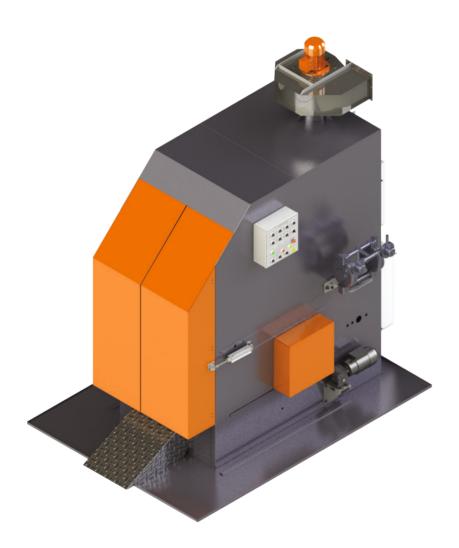




Tyre Painting Station PS 6-3



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

2000 Trichy Road • Coimbatore 641 005 • Tamil Nadu • India • +91 (422) 232 1000 • info@in.elgirubber.com • www.elgirubber.com

Foreword

The Tyre Painting Station PS 6-3 is designed to give the finished retreaded tyre a Premium / New tyre appearance for the discerning customer. It is suitable for casing diameter from 700 to 1300 mm and section widths from 140 to 470 mm. It has an efficient PLC controlled automatic cycle to paint the tyre sidewall without operator intervention.

Contents

01 Description	4
02 Specifications	5
03 Assembly and Commissioning Tools	6
04 Installation and Commissioning	7
05 Pre-Operation Checks	8
06 Operation	9
07 Do's and Don'ts	
08 Troubleshooting	11
09 Preventive Maintenance	13
10 Electrical Drawings	14
11 Pneumatic Circuit	
12 Parts List	
13 Essential Spares List	33

01 Description

The Tyre Painting station PS 6-3 consists of the following major components:

Main Frame

The main frame houses all the main components of the machine such as Rotating assembly, Tyre holding assembly, Spray gun assembly, Tyre ejector assembly etc.

Cabinet

This is an enclosure which covers entire machine. It houses the spray pump, electrical cabinet, blower assembly and pneumatic cabinet.

Tyre Rotating Assembly

The tyre is rotated by rollers, which is driven by 0.5 hp motor kept outside the cabin.

Ramp

A ramp is provided for easy loading and unloading of tyres.

Spray Gun Assembly

A couple of auto spray guns are used in the assembly. It is controlled by PLC for the precise spray function. Paint is supplied by a diaphragm type pressure pump from container.

Tyre Holding Assembly

The tyre holding assembly consist of a roller, in which a profile is made to the curvature of the tyre for perfect holding. Two pneumatic cylinders will pull down the roller and hold the tyre in place. This holding is done to avoid lateral movement of tyre during the painting process.

Electrical and Pneumatic Assembly

Electrical and pneumatic components are kept in a separate enclosure and the enclosure is fitted on the cabinet.

02 Specifications

Model	PS 6-3
Catalogue Number	MA81 63 - <mark>X</mark> *
Tyre Range	6.50 - 14 to 12.00 - 24.5
Air Pressure Requirement (kPa / kg/cm)	800 / 8
Dimensions (L x W x H) (mm)	2415 x 1400 x 2350
X* in Cat. No. denotes power supply	R - 220 / 60 / 3
specifications (V / Hz / ph)	<mark>O</mark> - 380 / 50 / 3
	<mark>S</mark> - 380 / 60 / 3
	P - 415 / 50 / 3
	U - 440 / 60 / 3
Weight (kg)	~450
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 extn. 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)	1⁄4 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.

Electrical and Pneumatic Connection

Connect the machine with the help of 2.5 sq.mm copper 4 core cable. From the nearest air point, draw a line using PU14 Pneumatic hose with quick connection fittings.

Air Pressure Setting

Ensure the air pressure in the regulator:

- (R1) is 7 kg/cm²
- (R2) is 2 kg/cm²
- (R3) is 4 kg/cm²
- (R4) is 2 kg/cm²

8

05 Pre-Operation Checks

- Remove the shipment clamps that are provided below the table, which are marked and painted red / orange (refer to included drawing).
- Check for free movement of all moving parts.
- Check if all nuts and bolts are properly tightened.
- Check if the spray gun point nozzles are facing the tyre.
- Check if the roller is seated in place.
- Check and ensure no twists, or crush in air line.
- Check and ensure that the foot switch cable is not crushed.
- Check and ensure that the paint hoses are not crushed.
- Check for any earth (electrical grounding) leakage.
- Check for any air leakage on the pneumatic lines.

06 Operation

- 1. Open the slide valve of pneumatic panel.
- Check the air pressure in the gauge. It should be 8 kg/cm² for the main inlet gauge.
- 3. Switch ON the main switch of the electrical control panel.
- 4. Open the door by operating the switch on the operating panel.
- 5. Roll the tyre over ramp and position it in between the rollers.
- 6. Choose the category of the tyre as LCV/TRUCK on the operating panel.
- 7. Set the MODE to AUTO.

Note: Manual mode is given only for trouble shooting and maintenance.

- 8. Close the door.
- 9. Press cycle start button on the operating panel. The machine will initiate the task and the tower lamp will glow in green.
- 10. After completion of the cycle, the machine will stop and this will be indicated by a red colour tower lamp.
- 11. Remove the tyre by pressing foot switch and unload it.
- 12. Cleaning cycle: Once the painting is completed (per shift or per day), take out the suction hose from paint container and dip it into a container filled with fresh water. Press the cycle start button and operate the machine with water to clean the nozzle and hoses. Repeat the cycle once more. Finally leave the suction hose in water until production starts for the next da y. Note: Do not use any solvents or detergents for cleaning the nozzle.
- 13. Take out the paint over-flow container and empty it at regular intervals.

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

- 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 are maintained.
- Ensure the cleaning cycle is performed, when machine is stopped over an hour.
- Ensure paint container is filled with water based paint.
- Use only the ramp to load tyres on the machine.
- Lubricate the chains weekly.
- Use only the eye bolts to lift the machine.

Don'ts

- Do not operate the machine until the shipment locks are removed.
- Do not place hand between doors while closing.

08 Troubleshooting

Symptoms / Problems	Possible Causes	Remedies
Machine does	1. Incoming supply failure	1. Check incoming supply
not run when switched on	2. Improper panel board connection	 Check and correct wiring as per circuit diagram
	3. Failure of fuse	3. Check and replace fuse
	4. Emergency switch in locked position	4. Release emergency switch
Motor runs on continuous	1. Contactor connection loose	1. Clean contactor terminals and tighten connections
pressing of switch and stops when	2. Push button contact lock connection loose	2. Check and rectify
is released	3. Push button contact lock failure	3. Replace contact block
Motor stops while running	1. Motor over loaded	1. Check whether over loaded and correct
	2. Wrong amperage setting	2. Reset relay amperage correctly and increase if needed within allowable
		limit
Tyre rotation speed decrease	1. Chain loose	 Check chain tension - correct or replace
while painting	2. Low voltage	2. Check and correct
6		
Spray gun is not	1. Check the paint availability	1. Refill the paint
working	2. Check the pneumatic pressure of cap, piston and pump	2. Fix it as recommended
	3. Check the nozzle for any blockage	3. Perform cleaning cycle or manual clean the nozzle

12

Symptoms / Problems	Possible Causes	Remedies
Paint is over / under sprayed	 Check the tyre category selection on the operating panel Check the nozzle adjustment Check for any blockage in nozzle 	 Choose proper category as Truck or LCV Adjust the spray gun knob for coverage Perform cleaning cycle or manual clean the nozzle
Tyre is squeezed when painting cycle is in process	 Over pressure in cylinder Tyre holding assembly proximity sensor failure Sensor clamp or stopper plate dislocation Nylon roller damaged or bearing failure 	 Set the appropriate pressure Check and change the sensor Locate the sensor to right position and fasten the bolts Check and replace rollers / bearings
Foot switch pressed but tyre not ejecting	 Electrical line disconnection Ejector cylinder pressure is not sufficient Ejector cylinder seal damaged Solenoid valve seal damaged 	 Check and connect Check and set air pressure as mentioned in page 7 Check and replace the seal kit Check and replace the seal kit

