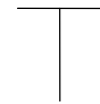


Functional assignment

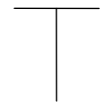
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Abbreviation functional assignment

System

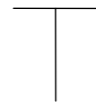
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Abbreviation plant

Mounting location

+	CS
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Abbreviation installation site

Component designation

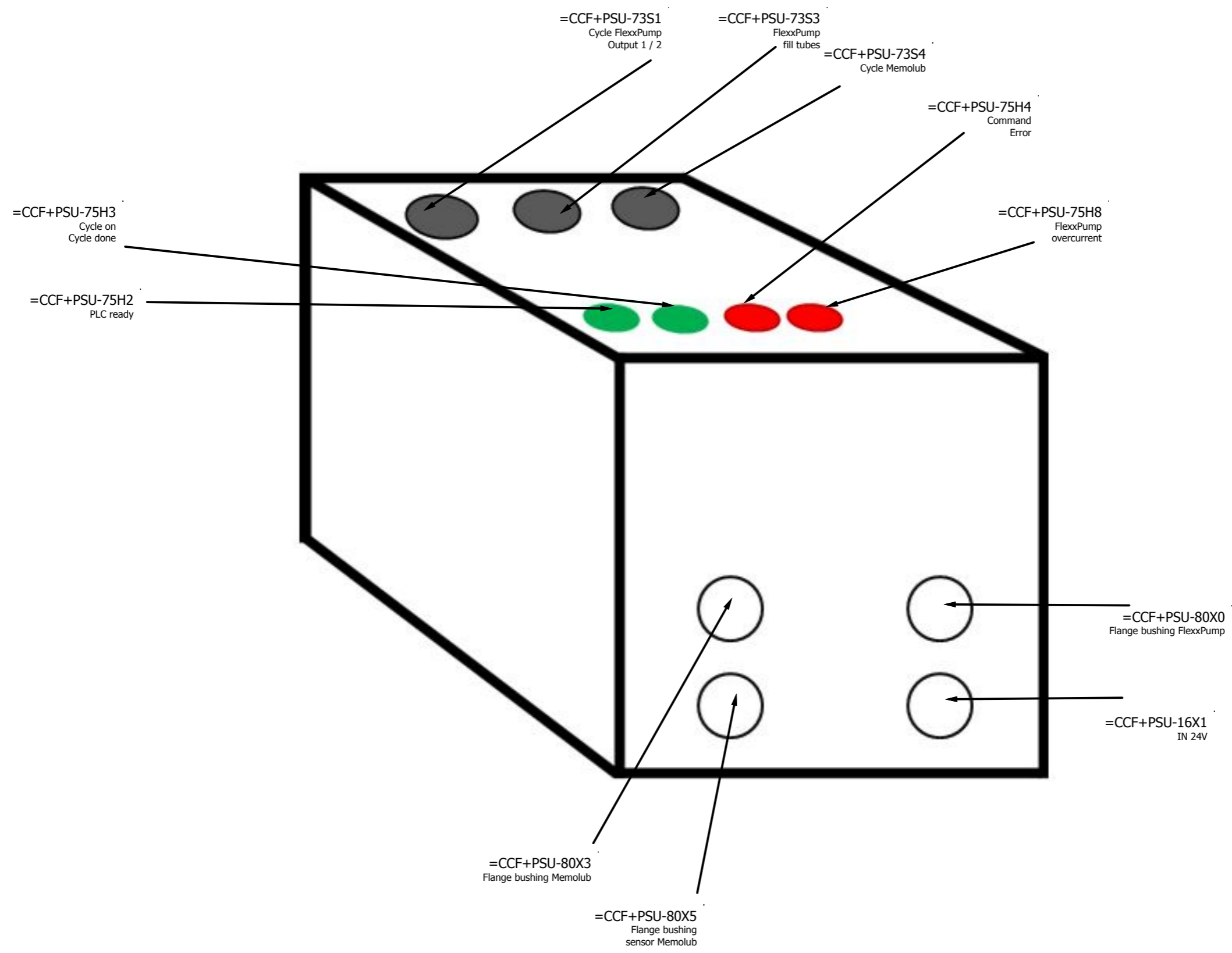
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Page number

Identifier

Path number



Document type		Date	15.06.2018	Customer: Güdel R&D Project: Optimization lubrication systems		Layout control unit	Information Pages #RDS =DOK +INFO		
		edit	danlae				B1R.100115	documentation	Page 40
Modification	Date	Name	Edit date				15.06.2018	Optimierung Schmiersysteme_V0-00-006	Pg 16

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GÜDEL

Customer : Güdel R&D
address : Industrie Nord
4900 Langenthal
Schweiz

Project : Optimierung Schmiersysteme_V0-00-006
Projectnumber : B1R.100115
Project description : Optimization lubrication systems

