



**SCOTNET
SOLUTIONS**

AUTOMATION



SCOTNET SOLUTIONS 1 SINGER ROAD EAST KILBRIDE GLASGOW G75 0XS SCOTLAND

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DS1200P₇ **Operation Instructions** **&** **Owners Manual**





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The instructions and advise in this handbook are designed to let you run and maintain the machine as efficiently and smoothly as possible. If you have any questions regarding any aspect of our machinery, please feel free to contact us at info@scotnet.com

Setting Up Your Machine

This machine is designed to work in conjunction with a SCOTNET 600 mm Automatic Net Loading Machine.

Although the machines always leave in a clean condition, washing is advised before taking any machine into a food production area. The DS1200P₇ can be washed with water (not a high pressure hose). For full cleaning instructions, see the Cleaning Procedures section on Page 7.

The machine should be positioned on a level surface. When in place, lock the four braked castors to secure the machine.

(A) Connecting the Machine

The DS1200P₇ is powered by a 230-volt AC mains electrical supply and compressed air.

Compressed Air Connection:

The machine comes with 3-4 metres of braided air hose. This is at the rear of the machine. Connect the compressed air supply to this. The machine should have the air pressure set at the regulator between minimum 4 BAR and 8 BAR(60-120PSI) maximum. At 80 PSI, the machine uses approximately 70 ft³ or 2000 litres of compressed air per minute. It is essential that the air supply is clean and dry. Note components that fail due to water damage are not covered by the warranty.

Electrical Connection:

The machine comes with approximately 3 metres of cable, which can be shortened as required. The machine must be supplied with a single phase supply.

(B) Only for Option Pack AWI, Machine with Automatic Water Injection

If your machine has AWI, it also needs to be plumbed into a drinking water supply. The machine comes with a length of 10mm hose for you to connect to your supply. The water should be at mains pressure. As an option, if mains water is not available, you can use the optional external pressurised water bottle instead.

(C) Fitting the Chambers Pistons and Tubes

Isolate the machine from both the compressed air and electrical supply.

On this machine, a different size of chamber and tube can be used on each side.

On the DS1200P₇ the chamber sides open. Chambers can be inserted either from the top, with the chamber door's closed, or from the side with the chamber door open.

Insert the chambers, one at a time into the chamber compartments. You will need to move the lid fully to one side to fit the chamber on the opposite side. The chambers will only go into the machine one way round.



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When in, make sure that they are located securely and evenly towards the front of the machine. The chambers are held in place by their own weight. No extra fitting is required.

Now fit the appropriate piston to the piston rod. Check each piston rod slides smoothly by manually pulling it into the netting tube, and returning it to its rest position. Note: Until the compressed air line is connected, the pistons will only move a small distance, as the Pilot Break Valves are on.

Load at least 2 tubes with SCOTNET elastic meat netting. The tubes slide downwards onto the front of the machine. The machine will not function unless both tubes are located fully.

(D) Running the Machine

The machine is fitted with an emergency stop at each side. Once pressed, these require a quarter turn to release them. If any of the safety circuit is broken e.g. a tube out, emergency stop pressed, the red LED will be illuminated and the HMI will inform you what the fault is.

When the machine is ready to run, the green LED will illuminate. You may need to cycle the lid to perform the reset.

Sliding the lid from one chamber to the other operates the machine. Once closed, the lid will lock until the machine has completed its cycle.

(E) Adjusting the Automatic Water Injection (Only for machines fitted with AWI)

Use the HMI to select water On or Off. The duration of the spray can also be adjusted.

(F) Anti Jam Technology

The machine is fitted with a system that detects if it has jammed, normally because a product is too large. If the machine has jammed while pushing, the piston will retract, and the lid will be unlocked so the lid can be opened and the jammed product released.

Important Note:

Only use netting tubes & chambers designed for use with the DS1200P7 stuffing system. If in doubt, contact our Service Desk.



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Maintenance Procedures

Daily Checks:

1. Check the auto drain filter regulator for water collection. Manually drain if required.
2. Check the pistons are properly secured.
3. Check the operation of the safety circuit.
4. First remove each tube in turn. Each time one is removed, an audible dump of air should be heard, the machine should not function, and the HMI should read emergency circuit tripped.
5. Do the same check with each chamber door.
6. Do the same check with both emergency stops.
7. Lubricate the lid slides with a food safe lubricant.
8. Lubricate the piston rod support bush with a food safe lubricant.
9. Check the machine functions, by moving the lid from side to side.

NB If in doubt about anything, contact our Service Desk.

Weekly Checks:

1. Check air pressure setting is between minimum 4 Bar and 8 Bar maximum (60-120PSI).
2. Check all nuts and bolts for security, tighten if required.
3. Check rod support bush for wear.

NB If in doubt about anything, contact our Service Desk.

Service Intervals

After installing the machine, we recommend that it is inspected by the installation engineer after:

- One Week
- One Month
- As required after this. We do not recommend leaving any machine for more than 6 months between services. The daily and weekly checks above must be carried out between services.
- Failure to service the machine in accordance with our recommendations invalidates the warranty.