09 Preventive Maintenance

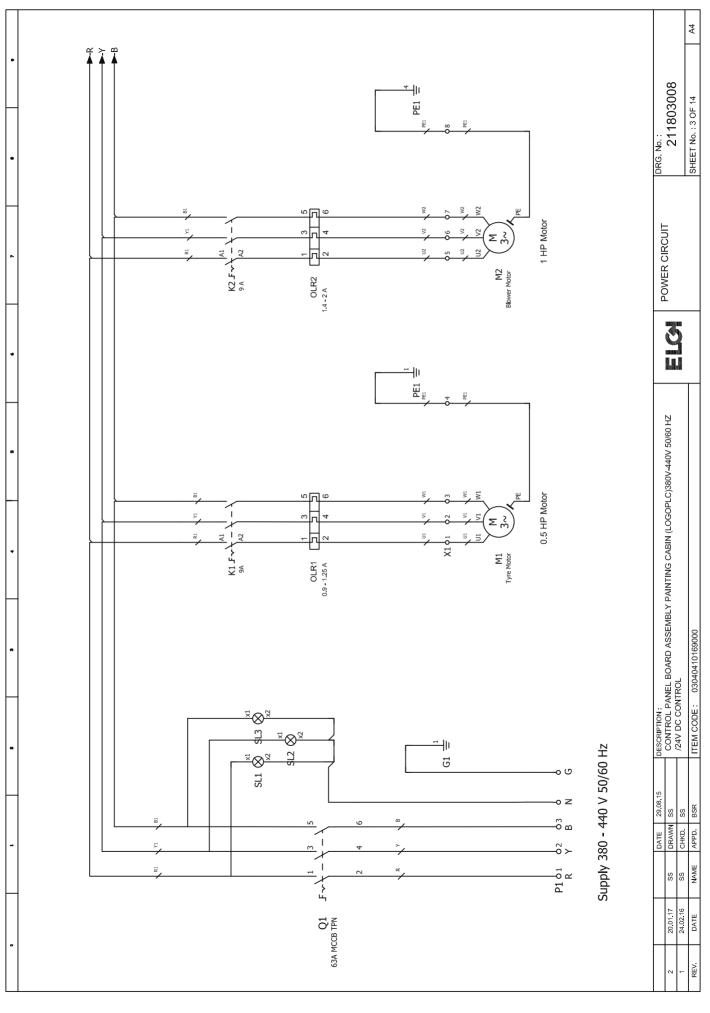
Name of the Post	Final Paint Station
Name of the Equipment	Tyre Painting Station
Model No.	PS 6-3

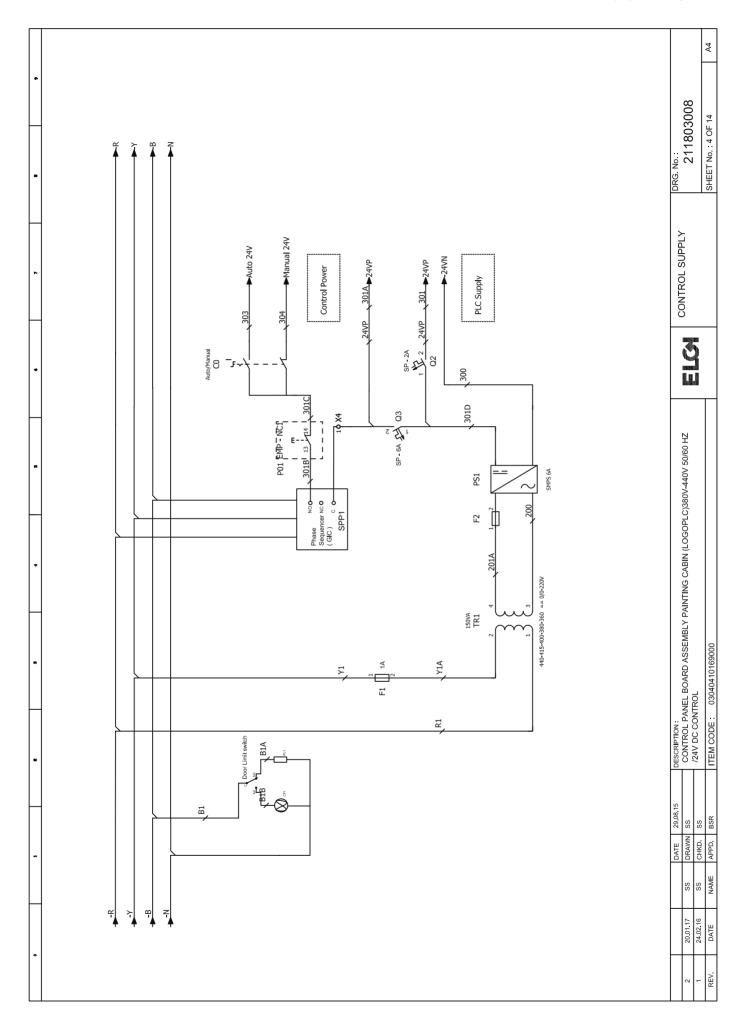
S. No.	Activity	Frequency	Acceptance Criteria
1	Clean the machine	Daily	Dust free
2	Clean the paint spray nozzles	When machine	No water in the filter unit
		is stopped more	
		than a hour	
3	Check air pressure is 8 kg/cm ²	Daily	Pressure in between -
			8 ± 0.5 kg/cm ²
4	Check air line and fitting for any leakage	Daily	No leakage
5	Check the paint collection tray and clean it	Daily	No damage / wear / tear
6	Grease the chain and bearings	Monthly	Smooth movement of
			rollers
7	Clean the pneumatic cylinders and guide shafts, if any	Daily	Smooth movement of hold
	paint is deposited		rollers

-		•		•	•	•	•
Ŵ	Elgi Rubber Company Limited	pany Limited					
	641005 Coimbatore Phone. 9894510000						
Company / customer Project description Drawing number Commission	TYRE PAINTIN 211803008 Elgi	TYRE PAINTING CABIN - 380-440 V / 50-60 HZ - 24V DC Control 211803008 Elgi	-440 V / 50-60) HZ - 24V DC	Control		
	03040410169000 03040410170000	CONTROL PANEL BOARD ASSEMBLY PAINTING CABIN (LOGOPLC)380V-440V 50/60 HZ /24V DC CONTROL CONTROL SWITCH BOARD ASSEMBLY PAINTING CABIN /24V DC CONTROL	ARD ASSEMBLY PAIN DARD ASSEMBLY PA	uting Cabin (Logo Jinting Cabin /241	2PLC)380V-440V 5 V DC CONTROL	0/60 HZ /24V DC CC	DNTROL
	29.08.15					Number of pages 14	14
2	DESCRIPTION :				TITI E PAGE	DRG. No. :	
SS	2001TR0L PANEL BOARD ASSEMBLY PAINTING CABIN (LOGOPLC)380V-440V 50/60 HZ	-Y PAINTING CABIN (LOGOPLC	c)380V-440V 50/60 HZ	9		211803008	3008
	ITEM CODE: 03040410169000			_		SHEET No. 1 OF 14	F 14

