



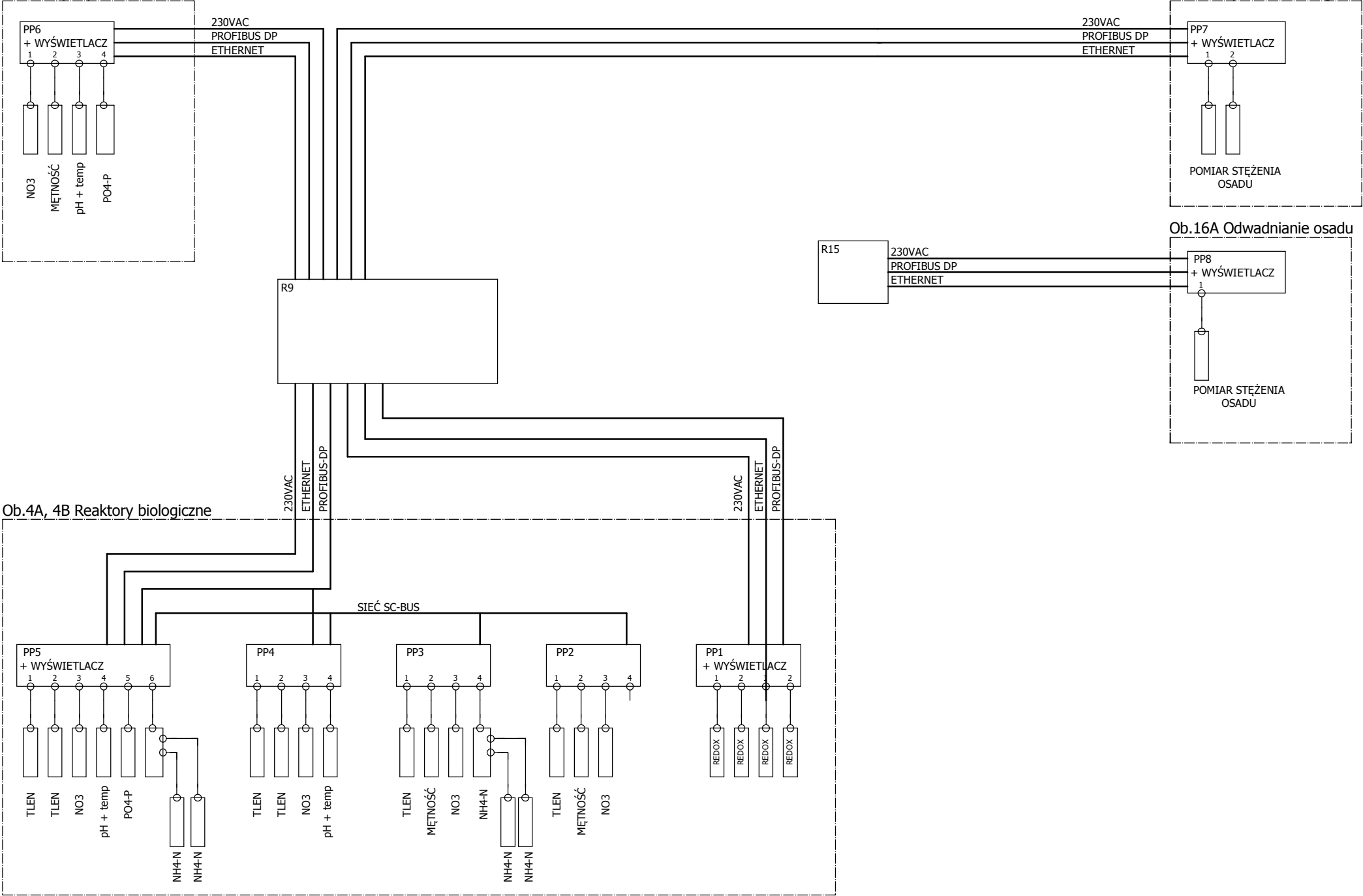
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TYTUŁ PROJEKTU	PROJEKT WYKONAWCZY
Numer projektu	P1280_R15
Klient końcowy	Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji Sp. z o.o.
Adres	ul. Tylna 9 98-100 Łask
Nazwa/nr obiektu	OB.15 Budynek technologiczny nr 2
Projektował	mgr inż. Marek Szamocki upr. LOD/1911/PWOWE/12
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Sprawdził	mgr inż. Jan Cichocki upr. 162/89/Wł
Ilość stron 125	
Modyfikowano	2015-12-16



Ob.7 Koryto pomiarowe



Spis treści

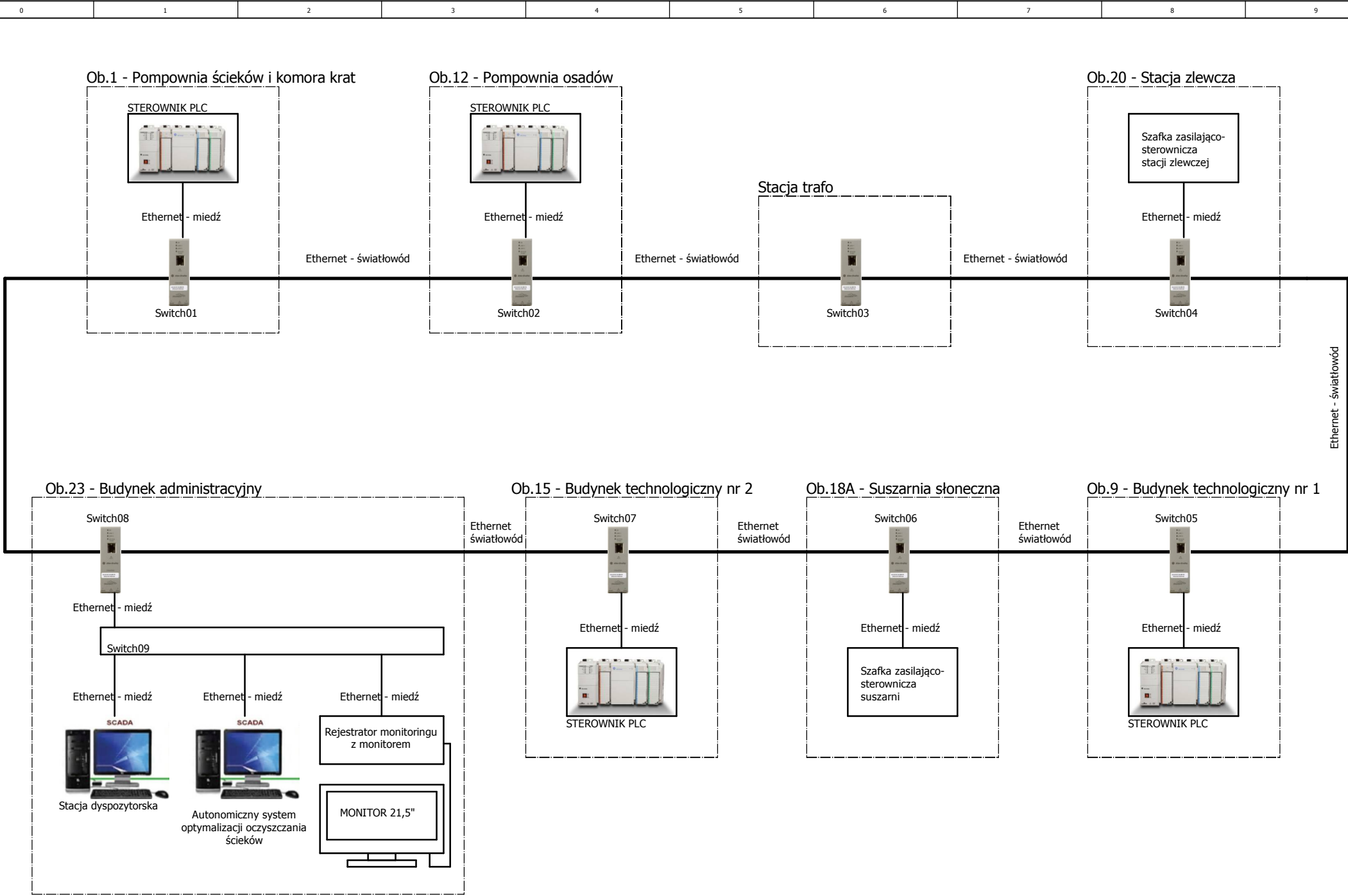
Strona	Opis stron	Dodatkowe pole strony	Data	Opracował	X
/1	Strona tytułowa / Okładka		2015-12-16		
/2	Struktura przetworników pomiarowych cz.1		2015-12-15		
/3	Struktura przetworników pomiarowych cz.2		2015-12-15		
/5	Spis treści : /1 - =R15+P2/401		2015-12-16		
/5.a	Spis treści : =R15+P2/402 - =R15+P2/1312		2015-12-16		
/5.b	Spis treści : =R15+P2/1321 - =R15+P3/2480		2015-12-16		
/5.c	Spis treści : =R15+P3/2490 - =R15+P3/4000		2015-12-16		
/7	Struktura sieci AKPIA		2015-12-10		
/10	Struktura sieci profibus		2015-12-16		
/11	Przegląd kabli : =+-150DP01W1 - =R15+P2-150N3.060W1.1		2015-12-16		
/11.a	Przegląd kabli : =R15+P2-161NA01W1.1 - =R15+P2-150W1.150W1.1		2015-12-16		
/11.b	Przegląd kabli : =R15+P2-150W2.030W1.1 - =R15+P3-QIR/15002W3.1		2015-12-16		
/11.c	Przegląd kabli : =R15+P3-QIR/15003W1.1 - =R15+P3-WK3		2015-12-16		
=R15+P1/20	Zasilanie 400V		2015-12-16		
=R15+P1/30	Zasilanie 400V		2015-12-15		
=R15+P1/50	Gniazda 400V		2015-12-15		
=R15+P1/51	Gniazda 230V		2015-12-16		
=R15+P1/60	Oświetlenie		2015-12-16		
=R15+P1/80	Widok pola P1		2015-12-16		
=R15+P1/86	Widok skrzynki sterowania lokalnego typ 1		2015-12-16		
=R15+P1/87	Widok skrzynki sterowania lokalnego typ 2		2015-12-16		
=R15+P2/90	Zasilanie gwarantowane		2015-12-16		
=R15+P2/95	Wyłącznik p.poż		2015-12-16		
=R15+P2/100	Zasilanie 24V DC		2015-12-16		
=R15+P2/101	Zasilanie 24V DC		2015-12-16		
=R15+P2/105	Zasilanie sterownicze 24V DC		2015-12-16		
=R15+P2/106	Zasilanie sterownicze 24V DC		2015-12-16		
=R15+P2/110	Zasilanie 230V AC		2015-12-16		
=R15+P2/301	Mieszadło dwuśmigłowe 140NSA01 Zasilanie		2015-12-16		
=R15+P2/302	Mieszadło dwuśmigłowe 140NSA01 Sterowanie		2015-12-16		
=R15+P2/303	Mieszadło dwuśmigłowe 140NSA01 PLC		2015-12-15		
=R15+P2/304	Elektrozawór 140GSA01 Zasilanie		2015-12-16		
=R15+P2/401	Macerator 150NSA01 Zasilanie		2015-12-16		

Strona	Opis stron	Dodatkowe pole strony	Data	Opracował	X
=R15+P2/402	Macerator 150NSA01 Sterowanie		2015-12-16		
=R15+P2/403	Macerator 150NSA01 PLC		2015-12-15		
=R15+P2/411	Macerator 150NSA02 Zasilanie		2015-12-16		
=R15+P2/412	Macerator 150NSA02 Sterowanie		2015-12-16		
=R15+P2/413	Macerator 150NSA02 PLC		2015-12-15		
=R15+P2/501	Pompa osadu cyrkulowanego 150NCA01 Zasilanie		2015-12-16		
=R15+P2/502	Pompa osadu cyrkulowanego 150NCA01 Sterowanie		2015-12-16		
=R15+P2/503	Pompa osadu cyrkulowanego 150NCA01 Sterowanie		2015-12-15		
=R15+P2/504	Pompa osadu cyrkulowanego 150NCA01 PLC		2015-12-15		
=R15+P2/511	Pompa osadu cyrkulowanego 150NCA02 Zasilanie		2015-12-16		
=R15+P2/512	Pompa osadu cyrkulowanego 150NCA02 Sterowanie		2015-12-16		
=R15+P2/513	Pompa osadu cyrkulowanego 150NCA02 Sterowanie		2015-12-15		
=R15+P2/514	Pompa osadu cyrkulowanego 150NCA02 PLC		2015-12-15		
=R15+P2/601	Szafa zasilająco-sterownicza instalacji odnawiania osadu Zasilanie		2015-12-16		
=R15+P2/611	Szafa zasilająco-sterownicza stacji dozowania polimeru Zasilanie		2015-12-15		
=R15+P2/701	Szafa zasilająco-sterownicza przenośników osadu Zasilanie		2015-12-15		
=R15+P2/801	Szafa zasilająco-sterownicza kotła Zasilanie		2015-12-16		
=R15+P2/811	Szafa zasilająco-sterownicza kogeneratora Zasilanie		2015-12-16		
=R15+P2/1001	Mieszadło pionowe 161NA01 Zasilanie		2015-12-16		
=R15+P2/1002	Mieszadło pionowe 161NA01 Sterowanie		2015-12-16		
=R15+P2/1003	Mieszadło pionowe 161NA01 PLC		2015-12-15		
=R15+P2/1011	Mieszadło pionowe 162NA01 Zasilanie		2015-12-16		
=R15+P2/1012	Mieszadło pionowe 162NA01 Sterowanie		2015-12-16		
=R15+P2/1013	Mieszadło pionowe 162NA01 PLC		2015-12-15		
=R15+P2/1101	Szafa zasilająco-sterownicza zbiornika biogazu Zasilanie		2015-12-16		
=R15+P2/1111	Szafa zasilająco-sterownicza węzła rozdzielczo-tłocznego biogazu Zasilanie		2015-12-16		
=R15+P2/1121	Szafa zasilająco-sterownicza odsiarczalni biogazu Zasilanie		2015-12-16		
=R15+P2/1131	Szafa zasilająco-sterownicza pochodni biogazu Zasilanie		2015-12-16		
=R15+P2/1201	Zasowy nożowe Zasilanie		2015-12-16		
=R15+P2/1301	Stacja odnawiania i higienizacji osadu - wentylacja Zasilanie		2015-12-16		
=R15+P2/1302	Stacja odnawiania i higienizacji osadu - wentylacja Zasilanie		2015-12-16		
=R15+P2/1311	Magazyn - wentylacja Zasilanie		2015-12-16		
=R15+P2/1312	Magazyn - wentylacja Zasilanie		2015-12-16		

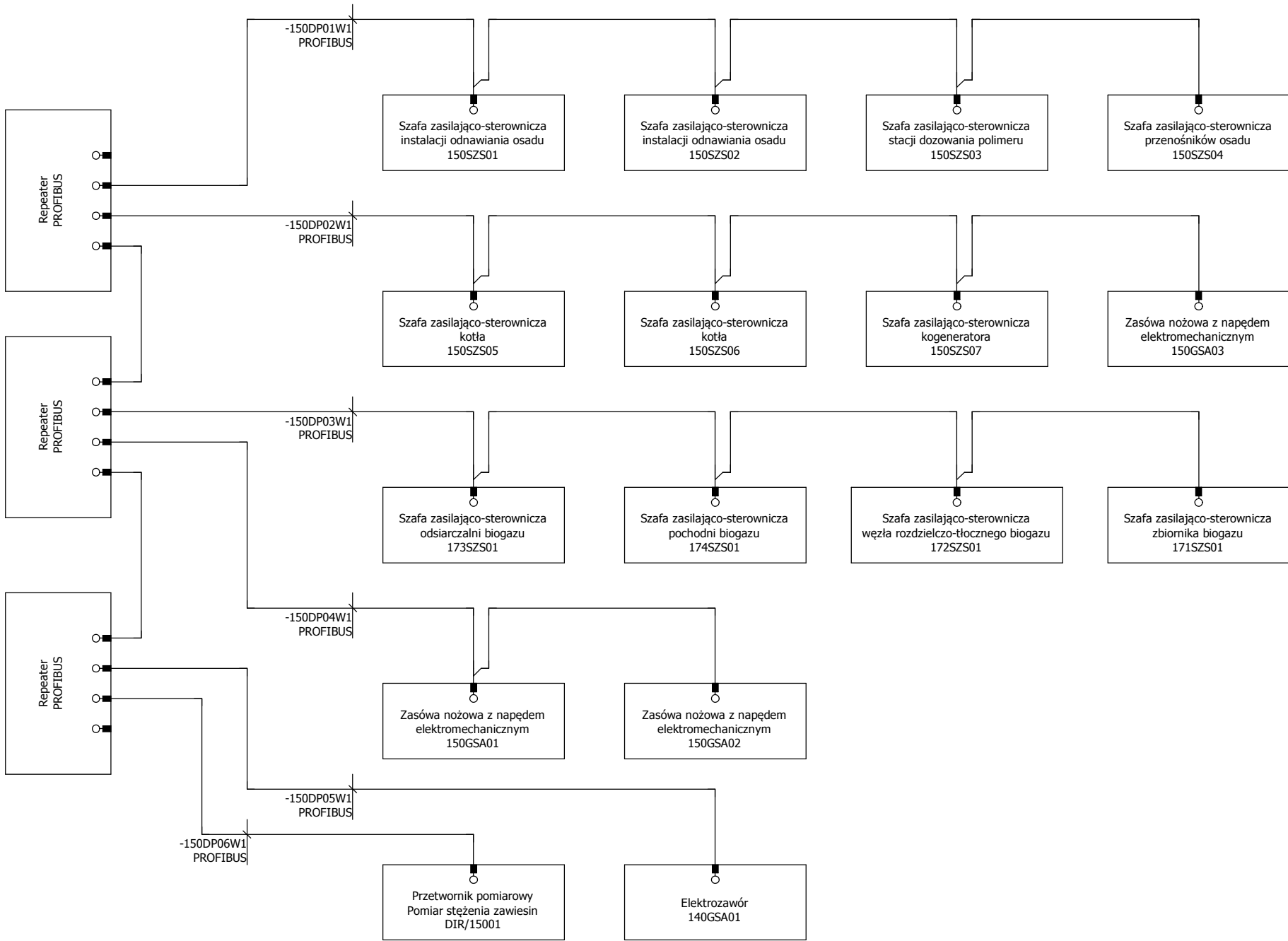
Spis treści

Strona	Opis stron	Dodatkowe pole strony	Data	Opracował	X
=R15+P2/1321	Warsztat - wentylacja Zasilanie		2015-12-16		
=R15+P2/1322	Warsztat - wentylacja Zasilanie		2015-12-16		
=R15+P2/1331	Stacja odnawiania i higienizacji osadu - wentylacja Zasilanie		2015-12-16		
=R15+P2/1332	Stacja odnawiania i higienizacji osadu - wentylacja Zasilanie		2015-12-16		
=R15+P2/1341	Pomieszczenie szaf sterowniczych - wentylacja Zasilanie		2015-12-16		
=R15+P2/2000	Wiodk szafy		2015-12-06		
=R15+P3/2001	Zasilanie		2015-12-15		
=R15+P3/2004	Sygnały szafa automatyki		2015-12-16		
=R15+P3/2100	Zasilanie sterownika		2015-12-15		
=R15+P3/2110	Zasilanie sterownika		2015-12-15		
=R15+P3/2150	Zasilanie urządzeń komunikacyjnych		2015-12-15		
=R15+P3/2200	Ethernet - Sterownik		2015-12-15		
=R15+P3/2201	Ethernet - Switch02		2015-12-15		
=R15+P3/2250	Profibus DP - Sterownik		2015-12-15		
=R15+P3/2251	Profibus DP - Repeater 2		2015-12-15		
=R15+P3/2252	Profibus DP - Repeater 3		2015-12-15		
=R15+P3/2310	Sieć Profibus DP		2015-12-15		
=R15+P3/2320	Sieć Profibus DP		2015-12-14		
=R15+P3/2321	Sieć Profibus DP		2015-12-15		
=R15+P3/2350	Pomiar ciśnienia PIA/14001 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2360	Pomiar poziomu LIA/14002 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2370	Sygnalizacja obecności piany LS/14001 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2380	Pomiar temperatury TIA/14001 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2390	Pomiar temperatury TIA/14002 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2400	Pomiar temperatury TIA/14003 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2410	Pomiar poziomu LIA/14001 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2420	Pomiar ciśnienia PIA/15001 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2430	Pomiar ciśnienia PIA/15002 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2440	Pomiar przepływu FIQRC/15001 - zasilanie i komunikacja		2015-12-16		
=R15+P3/2450	Pomiar przepływu FIQRC/15002 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2460	Pomiar pH i temperatury QIR/15001 i TIA/15001 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2470	Pomiar pH i temperatury QIR/15002 i TIA/15002 - zasilanie i komunikacja		2015-12-15		
=R15+P3/2480	Pomiar pH i temperatury QIR/15003 i TIA/15003 - zasilanie i komunikacja		2015-12-15		









Przegląd kabli

Nazwa kabla	Źródło	Cel	Typ kabla	Nr Katalogowy	Numer strony	Długość kabla (m)
-150DP01W1	=+	=+	PROFIBUS		/10	
-150DP02W1	=+	=+	PROFIBUS		/10	
-150DP03W1	=+	=+	PROFIBUS		/10	
-150DP04W1	=+	=+	PROFIBUS		/10	
-150DP05W1	=+	=+	PROFIBUS		/10	
-150DP06W1	=+	=+	PROFIBUS		/10	
=OB14+P3-PIA/14001W3.2	=OB14+PP	=OB14+PIA/14001	3x0,75 mm²		=R15+P3/2350	
=OB15+P3-PIA/15001W3.2	=OB15+PP	=OB15+PIA/15001	3x0,75 mm²		=R15+P3/2420	
=OB15+P3-PIA/15002W3.2	=OB15+PP	=OB15+PIA/15002	3x0,75 mm²		=R15+P3/2430	
=OB15+P3-PIA/15003W3.2	=OB15+PP	=OB15+PIA/15003	3x0,75 mm²		=R15+P3/2560	
=OB15+P3-PIA/15004W3.2	=OB15+PP	=OB15+PIA/15004	3x0,75 mm²		=R15+P3/2570	
=OB15+P3-PIA/15005W3.2	=OB15+PP	=OB15+PIA/15005	YKSLYekw 3x0,75 mm²		=R15+P3/2640	
=OB15+P3-PIA/15006W3.2	=OB15+PP	=OB15+PIA/15006	YKSLYekw 3x0,75 mm²		=R15+P3/2670	
=OB15+P3-QIR/15001W4.1	=OB15+QIR/15001+TIR/15001	=OB15+QIR/15001+TIR/15001	Kabel fabryczny		=R15+P3/2460	
=OB15+P3-QIR/15002W4.1	=OB15+QIR/15002+TIR/15002	=OB15+QIR/15002+TIR/15002	Kabel fabryczny		=R15+P3/2470	
=OB15+P3-QIR/15003W4.1	=OB15+DIR/12001	=OB15+QIR/15003+TIR/15003	Kabel fabryczny		=R15+P3/2480	
=OB15+P3-FIQRC/15001W3.2	=OB15+FIQRC/15001	=OB15+FIQRC/15001	YKSLYekw 4x0,25 mm²		=R15+P3/2440	
=OB15+P3-FIQRC/15001W3.3	=OB15+FIQRC/15001	=OB15+FIQRC/15001	YKSLYekw 3x0,75 mm²		=R15+P3/2440	
=OB15+P3-FIQRC/15002W3.2	=OB15+FIQRC/15002	=OB15+FIQRC/15002	YKSLYekw 4x0,25 mm²		=R15+P3/2450	
=OB15+P3-FIQRC/15002W3.3	=OB15+FIQRC/15002	=OB15+FIQRC/15002	YKSLYekw 3x0,75 mm²		=R15+P3/2450	
=OB15+P3-FIQRC/15003W3.2	=OB15+FIQRC/15003	=OB15+FIQRC/15003	YKSLYekw 4x0,25 mm²		=R15+P3/2590	
=OB15+P3-FIQRC/15003W3.3	=OB15+FIQRC/15003	=OB15+FIQRC/15003	YKSLYekw 3x0,75 mm²		=R15+P3/2590	
=OB15+P3-FIQRC/15004W3.2	=OB15+FIQRC/15004	=OB15+FIQRC/15004	YKSLYekw 4x0,25 mm²		=R15+P3/2600	
=OB15+P3-FIQRC/15004W3.3	=OB15+FIQRC/15004	=OB15+FIQRC/15004	YKSLYekw 3x0,75 mm²		=R15+P3/2600	
=OB15+P3-FIQRC/15005W3.2	=OB15+FIQRC/15005	=OB15+FIQRC/15005	YKSLYekw 4x0,25 mm²		=R15+P3/2610	
=OB15+P3-FIQRC/15005W3.3	=OB15+FIQRC/15005	=OB15+FIQRC/15005	YKSLYekw 3x0,75 mm²		=R15+P3/2610	
=OB15+P3-FIQRC/15006W3.2	=OB15+FIQRC/15006	=OB15+FIQRC/15006	YKSLYekw 4x0,25 mm²		=R15+P3/2620	
=OB15+P3-FIQRC/15006W3.3	=OB15+FIQRC/15006	=OB15+FIQRC/15006	YKSLYekw 3x0,75 mm²		=R15+P3/2620	
=OB12+P3-DIR/12001W4.1	=OB12+DIR/12001	=OB12+DIR/12001	Kabel fabryczny		=R15+P3/2580	
=R15+P1-150GN01W1	=R15+P1	=150+GN1	YDYżo 3x2,5 mm²		=R15+P1/51	
=R15+P1-150GN02W1	=R15+P1	=150+GN2	YDYżo 3x2,5 mm²		=R15+P1/51	
=R15+P1-150OSW04W1	=R15+P1	=R15+OSW04	YDYżo 3x1,5 mm²		=R15+P1/60	
=R15+P1-150OSW01W1	=R15+P1	=R15+OSW01	YDYżo 3x1,5 mm²		=R15+P1/60	
=R15+P1-150OSW02W1	=R15+P1	=R15+OSW02	YDYżo 3x1,5 mm²		=R15+P1/60	
=R15+P1-150OSW03W1	=R15+P1	=R15+OSW03	YDYżo 3x1,5 mm²		=R15+P1/60	
=R15+P1-150ZG01W1	=R15+P1	=150+ZG1	YDYżo 5x10 mm²		=R15+P1/50	
=R15+P1-150ZG02W1	=R15+P1	=150+ZG2	YDYżo 5x10 mm²		=R15+P1/50	
=R15+P1-150ZG03W1	=R15+P1	=150+ZG3	YDYżo 5x10 mm²		=R15+P1/50	
=R15+P1-150ZG04W1	=R15+P1	=150+ZG4	YDYżo 5x10 mm²		=R15+P1/50	
=R15+P2-140GSA01W1.1	=140+140GSA01	=R15+P2	YKYżo 4x2,5 mm²		=R15+P2/304	
=R15+P2-150GSA01W1.1	=150+150GSA01	=R15+P2	YKYżo 4x2,5 mm²		=R15+P2/1201	
=R15+P2-150GSA02W1.1	=150+150GSA02	=R15+P2	YKYżo 4x2,5 mm²		=R15+P2/1201	
=R15+P2-150GSA03W1.1	=150+150GSA03	=R15+P2	YKYżo 4x2,5 mm²		=R15+P2/1201	
=R15+P2-150N1.060W1.1	=R15+P2	=R15+P2	YKYżo 3x2.5 mm²		=R15+P2/1301	
=R15+P2-150N2.010W1.1	=R15+P2	=R15+P2	YKYżo 3x6 mm²		=R15+P2/1311	
=R15+P2-150N3.060W1.1	=R15+P2	=R15+P2	YKYżo 3x2.5 mm²		=R15+P2/1321	

Przegląd kabli

Nazwa kabla	Źródło	Cel	Typ kabla	Nr Katalogowy	Numer strony	Długość kabla (m)
=R15+P2-161NA01W1.1	=R15+P2	=161+161NA01SL	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/1001	
=R15+P2-161NA01W1.1.1	=161+161NA01SL	=161+161NA01	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/1001	
=R15+P2-161NA01W1.2	=161+161NA01	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/1001	
=R15+P2-161NA01W2.2	=161+161NA01SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/1001	
=R15+P2-162NA01W1.1	=R15+P2	=162+162NA01SL	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/1011	
=R15+P2-162NA01W1.1.1	=162+162NA01SL	=162+162NA01	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/1011	
=R15+P2-162NA01W1.2	=162+162NA01	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/1011	
=R15+P2-162NA01W2.2	=162+162NA01SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/1011	
=R15+P2-150NCA01W1.1	=R15+P2	=150+150NCA01SL	YKYekw(zo) 4x6 mm <sup>2</sup>		=R15+P2/501	
=R15+P2-150NCA01W1.1.1	=150+150NCA01SL	=150+150NCA01	YKYekw(zo) 4x10 mm <sup>2</sup>		=R15+P2/501	
=R15+P2-150NCA01W1.2	=150+150NCA01	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/501	
=R15+P2-150NCA01W2.2	=150+150NCA01SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/501	
=R15+P2-150NCA02W1.1	=R15+P2	=150+150NCA02SL	YKYekw(zo) 4x6 mm <sup>2</sup>		=R15+P2/511	
=R15+P2-150NCA02W1.1.1	=150+150NCA02SL	=150+150NCA02	YKYekw(zo) 4x6 mm <sup>2</sup>		=R15+P2/511	
=R15+P2-150NCA02W1.2	=150+150NCA02	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/511	
=R15+P2-150NCA02W2.2	=150+150NCA02SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/511	
=R15+P2-150NK2W1.1	=R15+P2	=R15+P2	YKYzo 3x6 mm <sup>2</sup>		=R15+P2/1341	
=R15+P2-150NK1W1.1	=R15+P2	=R15+P2	YKYzo 3x2.5 mm <sup>2</sup>		=R15+P2/1341	
=R15+P2-140NSA01W1.1	=R15+P2	=140+140NSA01SL	YKYzo 4x10 mm <sup>2</sup>		=R15+P2/301	
=R15+P2-140NSA01W1.1.1	=140+140NSA01SL	=140+140NSA01	YKYzo 4x10 mm <sup>2</sup>		=R15+P2/301	
=R15+P2-140NSA01W1.2	=140+140NSA01	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/301	
=R15+P2-140NSA01W2.2	=140+140NSA01SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/301	
=R15+P2-150NSA01W1.1	=R15+P2	=150+150NSA01SL	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/401	
=R15+P2-150NSA01W1.1.1	=150+150NSA01SL	=150+150NSA01	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/401	
=R15+P2-150NSA01W1.2	=150+150NSA01	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/401	
=R15+P2-150NSA01W2.2	=150+150NSA01SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/401	
=R15+P2-150NSA02W1.1	=R15+P2	=150+150NSA02SL	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/411	
=R15+P2-150NSA02W1.1.1	=150+150NSA02SL	=150+150NSA02	YKYzo 4x4 mm <sup>2</sup>		=R15+P2/411	
=R15+P2-150NSA02W1.2	=150+150NSA02	=R15+P2	YKSY 7x1 mm <sup>2</sup>		=R15+P2/411	
=R15+P2-150NSA02W2.2	=150+150NSA02SL	=R15+P2	YKSY 16x1 mm <sup>2</sup>		=R15+P2/411	
=R15+P2-120S01W1	=R15+P2	=120+120S01	HDGs 4x1,5 mm <sup>2</sup>		=R15+P2/95	
=R15+P2-150SZS01W1.1	=150+150SZS01	=R15+P2	YKYzo 5x25 mm <sup>2</sup>		=R15+P2/601	
=R15+P2-171SZS01W1.1	=171+171SZS01	=R15+P2	YKYzo 5x6 mm <sup>2</sup>		=R15+P2/1101	
=R15+P2-172SZS01W1.1	=172+172SZS01	=R15+P2	YKYzo 5x10 mm <sup>2</sup>		=R15+P2/1111	
=R15+P2-173SZS01W1.1	=173+173SZS01	=R15+P2	YKYzo 5x10 mm <sup>2</sup>		=R15+P2/1121	
=R15+P2-174SZS01W1.1	=174+174SZS01	=R15+P2	YKYzo 5x6 mm <sup>2</sup>		=R15+P2/1131	
=R15+P2-150SZS02W1.1	=150+150SZS02	=R15+P2	YKYzo 5x25 mm <sup>2</sup>		=R15+P2/601	
=R15+P2-150SZS03W1.1	=150+150SZS03	=R15+P2	YKYzo 5x2.5 mm <sup>2</sup>		=R15+P2/611	
=R15+P2-150SZS04W1.1	=150+150SZS04	=R15+P2	YKYzo 5x25 mm <sup>2</sup>		=R15+P2/701	
=R15+P2-150SZS05W1.1	=150+150SZS05	=R15+P2	YKYzo 5x4 mm <sup>2</sup>		=R15+P2/801	
=R15+P2-150SZS06W1.1	=150+150SZS06	=R15+P2	YKYzo 5x4 mm <sup>2</sup>		=R15+P2/801	
=R15+P2-150SZS07W1.1	=150+150SZS07	=R15+P2	YKYzo 5x4 mm <sup>2</sup>		=R15+P2/811	
=R15+P2-150W4.150W1.1	=R15+P2	=R15+P2	YKYzo 4x1.5 mm <sup>2</sup>		=R15+P2/1331	
=R15+P2-150W1.060W1.1	=R15+P2	=R15+P2	YKYzo 4x1.5 mm <sup>2</sup>		=R15+P2/1301	
=R15+P2-150W1.100W1.1	=R15+P2	=R15+P2	YKY 3x1.5 mm <sup>2</sup>		=R15+P2/1302	
=R15+P2-150W1.150W1.1	=R15+P2	=R15+P2	YKYzo 4x1.5 mm <sup>2</sup>		=R15+P2/1301	

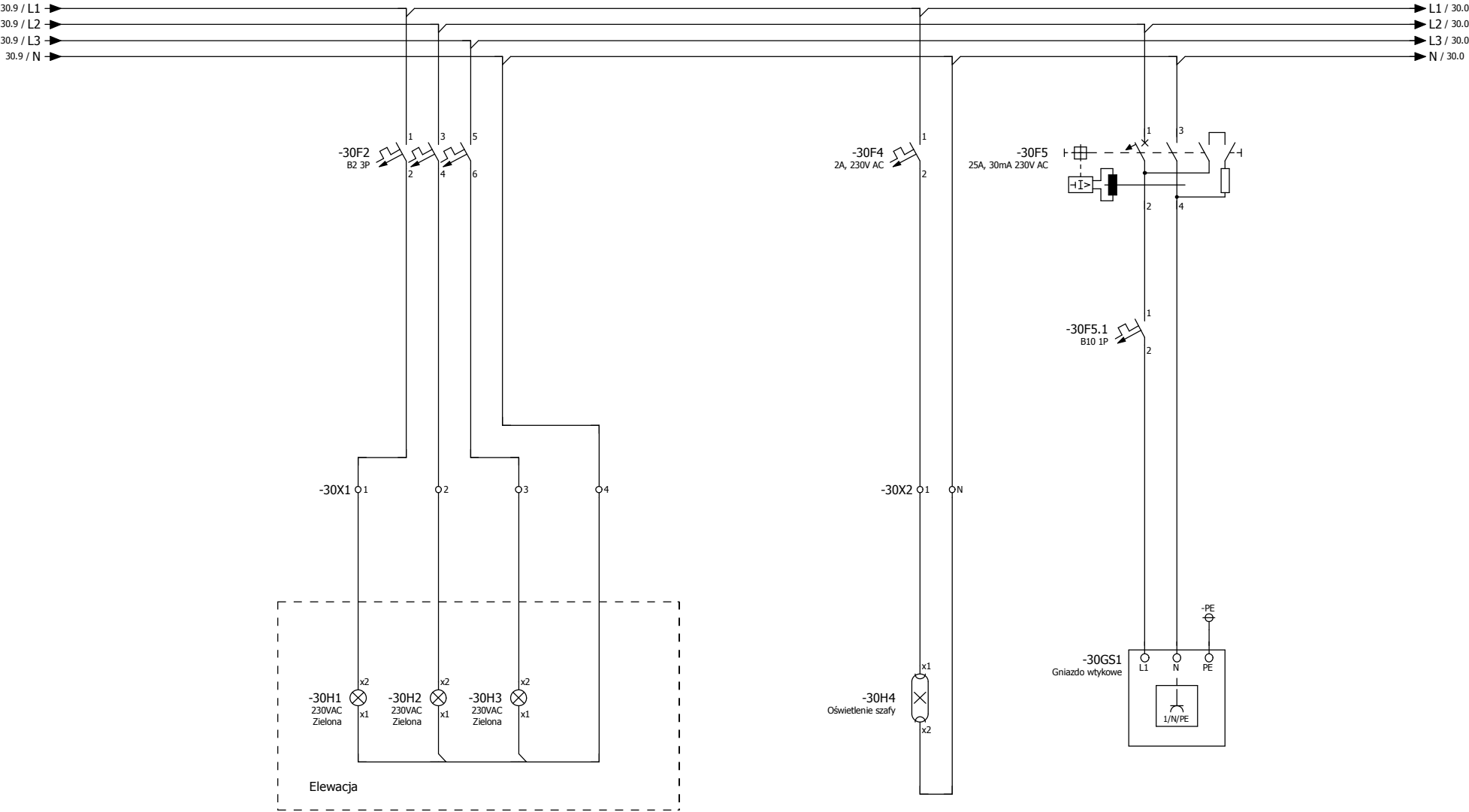
Przegląd kabli

Nazwa kabla	Źródło	Cel	Typ kabla	Nr Katalogowy	Numer strony	Długość kabla (m)
=R15+P2-150W2.030W1.1	=R15+P2	=R15+P2	YKY 3x1.5 mm²		=R15+P2/1312	
=R15+P2-150W3.031W1.1	=R15+P2	=R15+P2	YKY 3x1.5 mm²		=R15+P2/1322	
=R15+P2-150W3.032W1.1	=R15+P2	=R15+P2	YKY 3x1.5 mm²		=R15+P2/1322	
=R15+P2-150W4.060W1.1	=R15+P2	=R15+P2	YKY2o 4x1.5 mm²		=R15+P2/1331	
=R15+P2-150W4.100W1.1	=R15+P2	=R15+P2	YKY 3x1.5 mm²		=R15+P2/1332	
=R15+P3-150DIR01WP1	=OB15+DIR/12001	=R15+P3	1x2x0,64 mm²		=R15+P3/2321	
=R15+P3-DIR/12001W1.1	=R15+P3	=OB12+DIR/12001	YKY2o 3x1,5 mm²		=R15+P3/2580	
=R15+P3-DIR/12001W2	=OB15+DIR/12001	=R15+P3	Kabel FTP 4x2x0,5x		=R15+P3/2201	
=R15+P3-FIQR/15003W1.1	=R15+P3	=OB15+FIQR/15003	YKY2o 3x1,5 mm²		=R15+P3/2590	
=R15+P3-140GSA01WP1	=OB14+P3	=R15+P3	1x2x0,64 mm²		=R15+P3/2321	
=R15+P3-150GSA01WP2	=OB15+P3	=R15+P3	1x2x0,64 mm²		=R15+P3/2320	
=R15+P3-LIA/14001W3.1	=R15+P3	=OB14+LIA/14001	YKSLYekw 3x0,75 mm²		=R15+P3/2410	
=R15+P3-LIA/14002W3.1	=R15+P3	=OB14+LIA/14002	YKSLYekw 3x0,75 mm²		=R15+P3/2360	
=R15+P3-LIA/16101W3.1	=R15+P3	=OB16+LIA/16101	YKSLYekw 3x0,75 mm²		=R15+P3/2690	
=R15+P3-LIA/16102W3.1	=R15+P3	=OB16+LIA/16102	YKSLYekw 3x0,75 mm²		=R15+P3/2700	
=R15+P3-LS/14001W1.1	=R15+P3	=OB9+LS/14001	YKY2o 3x1,5 mm²		=R15+P3/2370	
=R15+P3-LS/14001W2.1	=R15+P3	=OB9+LS/14001	YKSY 3x0,75 mm²		=R15+P3/2370	
=R15+P3-PIA/14001W3.1	=OB14+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2350	
=R15+P3-PIA/15001W3.1	=OB15+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2420	
=R15+P3-PIA/15002W3.1	=OB15+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2430	
=R15+P3-PIA/15003W3.1	=OB15+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2560	
=R15+P3-PIA/15004W3.1	=OB15+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2570	
=R15+P3-PIA/15005W3.1	=OB15+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2640	
=R15+P3-PIA/15006W3.1	=OB15+PP	=R15+P3	YKSLYekw 3x0,75 mm²		=R15+P3/2670	
=R15+P3-QE/15001W1.1	=R15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2550	
=R15+P3-QE/15001W1.2	=OB15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2550	
=R15+P3-QE/15001W2.1	=R15+P3	=OB15+P3	YKSY 7x1 mm²		=R15+P3/2550	
=R15+P3-QE/15001W2.2	=OB15+P3	=OB02+P3	YDY 5x0,5 mm²		=R15+P3/2550	
=R15+P3-QE/15001W3.1	=OB15+P3	=OB02+P3	YDY 4x1 mm²		=R15+P3/2550	
=R15+P3-QE/15002W3.1	=OB15+P3	=OB02+P3	YDY 4x1 mm²		=R15+P3/2550	
=R15+P3-QE/15003W1.1	=R15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2630	
=R15+P3-QE/15003W1.2	=OB15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2630	
=R15+P3-QE/15003W2.1	=R15+P3	=OB15+P3	YKSY 7x1 mm²		=R15+P3/2630	
=R15+P3-QE/15004W3.1	=OB15+P3	=OB15+P3	YDY 4x1 mm²		=R15+P3/2630	
=R15+P3-QE/15005W1.1	=R15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2650	
=R15+P3-QE/15005W1.2	=OB15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2650	
=R15+P3-QE/15005W2.1	=R15+P3	=OB15+P3	YKSY 7x1 mm²		=R15+P3/2650	
=R15+P3-QE/15006W1.1	=R15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2680	
=R15+P3-QE/15006W1.2	=OB15+P3	=OB15+P3	YDY 3x1,5 mm²		=R15+P3/2680	
=R15+P3-QE/15006W2.1	=R15+P3	=OB15+P3	YKSY 7x1 mm²		=R15+P3/2680	
=R15+P3-QE/15006W2.2	=OB15+P3	=OB9+P3	YDY 5x0,5 mm²		=R15+P3/2680	
=R15+P3-QE/15006W3.1	=OB15+P3	=OB9+P3	YDY 4x1 mm²		=R15+P3/2680	
=R15+P3-QIR/15001W1.1	=R15+P3	=OB15+QIR/15001+TIR/15001	YKY2o 3x1,5 mm²		=R15+P3/2460	
=R15+P3-QIR/15001W3.1	=R15+P3	=OB15+QIR/15001+TIR/15001	YKSLYekw 3x0,75 mm²		=R15+P3/2460	
=R15+P3-QIR/15002W1.1	=R15+P3	=OB15+QIR/15002+TIR/15002	YKY2o 3x1,5 mm²		=R15+P3/2470	
=R15+P3-QIR/15002W3.1	=R15+P3	=OB15+QIR/15002+TIR/15002	YKSLYekw 3x0,75 mm²		=R15+P3/2470	





