

51000 Rijeka, Ivana Žorža 39
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Telefax: +385 51 254 925
e-mail: control-engineering@ri.t-com.hr
web: <http://www.control.hr>



CERTIFICATE
NUMBER
201006

PROJEKT BR. 573/08-16

NAZIV PROJEKTA: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA
GRAĐEVINA: MJERNO OKNO BABOTOK
INVESTITOR: "KOMUNALAC" d.o.o. BJELOVAR
RAZINA OBRADE: PROJEKT IZVEDENOG STANJA
PROJEKTANT VODITELJ: BORIS BIRO, dipl.ing.el.
PROJEKTANT: BORIS JAKOVAC, ing.el.
NUMAN TORIĆ, dipl.ing.el.

Rijeka, 28.02.2010.

CONTROL ENGINEERING

CONTROL ENGINEERING
ELEKTROTEHNIČKO PROJEKTIRANJE
I INŽENJERING d.o.o. 2
IVANA ŽORŽA 39. 51000 RIJEKA

DIREKTOR:

A handwritten signature in black ink, appearing to read 'Boris Jakovac', is written over a horizontal line.

Boris Jakovac, ing.el.

[illegible]

SADRŽAJ

STRANICA	NAZIV	BROJ NACRTA	DATUM	IZRADIO	X
-M0.B+D0C/1	NASLOVNA STRANICA		28.02.2010	BJA, NTO	
-M0.B+D0C/2	SADRŽAJ		28.02.2010	BJA, NTO	X
-M0.B+TEH/1	NASLOVNA STRANICA TEHNOLOŠKE SCHEME	1	28.02.2010	BJA, NTO	
-M0.B+TEH/2	TEHNOLOŠKA SCHEMA VODOVODA BJELOVAR	1	28.02.2010	BJA, NTO	
-M0.B+TEH/3	TEHNOLOŠKA SCHEMA M0 BABOTOK	1	28.02.2010	BJA, NTO	
-M0.B+BL0K/1	NASLOVNA STRANICA BL0K SCHEME	2	28.02.2010	BJA, NTO	
-M0.B+BL0K/2	BL0K SCHEMA	2	28.02.2010	BJA, NTO	
-M0.B+M0.B/1	NASLOVNA STRANICA TROPOLNE I STRUJNE SCHEME	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/2	NAPAJANJE I RAZVOD	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/3	NAPAJANJE I RAZVOD	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/4	EMV -IZLAZ BABOTOK	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/5	EMV -IZLAZ BABOTOK	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/6	EMV -IZLAZ BABOTOK	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/7	MJERNO OKNO: POTOPNA CRPKA, PROODOR VOĐE	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/8	VODOMJER	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/9	MJERAČ TLAKA	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/10	PLC CX9000	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/11	DIGITALNI ULAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/12	DIGITALNI ULAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/13	DIGITALNI ULAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/14	DIGITALNI ULAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/15	DIGITALNI IZLAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/16	DIGITALNI IZLAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/17	DIGITALNI IZLAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/18	DIGITALNI IZLAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/19	ANALOGNI ULAZI	3	28.02.2010	BJA, NTO	
-M0.B+M0.B/20	DISPOZICIJA OPREME U ORMARU	3	28.02.2010	BJA, NTO	

Investitor:	Projektant:	Način:	Broj projekta:	Nacrt br:
"KOMUNALAC" d.o.o. BJELOVAR	BORIS BIRO, dipl.ing.el.			
Sadržaj:	Projekt:	-		
PROJEKTIRANJE • INŽENJERING • ZAPOSSTVA	PROJEKT STANIŠNI VODOVODA BJELOVAR II FAZA	-		

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INVESTITOR: "KOMUNALAC" d.o.o. BJELOVAR

GRAĐEVINA: MJERNO OKNO BABOTOK

NAZIV PROJEKTA: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA

DATUM: 28.02.2010

BROJ PROJEKTA: 573/08

RAZINA OBRADE: PROJEKT IZVEDENOG STANJA

NAZIV NACRTA: TEHNOLOŠKA SHEMA

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Investitor: "KOMUNALAC" d.o.o. BJELOVAR	Projektant: BORIS BIRO, dipl.ing.el.	Nacrt: NASLOVNA STRANICA TEHNOLOŠKE SHEME	Bej projekta: 573/08	Nacrt br.: 1	- MOL.B + TEH
Gradilina: "KOMUNALAC" d.o.o. BJELOVAR	Sudradnik: BORIS JAVONAC, dipl.ing.el.	Projekt: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA	Datum: 28.02.2010	Myriko: 1	Urešene: 3

1

TIP VODMAJERA	WOLTMANNOVA TURBINA
PROIZVOĐAČ	MEINECKE
DN(mm)	100

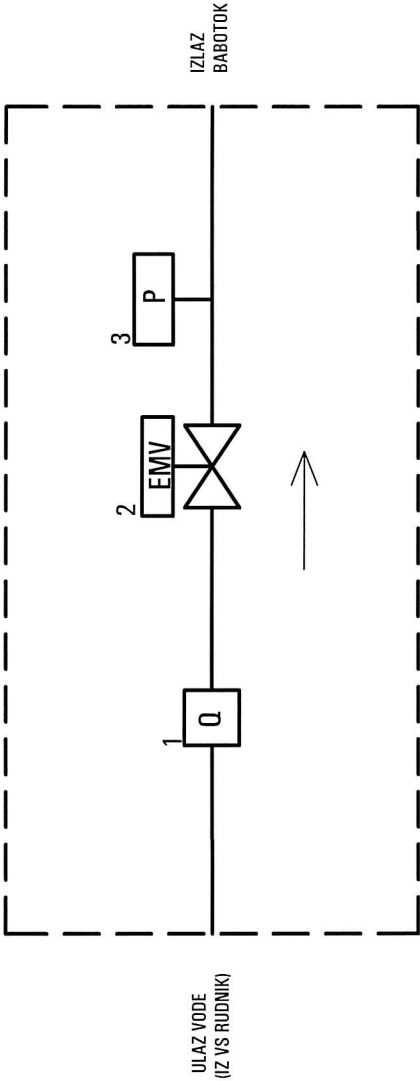
2

TIP EMV	5065 7211 - LEPTIRASTI "ROCO"
TIP ELEKTROMOTORNOG POGONA	AUMA NORM; SA07.1-F10
PROIZVOĐAČ	ERHARD
DN (mm)	100
PN (bar)	16
NAPON NAPAJANJA (VAC, Hz)	3x230/400; 50
SNAGA (W)	180
STRUJNI IZLAZ (mA)	-
STUPANJ ZAŠTITE	IP 67
PRIRUBNICE	EN 1092-2, TIP 21 ; PN16
UVODNICE	2xM25 ; 1xM20 ; IP 68
DIMENZIJAZ NAZUBLJENE PODLŠKE (mm)	-