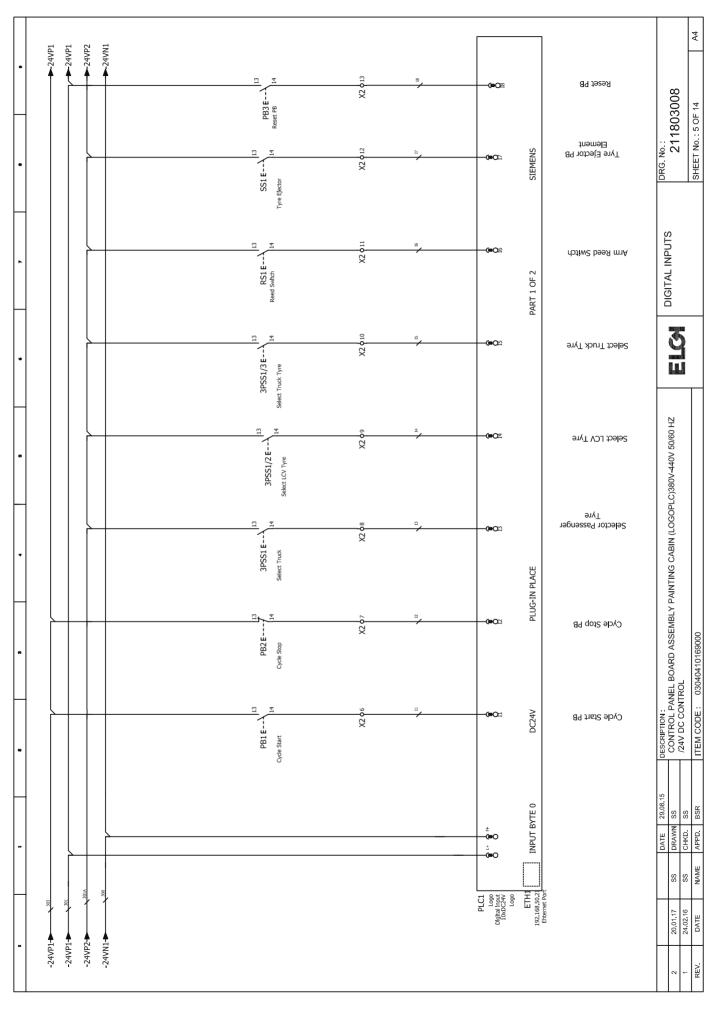
10 Electrical Drawings

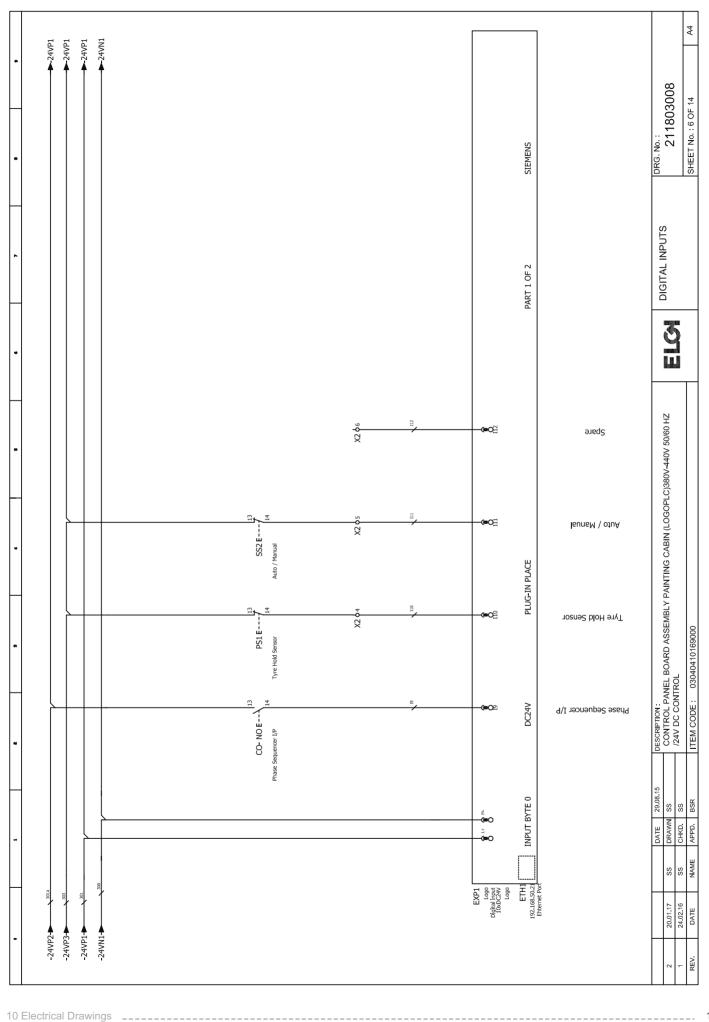
TECHNICALINICARMATION ALL DIEMENSIONS ARE IN MM INSIDE SIDE SURFACE PAINT SHADE : PEBBEL GF ALL DIEMENSIONS ARE ONLY AT FRONT SIDE INSIDE SIDE SURFACE PAINT SHADE : PEBBEL GF DOORS ARE ONLY AT FRONT SIDE INCOMING SUPPLY 415V AC DOORS ARE ONLY AT FRONT SIDE INCOMING SUPPLY 415V AC DOORS ARE ONLY AT FRONT SIDE INCOMING SUPPLY 415V AC CONTROL PANEL CONSTRUCTION CONTROL CABLES 24 V DC PART NO AE 1000500 EARTHING TO BE PROVIDED AS PER STANDARD UNDTH 500 EARTHING TO BE PROVIDED AS PER STANDARD DOOR SINGLE DOOR SINGLE DOOR MIDTH 210 SINGLE DOOR PANEL MAKE RITTAL PANEL MAKE RITTAL PANEL MAKE RITTAL POOR SINGLE DOOR DOOR SINGLE DOOR	TECHNICAL INFI TECHNICAL INFI EMENSIONS ARE IN MM EMENSIONS ARE IN MM & ARE ONLY AT FRONT SIDE MMK & CL PANEL CONSTRUCTION MMK MAKE RITTAL MAK										
EMENSIONS ARE IN MM INSIDE SIDE SURFACE S ARE ONLY AT FRONT SIDE INCOMING SUPPLY S ARE ONLY AT FRONT SIDE INCOMING SUPPLY COL PANEL CONSTRUCTION CONTROL VOLTAGE MAKE RITTAL MAKE RITTAL CONTROL VOLTAGE CONTROL VOLTAGE MAKE RITTAL CONTROL VOLTAGE CONTROL VOLTAGE MAKE RITTAL SOO CONTROL CABLES SINGLE DOOR EARTHING TO BE PROVIDED MAKE RITTAL SINGLE DOOR A 120 SINGLE DOOR	DIEMENSIONS ARE IN MM INSIDE SIDE SUFFACE PAINT SHADE: ORS ARE ONLY AT FRONT SIDE INCOMING SUPPLY 415V AC NTROL PANEL CONSTRUCTION CONTROL VOLTAGE 24V DC NTROL PANEL RITTAL 24V DC NTROL PANEL CONTROL VOLTAGE 1 SOM BLUE RT NO AE 1090500 EARTHING TO BE PROVIDED AS PER STAND DTH 500 EARTHING TO BE PROVIDED AS PER STAND DTH 210 SHROUDING TO BE PROVIDED AS PER STAND DTH 210 SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUTION SHROUTION OR SINGLE DOOR SINGLE DOOR SINGLE DOOR OR SINGLE DOOR SINGLE DOOR SINGLE DOOR						TECHNIC/	AL INFORMATI	NO		
S ARE ONLY AT FRONT SIDE SAFE ONLY AT FRONT SIDE (OL PANEL CONSTRUCTION MAKE RITTAL MO AD AE 1090500 T 500 210 210 210 210 210 210 210 210 210 2	ORS ARE ONLY AT FRONT SIDE INCOMING SUPPLY 415V AC NIFROL PANEL CONSTRUCTION CONTROL VOLTAGE 24V DC WEL MAKE RITTAL CONTROL CABLES 1 SOM BLUE DTH 500 EARTHING TO BE PROVIDED AS PER STAND SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTING BOX CONSTRUCTION EARTING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTING BOX CONSTRUCTION OR SINGLE DOOR EARTING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTING BOX CONSTRUCTION OR SINGLE DOOR SINGLE DOOR OR SINGLE DOOR EARTHING BOX CONSTRUCTION OR SINGLE DOOR SINGLE DOOR OR SINGLE DOOR EARTHING BOX CONSTRUCTION OR SINGLE DOOR SINGLE DOOR OR SINGLE DOOR SINGLE DOOR	◄		SIONS ARE	IN MM				DE SURFACE	PAINT SHAI	DE : PEBBEL GRAY
COL PANEL CONSTRUCTION MAKE RITTAL MAKE RITTAL MO AE 1090500 500 500 500 210 210 210 210 210 210 300 T 300 T	NITROL PANEL CONSTRUCTION CONTROL VOLTAGE 24V DC weL MAKE RITTAL CONTROL VOLTAGE 24V DC RT NO AE 1090500 ERTHING TO BE PROVIDED AS PER STAND 1 somm BLUE DTH 500 EARTHING TO BE PROVIDED AS PER STAND 500 DTH 500 EARTHING TO BE PROVIDED AS PER STAND DTH 210 EARTHING TO BE PROVIDED AS PER STAND DTH 210 SINGLE DOOR DTH 210 SINGLE DOOR DTH 210 SINGLE DOOR OR SINGLE DOOR SINGLE DOOR OR AE 1555500 EARTHING TO BE PROVIDED AS PER STAND OR AE SINGLE DOOR OR AE SINGLE DOOR OR AE SINGLE DOOR OR AE SINGLE DOOR	Ω	OORS ARE	ONLY AT F	RONT SIDE			INCOMING	SUPPLY	415V AC	
MAKE RITTAL MAKE RITTAL MO AE 1090500 T 500 500 210 210 210 210 210 210 210 210 210 2	MEL MAKE RITTAL CONTROL VOLIAGE 24V DC RT NO AE 1090500 GHT 500 EARTHING TO BE PROVIDED AS PER STAND DTH 500 EARTHING TO BE PROVIDED AS PER STAND SHROUDING TO BE PROVIDED AS PER STAND DTH 210 SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR SUB STANDARD SHROUDING TO BE PROVIDED AS PER STANDARD	O	ONTROL PA	NEL CONS	STRUCTION						
