



**SCOTNET  
SOLUTIONS**

**AUTOMATION**



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

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# **DS1200P<sub>6Rb</sub> Operation Instructions & Owners Manual**





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### EC Declaration of Conformity

In accordance with EN ISO 17050-1:2004

**We**

Scobie & Junor (Estd 1919) Ltd

*of*

1 Singer Road, Kelvin Industrial Estate, East Kilbride, Glasgow, G75 0XS

*in accordance with the following Directive(s):*

- 2004/108/EC The Electromagnetic Compatibility Directive
- 2006/42/EC The Machinery Directive

*hereby declare that:*

- Equipment Automatic Double Stuffer
- Model number DS1200P<sub>6R3</sub>

Serial Number

*is in conformity with the applicable requirements of the following documents*

Ref. No.	Title	Edition/date
BS EN ISO 12100-1	Safety of machinery. Basic concepts, general principles for design. Basic terminology, methodology	2003+A1:2009
BS EN ISO 12100-2	Safety of machinery. Basic concepts, general principles for design. Technical principles and specifications	2003+A1:2009
BS EN 1088	Safety of machinery. Interlocking devices associated with guards. Principles for design and selection	1995+A2:2008
BS EN ISO 13850	Safety of machinery. Emergency stop. Principles for design	2008
BS EN ISO 13857	Safety of machinery. Safety distances to prevent hazard zones being reached by upper and lower limbs	2008
BS EN 60204-1	Safety of machinery. Electrical equipment of machines. General requirements	2006+A1:2009
REGULATION (EC) No 1935/2004	On materials and articles intended to come into contact with food	2004

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications and is in accordance with the requirements of the Directive(s)

Signed by: Gordon Wicklow

Name: Gordon Wicklow  
 Position: Director  
 Done at: East Kilbride



On: 12 November 2010

Document ref. No. P<sub>6R3</sub>

The technical documentation for the machinery is available from the manufacturer at the above address.

Any modifications to the DS1200P<sub>6R3</sub>, which have not been approved by The Scobie & Junor Group, will invalidate this declaration.



Congratulations on the purchase of one of the range of SCOTNET Automation equipment. The instructions and advice 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@scotnetsolutions.com](mailto:info@scotnetsolutions.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 DS1200P<sub>6</sub> 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 DS1200P<sub>6</sub> is powered by a 110 – 230 volt AC mains electrical supply and compressed air.

#### Compressed Air Connection:

The machine comes with a quick release fitting, which terminates to a male hose fitting suitable for 10mm ID 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 80-102 PSI (5.5 - 7 BAR.) At 80PSI, the machine uses approximately 35 ft<sup>3</sup> or 1000 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 is fitted with a 3-pin mains plug. The machine comes with approximately 3 meters of cable, which can be shortened as required. Machines shipping outside the UK will come without a plug, as local markets vary.

### (B) Only for Option Pack AWI (Machines 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

On the DS1200P<sub>6</sub> 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



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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. 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 clockwise to release them. Make sure both are in the safe, released position before trying to operate the machine.

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

### **Important Note**

**Only use netting tubes & chambers designed for use with the DS1200P<sub>6</sub> stuffing system. If in doubt, contact our Service Desk.**

### **(E) Adjusting the Outward Stroke Speed**

The machine comes preset with the most common outward stroke speed. This is suitable for most products. However, for some applications it is necessary to adjust this speed, normally slowing it down.

Isolate the machine from all power supplies (compressed air and electrical). Open the pneumatic cabinet. The flow controllers are clearly marked. Only the outstroke can be slowed down. There is no adjustment on the return stroke. To adjust either stroke, first release the locking ring, then adjust the flow controller. Screw them clockwise to slow the stroke, and anticlockwise to speed it up.

When the desired speed is achieved, lock the flow controllers with the securing rings again. Adjust the controllers for both cylinders, so the speed is similar in each chamber. Close the cabinet. Reconnect the electrical and compressed air supplies to the machine.



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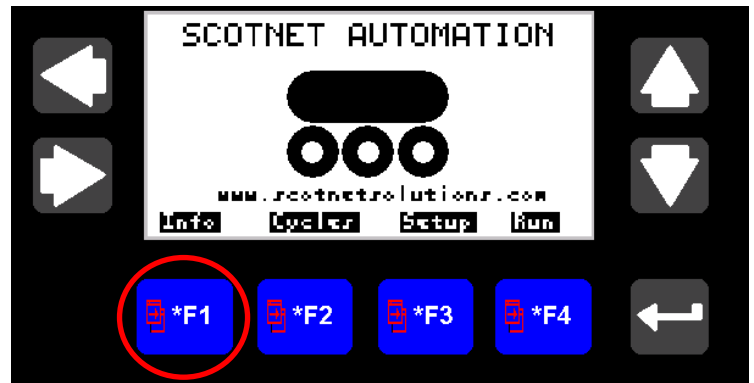
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## Using the Automation Screen

Your machine is fitted with a control screen that is used for many useful functions including:

- General Information About the machine
- Adjusting Machine Parameters, like AWI and SSL
- Reporting on Cycle's & Operator Speed
- Fault Diagnosis

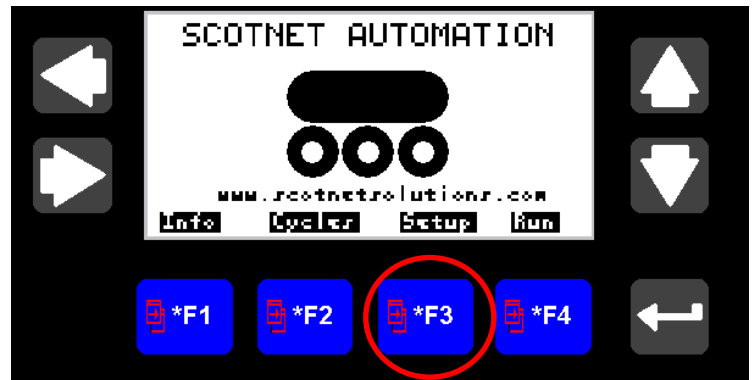
From the 'Home Page, all functions can be accessed easily. To access a feature, simply press the button that is nearest to it. i.e. to go to the 'Home' page from this page, you would press 'F1'. As you get to new pages, the labels change, and the same buttons perform different actions.



### (A) Setting Up Your Recipes

The DS1200<sub>6R</sub> is equipped with our Recipe system. Each recipe contains all the settings for a particular product. Each Recipe can be named, making it simple for operators to choose the correct one.

To access the Recipe menu from the 'Home' page, press 'Recipe'

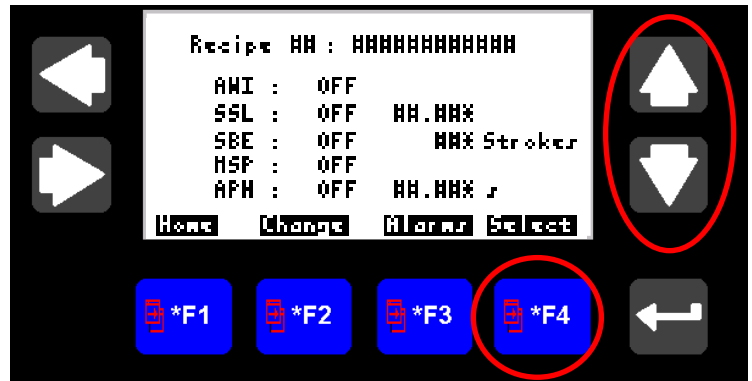




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## (B) View Recipe Summary

This shows the settings for the current 'Recipe'. To select a new 'Recipe' press 'Select' and using the Up and Down arrow keys, select a new 'Recipe' number.

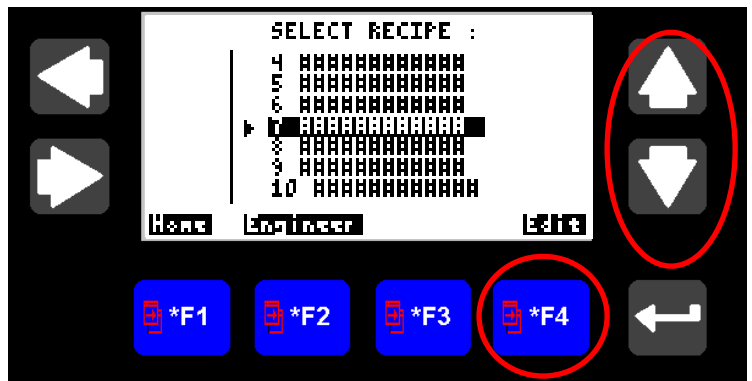


## (C) To Change A Recipe Setting, or To Add a New Recipe

Press the 'Change' button from the Recipe Summary screen.

