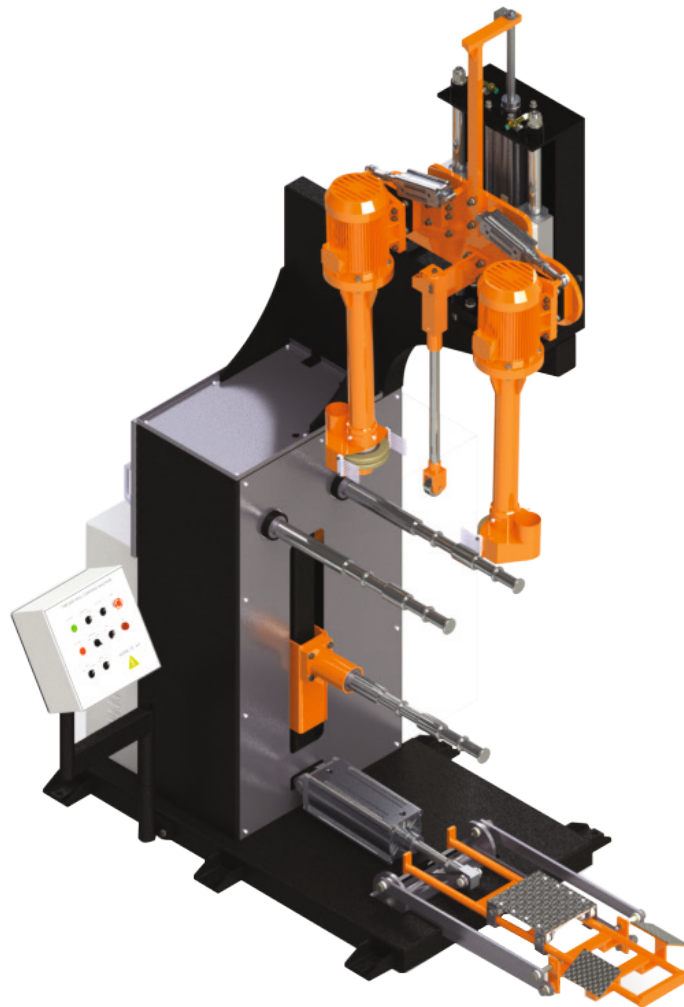




Tyre Sidewall Cleaner TC 6-3



Instruction Manual

The company reserves the right to change equipment specifications and models without notice. Pictures are representative and may not be part of the standard equipment.

Elgi Rubber Company Limited

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Foreword

Tyre Sidewall cleaning, has now become a requirement in many countries. Cleaning dirt and debris from the casing permits a more comprehensive inspection to better identify injuries and greatly reduces contamination risk within the retread process.

The Tyre Sidewall Cleaner machine is designed with:

- An integrated tyre lifting system
- Support rollers driven by a high-performance electric motor
- Special cleaning brushes driven by two motors with extended shaft to cover tyre bead size 14" to 24.5"

By actuating the pneumatic cylinders, the brushes will clean the entire sidewall up to the bead.

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01 Description

The Tyre Sidewall Cleaner TC 6 -3 consists of major components such as the main frame, cleaning components, tyre drive assembly, tyre lift arrangement, airline assembly, etc.

Main Frame

The main frame houses all the main components of the machine like; pneumatic and mechanical drive elements.

Cleaning Arrangements

This machine is provided with 2 cleaning arms. These include steel wire brushes which rotate at high rpm to clean the sidewall area of the tyre.

Tyre Drive Assembly

The tyre is rotated by 3 rollers driven by an AC motor. This is suitable for bead diameters from 14" to 24.5" and section widths from 140 mm to 470 mm.

Tyre Lift Arrangement

This machine is provided with an operator-friendly pneumatically operated tyre lift.

Air Line Assembly

This is provided with a shut off valve, filter cum regulator, solenoid valve and pneumatic cylinders.

02 Specifications

Model	TC 6-3
Catalogue Number	MA01 63 - X*
Tyre Range	6.50 - 14 to 12.00 - 24.5
Air Pressure Requirement (kPa / kg/cm ²)	800 / 8
Dimensions (L x W x H) (mm)	1550 x 1140 x 2750
X* in Cat. No. denotes power supply specifications (V / Hz / ph)	R - 220 / 60 / 3 O - 380 / 50 / 3 S - 380 / 60 / 3 P - 415 / 50 / 3 U - 440 / 60 / 3
Weight (kg)	~ 840
Installation	To be fixed to the floor

03 Assembly and Commissioning Tools

Accessories

Standard	Installation kit
----------	------------------

Tools

Spanners	
Double end 10 - 22	1 Set
Ring end 16 - 19	1 Set
Box bit 24" with extrn. rod	1 No.
Screw driver - 6" & 8"	1 No. each
Line tester	1 No.
Allen keys (mm)	1 Set
Combination plier - 8", 10"	1 No. each
Nylon hammer	1 No.
Circlip plier - 6" (internal and external)	1 No. each
Ball peen hammer (500 g)	1 No.

Materials

Lubricating oil (SAE 20)	¼ L
Multi-purpose grease	¼ kg
Electric cable 4 core, 1.5 sq.mm	Length as per installed position

04 Installation and Commissioning

Unloading

Unload the machine only by using eye bolt / forklift option given in the machine. Remove the machine bed bolt and take it out of the wooden pallet.

Positioning

The machine does not need a foundation. It is sufficient if it is fixed to the ground. Position the machine in the desired location on a level surface. The area where the machine is located should be well illuminated.

Cleaner Unit Assembly

Fix the cleaner unit assembly on top of the main frame. Fasten the bolts indicated in the drawing and plug the air line and electrical cable into the main frame.

Electrical and Pneumatic Connection

Connect the machine with the help of 4.5 sq.mm copper 4 core cable with the main line. From the nearest air point, draw a line using PU14 pneumatic hose with quick connection fittings.

Air Pressure Setting

Set the air pressure in the regulator:

- (R1) of main incoming side to 8 kg/cm² by rotating the knob clockwise and then lock it
- (R2) in pneumatic panel (HI) - 7.8 kg/cm²
- (R3) in pneumatic panel (LOW) - 7 kg/cm²
- (R4) in pneumatic panel (BRUSH movement) - 1.2 kg/cm²
- (R5) in pneumatic panel (TYRE lift) - 7.2 kg/cm²
- (R6) in pneumatic panel (TYRE hold) - 6 kg/cm²

05 Pre-Operation Checks

- Remove the shipment clamps that are provided on the machine, which are marked and painted red / orange (refer to included drawing).
- Open the hand slide valve of pneumatic line.
- Switch ON the MCB and ensure RYB light glowing on the control panel.
- Ensure the air pressure in the regulator:
 - (R1) is 8 kg/cm²
 - (R2) is 7.8 kg/cm²
 - (R3) is 7 kg/cm²
 - (R4) is 1.2 kg/cm²
 - (R5) is 7.8 kg/cm²
 - (R5) is 6 kg/cm²
- Check for free movement of all moving parts.
- Check that all nuts and bolts are properly tightened.
- Check and ensure no twists, or crush in air line.
- Check for any earth leakage.
- Check for any air leakage on the pneumatic lines.

06 Operation

1. Roll the tyre over the lift and press the 'UP' foot pedal.
2. Position the tyre such that the three rollers are in the centre of the bead diameter.
3. Push the tyre over the rollers. The tyre bead area should be in the centre of the rollers.
4. Press 'DOWN' on the foot pedal and lower the lift.
5. Push ON the 'HOLD TYRE' switch on the operating panel and ensure the third roller is firmly holding the tyre.
6. Push ON the 'CYCLE START' button.
7. After completion of the cleaning cycle, ensure that the cleaning arm is in home position (i.e.,) at the top and push OFF the 'HOLD TYRE' switch.
8. Press 'UP' on the foot pedal and lift the tyre from the rollers.
9. Pull out the tyre from rollers, holding the upper bead.
10. Press 'DOWN' on the foot pedal.
11. Once it reaches the ground, roll out the tyre from the lift.

Note: In case of any malfunction, hit the emergency button on the operating panel and call for service technician.

07 Do's and Don'ts

Do's

- Use eye bolts only to lift the machine.
- Place the machine in an open space where there is ample light and ventilation.
- Ensure that there is no leakage in the pneumatic valve and cylinder.
- Ensure correct pressure for cylinder as recommended is maintained.
- Ensure the dust collectors are connected to the machine.
- If a brush is wears out, replace it with a suitable brush as per recommendation.

Don'ts

- Do not switch on the machine without proper pneumatic pressure.
- Do not operate the machine until the shipment locks are removed.
- Do not place foot under the tyre lift.

08 Troubleshooting

Symptoms / Problems	Possible Causes	Remedies
Machine does not run when switched on	<ol style="list-style-type: none"> 1. Incoming supply failure 2. Improper panel board connection 3. Failure of fuse 4. Emergency switch in locked position 	<ol style="list-style-type: none"> 1. Check incoming supply 2. Check and correct wiring as per circuit diagram 3. Check and replace fuse 4. Release emergency switch
Motor runs on continuous pressing of switch and stops when is released	<ol style="list-style-type: none"> 1. Contactor connection loose 2. Push button contact lock connection loose 3. Push button contact lock failure 	<ol style="list-style-type: none"> 1. Clean contactor terminals and tighten connections 2. Check and rectify 3. Replace contact block
Motor stops while running	<ol style="list-style-type: none"> 1. Motor over loaded 2. Wrong amperage setting 	<ol style="list-style-type: none"> 1. • Check the pressure in R4 regulator and set it to 1.2 kg/cm² • Check the cleaning brush condition and replace if worn out 2. Reset relay amperage correctly and increase if needed within allowable limit
Brush motor speed decreases while in operation	<ol style="list-style-type: none"> 1. Brush shaft nut is loose 2. Excess air pressure in the arm cylinders 3. Low voltage 	<ol style="list-style-type: none"> 1. Check if nut is tightened properly 2. Decrease the air pressure 3. Check and correct the incoming voltage
Brush wears frequently	<ol style="list-style-type: none"> 1. Excess air pressure in arm cylinder 2. Wrong brush 3. Damaged brushes 	<ol style="list-style-type: none"> 1. Check the pressure in R4 regulator and set it to 1.2 kg/cm² 2. Replace with the correct brush mentioned in part list 3. Replace with new brush