Szyny miedziane Cu 30x10 400V 50Hz



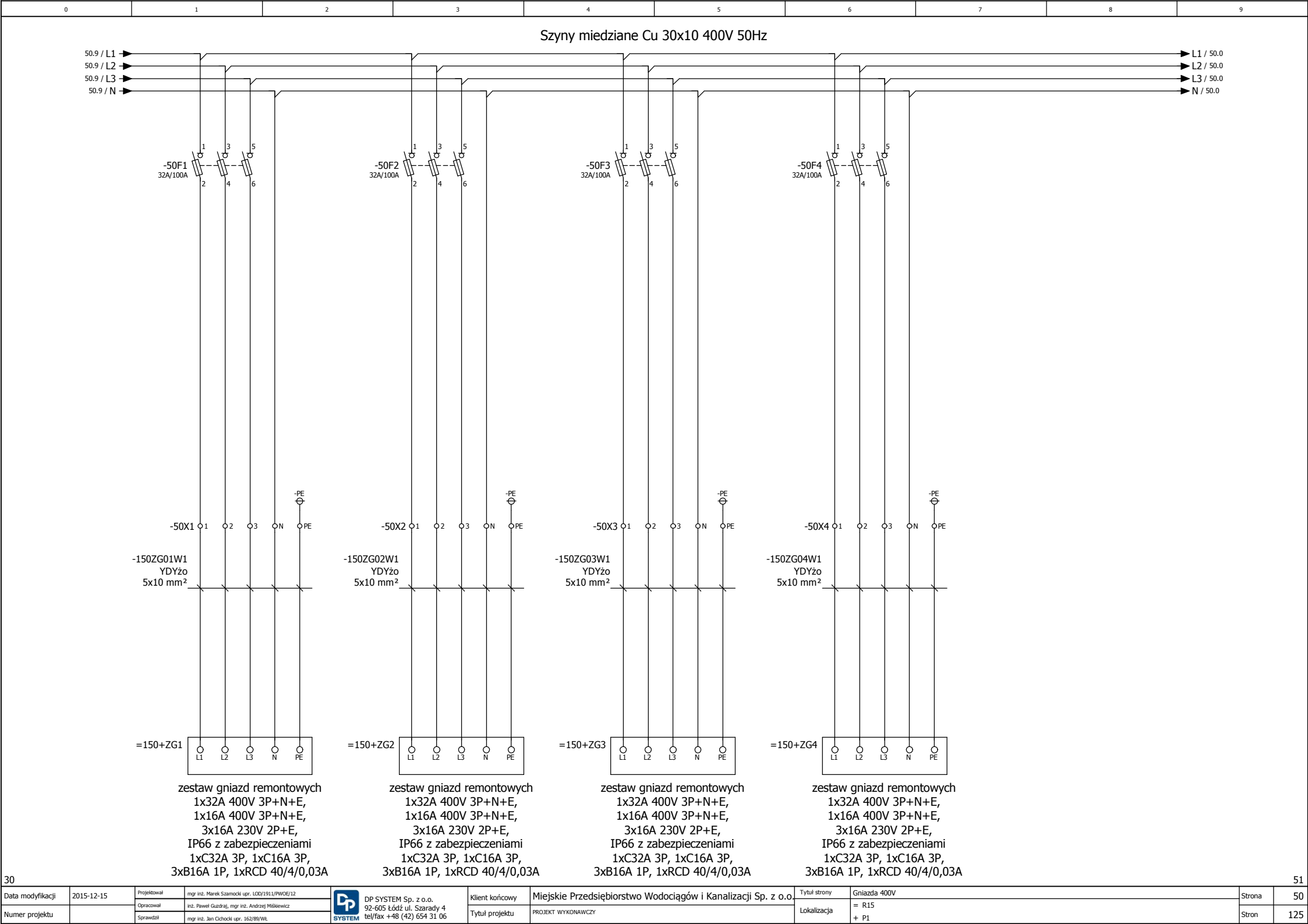
Ochrona  
przepięciowa

Sygnalizacja  
obecności faz

Sygnalizacja  
zaniku faz  
do systemu

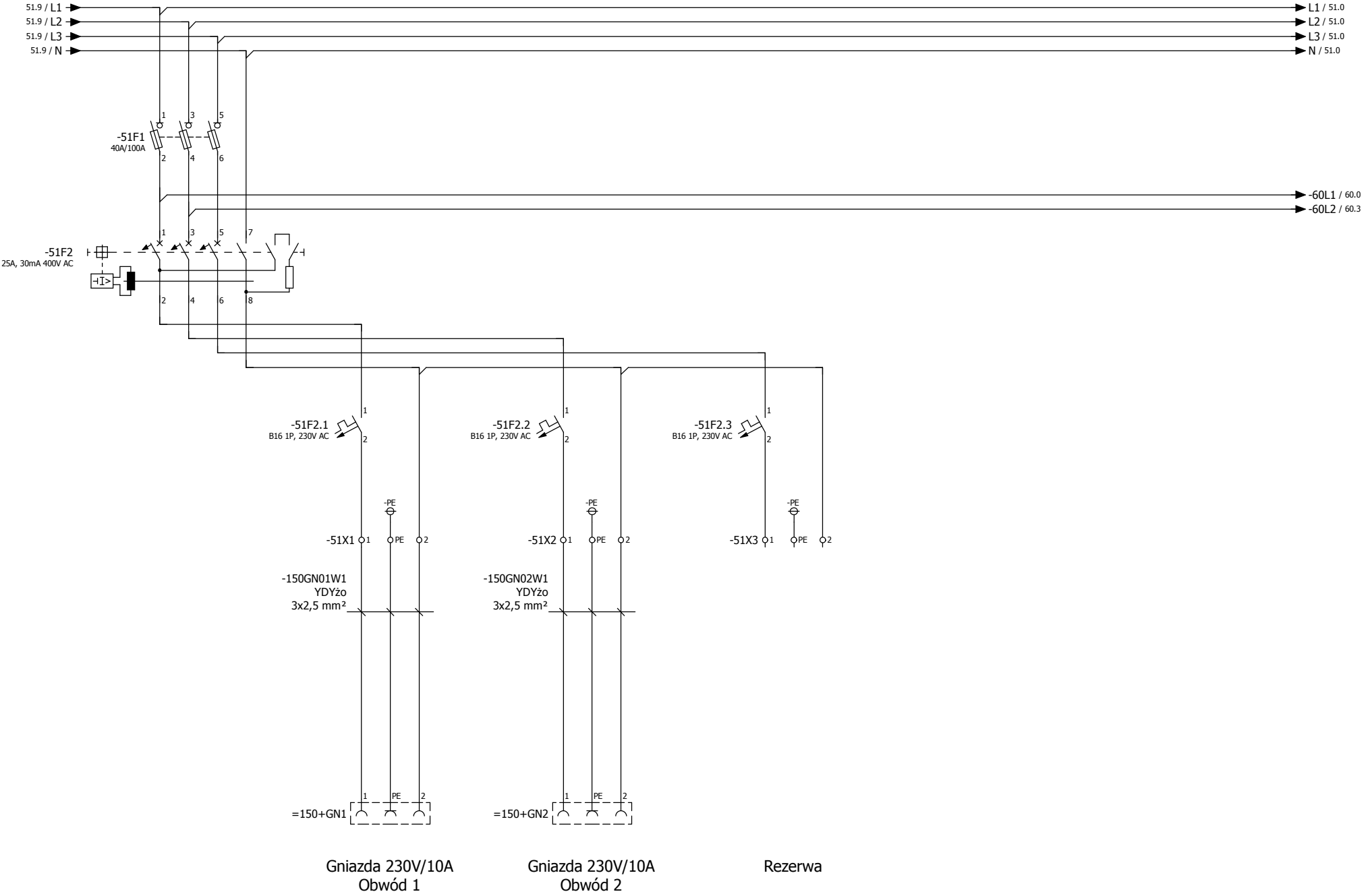
Oświetlenie  
rozdzielnic

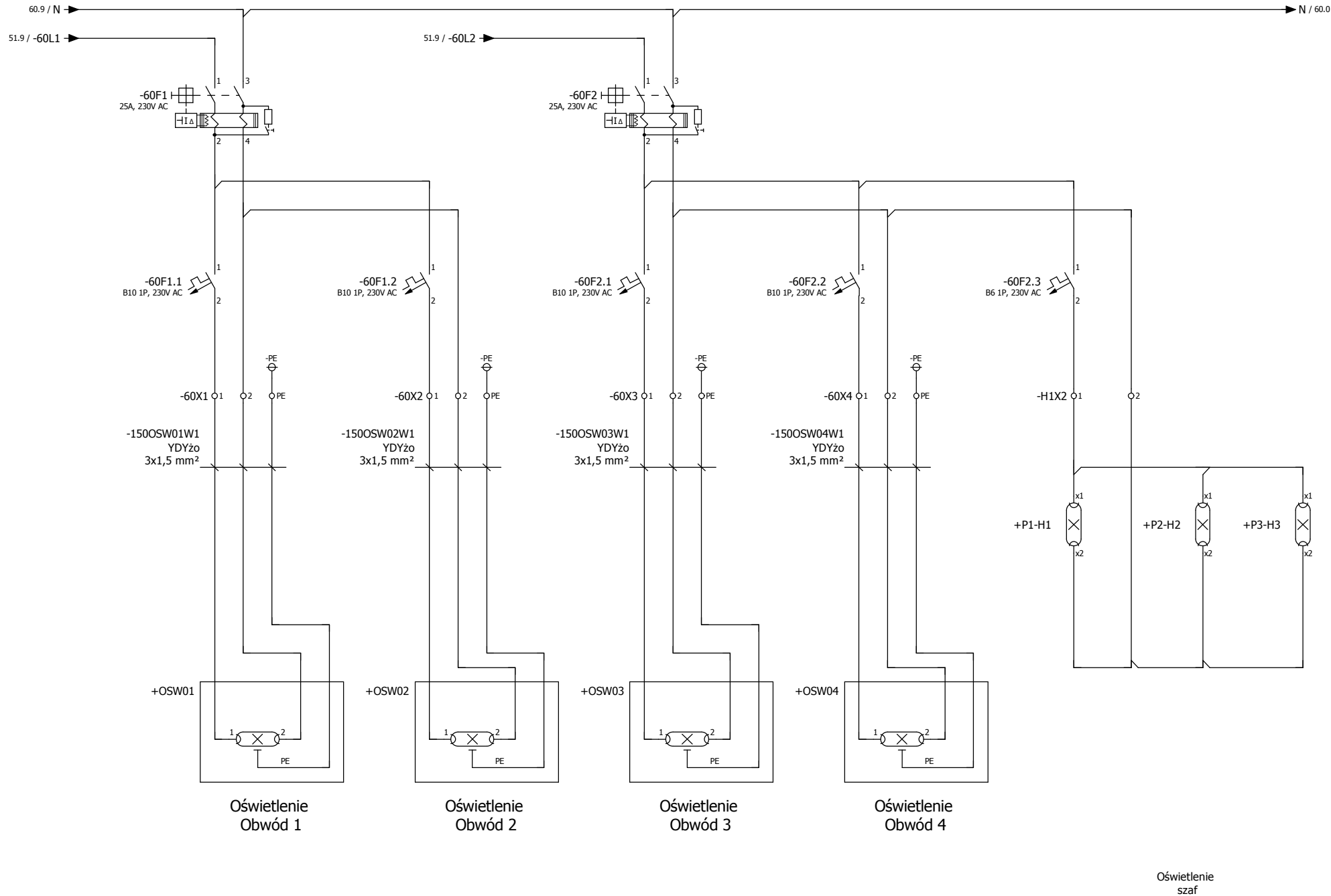
Gniazdo  
serwisowe

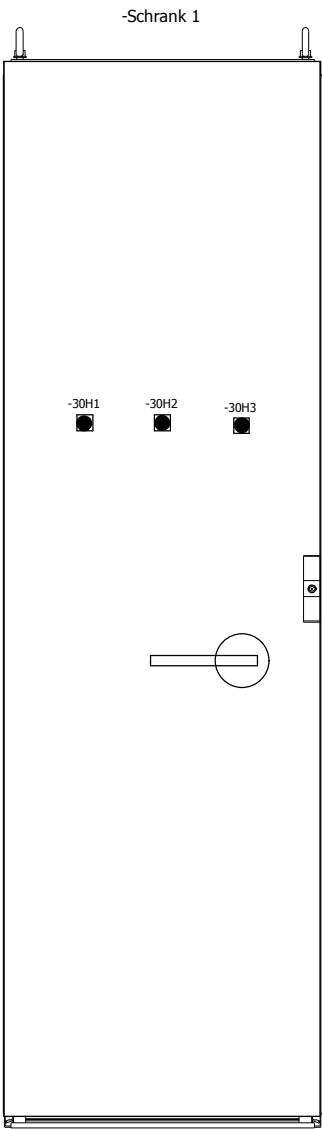
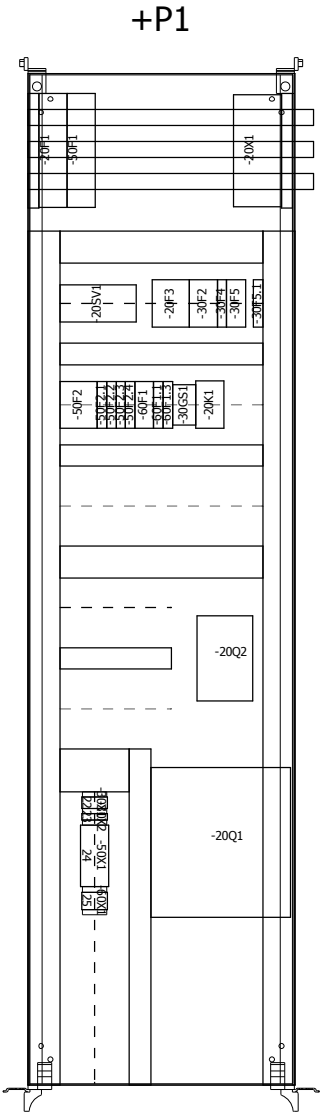




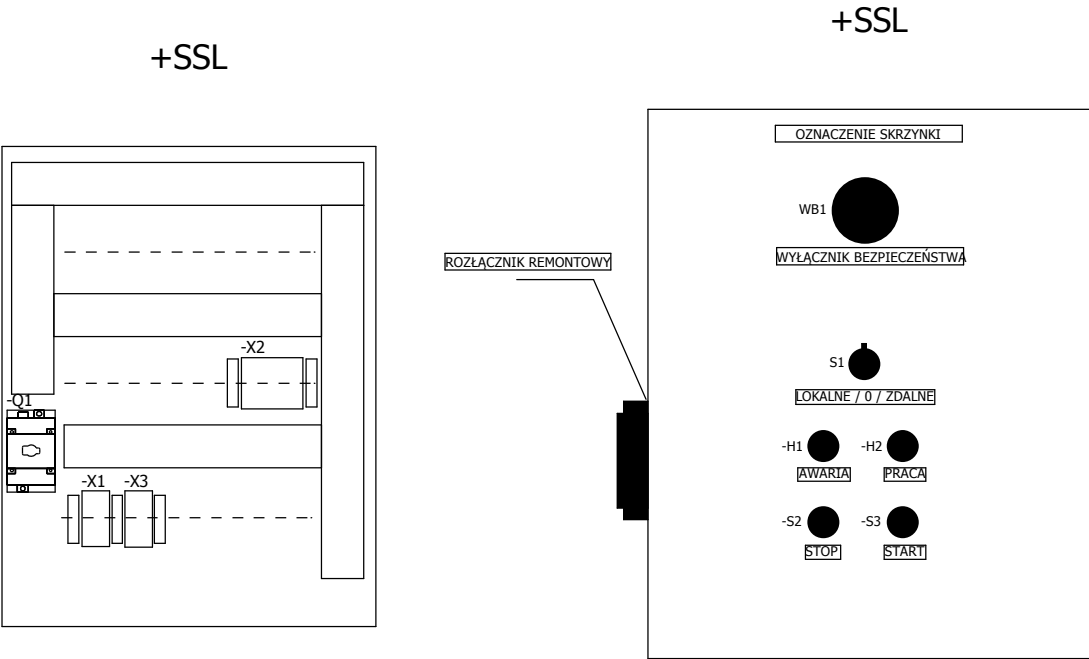
Szyny miedziane Cu 30x10 400V 50Hz



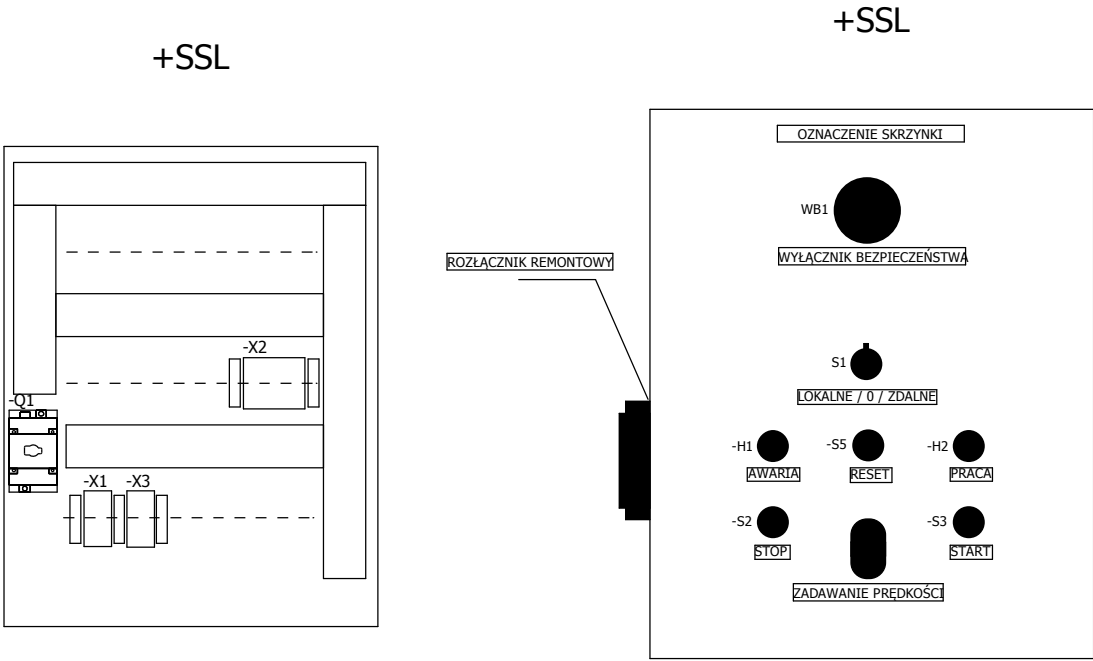


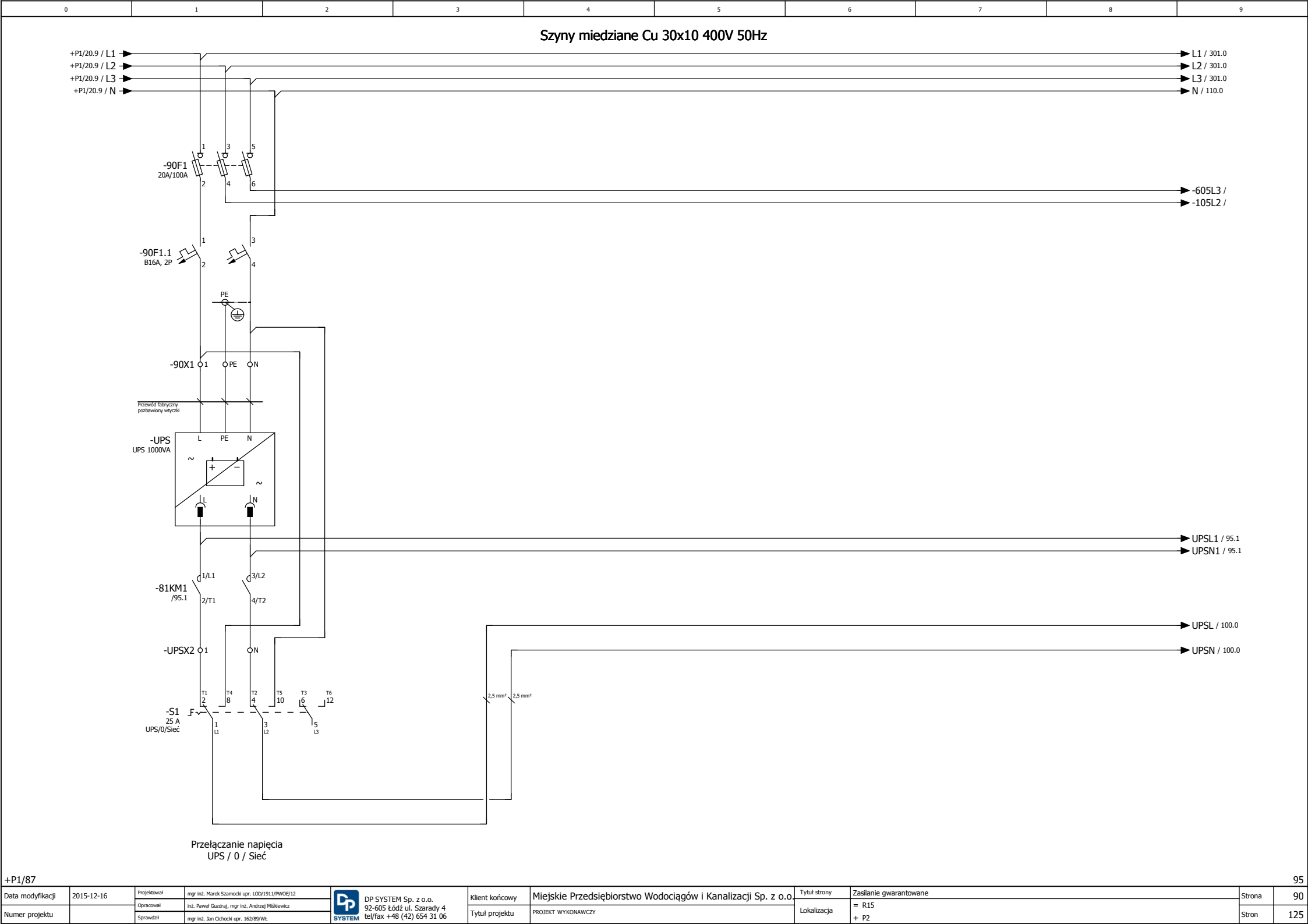


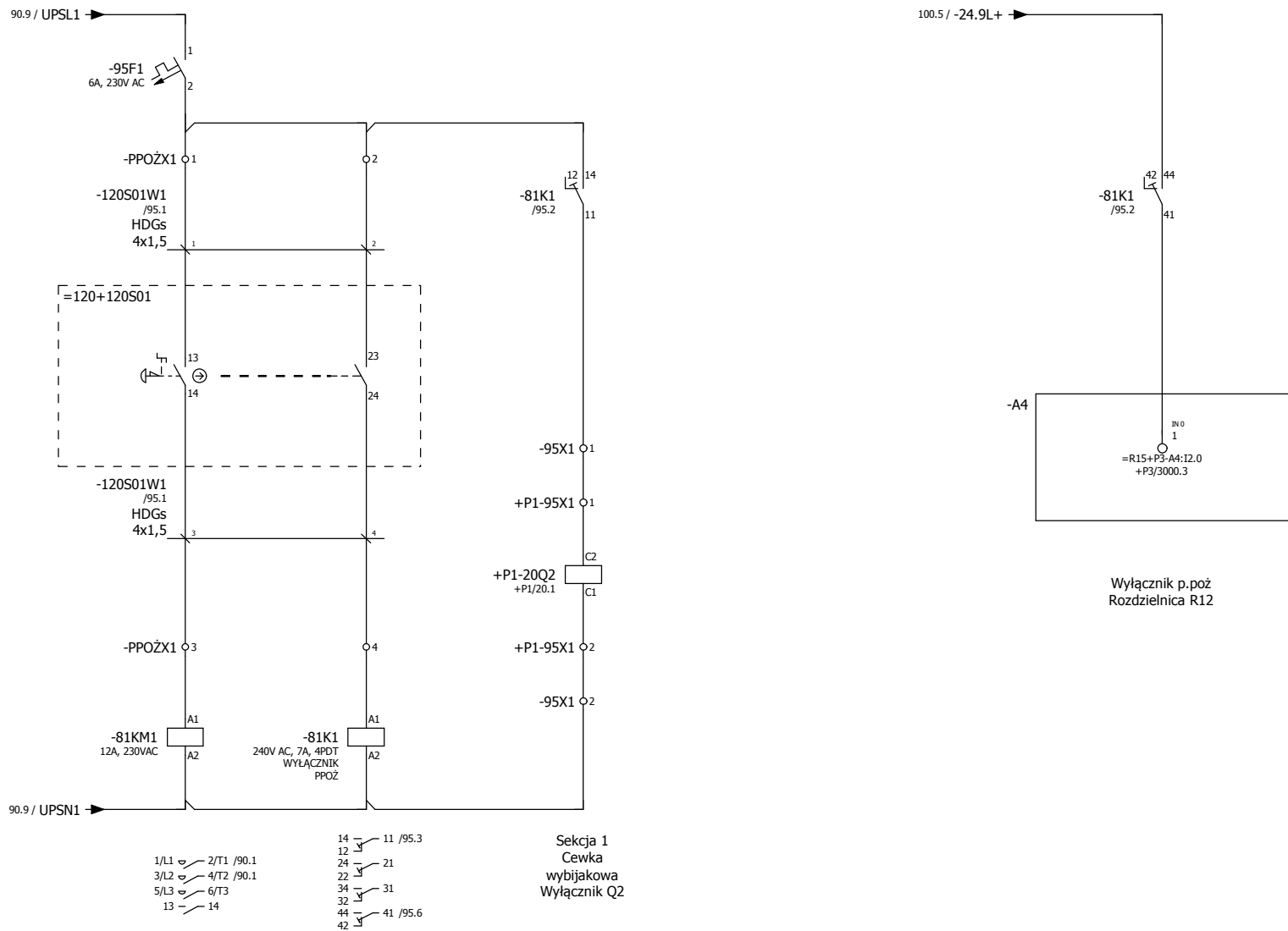
SKRZYNKI STEROWANIA LOKALNEGO DO NAPĘDÓW O ROZRUCHU BEZPOŚREDNIM

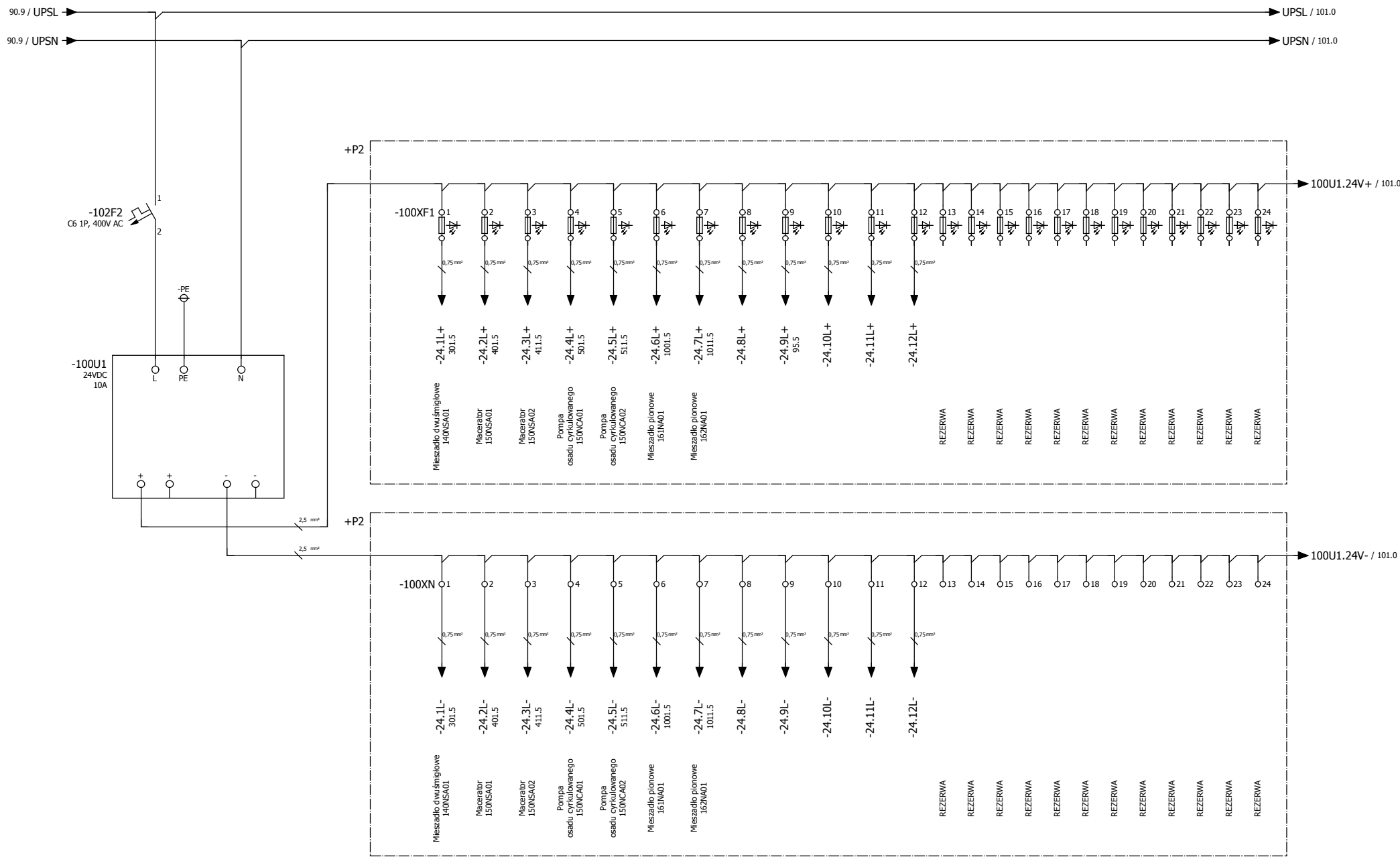


SKRZYNKI STEROWANIA LOKALNEGO DO NAPĘDÓW O ROZRUCHU FAŁOWNIKOWYM

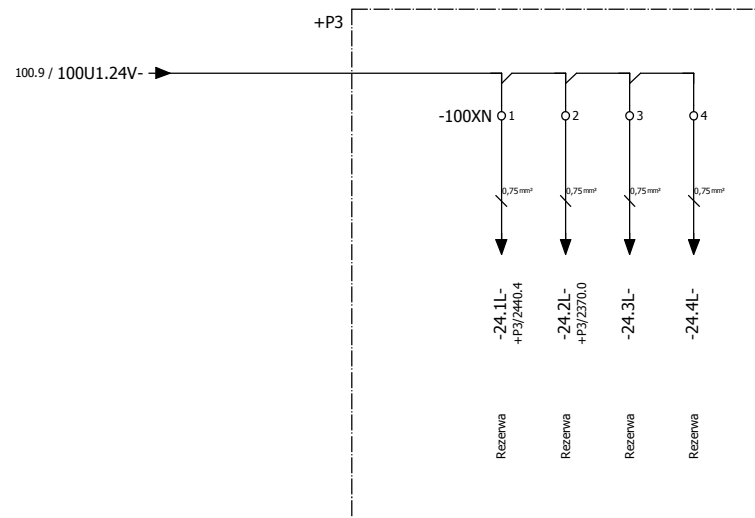





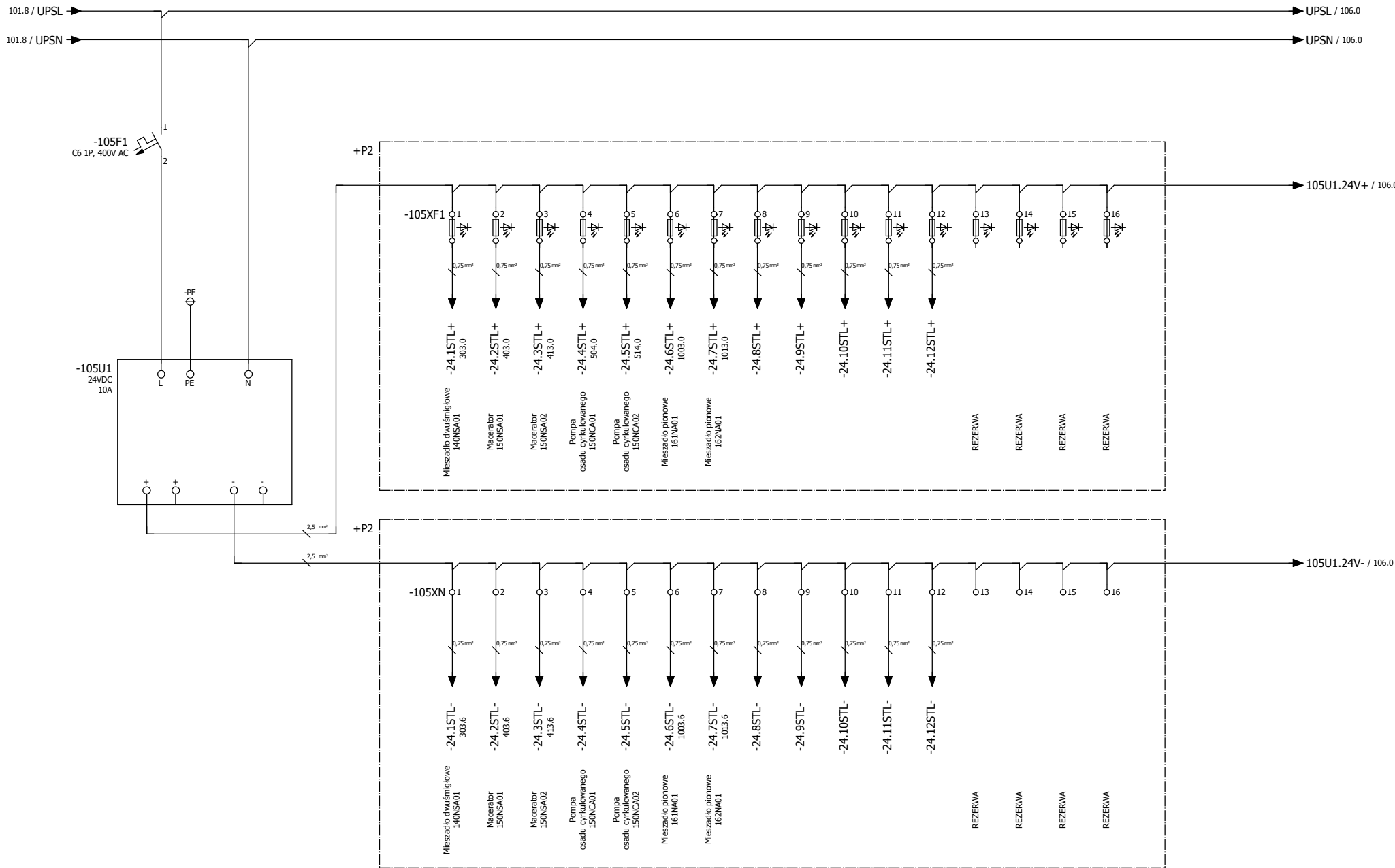


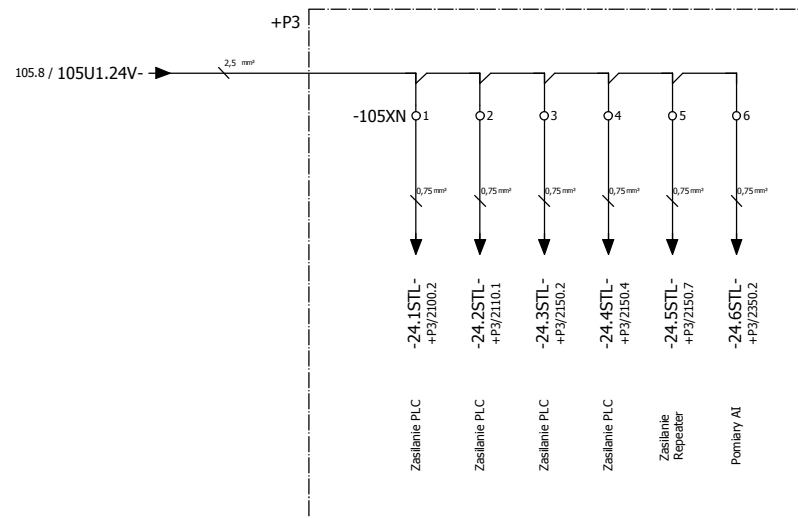






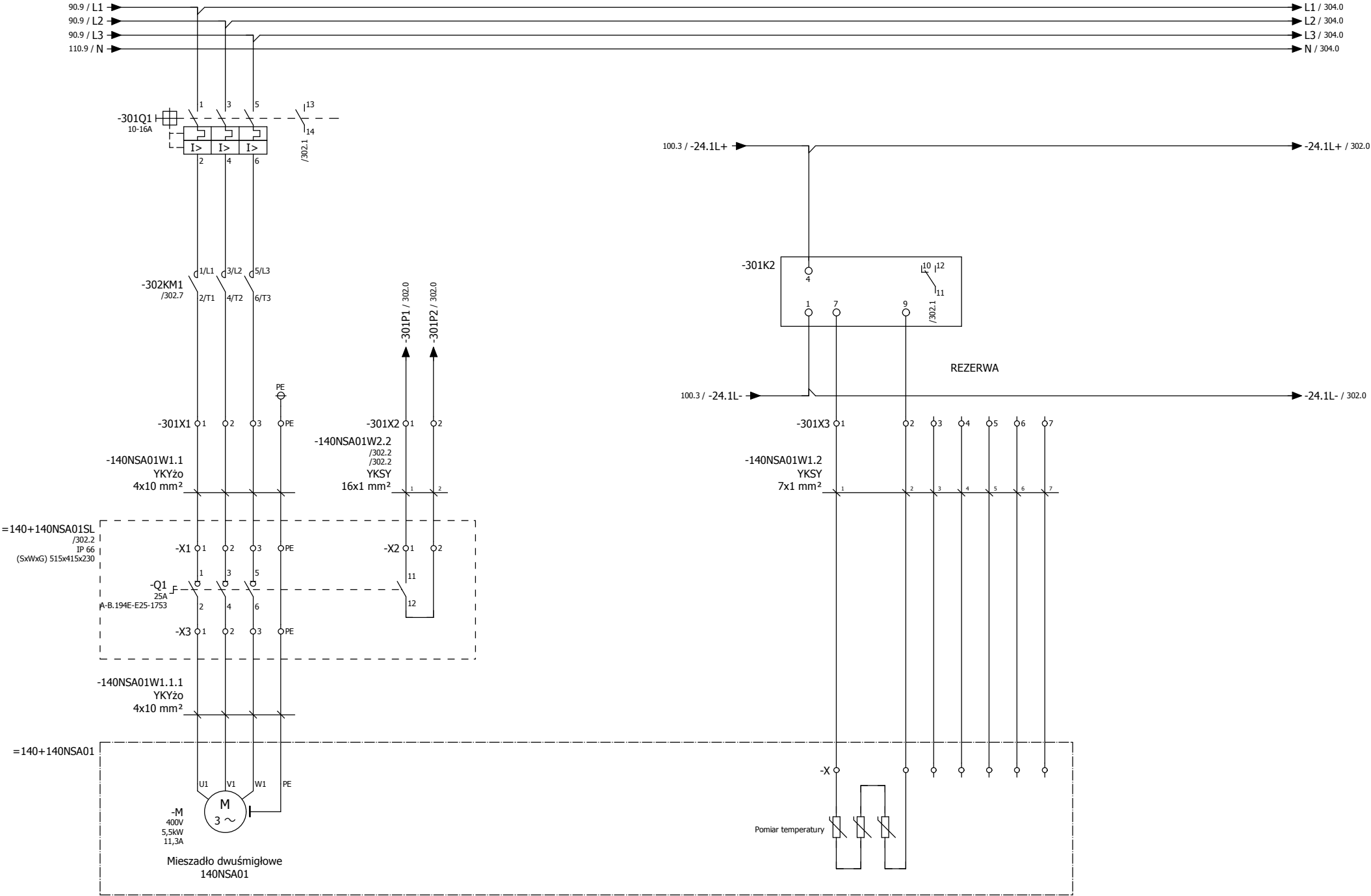
Data modyfikacji	2015-12-16	Projektował	mgr inż. Marek Szamocki upr. LODY191/PWOE12	 DP SYSTEM Sp. z o.o. 92-605 Łódź ul. Szarydy 4 tel/fax +48 (42) 654 31 06	Klient końcowy	Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji Sp. z o.o.	Tytuł strony	Zasilanie 24V DC	Strona	101
Numer projektu		Opracował	inż. Paweł Guzdraj, mgr inż. Andrzej Miśkiewicz		Tytuł projektu	PROJEKT WYKONAWCZY	Lokalizacja	= R15 + P2	Stron	125
		Sprawił	mgr inż. Jan Chichocki upr. 162/89/WŁ							