No AE 1090500 T 500 500 500 500 210 210 210 210 210 210 210 210 210 210 210 210 210 7 300 7 300 120 300 120 300 120 300 120 300 120 300 120 300	RT NO AE 1090500 1 SQMM BLUE GHT 500 CON IROL CABLES 1 SQMM BLUE DTH 500 EARTHING TO BE PROVIDED AS PER STAND PTH 210 SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PROVIDED AS PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PROVIDED AS PER STAND OR AE 1555500 SHROUDING TO BE PROVIDED AS PROVIDED A	٦	ANEL MAKE		RITTAL					24V UC	!
T 50 500 210 210 210 210 210 XING BOX CONSTRUCTION TING BOX CONSTRUCTION MAKE RITTAL MAKE RITTAL MAKE RITTAL MAKE 1555500 T 300 T 30	ICHT 500 EARTHING TO BE PROVIDED AS PER STAND DTH 500 EARTHING TO BE PROVIDED AS PER STAND PTH 210 SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTHING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTHING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTHING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTHING TO BE PROVIDED AS PER STAND OR SINGLE DOOR EARTHING TO BE PROVIDED AS PER STAND OR SINGLE DOOR AE 1555500 DTH 300 EARTHING DTH 120 OR OR SINGLE DOOR	<u>م</u>	ART NO		AE 109050	0		CONIROL	. CABLES	1 SQIMIM BL	UE
500 210 210 210 XTING BOX CONSTRUCTION MAKE RITTAL MAKE RITTAL MAKE RITTAL MAKE RITTAL MAKE 1555500 T 300 T	DTH 500 EARTHING TO BE PROVIDED AS PER STAND PTH 210 SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR SINGLE DOOR SHROUDING TO BE PROVIDED AS PER STAND OR AE 1555500 AE 1555500 OR AE 1555500 AE 15555500 OR AE 120	Т	EIGHT		500						
210 SINGLE DOOR TING BOX CONSTRUCTION MAKE RITTAL MAKE RITTAL MO AE 1555500 T 300 T 300 T 300 T 300 SINGLE DOOR	PTH 210 SHROUDING TO BE PROVIDED AS PER STAN OR SINGLE DOOR ERATING BOX CONSTRUCTION ERATING BOX CONSTRUCTION ERATING BOX CONSTRUCTION NEL MAKE RITTAL NO AE 1555500 DTH 300 DTH 120 NTH 120 OR SINGLE DOOR No SINGLE DOOR	5	VIDTH		500			EARTHING	G TO BE PROV	IDED AS PER ST/	ANDARD
TING BOX CONSTRUCT MAKE VO	OR SINGLE DOOR ERATING BOX CONSTRUCTION KEL MAKE RITTAL VEL MAKE 300 PTH 120 ON NGLE DOOR NGLE DOOR SINGLE DOOR	Ω	EPTH		210			SHROUDII	NG TO BE PRC	VIDED AS PER S	TANDARD
TING BOX CONSTRUC MAKE VO T	ERATING BOX CONSTRUCTION ERATING BOX CONSTRUCTION NeL MAKE RITTAL RT NO AE 1555500 GHT 300 DTH 300 DTH 300 DTH 300 DTH 300 DTH 120 OR SINGLE DOOR	Ω	OOR		SINGLE DO	JOR					
MAKE VO T	NEL MAKE RITAL RT NO AE 1555500 RT NO AE 1555500 GHT 300 GHT 300 DTH 300 DTH 120 OR SINGLE DOOR		PERATING I	BOX CONS	STRUCTION						
9 L	RT NO GHT 30 CH DTH 300 DTH 300 DTH 120 CN DTH 120 CN DTH 120 CN DTH 120 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 CN DTH 200 DTH	٦ ٦	ANEL MAKE		RITTAL						
F	Image: Head State 30 Image: State 30 Image: State 120 Image: State 120 Image: State SINGLE DOOR	ď,	ART NO		AE 155550	0(
	DTH 300 PTH 120 OR 120 OR SINGLE DOOR Indication of the second second second second conduction of the second second second control. Design Instruction	Т	IEIGHT		300						
	PTH 120 OR SINGLE DOOR Indext and the second of the secon	5	VIDTH		300						
	OR SINGLE DOOR Image: Dorition of the second of the seco	Ω	EPTH		120						
	Date 29.08.15 Description: ss Deriving ss CONTROL PANEL BOARD ASSEMBLY PAINTING CABIN (LOGOPLC)380V-440V 50/60 HZ ELGA DESIGN INSTRUCTION ss CHK0. ss (24V DC CONTROL PANEL DESIGN INSTRUCTION	D	OOR		SINGLE D	JOR					
				VTE 29.08.15	DESCRIPTION:					DESIGN INSTRUCTIO	
DATE 29.08.15 DESCRIPTION:		2 20.01.1 1 24.02.1	ss	kawn SS HKD. SS	CONTROL PANEL B	OARD ASSEMBLY I	PAINTING CABIN (LUGC	PLC)380V-440V 50/60 HZ	Š		