Symptoms / Problems	Possible Causes	Remedies
Tyre drive roller rotates but tyre does not rotate	<ol style="list-style-type: none"> 1. Inadequate pressure in rolling cylinder 2. Tyre bead is lubricated with oil, grease, etc. 	<ol style="list-style-type: none"> 1. Set air pressure as mentioned in page 7 2. Clean the bead and load the tyre
Brush motors gets over heated	<ol style="list-style-type: none"> 1. Excess air pressure in arm cylinder 2. Brush damaged or worn out 3. Coil of motor weak 	<ol style="list-style-type: none"> 1. Check and correct the pressure 2. Replace with new brush 3. Check coil with help of meter and rewind if needed
Cleaner assembly not moving downwards or upwards	<ol style="list-style-type: none"> 1. Proximity sensor failure 2. Sensor clamp position shifted 3. Cylinder seal damaged 4. Solenoid valve seal damaged 5. Pressure not sufficient 	<ol style="list-style-type: none"> 1. Check and replace the sensor, if necessary 2. Reset to correct position 3. Check and replace the seal kit 4. Check and replace the seal kit 5. Check and set air pressure as mentioned in page 7
Tyre lift not working	<ol style="list-style-type: none"> 1. Cylinder seal kit damaged 2. Pilot valve seal kit damaged 3. Foot switch seal kit damaged 4. Pressure is not sufficient 	<ol style="list-style-type: none"> 1. Check and replace the seal kit 2. Check and replace the seal kit, replace the valve if necessary 3. Check and replace the seal kit replace the valve if necessary 4. Check and set air pressure as mentioned in page 7
Tyre lift is working too fast or too slow	<ol style="list-style-type: none"> 1. Flow control valve setting is not correct 2. Low / high air pressure 	<ol style="list-style-type: none"> 1. Set the flow control valve to desired level by adjusting its knob 2. Check and set air pressure as mentioned in page 7

09 Preventive Maintenance

Name of the Post	Sidewall Cleaning Machine
Name of the Equipment	Tyre Sidewall Cleaner
Model No.	TC 6-3

S. No.	Activity	Frequency	Acceptance Criteria
1	Clean the machine	Daily	Dust free
2	Drain the water from the air filter	Daily	No water in the filter unit
3	Clean all pins and piston rod	Daily	Dust free
4	Check the condition of accessories of machine - eg, tyre lift, cleaning brush, cleaning arm, drive rollers, etc.	Daily	No damage
5	Operating air pressure 8 kg/cm ²	Daily	Operating pressure to be at - 8 ± 0.5 kg/cm ²
6	Check the pneumatic fitting and lines for leak / wear	Weekly	No leakage / wear
7	Check all the electrical connections are tight	Weekly	No loose connection
8	Apply oil on all pins and piston rod with SAE - 40 oil	Weekly	Properly lubricated

10 Electrical Drawings

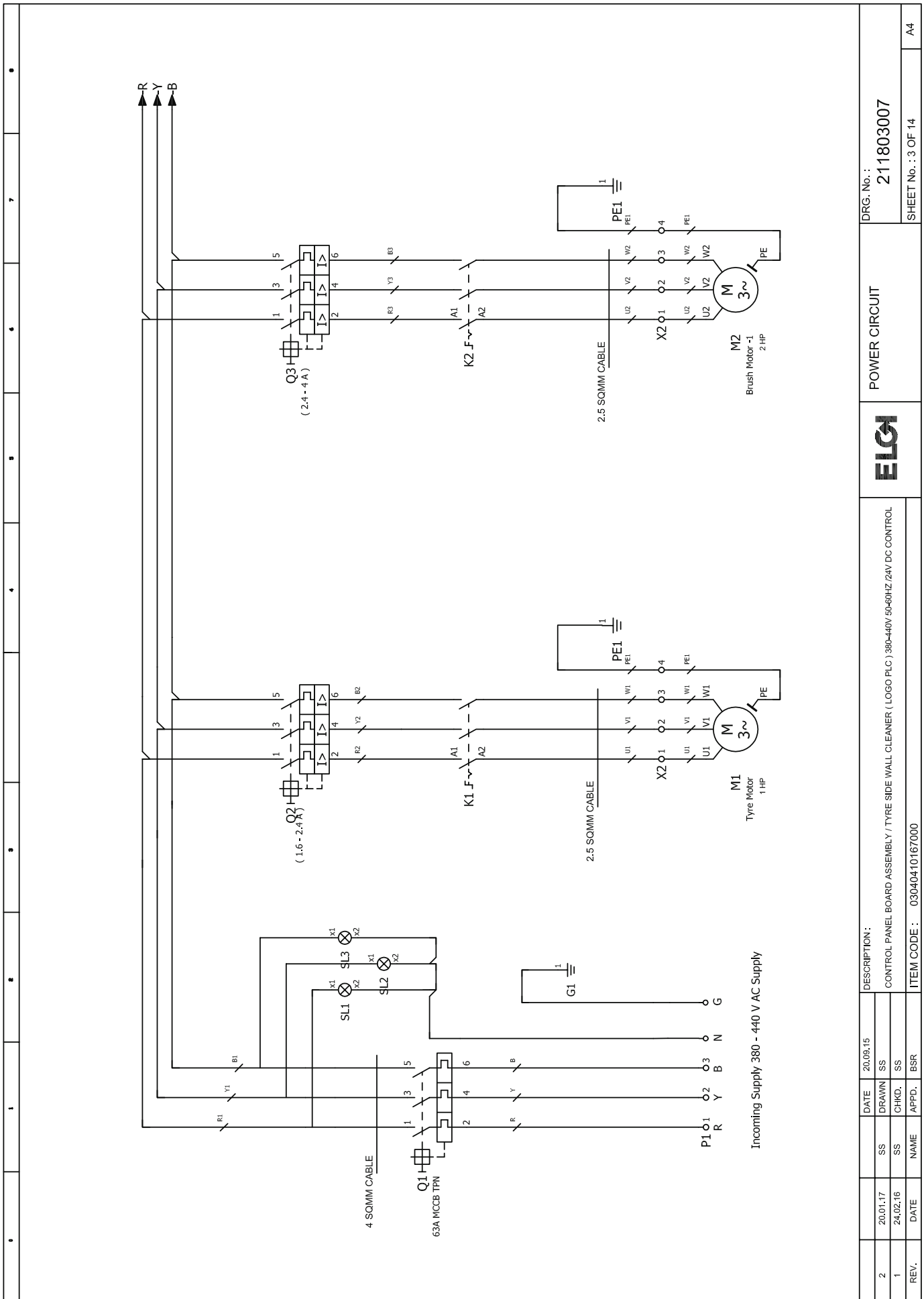
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<p>TYRE SIDE WALL CLEANER - 415 V / 50HZ - 24V DC Control</p> <p>211803006</p> <p>Elgi</p>			
Company / customer Project description Drawing number Commission		03040410167000 CONTROL PANEL BOARD ASSEMBLY TYRE SIDE WALL CLEANER (LOGOPLC)380V-440V 50/60 HZ /24V DC 03040410168000 CONTROL SWITCH BOARD ASSEMBLY TYRE SIDE WALL CLEANER / 24VDC	
Created on Edit date		20.09.15 Number of pages 14	
			
		TITLE PAGE	
		DRG. No. : 211803007	
		SHEET No. : 1 OF 14	
		A4	

REV.	DATE	NAME	APPD.	BSR	DESCRIPTION :	ITEM CODE :
2	20.01.17	SS	SS	SS	CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL	03040410167000
1	24.02.16	SS	CHKD.	SS		

TECHNICAL INFORMATION

<p>ALL DIEMENSIONS ARE IN MM DOORS ARE ONLY AT FRONT SIDE</p>		<p>HEIGHT 300</p>
<p>CONTROL PANEL CONSTRUCTION</p>		<p>WIDTH 300</p>
<p>PANEL MAKE RITTAL</p>	<p>PART NO AE 1076500</p>	<p>DEPTH 120</p>
<p>HEIGHT 760</p>	<p>WIDTH 600</p>	<p>DOOR SINGLE DOOR</p>
<p>DEPTH 210</p>	<p>DOOR SINGLE DOOR</p>	<p>OUTSIDE SURFACE PAINT SHADE : PEBBEL GRAY</p>
<p>OPERATING BOX CONSTRUCTION</p>		<p>INSIDE SIDE SURFACE PAINT SHADE : PEBBEL GRAY</p>
<p>PANEL MAKE RITTAL</p>	<p>PART NO EB 1555500</p>	<p>INCOMING SUPPLY 230V AC</p>
<p>OPERATING BOX CONSTRUCTION</p>		<p>INCOMING CABLE 0.75 SQMM X 3 CORE</p>
<p>OPERATING BOX CONSTRUCTION</p>		<p>CONTROL VOLTAGE 230V AC & 24V DC</p>
<p>OPERATING BOX CONSTRUCTION</p>		<p>CONTROL CABLES 0.75 SQMM RED & BLUE</p>
<p>OPERATING BOX CONSTRUCTION</p>		<p>EARTHING TO BE PROVIDED AS PER STANDARD</p>
<p>OPERATING BOX CONSTRUCTION</p>		<p>SHROUDING TO BE PROVIDED AS PER STANDARD</p>

2	20.01.17	SS	DATE	20.09.15	DESCRIPTION :	DRG. No. :	211803007
1	24.02.16	SS	DATE		CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL	DESIGN INSTRUCTION	
REV.	DATE	NAME	APPD.	BSR	ITEM CODE : 03040410167000	ELGI	SHEET No. : 2 OF 14
							A4