Cleaning Procedures

DO NOT CLEAN MACHINE WITH HIGH PRESSURE APPARATUS

Before cleaning the machine, remove the tubes, chambers and pistons.

Pull each of the pusher rods out manually, then clean them. Return them to their home positions when done.

The machine can now be cleaned with low pressure hoses and a hand brush. Do not spray water onto the HMI. Once cleaned, replace all of the parts.



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Replacing Components

In the following pages you will see the component locations.



Tube in Position Inductive Proximity Detectors (IPD)

To detect when each tube is in position, 2 normally open inductive proximity detectors (IPD's) are used. 2 on the left hand side and 2 on the right hand side.



Chamber Door Proximity Detectors

To detect when each chamber door is closed, magnetically actuated normally open proximity switches are used.



Sliding Lid Proximity Detectors

To detect when the lid is slid from side to side, magnetically actuated normally open proximity switches are used.



Fault Finding Procedures

Machine Fails to Operate

Check the air pressure at the regulator. It should be set between minimum 4 Bar and 8 Bar Maximum (see 'Setting Up the Machine' section)

Check Isolator is in the 'On' position, and the electrical supply is connected.

Check both tubes are located, chamber doors are closed and E-stops are released, the machine should now be ready to run (green LED). You may need to cycle the lid once to reset the machine.

If there is a red LED, look at the HMI to see what is causing the issue.

Check the chamber doors are closed and latched.

There are some circuit breakers in the Electrical Box inside the machine. Check that these have not tripped.

For all other faults, contact our Service Desk.

Automatic Jam Detection

The machine is fitted with Automatic Jam Detection. Therefore if a product is placed in the chamber, and the chamber lid slid over, the cycle is started as normal. If the machine does not complete its cycle in a pre set time, it will detect this, and return the piston to its start position, and unlock the chamber door, so it can be opened, and the jam removed.

Lid Will Not Open

If lid will not open, the machine has not completed its cycle (jammed). The machine will automatically count to 5 seconds in this case and will then reset automatically.

Emergency Stop Pressing / machine reset

When either emergency stop is pressed, the machine will stop wherever it is in its cycle. When the emergency stop is reset you must then press the reset button to continue to use machine.

If there are any other problems, please contact our SCOTNET Automation Service Desk on: +44 (0) 1355 237041 for assistance.



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Safety Box





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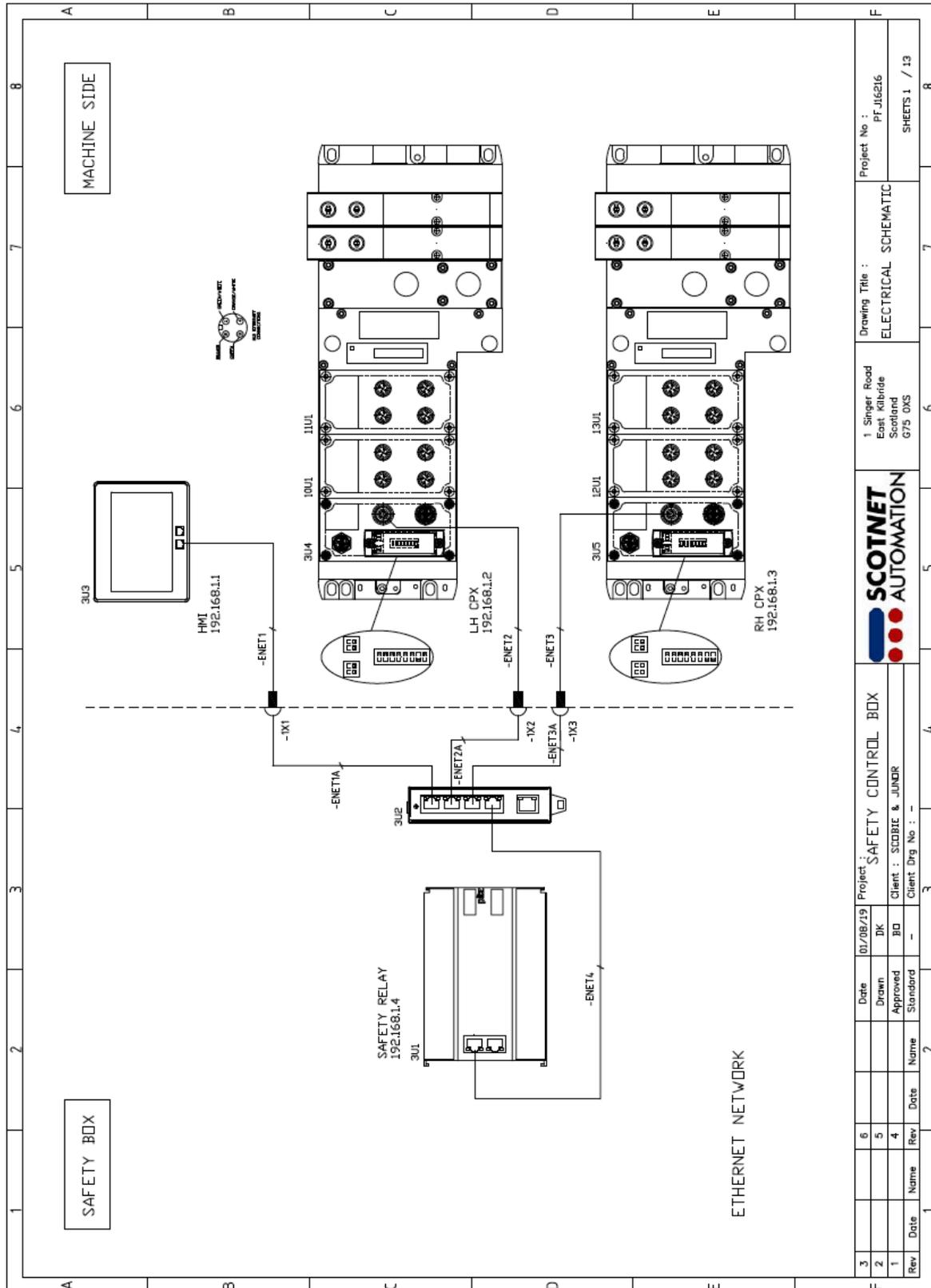
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Electrical Drawings