3

TIP MJERAČA TLAKA	PCE-28
PROIZVOĐAČ	APLISENS
PRIKLJUČAK	G1/2
MJERNI OPSEG (bar)	0-10
STRUJNI IZLAZ (mA)	4-20
NAPAJANJE (VDC)	10.5 - 36
KLASA (%)	0.2

M0 BABOTOK



0	1	2	3	4	5	6	7	8	9
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INVESTITOR: "KOMUNALAC" d.o.o. BJELOVAR

GRAĐEVINA: MJERNO OKNO BABOTOK

NAZIV PROJEKTA: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA

DATUM: 28.02.2010

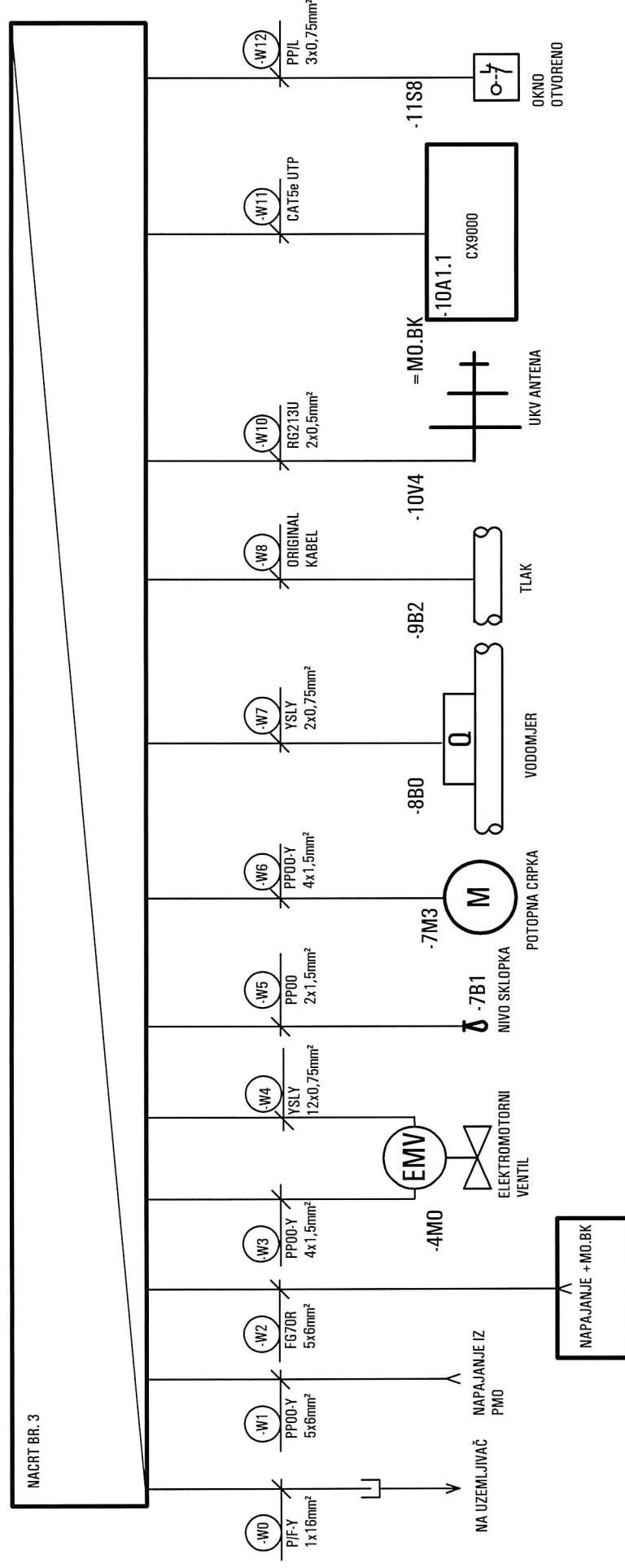
BROJ PROJEKTA: 573/08


RAZINA OBRADE: PROJEKT IZVEDENOG STANJA

NAZIV NACRTA: BLOK SHEMA

Investitor: "KOMUNALAC" d.o.o. BJELOVAR	Projektant: BORIS BIRO, dipl.ing.el.	Naziv: NASLOVNA STRANICA BLOK SHEME	Bej projekta: 573/08	Naziv br: 2	- MOL.B + BLOK
Gradnja: ** MJERNO OKNO BABOTOK	Sudradnik: BORIS JAKOVAC ing.el. / NIJMAN TORIĆ dipl.ing.el.	Projekt: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA	Datum: 28.02.2010	Mjeseč: List:	List: 1 Listene: 2

+MO.B



Investitor:	Projektni inženjering:	 CONTROL ENGINEERING <small>d.o.o. BJELOVAR</small> PROJEKTIRANJE • INŽENJERING • ZASTUPSTVO	Broj projekta:	Nacrtni broj:
"KOMUNALAC" d.o.o. BJELOVAR	BORIS BIRO, dipl.ing.el.		573/08	2
Građevinar:	Suradnik:		Mjesečni:	
MJERNO OKNO BABOTOK	BORIS JAKOVAC, ing.el. NUMAN TORIĆ, dipl.ing.el.		Datum:	
			28.02.2010.	
				- M.O.B + BLOK
				List: 2 Ustav: 2

0	1	2	3	4	5	6	7	8	9
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INVESTITOR: "KOMUNALAC" d.o.o. BJELOVAR