Functional unit : R&D control system

Module : Control panel
Document type : ELEKTRIK

Responsible for project : R.Niederhauser

Created on : 15.06.2018

Edit date : 15.06.2018

by (short name) : danlae

=DOK&/40

Document type		Date	15.06.2018	Customer: Güdel R&D Project: Optimierung lubrication systems		Title page/cover sheet	Information Pages		#RDS	=CCF	+INFO	
ELEKTRIK		edit	danlae									
		Contr.										
Modification	Date	Name	Edit date	15.06.2018	Optimierung Schmiersysteme_V0-00-006		B1R.100115	Control panel		Page	0	
										Pg	16	

Line colors:

Main current	400 VAC	L1 L2 L3 N PE	black black black light blue green / yellow
Control voltage 230VAC	Potential Potential grounded		red red
Control voltage 24VDC	+ -		Dark blue white-blue
External voltages In front of main switch			orange Mark ends yellow

Line cross section:

Main current	min. 1,5mm ²
Neutral conductor	min. 1,5mm ²
Grounding conductor	min. 1,5mm ²
External voltages In front of main switch	min. 1mm ² min. 1,5mm ²
Control voltage 230VAC	min. 1mm ²
Control voltage 24VDC PLC inputs / outputs Safety inputs / outputs PLC	1mm ² 0,5mm ² 1mm ²

Standards:

nach IEC

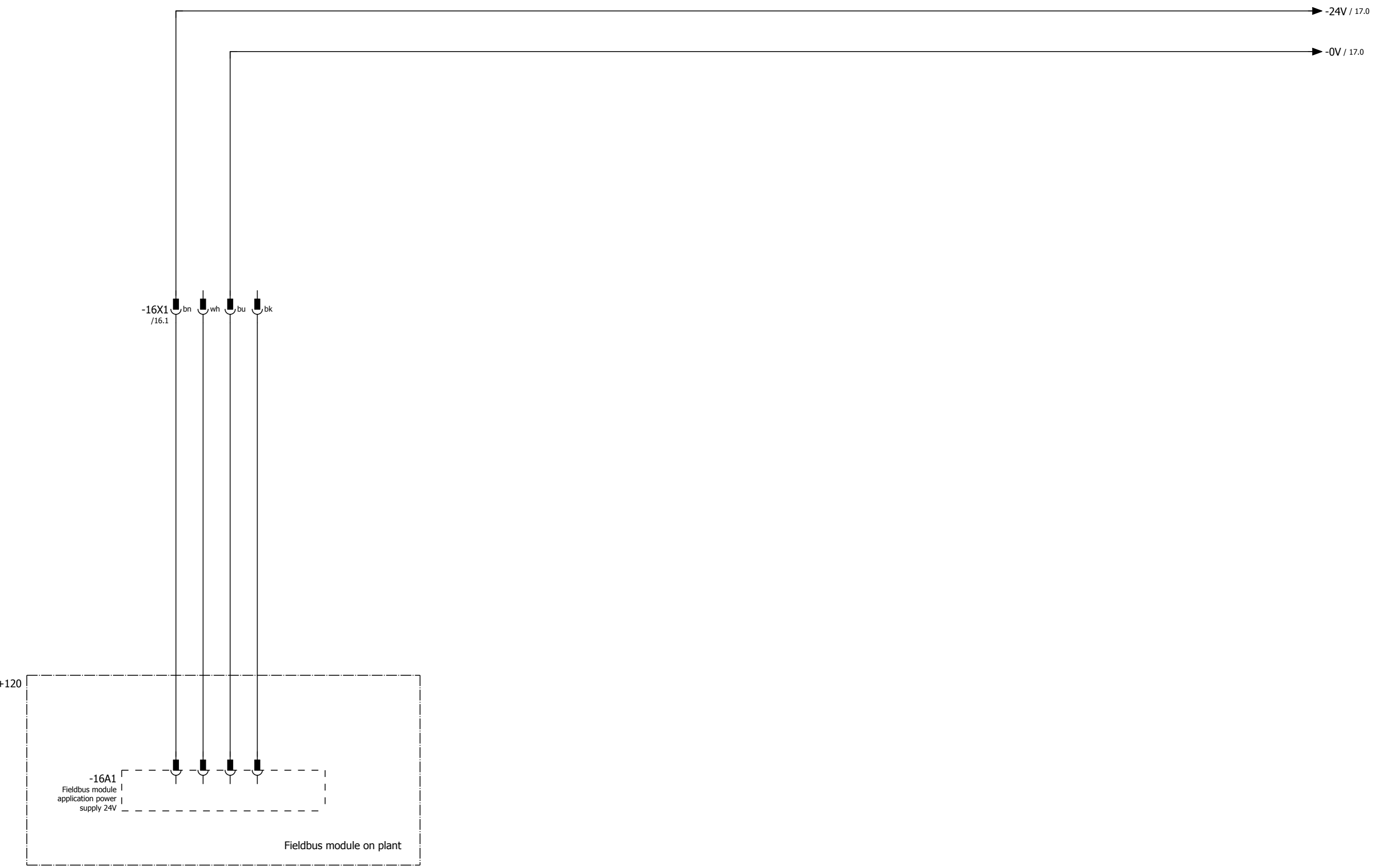
	General	IEC 60204-1
	Idendifikation	IEC 81346
	Letter code	IEC 750