Rev	Date	Name	Date	Name	Rev	Date	Name	Date	Name
3					6				
2					5				
1					4				
					3				
Project: SAFETY CONTROL BOX					Project No: PFJ16216				
Date: 01/08/19					Drawing Title: ELECTRICAL SCHEMATIC				
Drawn: DK					1 Singer Road				
Approved: BD					East Kilbride				
Standard: -					Scotland				
Client: SCOBIE & JUNIOR					G75 0XS				
Client Drg No: -					SHEETS 1 / 13				

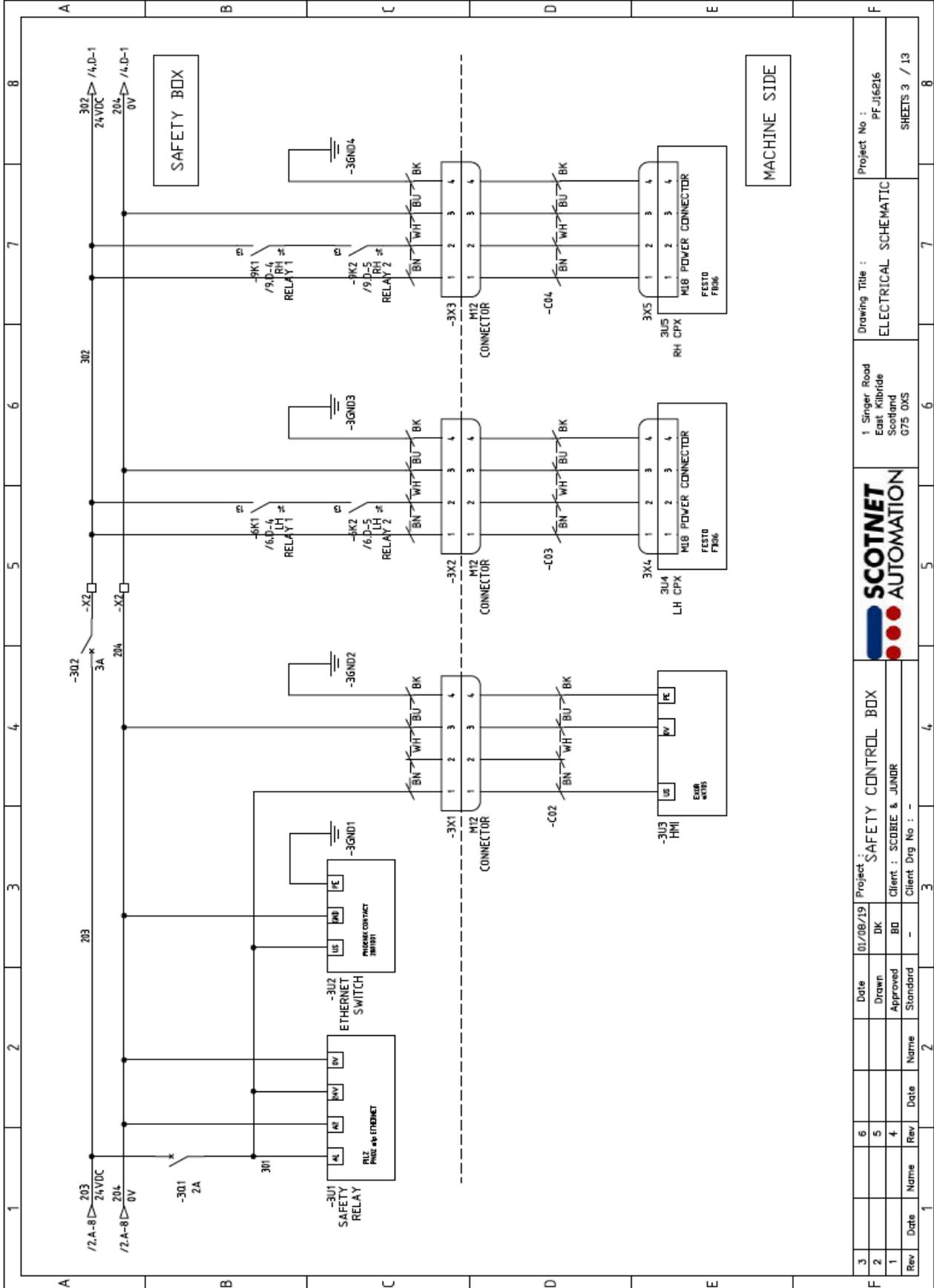


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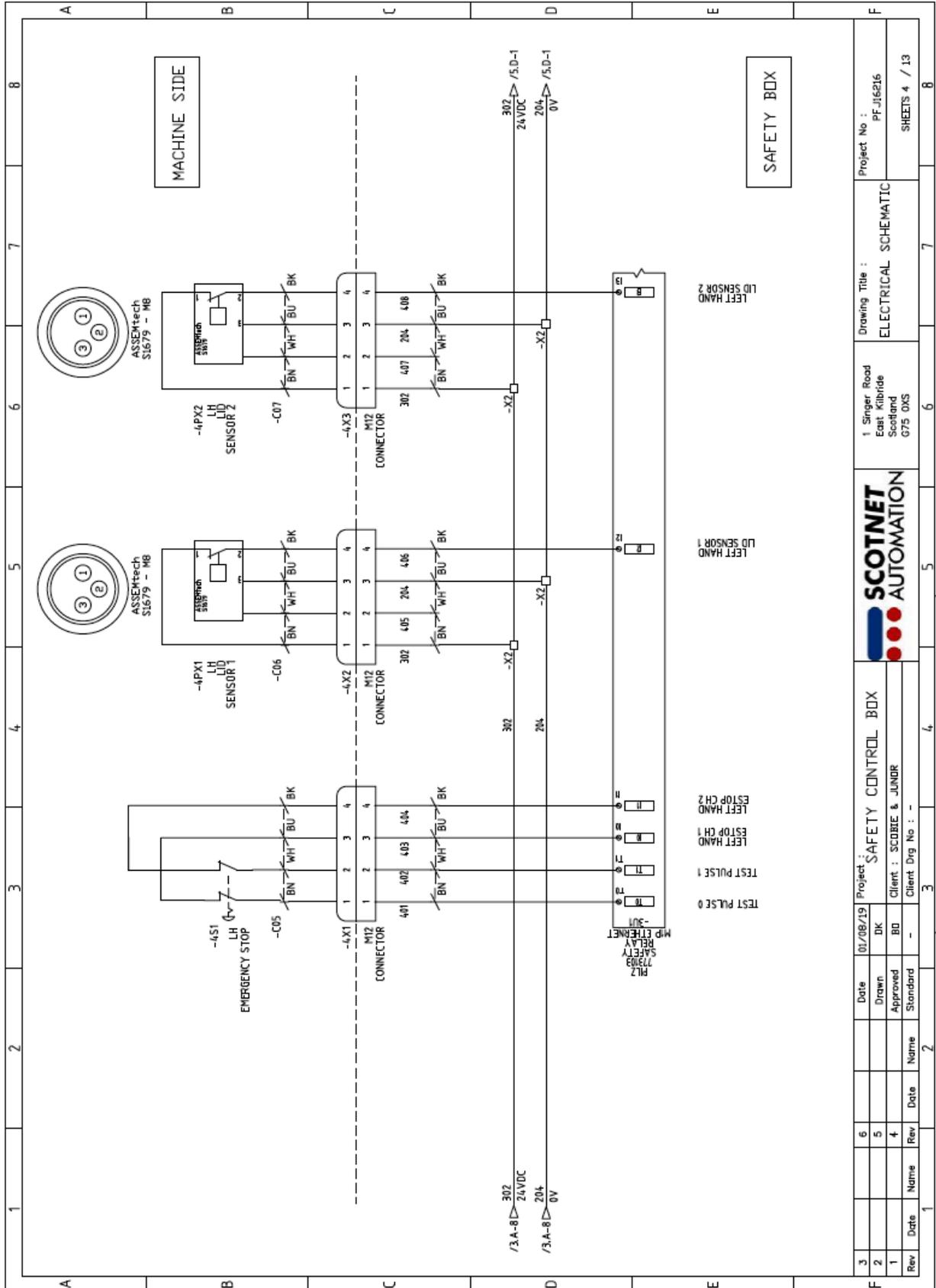


3	Date	01/08/19	Project	SAFETY CONTROL BDX	Project No	PF-J6216
2	Drawn	DK	1 Singer Road East Kilbride Scotland G75 0XS	ELECTRICAL SCHEMATIC	SHEETS 3 / 13	
1	Approved	BD	SCOTNET AUTOMATION			
Rev	Date	Rev	Name	Client	Client Drg No : -	
				Client : SCOBIE & JUNIOR		