GRAĐEVINA: MJERNO OKNO BABOTOK

NAZIV PROJEKTA: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA

DATUM: 28.02.2010

BROJ PROJEKTA: 573/08

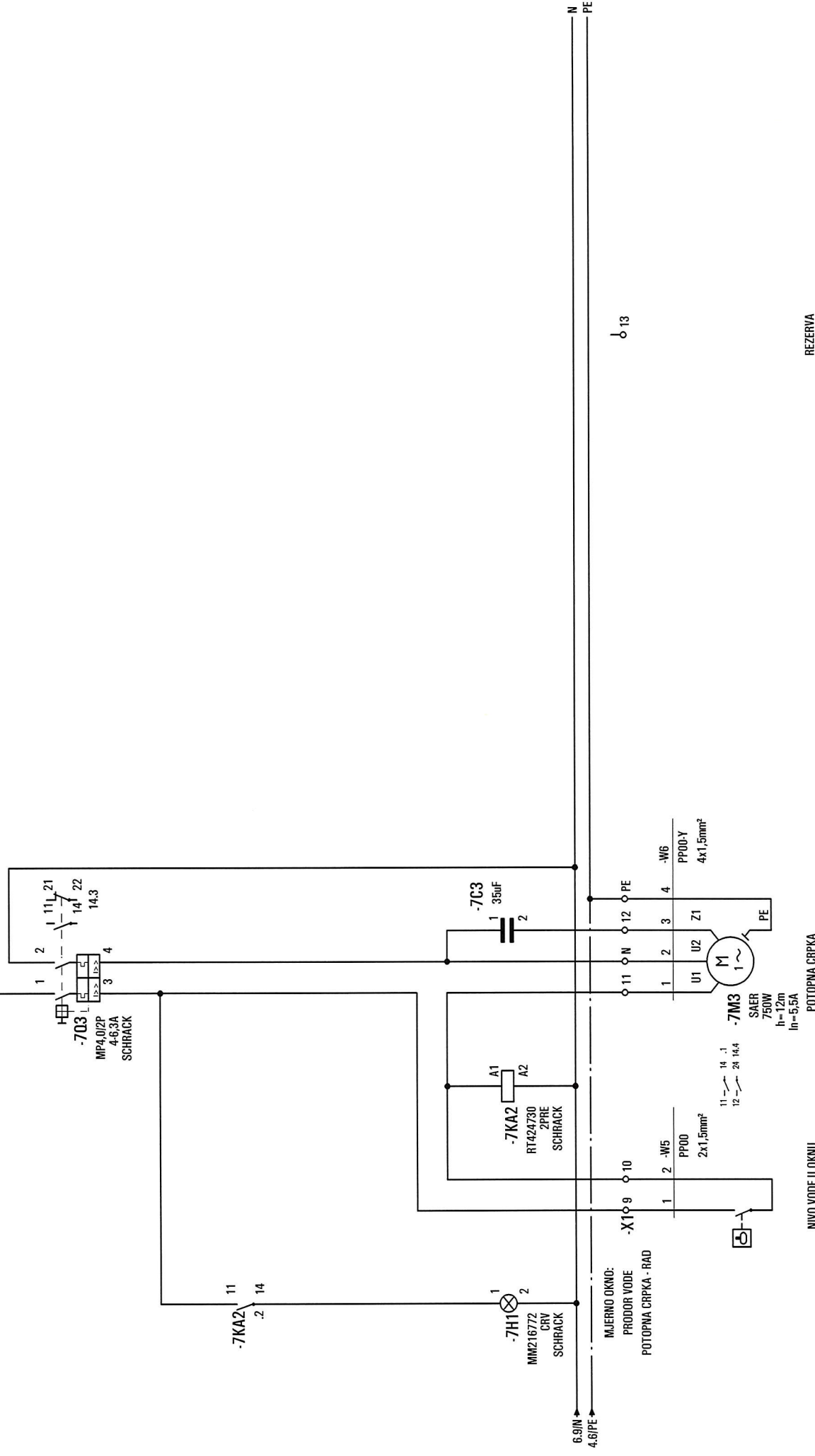
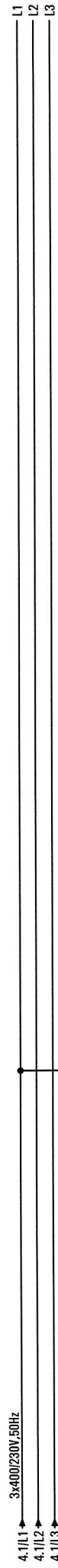
RAZINA OBRADE: PROJEKT IZVEDENOG STANJA

NAZIV NACRTA: TROPOLNA I STRUJNA SHEMA + M0.B

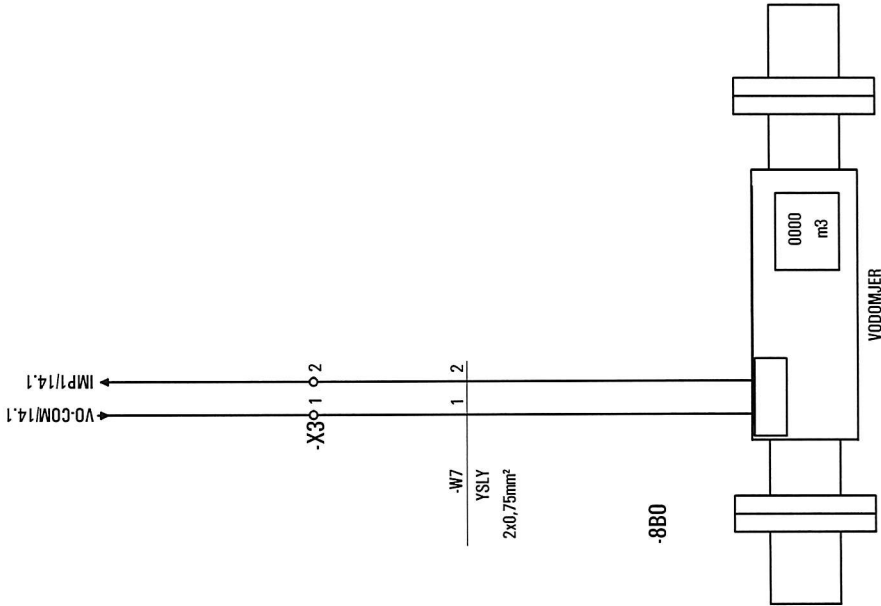
Imetitelj: "KOMUNALAC" d.o.o. BJELOVAR	Projektant: BORIS BIRO, dipl.ing.el.	Nacrt: NASLOVNA STRANICA TROPOLNE I STRUJNE SHEME	Broj projekta: 573/08	Nacrt br: 3	- M0.B + M0.B
Građevina: MJERNO OKNO BABOTOK	Suradnik: BORIS JAKOVAC, ing.el. / NUMAN TORIĆ, dipl.ing.el.	Projekt: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA	Datum: 28.02.2010	Mjeseč: 1	Lisnice: 20