Labels:

Wire identification	no	
Device designation	Yes	On device and on installation place
External labeling	no	
Cable	Yes	Plastic plate

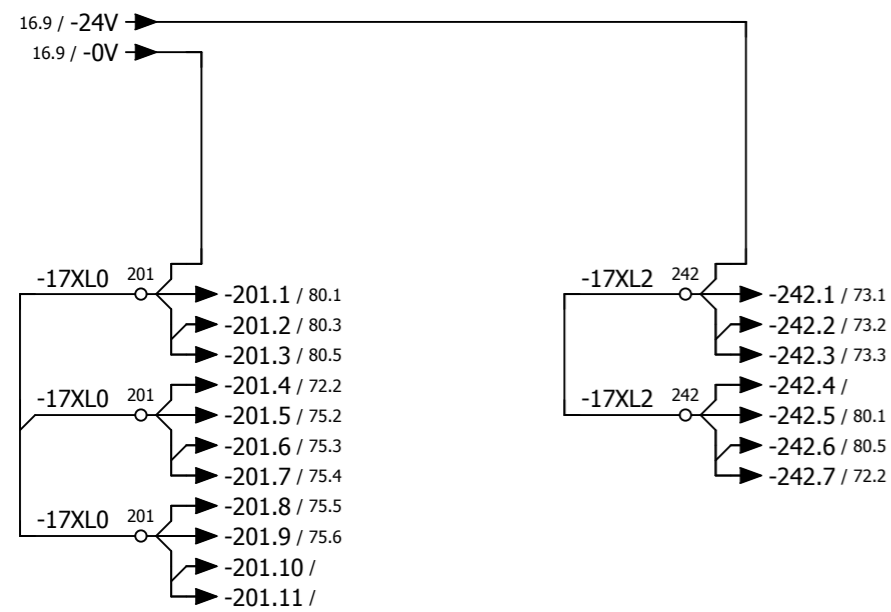
Material requirements

Regulations	Specification_electrical equipment Güdel Standard
Special regulations	None
Interference suppression	All contactors and valves are equipped with suppressor elements