DRG. No. : 211803007

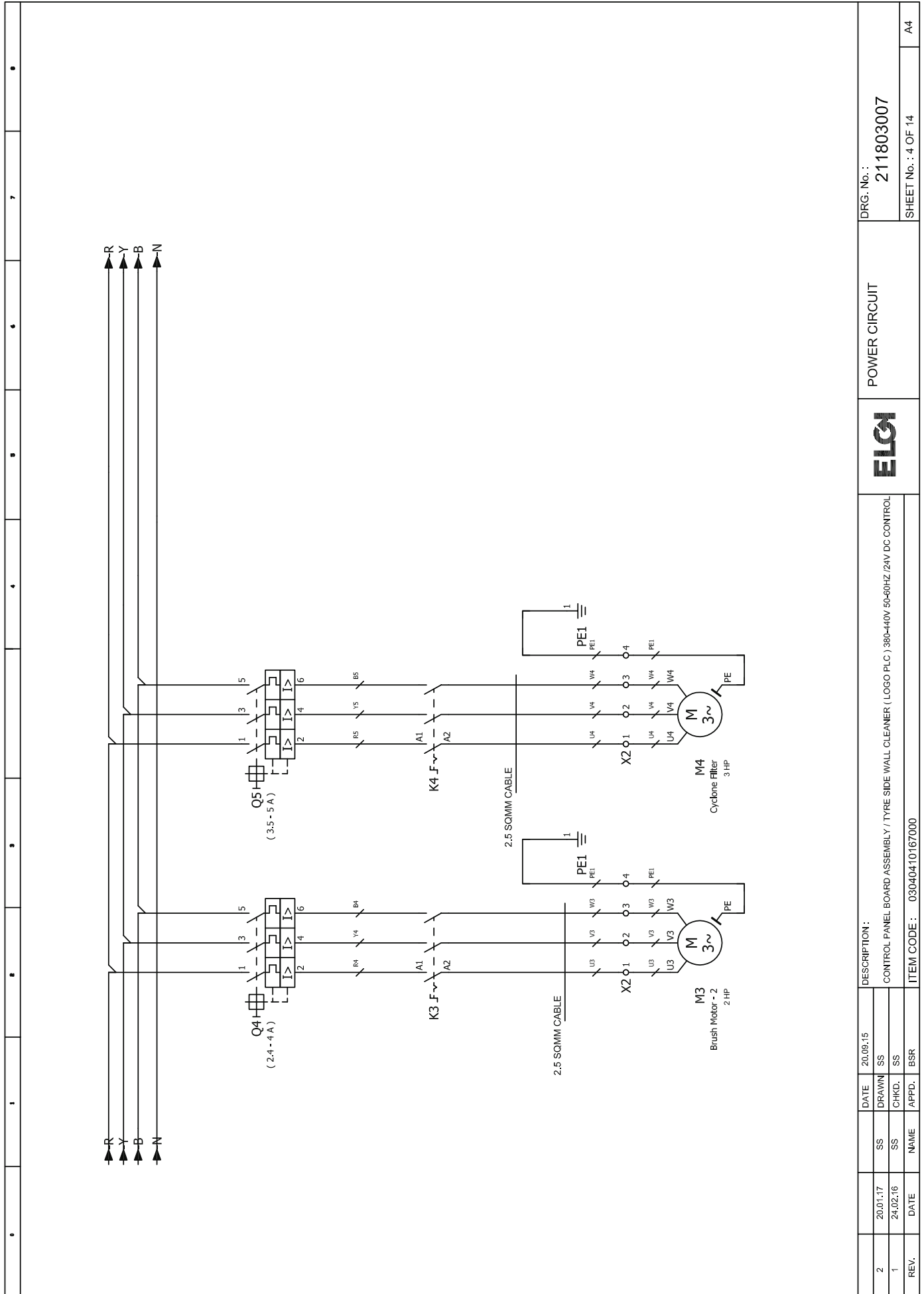
POWER CIRCUIT



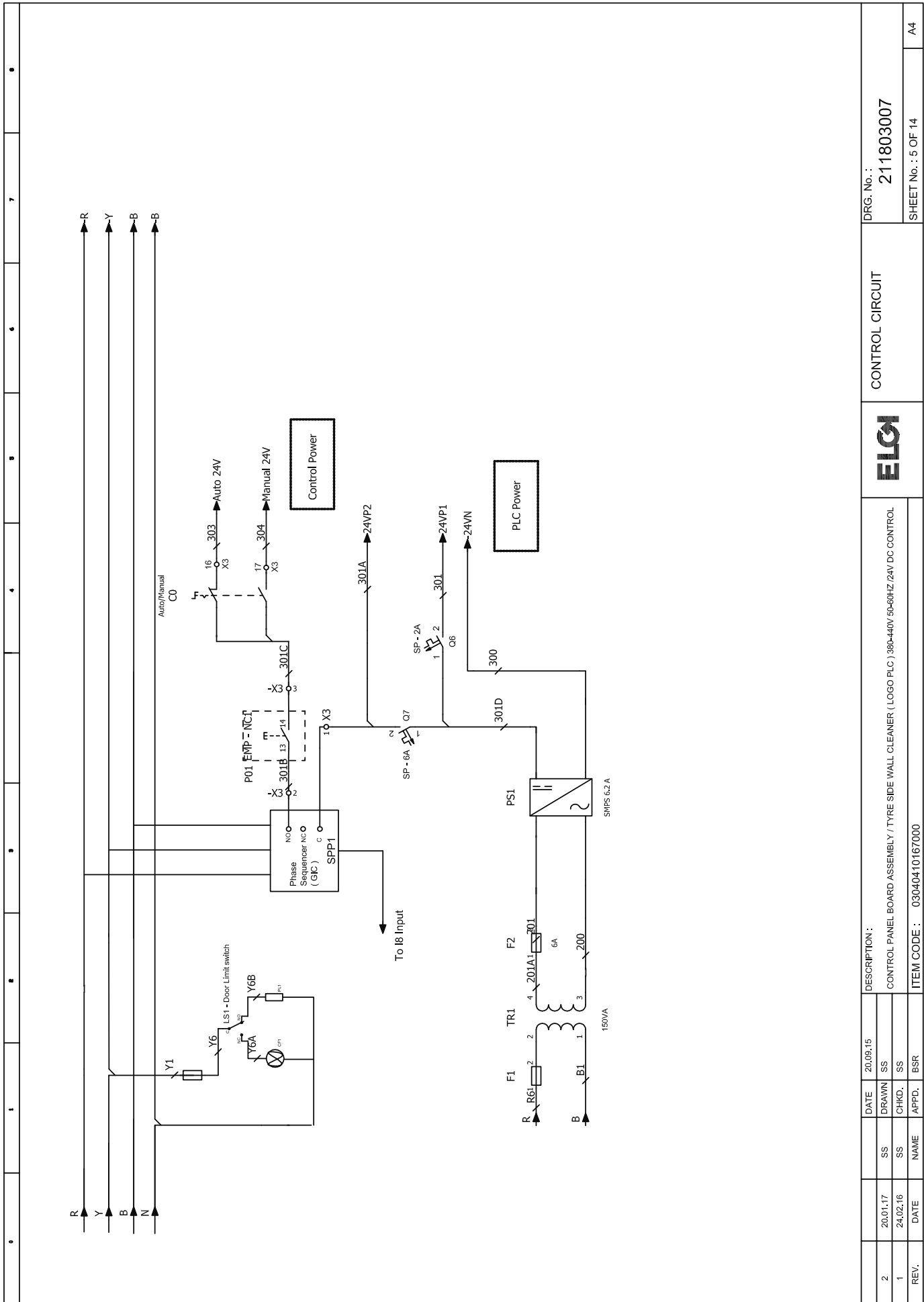
DESCRIPTION:
CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL

ITEM CODE : 03040410167000

REV.	DATE	NAME	APPD.	BSR.
2	20.01.17	SS	SS	
1	24.02.16	SS	SS	



DRG. No. : 211803007		POWER CIRCUIT		ELGI		DRG. No. : 211803007	
SHEET No. : 4 OF 14		A4		CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL		DESCRIPTION :	
REV.	DATE	NAME	APPD.	DATE	20.09.15	SS	SS
2	20.01.17	SS	SS	DATE	20.09.15	SS	SS
1	24.02.16	SS	SS	DATE	24.02.16	SS	SS
				APPD.			
				BSR			
ITEM CODE : 03040410167000							



DRG. No. : 211803007

SHEET No. : 5 OF 14

CONTROL CIRCUIT

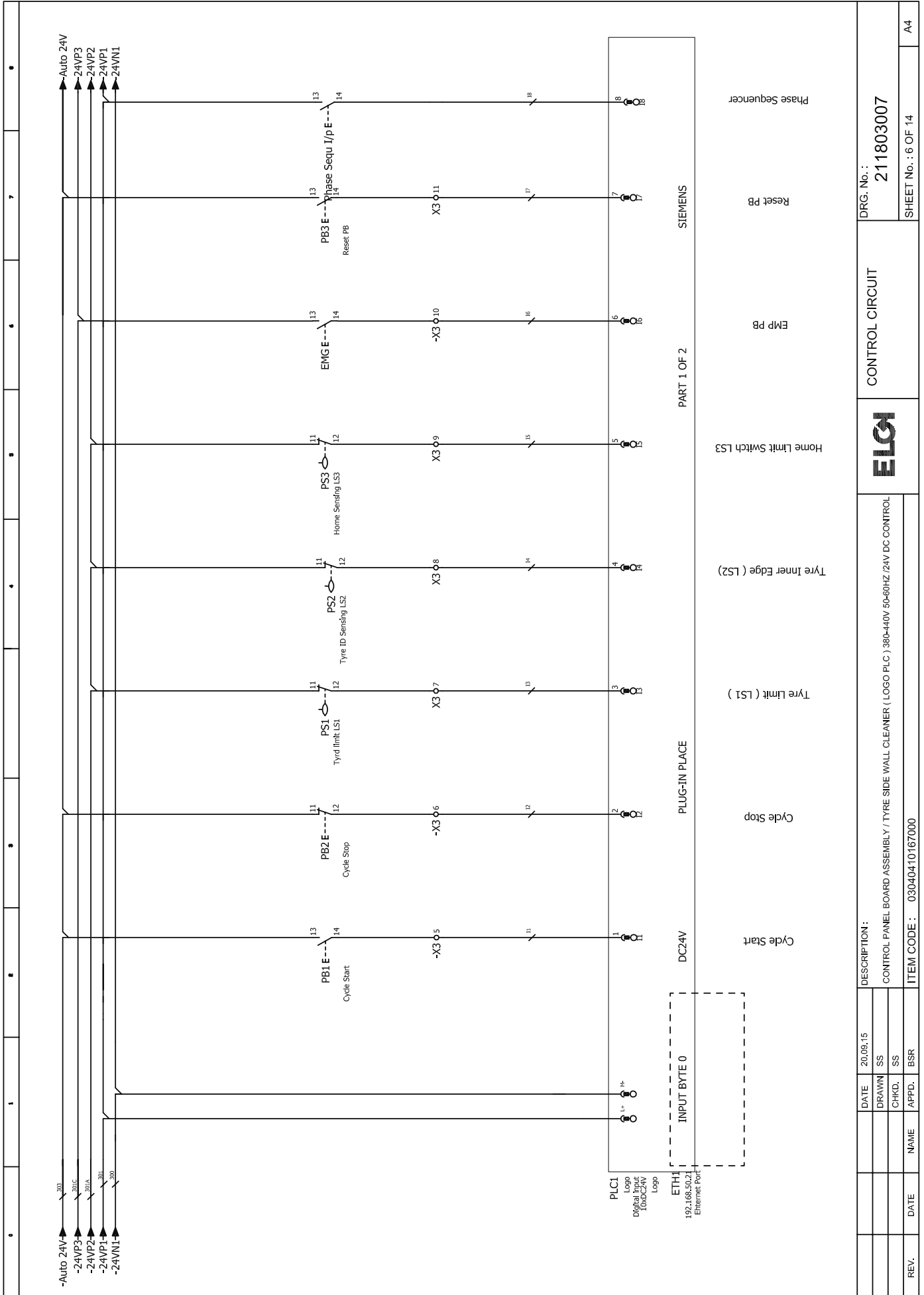


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CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ 24V DC CONTROL