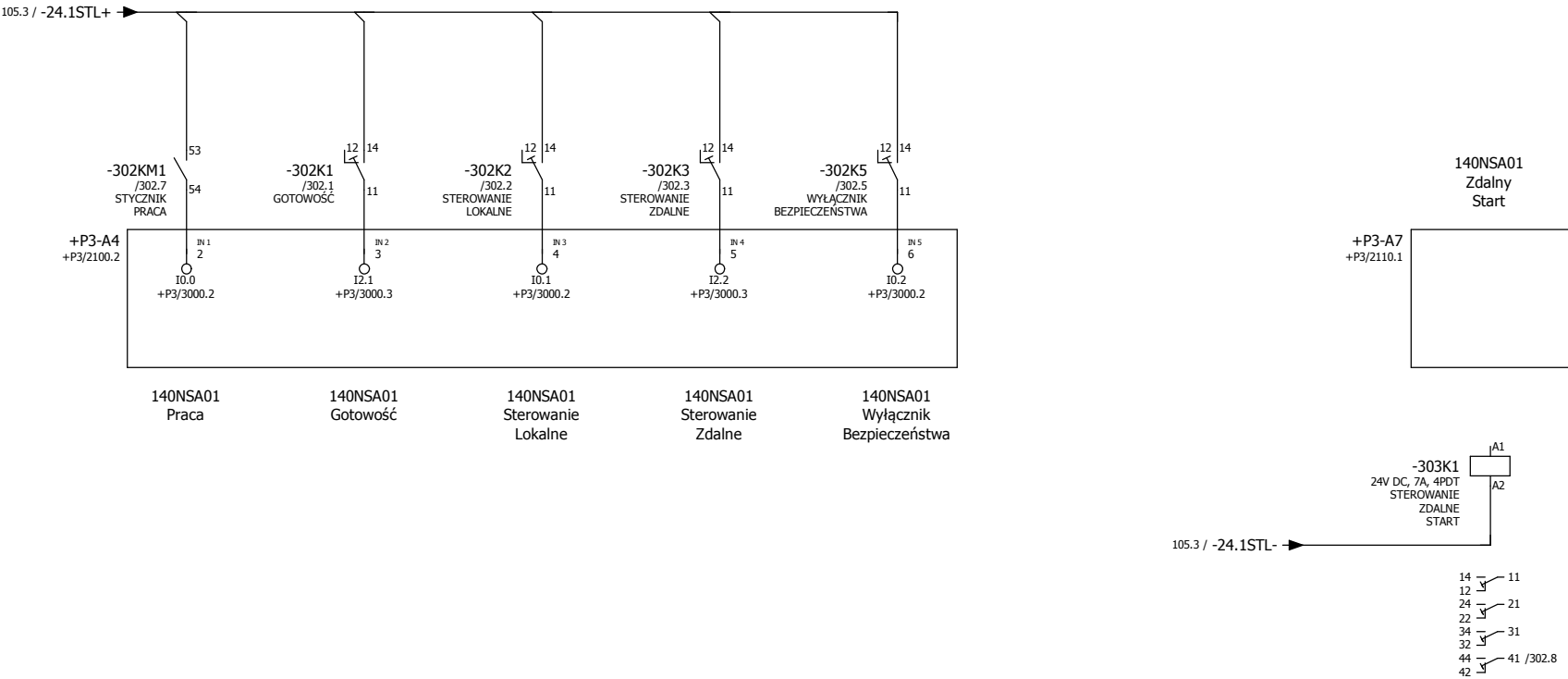




Szyny miedziane Cu 30x10 400V 50Hz



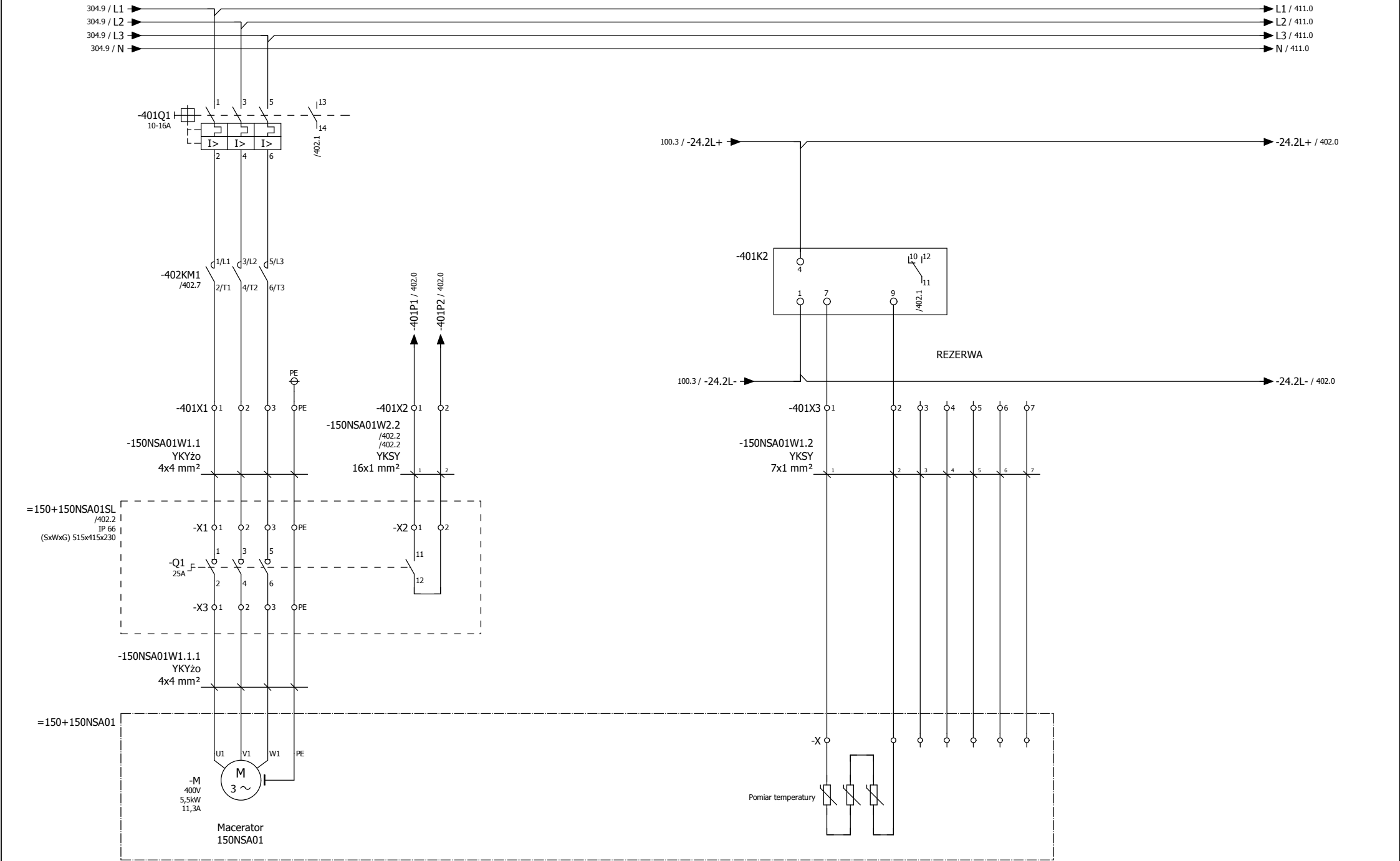




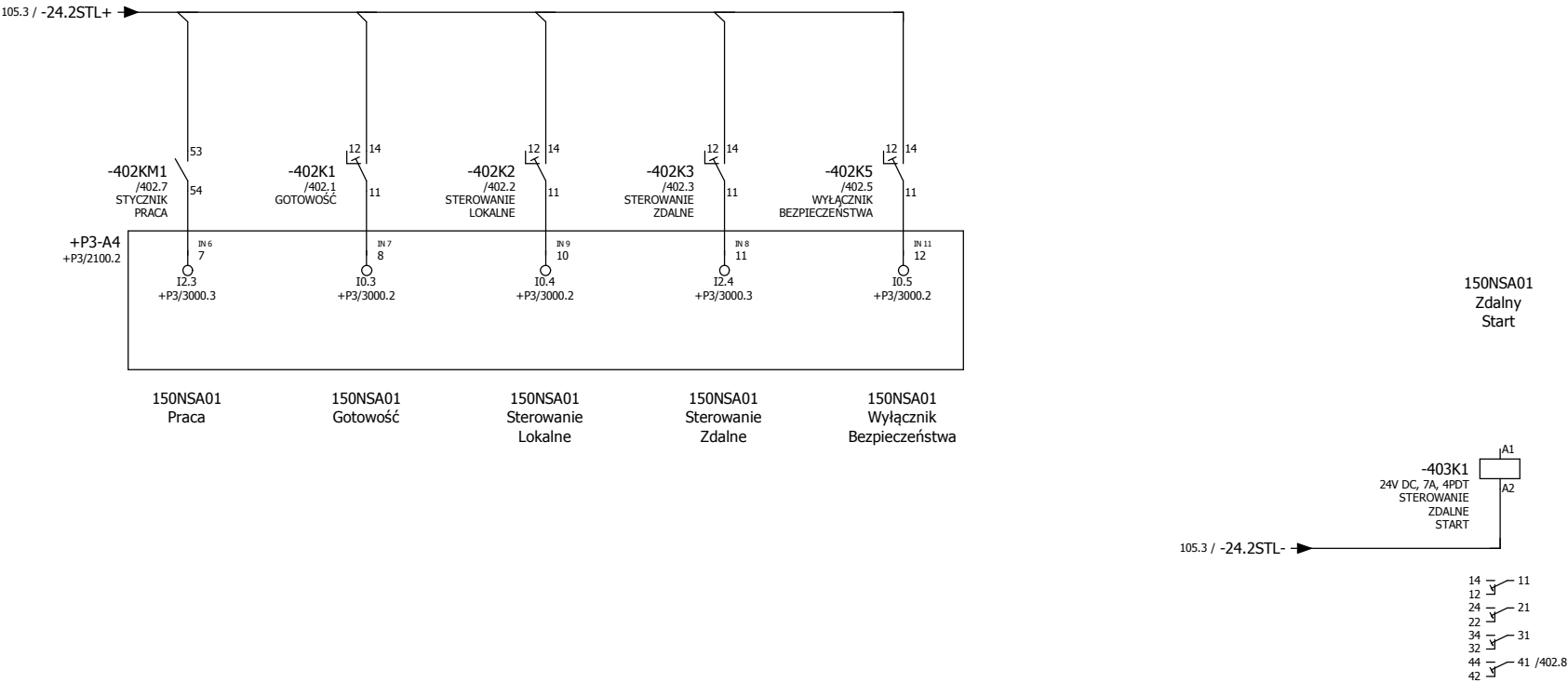


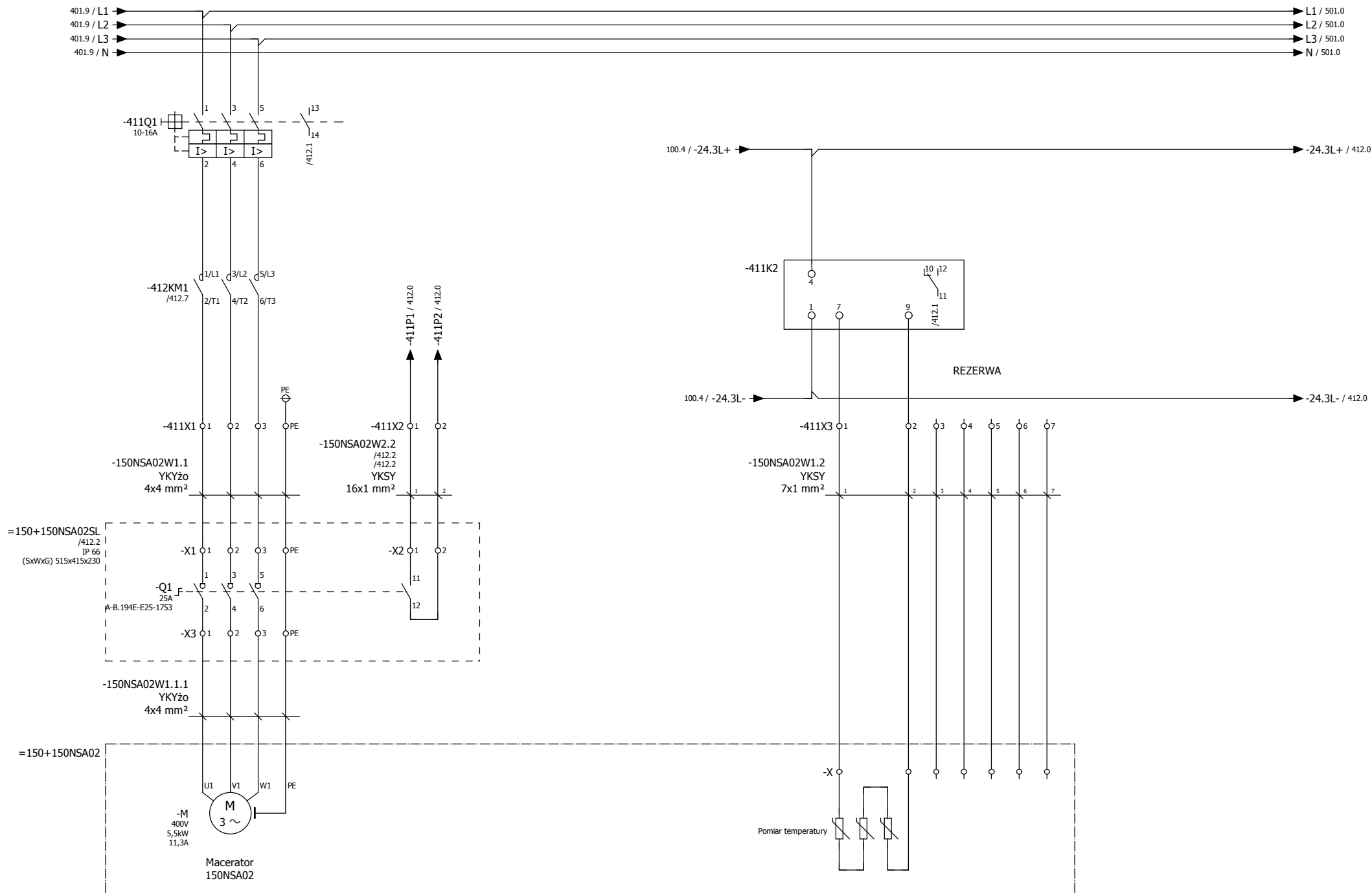


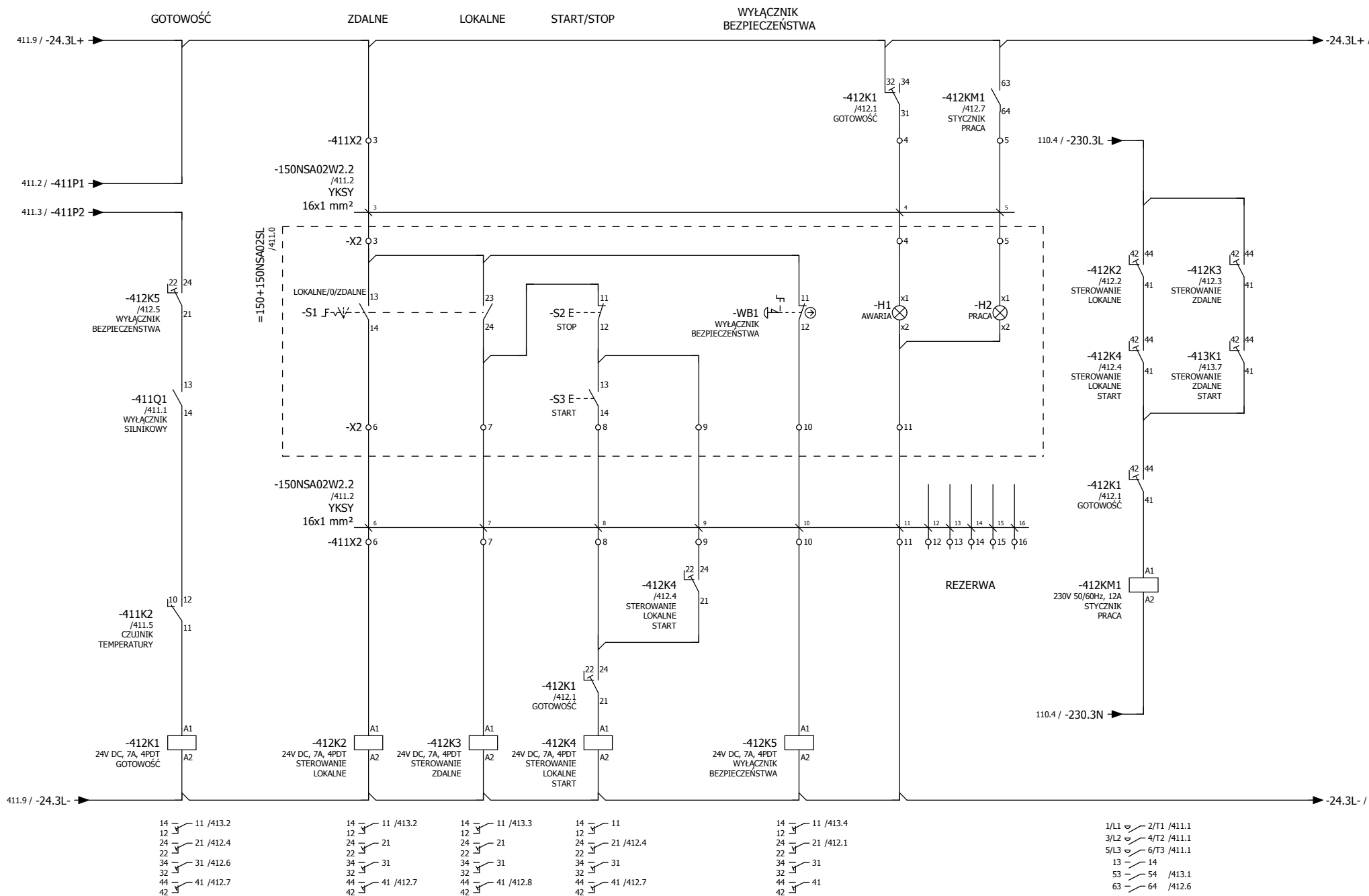
Szyny miedziane Cu 30x10 400V 50Hz

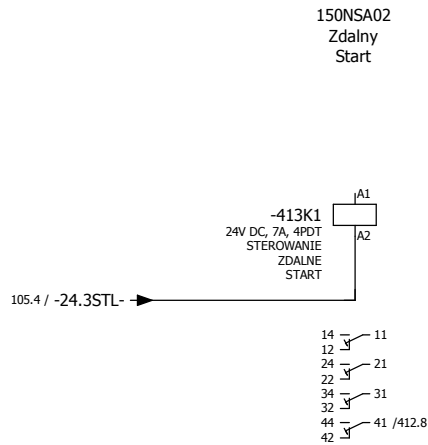
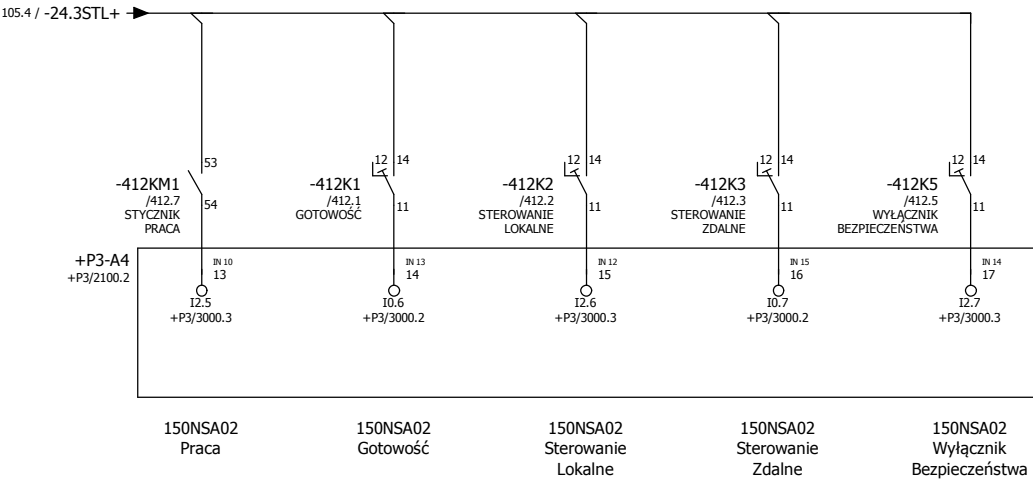