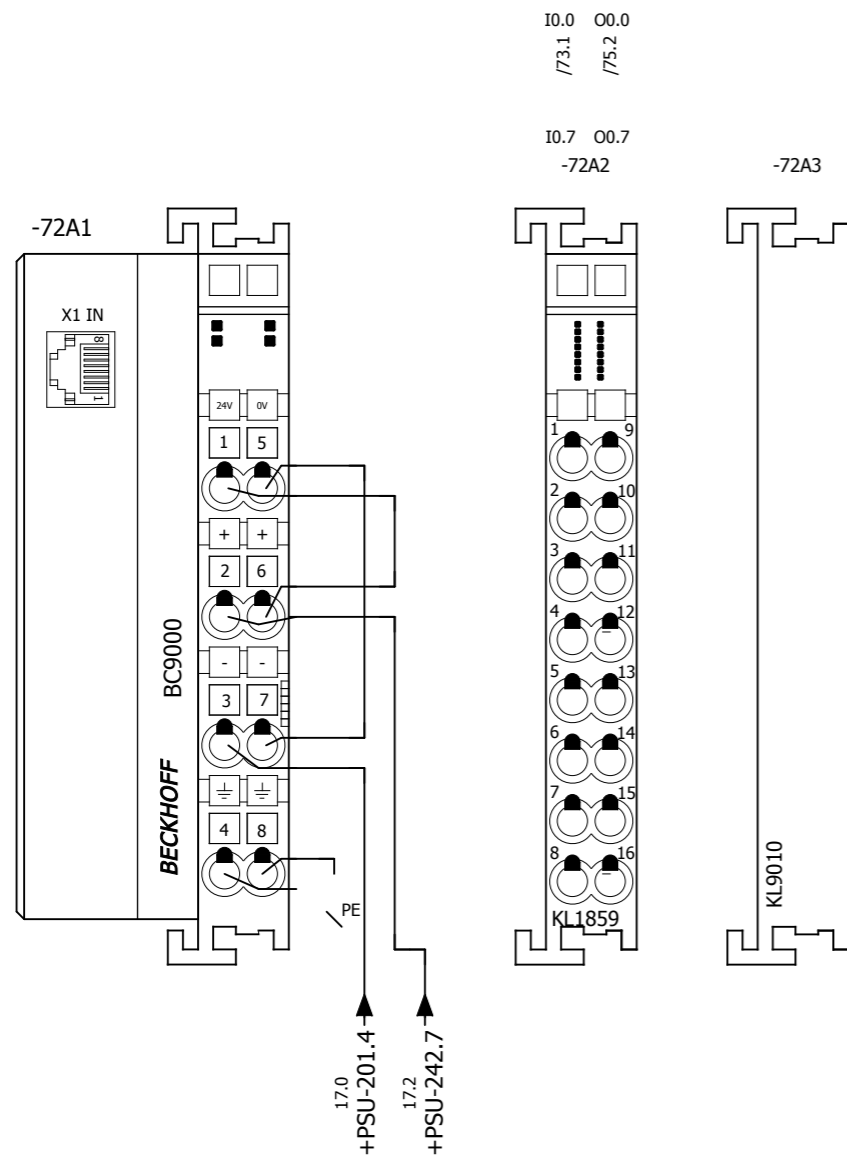


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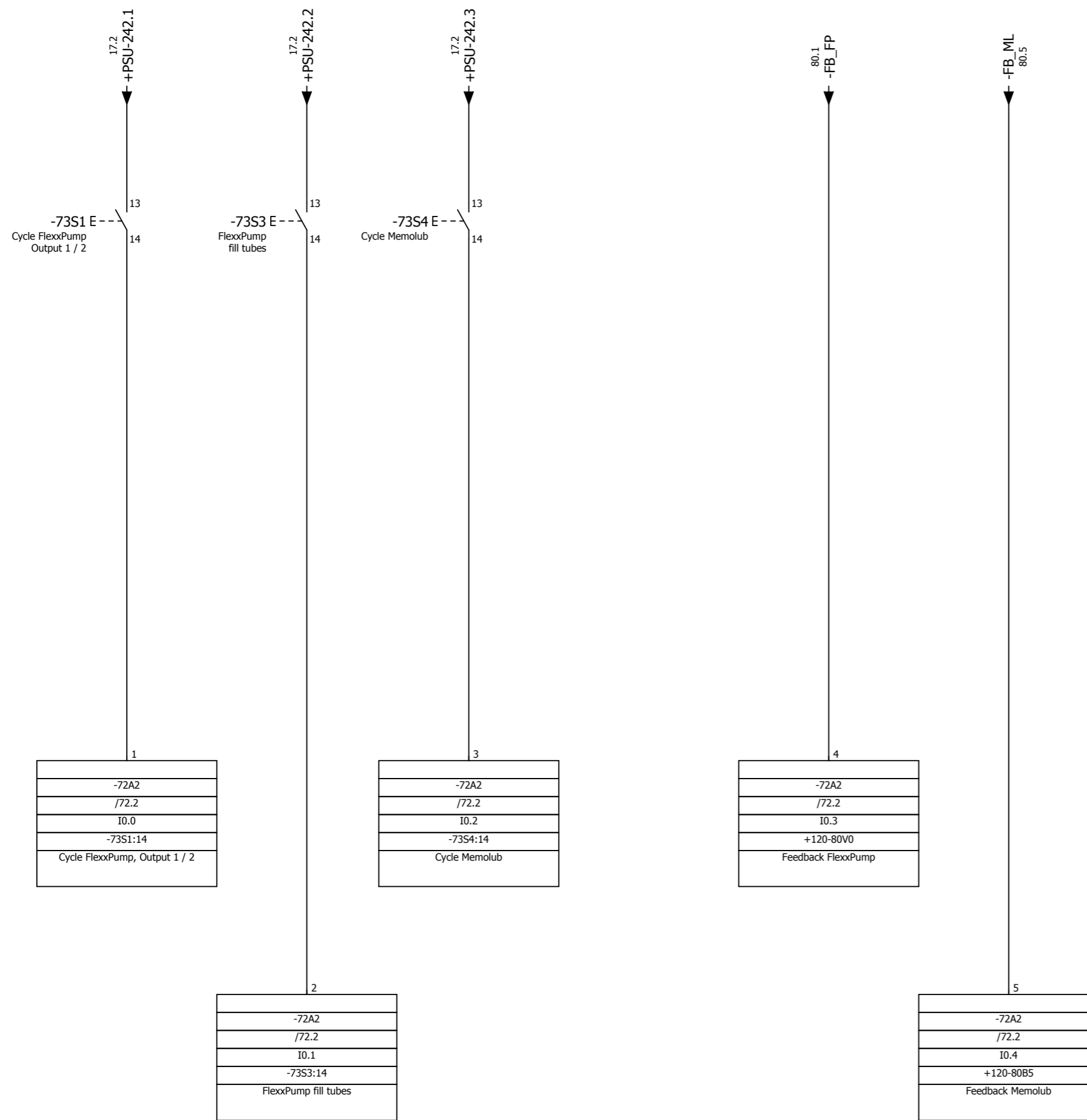
			Date	15.06.2018	Order:		Power supply 24VDC	= CCF		Page	16
			edit	danlae	Customer:	Güdel R&D		+ PSU		Pg	16
			Contr.		Project:	Optimierung Schmiersysteme_V0-00-006					
Modification	Date	Name	Orig		Replacement for				B1R.100115		
					Replaced by						