Now use the up and down arrows to select your 'Recipe' number. Press 'Enter' to select the 'Recipe' and press 'Edit' to modify the settings.

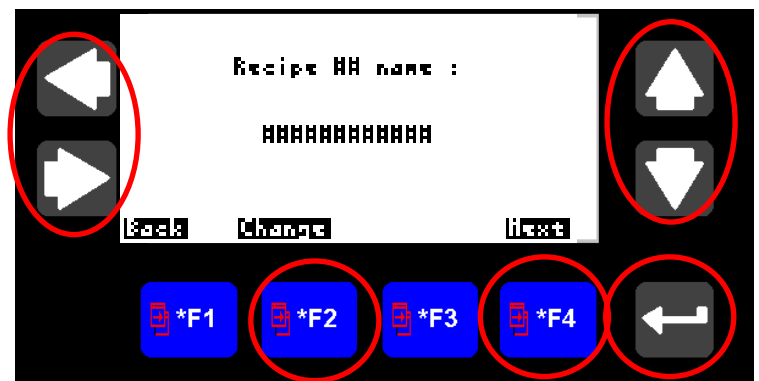
You will be asked for the 'Supervisor' password to enter this mode. This is **2244**



## (D) Change the Name of your 'Recipe'

Press 'Change' to edit the 'Recipe' name. Use the up and down arrows to select the letter required, and use the left and right arrows to move on to the next letter. Press 'INS' to enter a space. When you are finished, press 'Enter' to save your settings.

Press 'Next' to move on.





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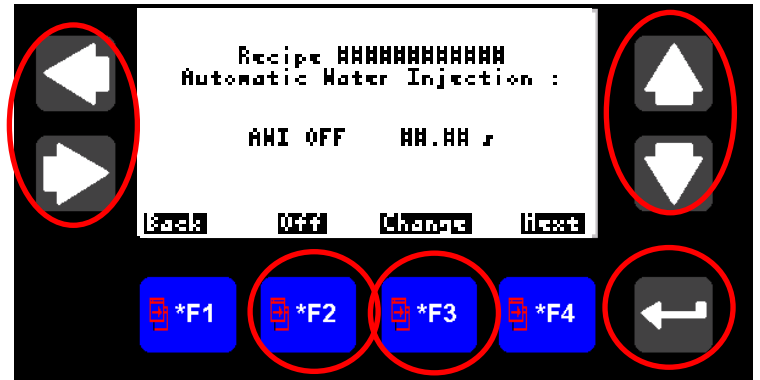
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## (E) Setting up the Automatic Water Injection (AWI)

Press 'Off or On' at F2 to turn AWI on and OFF.

Press 'Change' at F3 to adjust the time the AWI is on. Use the Up and Down arrows to adjust the time. Press 'Enter' to confirm. More time = more water.

If AWI is not installed on your machine, editing will no be possible. Press 'Enter' to confirm the changes, and 'Next' to move on.

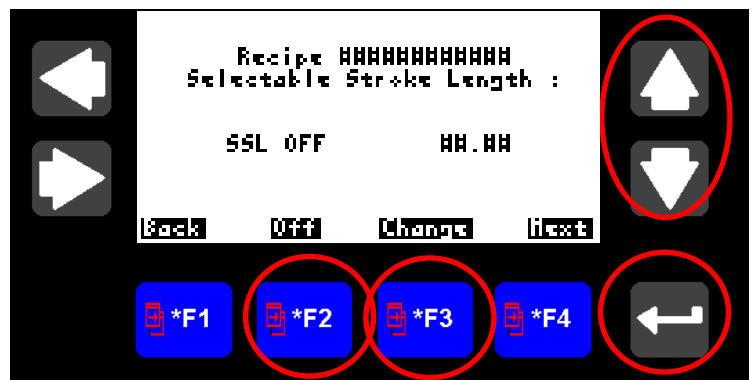


## (F) Setting Up Selectable Stroke Length (SSL)

Press 'Off or On' at F2 to turn SSL on and OFF.

Press 'Change' at F3 to adjust the time the SSL is On. Use the Up and Down arrows to adjust the time. Press 'Enter' to confirm. More time = longer stroke.

If SSL is not installed on your machine, editing will no be possible. Press 'Enter' to confirm the changes, and 'Next' to move on.

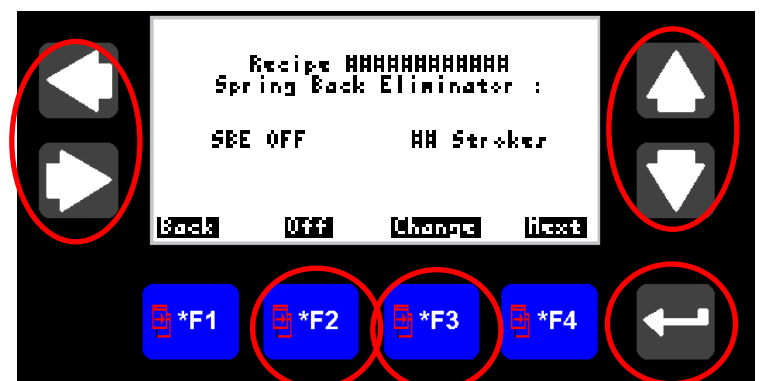


## (F) Setting Up Spring Back Elimination (SBE)

Press 'Off or On' at F2 to turn SBE on and OFF.

Press 'Change' at F3 to adjust the number of SBE cycles. Use the Up and Down arrows to adjust the number. Press 'Enter' to confirm. More cycles = more net.

If SBE is not installed on your machine, editing will no be possible. Press 'Enter' to confirm the changes, and 'Next' to move on.







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## (G) Net Slip Prevention (NSP)

Press 'Off or On' at F2 to turn NSP on and OFF.

Press 'Change' at F3 to adjust the time after the cylinder moves that the NSP releases. Use the Up and Down arrows to adjust the time. Press 'Enter' to confirm. More time = less net slippage.

If NSP is not installed on your machine, editing will no be possible. Press 'Enter' to confirm the changes, and 'Next' to move on.

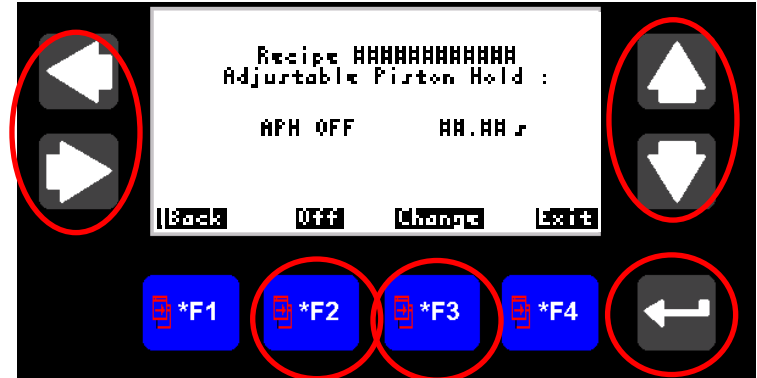


## (H) Setting up Automatic Piston Hold (APH)

Press 'Off or On' at F2 to turn APH on and OFF.

Press 'Change' at F3 to adjust the time that the Piston will hold at its outward stroke. Use the Up and Down arrows to adjust the time. Press 'Enter' to confirm. More time = longer piston hold.

If APH is not installed on your machine, editing will no be possible. Press 'Enter' to confirm the changes, and 'Exit to return to the 'Recipe' menu.



To add more Recipes, simply repeat the steps above. When you have finished, press 'Home' to return to the main screen.

## (I) Anti Jam Technology

The machine is fitted with a system that detects if it has jammed, normally because a product is too large. If this occurs, the machine will count out 5 seconds after which the rodless cylinders will retract, and when they have completed their return the lid lock will release. This will allow the lid to open, and the jammed product to be freed. (The jam will also be indicated on the Screen).

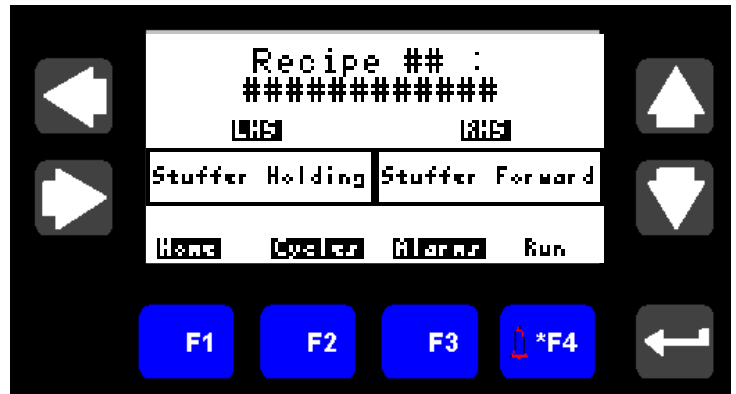


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## (J) Run Mode

The Screen has a 'Run' mode. In this view, the machine will show what function it is performing at any time. To access 'Run' mode, simply press 'Run' from any screen.