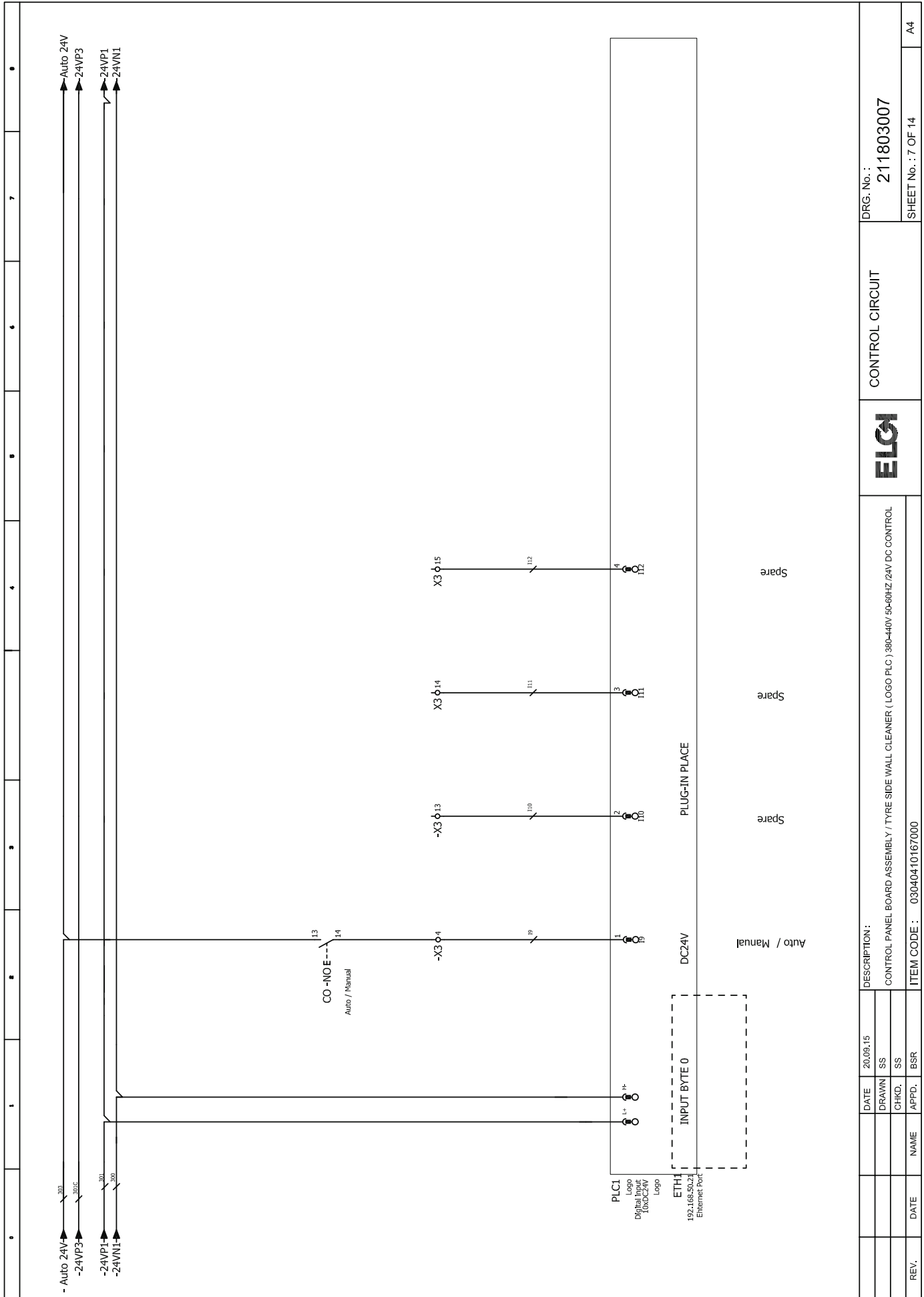
ITEM CODE : 03040410167000

DATE	20.09.15	DATE	20.09.15
DATE	20.09.15	DATE	20.09.15
DRAWN	SS	CHKD.	SS
APPD.	BSR	NAME	BSR
REV.			
2	20.01.17	1	24.02.16

A4



	DATE	20.09.15	DESCRIPTION :
	DRAWN	SS	CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL
	CHKD.	SS	
	APPD.	BSR	
REV.	DATE	NAME	ITEM CODE : 03040410167000
ELGI			CONTROL CIRCUIT
			DRG. No. : 211803007
			SHEET No. : 6 OF 14
			A4