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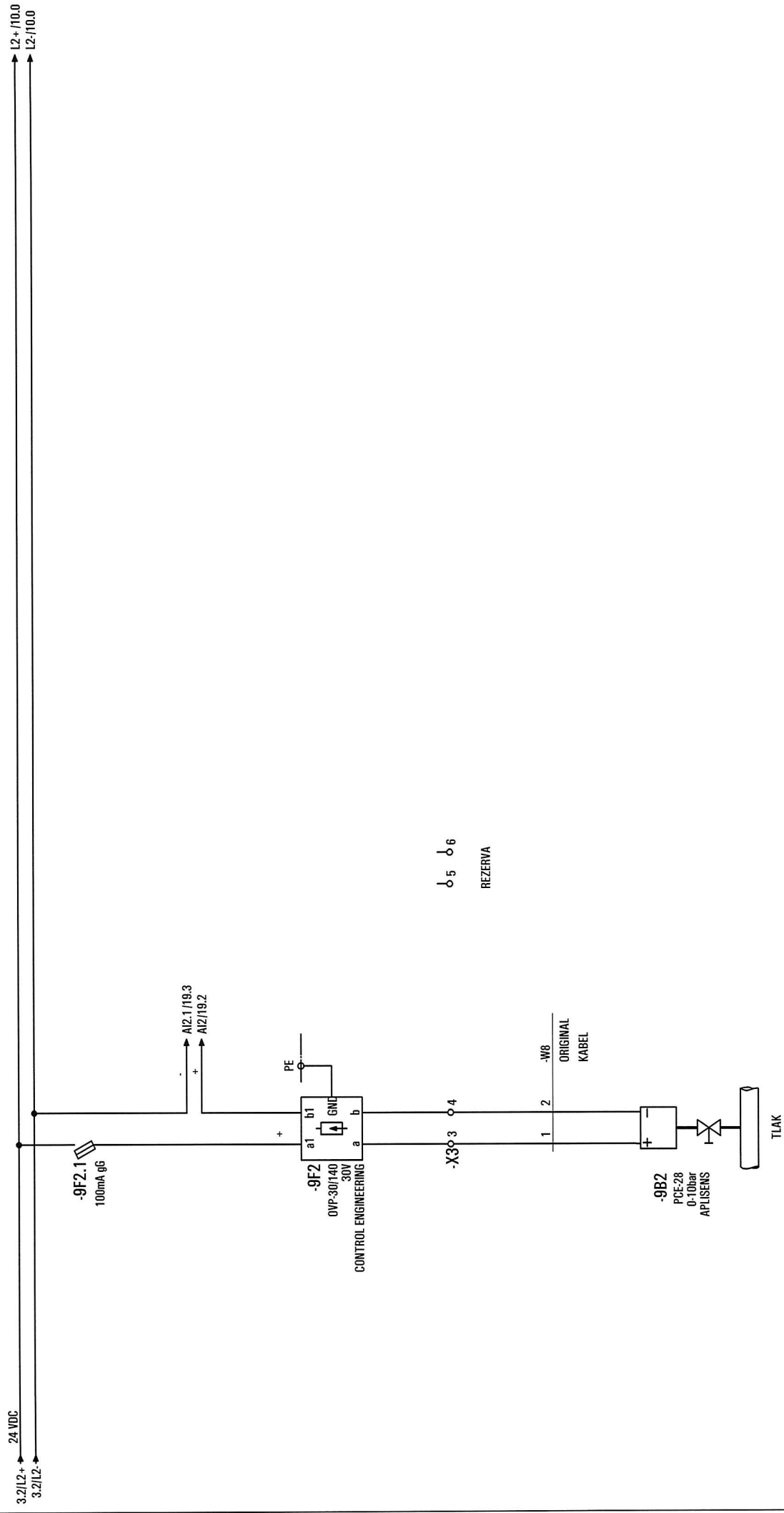


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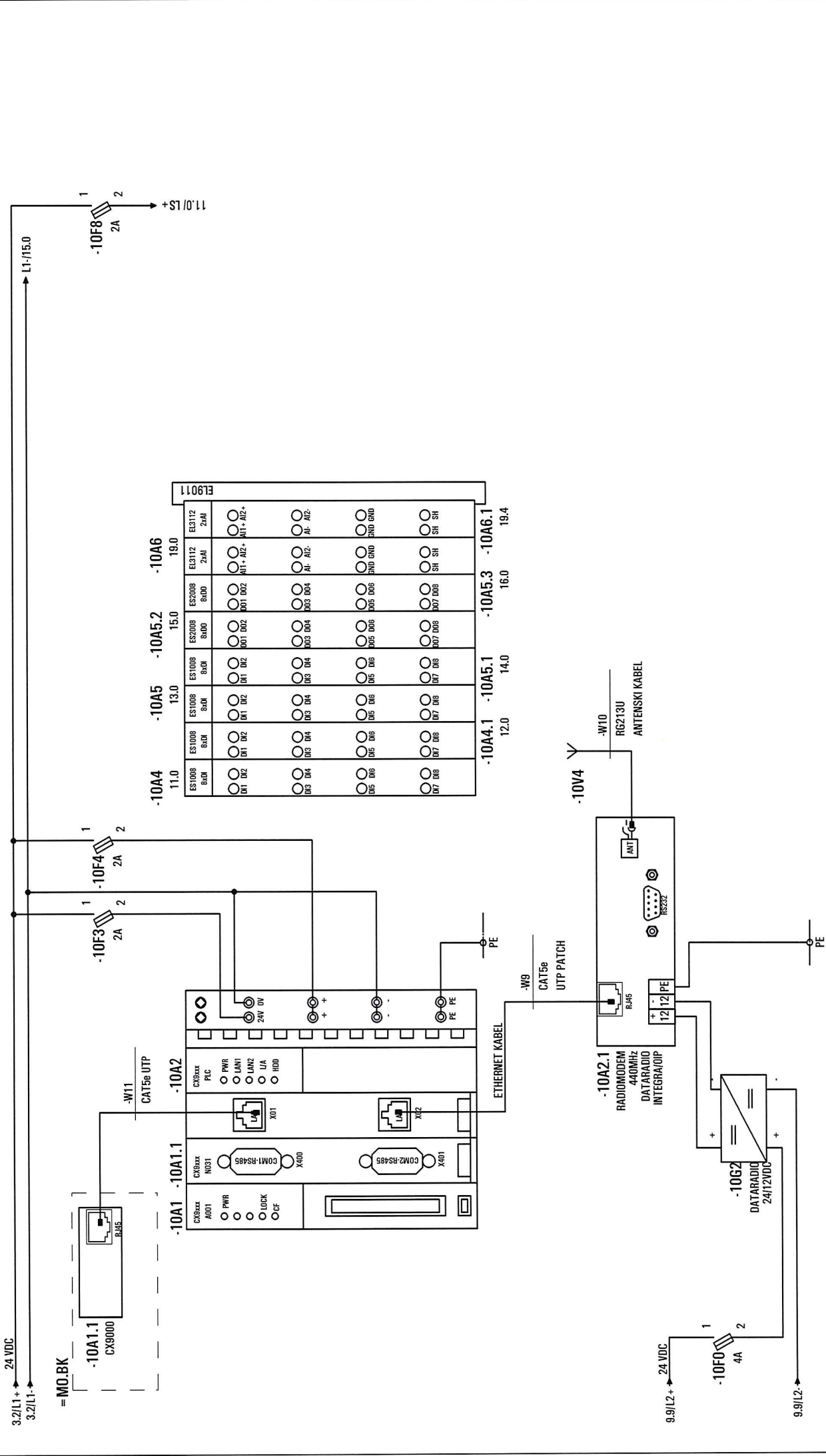