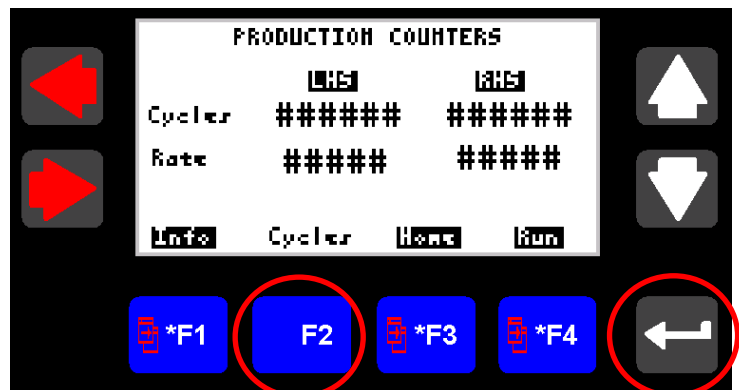
## (K) Production Counters

The machine is fitted with counter system. This is useful when a batch of product needs to be made to a fixed number.

To access Counters mode, press the 'Cycles' button from the home page.

The Cycles can be reset at any time by pressing the enter button.

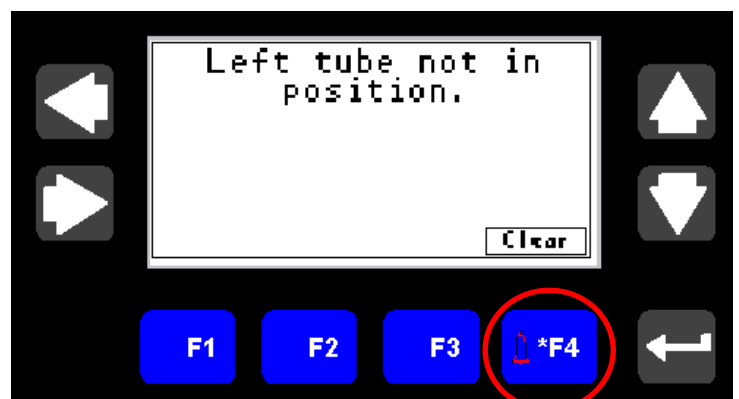
The 'Rate' number shows the current hourly production rate, based on the last 2 minutes work.



## (L) Alarms

The machine monitors both tubes, both chamber doors and the emergency stops. If it detects something out of position, it will show this on the screen.

To clear the alarm, correct the problem, or press the 'Clear' button. A list of the alarms is kept in the unit, and can be accessed by the engineers





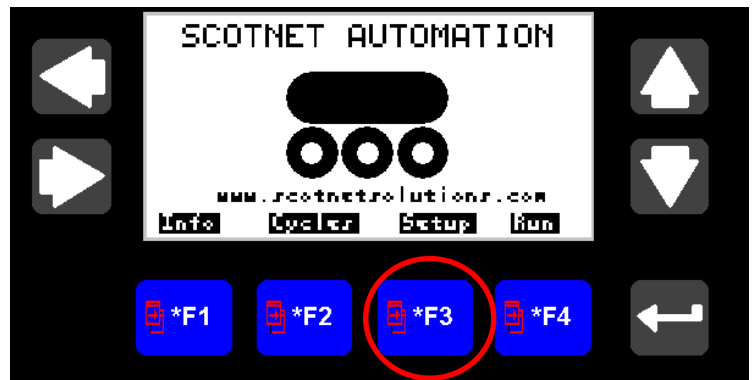
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## Diagnostics Mode

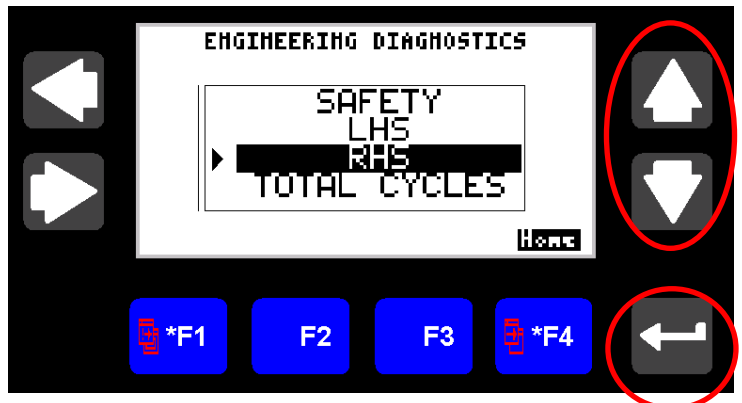
The machine has an inbuilt diagnostics programme, which can be used by the engineers to test all the sensors on the machine.

To access Diagnostics mode, press the 'Recipe' button from the Home page. Then Press 'Change' from the Recipe Summary Page.

Then press the 'Diagnostics' button. You will be asked for a password to enter this section. This is **1974**



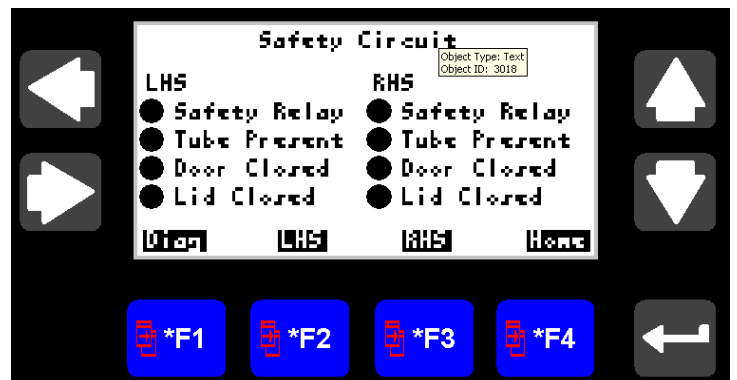
From the Diagnostics Home Page, you can access the 4 sections of the Diagnostics section. Select the feature you want with the Up and Down arrows, and press enter to access that mode.



## Safety Circuit

This mode shows all the safety sensors on the machine, and which ones are currently active.

By moving the various parts of the machine, the different sections will light up. Therefore if the LHS door is closed, and it does not light up here, then there is a fault with that sensor, or the lead going to the sensor.



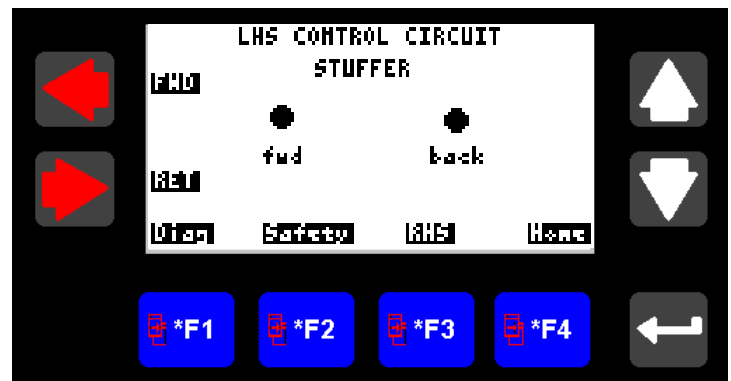


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### LHS Control Circuit

This mode shows the proximity switches on the Left hand side cylinder of the machine.

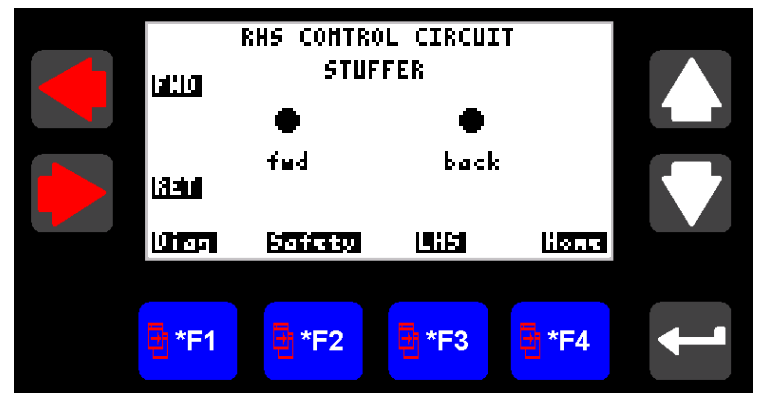
If the lid is closed over the LHS chamber, then pressing the arrows will move the cylinder back and forward. By doing this, you will see the different sensors light up. If a sensor does not light up when the carriage passes it, then that sensor, or the lead going to it has failed.