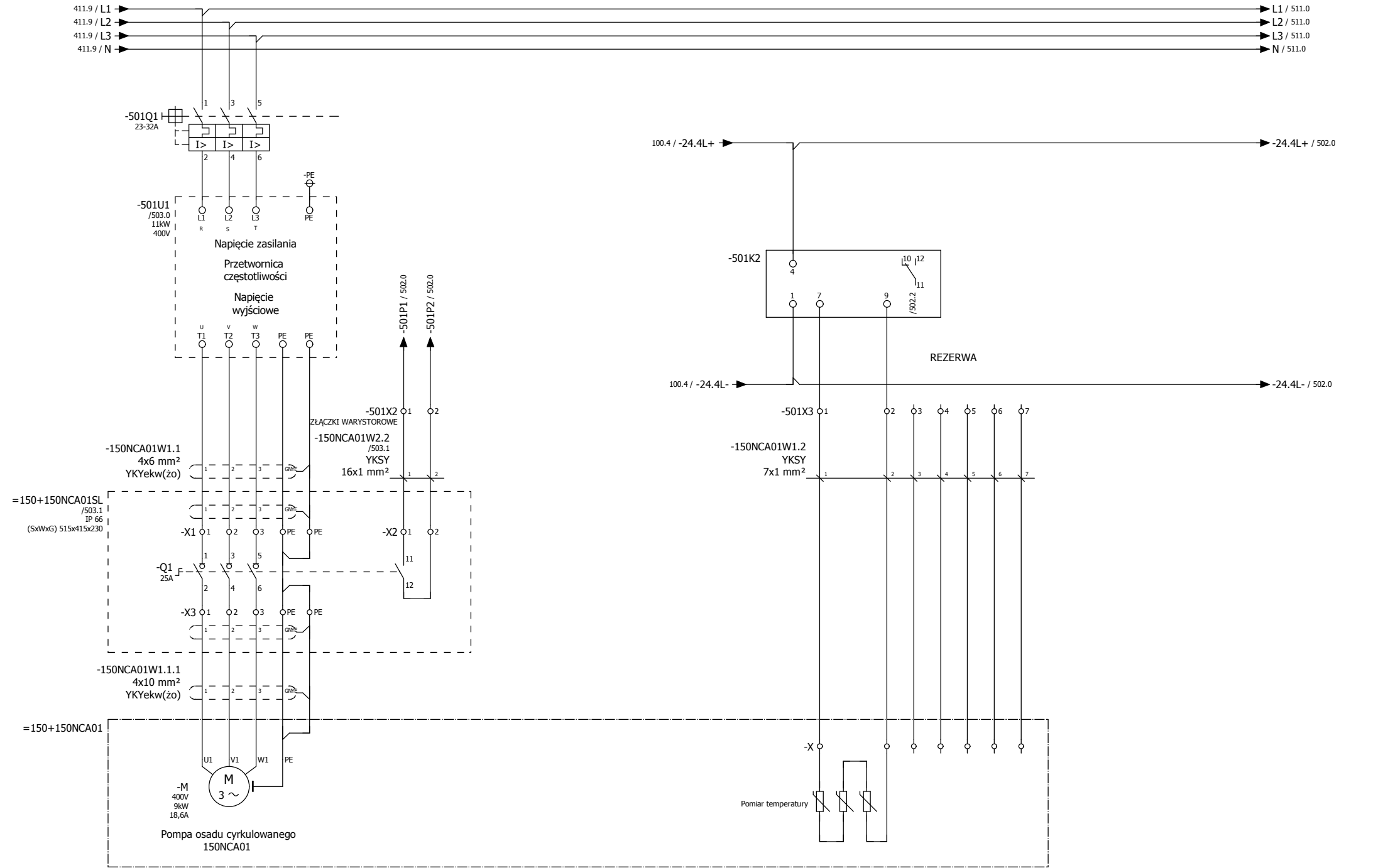


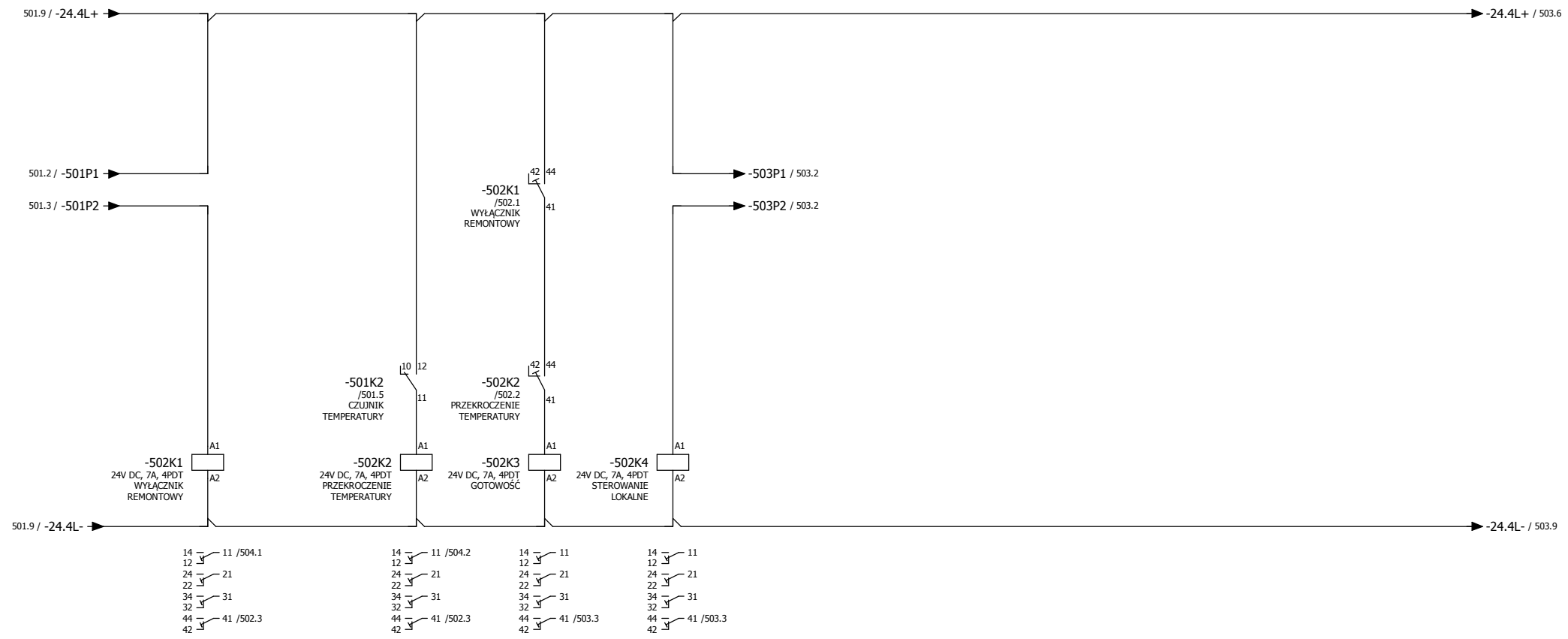




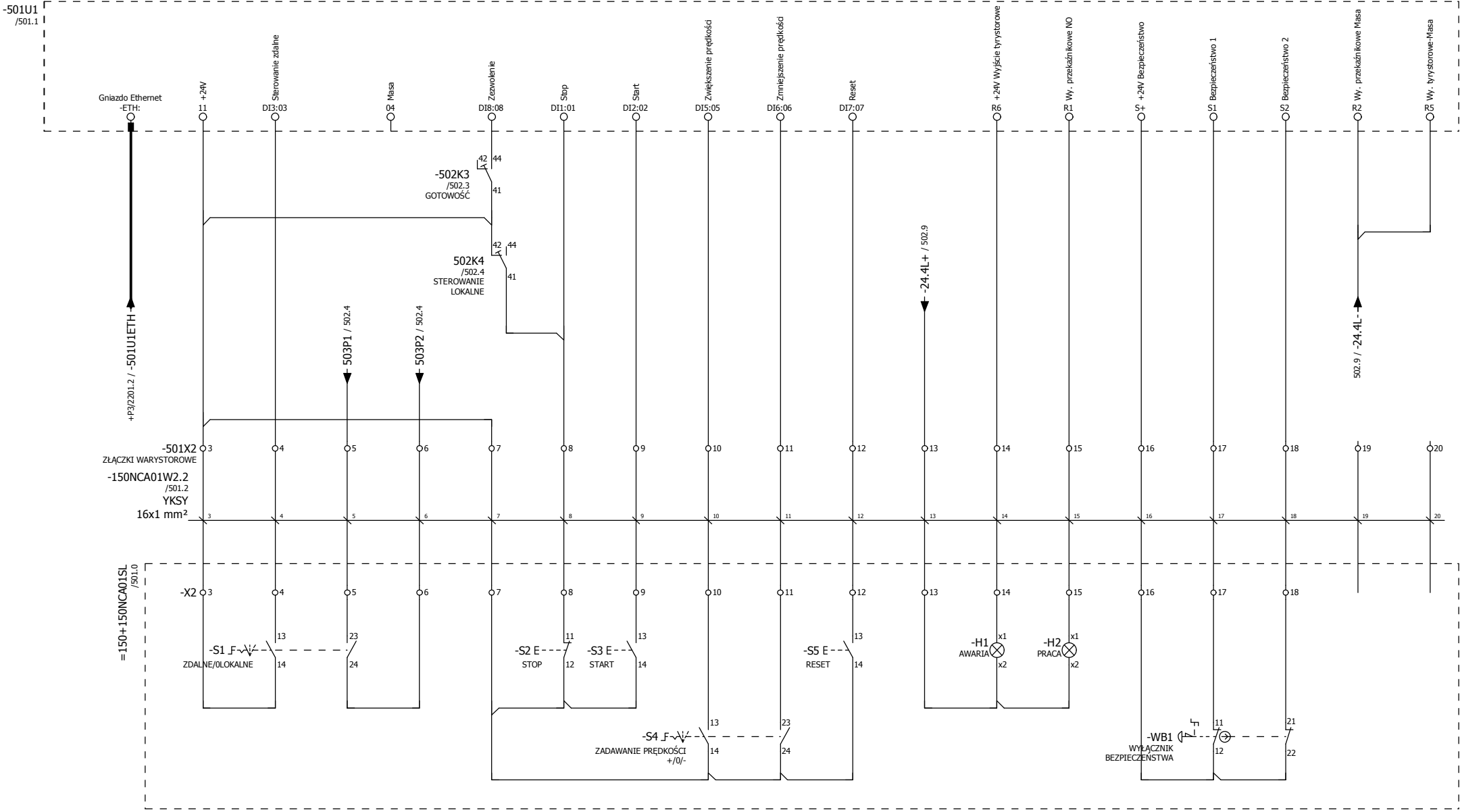


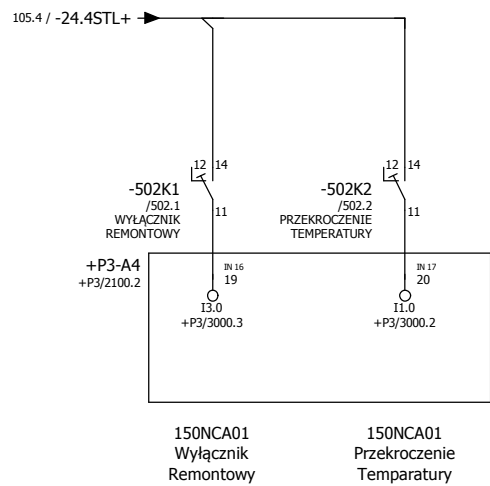
Szyny miedziane Cu 30x10 400V 50Hz

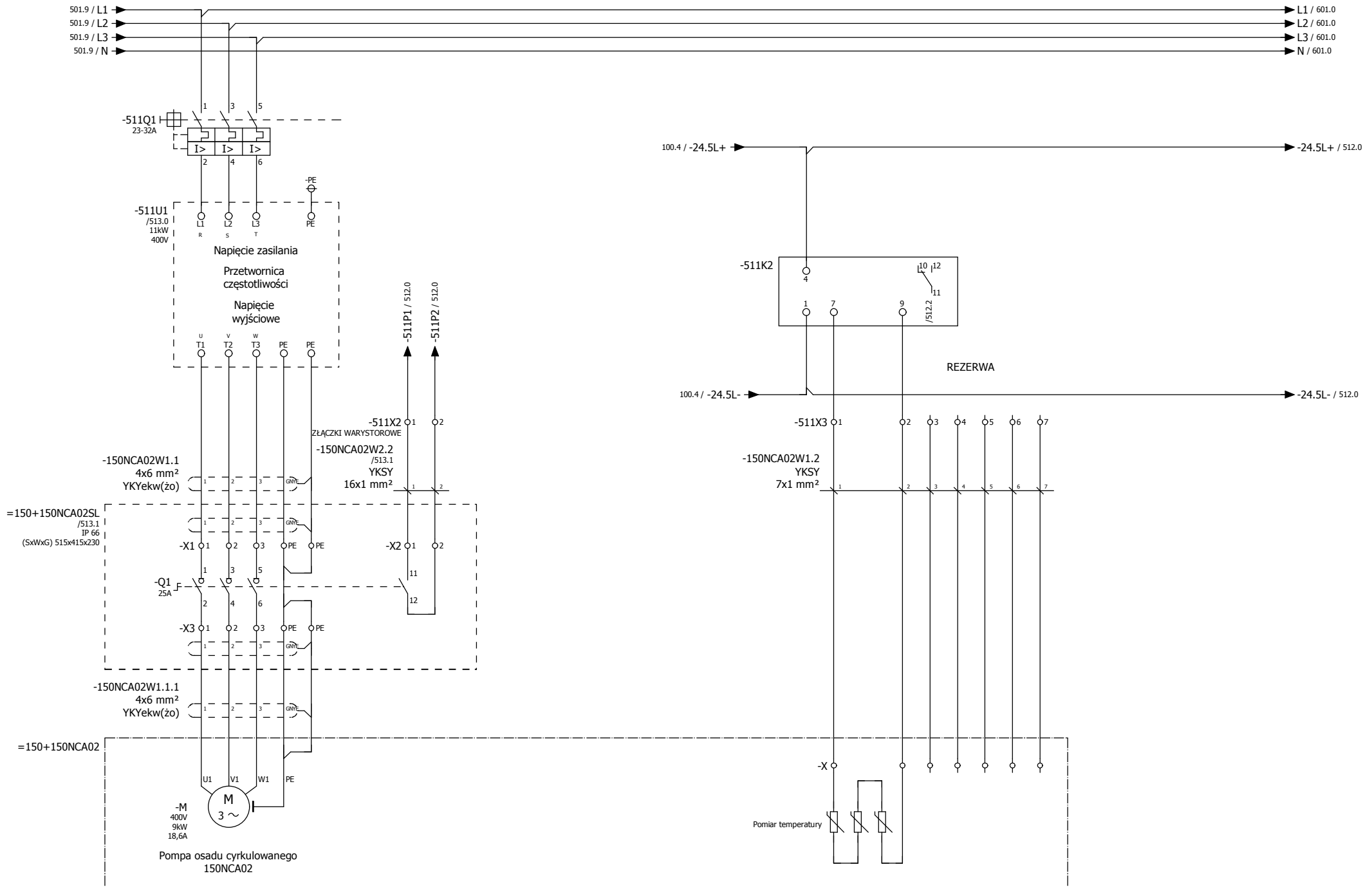


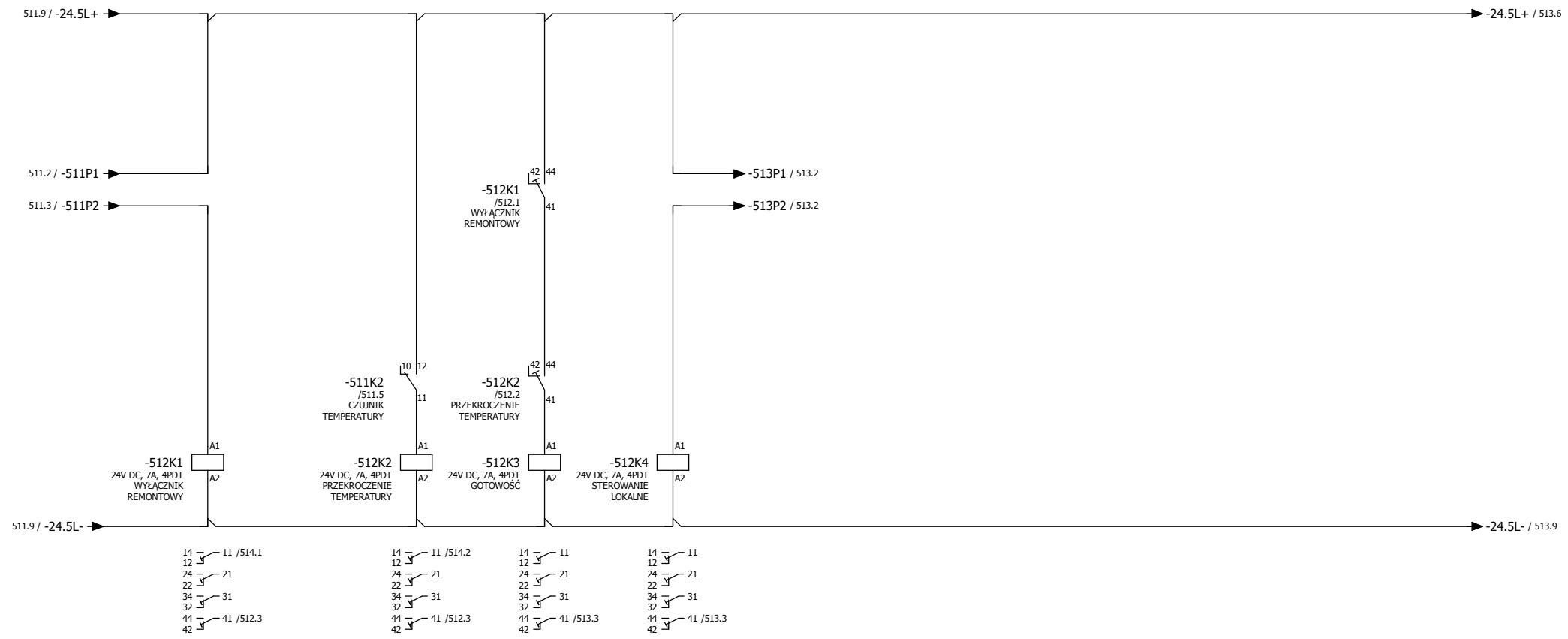




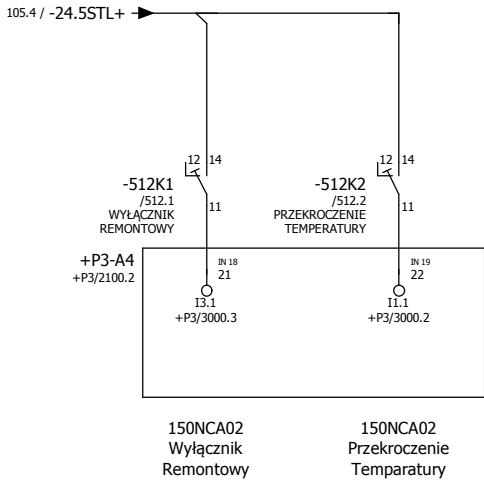


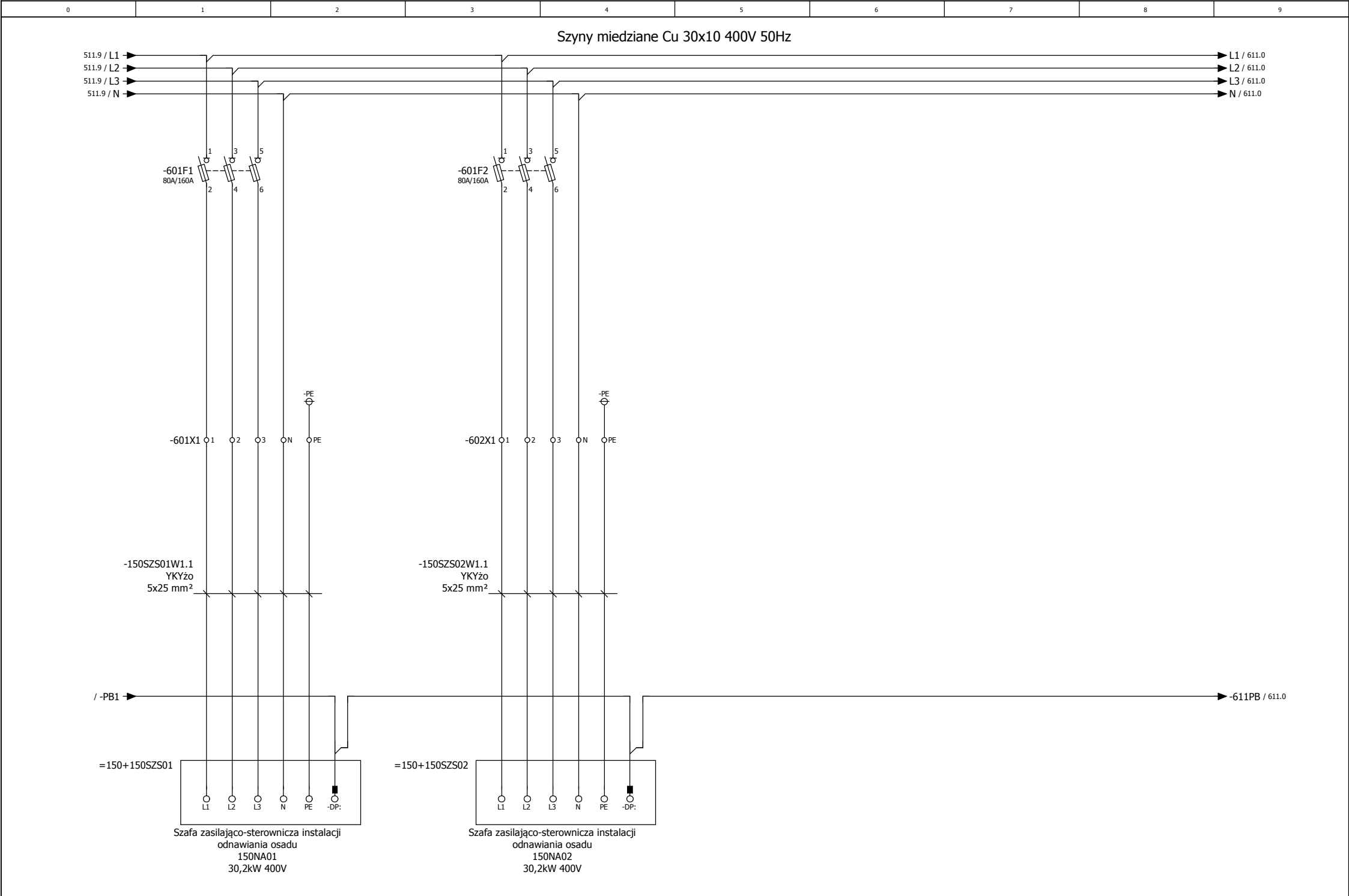


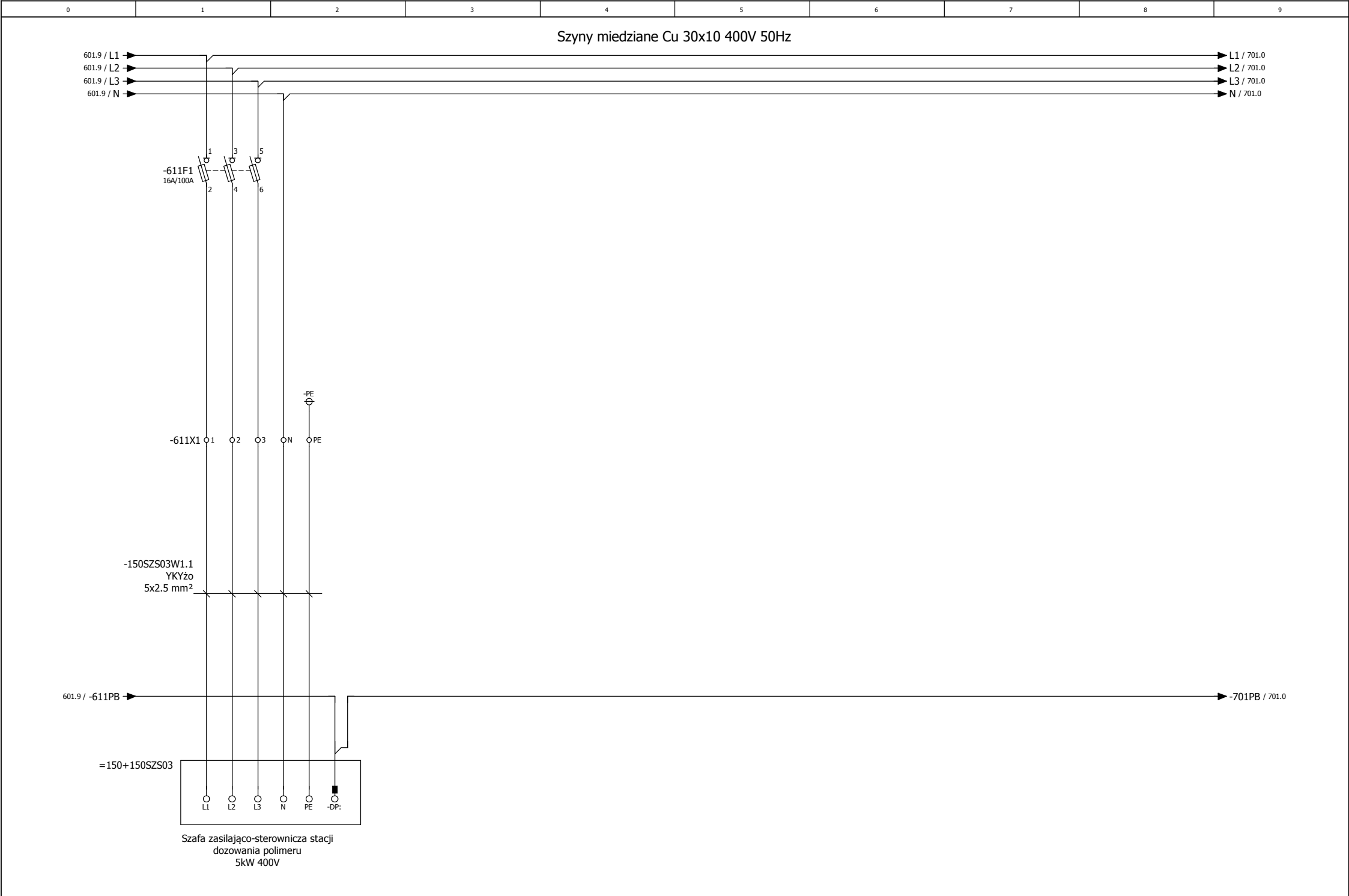




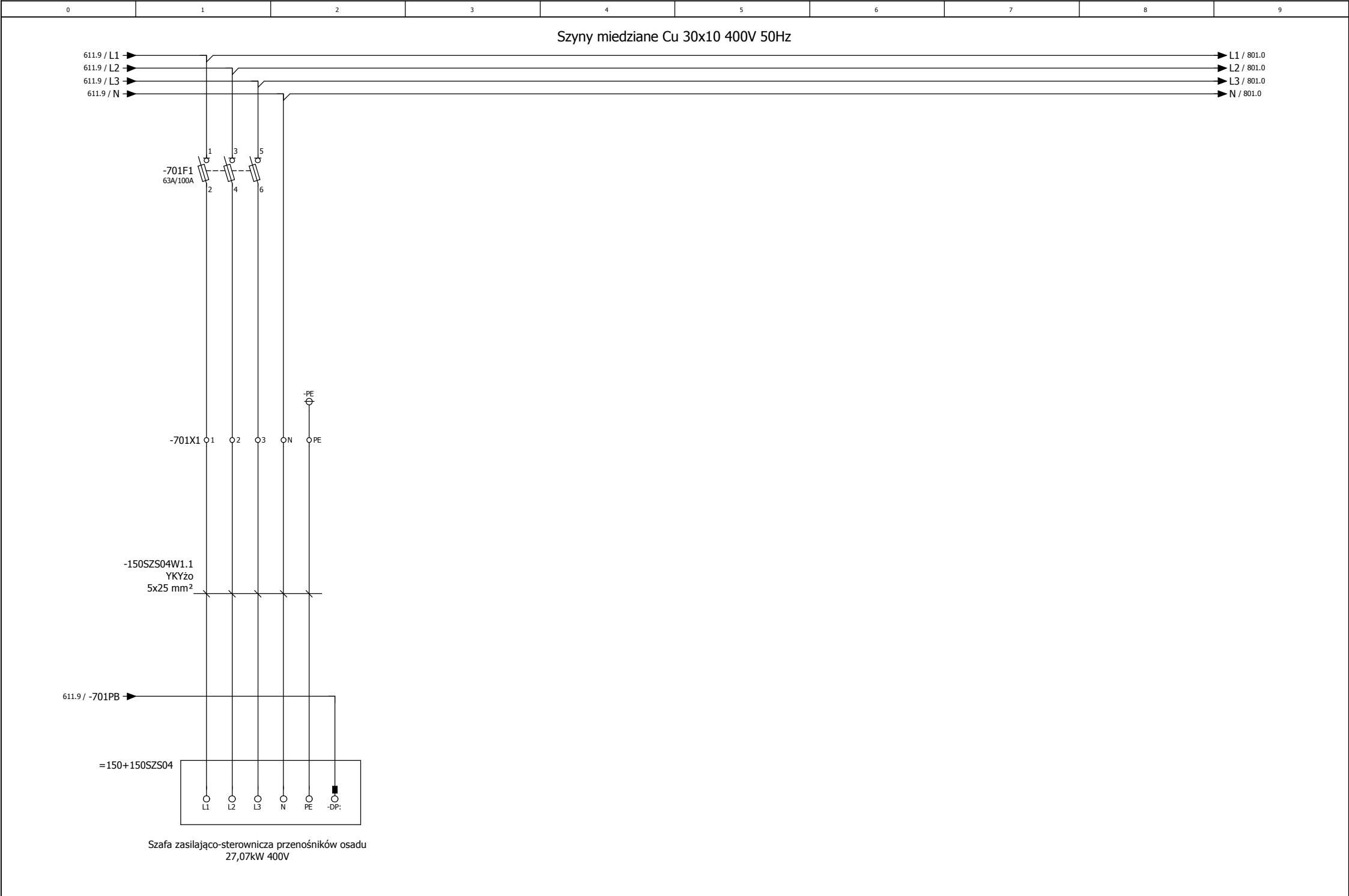


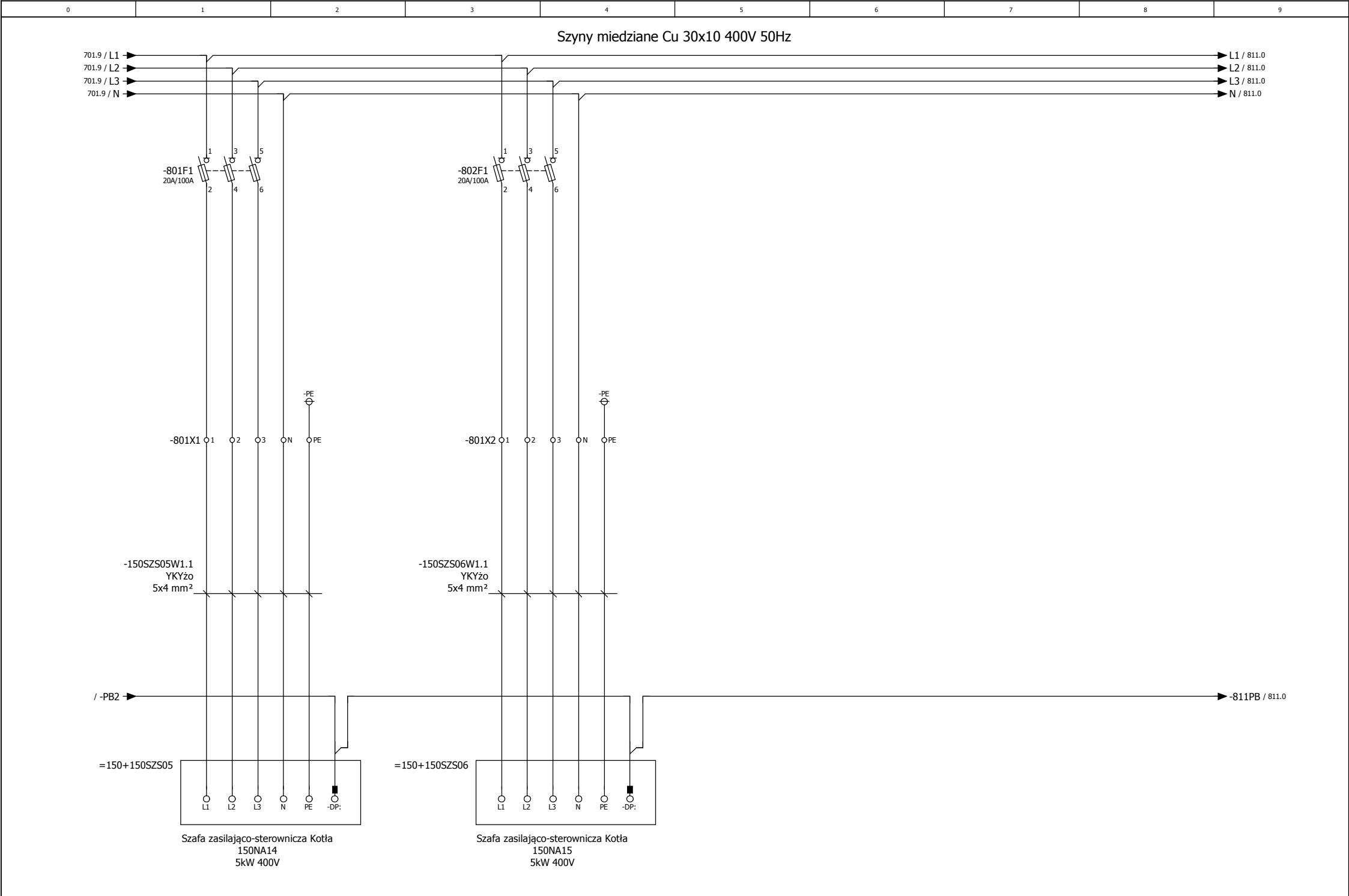


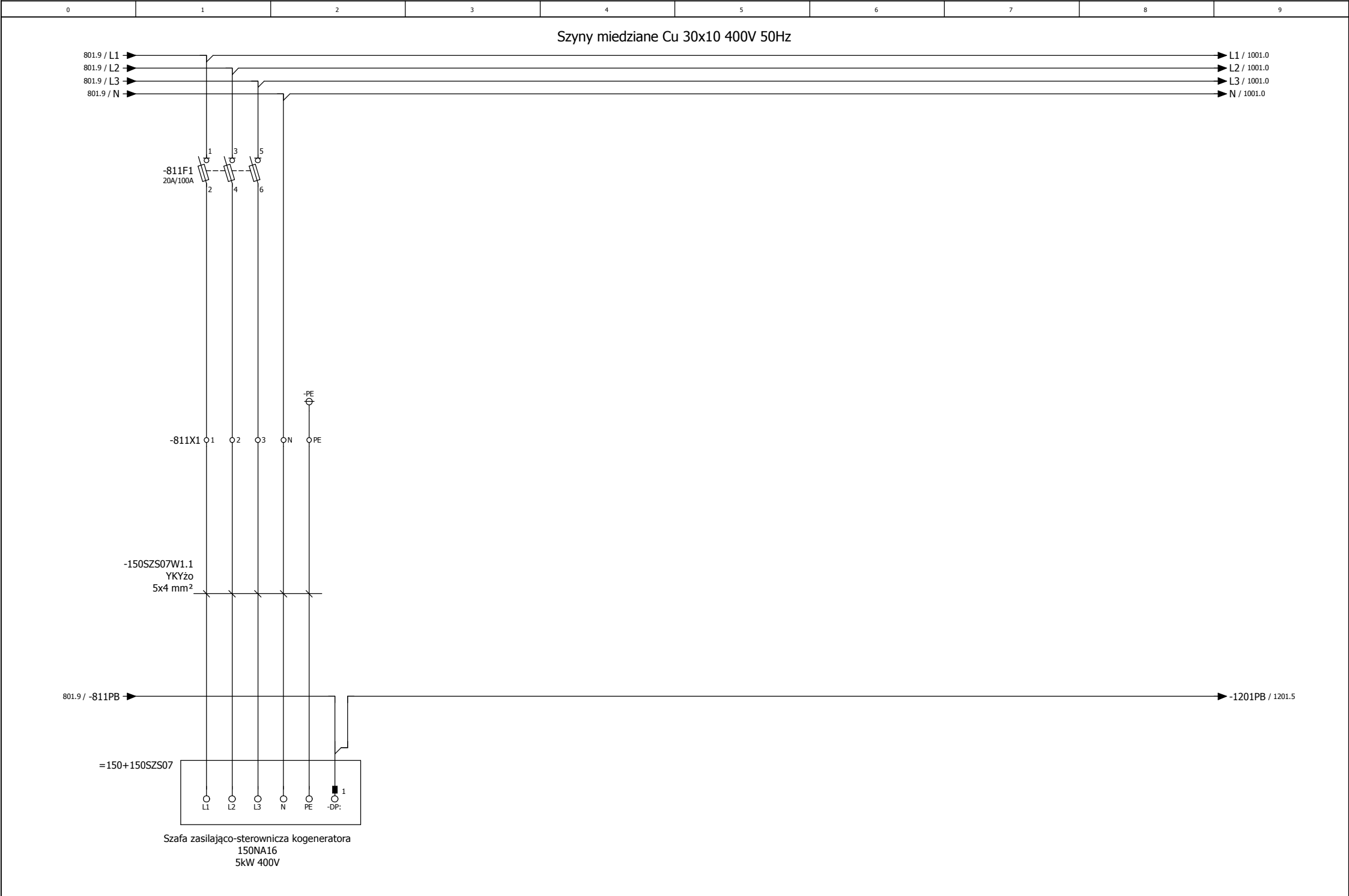




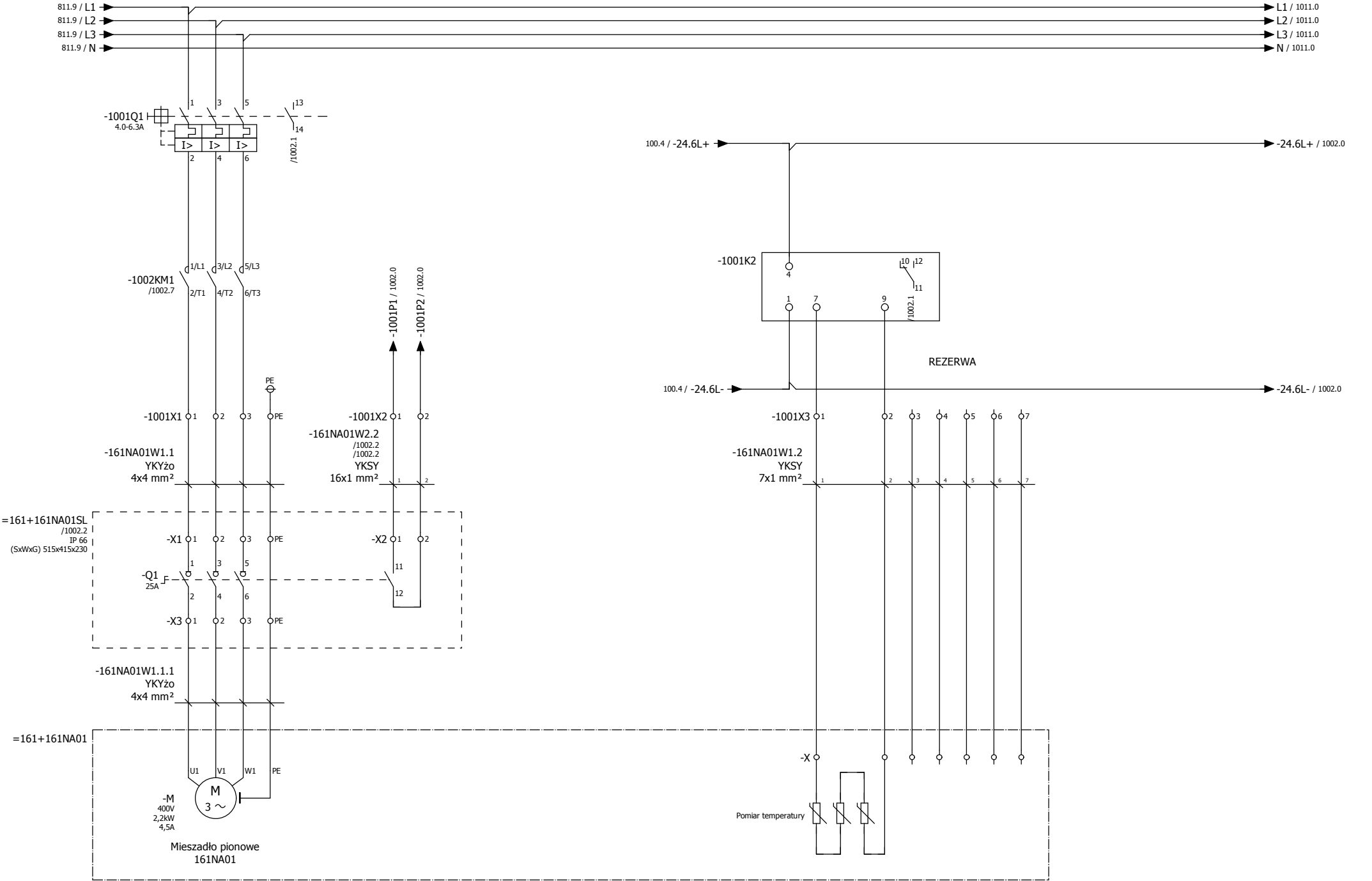




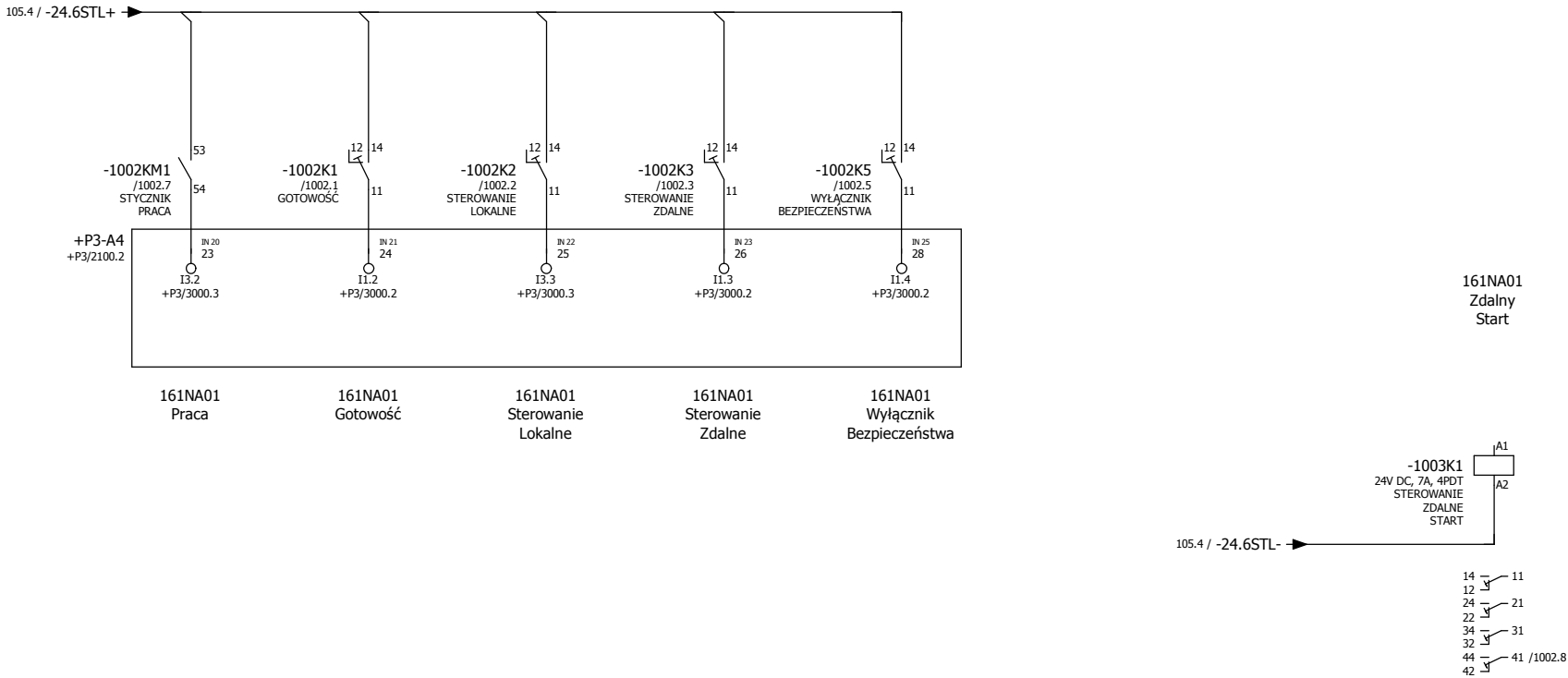




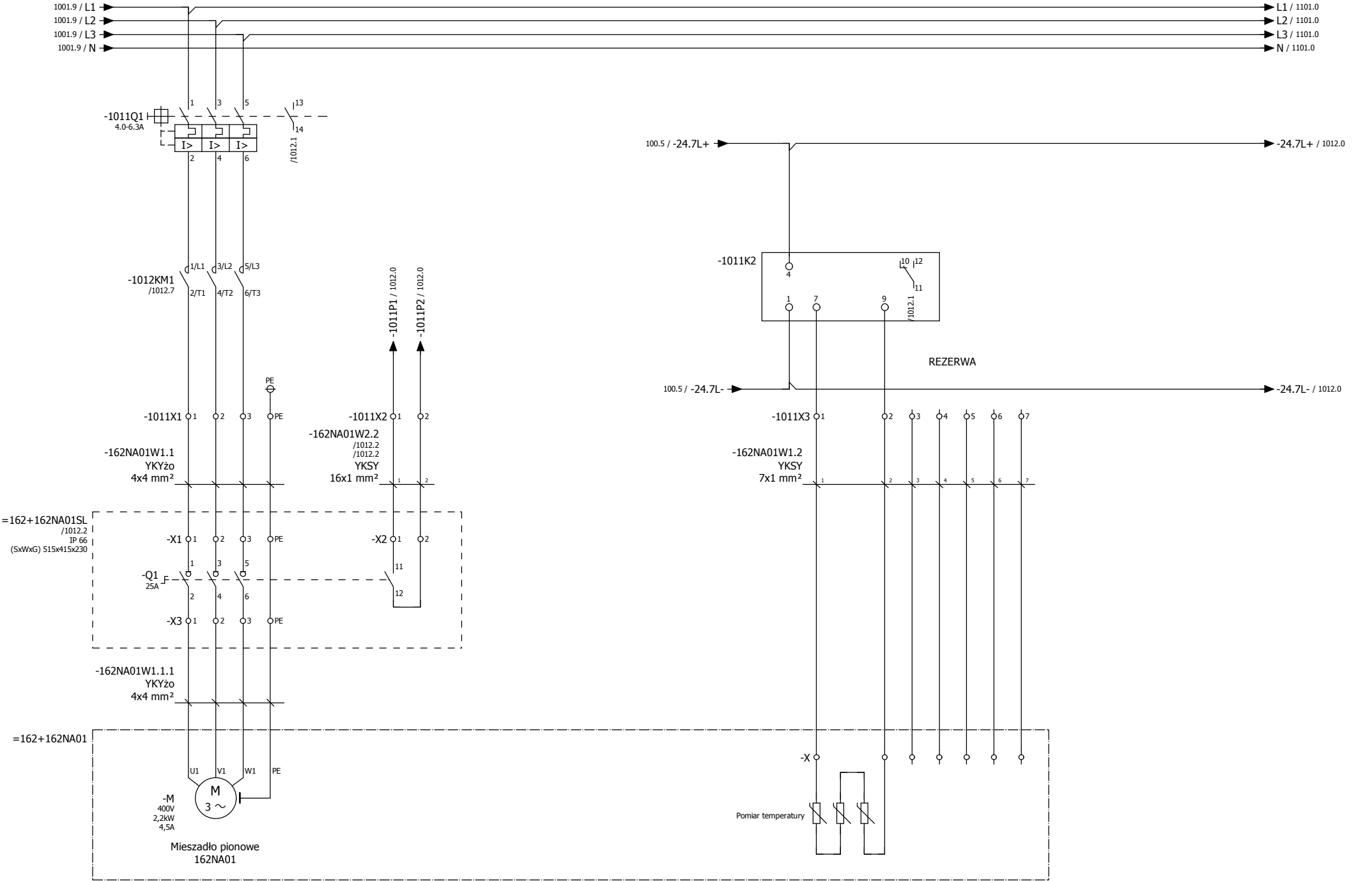
Szyny miedziane Cu 30x10 400V 50Hz





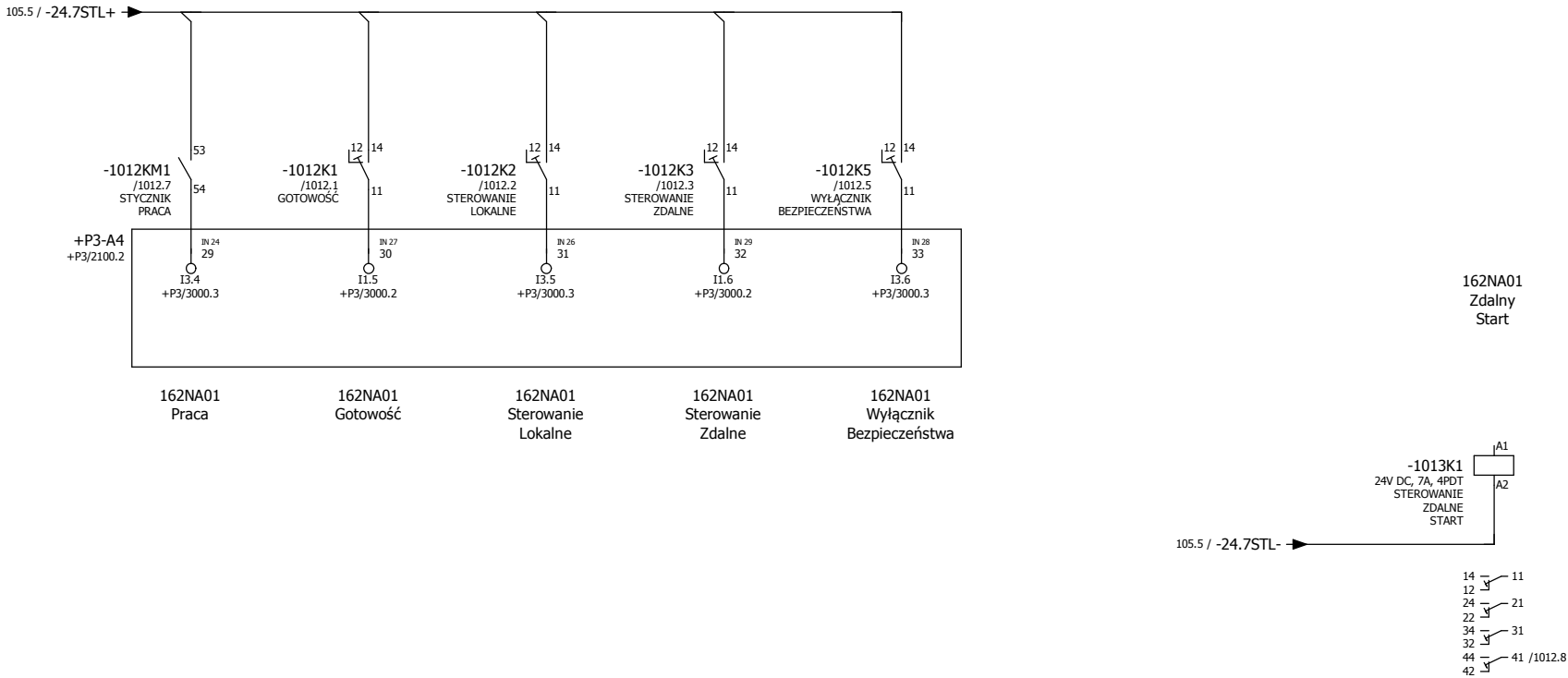


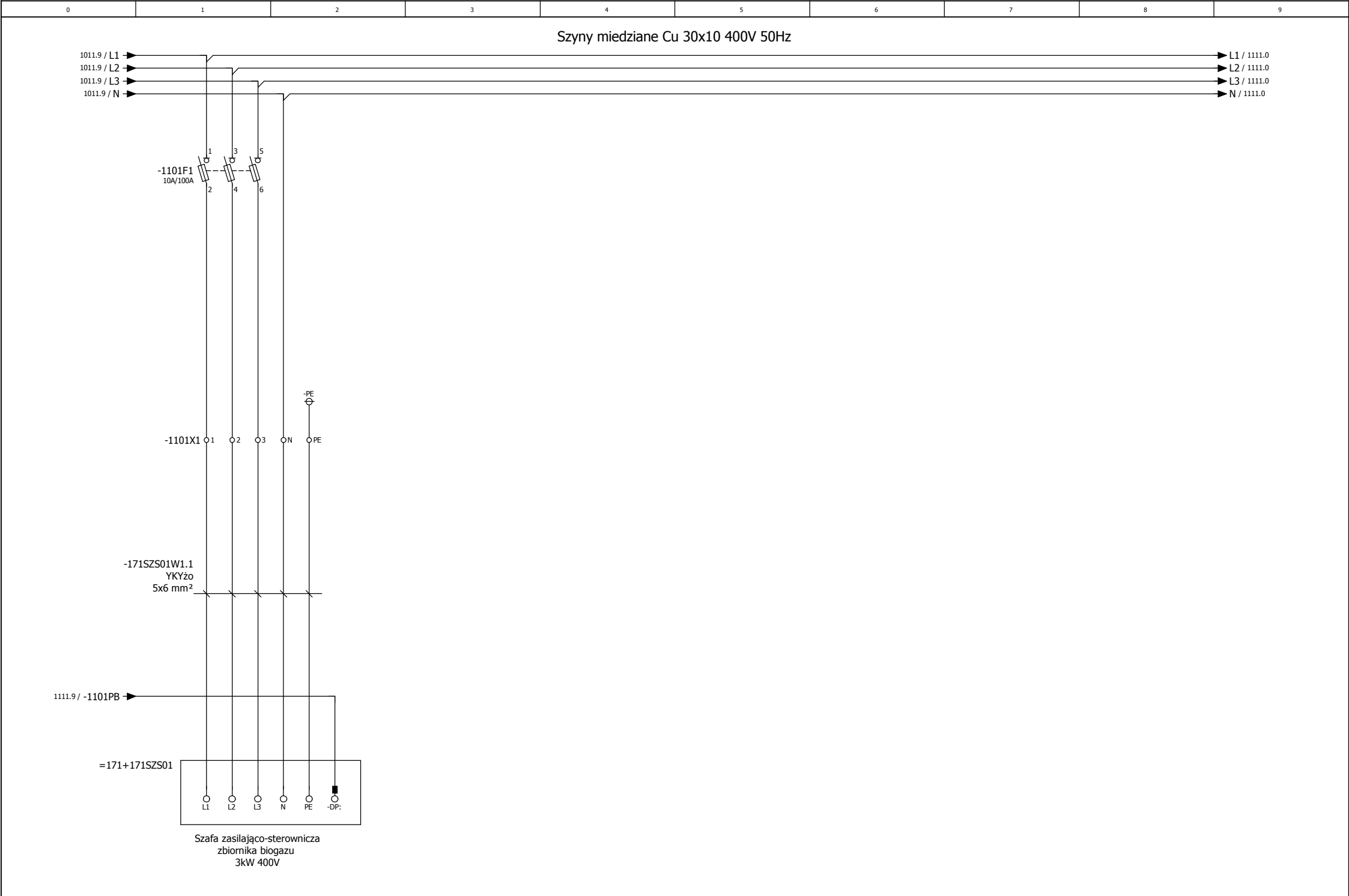
Szyny miedziane Cu 30x10 400V 50Hz




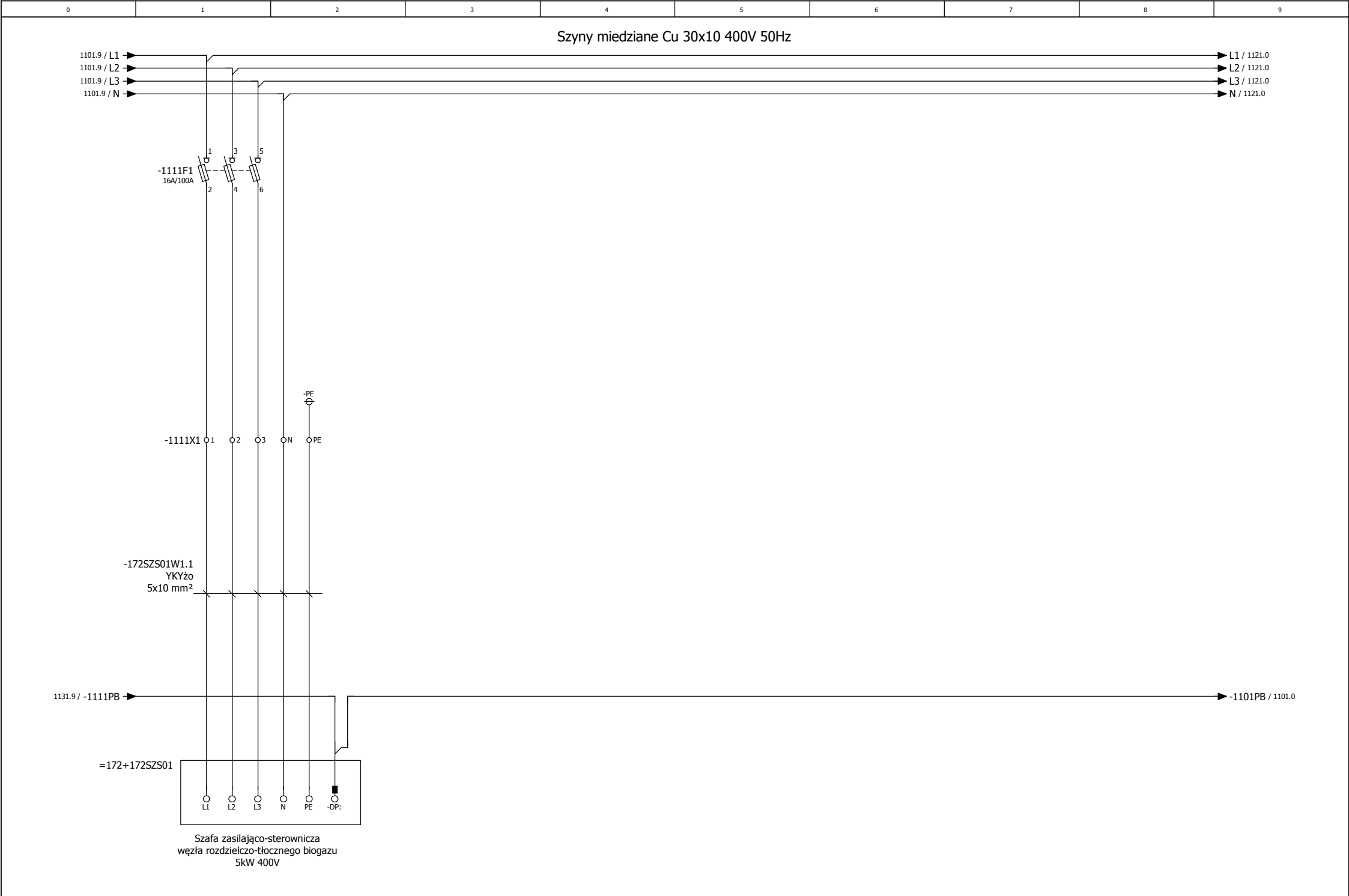


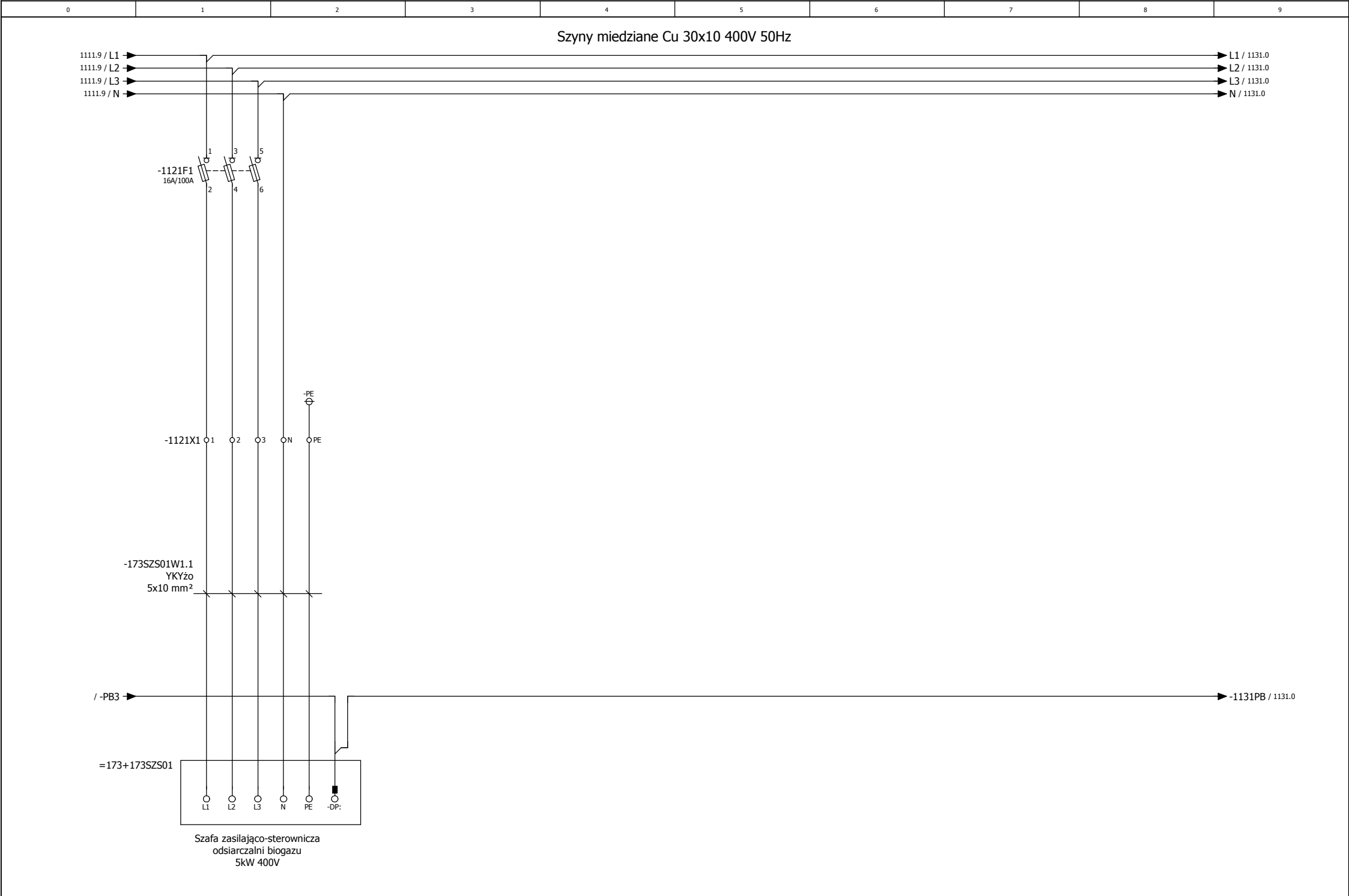


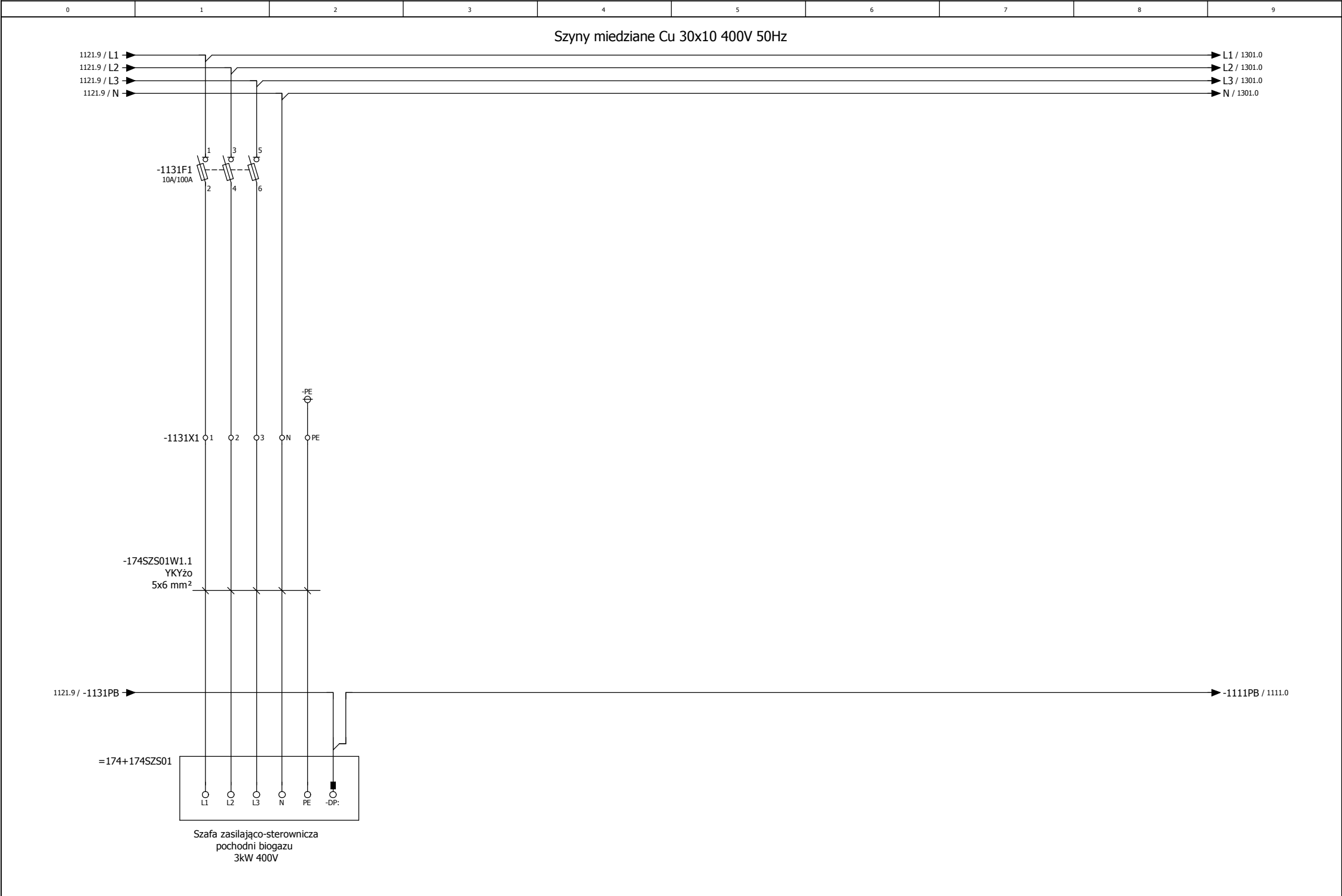




1013										1111			
Data modyfikacji	2015-12-16	Projektował	mgr inż. Marek Szamocki upr. LOD/1911/PWCE/12	 DP SYSTEM Sp. z o.o. 92-605 Łódź ul. Szarady 4 tel/fax +48 (42) 654 31 06	Klient końcowy	Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji Sp. z o.o.	Tytuł strony	Szafa zasilająco-sterownicza zbiornika biogazu Zasilanie			Strona	1101	
Numer projektu		Opracował	inż. Paweł Guźdź, mgr inż. Andrzej Miśkiewicz		Tytuł projektu	PROJEKT WYKONAWCZY	Lokalizacja	= R15			Stron	125	
		Sprawił	mgr inż. Jan Cichocki upr. 162/89/WL					+ P2					