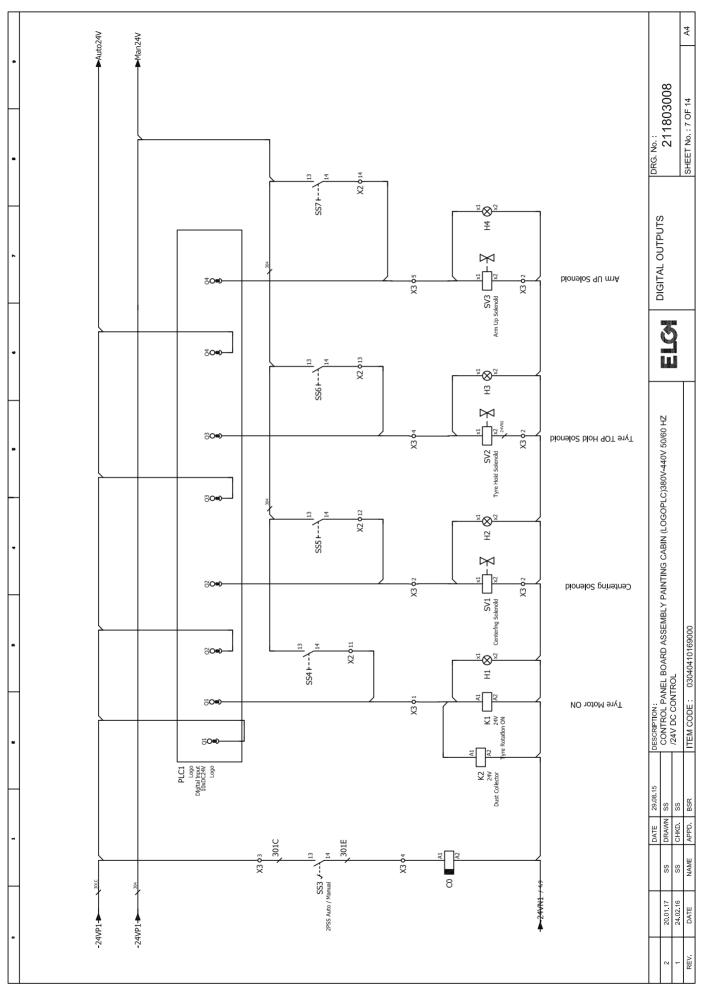


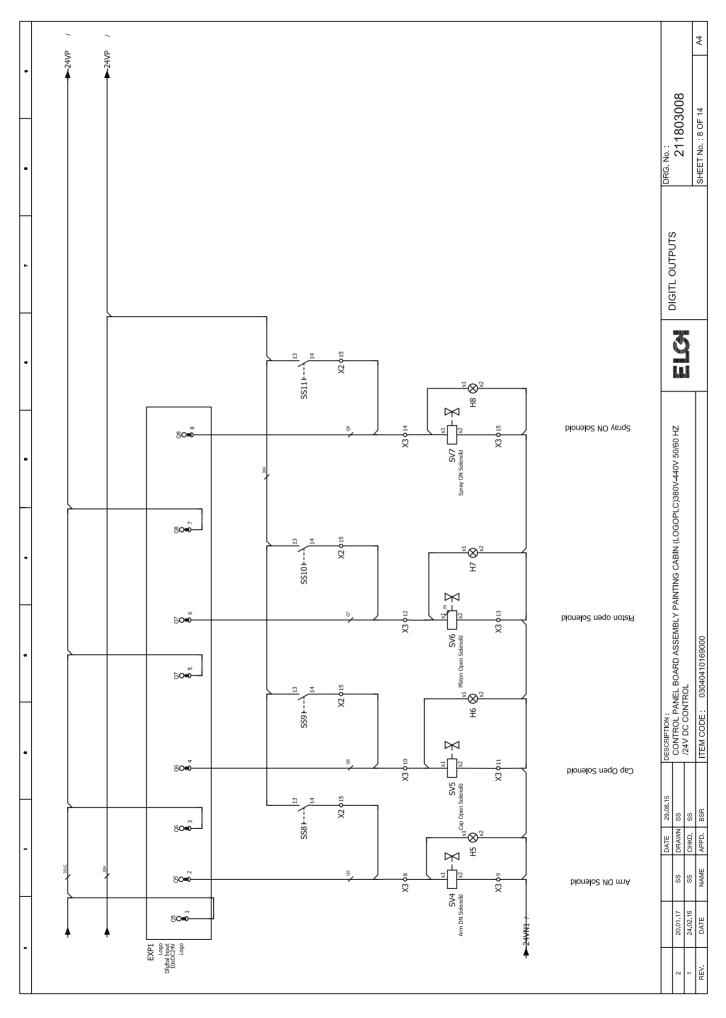


10 Electrical Drawings

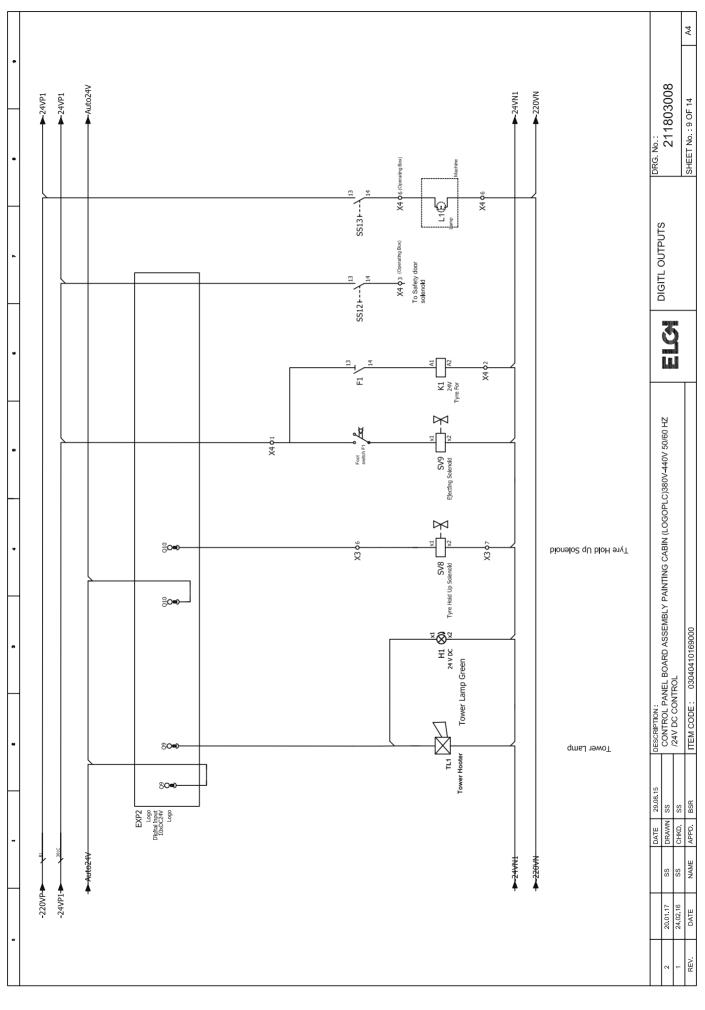


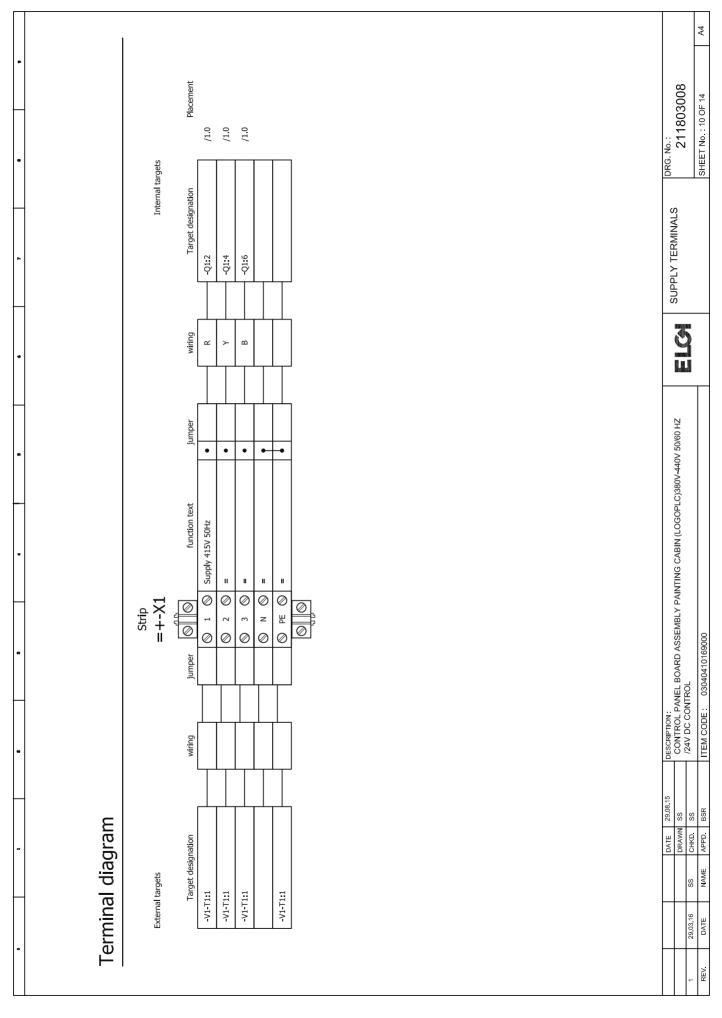






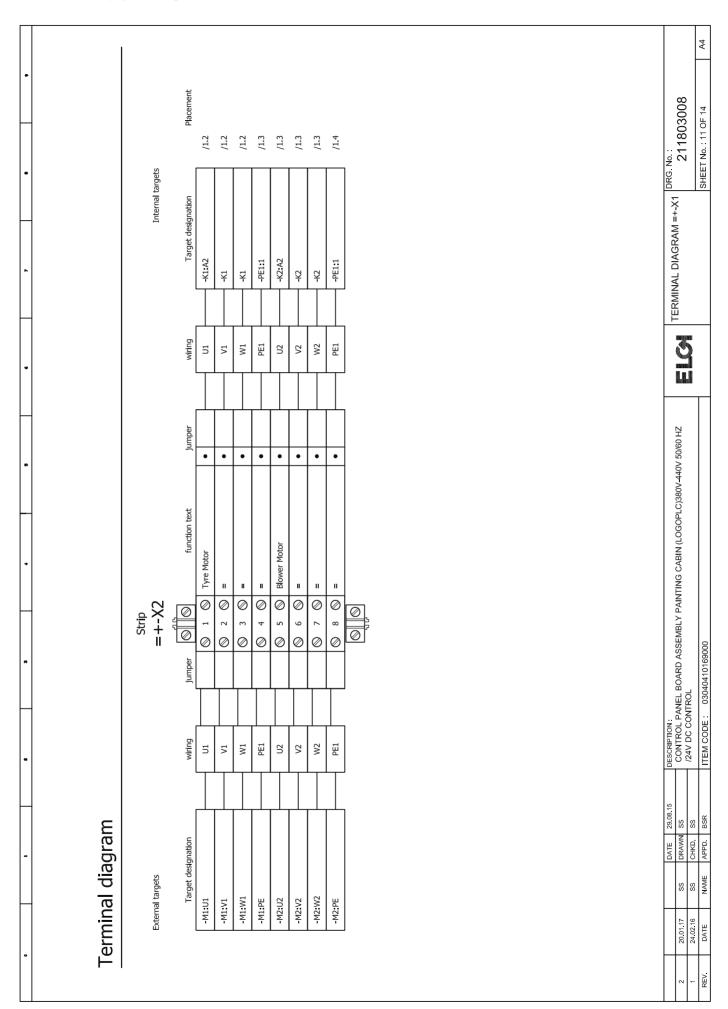
10 Electrical Drawings





10 Electrical Drawings ____

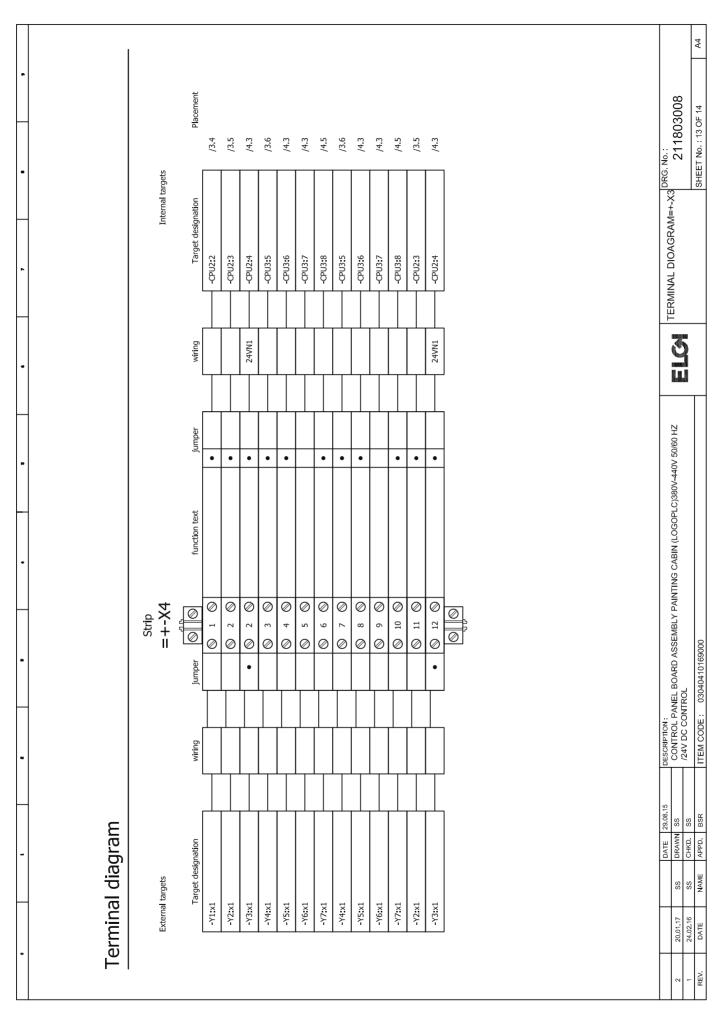
23



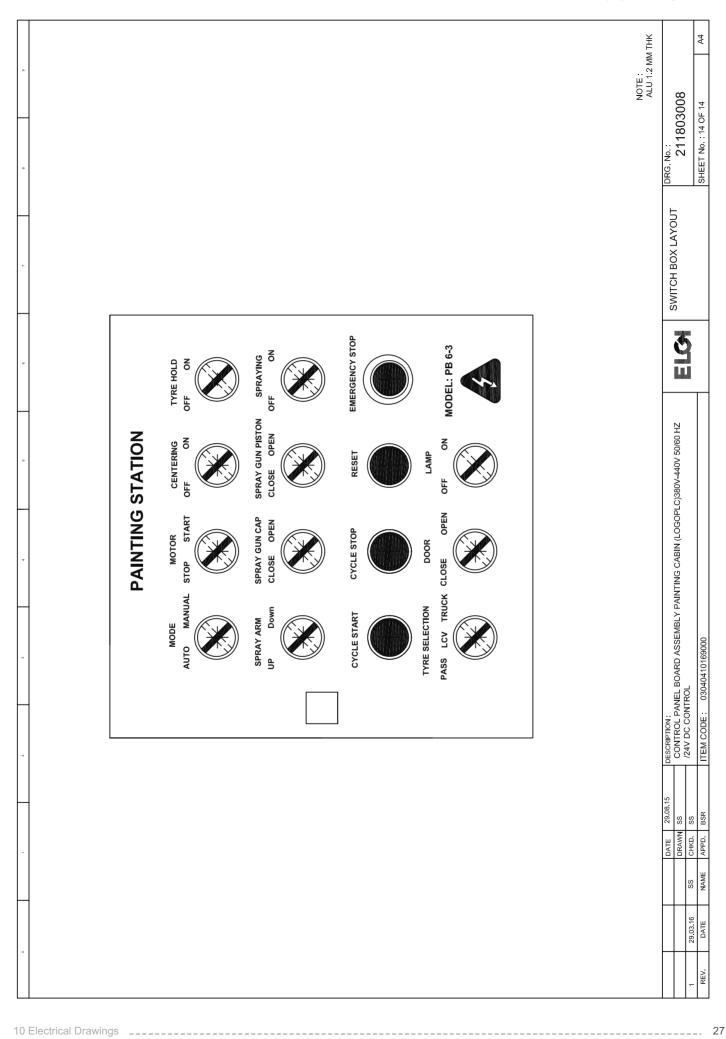
_ _ _ _ _ _ _ _

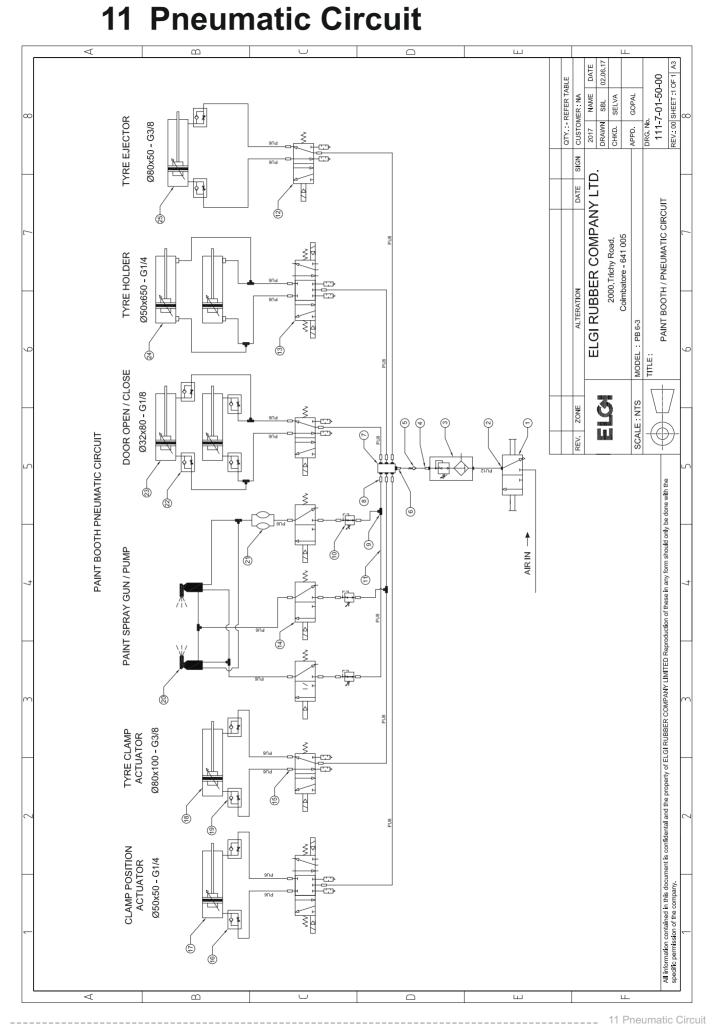
A4 Placement DRG. No. : 211803008 SHEET No.: 12 OF 14 /3.2 /3.2 /3.3 /3.7 /3.8 /3.9 /4.1 /4.1 /4.4 /4.4 /4.6 /5.2 /5.3 /5.3 /5.3 /5.3 /3.2 Internal targets TERMINAL DIAGRAM=+-X2 Target designation T1 : L+ -S15.14 -S10.14 -S11 14 -S12:14 -S13:14 -S14 14 -S16.14 -S0:12 -S8:14 -S1:14 -S2 14 -S3 14 -S4 14 -S5 14 -S7 14 -S9 14 E S wiring 24VP2 DESCRPTION: CONTROL PANEL BOARD ASSEMBLY PAINTING CABIN (LOGOPLC)380V-440V 50/60 HZ /24V DC CONTROL jumper • • • • • • • ٠ • • ٠ • • • function text 0 14 0 0 15 0 