### RHS Control Circuit

This mode shows the proximity switches on the Right hand side cylinder of the machine.

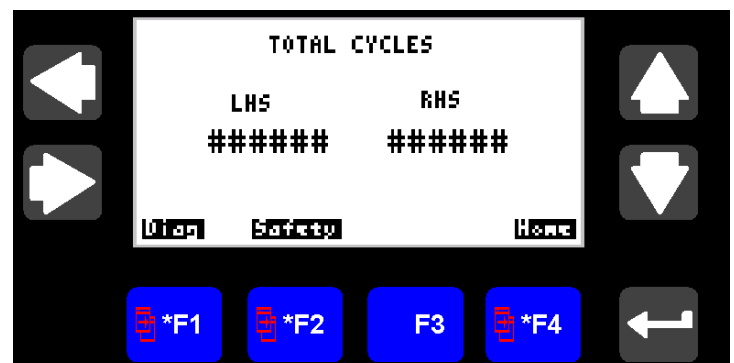
If the lid is closed over the RHS chamber, then pressing the arrows will move the cylinder back and forward. By doing this, you will see the different sensors light up. If a sensor does not light up when the carriage passes it, then that sensor or the lead going to it has failed.



### Total Cycles

This mode shows the total number of cycles your machine has done since new.

NB new machines will show some cycles, due to testing prior to despatch. These counters cannot be reset.





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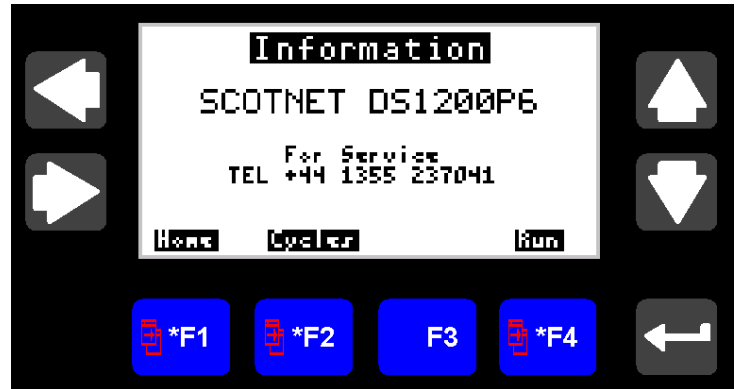
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## (M) Information Mode

This screen shows our Service Desk phone number. If you need any assistance with your machine, please do not hesitate to contact us.





## 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.  
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 display panel should read emergency circuit tripped.  
Do the same check with each chamber door.  
Do the same check with both emergency stops.
4. Lubricate the lid slides with a food safe lubricant.
5. Lubricate the piston rod support bush with a food safe lubricant.
6. 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 80 - 102 PSI, or 5.5 - 7 bar.
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.



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## **Cleaning Procedures**

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

The machine can now be cleaned with water. We do not recommend high-pressure hoses for cleaning.

**Do not spray water onto the Screen.**

**Once cleaned, replace all of the parts removed.**



## Replacing Components on the DS1200P<sub>6</sub>

Several components on the DS1200P<sub>6</sub> require setting up before fitting replacements to the machine.

Below, each valve in the machine is pictured, with additional comments on how to replace them where required.



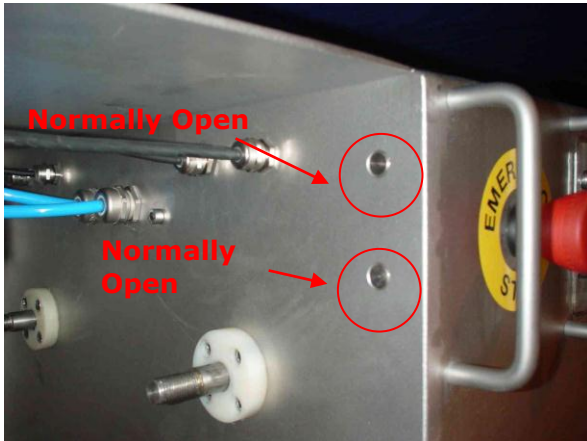
### **Tube in Position Inductive Proximity Detectors (IPD)**

To detect when each tube is in position, 2 normally open inductive proximity detectors (IPD's) are used.



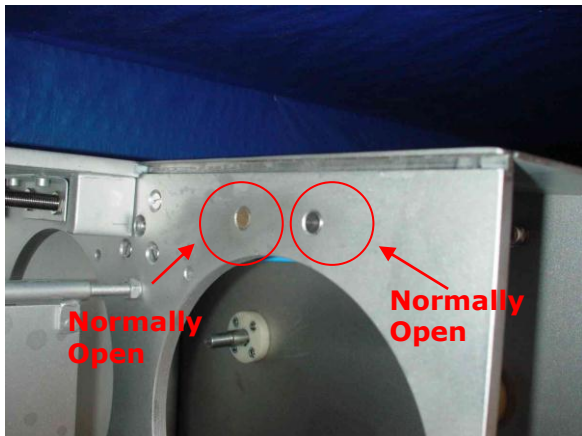


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### Chamber Door Proximity Detectors

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



### Sliding Lid Proximity Detectors

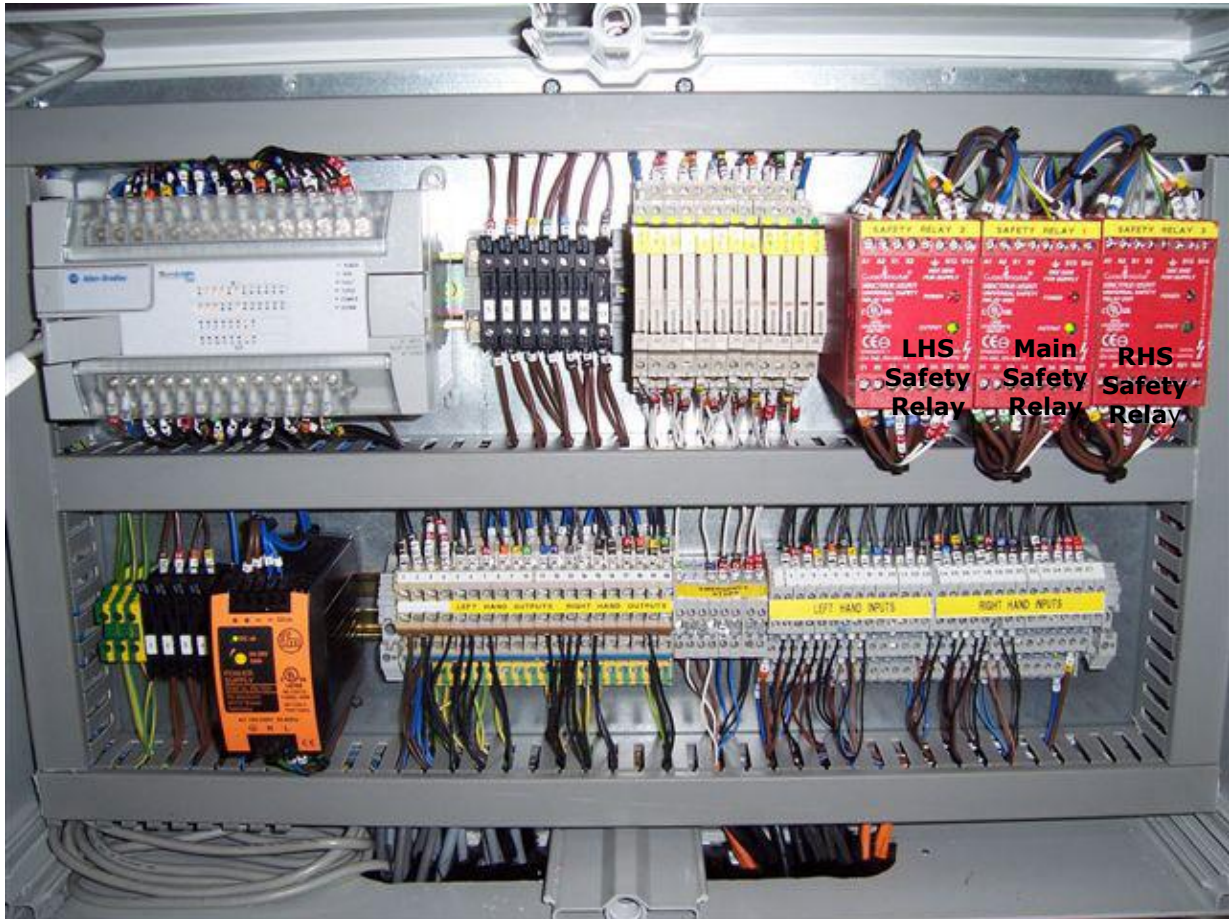
To detect when the lid is slid from side to side, magnetically actuated normally open proximity switches are used.