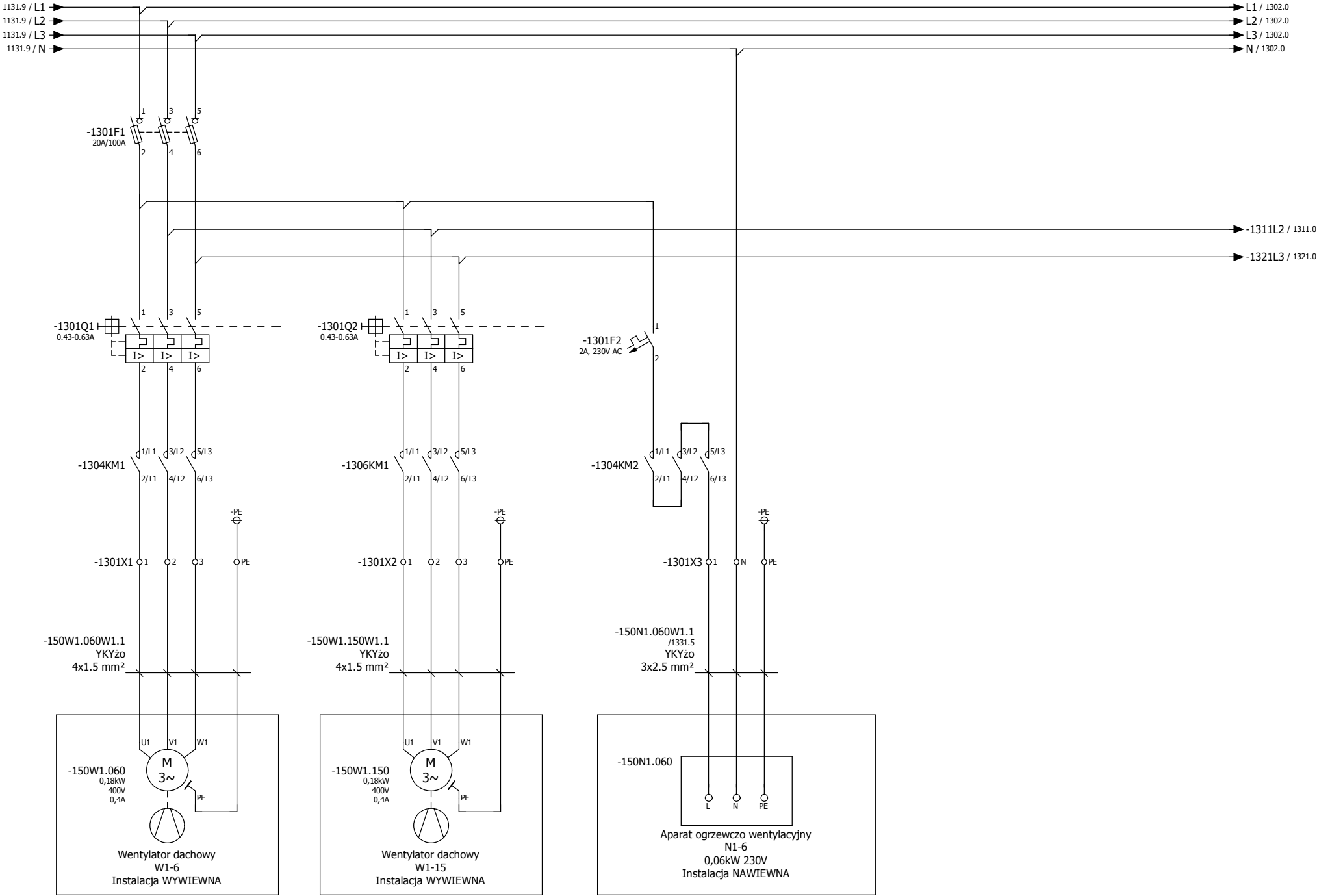


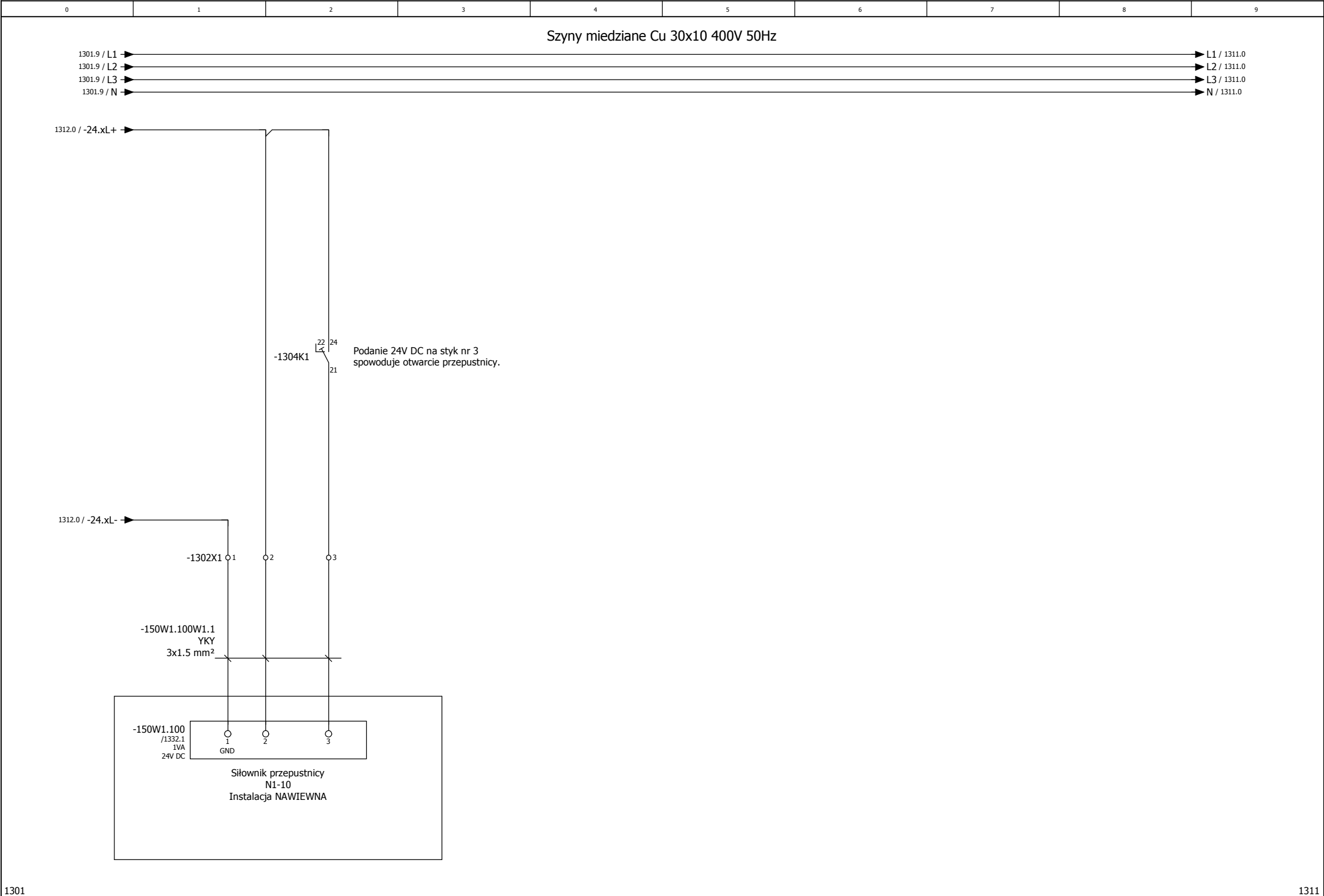




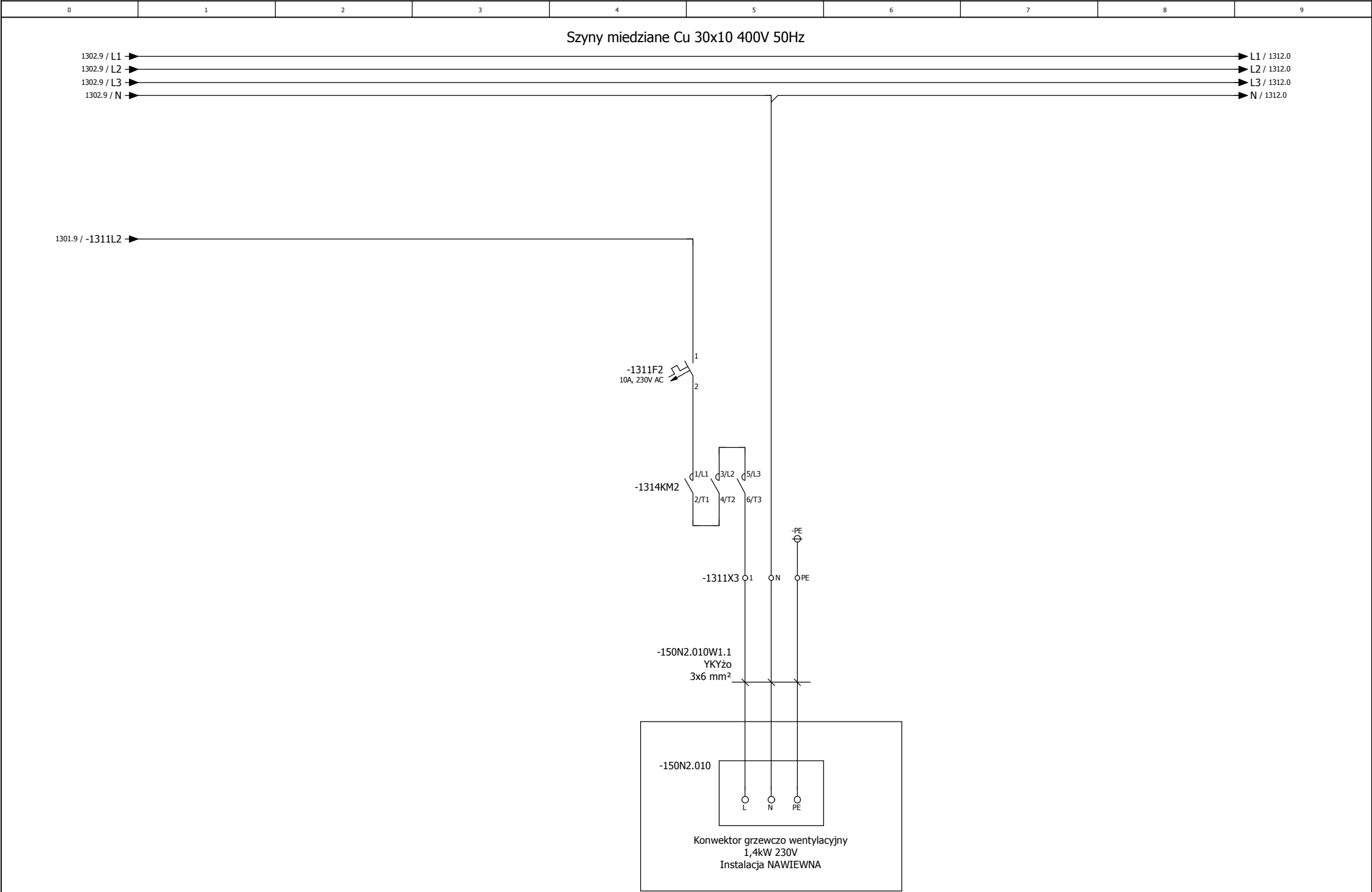


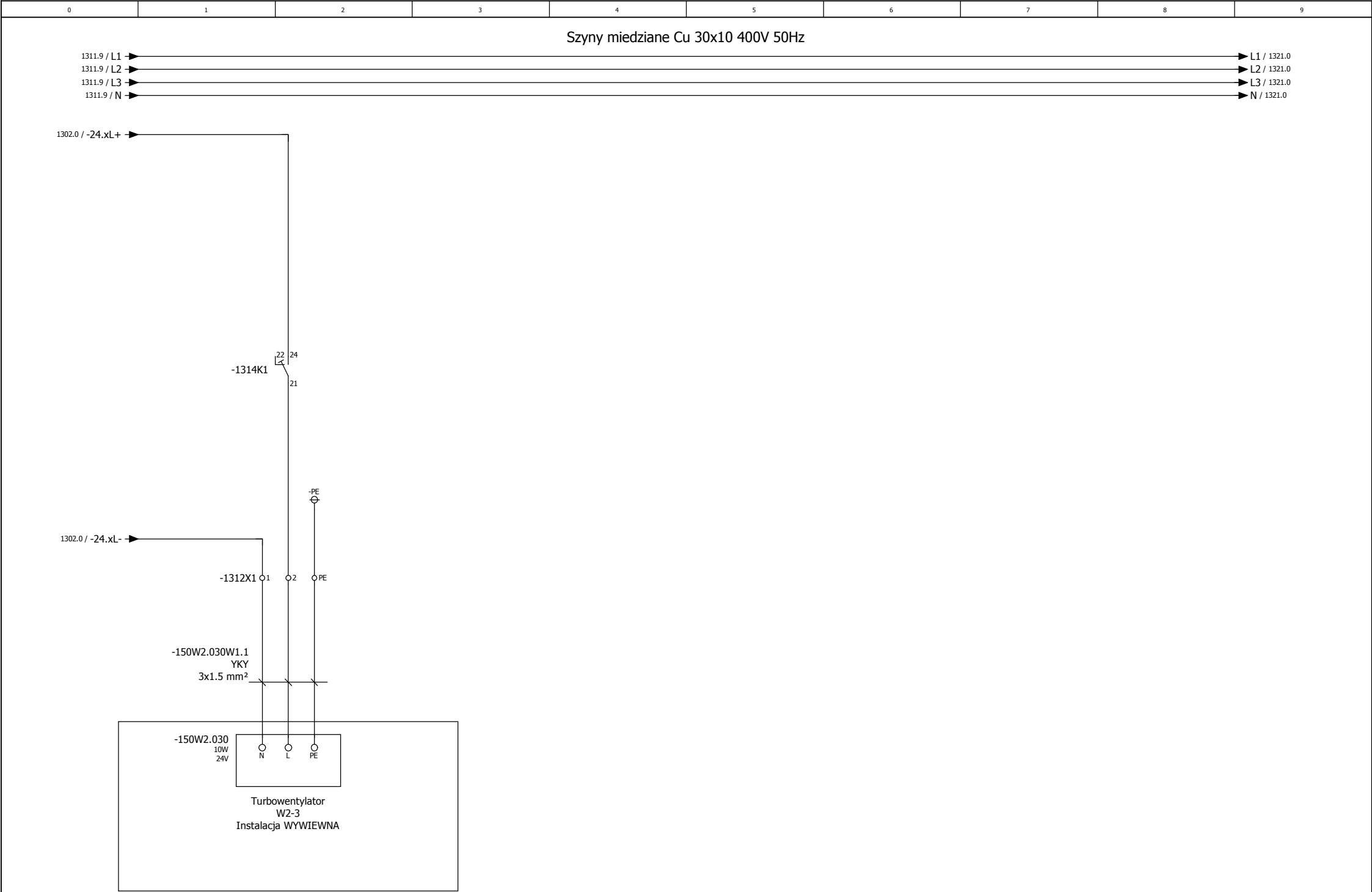
Szyny miedziane Cu 30x10 400V 50Hz

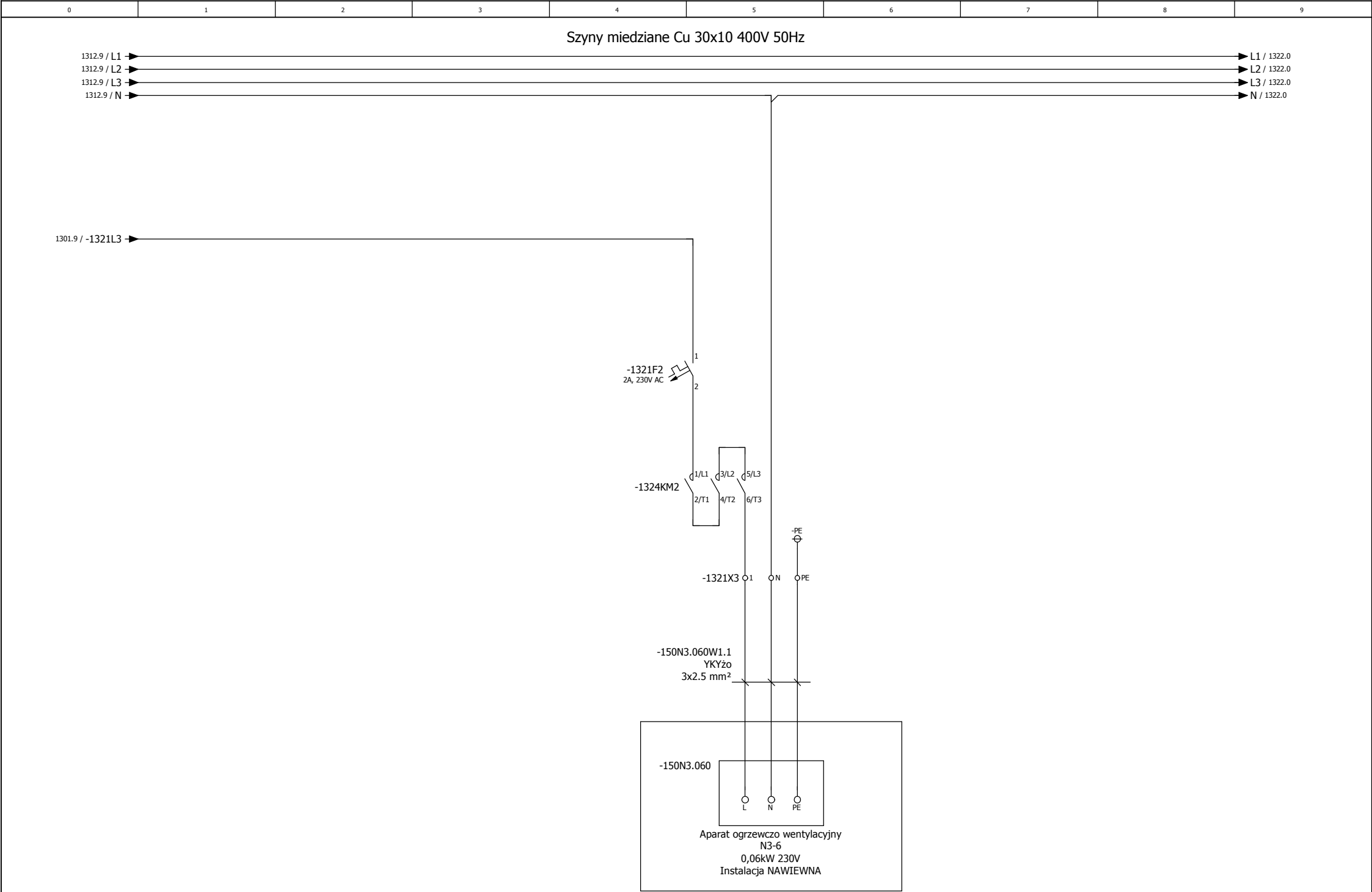


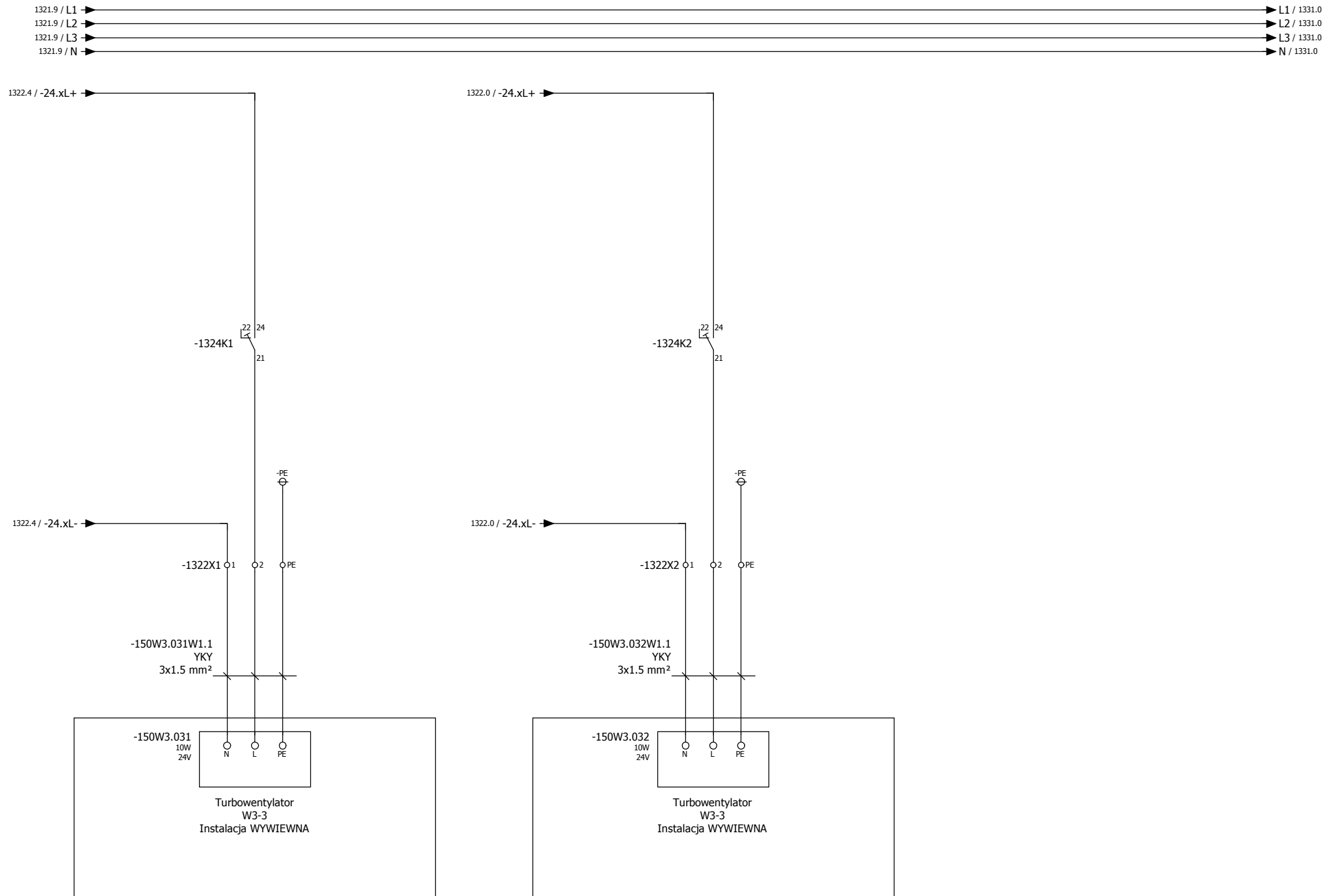


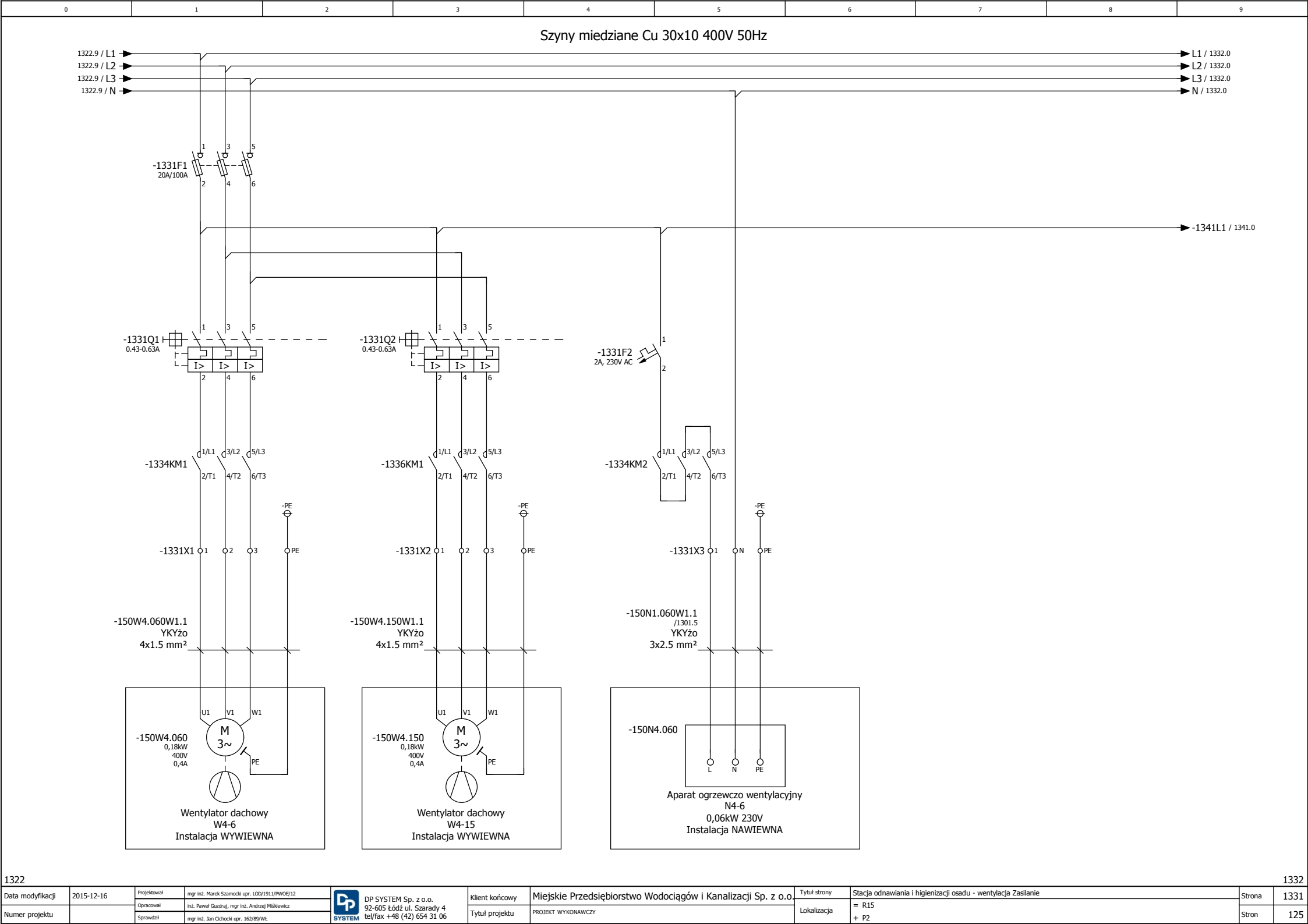


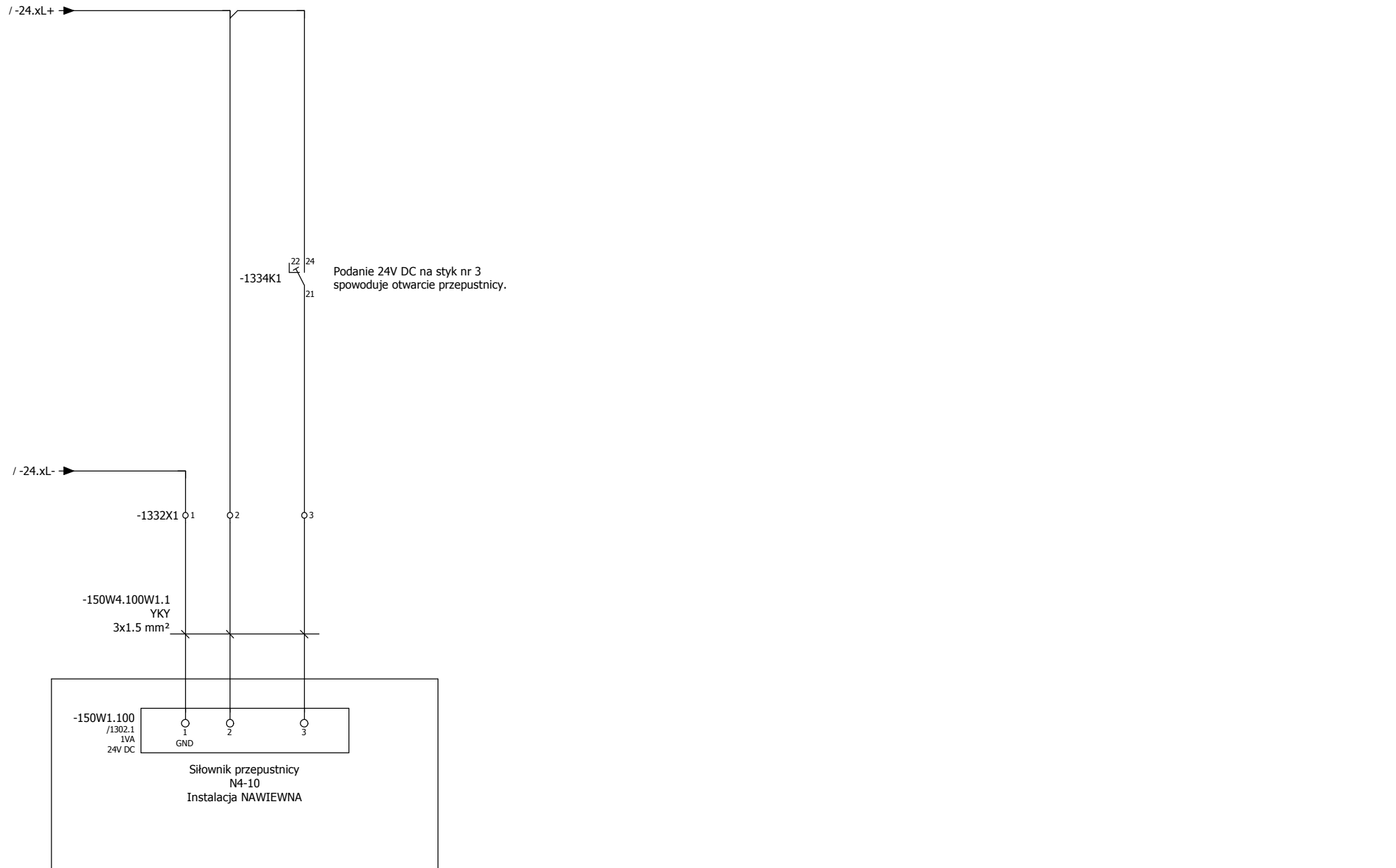


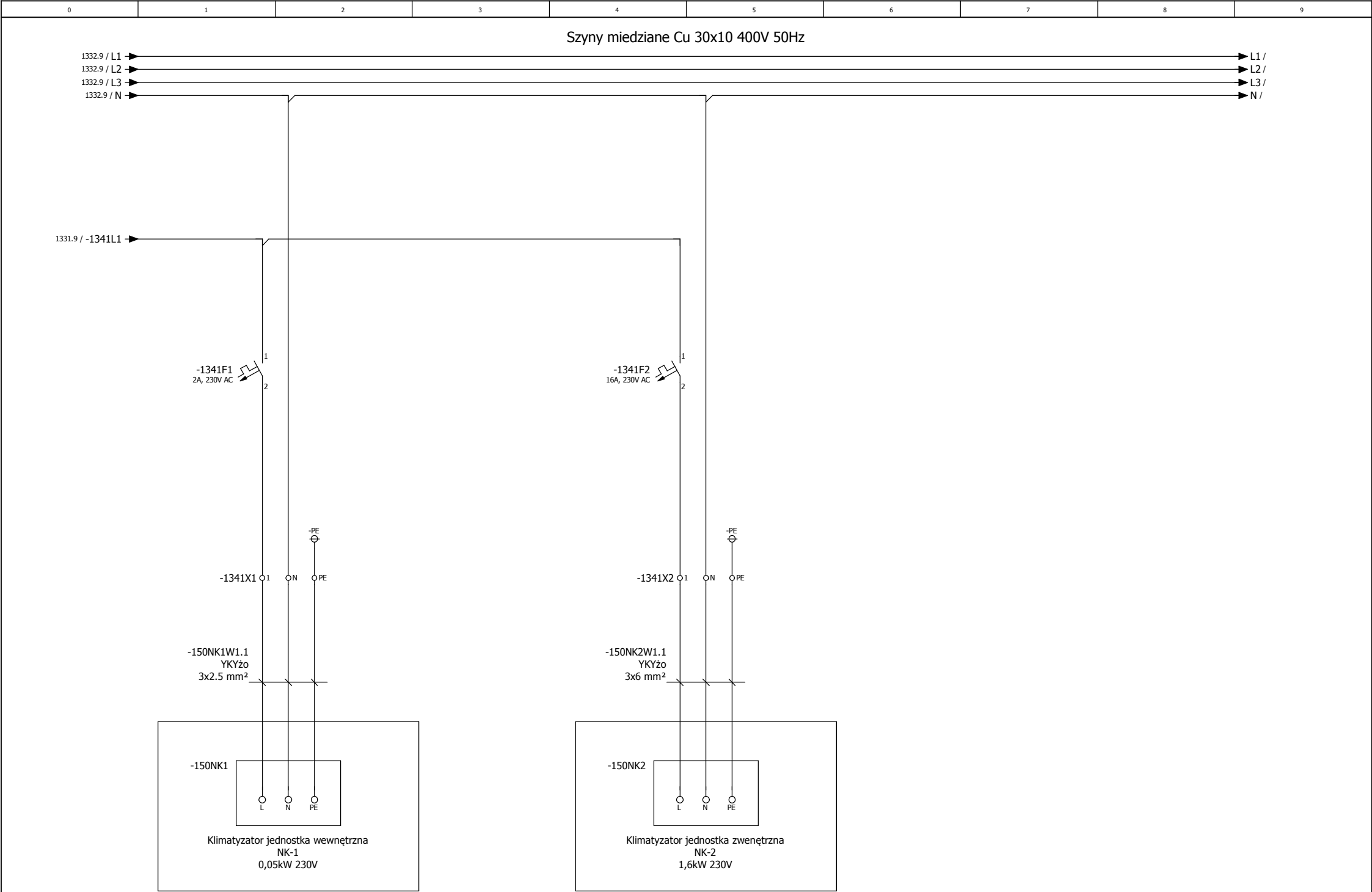






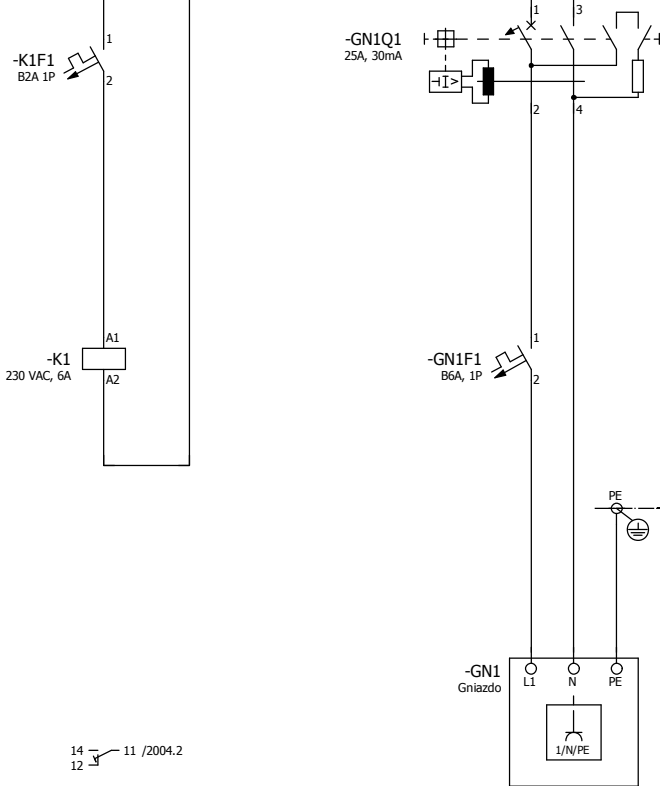
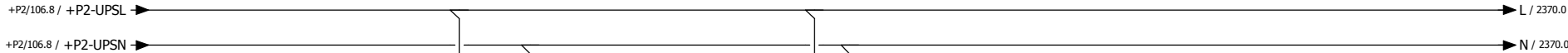


