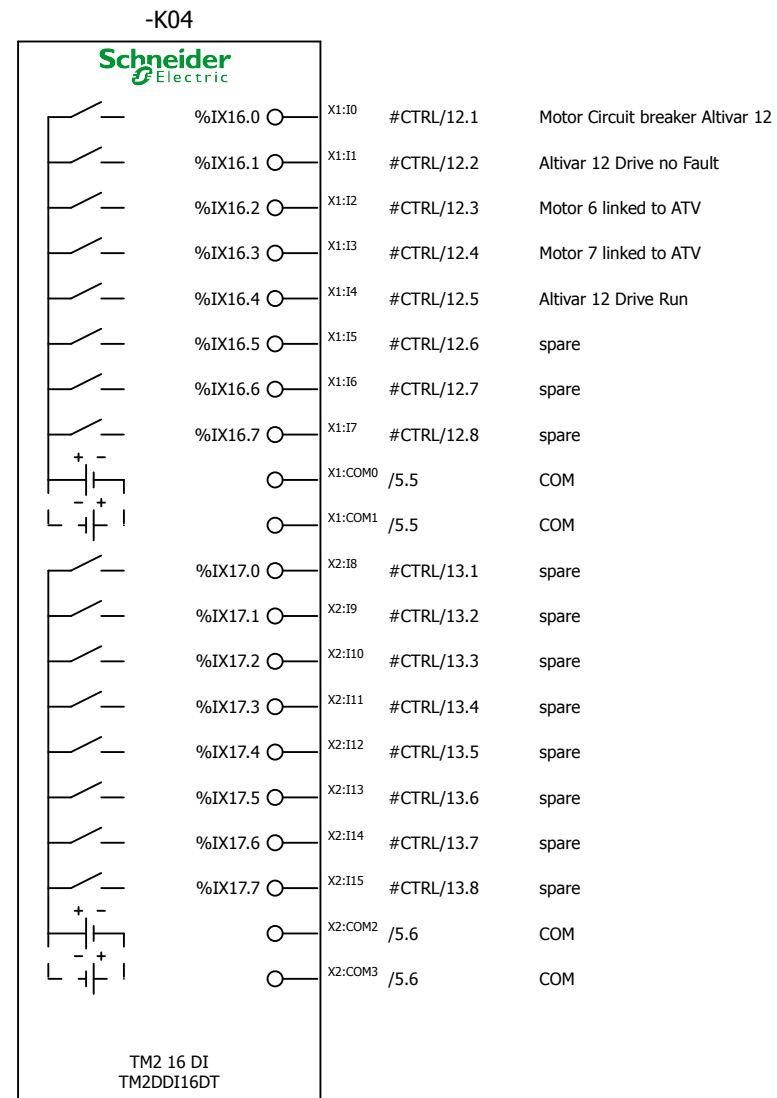
/4.1  
#COM/1.3  
/1.0



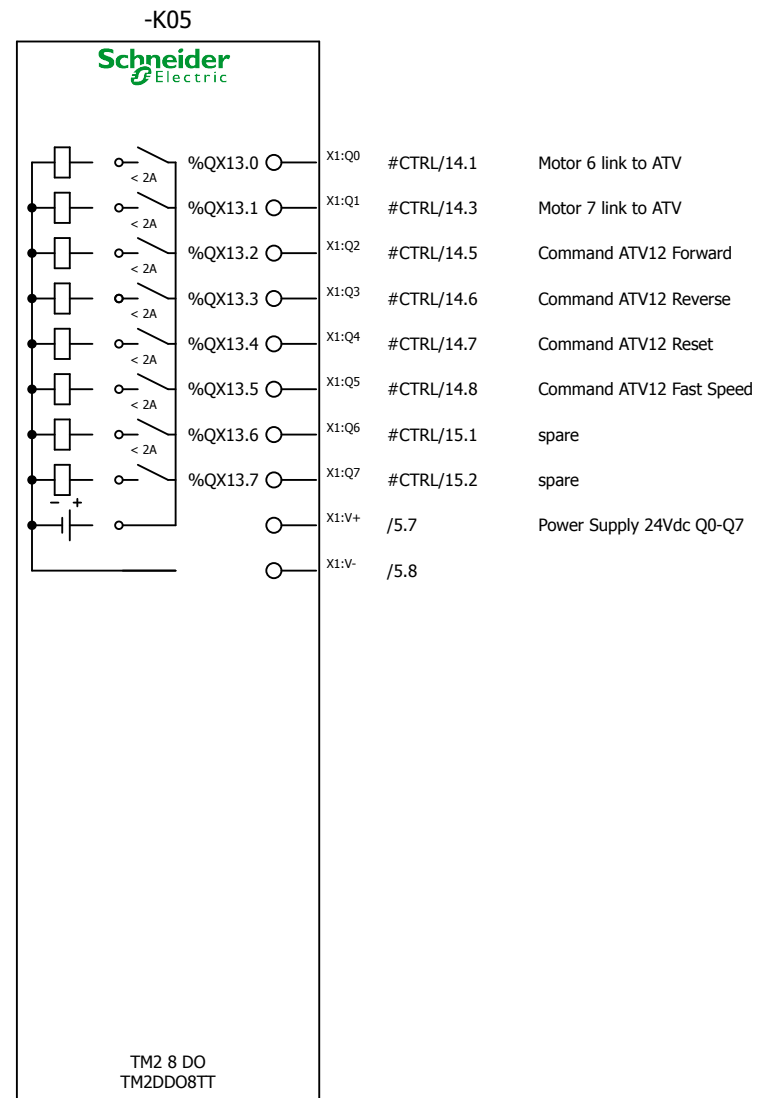
/1.1



/1.2

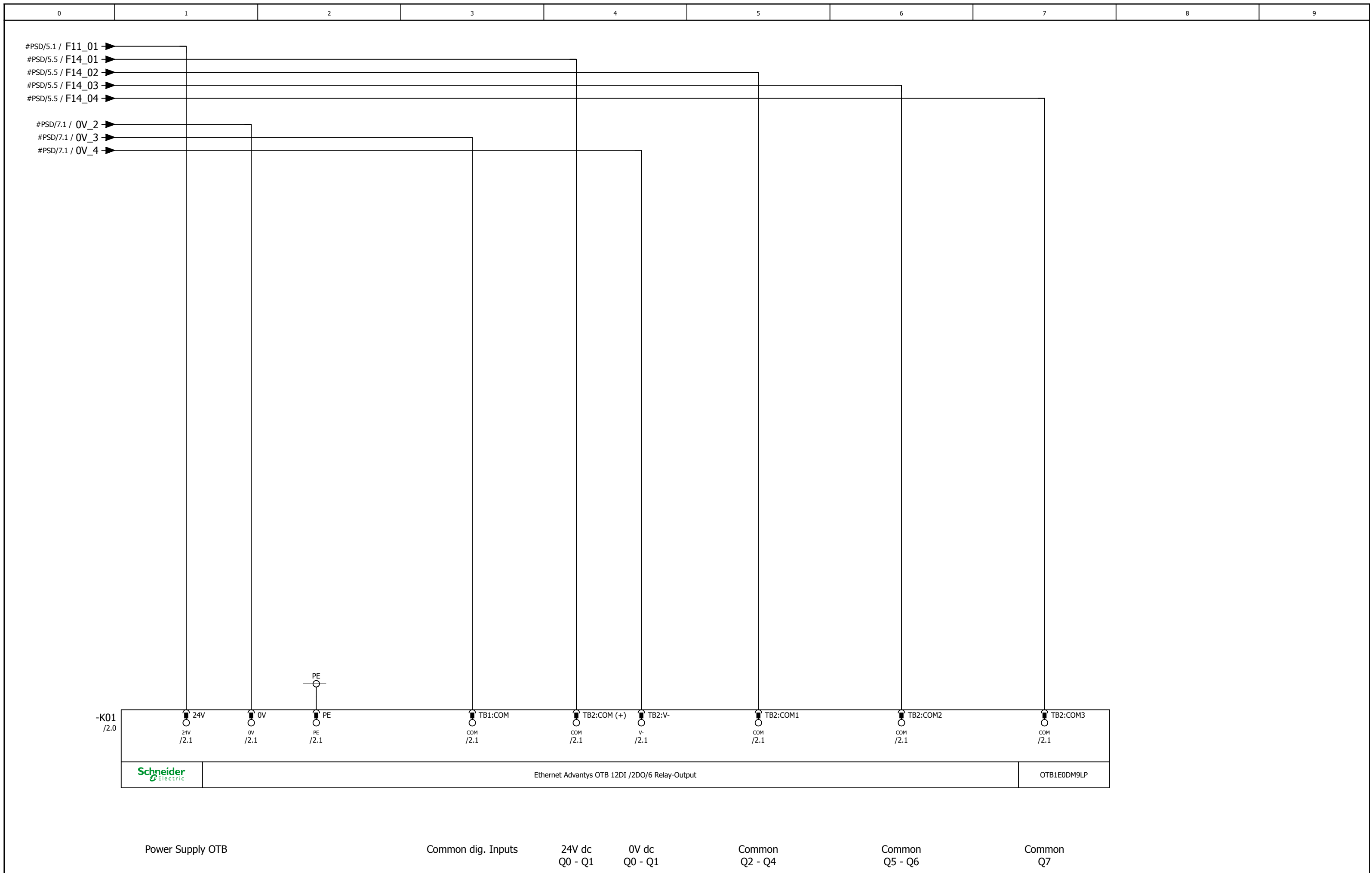


/1.3

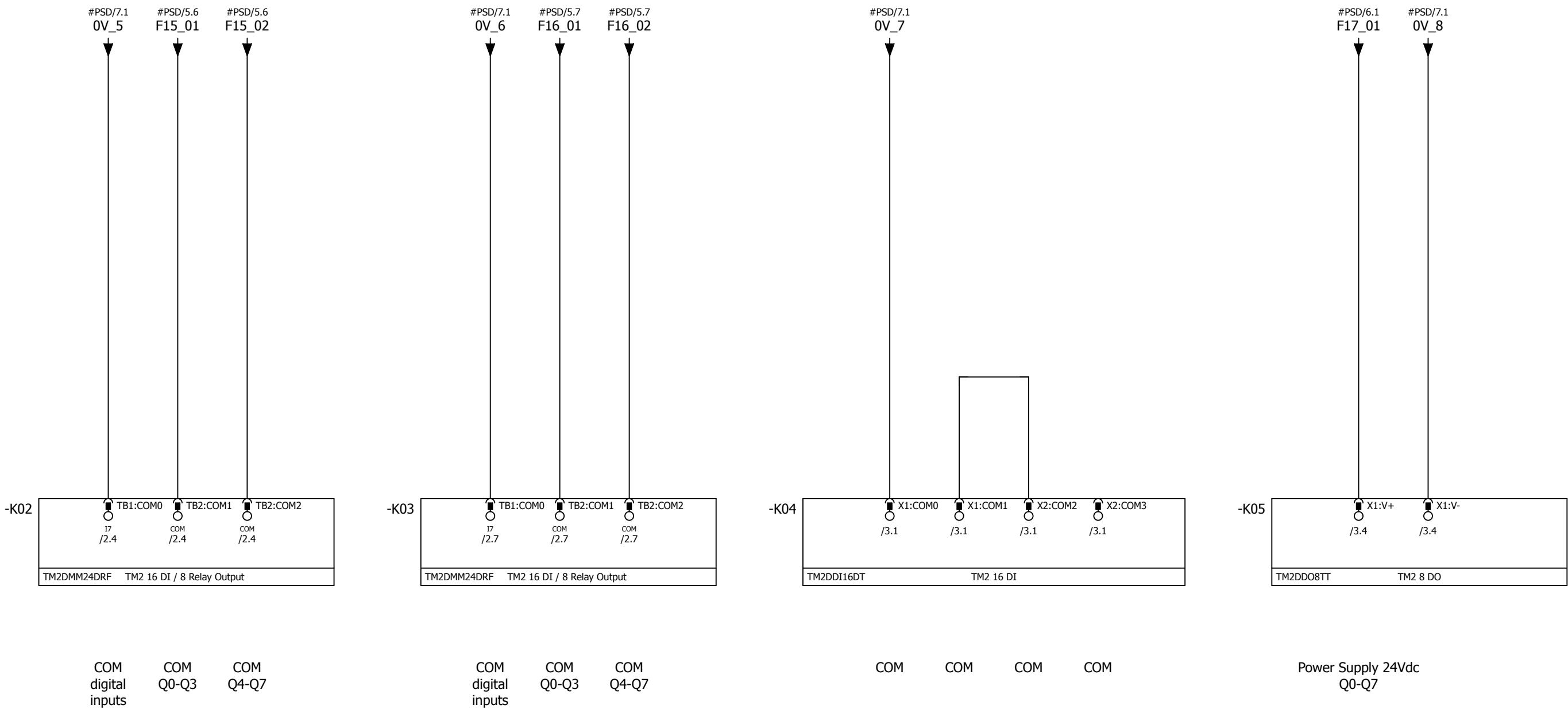


/1.4



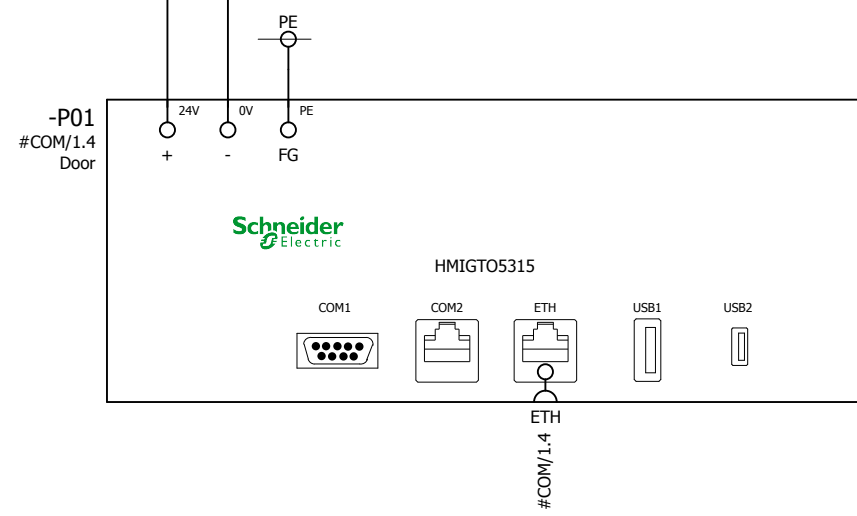


		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric		Power supply OTB		=WIRD		+RC1
		Ed.	kJakob	TVDA								#PLC
		Appr		Replacement of		Replaced by				EIO0000001822.01		Page 4
Modification	Date	Name	Original									of 5



			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Power Supply TM2		=WIRD +RC1
			Ed.	kJakob	TVDA				#PLC
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page 5
								=WIRD+RC1#PLC/5	of 5

#PSD/5.2 / F12\_01 →  
 #PSD/7.1 / 0V\_9 →

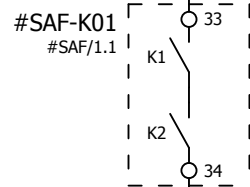


#PLC/5

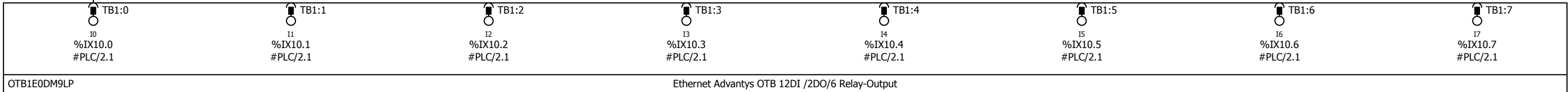
#CTRL/1

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		HMI Magelis Panel Power Supply		=WIRD	+RC1