Investitor: "KOMUNALAC" d.o.o. BJELOVAR	Projektant: BORIS BIRO, dipl.ing.el.	Nart: VODOMJER	Bij projekat: 573/08	Nart br: 3	+ M0.B
Gradilina: MUJERNO OKNO BABOTOK	Suradnik: BORIS JAKOVAC, ing.el. / NUMAN TORIC, dipl.ing.el.	Projekt: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA	Datum: 28.02.2010	Mjerilo: -	+ M0.B
					Lst:
					20

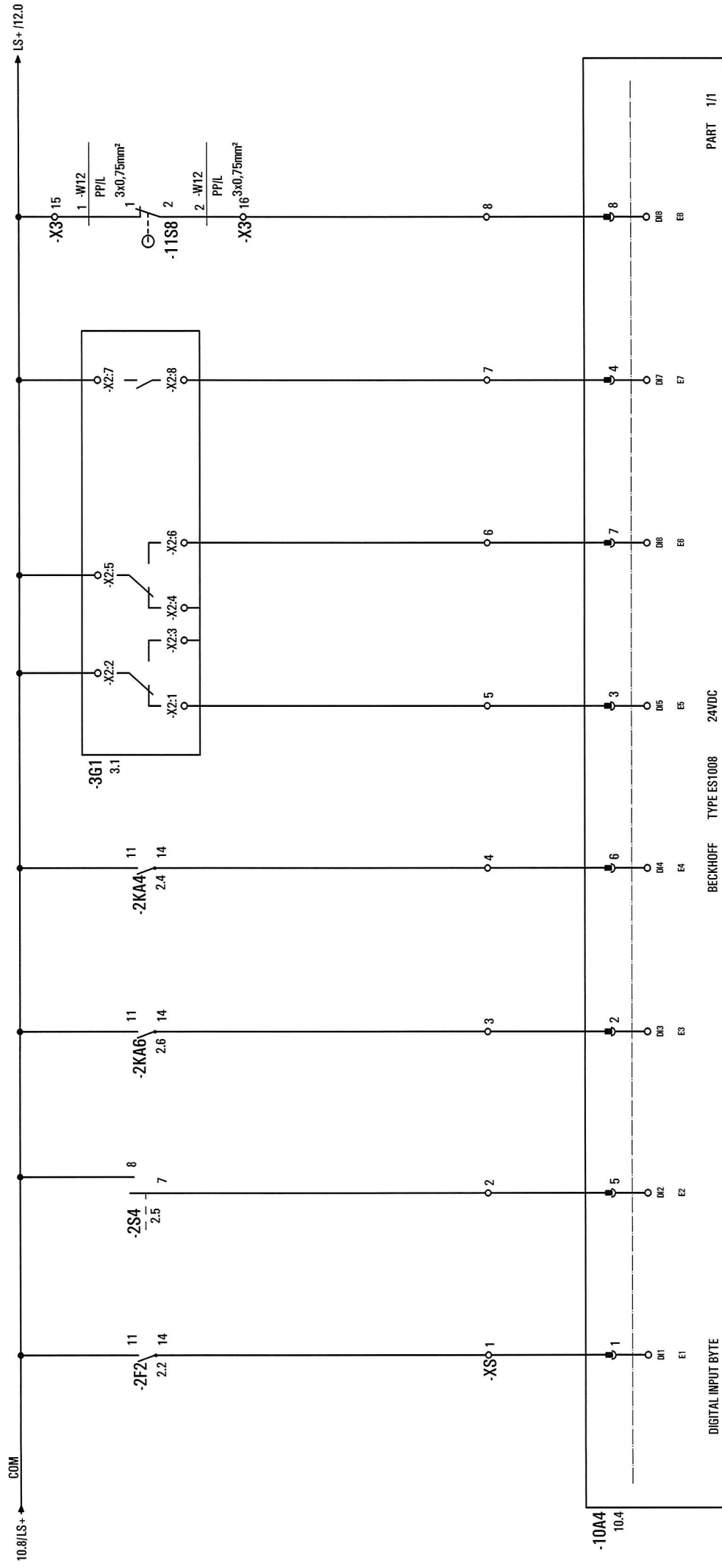
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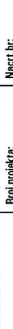