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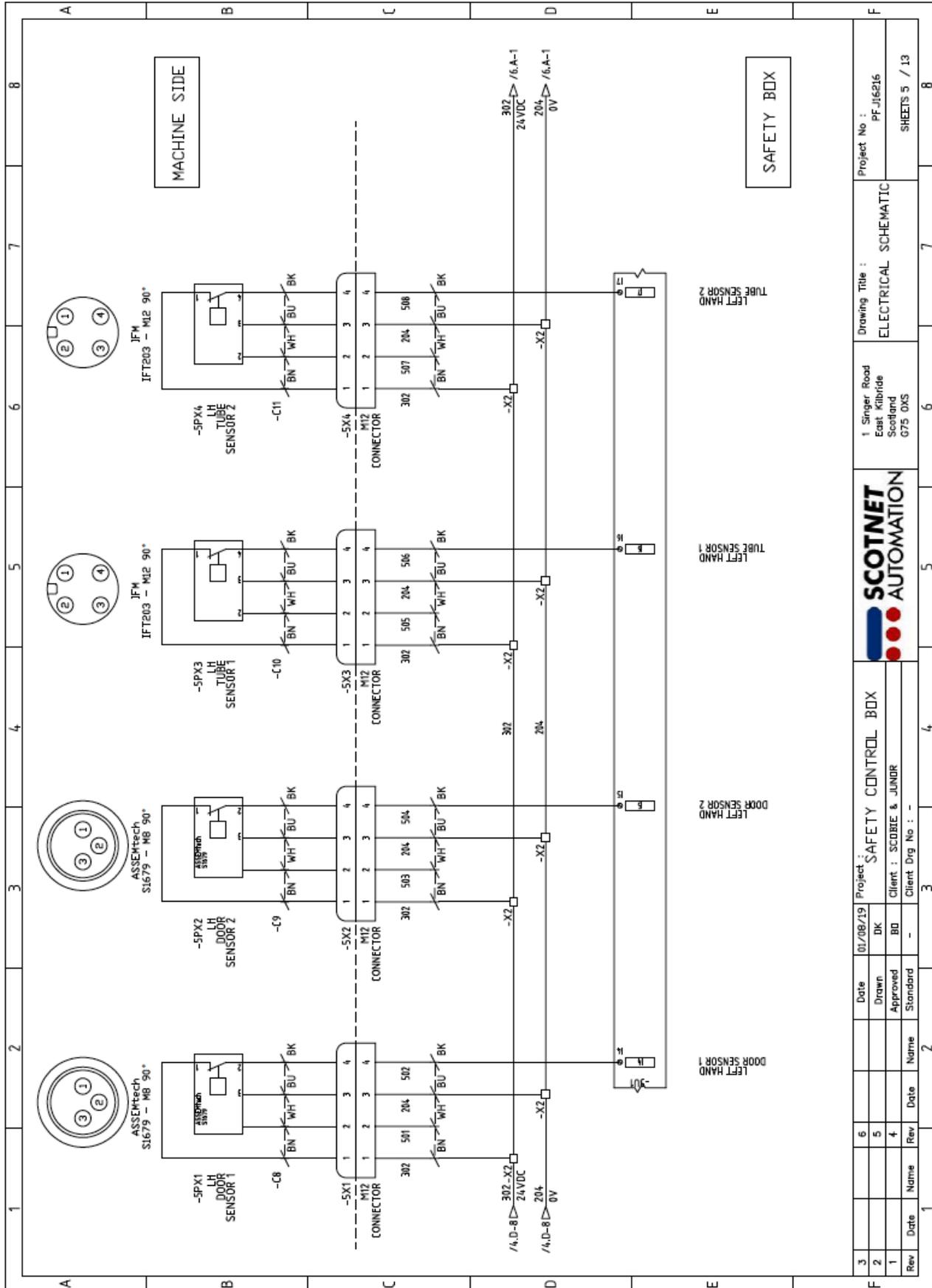


3	Date	01/08/19	Project	SAFETY CONTROL BOX	Project No	PF-J16216
2	Drawn	BK	Client	SCOBIE & JUNIOR	Drawing Title	ELECTRICAL SCHEMATIC
1	Approved	BO	Client Org No	-		SHEETS 4 / 13
Rev	Date	Name	Rev	Date	Name	Rev