			Ed.	kJakob						
			Appr		TVDA					Page 1
Modification	Date	Name	Original		Replacement of	Replaced by			EIO0000001822.01	=WIRD+RC1#HMI/1 of 1

#SAF/1.8 / F13\_02 →



#PLC-K01



E-Stop  
okay

spare

spare

spare

spare

spare





spare

spare

#HMI/1

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Inputs OTB		=WIRD +RC1
			Ed.	kJakob	TVDA				#CTRL
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page 1
								=WIRD+RC1#CTRL/1	of 15

#PLC-K01


 TB1:8 18 %IX11.0 #PLC/2.1	 TB1:9 19 %IX11.1 #PLC/2.1	 TB1:10 110 %IX11.2 #PLC/2.1	 TB1:11 111 %IX11.3 #PLC/2.1
OTB1E0DM9LP      Ethernet Advantys OTB 12DI /2DO/6 Relay-Output			

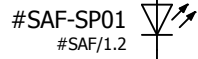
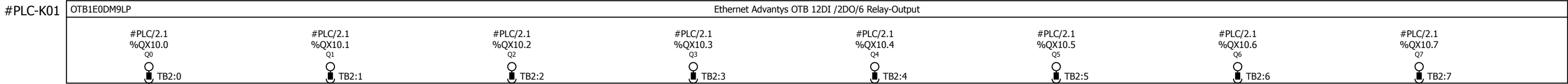
spare

spare

spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Inputs OTB		=WIRD	+RC1	
			Ed.	kJakob	TVDA					#CTRL	
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	2	
									=WIRD+RC1#CTRL/2	of	15