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## Electrical Box Overview



### Fuses

- 1) Power Supply
- 2) PLC
- 3) Heater
- 4) Heater
- 5) Screen
- 6) LHS Inputs (When Machine Viewed From Tube End)
- 7) RHS Inputs (When Machine Viewed From Tube End)
- 8) Main Dump Valve & Lid Lock Valve
- 9) LHS Outputs (When Machine Viewed From Tube End)
- 10) RHS Outputs (When Machine Viewed From Tube End)
- 11) Lid Lock & Pilots

### Relays

- R1; Left Hand Side Tube Sensor Left
- R2; Left Hand Side Tube Sensor Right
- R3; Left Hand Side Door Sensor Top
- R4; Left Hand Side Door Sensor Bottom
- R5; Right Hand Side Tube Sensor Left
- R6; Right Hand Side Tube Sensor Right
- R7; Right Hand Side Door Sensor Top
- R8; Right Hand Side Door Sensor Bottom
- R9; Left Hand Side Lid Sensor Left
- R10; Left Hand Side Lid Sensor Right
- R11; Right Hand Side Lid Sensor Left
- R12; Right Hand Side Lid Sensor Right



## Pneumatic Box Overview



NB: Left and Right definitions are for when machine is viewed from the tube end.

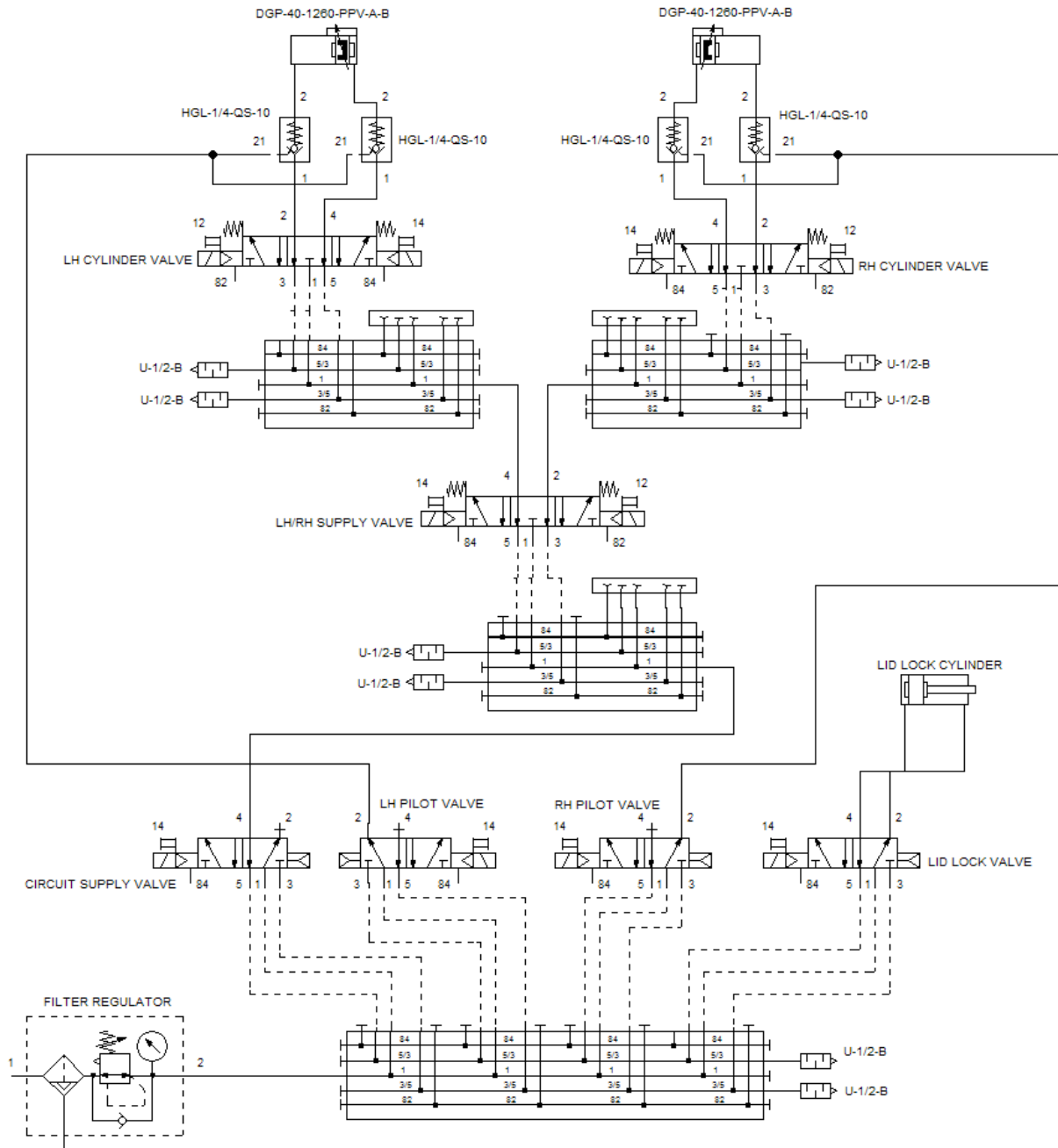
Blue Tubing = Supply  
Silver Tubing = Exhaust



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

T: +44 (0) 1355 244 244 F: +44 (0) 1355 266 655 E: [INFO@SCOTNETSOLUTIONS.COM](mailto:INFO@SCOTNETSOLUTIONS.COM) W: [WWW.SCOTNETSOLUTIONS.COM](http://WWW.SCOTNETSOLUTIONS.COM)

## DS1200P6 PNEUMATIC DIAGRAM



Pos	Designation	Part number	Article designation	Type	Packaging unit	Unit	Stroke length (10...3,000 MM)
1	LH PILOT VALVE	163142	Solenoid valve	OPE18-M1H-SL-1/4	1	PCB	
2	LID LOCK VALVE	163142	Solenoid valve	OPE18-M1H-SL-1/4	1	PCB	
3	CIRCUIT SUPPLY VALVE	163142	Solenoid valve	OPE18-M1H-SL-1/4	1	PCB	
4	RH PILOT VALVE	163142	Solenoid valve	OPE18-M1H-SL-1/4	1	PCB	
5	LH CYLINDER VALVE	170249	Solenoid valve	OPE18-M1H-S/SE-1/4	1	PCB	
6	RH CYLINDER VALVE	170249	Solenoid valve	OPE18-M1H-S/SE-1/4	1	PCB	
7	LH/RH SUPPLY VALVE	170249	Solenoid valve	OPE18-M1H-S/SE-1/4	1	PCB	
8	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
9	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
10	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
11	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
12	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
13	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
14	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
15	U-1/2-B	6844	Silencer	U-1/2-B	1	PCB	
16	FILTER REGULATOR	529183	Filter regulator	MSP-LFR-1/2-D8-ERV-AS-Z	1	PCB	
17	DGP-40-1260-PPV-A-B	161782	Linear drive	DGP-40-1260-PPV-A-B	1	PCB	1260
18	DGP-40-1260-PPV-A-B	161782	Linear drive	DGP-40-1260-PPV-A-B	1	PCB	1260
19	LID LOCK CYLINDER	188213	Short stroke cylinder	ADVO-32-25-H-P	1	PCB	
20	HGL-1/4-QS-10	530042	Non-return valve	HGL-1/4-QS-10	1	PCB	
21	HGL-1/4-QS-10	530042	Non-return valve	HGL-1/4-QS-10	1	PCB	
22	HGL-1/4-QS-10	530042	Non-return valve	HGL-1/4-QS-10	1	PCB	
23	HGL-1/4-QS-10	530042	Non-return valve	HGL-1/4-QS-10	1	PCB	



## Fault Finding Procedures

### Machine Fails to Operate

Check the air pressure at the regulator. It should be set between minimum 8 Bar and 10 Bar Maximum (see 'Setting Up the Machine' section)

Check both tubes are located correctly on the machine.

Check both emergency stops are released and in the safe position.  
(The Screen will inform you of any breaks in the emergency stop circuit).

Check that the filter regulator is free from water.

Check both chamber doors are closed.

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

There are some fuses in the Electrical Box inside the machine. Check that these have not blown.

For all other faults, contact our Service Desk.