DRG. No. : 211803007
SHEET No. : 7 OF 14

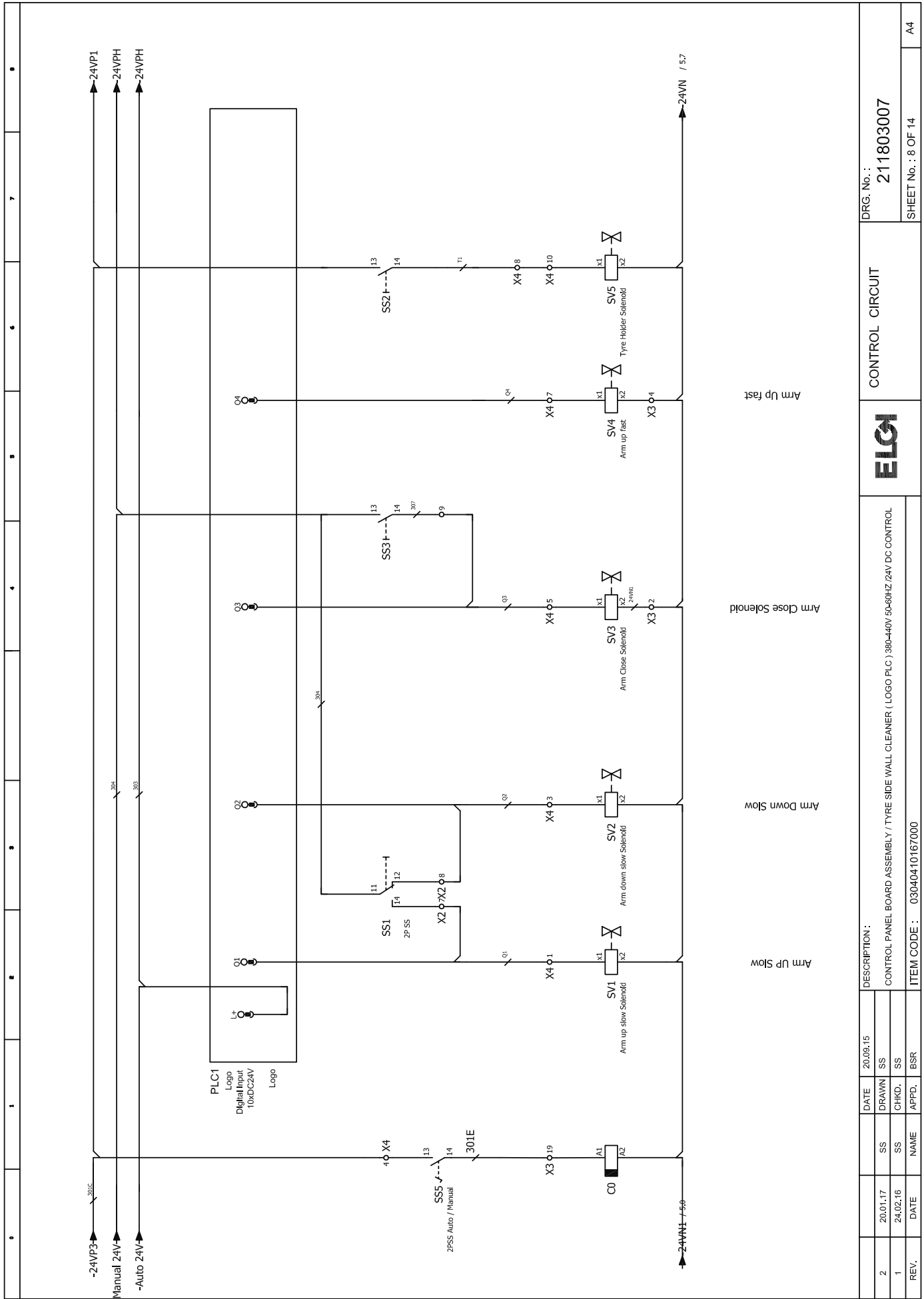
CONTROL CIRCUIT

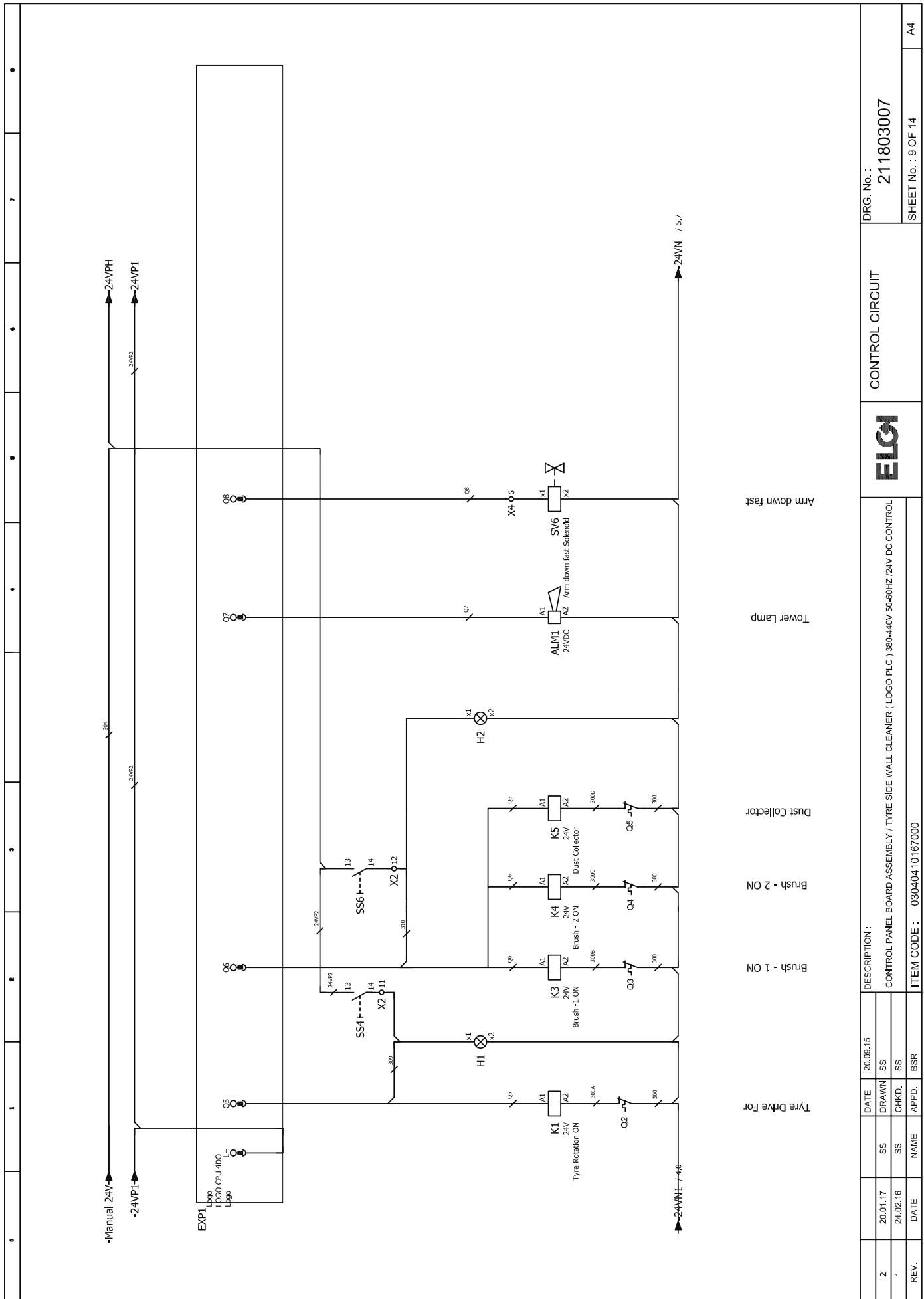


DESCRIPTION :
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ITEM CODE : 03040410167000

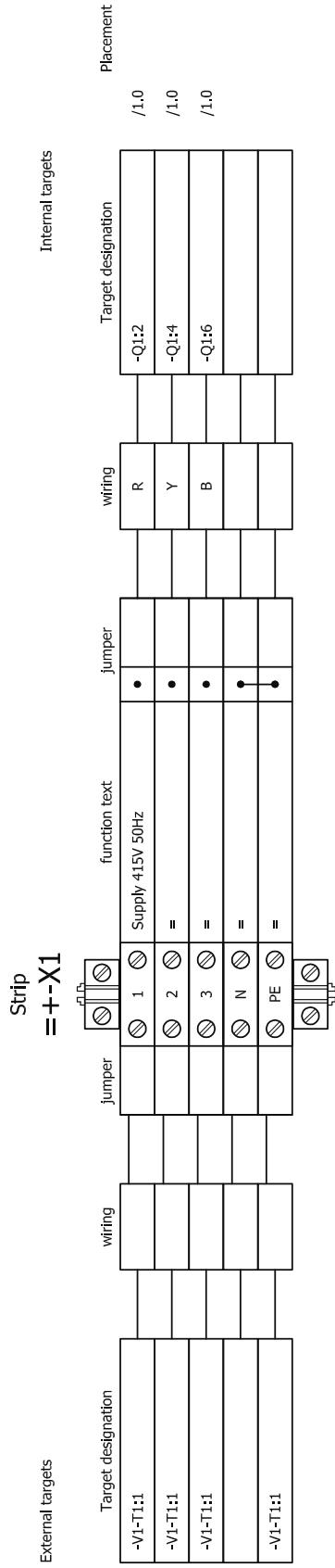
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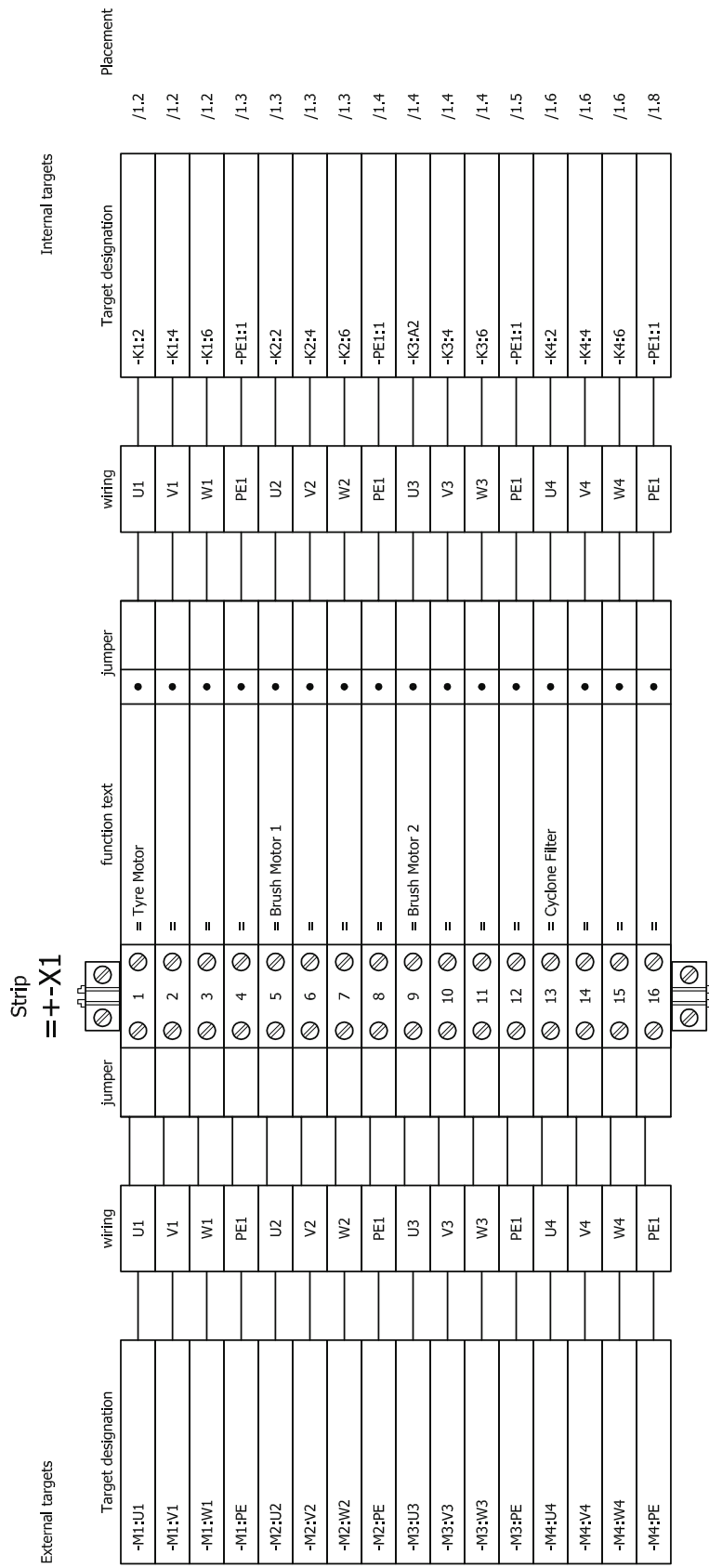
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1	24.02.16	SS	CHKD.	SS	ITEM CODE : 03040410167000		SHEET No. : 9 OF 14			
REV.	DATE	NAME	APPD.	ESR					A4	

Terminal diagram



2	20.01.17	SS	DATE	20.09.15	DESCRIPTION :	DRG. No. :	211803007
1	24.02.16	SS	DRAWN	SS	CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL	TERMINAL DIAGRAM ==+-X1	
REV.	DATE	NAME	CHKD.	SS	ITEM CODE : 03040410167000	ELGI	SHEET No. : 10 OF 14
		APPD.	BSR				A4

Terminal diagram



2	20.01.17	SS	DATE	20.09.15	DESCRIPTION:
1	24.02.16	SS	DRAWN	SS	CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL
REV.	DATE	NAME	APPD.	ESR	ITEM CODE : 03040410167000

ELGI		DRG. No. : 211803007
TERMINAL DIAGRAM =+-X2		
SHEET No. : 11 OF 14		A4

Terminal diagram

External targets		Internal targets	
Target designation	wiring	Target designation	wiring
=	301A	=	301A
=	301B	=	301B
=	301C	=	301C
-CPU2:9	I9	-CO-NO	I9
-CPU2:1	I1	-S1:14	I1
-CPU2:2	I2	-S2:14	I2
-CPU2:3	I3	-S3:14	I3
-CPU2:4	I4	-S4:14	I4
-CPU2:5	I5	-S5:14	I5
-CPU2:6	I6	-S6:14	I6
-CPU2:7	I7	-S7:14	I7
=	=	=	=
=	I10	=	=
=	=	=	=
=	=	=	=
-CPU2:7	303	-S7:14	303
-CPU2:8	304	-S9:14	304
-CO	301C	-S10:14	301C
-CO	301E	-S11:14	301E
=	PE	=	PE