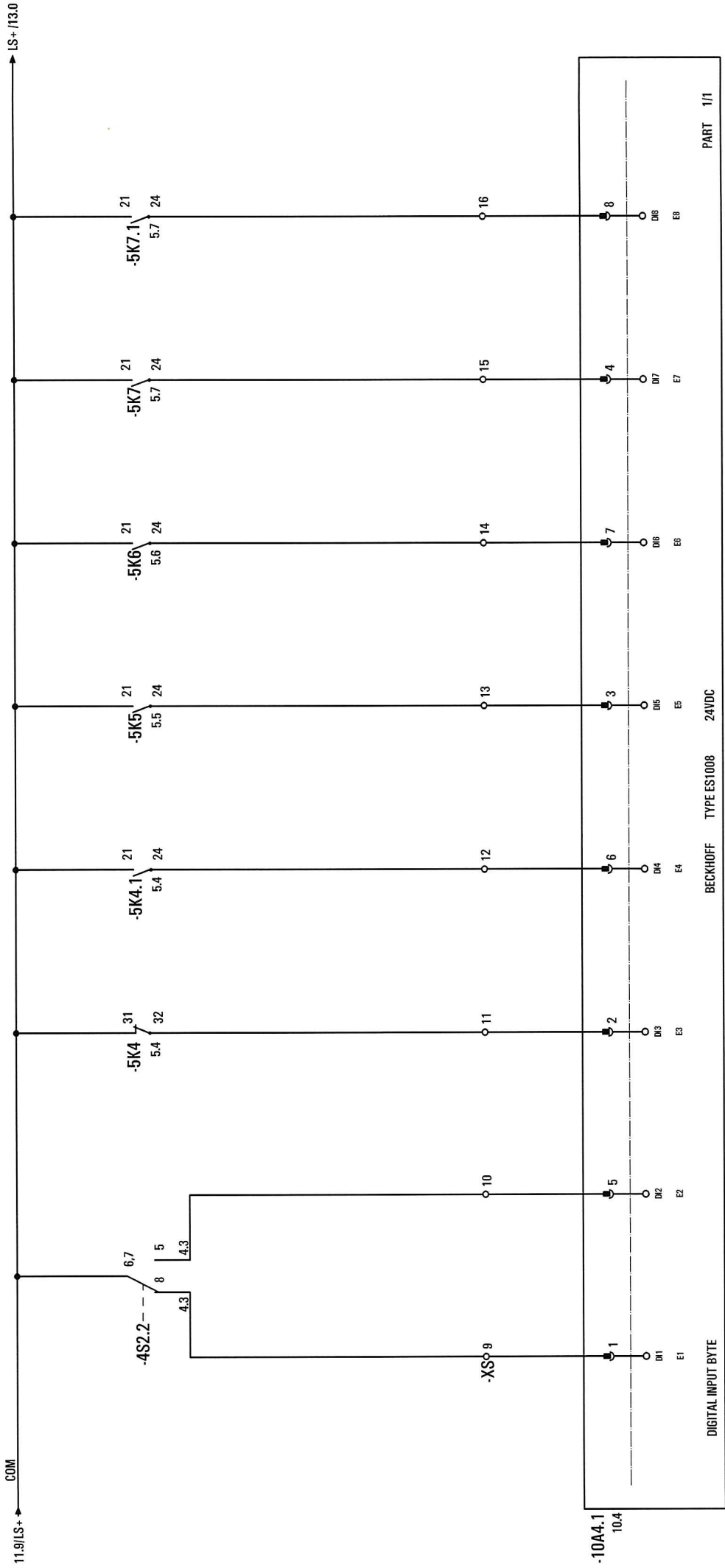
Investitor: "KOMUNALAC" d.o.o. BJELOVAR	Projektant: BORIS BIRO, dipl.ing.el. Suradnik: BORIS JAKOVAC, ing.el. / NUMAN TORIĆ, dipl.ing.el.	Nacrt: MJERAČ TIJAKA Projekt: PROJEKT SDNU VODOVODA BJELOVAR, II FAZA	Brog projekta: 573/08		Nacrt br: 3		- MD.B + MD.B	
			Datum: 28.02.2010		Mjelo: List		9 Liste	



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Inventor:	Investitor:	Nacrt:	 CONTROL ENGINEERING d.o.o. RIJKA PROJEKTIRANJE • INŽENJERING • ZASTUPSTVO	Broj projekta:	Nacrt br:	- M.B. + M.B.
Gradina:	Projektant:	Projekt:		Datum:	Mjeric:	
MJERNO OKNO BABOTOK	BORIS BIRLO, dipl.ing.el.	PROJEKT SDRU VODOVODA BJELOVAR, II FAZA	28.02.2010	3	11	20



EMV
RUČNO

EMV
AUTOMATSKI

EMV
TERMIČKA GREŠKA

EMV
MOMENT ZATVARANJA

EMV
MOMENT OTVARANJA

EMV
ZATVOREN

EMV
OTVOREN

EMV
U POGONU

The diagram illustrates the wiring for a digital input module (ES1008). The main power supply is connected to terminal 13.9/LS+ (COM). The module's internal components are labeled with values: -7Q3 (7.3), -7KA2 (7.2), -4F0 (4.1), and 8.1/IMP1. The digital input lines are connected to terminals 1 through 8, which are labeled with their respective functions: 1 (VODOMJER SUMARNI PROTOK), 2 (POTOPNA CRPKA ISPAD NAPAJANJA), 3 (MJEJNO OKNO: PROODOR VODEJ POTOPNA CRPKA - RAD), 4 (REZERVA), 5 (REZERVA), 6 (REZERVA), 7 (REZERVA), and 8 (REZERVA). The module is identified as TYPE ES1008 24VDC.

DIGITAL OUTPUT BYTE

BECKHOFF TYPE ES2008 24VDC

PART 1/1

DO01 **DO02** **DO03** **DO04** **DO05** **DO06** **DO07** **DO08**

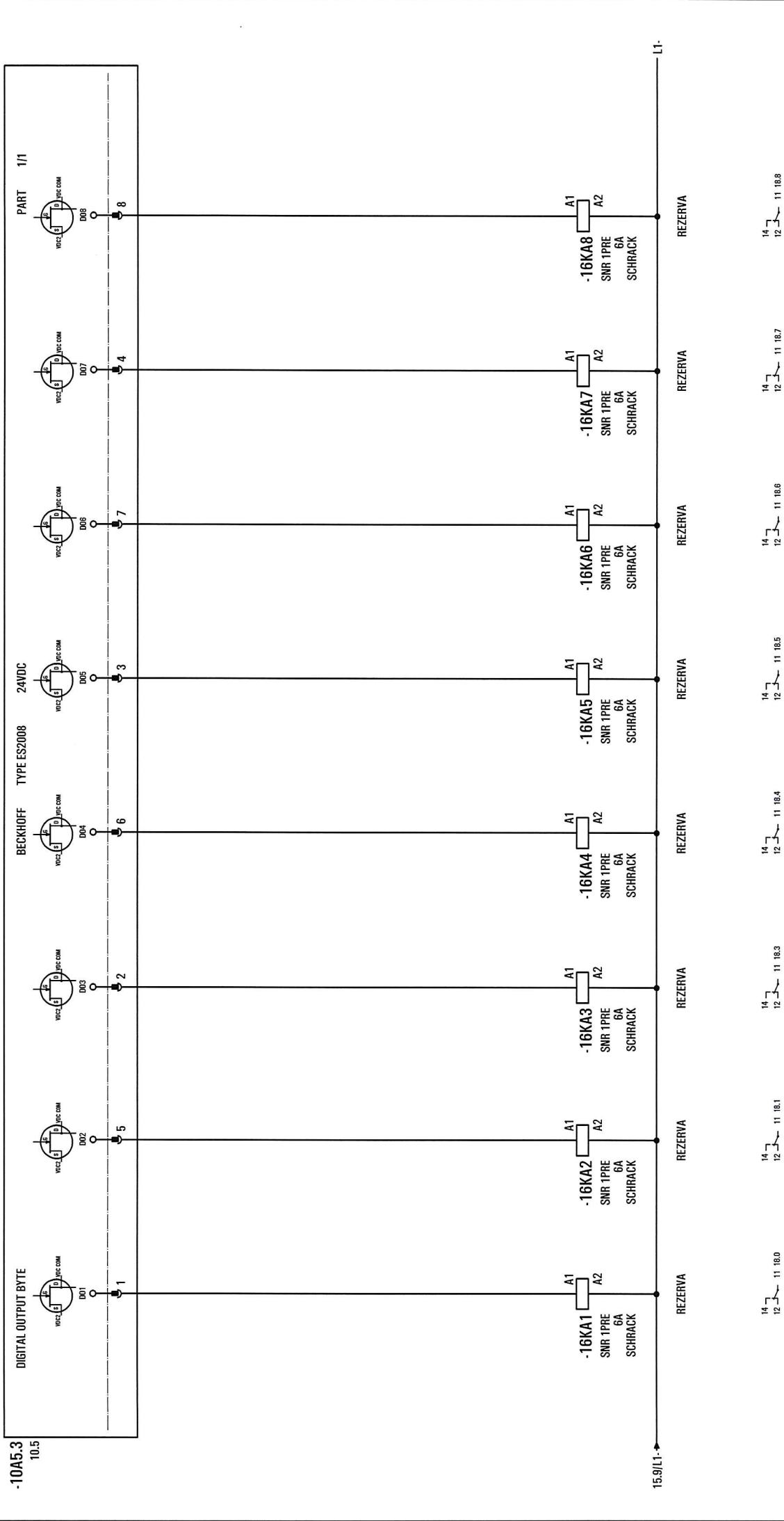
15KA1 **15KA2** **15KA3** **15KA4** **15KA5** **15KA6** **15KA7** **15KA8**