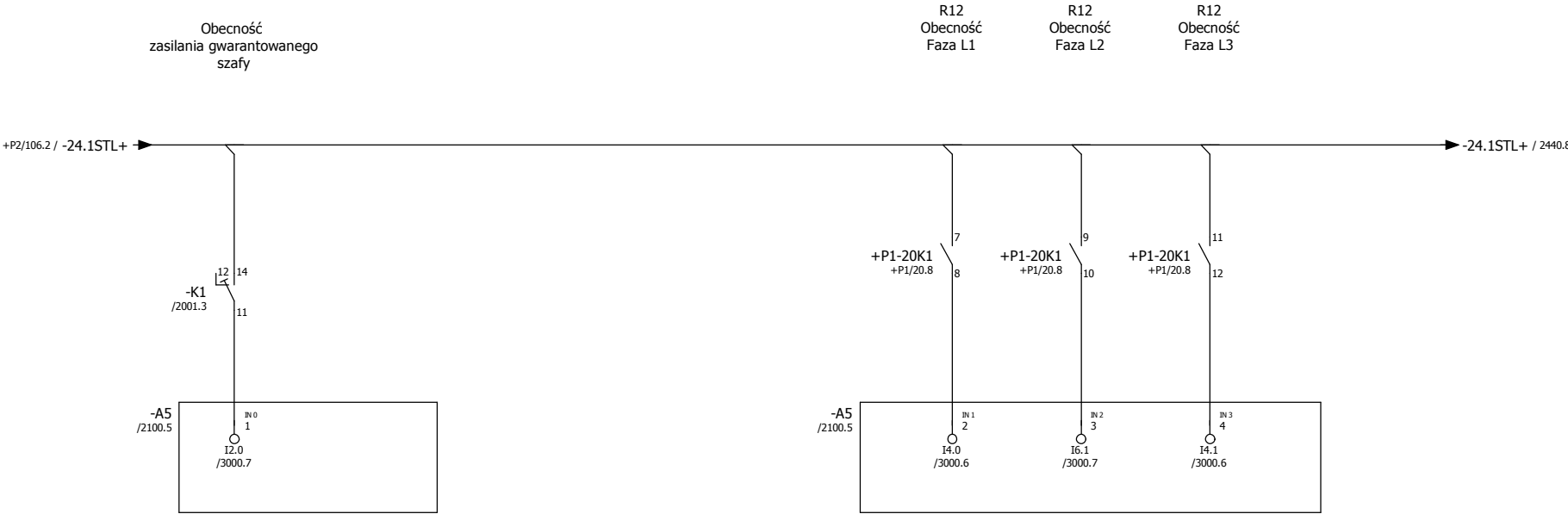




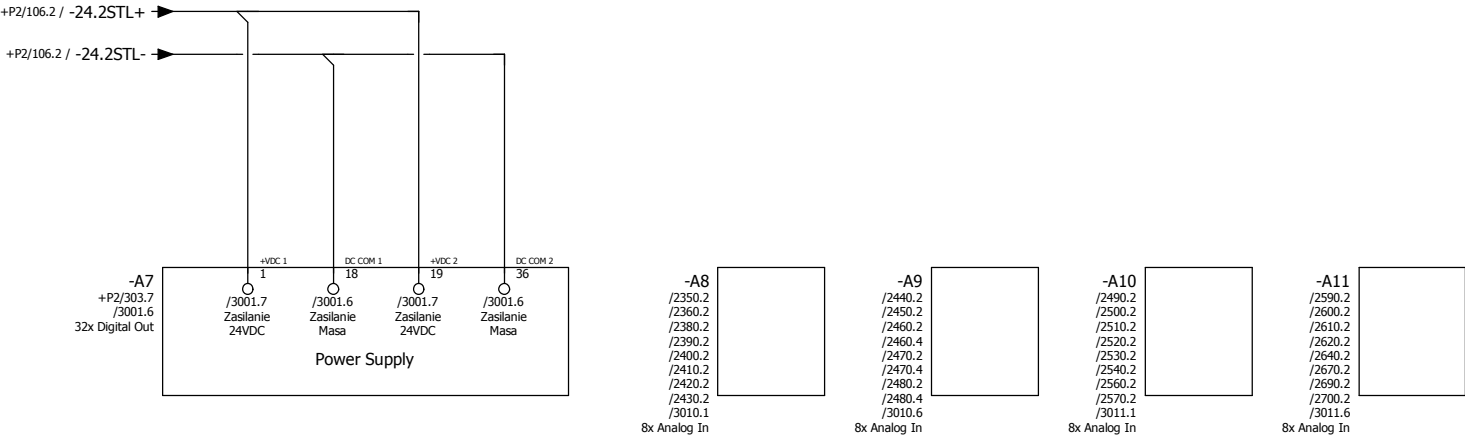
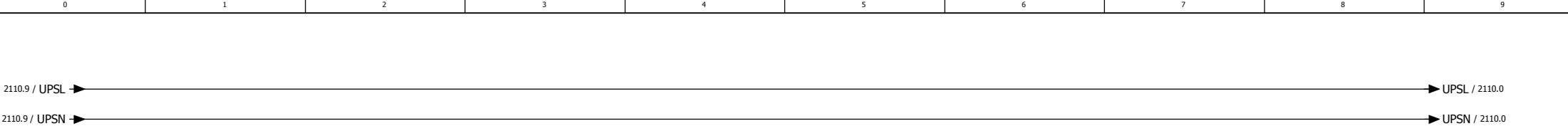


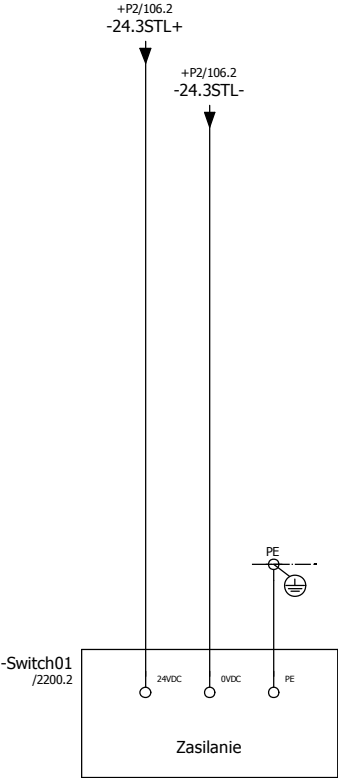




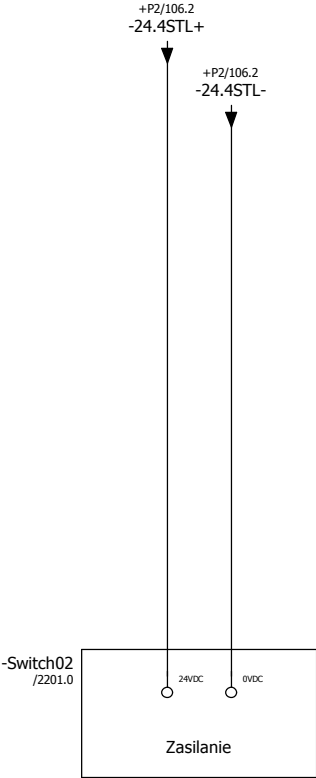




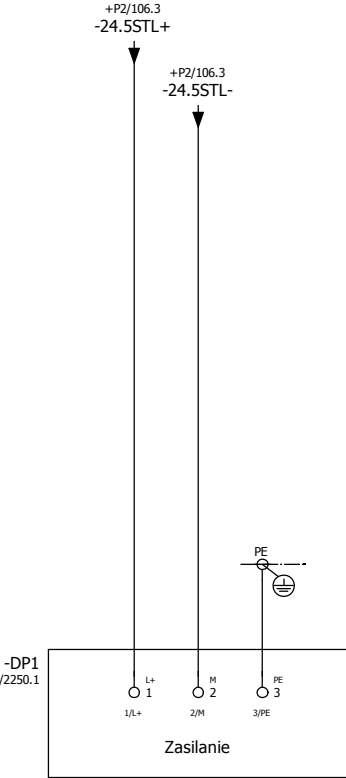




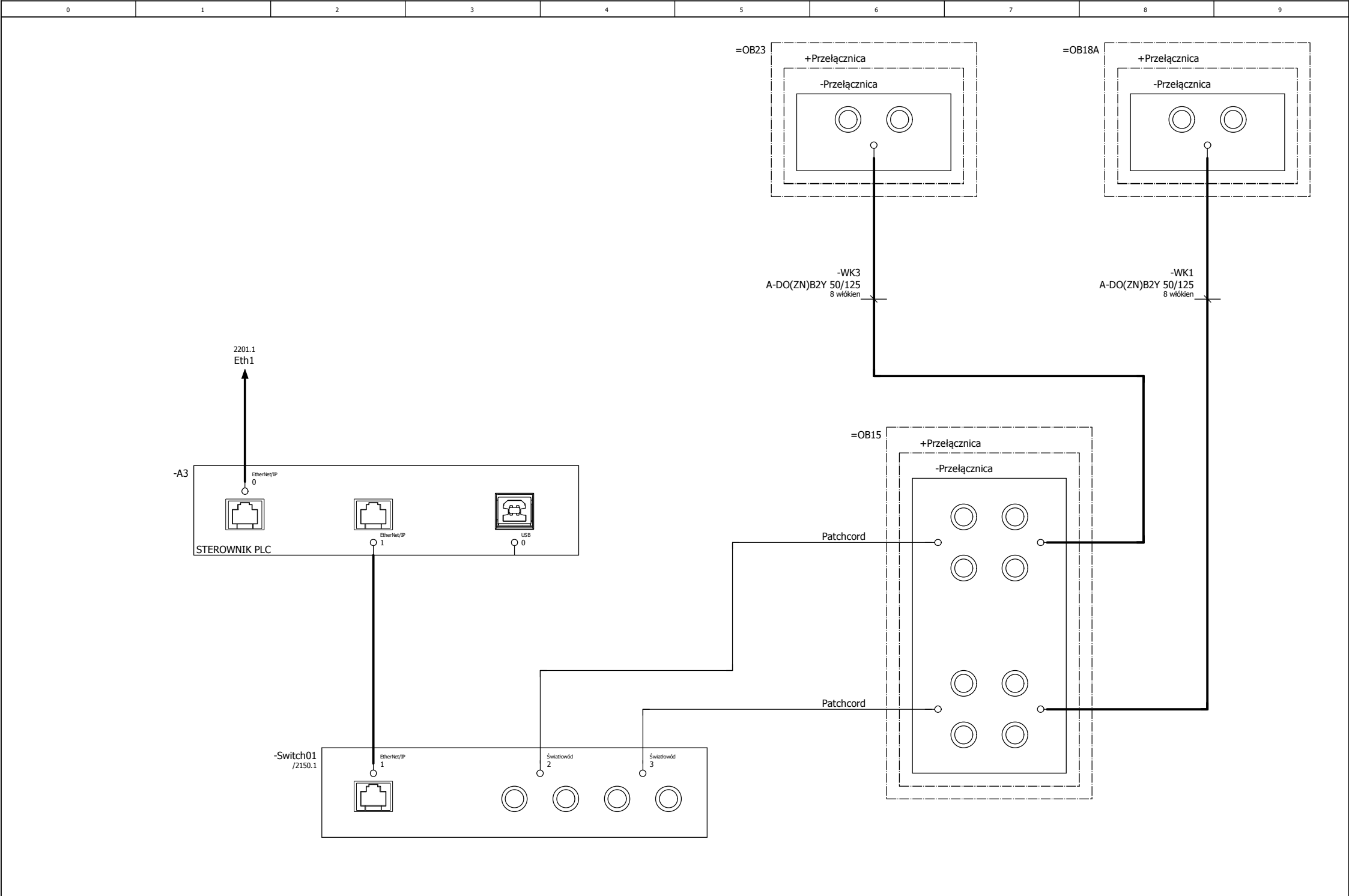
Zasilanie switch ethernetowy i światłowodowy

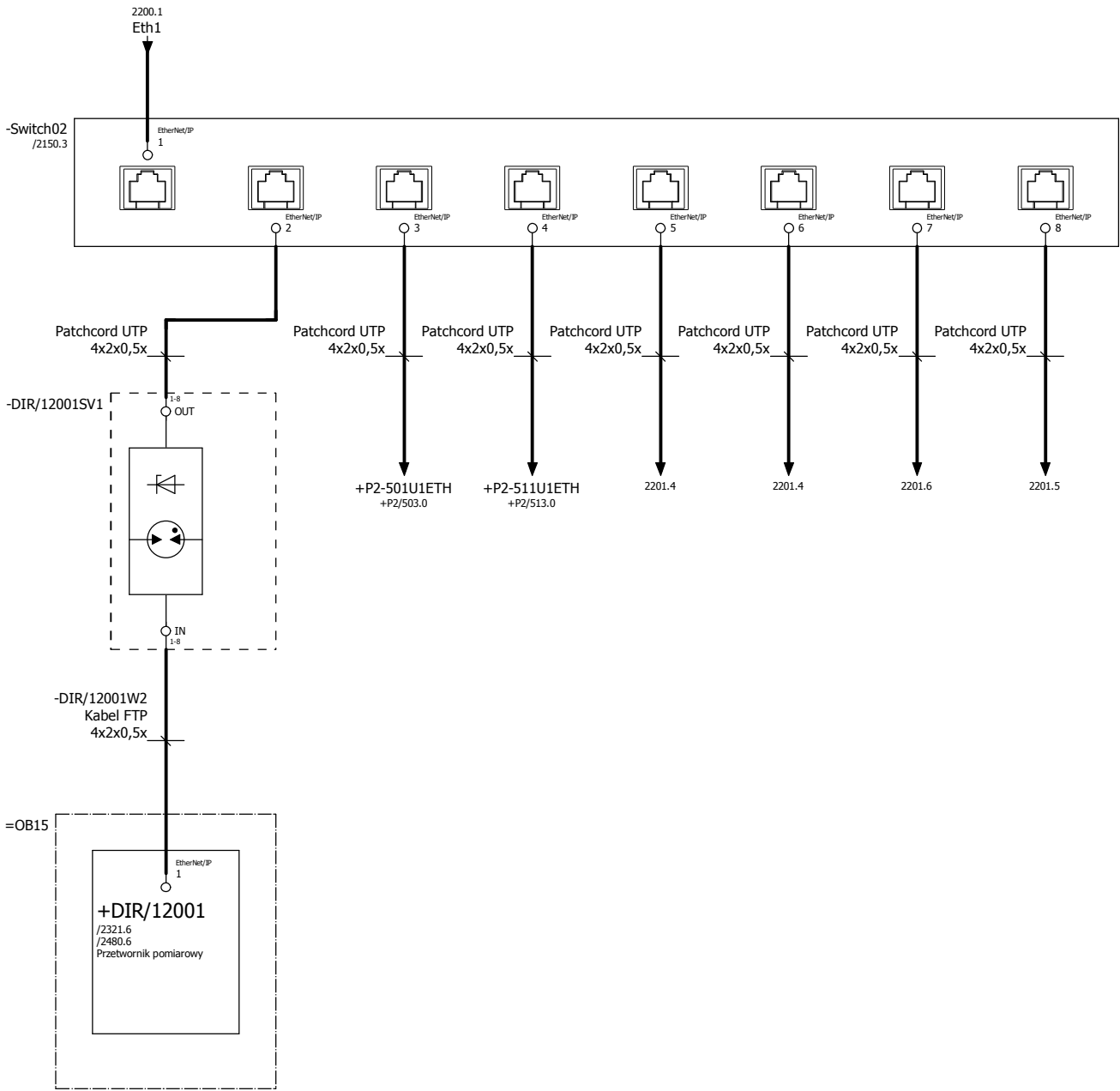


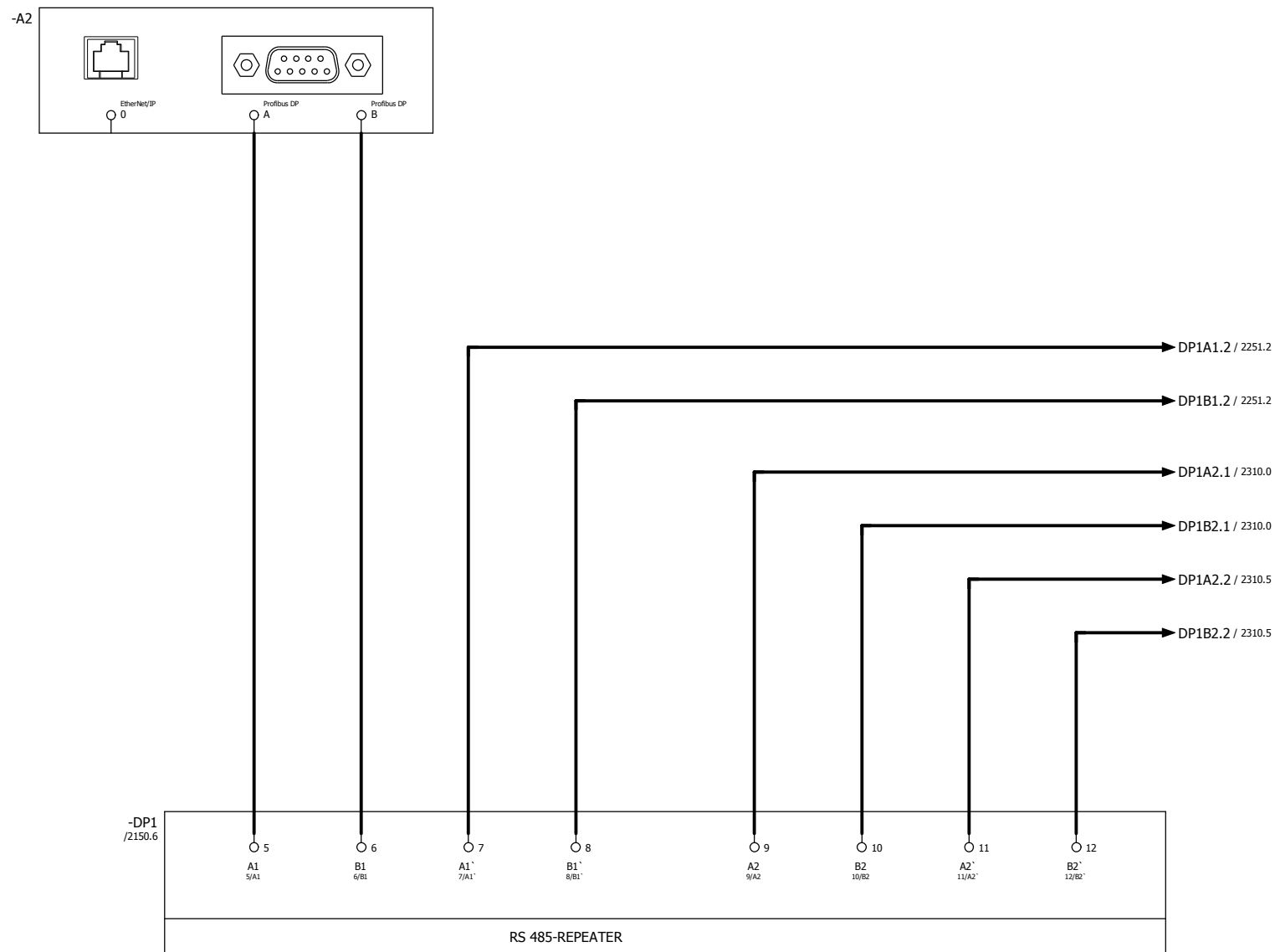
Zasilanie switch ethernetowy 8-portowy



Zasilanie Repeater



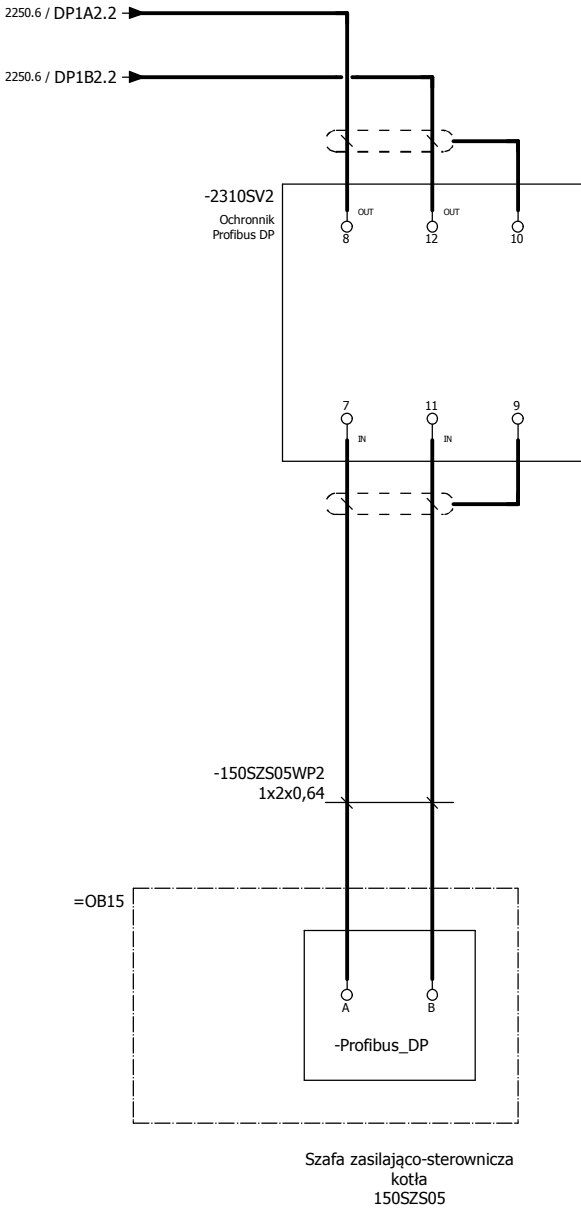
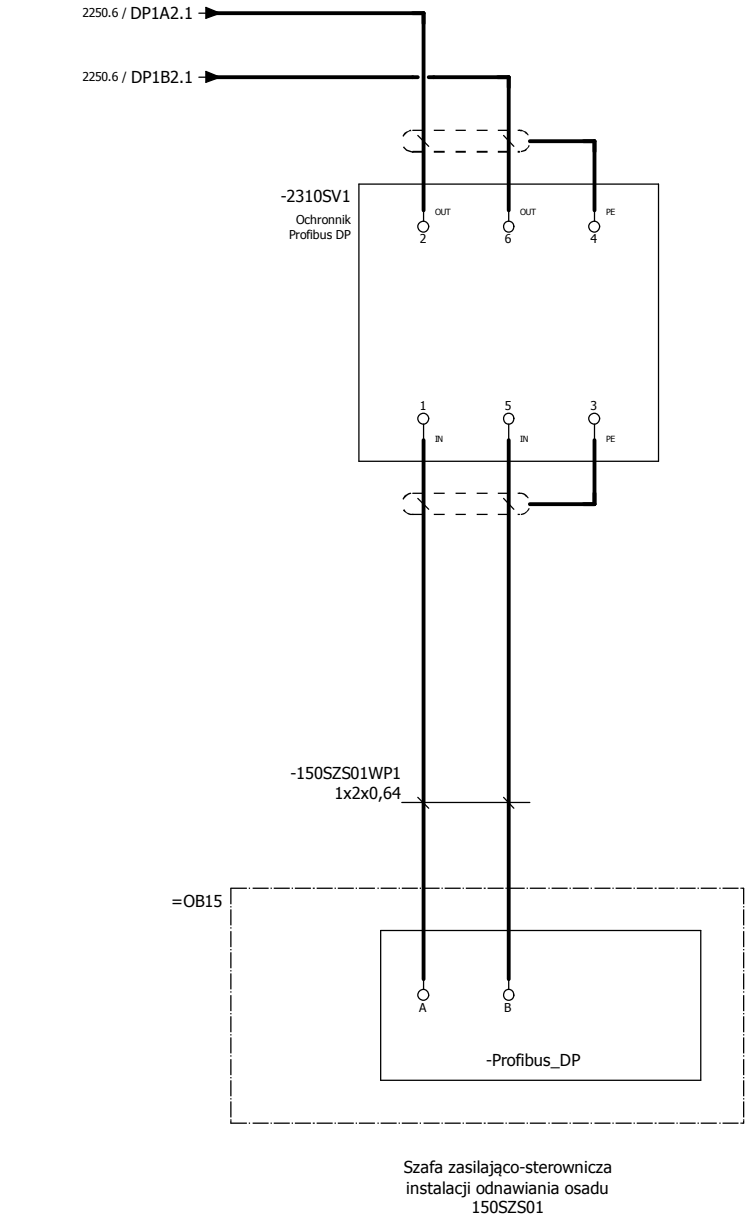


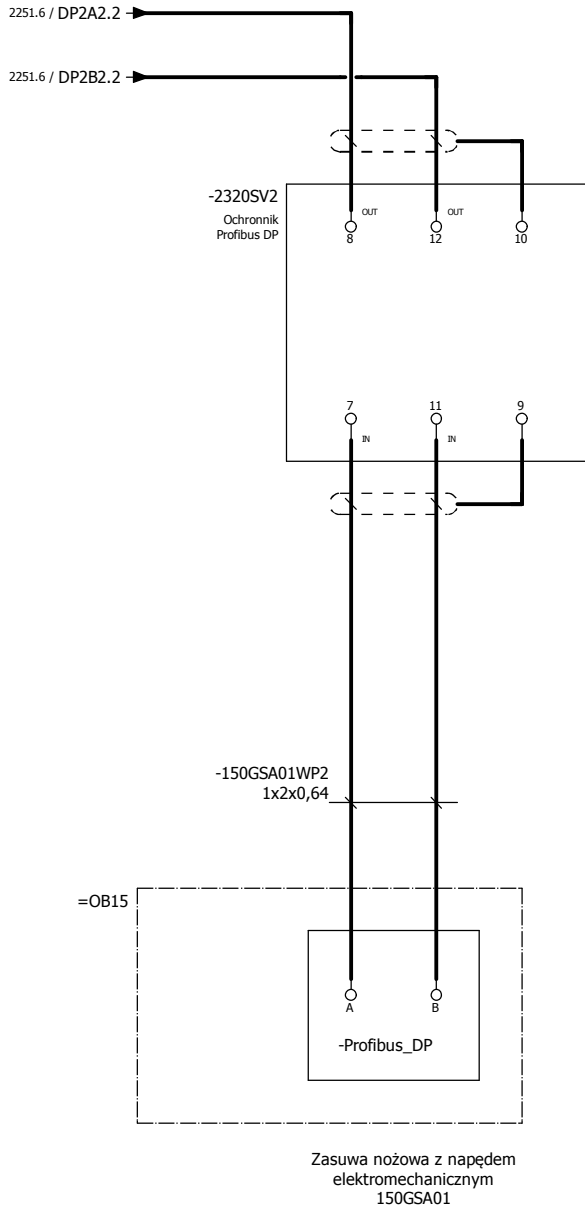
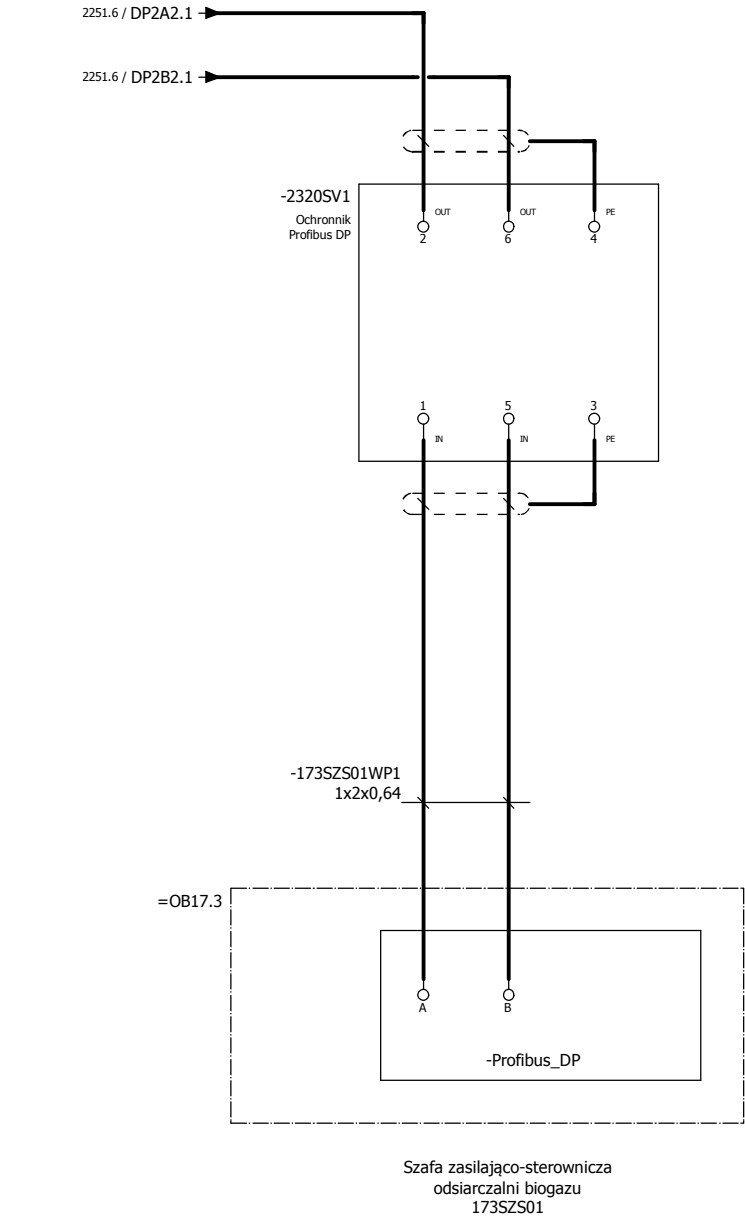


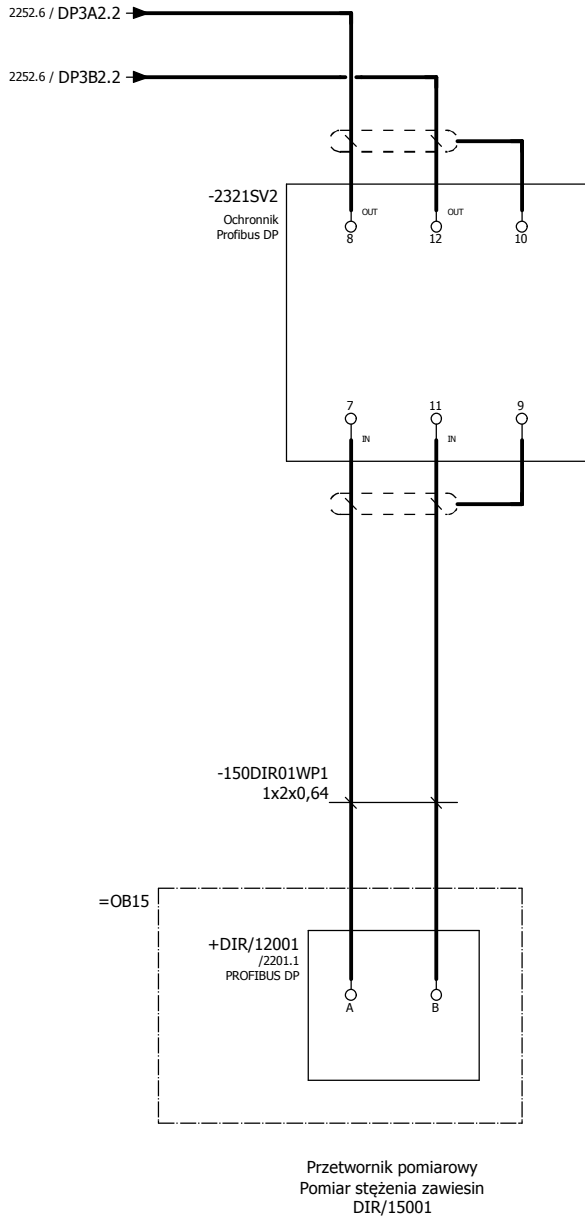
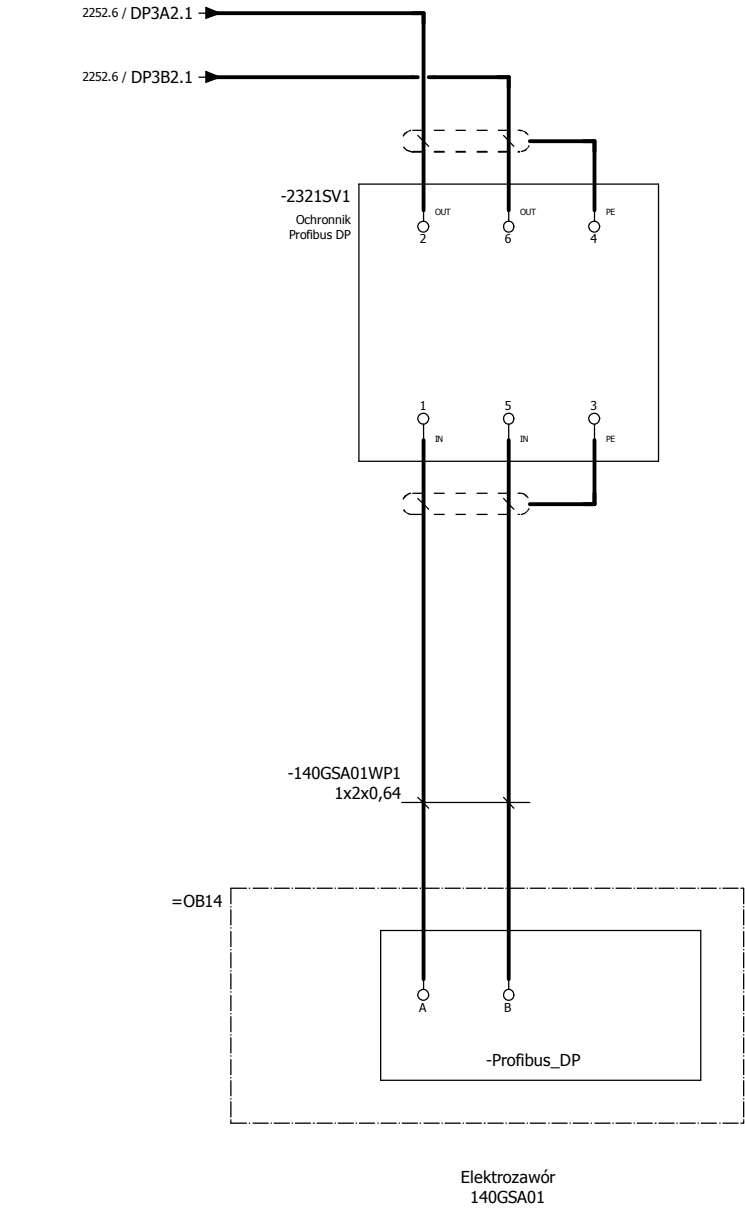