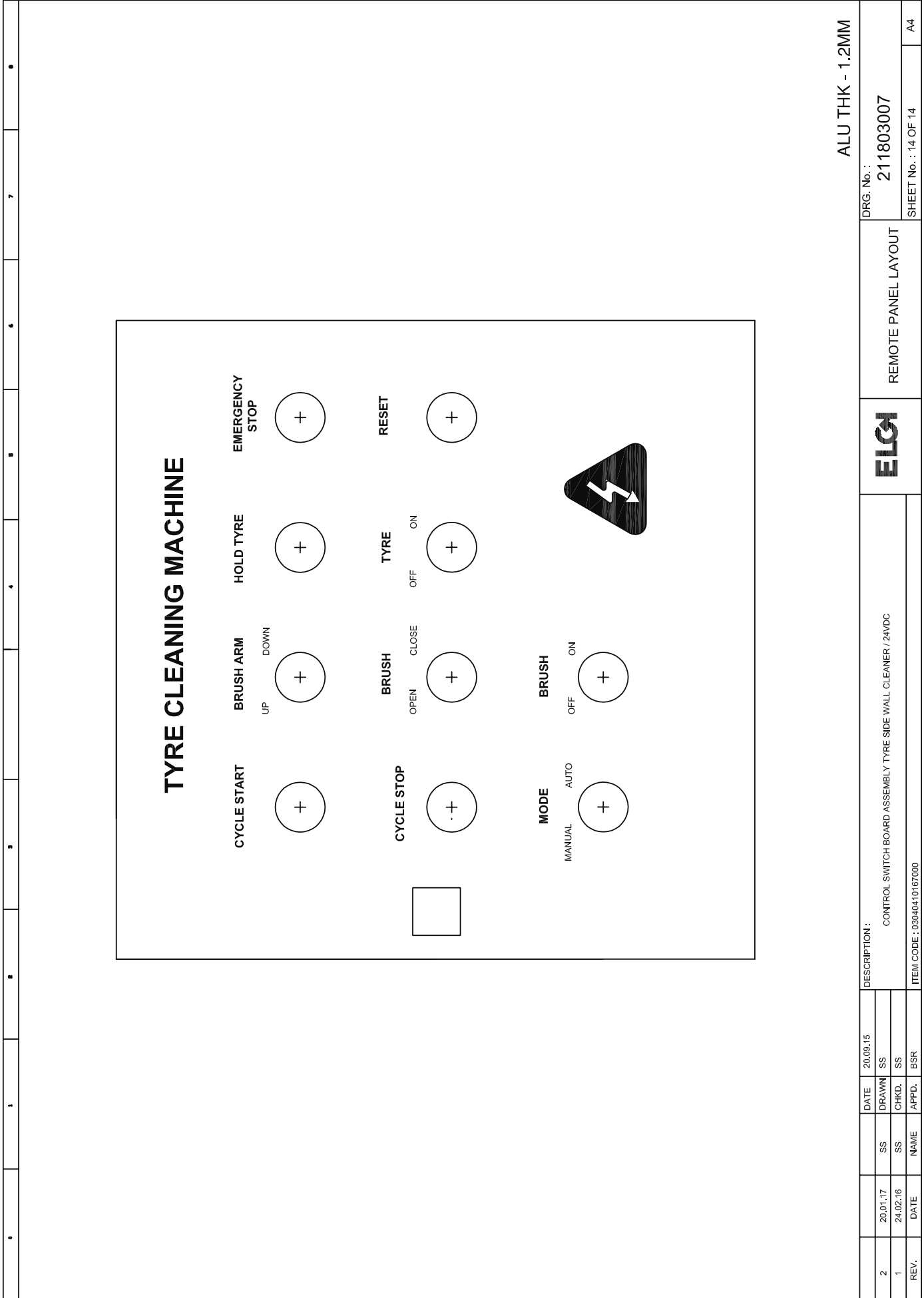
Strip	Terminal	Function	Wiring
=+-X3	1	=	301A
	2	=	301B
	3	=	301C
	4	Auto/Manual	I9
	5	Cycle start	I1
	6	Cycle stop	I2
	7	Tyre limit	I3
	8	Tyre inner edge	I4
	9	Home limit	I5
	10	EMP	I6
	11	Reset	I7
	12	=	=
	13	=	I10
	14	=	=
	15	=	=
	16	Auto	303
	17	Manual	304
	18	=	301C
	19	=	301E
	20	=	PE

2	20.01.17	SS	DATE	20.09.15	DATE	20.09.15	DRG. No.:	211803007
1	24.02.16	SS	DRAWN	SS	CHKD.	SS	TERMINAL DIAGRAM=+-X3	SHEET No. : 12 OF 14
REV.	DATE	NAME	APPD.	BSR	DESCRIPTION :	CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL		
					ITEM CODE :	03040410167000		
						ELGI		A4

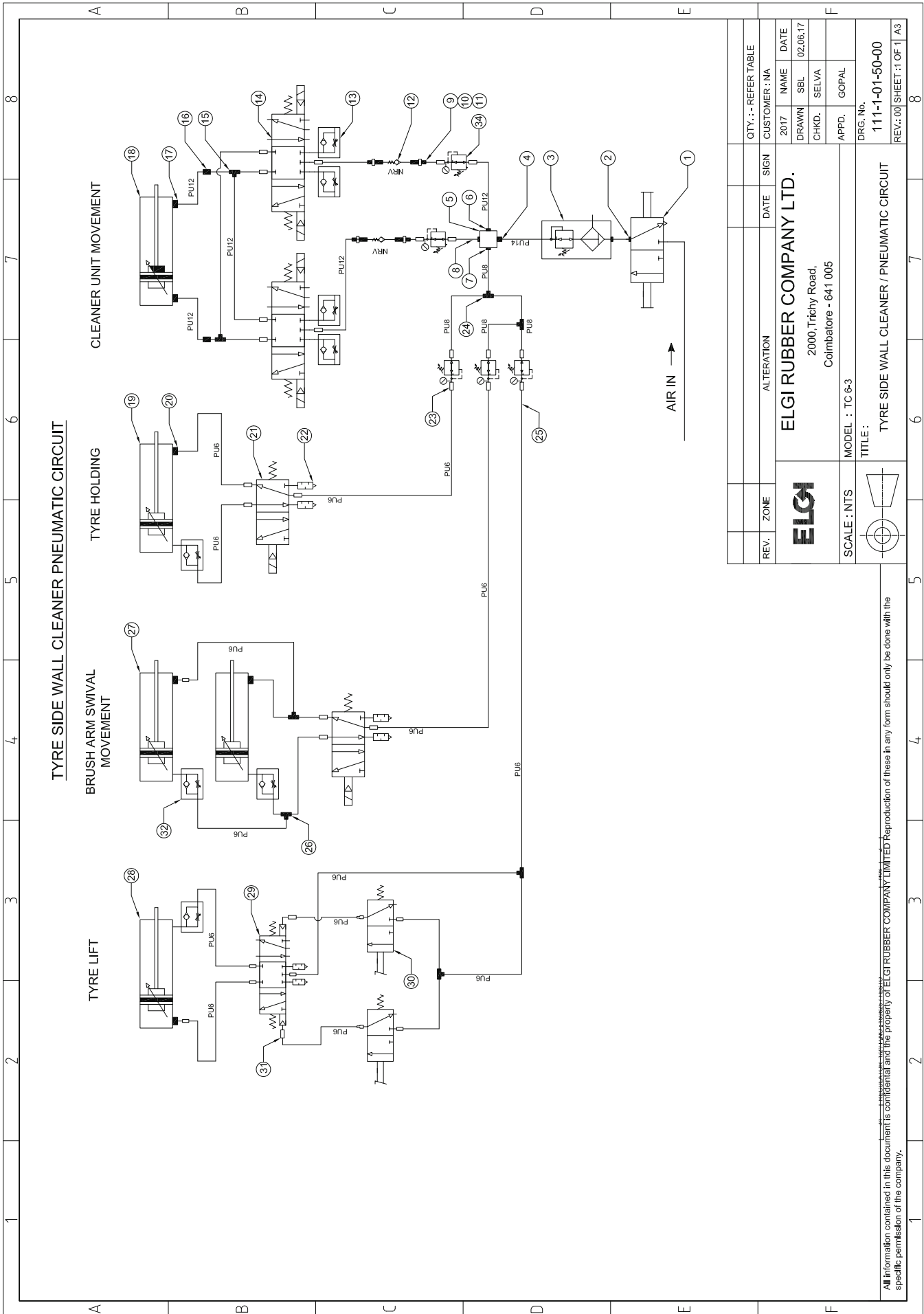
Terminal diagram

External targets		Strip = +-X4				Internal targets	
Target designation	wiring	jumper	function text	jumper	wiring	Target designation	Placement
SV1 :x1	Q1	⊗ 1	Arm up fast	•	Q1	-CPU2:1	
K1:13	Q5	⊗ 2	Tyre drive	•	Q5	-CPU2:5	
SV2:x1	Q2	⊗ 3	Arm up fast	•	Q2	-CPU2:4	
K2:13	Q6	⊗ 4	Brush	•	Q6	-CPU2:6	
SV3:x1	Q3	⊗ 5	Arm close		Q3	-CPU2:3	
SV6:x1	Q8	⊗ 6	Arm down fast		Q8	-CPU2:6	
=	Q4	⊗ 7	=		Q4	=	
SV1 :x1	T1	⊗ 8	Arm up fast	•	T1	-CPU2:1	
SV4 :x1	Q1	⊗ 9	Roller	•	Q1	S7:13	
SV2 :x1	Q2	⊗ 10	Arm down slow		Q2	-CPU2:2	
SV6:x1	Q8	⊗ 11	Arm down fast		Q8	-CPU2:6	
SV3:x1	Q3	⊗ 12	Arm close		Q3	-CPU2:3	
=	=	⊗ 13	=		=	=	
SV2:x1	Q4	⊗ 14	Arm up fast	•	Q4	-CPU2:4	
=	300	⊗ 15	=		300	=	
=	PE	⊗ 16	=		PE	=	

2	20.01.17	SS	DATE	20.09.15	DESCRIPTION :	DRG. No. :	211803007
1	24.02.16	SS	DRAWN	SS	CONTROL PANEL BOARD ASSEMBLY / TYRE SIDE WALL CLEANER (LOGO PLC) 380-440V 50-60HZ /24V DC CONTROL	TERMINAL DIAGRAM = +-X4	
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		BSR					A4