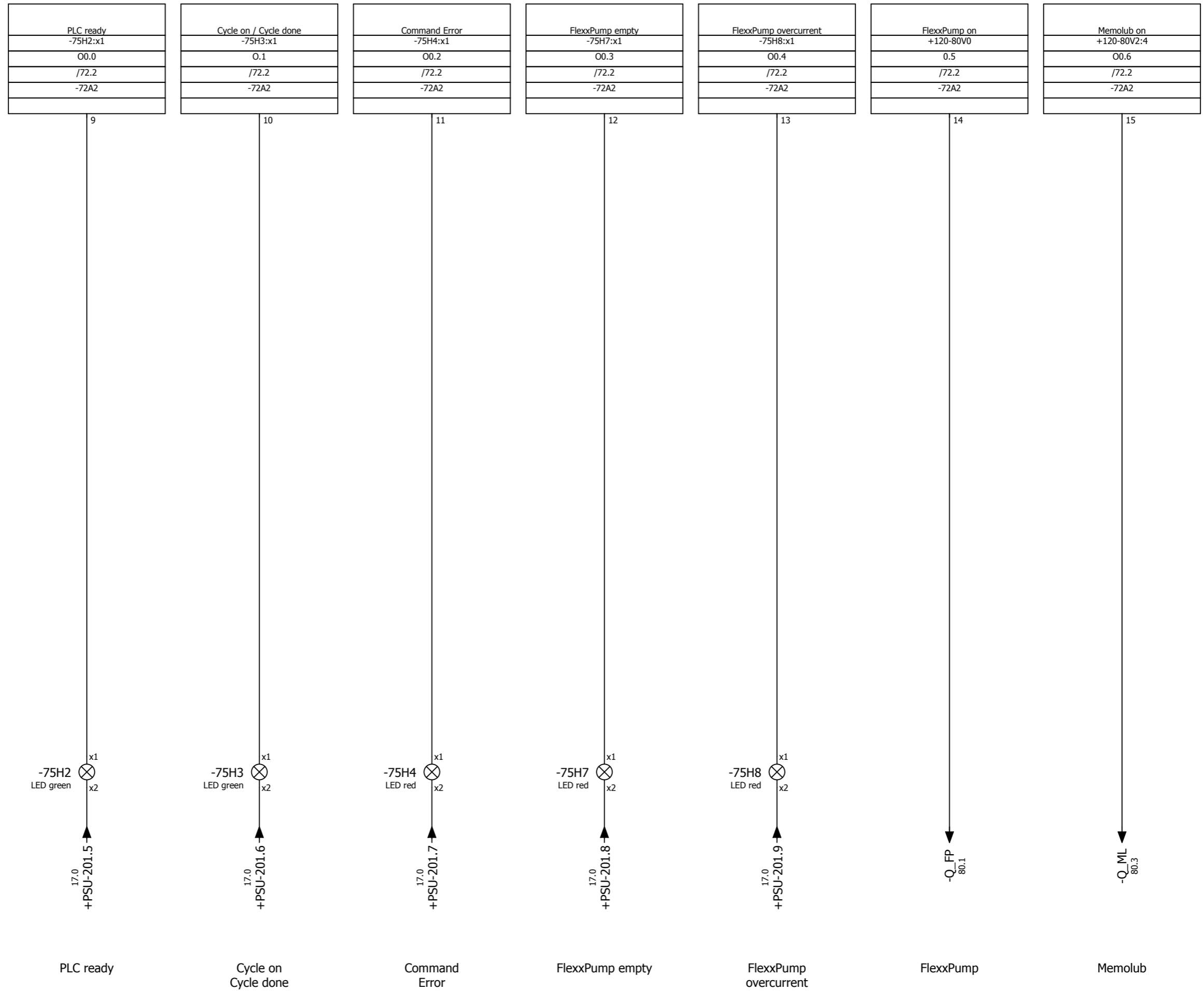
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			Contr.		Project:	Optimierung Schmiersysteme_V0-00-006				
Modification	Date	Name	Orig		Replacement for		Replaced by			
									B1R.100115	
										Page 17
										Pg 16