strip =+-X3 Ø , 2 🔘 ∾ 4 5 🔘 0 9 0 7 () ⊘ ∞ O 10 O O 12 O O 16 O 0 2 0 0 6 0 Ø O 13 O 0 Ø 11 Ø Ø Ø Ø Ø Ø Ø Ø ITEM CODE: 03040410169000 jumper • wiring DATE 29.08.15 DRAWN SS CHKD SS APPD BSR Terminal diagram Target designation SS SS NAME External targets -CPU2: 3 -CPU1.8 -S0:11 -CPU1:1 -CPU1:3 -CPU1:4 -CPU1:5 -CPU1:7 -CPU2:2 -CPU2:4 -CPU3:5 -CPU1:2 -CPU2:1 -CPU3:6 -CPU3 7 -CPU3.8 -F1 : 1 20.01.17 24.02.16 DATE REV.

25



10 Electrical Drawings

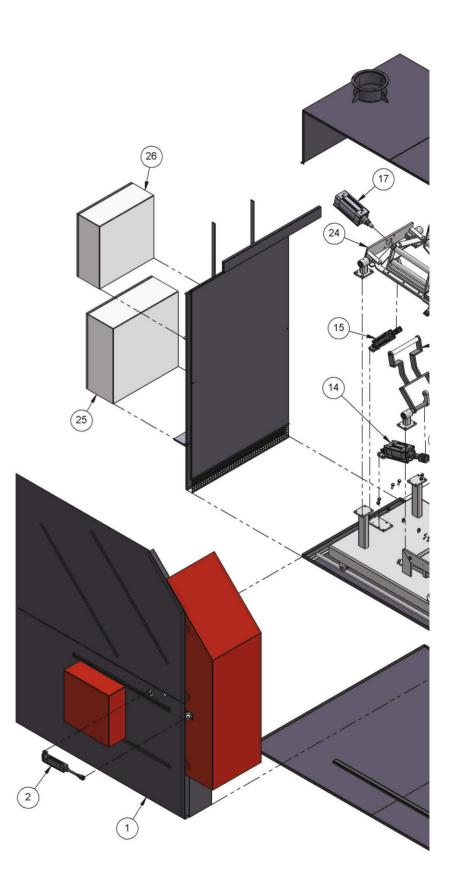




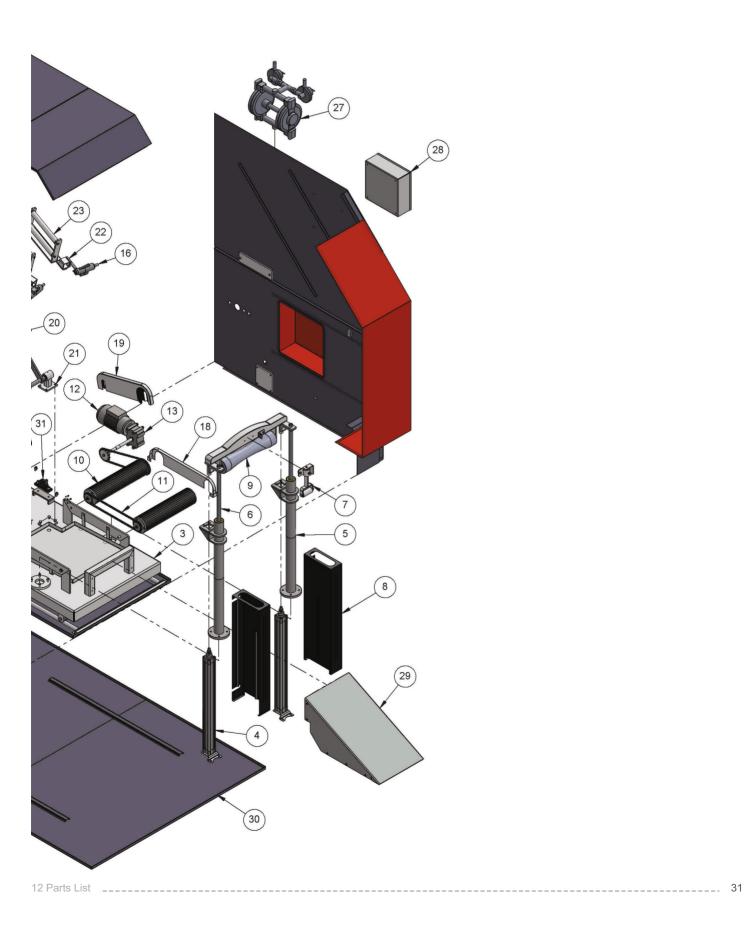
Pneumatic Circuit - BOM

S. No.	Description	UOM	Qty.
1	HAND SLIDE VALVE 1/2" / P.NO:2342 / FESTO	Nos	1
2	SWIVEL ELBOW 1/2" x PU14 / FESTO	Nos	2
3	FILTER CUM REGULATOR 1/2" / P.NO:159584 / FESTO	Nos	1
4	REDUCER NIPPLE 1/2" x 1/2"	Nos	1
5	NON RETURN VALVE - 1/2" / P.NO: GV163 / JANATICS	Nos	1
6	REDUCER NIPPLE 1/2" x 3/8"	Nos	1
7	JUNCTION BOX-3/8" x 1/4" P.NO:WJ03066261 / JANATICS	Nos	1
8	SWIVEL ELBOW 1/4" x PUB	Nos	20