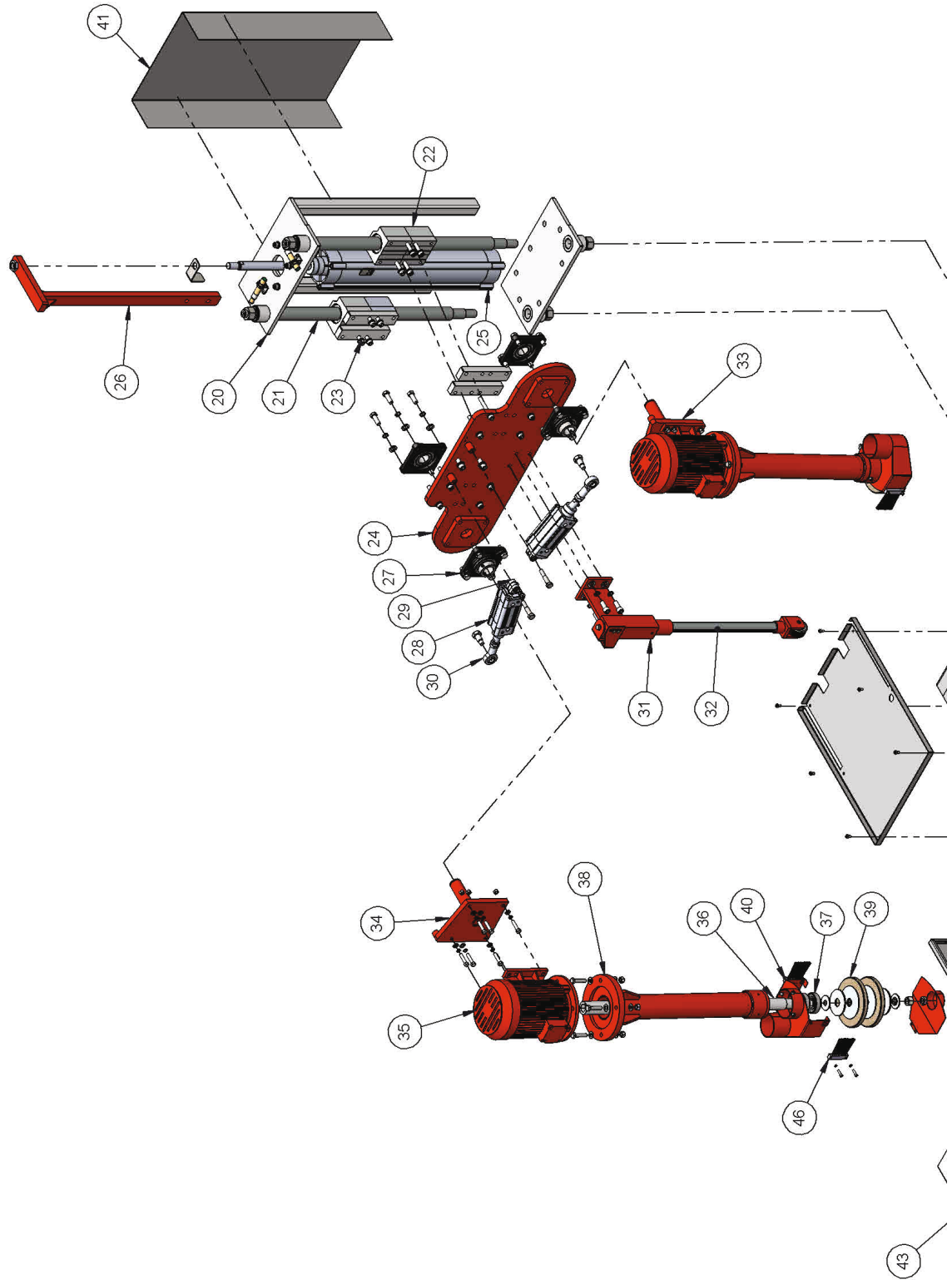
11 Pneumatic Circuit

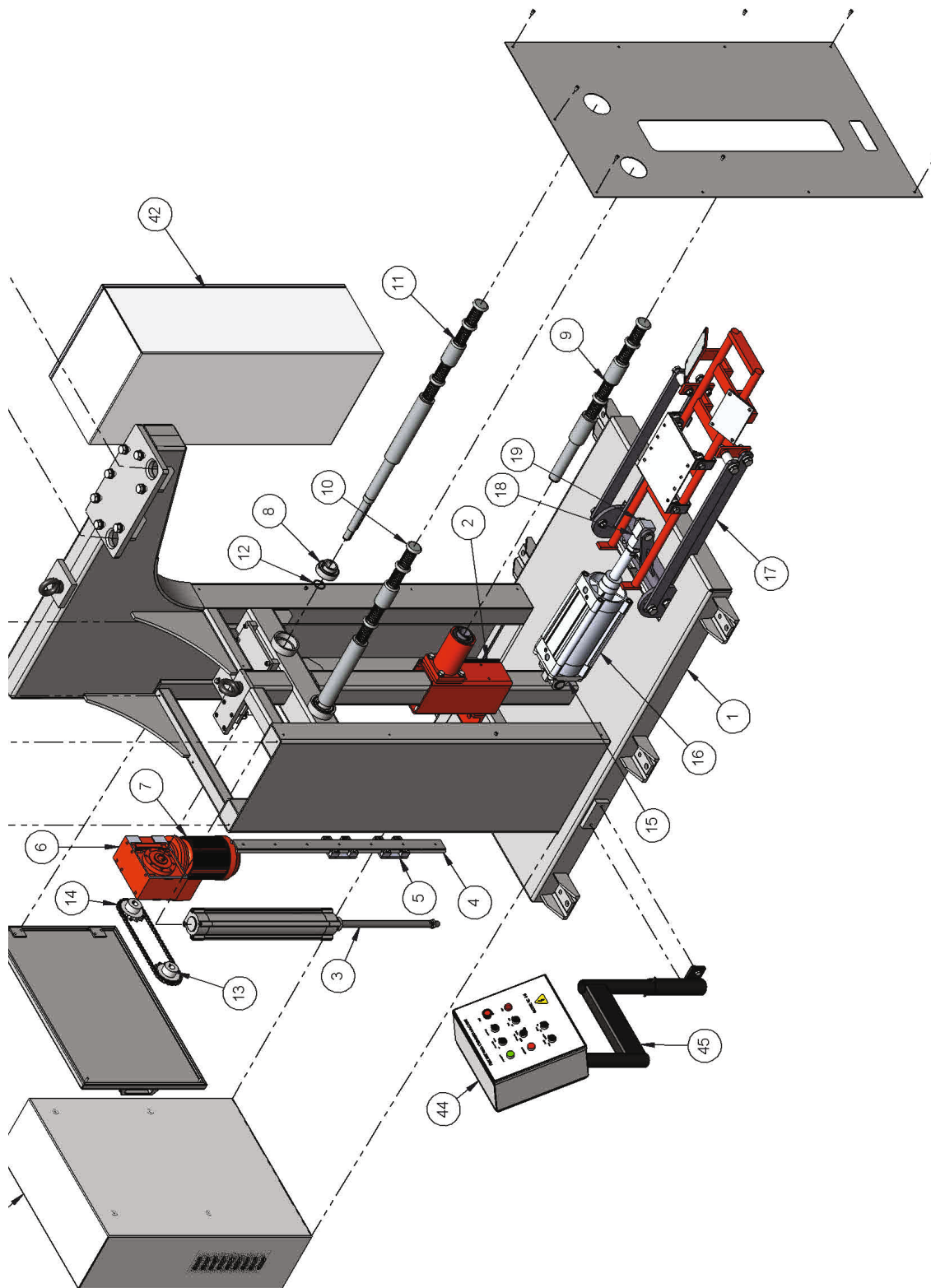


Pneumatic Circuit - BOM

S. No.	Description	UOM	Qty.
1	HAND SLIDE VALVE 1/2" I P.NO:2342 / FESTO	Nos	1
2	SWIVEL ELBOW 1/2" x PU14 / FESTO	Nos	2
3	AIR FILTER CUM REGULATOR-1/2"-D-MIDI / P.NO:159584 / FESTO	Nos	1
4	REDUCER NIPPLE 1/2" x 3/8"	Nos	1
5	JUNCTION BOX/ P.NO:WJ0162 / JANATICS	Nos	1
6	SWIVEL ELBOW 3/8" x PU12 / P.NO: WS0211252 / JANATICS	Nos	12
7	SWIVEL ELBOW 3/8" x PUB / P.NO: WS0210852 / JANATICS	Nos	1
8	POL YURETHENE TUBING PUN-12 / FESTO	Mtr	-
9	NIPPLE - 3/8"	Nos	1
10	BUSH NUT - 1/2" x 3/8"	Nos	2
11	COUPLING -1/2" x 1/2"	Nos	2
12	NON RETURN VALVE (GM) 1/2"	Nos	2
13	FLOW CONTROL VALVE -3/8" x PU12 / GR5 / JANATICS	Nos	4
14	SOLENOID VALVE 5/3 / P.NO:DS265SC61-W / JANATICS	Nos	2
15	UNION TEE -PU12 / P.NO: WP2301212/ JANATICS	Nos	2
16	BULK HEAD UNION - PU12 / P.NO :WP2501212 / JANATICS	Nos	4
17	SWIVEL ELBOW 1/2" x PU12 / P.NO:153054 / FESTO	Nos	2
18	PNEUMATIC CYLINDER- DNC 100-500 PPV/P.NO:163490/FESTO	Nos	1
19	PNEUMATIC CYLINDER- DSBC-63-400-PPVA-NJ/PARTN O.1383588/FESTO	Nos	1
20	SWIVEL ELBOW 1 / 4 " / P.NO:153045 /FESTO	Nos	4
21	SOLENOID VALVE 5/2 / P.NO:DS254SR60 / JANATICS	Nos	2
22	SILENCER 1/4" I P.NO:165004 / FESTO	Nos	4
23	SWIVEL ELBOW 1/4" x PU6 / FESTO	Nos	14
24	UNION TEE PUB/ P.NO:153130 / FESTO	Nos	2
25	POL YURETHENE TUBING PUN-6 / FESTO	Mtr	-
26	UNION TEE -PU6 / P.NO :WP2300606 / JANATICS	Nos	4
27	PNEUMATIC CYLINDER- DNC 50-50-PPV/P.NO:163385/FESTO	Nos	1
28	PNEUMATIC CYLINDER-DNC125X160 PPV/P.NO.163517/FESTO	Nos	1
29	SPOOL VALVE 5/3 DS65EC61/JANATICS	Nos	1
30	FOOT OPERATED VALVE/ P.NO: DP045F61 / JANATICS	Nos	2
31	MALE CONNECTOR 1/8" x PU6 /P.NO: WP2110650 / JANATICS	Nos	2
32	FLOW CONTROL VALVE-1/4" x PU6/GR5	Nos	4
33	BULK HEAD UNION - PU6 / P.NO:WP2500606 / JANATICS	Nos	9
34	REGULATOR-1/2"/ P.NO: 159625 / FESTO	Nos	2