#PSD/7.1 / OV\_10 →

Button Indicator  
E-Stop ACK

spare

spare

spare

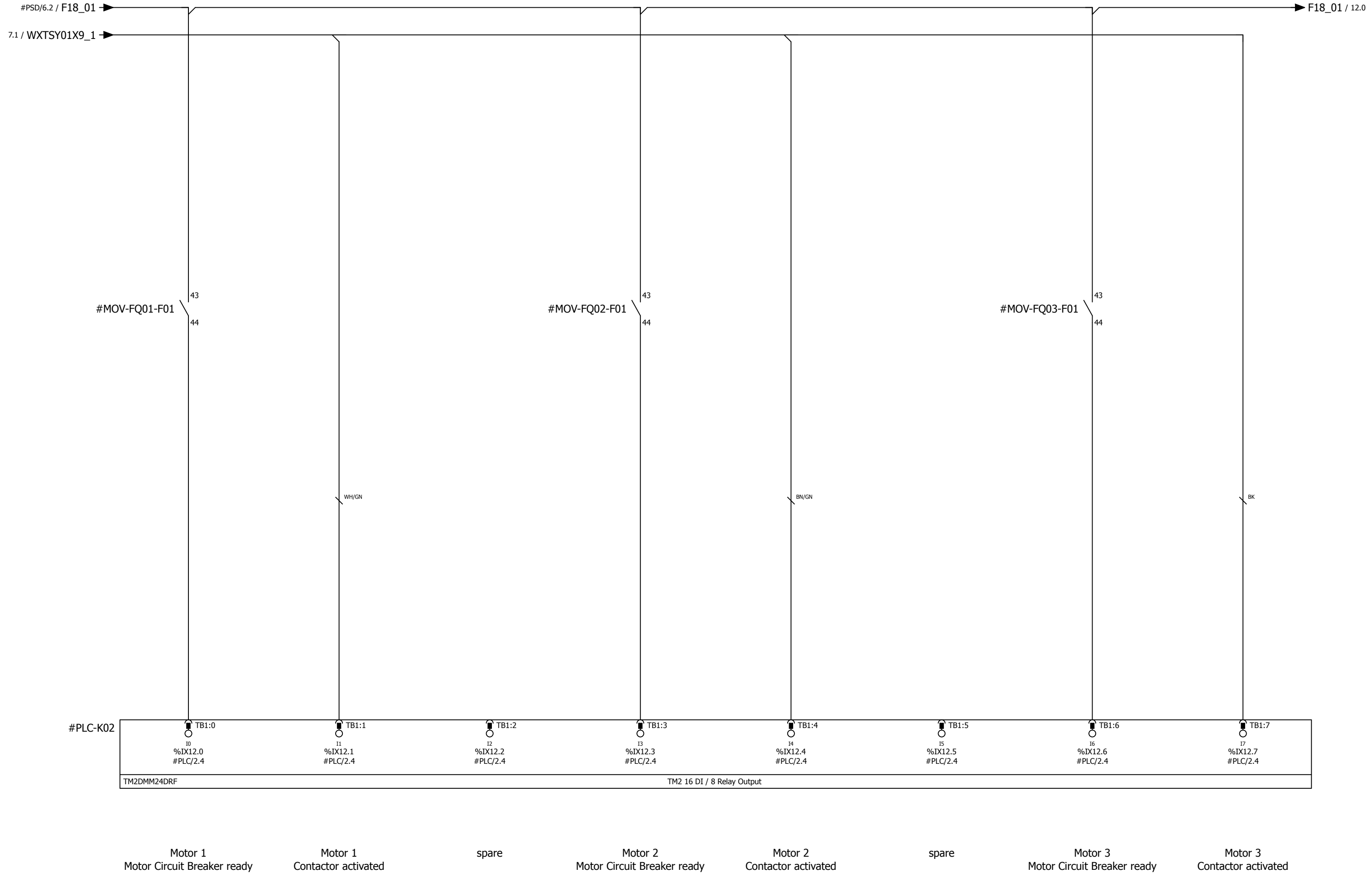
spare

spare

spare

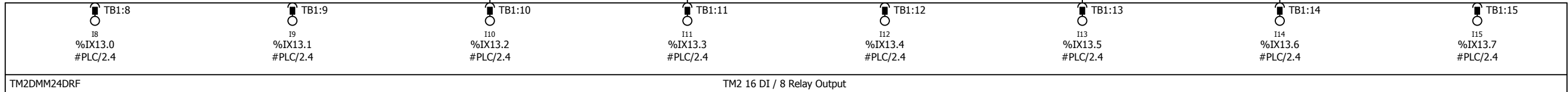
spare

Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Outputs OTB	EIO0000001822.01	Page 3
Ed.	kJakob	TVDA		=WIRD +RC1 #CTRL		
Appr		Replacement of	Replaced by		=WIRD+RC1#CTRL/3	of 15
Modification	Date	Name	Original			



7.1 / WXTSY01X9\_2 →

#PLC-K02



spare

spare

Motor 4  
Contactor activated

Motor 4  
Motor Circuit Breaker trip

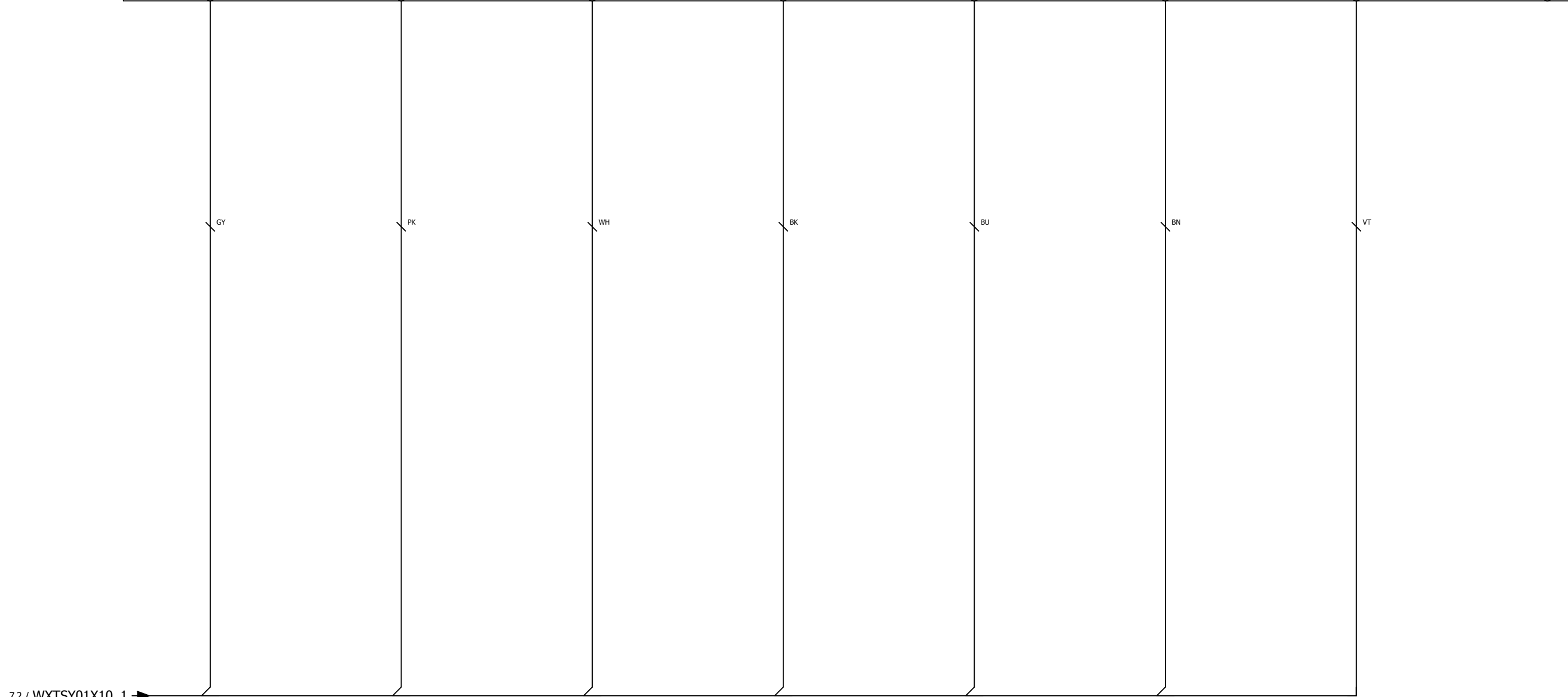
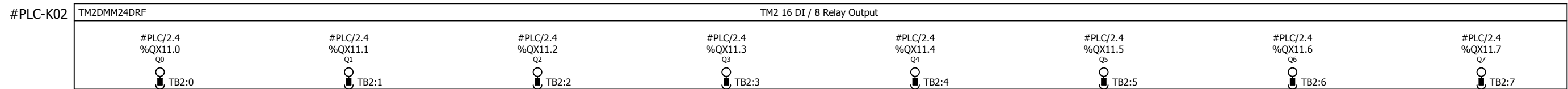
spare