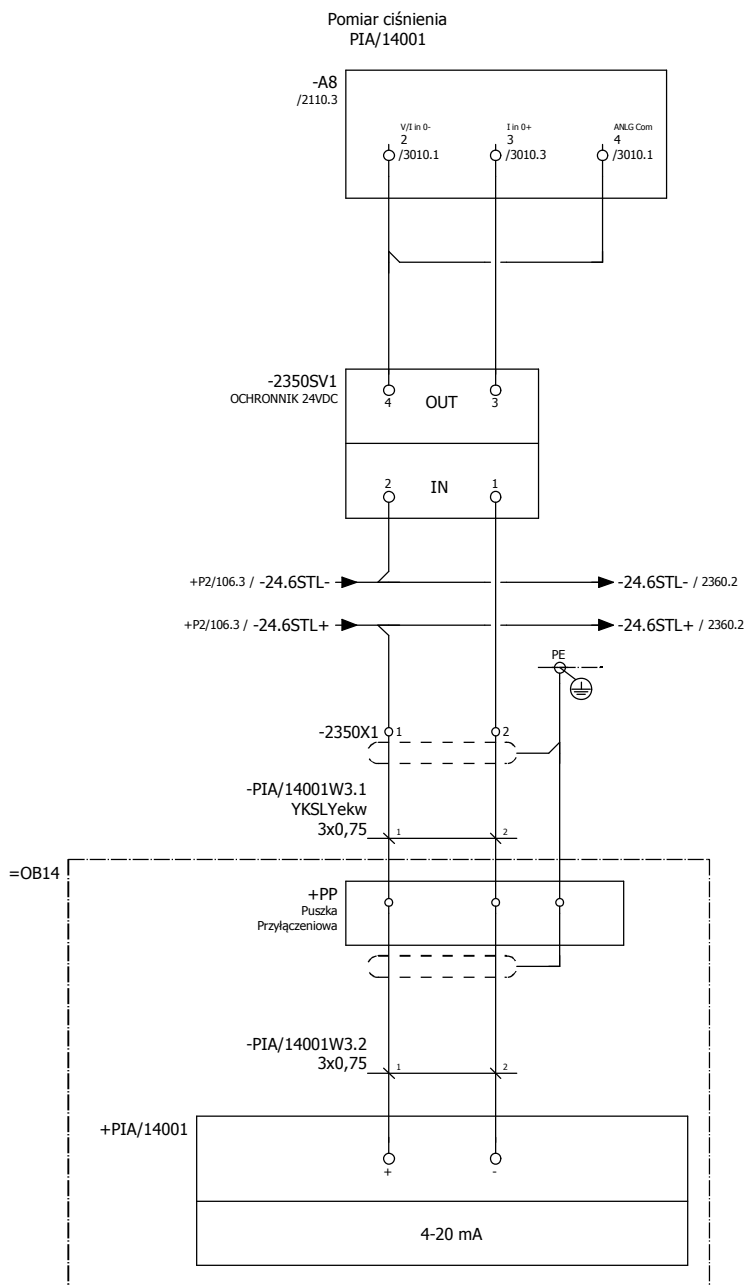


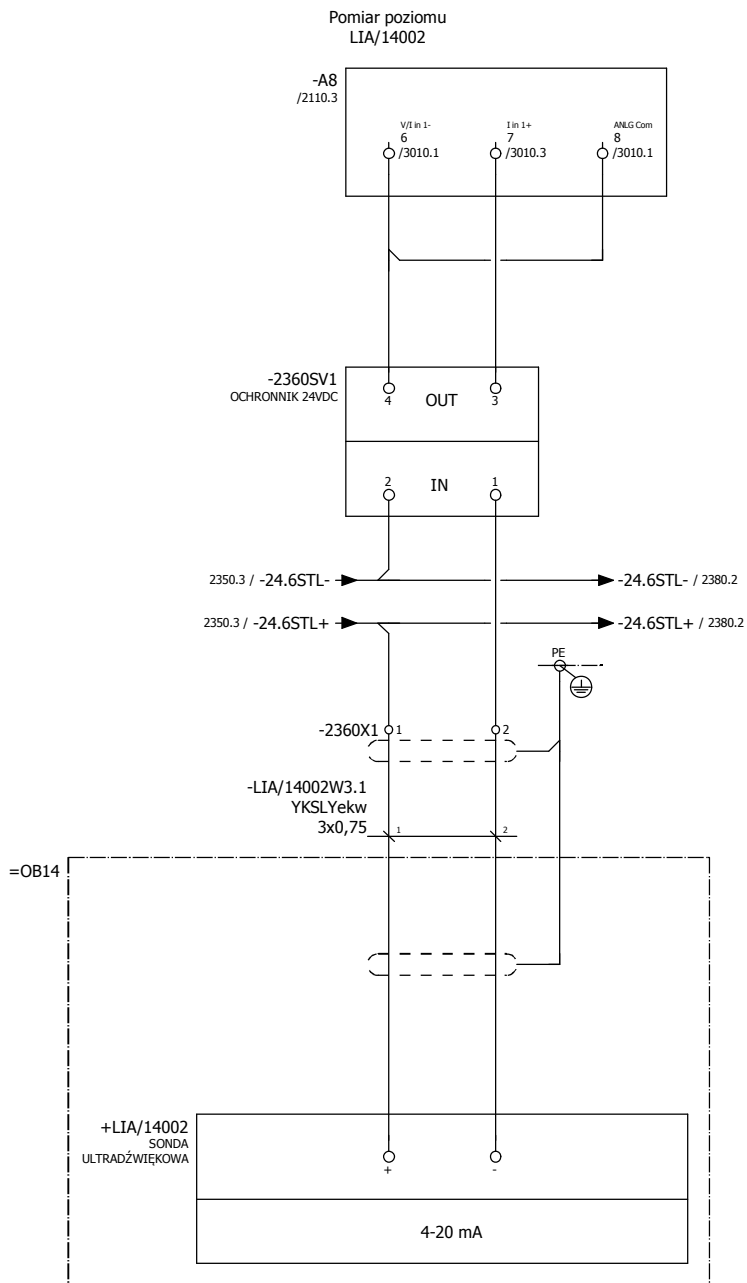


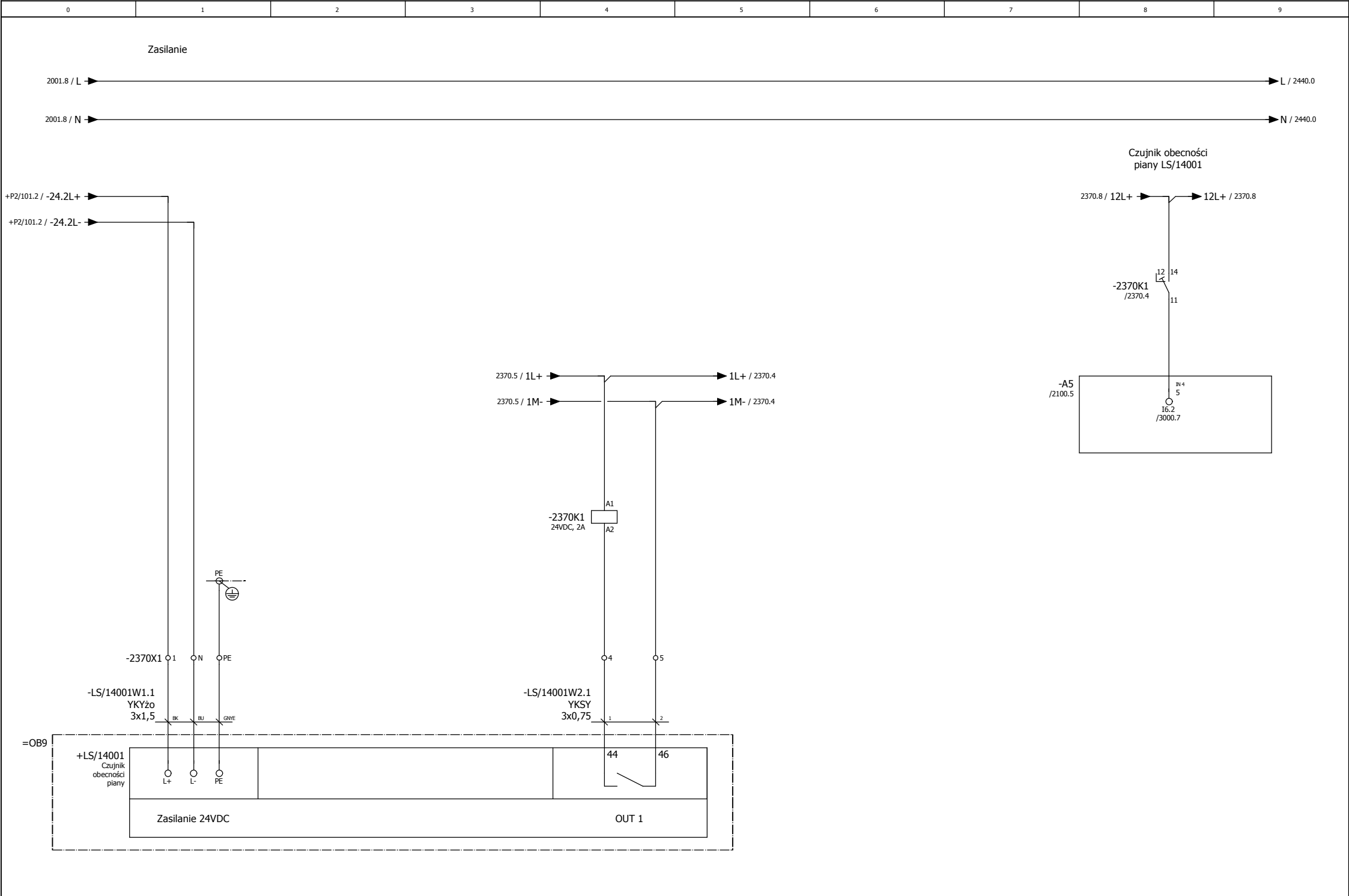




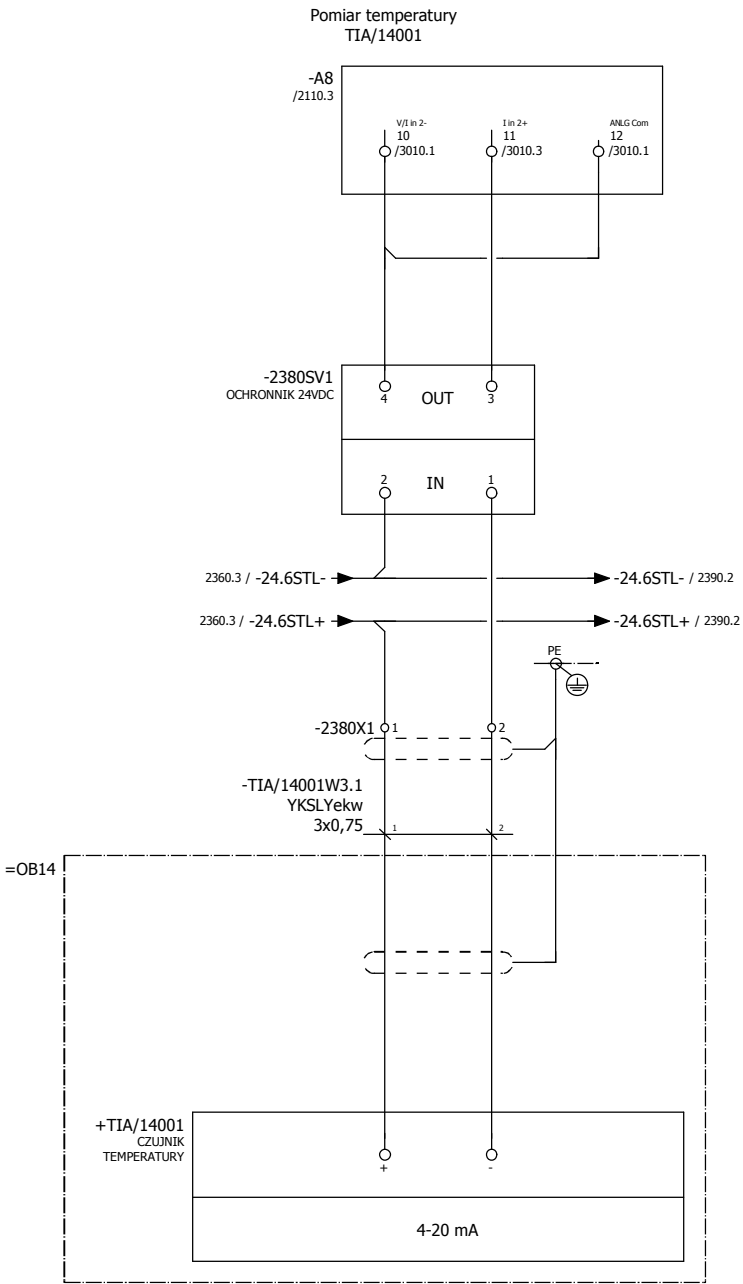






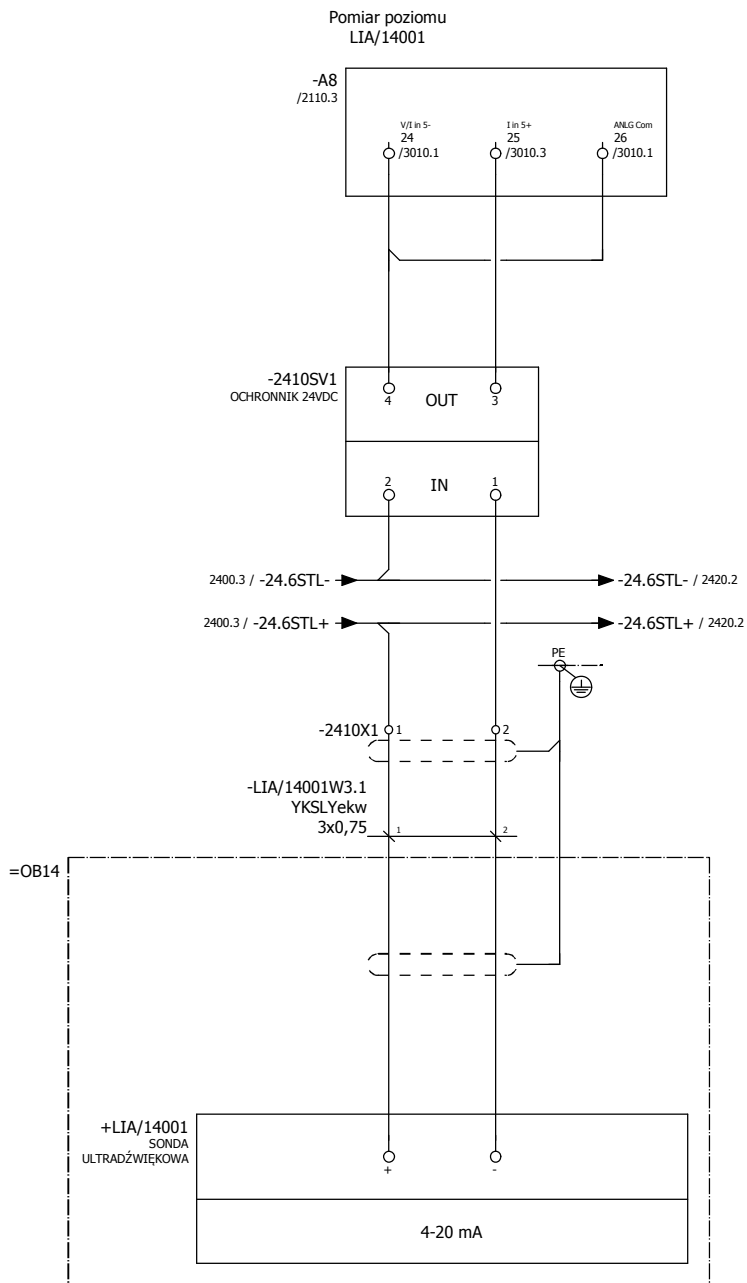


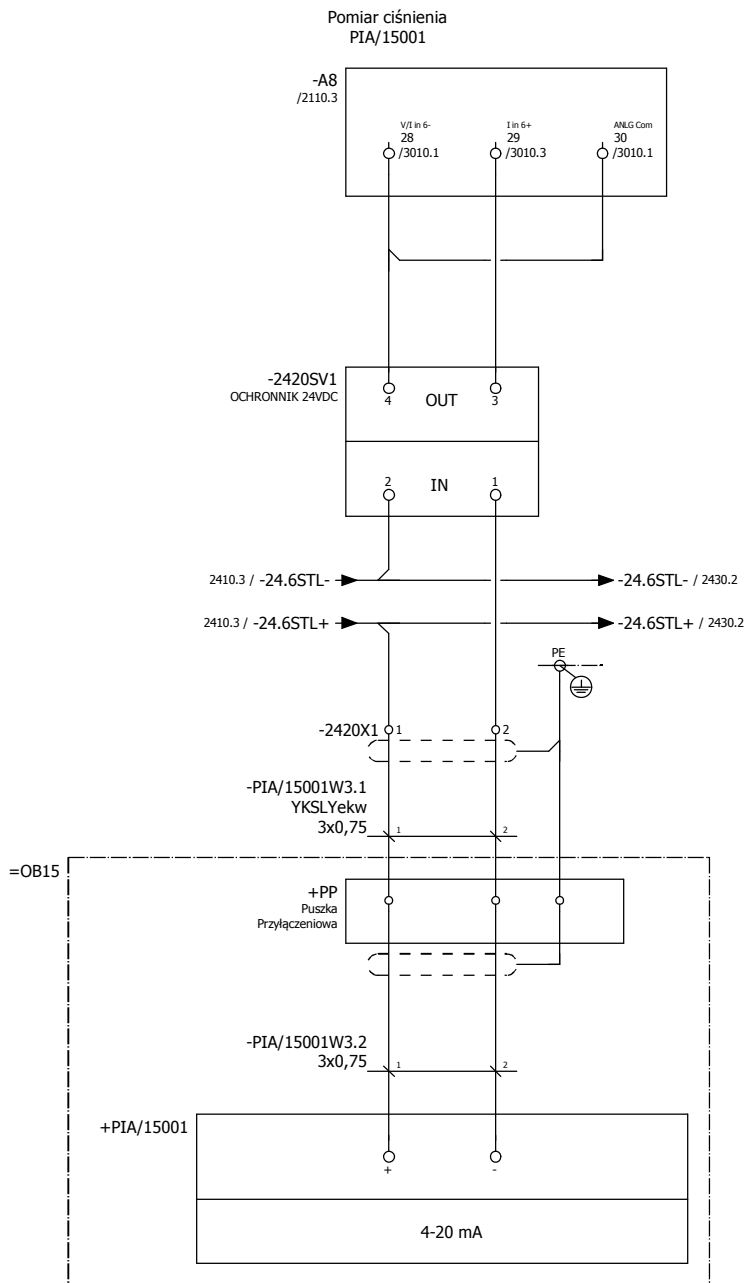


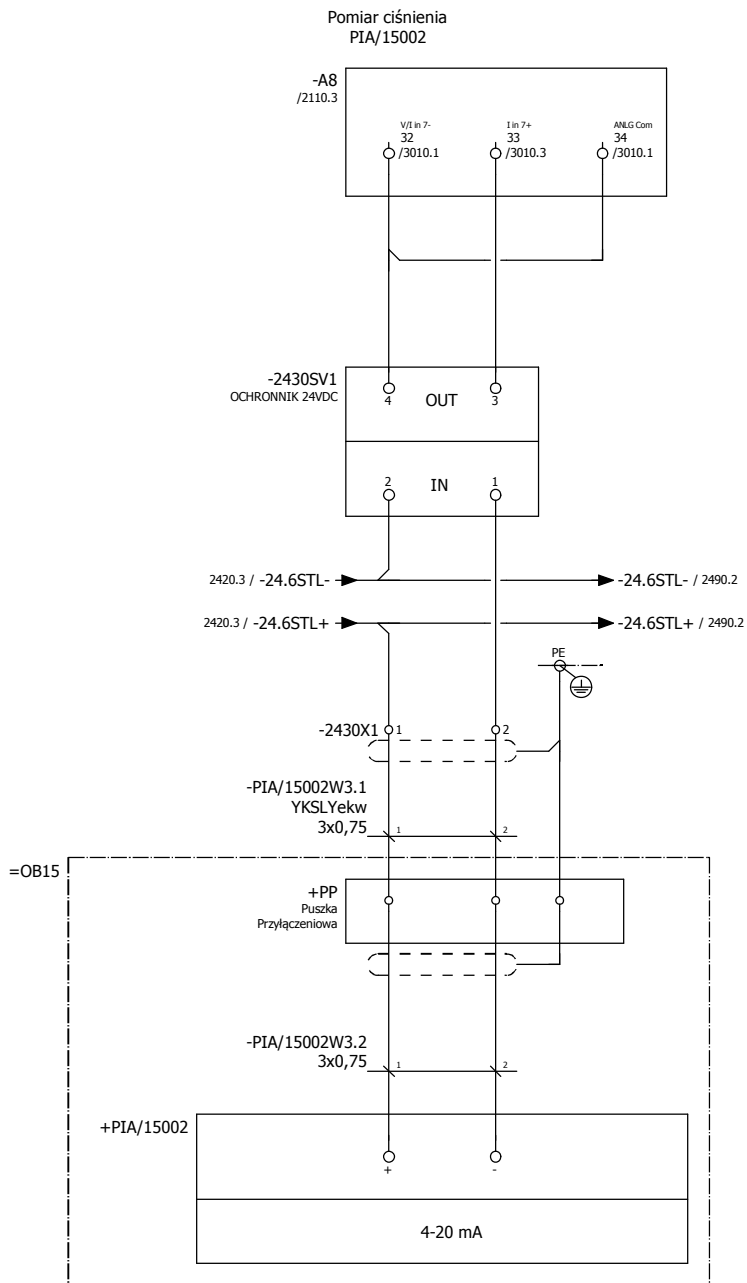


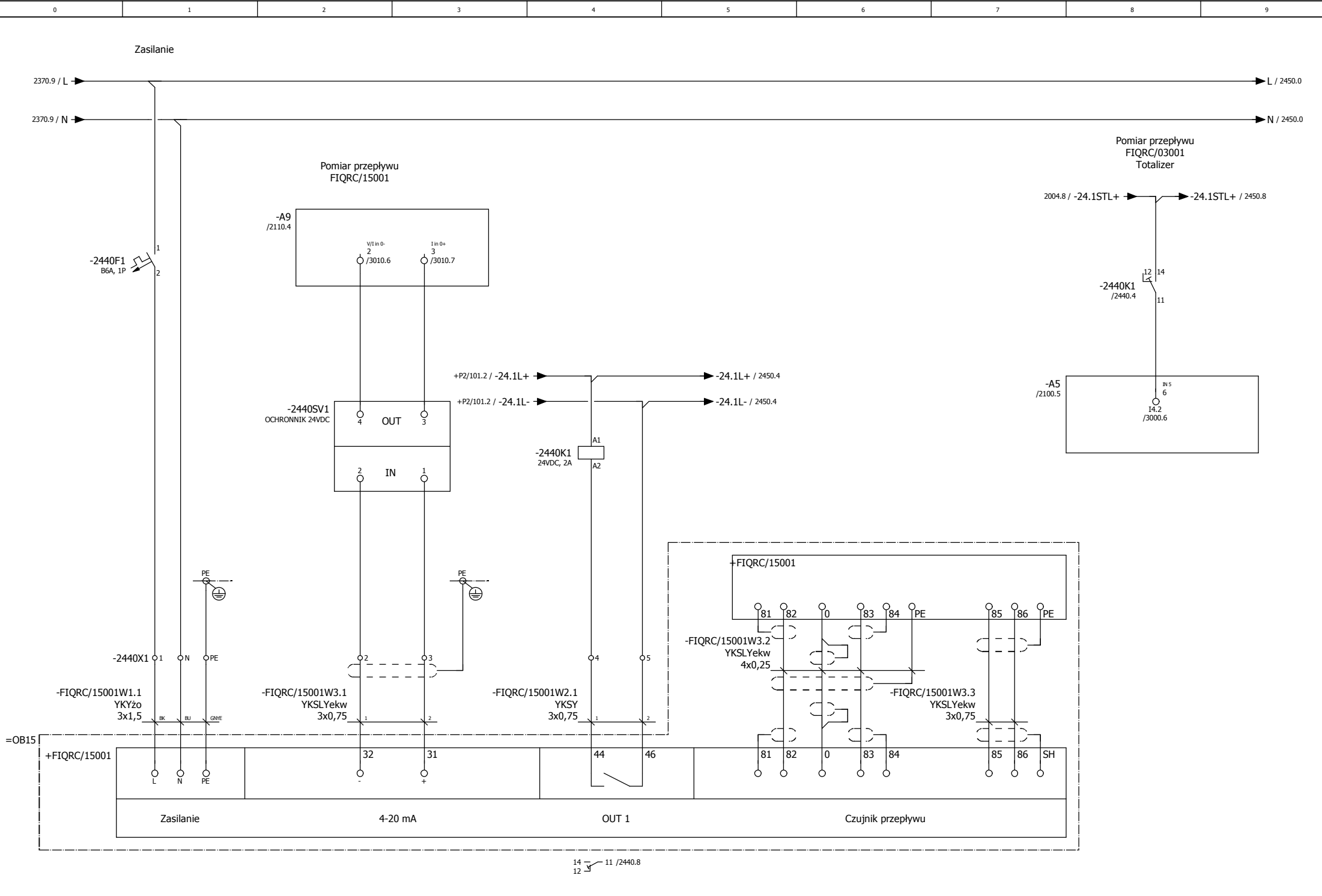






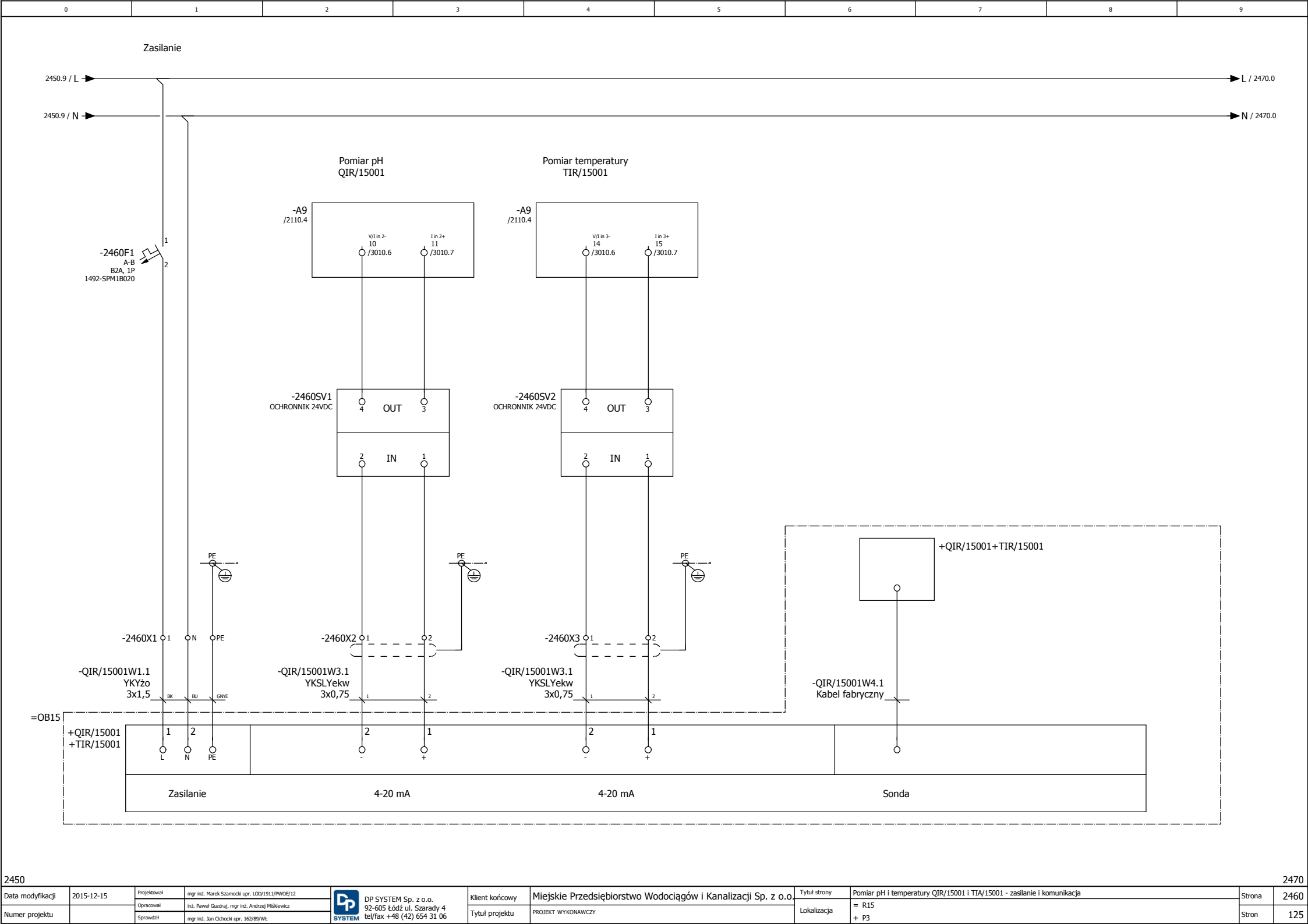


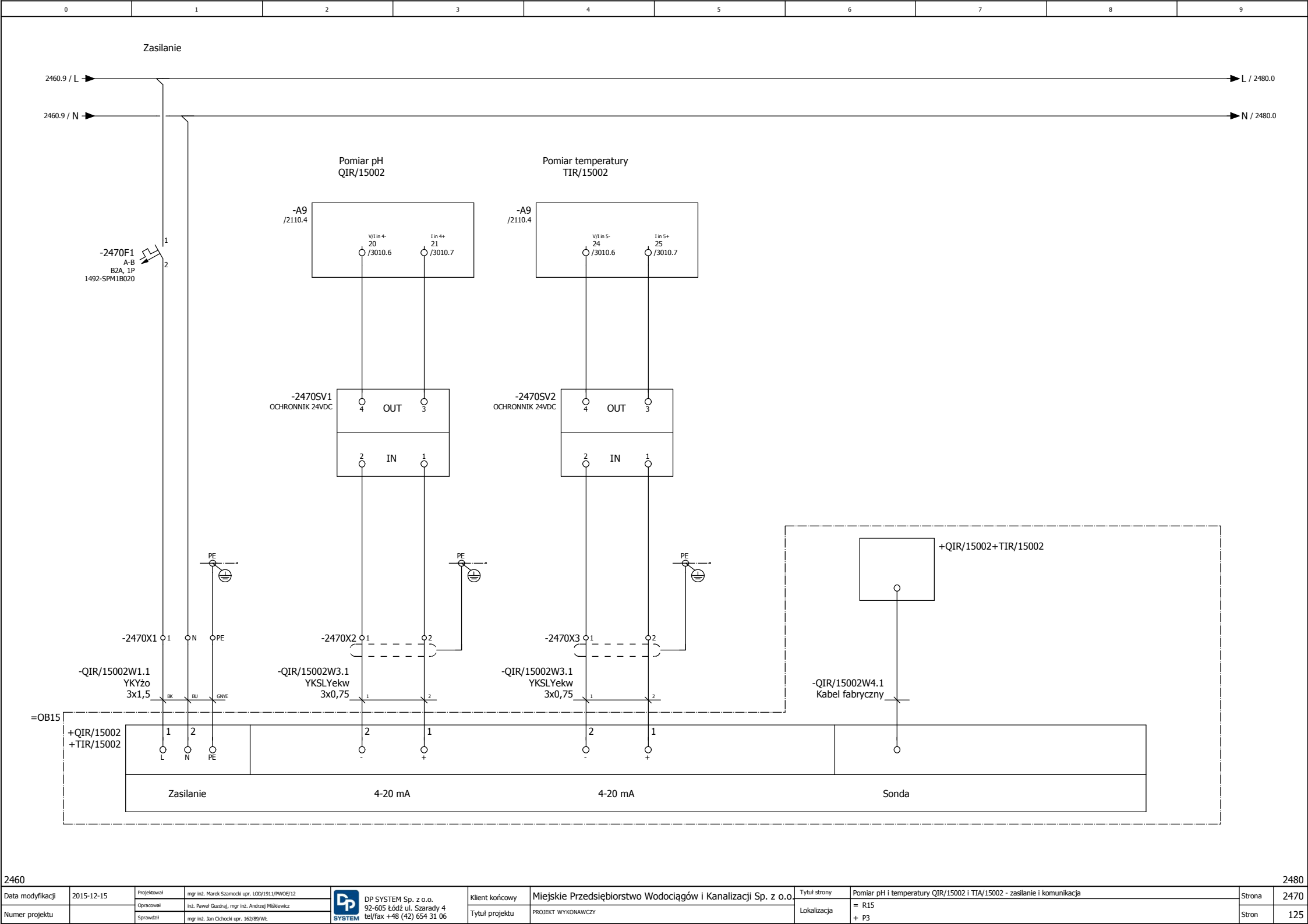


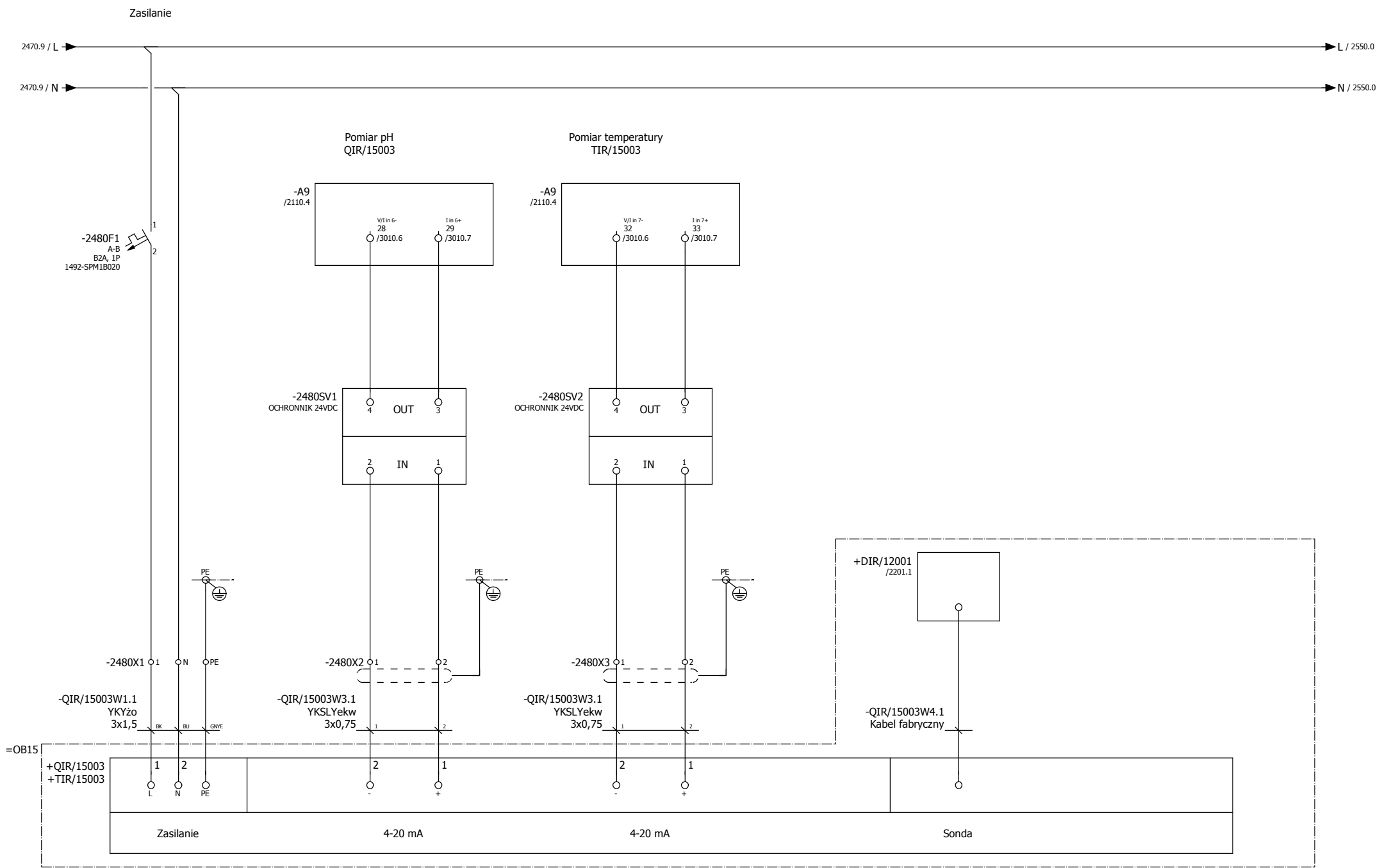


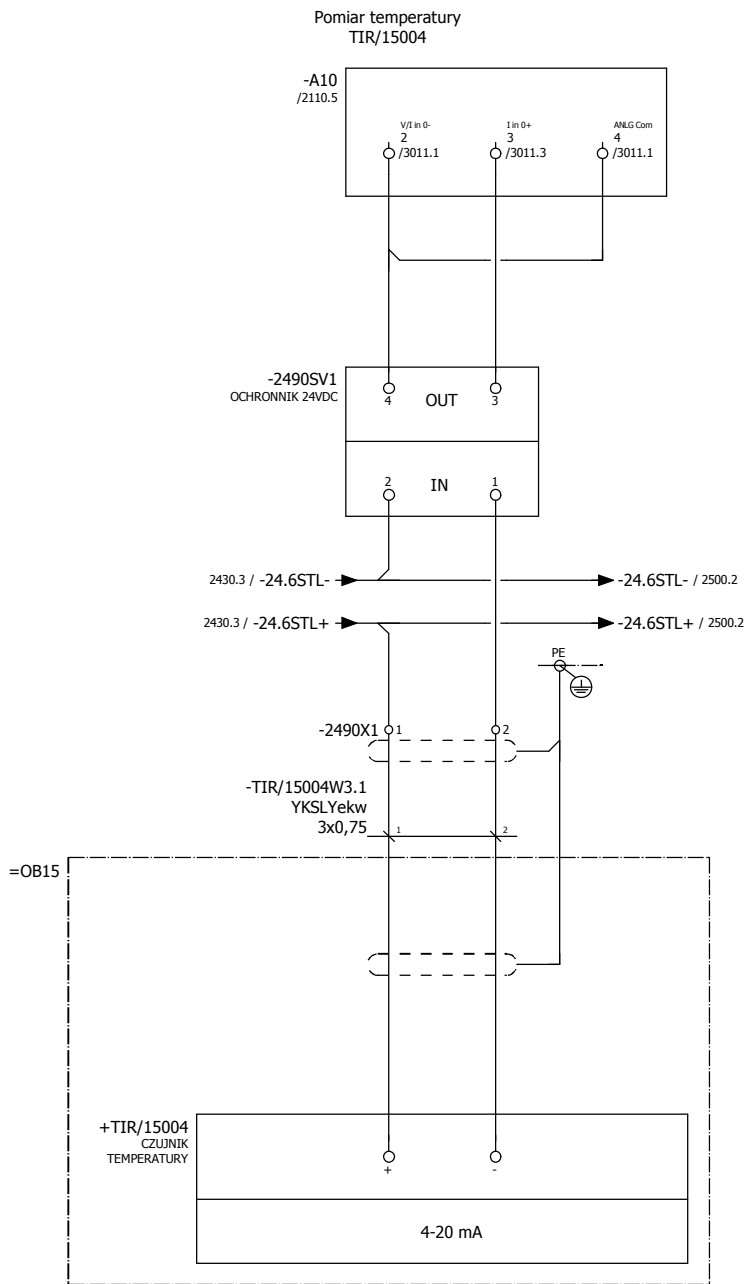


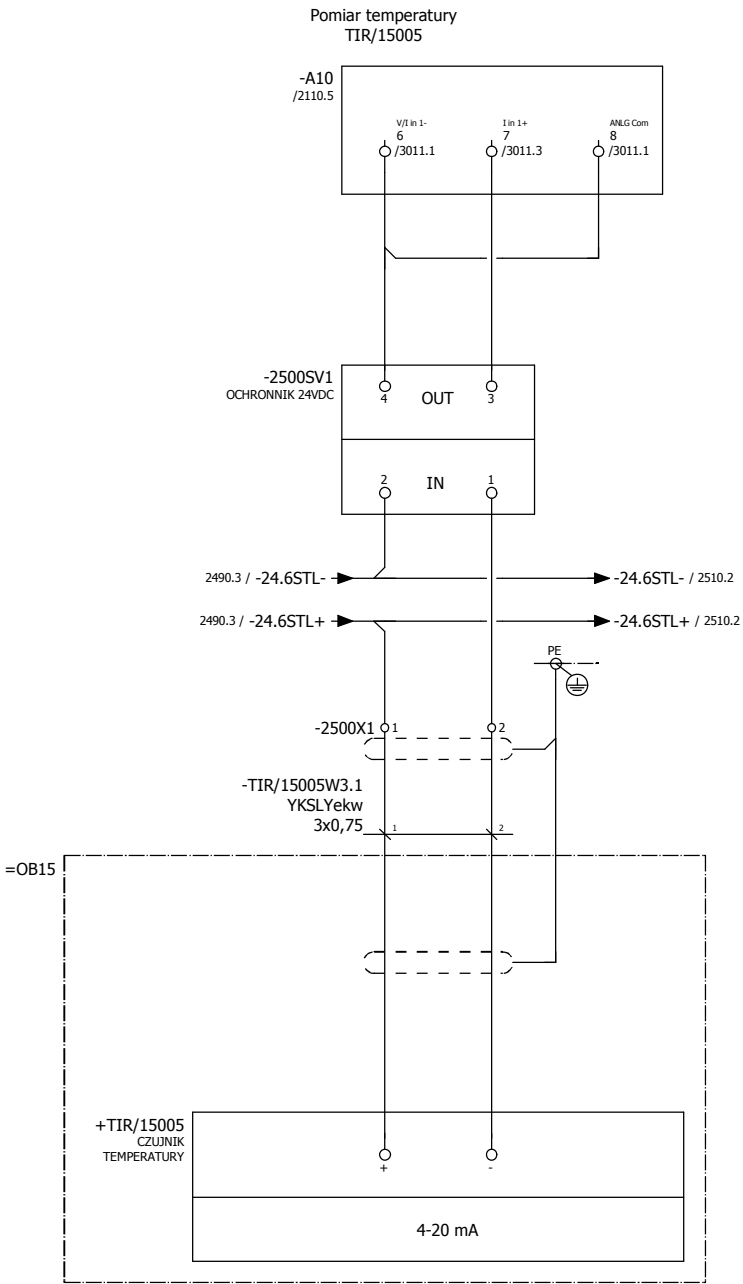




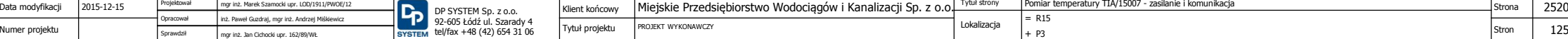






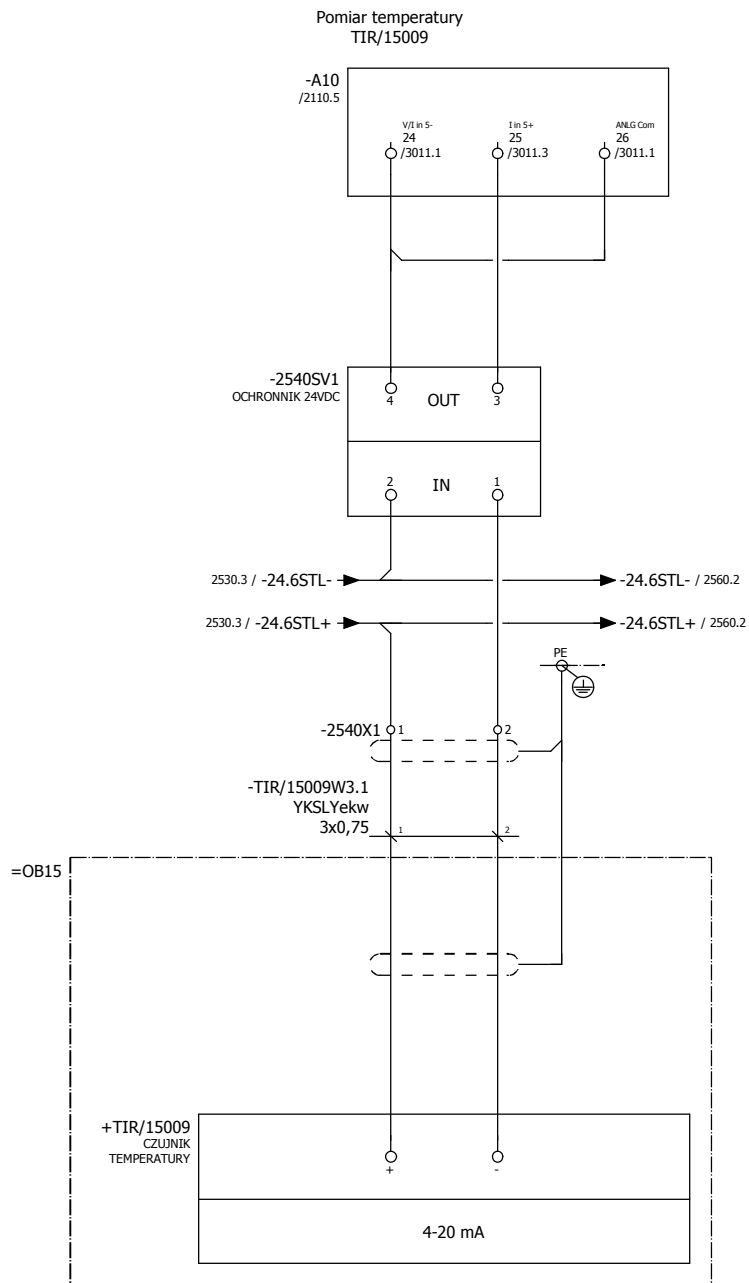


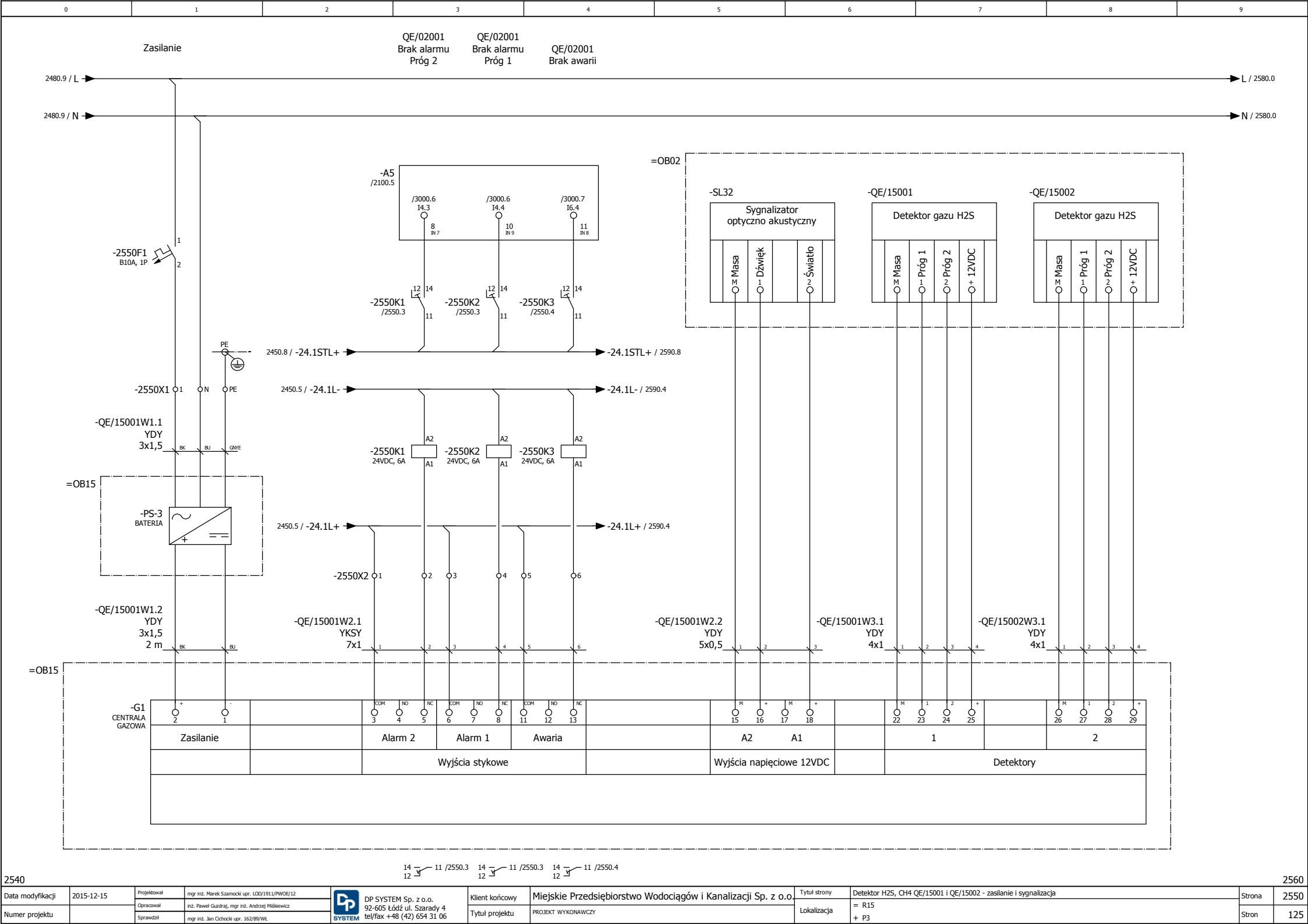


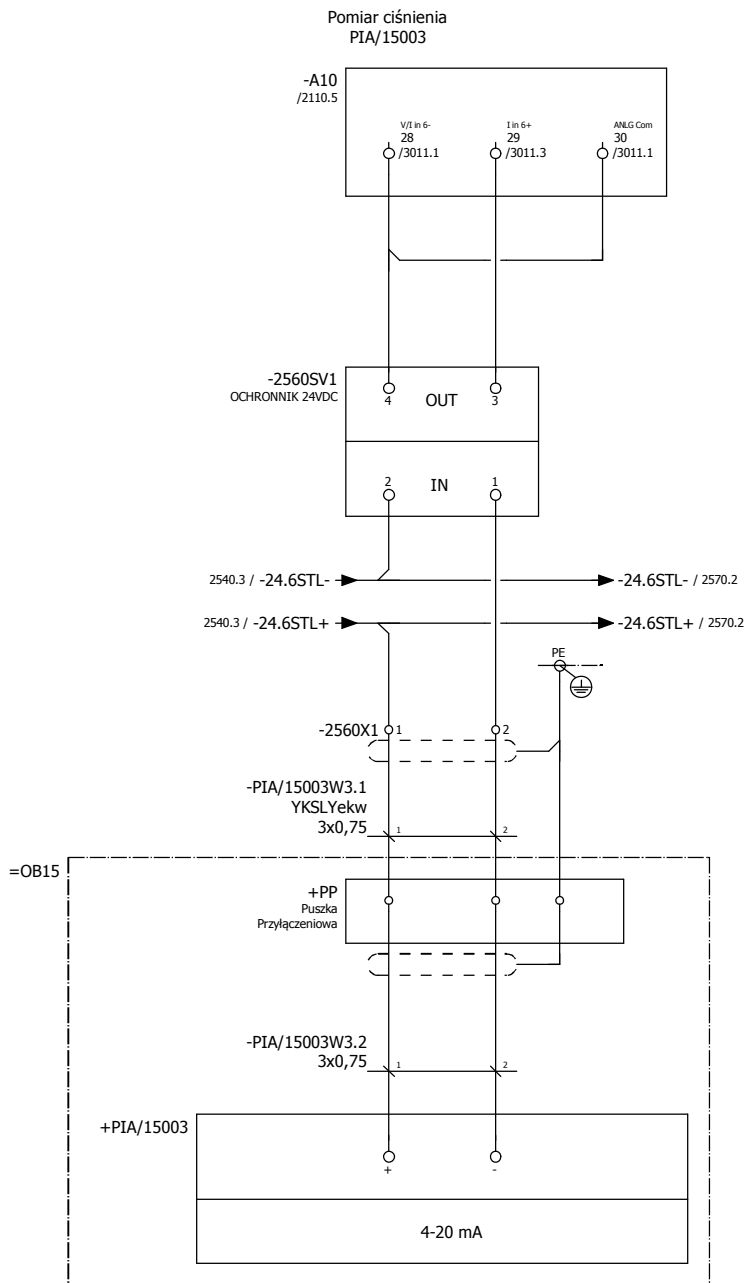


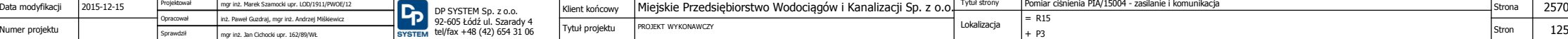


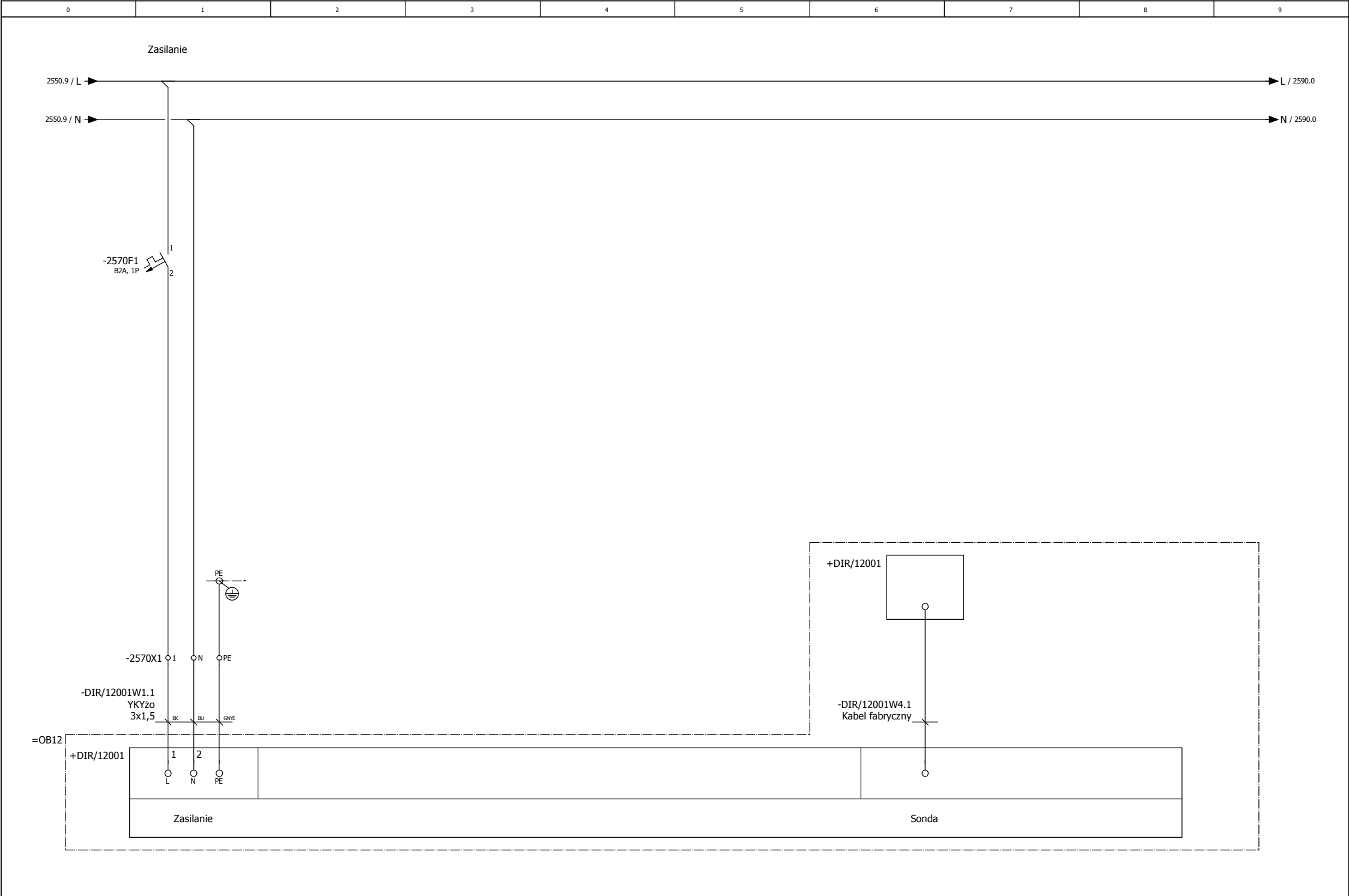


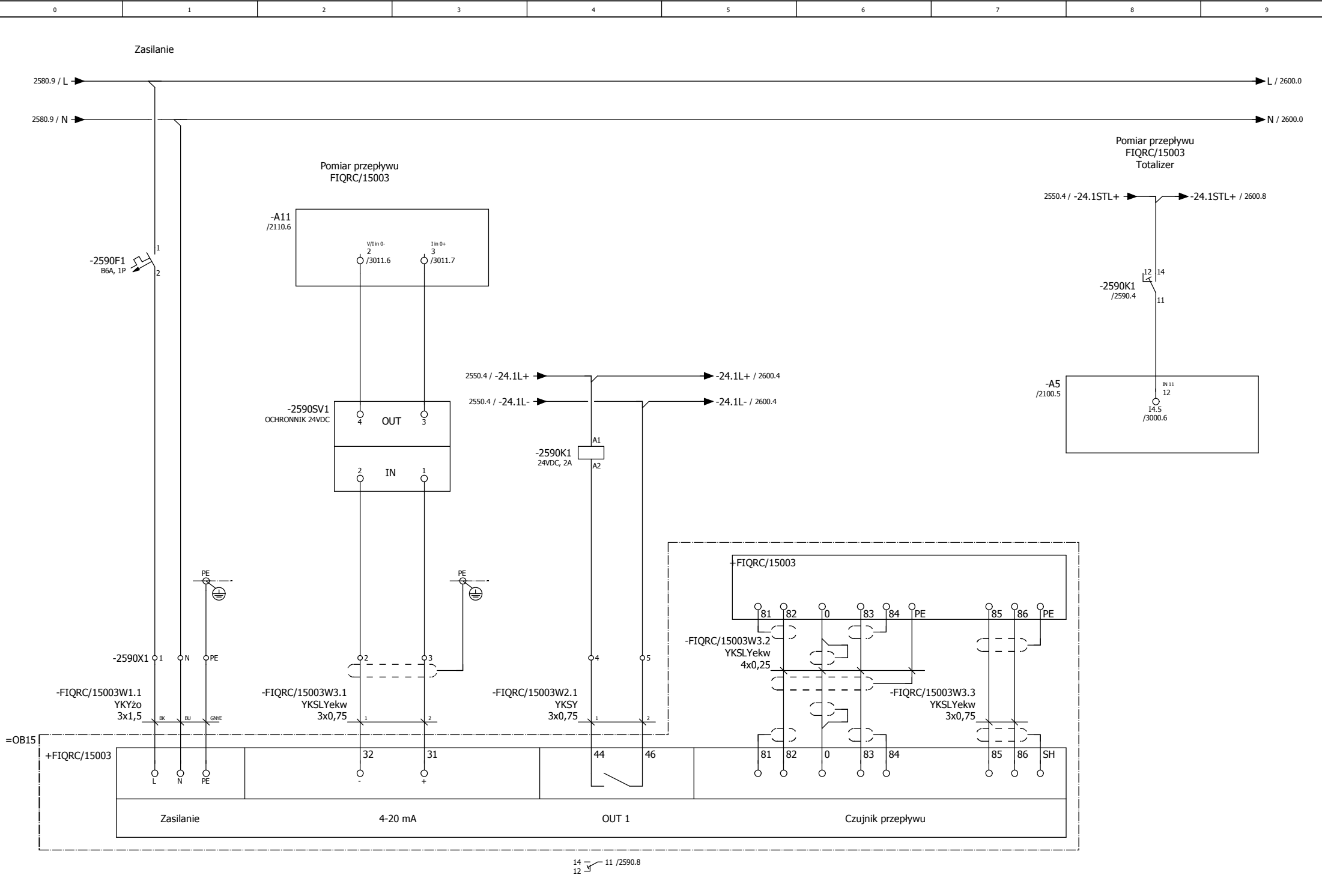




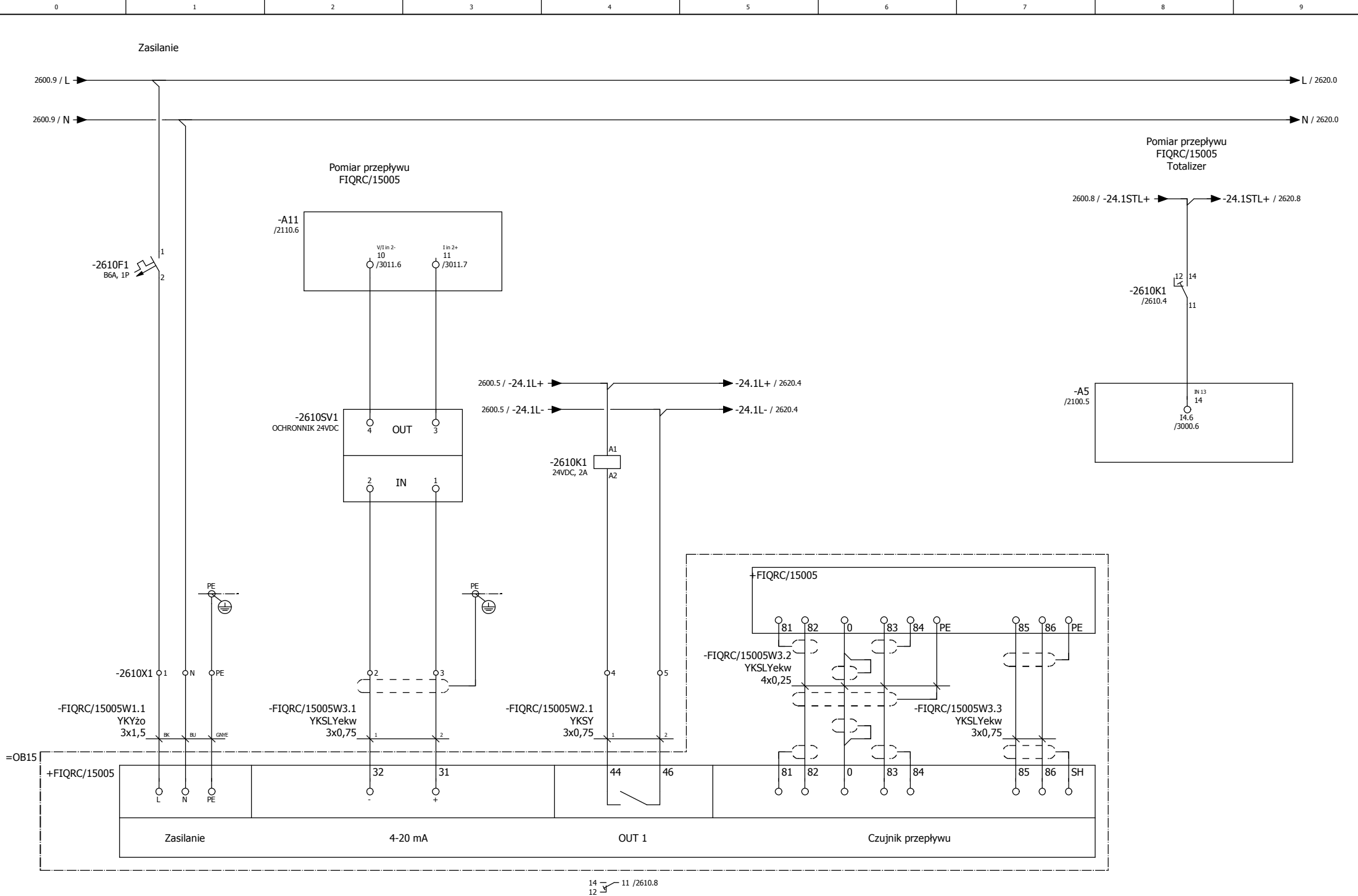






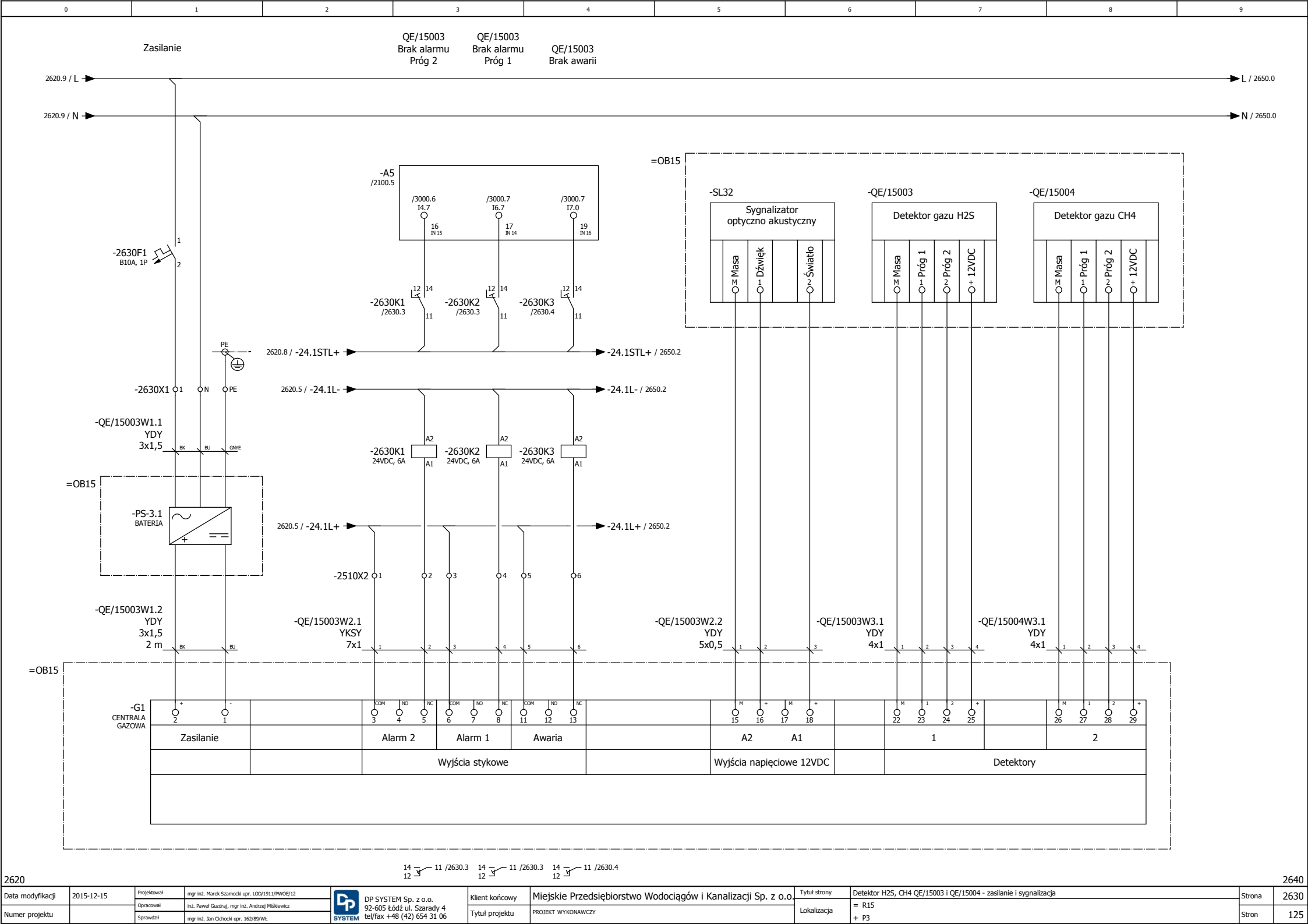




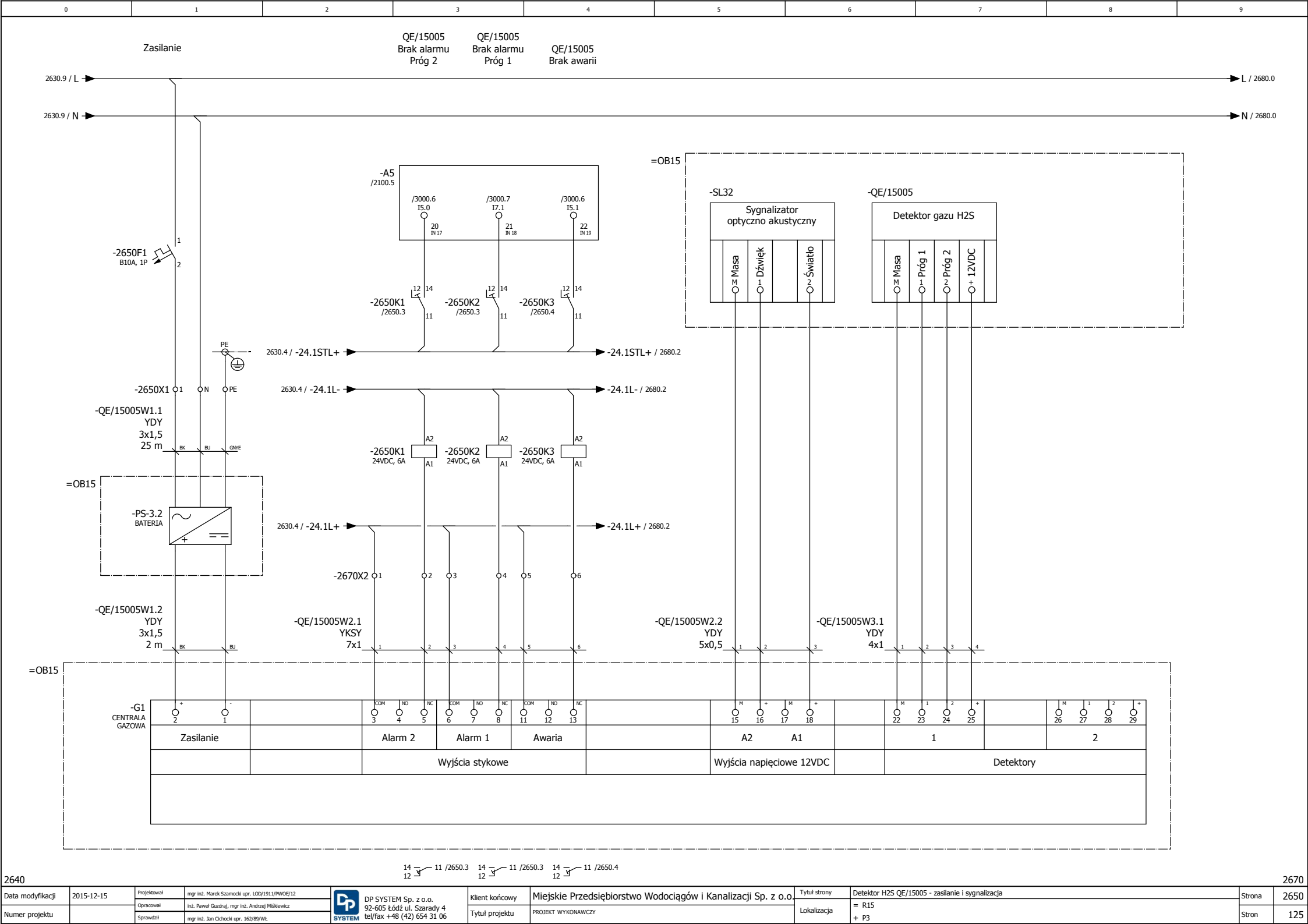


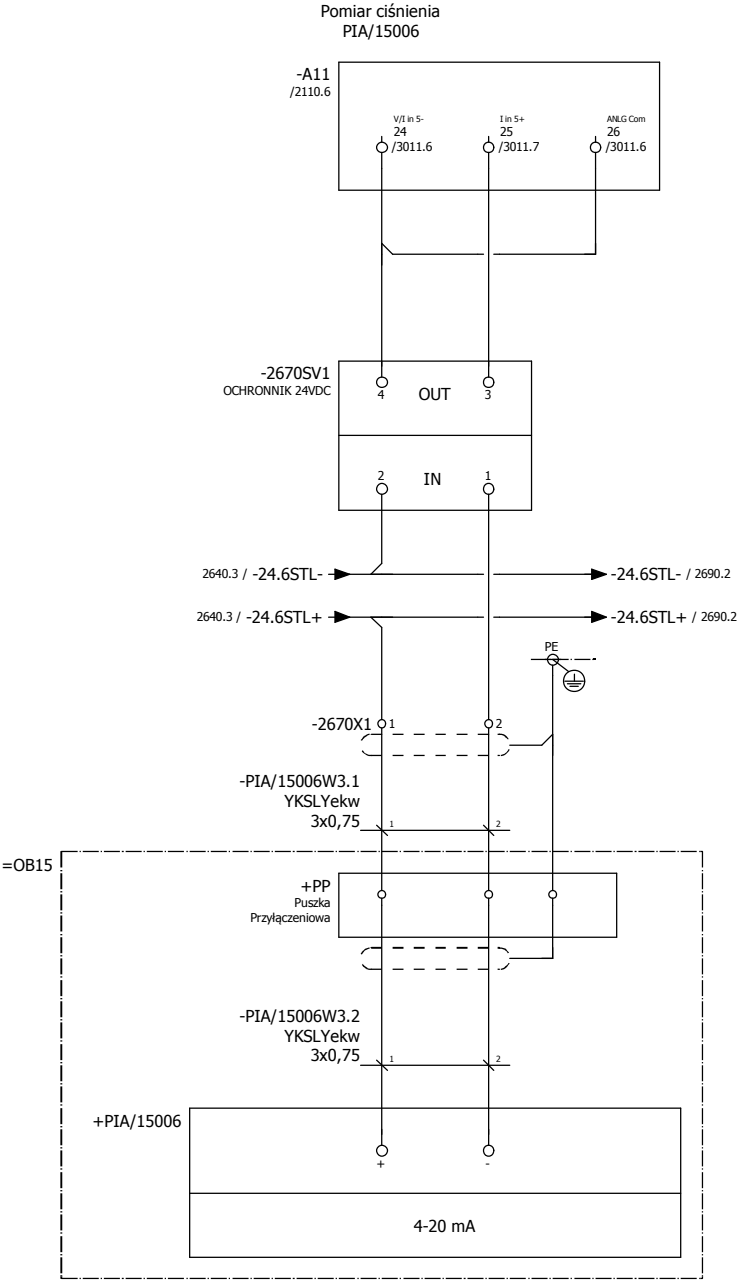


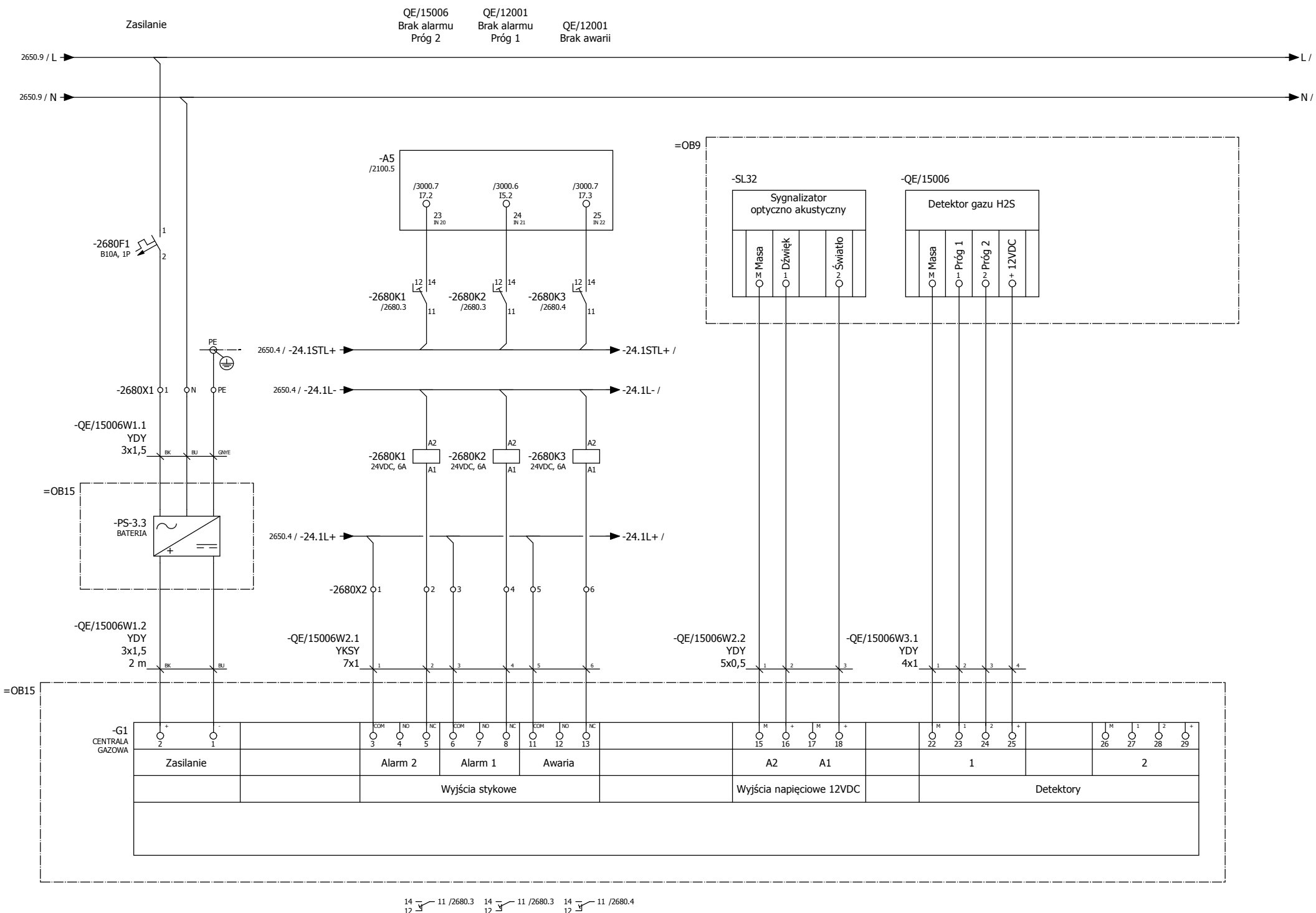




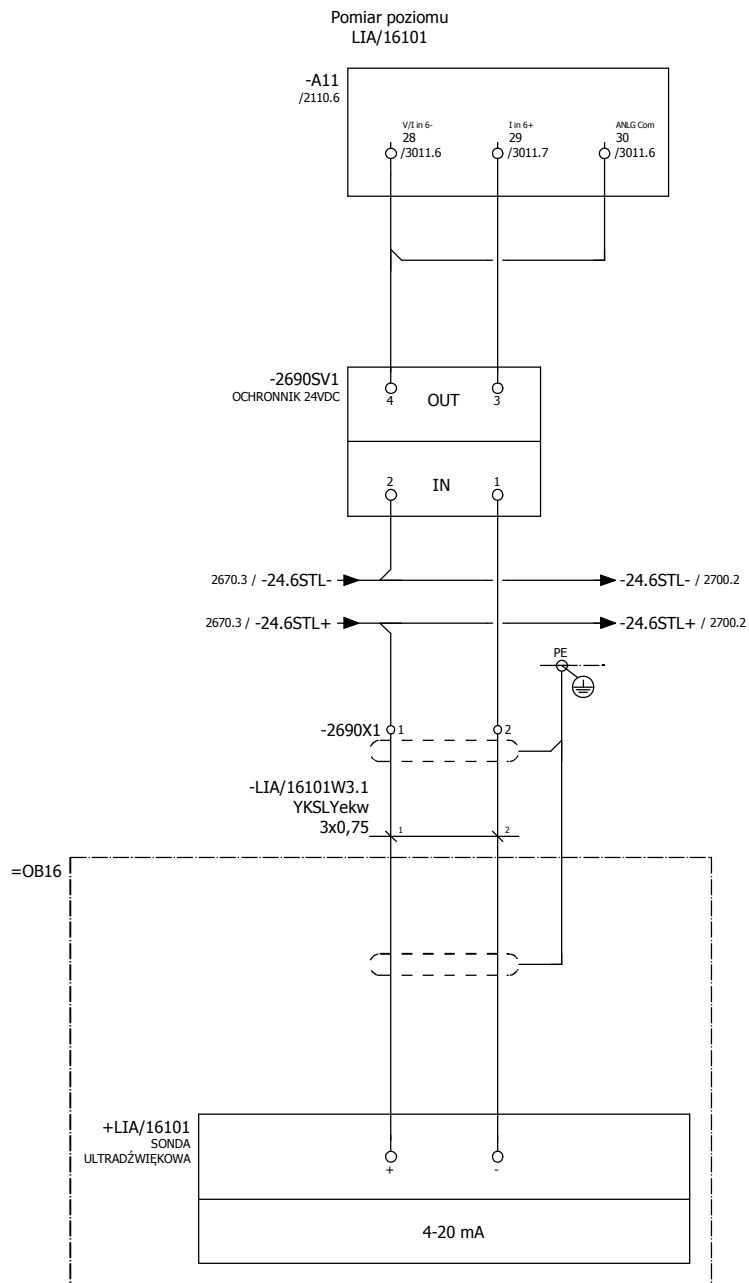









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2680										2700	
Data modyfikacji	2015-12-15	Projektował	mgr inż. Marek Szamocki upr. ŁOD/1911/PWCE/12	 DP SYSTEM Sp. z o.o. 92-605 Łódź ul. Szarady 4 tel/fax +48 (42) 654 31 06	Klient końcowy	Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji Sp. z o.o.	Tytuł strony	Pomiar poziomu LIA/16101 - zasilanie i komunikacja		Strona	2690
Numer projektu		Opracował	inż. Paweł Guzdraj, mgr inż. Andrzej Miśkiewicz		Tytuł projektu	PROJEKT WYKONAWCZY	Lokalizacja	= R15		Stron	125
		Sprawił	mgr inż. Jan Cichocki upr. 162/89/WL					+ P3			





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32x Digital In

140NSA01 Praca	+P2/303.1	<div><div>2</div><div>IN 1</div></div> <div>I0.0</div> <div>+P2-302KM1:54</div>	<div><div>12.0</div><div>IN 0</div></div> <div><div>1</div><div>1</div></div>
140NSA01 Sterowanie Lokalne	+P2/303.2	<div><div>4</div><div>IN 3</div></div> <div>I0.1</div> <div>+P2-302K2:11</div>	<div><div>12.1</div><div>IN 2</div></div> <div><div>3</div><div>1</div></div>
140NSA01 Wyłącznik Bezpieczeństwa	+P2/303.4	<div><div>6</div><div>IN 5</div></div> <div>I0.2</div> <div>+P2-302K5:11</div>	<div><div>12.2</div><div>IN 4</div></div> <div><div>5</div><div>1</div></div>
150NSA01 Gotowość	+P2/403.2	<div><div>8</div><div>IN 7</div></div> <div>I0.3</div> <div>+P2-402K1:11</div>	<div><div>12.3</div><div>IN 6</div></div> <div><div>7</div><div>1</div></div>
150NSA01 Sterowanie Lokalne	+P2/403.2	<div><div>10</div><div>IN 9</div></div> <div>I0.4</div> <div>+P2-402K2:11</div>	<div><div>12.4</div><div>IN 5</div></div> <div><div>9</div><div>1</div></div>
150NSA01 Wyłącznik Bezpieczeństwa	+P2/403.4	<div><div>12</div><div>IN 11</div></div> <div>I0.5</div> <div>+P2-402K5:11</div>	<div><div>12.4</div><div>IN 8</div></div> <div><div>11</div><div>1</div></div>
150NSA02 Gotowość	+P2/413.2	<div><div>14</div><div>IN 13</div></div> <div>I0.6</div> <div>+P2-412K1:11</div>	<div><div>12.5</div><div>IN 10</div></div> <div><div>13</div><div>1</div></div>
150NSA02 Sterowanie Zdalne	+P2/413.3	<div><div>16</div><div>IN 15</div></div> <div>I0.7</div> <div>+P2-412K3:11</div>	<div><div>12.6</div><div>IN 12</div></div> <div><div>15</div><div>1</div></div>
Zasilanie Masa	/2100.3	<div><div>18</div><div>DC COM 2</div></div> <div></div> <div>+P2-412K5:11</div>	<div><div>12.7</div><div>IN 14</div></div> <div><div>17</div><div>1</div></div>
150NCA01 Przekroczenie Temperatury	+P2/504.2	<div><div>20</div><div>IN 17</div></div> <div>I1.0</div> <div>+P2-502K2:11</div>	<div><div>13.0</div><div>IN 16</div></div> <div><div>19</div><div>1</div></div>
150NCA02 Przekroczenie Temperatury	+P2/514.2	<div><div>22</div><div>IN 19</div></div> <div>I1.1</div> <div>+P2-512K2:11</div>	<div><div>13.1</div><div>IN 18</div></div> <div><div>21</div><div>1</div></div>
161NA01 Gotowość	+P2/1003.2	<div><div>24</div><div>IN 21</div></div> <div>I1.2</div> <div>+P2-1002K1:11</div>	<div><div>13.2</div><div>IN 20</div></div> <div><div>23</div><div>1</div></div>
161NA01 Sterowanie Zdalne	+P2/1003.3	<div><div>26</div><div>IN 23</div></div> <div>I1.3</div> <div>+P2-1002K3:11</div>	<div><div>13.3</div><div>IN 22</div></div> <div><div>25</div><div>1</div></div>
161NA01 Wyłącznik Bezpieczeństwa	+P2/1003.4	<div><div>28</div><div>IN 25</div></div> <div>I1.4</div> <div>+P2-1002K5:11</div>	<div><div>13.4</div><div>IN 24</div></div> <div><div>27</div><div>1</div></div>
162NA01 Gotowość	+P2/1013.2	<div><div>30</div><div>IN 27</div></div> <div>I1.5</div> <div>+P2-1012K1:11</div>	<div><div>13.4</div><div>IN 26</div></div> <div><div>29</div><div>1</div></div>