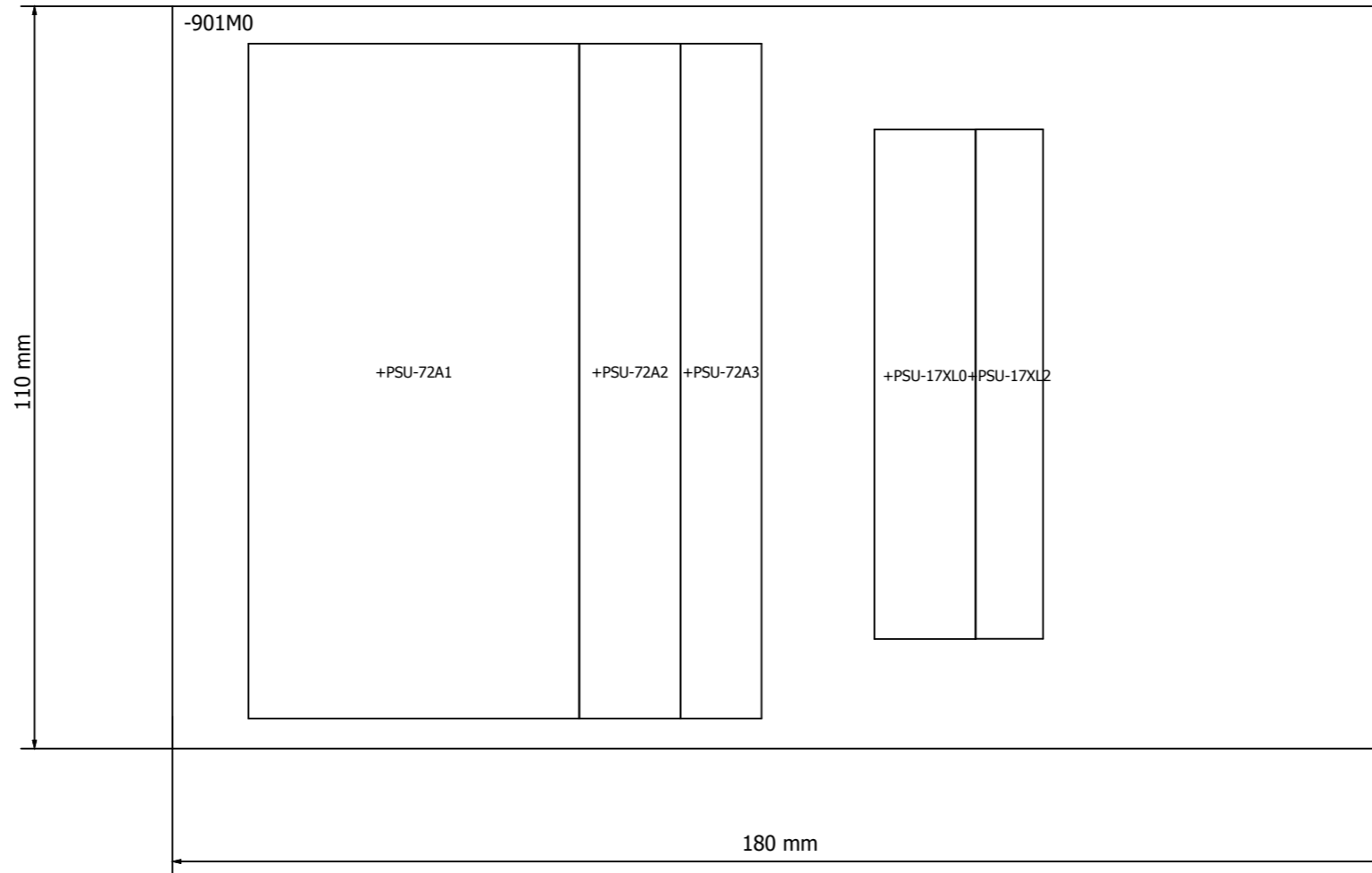


Document type		Date	15.06.2018	Customer: Güdel R&D Project: Optimization lubrication systems	PLC	Control box	#RDS	=CCF	+PSU
ELEKTRIK		edit	danlae						
Modification	Date	Name	Edit date	15.06.2018	Optimierung Schmiersysteme_V0-00-006	B1R.100115	Control panel	Page	72
								Pg	16