Motor 5  
Contactor activated

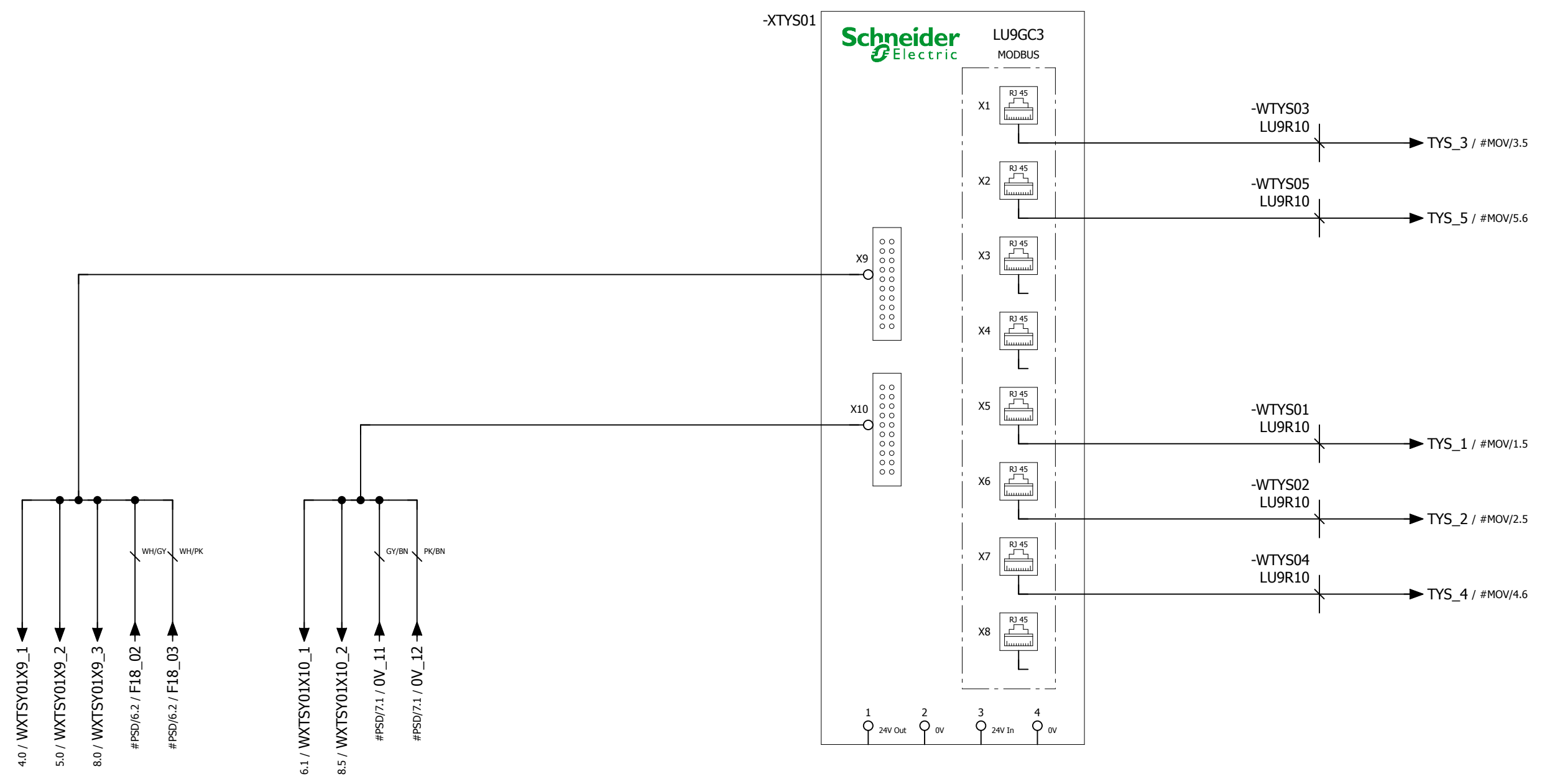
Motor 5  
Motor Circuit Breaker trip

spare

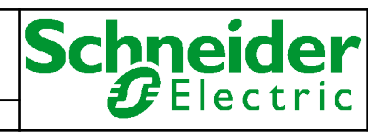




Motor 1 - Start Forward   
 Motor 2 - Start Forward   
 Motor 3 - Start Forward   
 Motor 3 - Start Reverse   
 Motor 4 - Start Forward   
 Motor 5 - Start Forward   
 Motor 5 - Start Reverse   
 spare

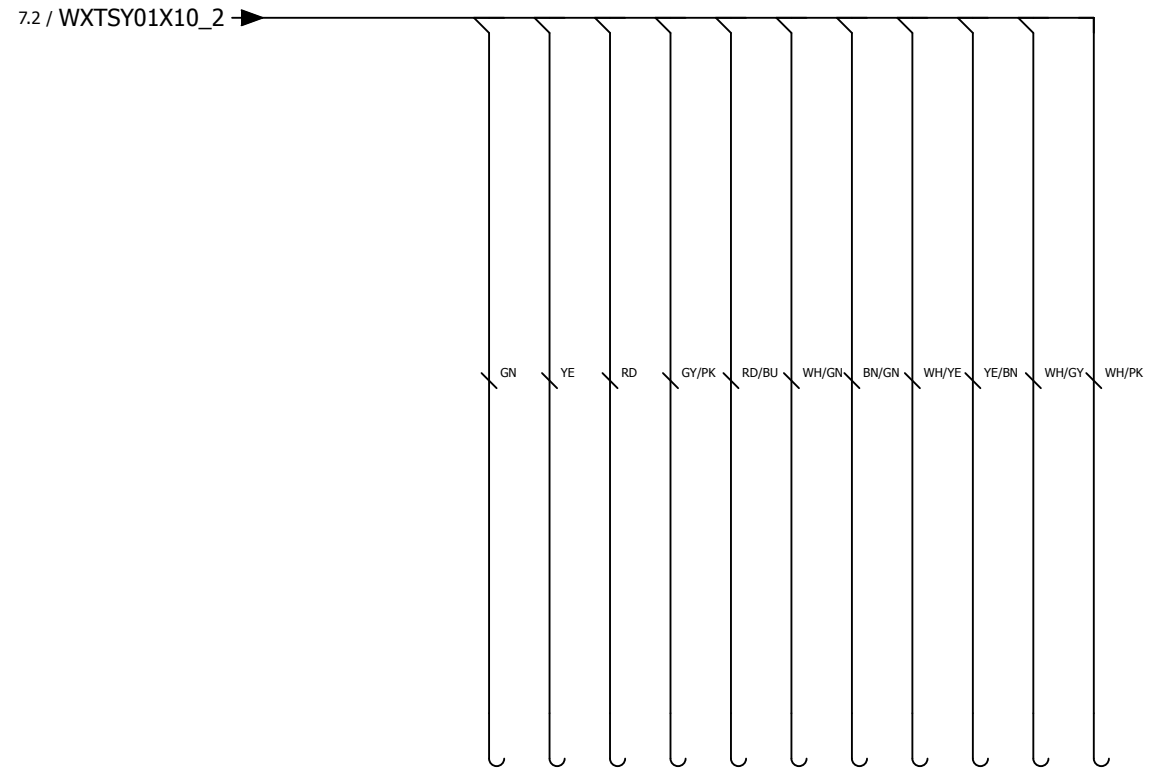
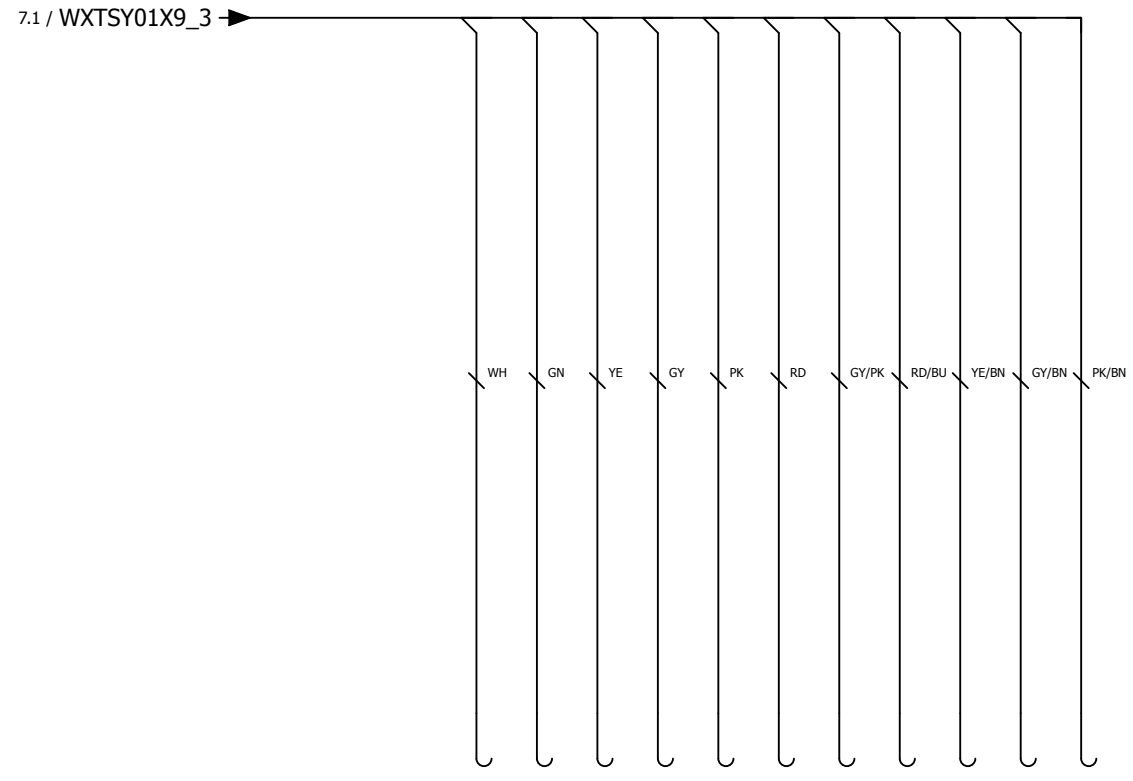


Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251
Ed.	kJakob	
Appr		TVDA
Modification	Date	Name
	Original	Replacement of
		Replaced by











TeSys Splitterbox

		=WIRD	+RC1
		#CTRL	
EIO0000001822.01	Page	7	
		=WIRD+RC1#CTRL/7	of 15



Unused wires of the pre-formed cables connected to the HE10 connectors X9 and X10 on the TeSys splitterbox LU9G02 #CTRL-XTYS01.