162NA01 Sterowanie Zdalne	+P2/1013.3	<div><div>32</div><div>IN 29</div></div> <div>I1.6</div> <div>+P2-1012K3:11</div>	<div><div>13.5</div><div>IN 28</div></div> <div><div>31</div><div>1</div></div>
		<div><div>34</div><div>IN 31</div></div> <div>I1.7</div> <div>+P2-1012K5:11</div>	<div><div>13.6</div><div>IN 30</div></div> <div><div>33</div><div>1</div></div>
Zasilanie Masa	/2100.4	<div><div>36</div><div>DC COM 4</div></div> <div></div> <div>I3.7</div>	<div><div>13.7</div><div>IN 30</div></div> <div><div>35</div><div>1</div></div>

+P2/95.6 Wyłącznik p.poż Rozdzielnicza R12

+P2/303.2 140NSA01 Gotowość

+P2/303.3 140NSA01 Sterowanie Zdalne

+P2/403.1 150NSA01 Praca

/2100.3 Zasilanie Masa

+P2/403.3 150NSA01 Sterowanie Zdalne

+P2/413.1 150NSA02 Praca

+P2/413.2 150NSA02 Sterowanie Lokalne

+P2/413.4 150NSA02 Wyłącznik Bezpieczeństwa

+P2/504.1 150NCA01 Wyłącznik Remontowy

+P2/514.1 150NCA02 Wyłącznik Remontowy

+P2/1003.1 161NA01 Praca

+P2/1003.2 161NA01 Sterowanie Lokalne

/2100.4 Zasilanie Masa

+P2/1013.1 162NA01 Praca

+P2/1013.2 162NA01 Sterowanie Lokalne

+P2/1013.4 162NA01 Wyłącznik Bezpieczeństwa

R12 Obecność Faza L1

R12 Obecność Faza L3

Pomiar przepływu FIQRC/03001 Totalizer

QE/02001 Brak alarmu Próg 2

QE/02001 Brak alarmu Próg 1

Pomiar przepływu FIQRC/15003 Totalizer

Pomiar przepływu FIQRC/15005 Totalizer

QE/15003 Brak alarmu Próg 2

Zasilanie Masa

QE/15005 Brak alarmu Próg 2

QE/15005 Brak awarii

QE/12001 Brak alarmu Próg 1

Zasilanie Masa

-A5  
32x Digital In

	<div><div>2</div><div>IN 1</div></div> <div>I4.0</div> <div>+P1-20K1:8</div>	<div><div>16.0</div><div>IN 0</div></div> <div><div>1</div><div>1</div></div>
	<div><div>4</div><div>IN 3</div></div> <div>I4.1</div> <div>+P1-20K1:12</div>	<div><div>16.1</div><div>IN 2</div></div> <div><div>3</div><div>1</div></div>
	<div><div>6</div><div>IN 5</div></div> <div>I4.2</div> <div>-2440K1:11</div>	<div><div>16.2</div><div>IN 4</div></div> <div><div>5</div><div>1</div></div>
	<div><div>8</div><div>IN 7</div></div> <div>I4.3</div> <div>-2550K1:14</div>	<div><div>16.3</div><div>IN 6</div></div> <div><div>7</div><div>1</div></div>
	<div><div>10</div><div>IN 9</div></div> <div>I4.4</div> <div>-2550K2:14</div>	<div><div>16.4</div><div>IN 5</div></div> <div><div>9</div><div>1</div></div>
	<div><div>12</div><div>IN 11</div></div> <div>I4.5</div> <div>-2590K1:11</div>	<div><div>16.4</div><div>IN 8</div></div> <div><div>11</div><div>1</div></div>
	<div><div>14</div><div>IN 13</div></div> <div>I4.6</div> <div>-2610K1:11</div>	<div><div>16.5</div><div>IN 10</div></div> <div><div>13</div><div>1</div></div>
	<div><div>16</div><div>IN 15</div></div> <div>I4.7</div> <div>-2630K1:14</div>	<div><div>16.6</div><div>IN 12</div></div> <div><div>15</div><div>1</div></div>
	<div><div>18</div><div>DC COM 2</div></div> <div></div> <div>I6.7</div>	<div><div>16.7</div><div>IN 14</div></div> <div><div>17</div><div>1</div></div>
	<div><div>20</div><div>IN 17</div></div> <div>I5.0</div> <div>-2650K1:14</div>	<div><div>17.0</div><div>IN 16</div></div> <div><div>19</div><div>1</div></div>
	<div><div>22</div><div>IN 19</div></div> <div>I5.1</div> <div>-2650K3:14</div>	<div><div>17.1</div><div>IN 18</div></div> <div><div>21</div><div>1</div></div>
	<div><div>24</div><div>IN 21</div></div> <div>I5.2</div> <div>-2680K2:14</div>	<div><div>17.2</div><div>IN 20</div></div> <div><div>23</div><div>1</div></div>
	<div><div>26</div><div>IN 23</div></div> <div>I5.3</div> <div></div>	<div><div>17.3</div><div>IN 22</div></div> <div><div>25</div><div>1</div></div>
	<div><div>28</div><div>IN 25</div></div> <div>I5.4</div> <div></div>	<div><div>17.4</div><div>IN 24</div></div> <div><div>27</div><div>1</div></div>
	<div><div>30</div><div>IN 27</div></div> <div>I5.5</div> <div></div>	<div><div>17.4</div><div>IN 26</div></div> <div><div>29</div><div>1</div></div>
	<div><div>32</div><div>IN 29</div></div> <div>I5.6</div> <div></div>	<div><div>17.5</div><div>IN 28</div></div> <div><div>31</div><div>1</div></div>
	<div><div>34</div><div>IN 31</div></div> <div>I5.7</div> <div></div>	<div><div>17.6</div><div>IN 30</div></div> <div><div>33</div><div>1</div></div>
	<div><div>36</div><div>DC COM 4</div></div> <div></div> <div>I7.7</div>	<div><div>17.7</div><div>IN 30</div></div> <div><div>35</div><div>1</div></div>

/2004.2 Obecność zasilania gwarantowanego szafy

/2004.6 R12 Obecność Faza L2

/2370.8 Czujnik obecności plany L5/14001

/2450.8 Pomiar przepływu FIQRC/15002 Totalizer

/2100.5 Zasilanie Masa

/2550.4 QE/02001 Brak awarii

/2600.8 Pomiar przepływu FIQRC/15004 Totalizer

/2620.8 Pomiar przepływu FIQRC/15006 Totalizer

/2630.3 QE/15003 Brak alarmu Próg 1

/2630.4 QE/15003 Brak awarii

/2650.3 QE/15005 Brak alarmu Próg 1

/2680.3 QE/15006 Brak alarmu Próg 2

/2680.4 QE/12001 Brak awarii

/2100.6 Zasilanie Masa