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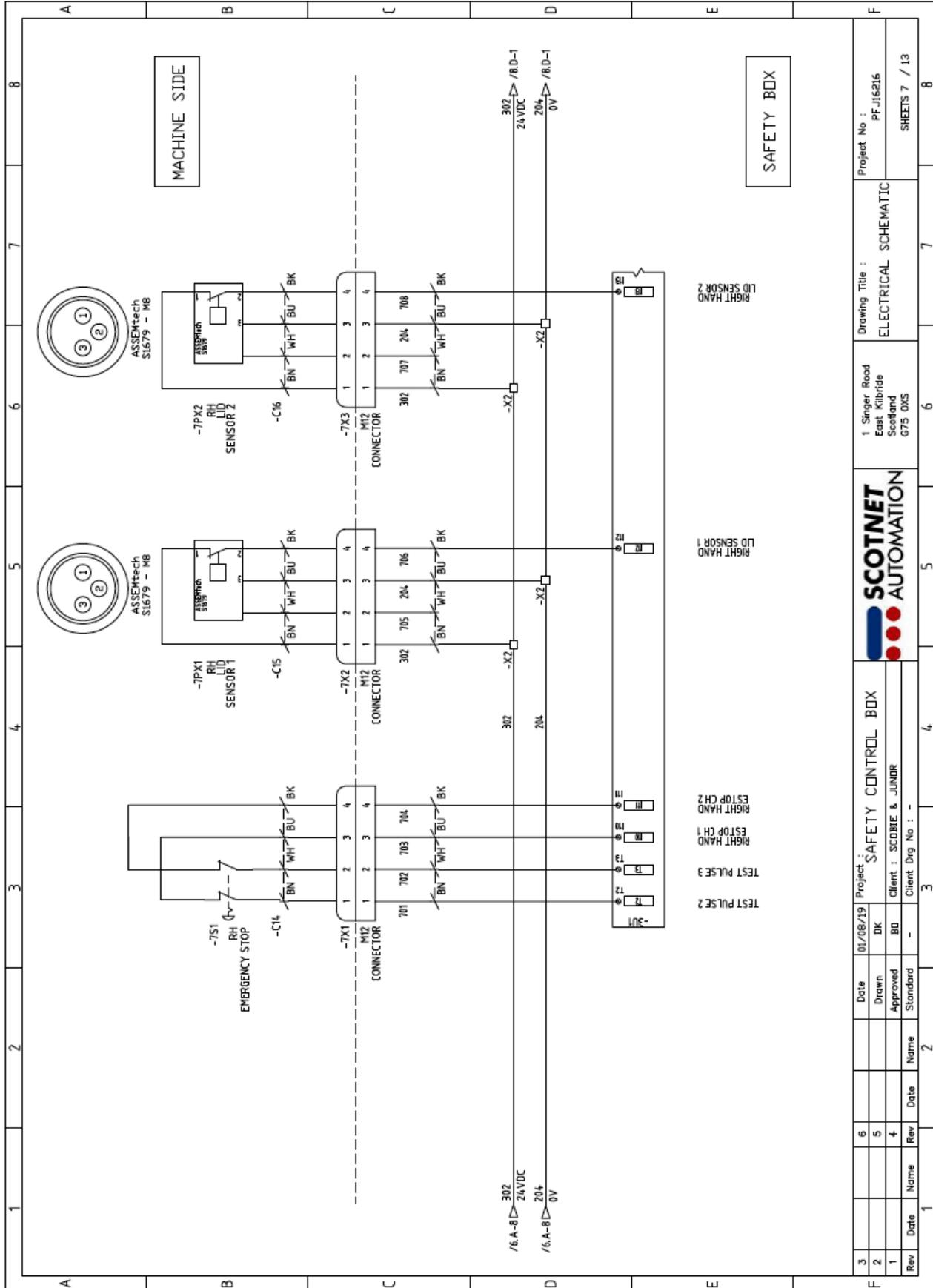


3	Date	01/08/19	Project	SAFETY CONTROL BOX	SCOTNET AUTOMATION	Drawing Title	ELECTRICAL SCHEMATIC	Project No	PF-J16216
2	Drawn	DK		1 Singer Road East Kilbride Scotland G75 0XS					
1	Approved	BD							
Rev	Date	Name	Date	Name	Date	Name	Date	Name	Date
1									
2									
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6									
SHEETS 5 / 13									