### Emergency Stop Pressing:

When either emergency stop is pressed, the machine will stop wherever it is in its cycle. When the emergency stop is reset, the machine will reset itself, and retract the piston to the start position. When this is complete, the machine will release the lid lock, enabling the lid to be opened.

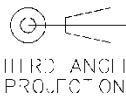
If there are any other problems, please contact our SCOTNET Automation Service Desk on:

+44 (0) 1355 237041 for assistance.

Part Code	Description	Description 2	DS1200P6R3
SAS1679	M12 Single Pole Normally Open Sensor		8
SAST12300	3M Straight Lead for S1679		8
SAS1417	M12 Magnet	PTM12	6
SA153049	Push in Elbow 8mm Fitting	QSL-1/4-8	2
SA163142	System Control Valve 5/2	CPE18-M1H-5L-1/4	4
SA170249	Cylinder Control Valve 5/3 Center Exhausted	CPE18-M1H-5/3E-1/4	3
SA164970	Manifold Basic Block 2 Valve	CPE18-PRSG-2	3
SA164973	Manifold End Block	CPE-18-PRS-EP	3
SA164974	Manifold Blanking Plate	CPE18-PRSB	3
SA164972	Expansion Block	CPE18-PRSE-2	2
SA6844	Manifold silencer	U-1/2B	8
SA3571	Blanking plug	B-1/2	6
SA3569	Blanking plug	B-1/4	3
SA153047	Push-in/threaded L-fitting	QSL-1/4-6	2
SA153046	Push-in/threaded L-fitting	QSL-1/8-6	4
SA153149	Push-in Y connector	QSY-6	2
SA151688	Plug socket	KNEB-1-24-25-LED	10
SA153051	Threaded/Push-in fitting	QSL-1/4-10	5
SA153082	Threaded/Push-in fitting	QSL-1/4-10	3
SA190661	Threaded/Push-in fitting	QSL-1/2-10	3
SA153073	Push-in L-connector	QSL-10	3
SA153055	Threaded/Push-in fitting	QSL-1/2-16	7
SA153075	Push-in elbow	QSL-16	7
SA153011	Threaded/Push-in fitting	QS-1/2-16	13
SA9973	Bulkhead fitting	SCM-1/2	9
SA529183	Filter Regulator with Integral Gauge	MS6-LFR-1/2-D6-ERV-AS-Z	1
SA1526075	Mounting Bracket for MS6 Filter Regulator	MS6-WR	1
SA532188	Nut For MS6 Filter Regulator	MS6-WRS	1
SA150738	Cylinder Support (Mount)	MUP-40 Mounting Bracket	4
SA150802	Moment Compensator for Cylinder 40 Bore	FKP-40 Drive Coupler	2
SA161782-1260	Rodless Cylinder 40 Bore for P5 & 6	DGP-40-1260-PPV-A-B	2
SA188213	Lid Lock Cylinder	ADVC-32-25-I-P	1
SA195281	Plastic tubing 6mm Black	PLN-6x1-SW	4
SA193404	Plastic tubing 6mm Neutral	PLN-6x1-NT	4
SA195283	Plastic tubing 10mm Black	PLN-10x1,5-SW	6
SA193406	Plastic tubing 10mm Neutral	PLN-10x1,5-NT	6
SA539064	Plastic tubing 16mm	PLN-16X2-NT	3
SA530042	Non-return valve	HGL-1/4 QS-10	4
SA161725	Water Injection Valve	MN1H-2-1/4-MS	AWI OPT (2)
SA30931	Cable For Water Injection Solenoid	KMC-1-24-2.5-LED	AWI OPT (2)
SA123060	Coil For Water Injection Solenoid		AWI OPT (2)
SA153073	Push-in L-connector	QSL-10	AWI OPT (1)
SA153007	Push-in fitting	QS-1/4-10	AWI OPT (2)
SA153003	QS-1/4-6	QS-1/4-6	AWI OPT (2)
SA153151	QSY-10	QSY-10	AWI OPT (1)
SAAWINOZ	Water Injection Nozzle		AWI OPT (2)
SADN1021	Power Supply, 24V DC 2.1A		1
SAMK5101	Cylinder Proximity switch,		4
SAE11486	Extension cable 2 pin, 3 core, 2m, with 3 pin socket		4
SAIFT203	Normally Open Inductive Proximity Switch		4
SAE10700	Cable with Plug for Inductive Proximity Switch		4
SADS12000K	DS1200 Kit		1
SASEAL	Seal		1
SACASTOR	Castors		4
SAHANDLE	Guard handles		2
NL61010	Cam Locks		2
SADSRDGD	DS Nylon Rod Guide		2
SA800E15YE112	E Stop Sticker		2
SaMISC	Miscellaneous Parts		1
SAAB1762L40BWA	MLX1200 24VDC PLC		1
SAAB2711M3A18L1	Pannel View		1
SAAB2711CBLHM05	Cable for Pannel View		1
SAMRR9T	Guardmaster Safety Relay		3
SAAB800FPMT44	E Stop Push Button		2
SAAB800FALP	Latch for E Stop		2
SAAB800FX10	Normally Open Contact for E-Stop		2
SAAB800FX01	Normally Closed Contact For E-Stop		2
SAAB1492WFB4	Fuse Carrier		10
SA3115587	ISOLATOR		1
SA351588	2 Pole Relay		4
SA4009130	Relay Base		4
SA3886611	1 Amp Fuse		2
SA3886582	500 Milliamp Fuse		8
SA153048	QSL-1/8-8	Elbow Fittings for CPE Valves	2
SAR23432	Roller Assembly for Sliding Cover	4 Per Machine	4