12 Parts List





Parts List - BOM

S. No.	Order Code	Description	UOM	Qty.
1	MA0163/1	MAIN FRAME ASSEMBLY TYRE SIDE WALL CLEANER	Nos	1
2	MA0163/2	SLIDE TUBE ASSEMBLY - TC 6-3	Nos	1
3	MA0163/3	PNEUMATIC CYLINDER - DNC-63-400-PPVA/ P.No. 163411/FESTO	Nos	1
4	MA0163/4	LINEAR GUIDE – DOUBLE RAIL/P.NO:WS10-40 L-1200MM/IGUS	Nos	1
5	MA0163/5	LINEAR GUIDE – CARRIAGES FITTED/P.NO:WW-W1010-10/IGUS	Nos	2
6	MA0163/6	GEAR BOX / W63U10P80B5B3 / BONFIGILIOLI	Nos	1
7	MA0163/7	MOTOR 1 HP - 1400 RPM (4P) BN80B4B5 / FLANGE MOUNTED / BONFIGILIOLI	Nos	1
8	MA0163/8	BEARING UC207D1 / NTN	Nos	6
9	MA0163/9	IDLER SHAFT - TYRE DRIVE UNIT	Nos	1
10	MA0163/10	DRIVEN SHAFT - TYRE DRIVE UNIT	Nos	1
11	MA0163/11	DRIVE SHAFT - TYRE DRIVE UNIT	Nos	1
12	MA0163/12	CIRCLIP A-35	Nos	3
13	MA0163/13	1/2" PITCH 14TEETH SIMPLEX SPROCKET	Nos	2
14	MA0163/14	INDUSTRIAL CHAIN 1/2" x 5/16" - ROLLON-830mm	Nos	1
15	MA0163/15	SWIVEL FLANGE SNC-125/P.NO: 174389	Nos	1
16	MA0163/16	PNEUMATIC CYLINDER – DNC 125-160 PPV/ P.NO: 163503/FESTO	Nos	1
17	MA0163/17	TYRE LIFT ASSEMBLY - TC 6-3	Nos	1
18	MA0163/18	CYLINDER MOUNTING FRONT ADOPTER - TC 6-3	Nos	1
19	MA0163/19	CYLINDER HINGE PIN - TC 6-3	Nos	1
20	MA0163/20	CLEANER UNIT - TOP FRAME ASSEMBLY - TC 6-3	Nos	1
21	MA0163/21	GUIDE SHAFT WITH END MACHINING - HARDENED & GROUND CHROME PLATED	Nos	1
22	MA0163/22	LINEAR BEARING / SUPER SLIDES / P.No.LMA40UU	Nos	2
23	MA0163/23	LINEAR BEARING SPACER PLATE - TC 6-3	Nos	1
24	MA0163/24	MOVING PLATE - SIDE WALL CLEANER	Nos	1
25	MA0163/25	PNEUMATIC CYLINDER - A 28 100-500 / JANATICS	Nos	1
26	MA0163/26	MOVING PLATE CONNECTING BRACKET - TC 6-3	Nos	4
27	MA0163/27	BEARING PILLOW BLOCK UCF207D1 NTN	Nos	1
28	MA0163/28	PNEUMATIC CYLINDER - DNC-50-50-PPV/ P.No 163385/FESTO	Nos	1
29	MA0163/29	SWIVEL FLANGE SNCL-50/ P.No 174406 / FESTO	Nos	1
30	MA0163/30	ROD END CLEVIS/ SGS-M16 / P.No.9258	Nos	1
31	MA0163/31	GUIDE BRACKET ASSEMBLY - TC 6-3	Nos	1
32	MA0163/32	POSITION ROD ASSEMBLY - TC 6-3	Nos	1
33	MA0163/33	SWIVAL MOTOR MOUNTING ASEEMBLY RH - TC 6-3	Nos	1
34	MA0163/34	SWIVAL MOTOR MOUNTING ASEEMBLY LH - TC 6-3	Nos	1
35	MA0163/35	MOTOR - 2HP/1440 RPM / 415V / 3PH / 50 HZ / FOOT / FLANGE MOUNT / SIEMENS	Nos	2
36	MA0163/36	DRIVE SHAFT - CLEANER UNIT (LH & RH)	Nos	1
37	MA0163/37	ANGULAR CONTACT BALL BEARING SKF - 7206 BECBP	Nos	2
38	MA0163/38	TOOL HOLDER PIPE HOUSING - TC 6-3	Nos	1
39	MA0163/39	STEEL BRUSH 6"	Nos	2
40	MA0163/40	TOOL GUARD ASSEMBLY FOR TYRE SIDE WALL CLEANER	Nos	2
41	MA0163/41	CLEANER UNIT CLOSING COVER	Nos	2
42	MA0163/42	PNEUMATIC PANEL BOX ASSEMBLY	Nos	2
43	MA0163/43	CONTROL PANEL BOARD ASSEMBLY TYRE SIDE WALL CLEANER (LOGOPLC)	Nos	1
44	MA0163/44	CONTROL SWITCH BOARD ASSEMBLY TYRE SIDE WALL CLEANER / 24V DC	Nos	1
45	MA0163/45	OPERATING PANEL FRAME ASSEMBLY - TC 6-3	Nos	1
46	MA0163/46	NYLON BRUSH	Nos	4

13 Essential Spares List

S. No.	Order Code	Description	UOM	Qty.
1	MA0163/ES/1	Seal Kit for Pneumatic Cylinder DNC125 x 160 PPV / Festo	Nos	1
2	MA0163/ES/2	Seal Kit for Pneumatic Cylinder DSBC 63 - 400 PPVA-N3 / Festo	Nos	1
3	MA0163/ES/3	Seal Kit for Pneumatic Cylinder DNC 50-50-PPV/ Festo	Nos	1
4	MA0163/ES/4	Seal Kit for Pneumatic Cylinder DNC 100-500 PPV/ Festo	Nos	1
5	MA0163/ES/5	Seal Kit for Solenoid Operated Valve 5/3 / Festo	Nos	2
6	MA0163/ES/6	Seal Kit for Solenoid Operated Valve 5/2 / Festo	Nos	2
7	MA0163/ES/7	Seal Kit for Solenoid Operated Valve 5/3 /Janatics	Nos	1
8	MA0163/ES/8	Tyre Cleaner – Brush	Nos	40
9	MA0163/ES/9	Power Supply 24VDC 6.2A / 6EP1333-1LD00 / Siemens	Nos	1
10	MA0163/ES/10	MCCB 63A / 3VT1706-2DC36-0AA0 / Siemens - Q1	Nos	1
11	MA0163/ES/11	MCB 6A SP / 5SL61067RC / Siemens - Q7	Nos	1
12	MA0163/ES/12	MCB 2A SP / 5SL41027RC / Siemens - Q6	Nos	1
13	MA0163/ES/13	Power Contactor 12A / 3RT2017-1BB41 / Siemens - K2	Nos	3
14	MA0163/ES/14	Power Contactor 9A / 3RT2016-1BB41 / Siemens - K1	Nos	2
15	MA0163/ES/15	Control Contactor / 3RH2122-1BB40 / Siemens - CO	Nos	1
16	MA0163/ES/16	MPCB TP 2.4-4A / 3VU1340-1MJ00 / Siemens - Q3	Nos	2
17	MA0163/ES/17	MPCB 1.6-2.4A / 3VU1340-1MH00 / Siemens - Q2	Nos	1
18	MA0163/ES/18	MPCB 3.5-5A / 3VU1340-1NJ00 / Siemens - Q5	Nos	1
19	MA0163/ES/19	Indication Lamp Red 220V AC / 3SB52 85-6HC03 / Siemens - SL1	Nos	1
20	MA0163/ES/20	Indication Lamp Yellow 220V AC / 3SB52 85-6HD03 / Siemens - SL2	Nos	1
21	MA0163/ES/21	Indication Lamp Blue 220V AC / 3SB52 85-6HF03 / Siemens - SL3	Nos	1
22	MA0163/ES/22	Transformer / 150VA,415V/220V / Procon - TR1	Nos	1
23	MA0163/ES/23	Single Phase Preventor / SM301 / L&T - GIC - SPP1	Nos	1
24	MA0163/ES/24	Fuse Terminal With Glass Fuse / Connectwell - F1, F2	Nos	1
25	MA0163/ES/25	Tower Lamp Green Color / Ideal - ALM1	Nos	1
26	MA0163/ES/26	Door Limit Switch 1NO+1NC / Reputed - LS1	Nos	1
27	MA0163/ES/27	Inductive Proximity Sensor / Model.IME18-05BPPZC0S / Sick - PS1-3	Nos	2
28	MA0163/ES/28	Inductive Proximity Connector / Model.DOS-1204-W / Sick - PS1-3	Nos	2
29	MA0163/ES/29	Emergency Stop + NC / 3SB5203-0UC01 / Siemens - EMP	Nos	1
30	MA0163/ES/30	2 Position Selector Switch / 3SB5000-2AB01 / Siemens - SS3	Nos	1
31	MA0163/ES/31	Push Button Green / 3SB50 00-0AE01 / Siemens - PB1	Nos	1
32	MA0163/ES/32	Push Button Red / 3SB50 00-0AC01 / Siemens - PB2	Nos	1
33	MA0163/ES/33	NC Element / 3SB54 00-0C / Siemens - EMP	Nos	1
34	MA0163/ES/34	Push Button Yellow / 3SB50 00-0AD01 / Siemens - PB3	Nos	1
35	MA0163/ES/35	No Element/ 3SB54 00-0B / Siemens - PB1	Nos	1