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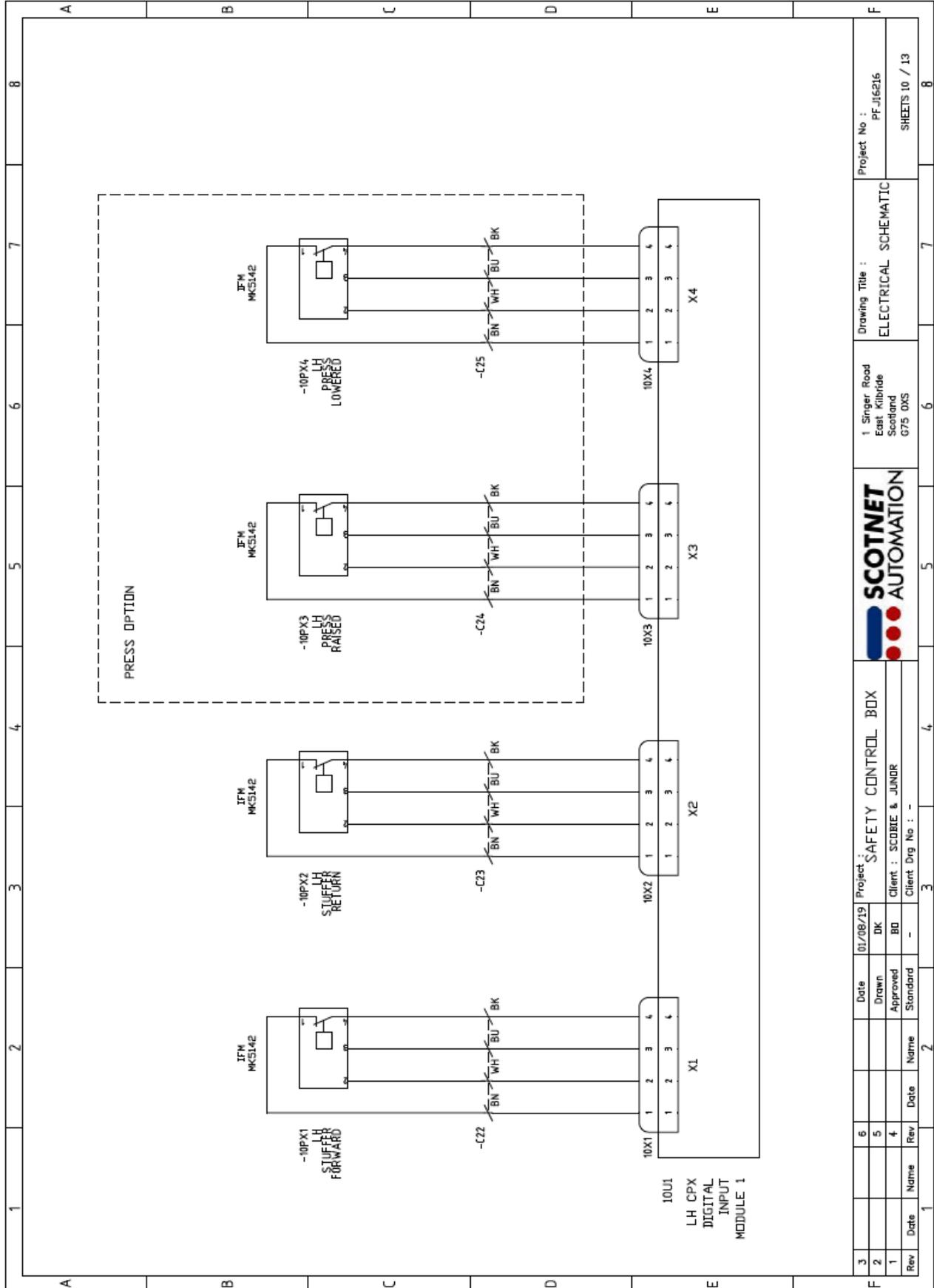


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2	Drawn	DK	Client :	SCOBIE & JUNIOR	Drawing Title :	ELECTRICAL SCHEMATIC
1	Approved	BD	Client Drg No :	-		
Rev	Date	Name	Rev	Date	Name	SHEETS 7 / 13



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Rev	Date	Name	Rev	Date	Name
3			6		
2			5		
1			4		