#PLC-K03

 TB1:0 10 %IX14.0 #PLC/2.7	 TB1:1 11 %IX14.1 #PLC/2.7	 TB1:2 12 %IX14.2 #PLC/2.7	 TB1:3 13 %IX14.3 #PLC/2.7	 TB1:4 14 %IX14.4 #PLC/2.7	 TB1:5 15 %IX14.5 #PLC/2.7	 TB1:6 16 %IX14.6 #PLC/2.7	 TB1:7 17 %IX14.7 #PLC/2.7		
TM2DMM24DRF								TM2 16 DI / 8 Relay Output	

spare

spare

spare


spare

spare

spare

spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Inputs TM2		=WIRD	+RC1	
			Ed.	kJakob	TVDA					#CTRL	
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	9	
									=WIRD+RC1#CTRL/9	of	15

#PLC-K03

18 ○ %IX15.0 #PLC/2.7	19 ○ %IX15.1 #PLC/2.7	110 ○ %IX15.2 #PLC/2.7	111 ○ %IX15.3 #PLC/2.7	112 ○ %IX15.4 #PLC/2.7	113 ○ %IX15.5 #PLC/2.7	114 ○ %IX15.6 #PLC/2.7	115 ○ %IX15.7 #PLC/2.7
TM2DMM24DRF <span style="float:right;">TM2 16 DI / 8 Relay Output</span>							

spare

spare

spare

spare

spare

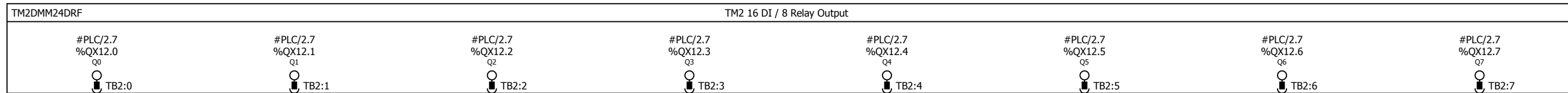
spare

spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Inputs TM2		=WIRD	+RC1
			Ed.	kJakob	TVDA					#CTRL
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page	10
								=WIRD+RC1#CTRL/10	of	15

#PLC-K03



spare

spare

spare

spare

spare

spare

spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Outputs TM2		=WIRD	+RC1
			Ed.	kJakob	TVDA					#CTRL
Modification	Date	Name	Original		Replacement of	Replaced by		EIO0000001822.01	Page	11
									=WIRD+RC1#CTRL/11 of 15	



#PLC-K04

X2:I8 %IX17.0 #PLC/3.1	X2:I9 %IX17.1 #PLC/3.1	X2:I10 %IX17.2 #PLC/3.1	X2:I11 %IX17.3 #PLC/3.1	X2:I12 %IX17.4 #PLC/3.1	X2:I13 %IX17.5 #PLC/3.1	X2:I14 %IX17.6 #PLC/3.1	X2:I15 %IX17.7 #PLC/3.1
TM2DDI16DT							
TM2 16 DI							

spare

spare

spare


spare

spare

spare

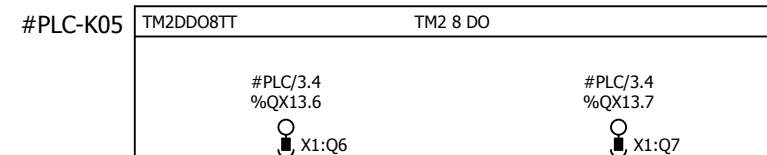
spare

spare

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital inputs TM2		=WIRD	+RC1
			Ed.	kJakob	TVDA					#CTRL
Modification	Date	Name	Original		Replacement of	Replaced by		EIO0000001822.01	Page	13
								=WIRD+RC1#CTRL/13	of	15