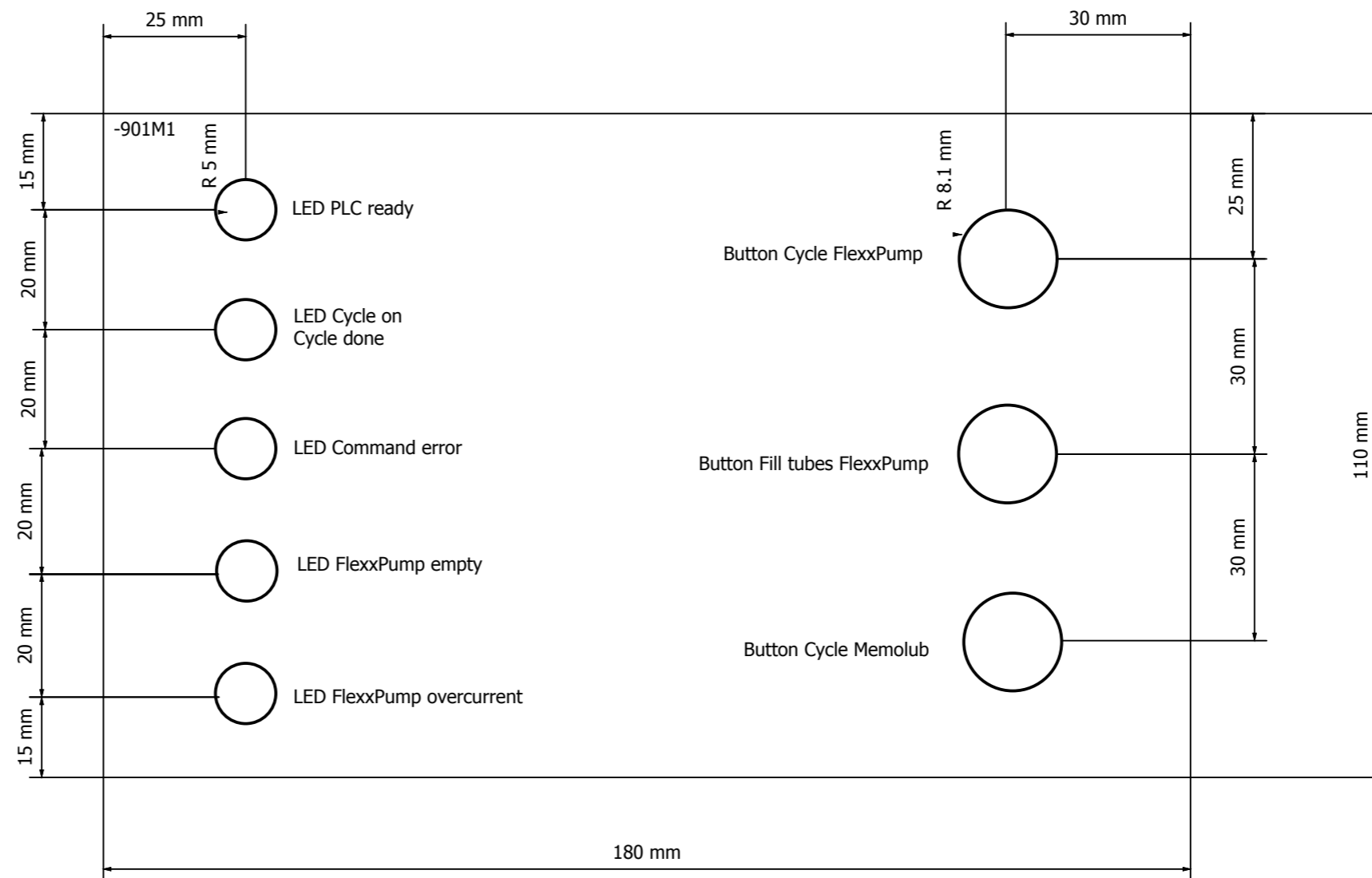


	Date	15.06.2018	Order:	
	edit	danlae	Customer:	Güdel R&D
	Contr.		Project:	Optimierung Schmiersysteme_V0-00-006
Modification	Date	Name	Orig	Replacement for / Replaced by
				Signals internal
				= CCF
				+ PSU
				B1R.100115
				Page 73
				Pg 16