EMV STOP **EMV ZATVORI** **EMV OTVORI** **REZERVA** **REZERVA** **REZERVA** **REZERVA** **REZERVA**

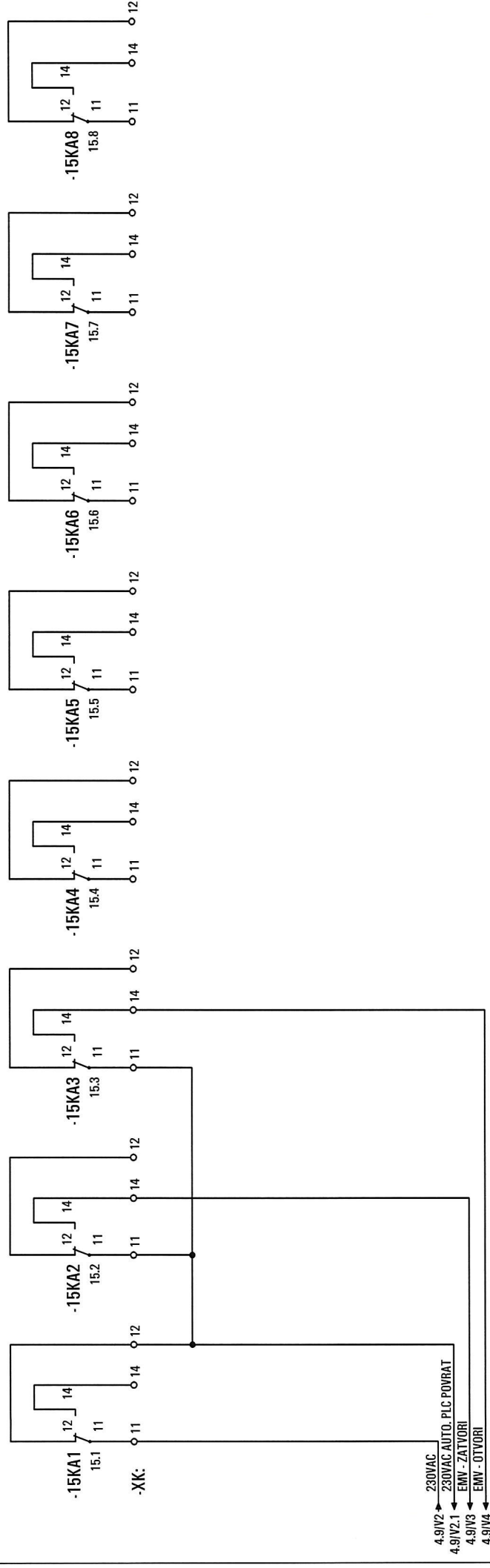
10.8/L1 **11** **12** **13** **14** **15** **16** **17** **18** **19** **20**

Legend:

- 15KA1: SNR 1PRE, 6A, SCHRACK
- 15KA2: SNR 1PRE, 6A, SCHRACK
- 15KA3: SNR 1PRE, 6A, SCHRACK
- 15KA4: SNR 1PRE, 6A, SCHRACK
- 15KA5: SNR 1PRE, 6A, SCHRACK
- 15KA6: SNR 1PRE, 6A, SCHRACK
- 15KA7: SNR 1PRE, 6A, SCHRACK
- 15KA8: SNR 1PRE, 6A, SCHRACK