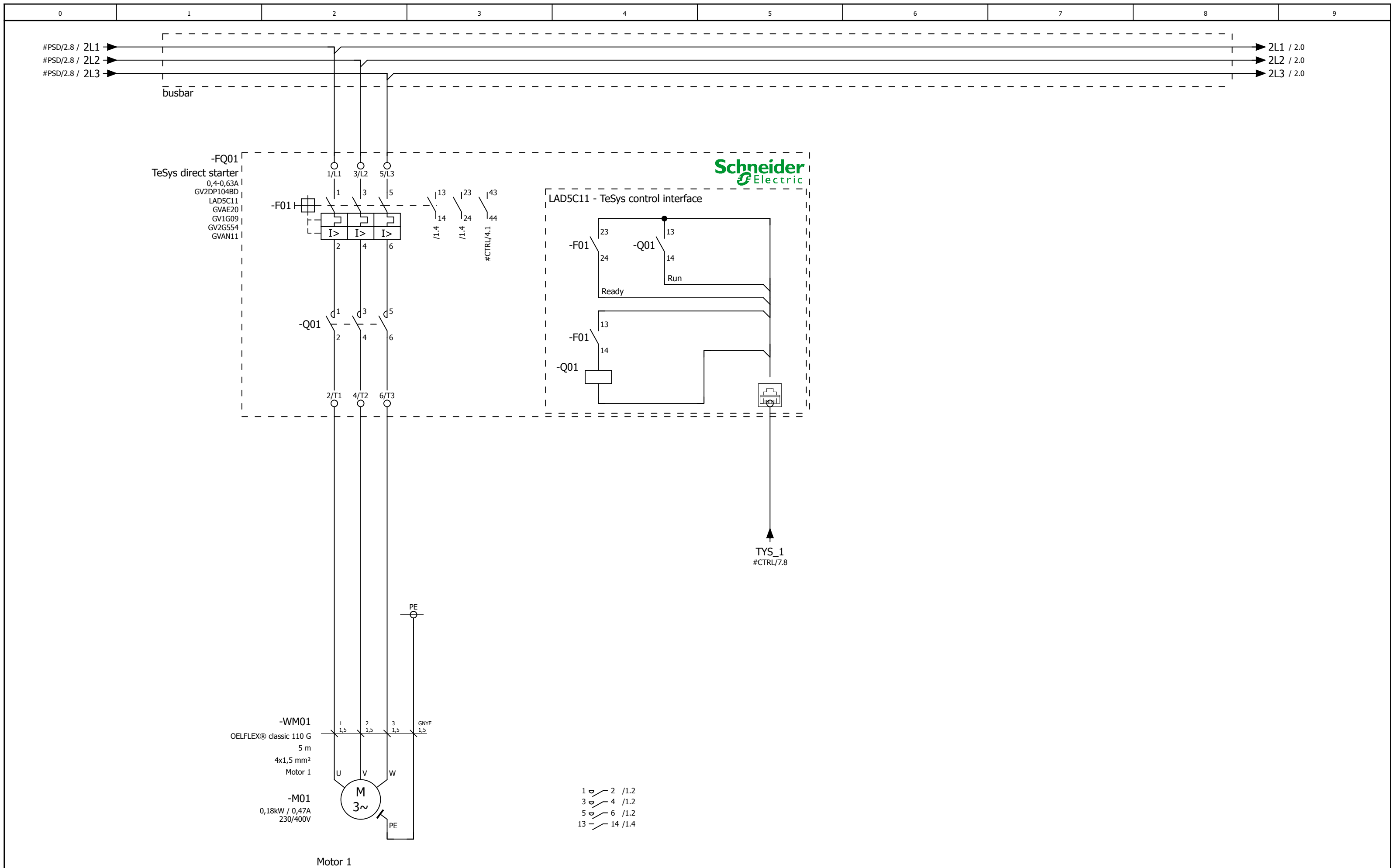




spare

spare

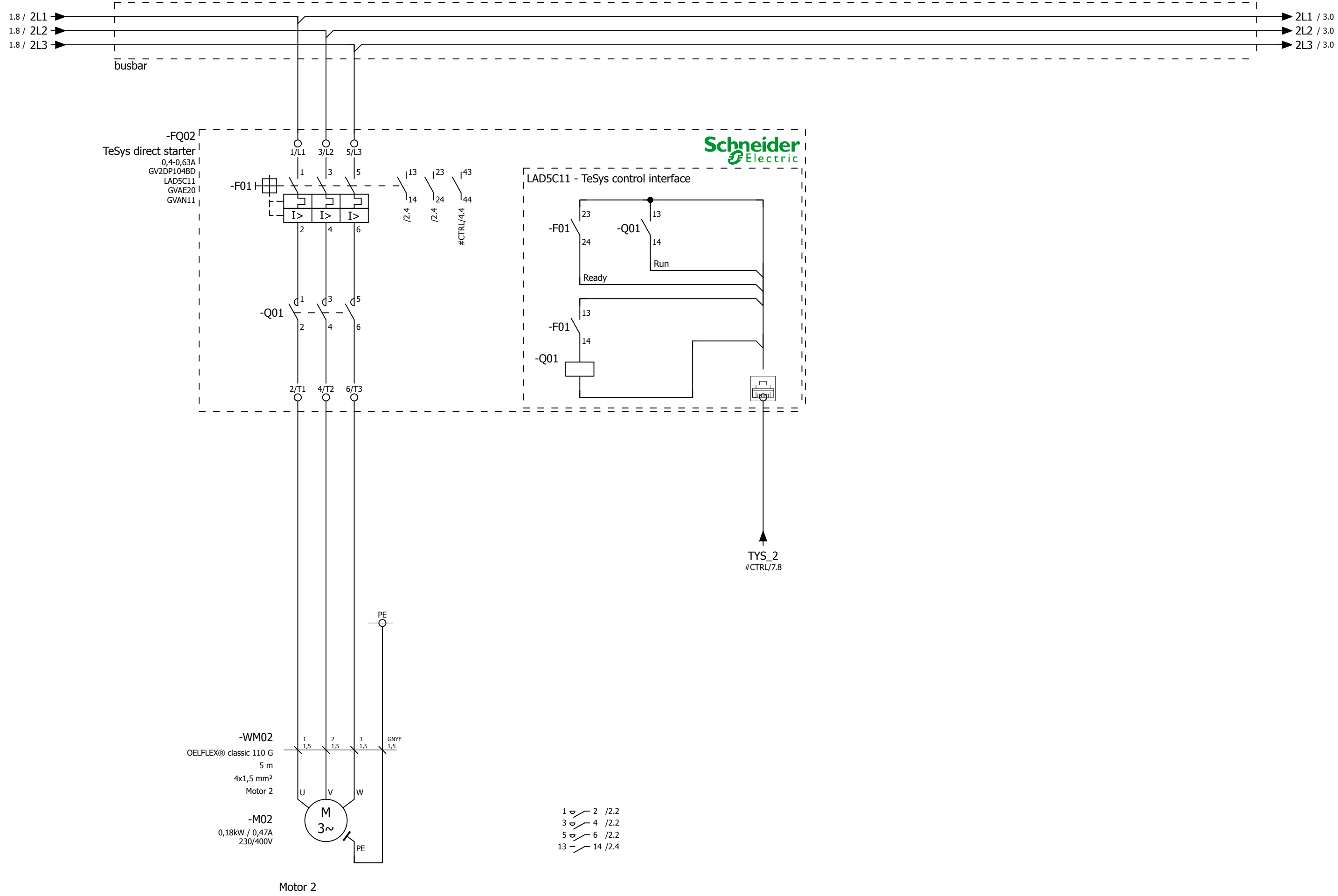
			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Digital Outputs TM2		=WIRD	+RC1
			Ed.	kJakob	TVDA					
Modification	Date	Name	Original		Replacement of	Replaced by		EIO0000001822.01	Page	15
								=WIRD+RC1#CTRL/15 of 15		



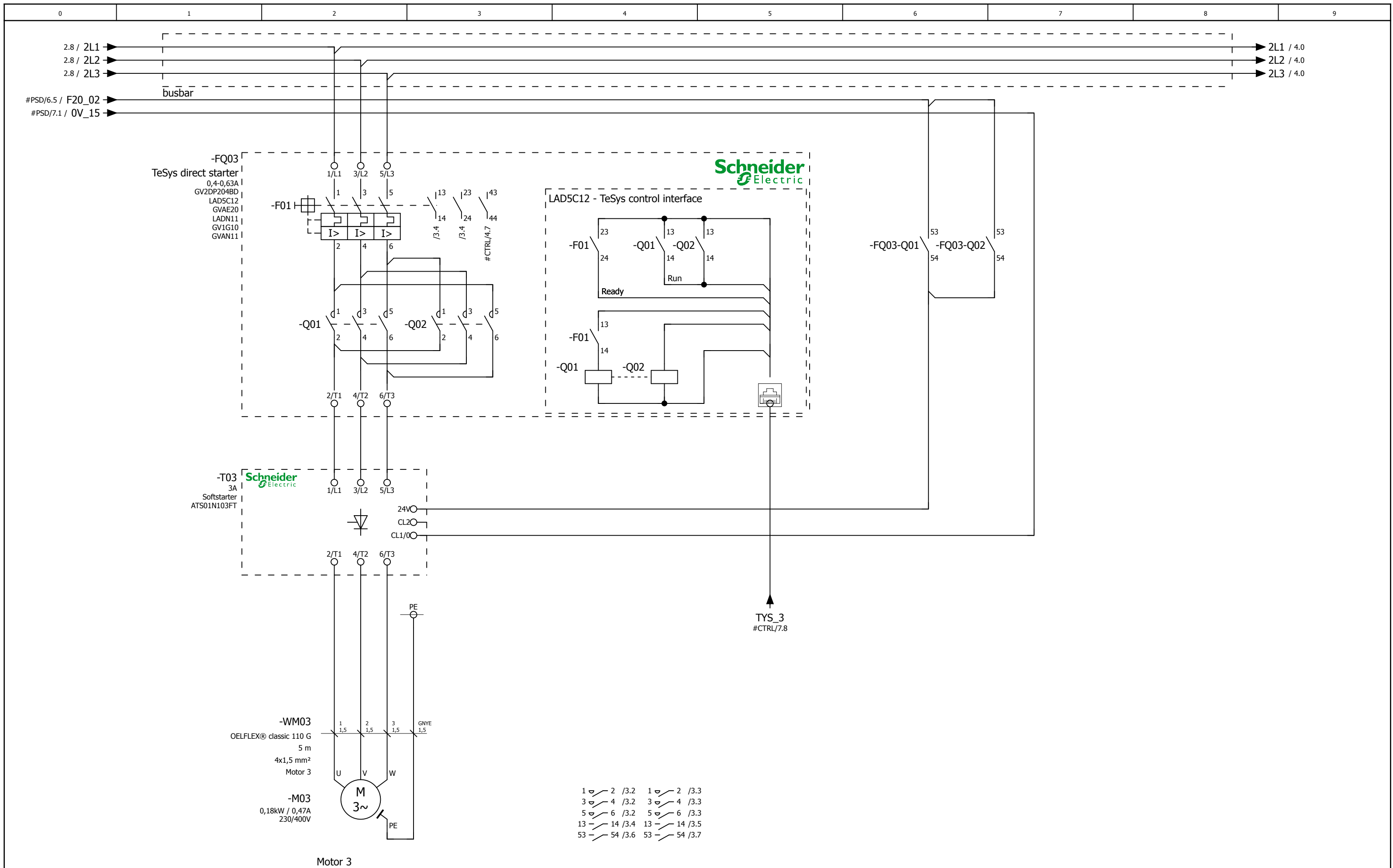
#CTRL/15

2

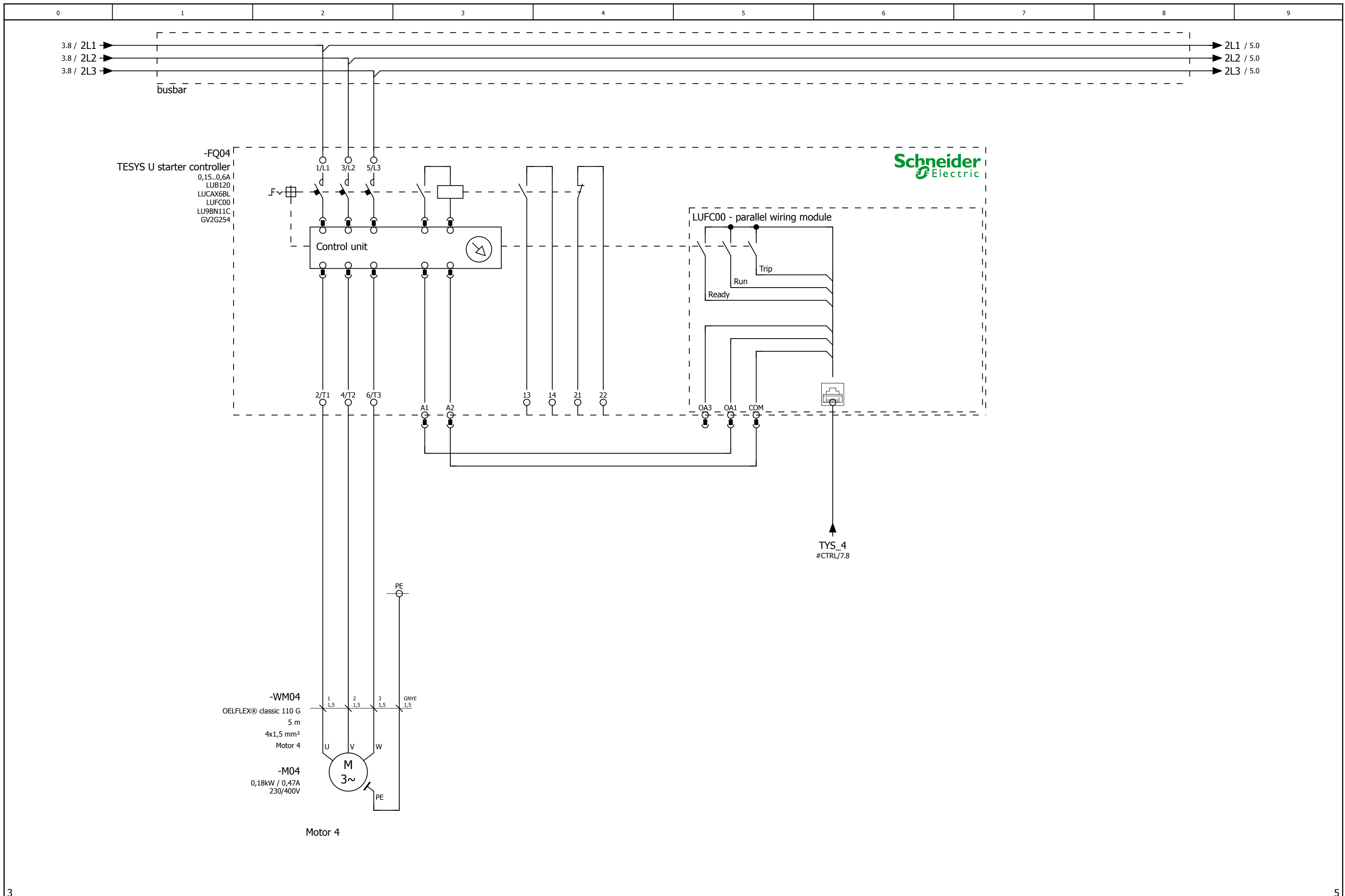
Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251	Schneider Electric	Motor 1 TeSys Direct Starter + Softstart	=WIRD	+RC1
Ed.	kJakob	TVDA				#MOV
Appr		Replacement of			EIO0000001822.01	Page 1
Modification	Date	Name	Original	Replaced by		=WIRD+RC1#MOV/1 of 7