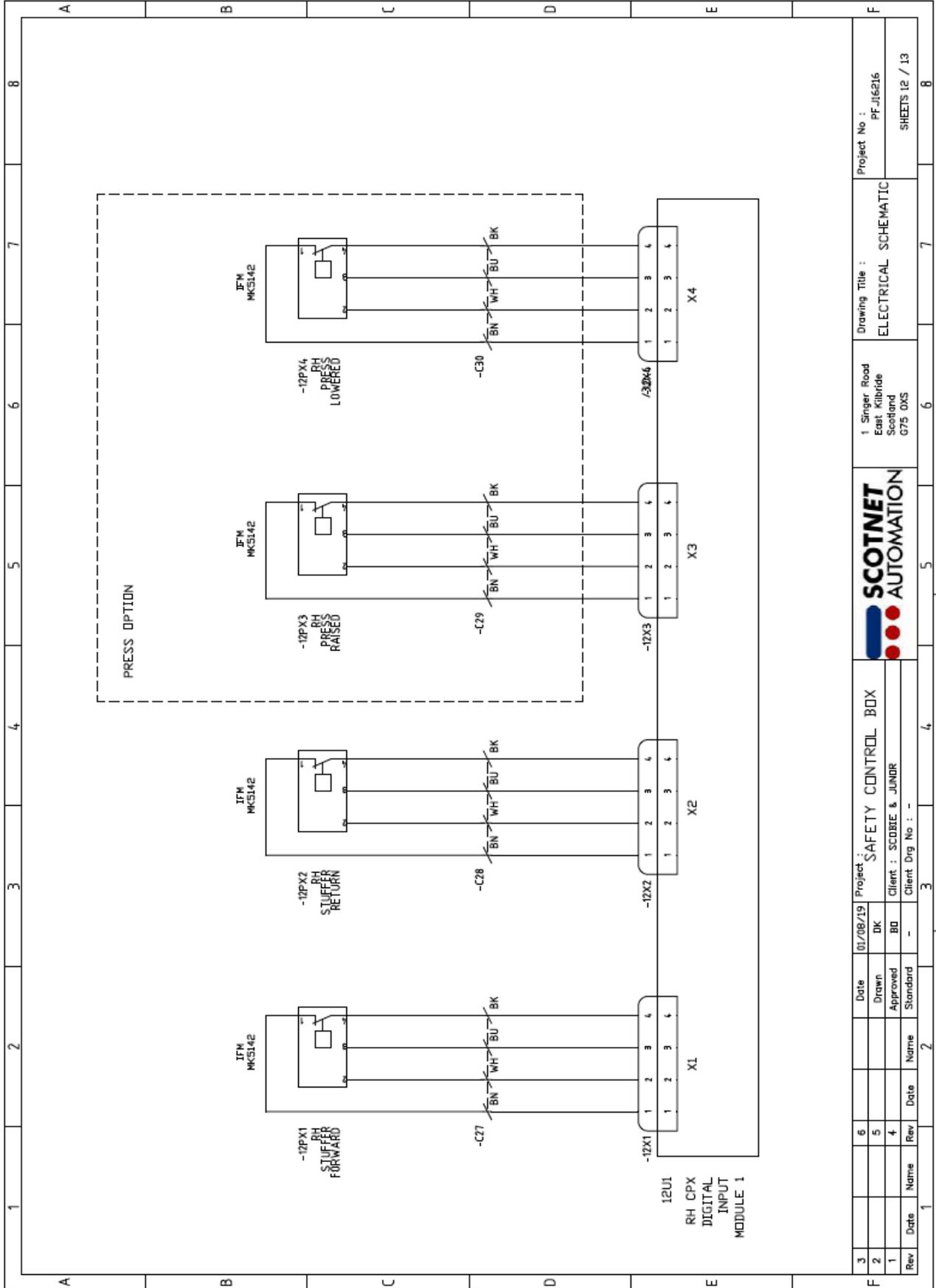
Project:	01/08/19	Date:	DK	Drawn:	DK
Client:	SCDBIE & JUNDR	Approved:	BO	Standard:	
Client Drg No:	-				

Project No:	PF-J16216
Drawing Title:	ELECTRICAL SCHEMATIC
Address:	1 Singer Road East Kilbride Scotland G75 0XS
SHEETS	10 / 13



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3	Date	01/08/19	Project	SAFETY CONTROL BOX	Drawing Title	ELECTRICAL SCHEMATIC	Project No	PF-J16216
2	Drawn	BK	Client	SCDBBE & JUNDR	Client Drg No	-		
1	Approved	BD						
Rev	Date	Name	Date	Name				



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Spare Parts

ItemNo	ItemDescLin1	ItemDescLin2
CPC-18T	P7 ELECTRICAL SAFETY BOX	
EX-705	5" PCAP HMI / IIOT CONTROLLER (V3)	
SA529183	FILTER REGULATOR	MS6-LFR-1/2-D6-ERV
SA526075	MOUNTING BRACKET	MS6-WR
SA532188	HEX HUT	MS6-WRS
SA539217	VTSA-FB VALVE TERMINAL	53E-F36GCQSFAX-S+IGC 44P-N-V-VG-B-EE
SA543306	LID LOCK CYLINDER	CDC-25-25-I-P
SA1312503	LINEAR DRIVE	DGC-K-40-1260
SA8001413	MOMENT COMPENSATION	DARD-L1-40-S
SA150738	CENTRAL SUPPORT	MUP-40
SAIFT203	TUBE SENSOR FOR DS1200	NORMALLY OPEN
SAE10700	TUBE SENSOR CABLE FOR SAIIFT203	DS1200P - ANGLED PLUG
SAMK5101	CYLINDER T SLOT PROXIMITY SWITCH - NORMALLY OPEN	FOR DS1200
	CABLE FOR T SLOT PROX	
SAS1679	DOOR & LID SENSOR FOR DS1200 - NORMALLY OPEN	
SAS1417	M12 MAGNET	PTM12
SAST12300	CABLE FOR SAS1679	
SA161725	SOLENOID VALVE FOR WATER INJECTION	MN1H-2-1/4-MS
SA30931	CABLE FOR WATER INJECTION	SOLONOID
SA123060	SOLENOID COIL FOR WATER INJECTION	MSN1G-24DC-0D
NL61010	SCOTNET CAMLOCK SET	NETLOADERS & DS1200 2/PK
DSSEAL	SEAL FOR D/STUFFER LID	
SA3106937	RED LED FOR DS1200	N.3106937
SA3106959	GREEN LED FOR DS1200	N.3106959
SAZB4BZ101	EMERGENCY STOP BUTTON	N.ZB4BS844
SAZB4BZ105	CONTACT + BEZEL 1N/O	P/N.ZB4 BZ101
SAHANDLE	E STOP PUSH BUTTON GAURD	
SAZBY9230	E STOP LEGEND PLATE	
SA3115587	3 POLE RED/YELLOW ISOLATOR 20A	