MODIFICATIONS  
ORIGINAL 01

DIMENSIONS  
IN MILLIMETERS

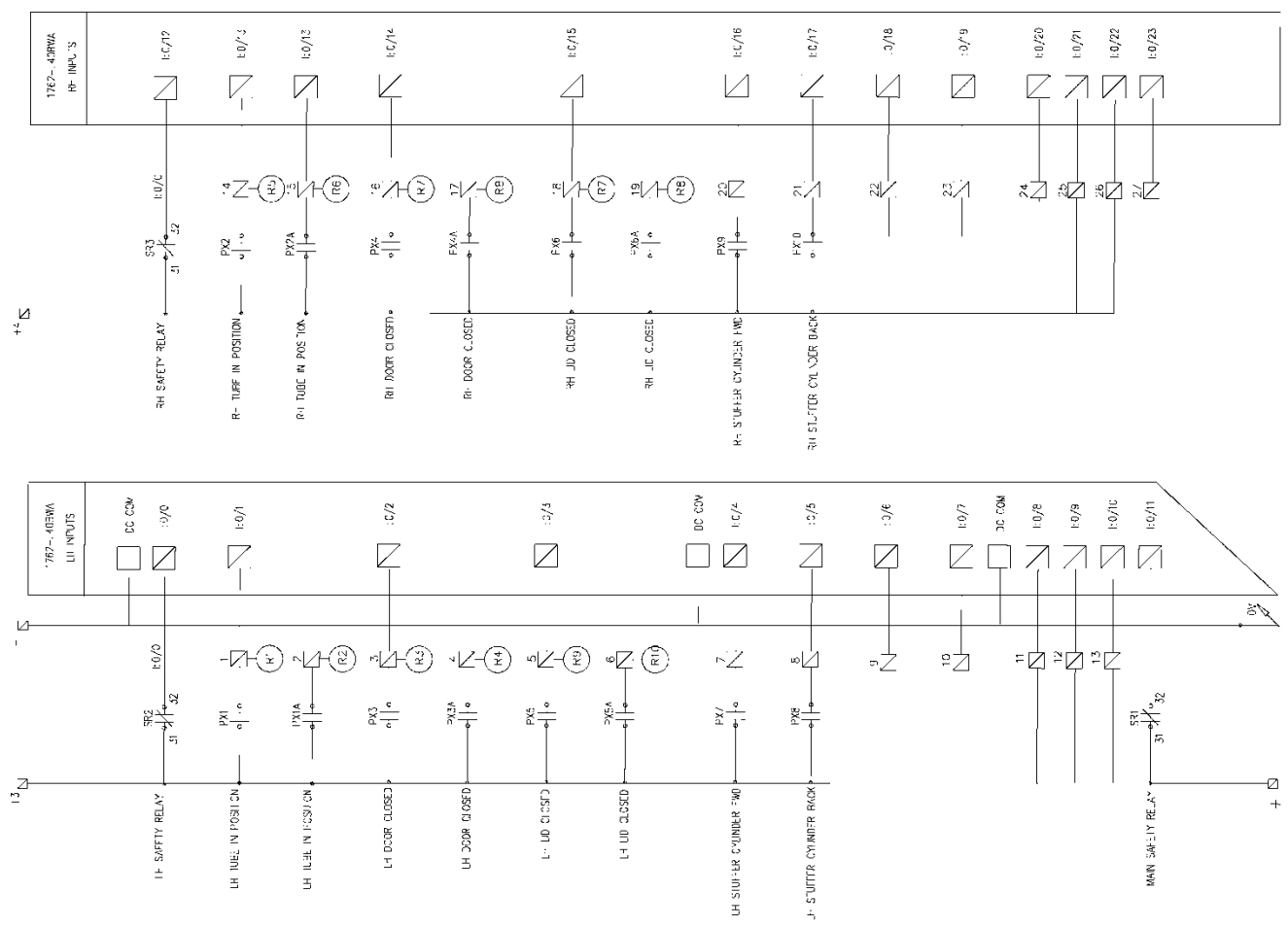


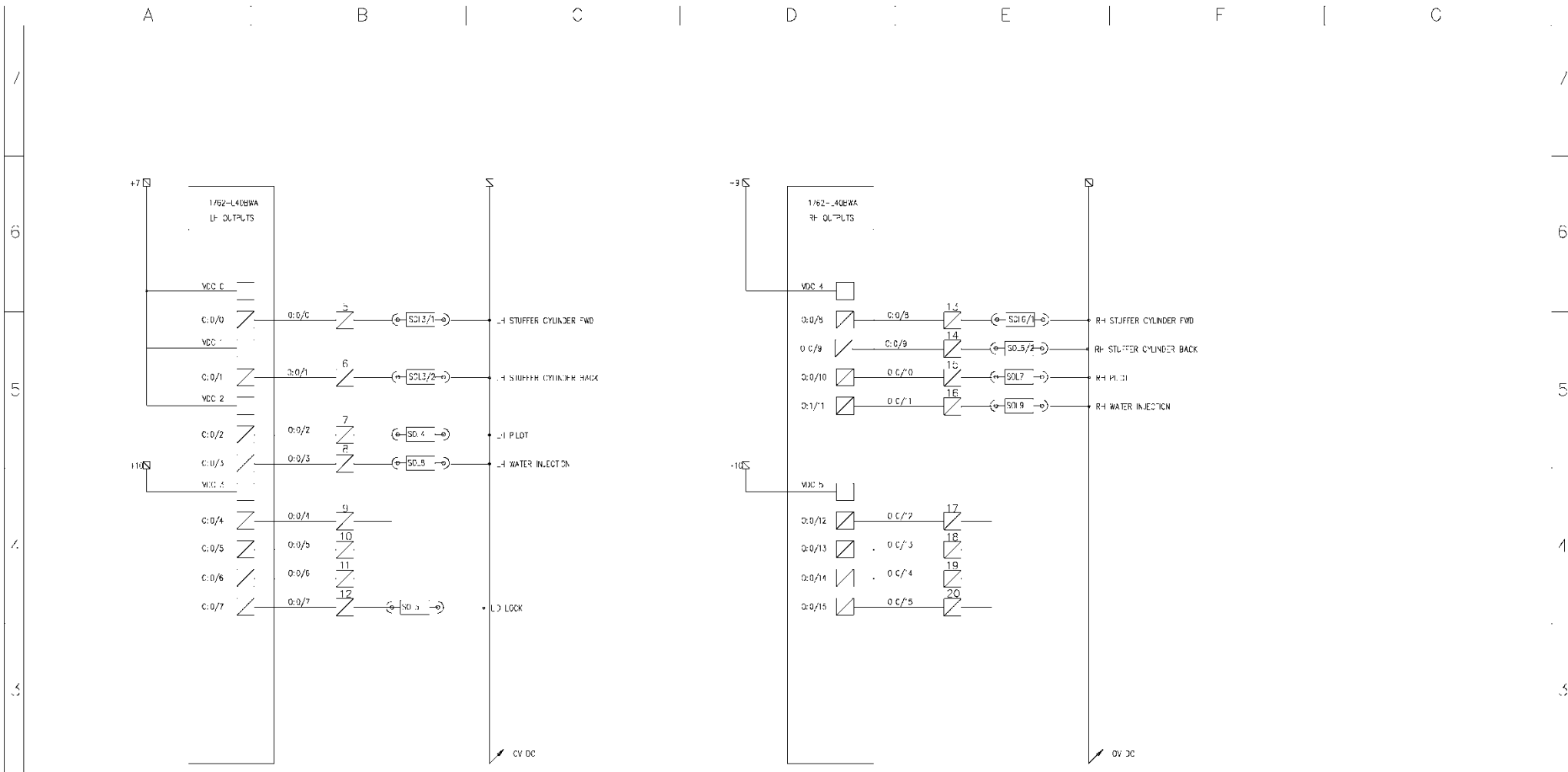
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ONE DECIMAL PLACE = 0.5mm  
TWO DECIMAL PLACES = 0.2mm  
ALL HOLES = -0.0mm +0.2mm

DRAWN Scott McKeivie 8/12/09  
CHECKED  
APPROVED

Scotnet Automation  
1 SINGER ROAD  
EAST KILBRIDE  
SC01 6ND  
G75 0XS

DRAWING NUMBER  
DS1200P6 E03  
ISSUE  
A





MODIFICATIONS  
 ORIGINAL 01

DIMENSIONS  
 IN  
 MILLIMETERS



TOLERANCE  
 NO DECIMAL PLACES  $\pm 1.0\text{mm}$   
 ONE DECIMAL PLACE  $\pm 0.5\text{mm}$   
 TWO DECIMAL PLACES  $0.2\text{mm}$   
 ALL HOLES  $-0.0\text{mm}+0.2\text{mm}$

Scotnet Automation  
 1 SINGER ROAD  
 EAST KILBRIDE  
 SCOTLAND  
 G75 0XS

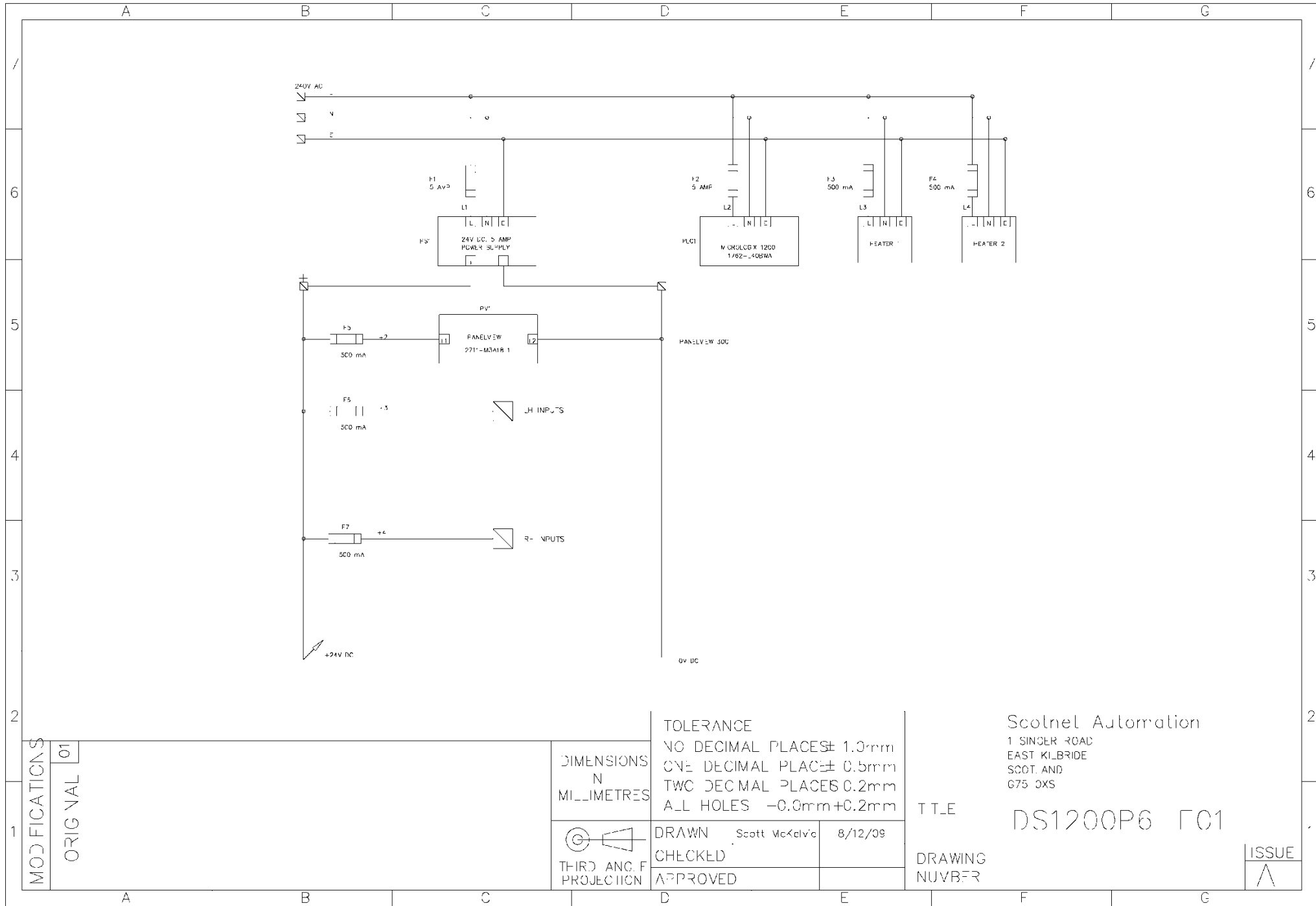
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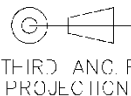
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MODIFICATIONS  
ORIGINAL 01