		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric		Motor 2 TeSys Direct Starter + Softstart		=WIRD +RC1	
		Ed.	kJakob	TVDA						#MOV	
		Appr		Replacement of		Replaced by		EIO0000001822.01		Page 2	
Modification	Date	Name	Original					=WIRD+RC1#MOV/2		of 7	



		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Schneider Electric		Motor 3 TeSys Direct Starter + Softstart		=WIRD +RC1	
		Ed.	kJakob	TVDA						#MOV	
		Appr		Replacement of		Replaced by		EIO0000001822.01		Page 3	
Modification	Date	Name	Original							=WIRD+RC1#MOV/3 of 7	

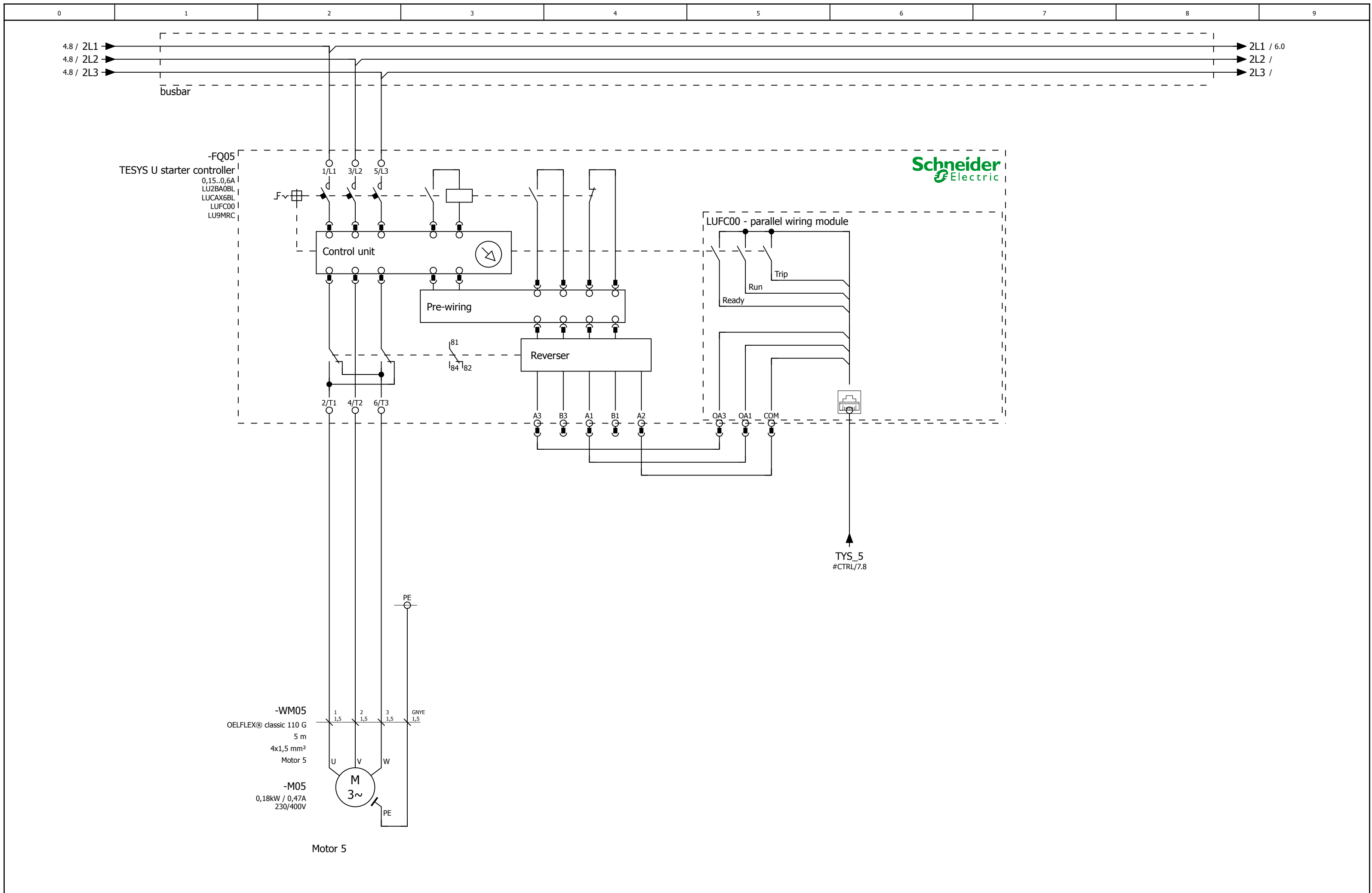


		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251				=WIRD	+RC1
		Ed.	kJakob					#MOV	
		Appr		TVDA				Page 4	
Modification	Date	Name	Original	Replacement of	Replaced by			=WIRD+RC1#MOV/4 of 7	



Motor 4  
TeSysU Starter Controller

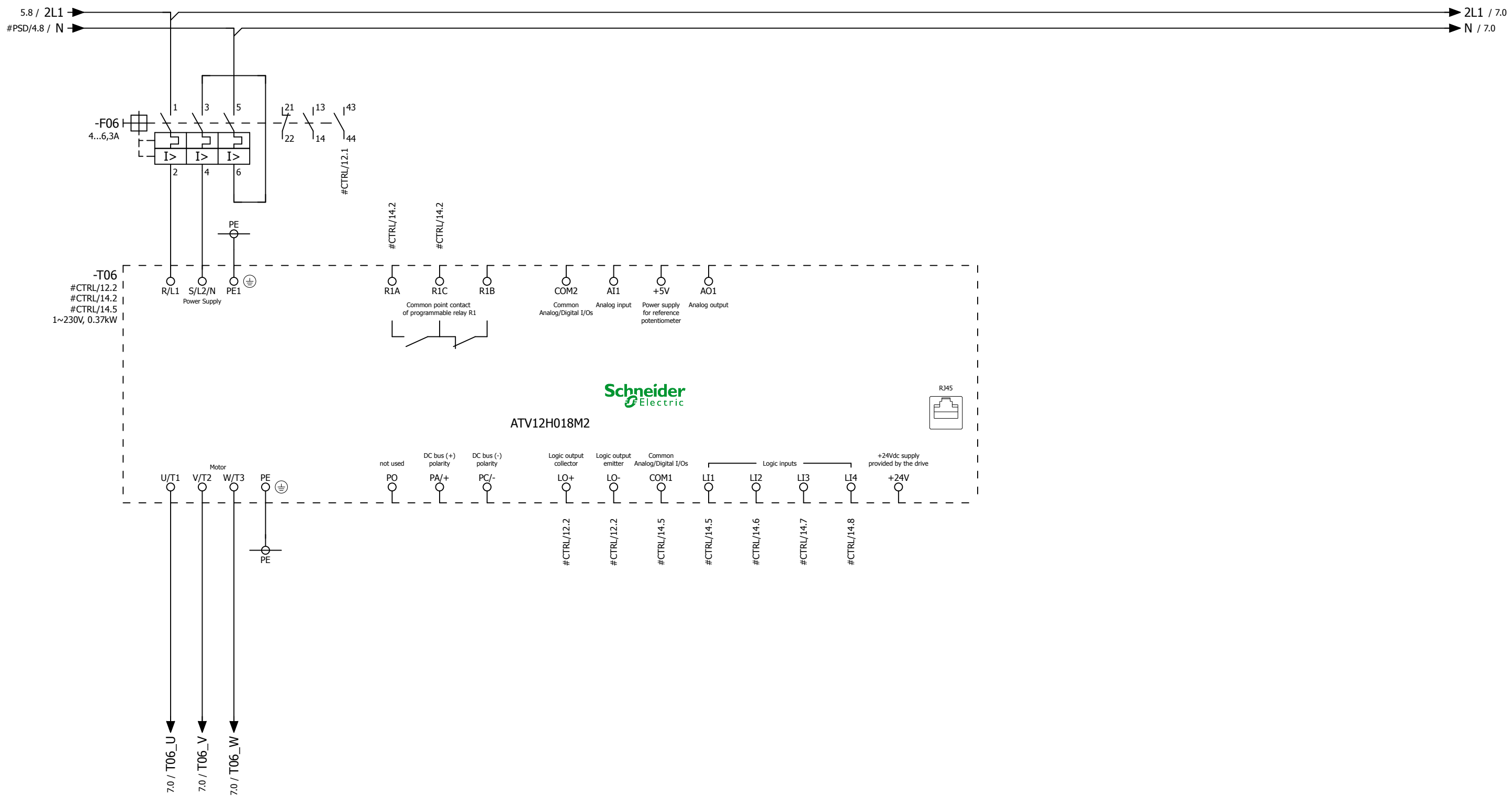
EIO0000001822.01



		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251				=WIRD	+RC1
		Ed.	kJakob	TVDA					#MOV
		Appr		Replacement of		Replaced by		EIO0000001822.01	Page 5
Modification	Date	Name	Original					=WIRD+RC1#MOV/5	of 7