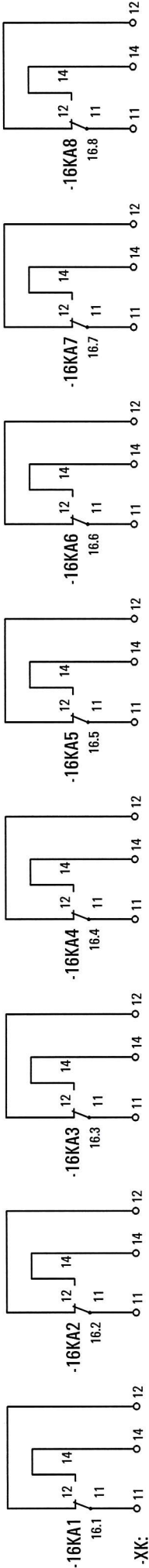


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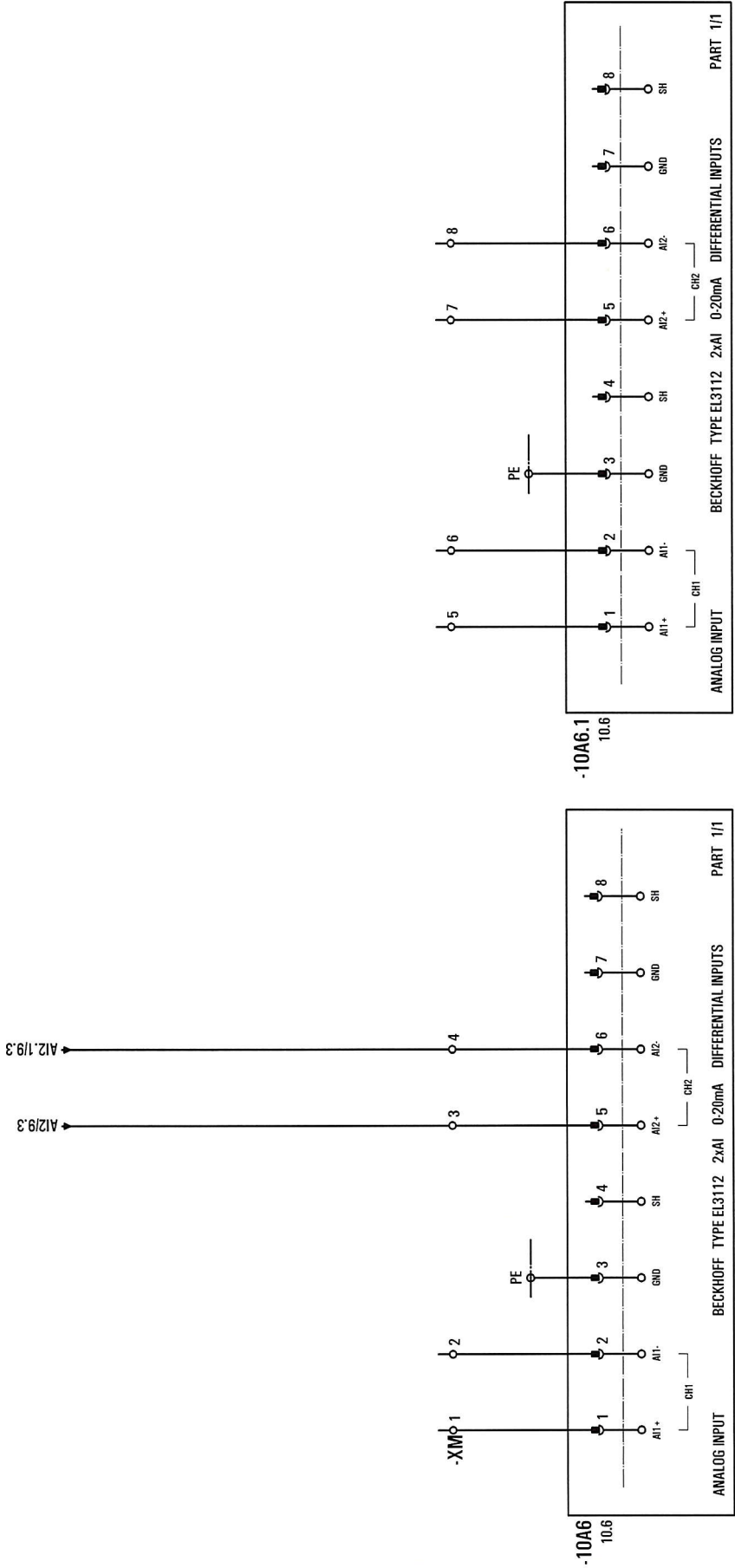


Inovator:	"KOMUNALAC" d.o.o. BJELOVAR	Projektant:	BORIS BIRO, dipl.inj.el.	Nacrt:	DIGITALNI IZLAZI
Građevnik:	M.IVERNO OKNO BARITOK	Sudradnik:	BORIS JAKOVAČ, inž.el. / NIJMAN TORIĆ, dipl.inj.el.	Projekat:	PROJEKT SPOJNI VODOVODA BJELOVAR - II FAZA
<div>CONTROL ENGINEERING PROJEKTOVANJE • INŽENJERING • ZASTUPSTVA</div>					
Broj projekta:				Nacrt br:	
573/08				3	
Datum:				Mjerilo:	
28.02.2010					
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				20	
				Lisara:	
				20	

0	1	2	3	4	5	6	7	8	9
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Investitor:	Projekcent:	Nacrt:	Rezerva				Rezerva				Rezerva				Rezerva			
"KOMUNALAC" d.o.o. BJELOVAR	BORIS BIRO, dipl.ing.el.	DIGITALNI IZLAZI																
Grafičina:	Suradnik:	Projekt:																
MJERNO OKNO BAROTOK	BORIS JAKOVAC, ing.el. / NIIMAN TORIĆ, dipl.ing.el.	PROJEKT SDNIH VODOVODA BJELOVAR, II FAZA																

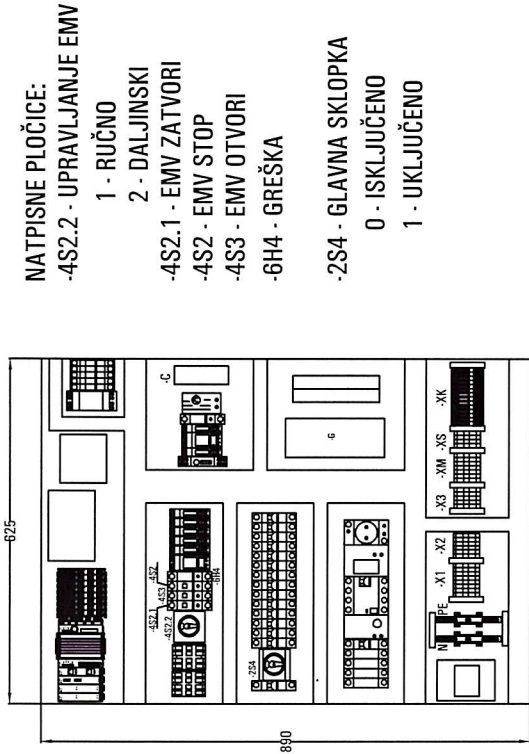


MJERENJE TLAKA
(0 - 10 bar)

REZERVA

REZERVA

+ MO.B: HIMEL, TIP: PLA, DIM.750x1000x320, IP65



- NATPISNE PLOČICE:
- 4S2.2 - UPRAVLJANJE EMV
 - 1 - RUČNO
 - 2 - DALJINSKI
 - 4S2.1 - EMV ZATVORI
 - 4S2 - EMV STOP
 - 4S3 - EMV OTVORI
 - 6H4 - GREŠKA
 - 2S4 - GLAVNA SKLOPKA
 - 0 - ISKLJUČENO
 - 1 - UKLJUČENO