9	UNION TEE PUB / P .NO :WP2300808 / JANA TICS	Nos	2
10	REGULATOR LR 1/4-D MINI-P.NO:159 625 / FESTO	Nos	3
11	POL YURETHENE TUBING PUN-8 / FESTO	Mtr	-
12	SOLENOID VALVE 5/2 /P.NO:DS255SR61 / JANATICS	Nos	3
13	SOLENOID VALVE 5/3 / P.NO:DS285SC61/JANATICS	Nos	2
14	SOLENOID VALVE 3/2 /P.NO:DS245SR61/JANATICS	Nos	3
15	SWIVEL ELBOW 1/4" x PU6 / P.NO:153047 / FESTO	Nos	17
16	FLOW CONTROL VALVE -1/4" x PU6	Nos	2
17	PNEUMATIC CYLINDER DSBC 50 50 PPVA-N3 / P.NO:1366950	Nos	1
18	PNEUMATIC CYLINDER DSBC 80 100 PPVA-N3 / P.NO:1383337	Nos	1
19	FLOW CONTROL VALVE -3/8" x PU6	Nos	4
20	PNEUMATIC PILOT SPRAY GUN	Nos	2
21	PAINT PUMP/DIAPHRAGM TYPE/MODEL: DPSM - 904E/ANEST IWATA	Nos	1
22	FLOW CONTROL VALVE - 1/8" x PU6 / P.NO:GR1105006/JANATICS	Nos	2
23	PNEUMATIC CYLINDER DSBC 32 80 PPVA-N3 / P.NO:1376425	Nos	1
24	PNEUMATIC CYLINDER DSBG - 50 - 650 PPVA- N3/P.NO:1646708/FESTO	Nos	1
25	PNEUMATIC CYLINDER DSBC 80 50 PPVA-N3 / P.NO:1383335	Nos	1