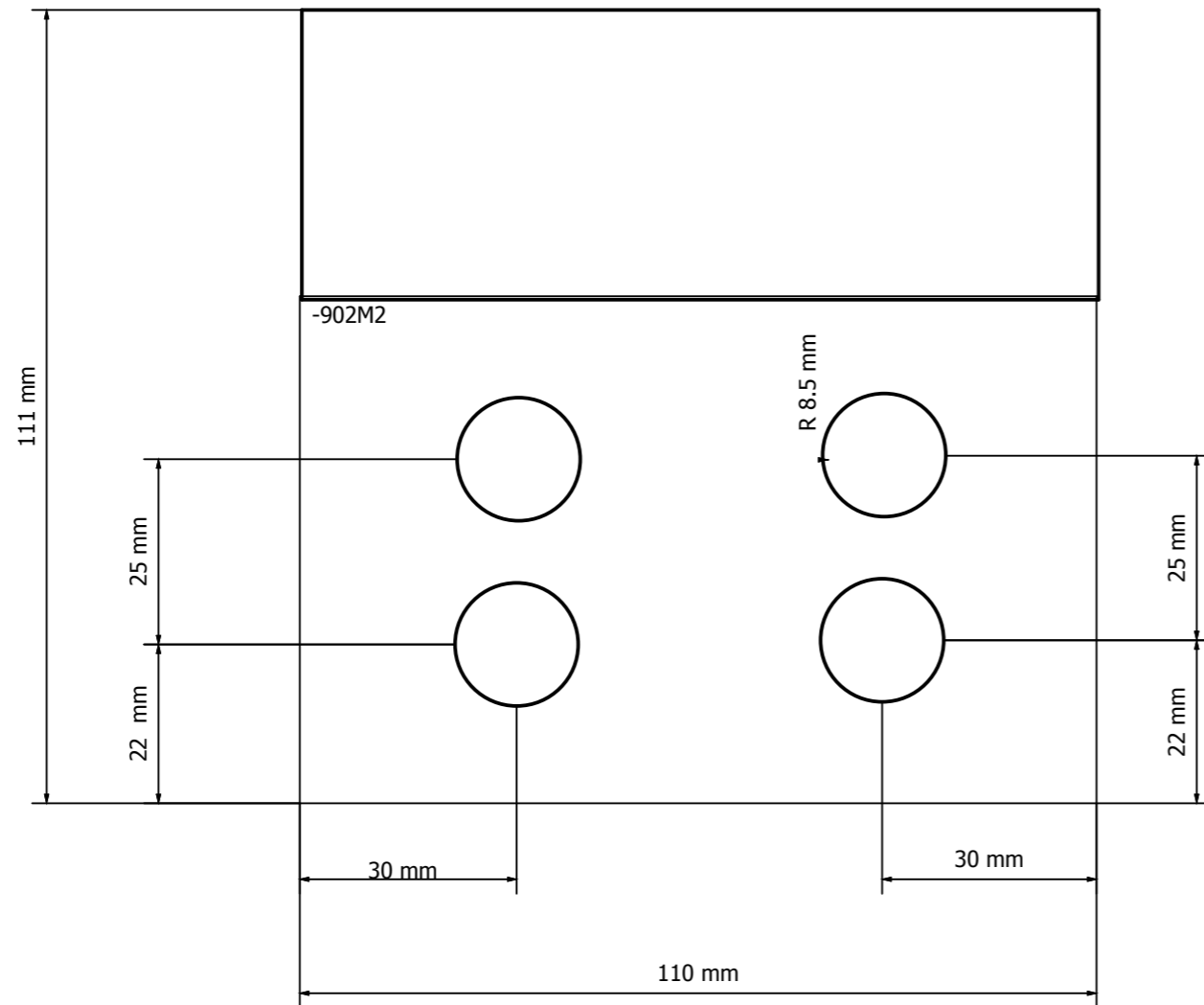




			Date	15.06.2018	Order:		Switch cabinet design		= CCF
			edit	danlae	Customer:	Güdel R&D			+ LAY
			Contr.		Project:	Optimierung Schmiersysteme_V0-00-006			
Modification	Date	Name	Orig		Replacement for				
					Replaced by				
								B1R.100115	
									Page 900
									Pg 16



			Date	15.06.2018	Order:			= CCF
			edit	danlae	Customer:	Güdel R&D		+ LAY
			Contr.		Project:	Optimierung Schmiersysteme_V0-00-006		
Modification	Date	Name	Orig		Replacement for	Replaced by		
								B1R.100115
								Page 901
								Pg 16



			Date	15.06.2018	Order:		Switch cabinet design, side	= CCF		Page	902
			edit	danlae	Customer:	Güdel R&D		+ LAY		Pg	16
			Contr.		Project:	Optimierung Schmiersysteme_V0-00-006					
Modification	Date	Name	Orig		Replacement for	Replaced by			B1R.100115		

Parts list

DT	Quantity	Subset	Cable on cable reel	Designation	Order number	Manufacturer	Part number
+PSU-72A1	1			Bus Terminal Controller Ethernet-TCP/IP	BC9000	Beckhoff	10419149
+PSU-72A2	1			Bus terminal HD, 8DI/DO, 24VDC	KL1859	Beckhoff	10419163
+PSU-72A3	1			System terminal bus end	KL9010	Beckhoff	0114039
+PSU-75H2	1			LED Indicator, green, 24VDC	QS103XXG24	APEM	10419065
+PSU-75H3	1			LED Indicator, green, 24VDC	QS103XXG24	APEM	10419065
+PSU-75H4	1			LED Indicator, red, 24VDC	QS103XXR24	APEM	10419067
+PSU-75H7	1			LED Indicator, red, 24VDC	QS103XXR24	APEM	10419067
+PSU-75H8	1			LED Indicator, red, 24VDC	QS103XXR24	APEM	10419067
+PSU-73S1	1			Pushbutton, 1NC/NO, black	1.15.106.301/0104	RAFI	10419085
+PSU-73S3	1			Pushbutton, 1NC/NO, black	1.15.106.301/0104	RAFI	10419085
+PSU-73S4	1			Pushbutton, 1NC/NO, black	1.15.106.301/0104	RAFI	10419085
+PSU-80W0	1	0.6 m		Circular plug-in connector M12 plug straight, M12 female straight, 4-pin, L = 0.6m gray	7000-40021-2340060	Murrelektronik	0139705
+PSU-16X1	1			Male socket, M12, 4-pin, 0.2m	7000-13501-9710020	Murrelektronik	0203651
+PSU-80X0	1			Flange socket, M12, 5-pin, 0.2m	7000-13561-9720020	Murrelektronik	0197887
+PSU-80X3	1			Flange socket, M12, 5-pin, 0.2m	7000-13561-9720020	Murrelektronik	0197887
+PSU-80X5	1			Flange socket, M12, 5-pin, 0.2m	7000-13561-9720020	Murrelektronik	0197887
+PSU-17XL0	3			Through terminal 4-wire 2.5mm² gy	280-833	Wago	0121593
+PSU-17XL2	4			Through terminal 4-wire 2.5mm² gy	280-833	Wago	0121593
+LAY-901M0	1			Housing PK 180x110x111mm (WxHxD) RAL7035 without knockouts	PK9515.000	Rittal	10363133