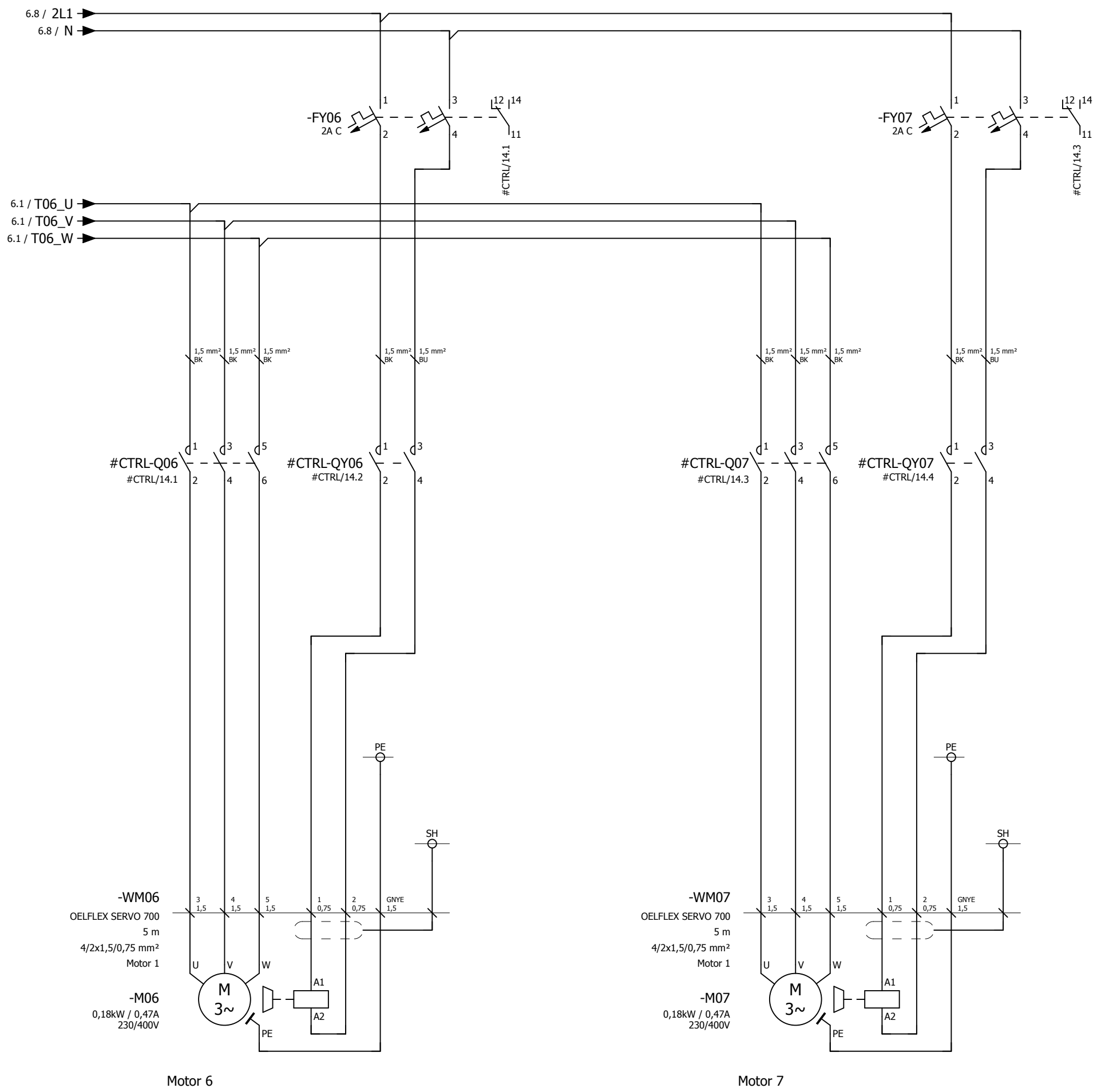


Motor 5  
TeSysU Starter Controller



		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251			Motor 6+7 Altivar 12	=WIRD +RC1	
		Ed.	kJakob	TVDA				#MOV	
		Appr		Replacement of				EIO0000001822.01	Page 6
Modification	Date	Name	Original	Replaced by				=WIRD+RC1#MOV/6	of 7

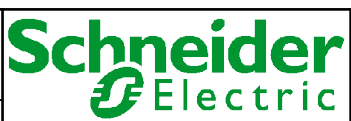




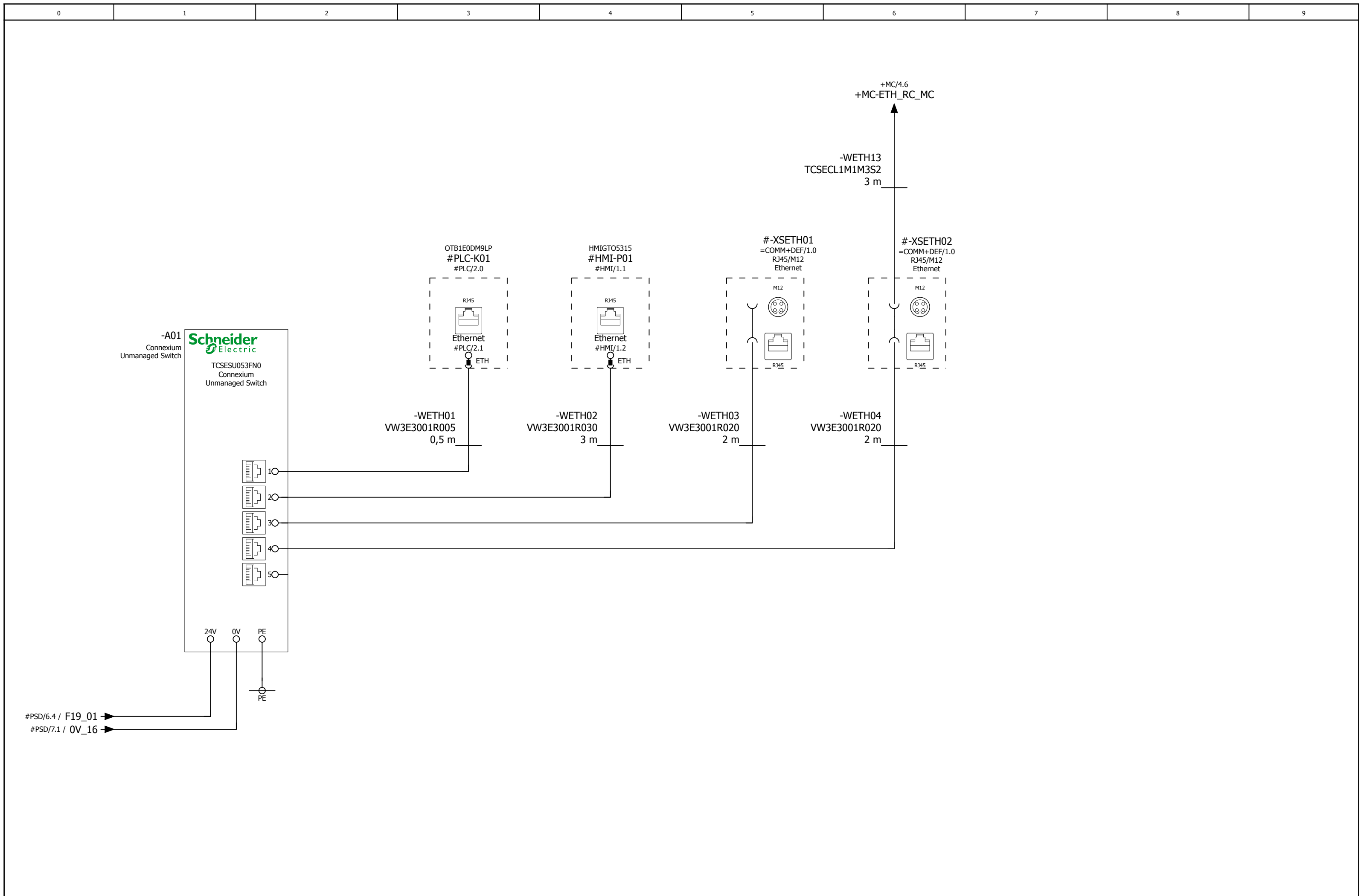
Motor 6

Motor 7

		Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251				=WIRD +RC1	
		Ed.	kJakob					#MOV	
		Appr		TVDA					
Modification	Date	Name	Original	Replacement of	Replaced by			EIO0000001822.01	Page 7
								=WIRD+RC1#MOV/7 of 7	



Motor 6+7  
Contactors



#MOV/7

			Date	2015/11/13	Distributed / Modbus TCP / Logic Controller M251		Ethernet topology - Modbus TCP Fieldbus RC	EIO0000001822.01	Page 1	=WIRD +RC1 #COM 1
			Ed.	kJakob						
			Appr	TVDA						
Modification	Date	Name	Original		Replacement of	Replaced by				=WIRD+RC1#COM/1 of 1