12 Parts List



12 Parts List



Parts List - BOM

S. No.	Order Code	Description	UOM	Qty
1	MA8163/1	CABINET ASSEMBLY FOR PAINT BOOTH	NOS	1
2	MA8163/2	PNUEMATIC CYLINDER - FESTO P.NO-1376425_DSBC_32_80_PPVA_N3	NOS	2
3	MA8163/3	BASE FRAME ASSEMBLY - PAINTBOOTH	NOS	1
4	MA8163/4	PNEUMATIC CYLINDER DSBC-50-650-PPVA-N3/ FESTO P.No.1463766	NOS	2
5	MA8163/5	GUIDE POST ASSEMBLY - PAINT BOOTH	NOS	2
6	MA8163/6	GUIDE SHAFT - PAINT BOOTH	NOS	2
7	MA8163/7	POSITION ROLLER ASSEMBLY	NOS	1
8	MA8163/8	CYLINDER COVER	NOS	2
9	MA8163/9	TOP ROLLER ASSEMBLY	NOS	1
10	MA8163/10	DRIVE ROLLER - IS5	NOS	2
11	MA8163/11	INDUSTRIAL CHAIN 1/2" x 5/16" - ROLLON	NOS	1
12	MA8163/12	MOTOR	NOS	1
13	MA8163/13	GEAR BOX	NOS	1
14	MA8163/14	PNEUMATIC CYLINDER DSBC_80_50_PPVA_N3/FESTO P.No.1383335	NOS	1
15	MA8163/15	PNEUMATIC CYLINDER DSBC-50-50-PPVA-N3/FESTO P.No. 1366950	NOS	1
16	MA8163/16	NOZZLE	NOS	2
17	MA8163/17	PNEUMATIC CYLINDER - FESTO 1383337 DSBC-80-100-PPVA-N3	NOS	1
18	MA8163/18	DRIVEN CHAIN GUARD	NOS	1
19	MA8163/19	DRIVE CHAIN GUARD	NOS	1
20	MA8163/20	EJECTING ARM ASSEMBLY	NOS	1
21	MA8163/21	BEARING SUPPORT BLOCK	NOS	4
22	MA8163/22	NOZZLE MOUNTING BRACKET	NOS	2
23	MA8163/23	SUPPORT ROLLER ASSEMBLY	NOS	2
24	MA8163/24	SWIVEL PLATE ASSEMBLY	NOS	1
25	MA8163/25	PNUEMATIC PANEL BOX ASSY	NOS	1
26	MA8163/26	ELECTRICAL PANEL BOX ASSY	NOS	1
27	MA8163/27	PAINT BOOTH PUMP ASSY	NOS	1
28	MA8163/28	OPERATING PANEL BOX ASSY	NOS	1
29	MA8163/29	RAMP PAINT BOOTH	NOS	1
30	MA8163/30	SS. TRAY - PB1	NOS	1
31	MA8163/31	BEARING PILLOW BLOCK UCP204D1 / NTN	NOS	1

13 Essential Spares List

S. No.	Order Code	Description	UOM	Qty
1	MA8163/ES/1	Seal Kit for Pneumatic Cylinder DSBC-50-50-PPVA-N3 / Festo	Nos	1
2	MA8163/ES/2	Seal Kit for Pneumatic Cylinder DSBC-80-100-PPVA-N3 / Festo	Nos	1
3	MA8163/ES/3	Seal Kit for Pneumatic Cylinder DSBC-32-80-PPV-A / Festo	Nos	2
4	MA8163/ES/4	Seal Kit for Pneumatic Cylinder DSBG -50-650-PPVA -N3 / Festo	Nos	2
5	MA8163/ES/5	Seal Kit for Pneumatic Cylinder DSBC -80-50-PPVA -N3 / Festo	Nos	1
6	MA8163/ES/6	Seal Kit for Solenoid Operated Valve 5/3 x 1/4" / Janatics	Nos	2
7	MA8163/ES/7	Seal Kit for Solenoid Operated Valve 5/2 x 1/4"/ Janatics	Nos	3
8	MA8163/ES/8	Seal Kit for Solenoid Operated Valve 3/2 x 1/4"/ Janatics	Nos	3
9	MA8163/ES/9	PLC Logo 12/24RC 8DI/4DO With Display 6ED1052-1MD00-0BA8 / Siemens - PLC1	Nos	1
10	MA8163/ES/10	Expansion Module DM8 12/24R 4DI/4DO 6ED1055-1MB00-0BA2 / Siemens - EXP1	Nos	1
11	MA8163/ES/11	Power Supply 2.5 A 6EP13321LA00 / Siemens - PS1	Nos	1
12	MA8163/ES/12	MCCB 63A 3VT1706-2DA36-0AA0 / Siemens - Q1	Nos	1
13	MA8163/ES/13	MCB 6A SP 5SL61067RC / Siemens - Q3	Nos	1
14	MA8163/ES/14	MCB 2A SP 5SL41027RC / Siemens - Q2	Nos	1
15	MA8163/ES/15	Power Contactor 9A 3RT2016-1BB41 / Siemens - K1, K2	Nos	1
16	MA8163/ES/16	Control Contactor 10A 3RH2122-1BB40 / Siemens - CO	Nos	1
17	MA8163/ES/17	OLR(0.9-1.25A) 3RU2116-0KB0 / Siemens - OLR1	Nos	1
18	MA8163/ES/18	Indication Lamp Red 220V AC 3SB5285-6HC03 / Siemens - SL1	Nos	1
19	MA8163/ES/19	Indication Lamp Yellow 220V AC 3SB5285-6HD03 / Siemens - SL2	Nos	1
20	MA8163/ES/20	Indication Lamp Blue 220V AC 3SB5285-6HF03 / Siemens - SL3	Nos	1
21	MA8163/ES/21	Transformer 150VA,415V/220V / Procon - TR1	Nos	1
22	MA8163/ES/22	Single Phase Preventor SM301 L&T - GIC - SPP1	Nos	1
23	MA8163/ES/23	Tower Lamp(Green) With Buzzer 24VDC / Ideal - TL1	Nos	1
24	MA8163/ES/24	Fuse Terminal With Glass Fuse / Connectwell - F1, F2	Nos	2
25	MA8163/ES/25	Emergency Stop + NC 3SB5203-0UC01 / Siemens - EMP	Nos	1
26	MA8163/ES/26	3 Position Selector Switch 3SB5000-2DB01/ Siemens - 3PSS1	Nos	1
27	MA8163/ES/27	2 Position Selector Switch 3SB5000-2AB01 / Siemens - SS1	Nos	1
28	MA8163/ES/28	Push Button Green 3SB50 00-0AE01 / Siemens - PB1	Nos	1
29	MA8163/ES/29	Push Button Red 3SB50 00-0AC01 / Siemens - PB2	Nos	1
30	MA8163/ES/30	No Element 3SB54 00-0C / Siemens - PB1	Nos	1
31	MA8163/ES/31	Push Button Yellow 3SB50 00-0AD01 / Siemens - PB3	Nos	1