DIMENSIONS  
IN  
MILLIMETRES



TOLERANCE  
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ONE DECIMAL PLACE ± 0.5mm  
TWO DECIMAL PLACES ± 0.2mm  
ALL HOLES -0.0mm +0.2mm

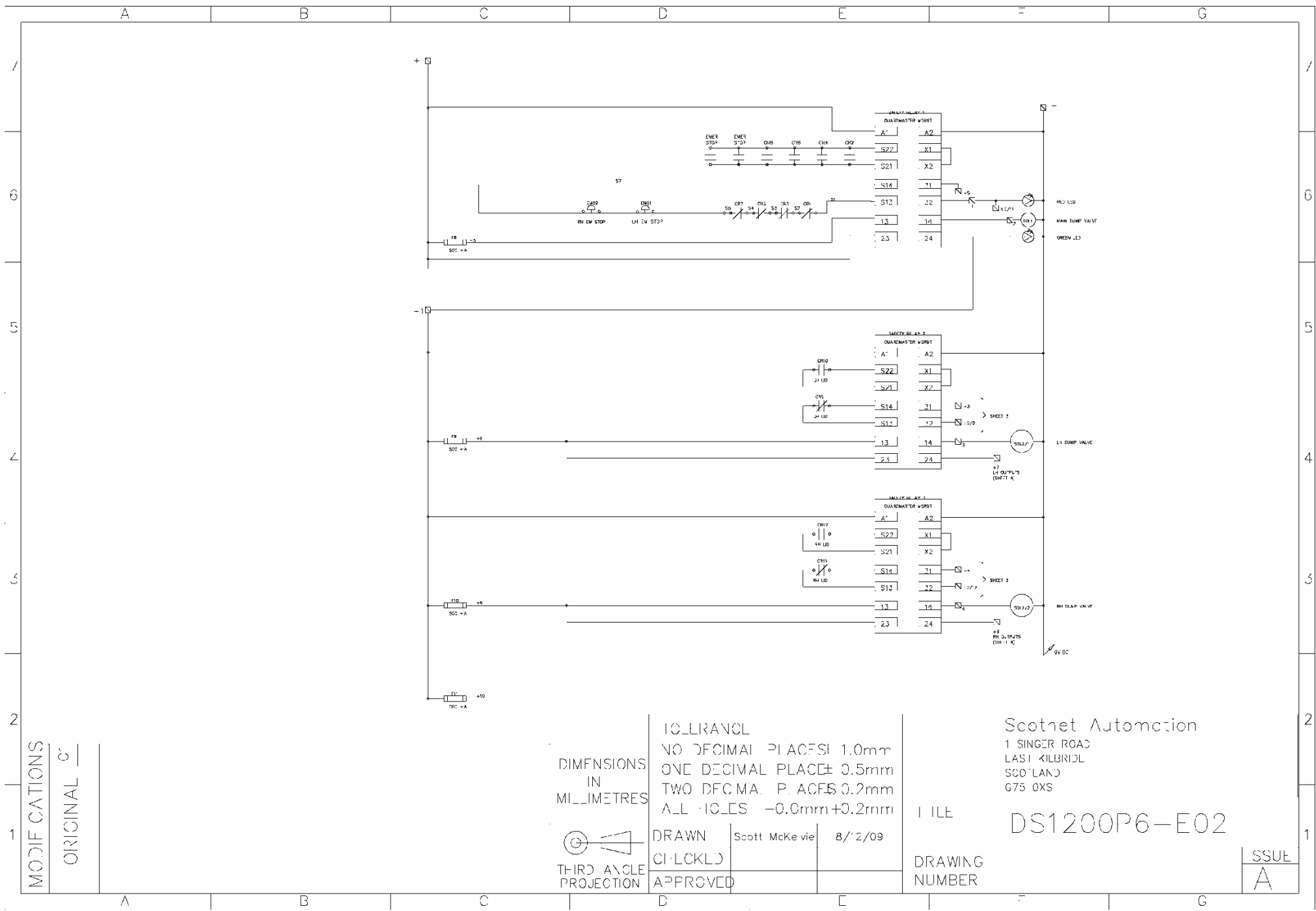
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EAST KILBRIDE  
SCOTLAND  
G75 0XS

TITLE DS1200P6 01

DRAWING  
NUMBER

ISSUE  
1



MODIFICATIONS  
ORIGINAL

DIMENSIONS  
IN  
MILLIMETRES

THIRD ANGLE  
PROJECTION

IO\_L1RANCL  
NO DECIMAL PLACE ± 1.0mm  
ONE DECIMAL PLACE ± 0.5mm  
TWO DECIMAL PLACE ± 0.2mm  
ALL DIMENSIONS -0.0mm +0.2mm

DRAWN	Scott McKevie	8/2/09
CI-LOCKED		
APPROVED		

FILE  
DRAWING  
NUMBER

Scotnet Automation  
1 SINGER ROAD  
LAST KILBRIDE  
SCOTLAND  
G75 0XS

DS1200P6-E02

ISSUE  
A



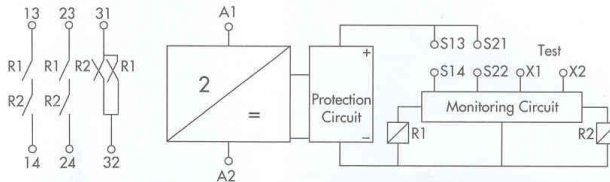
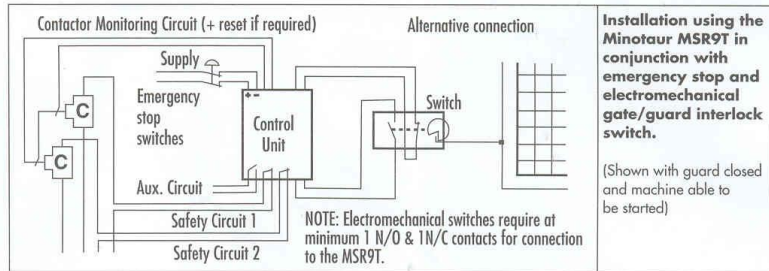
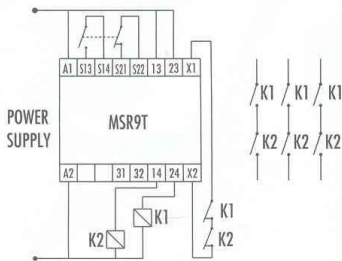
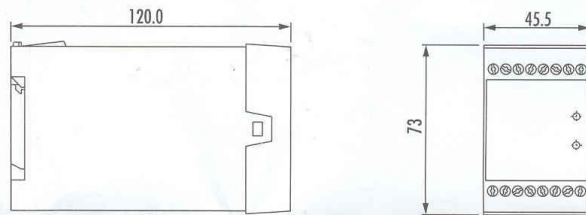
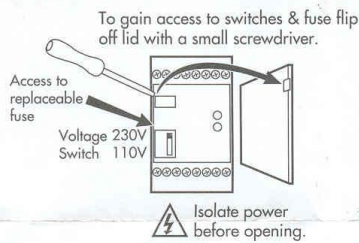
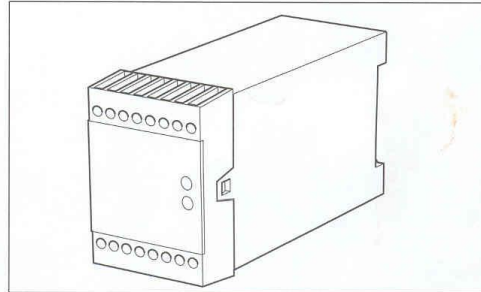
SCOTNET SOLUTIONS 33 CARRON PLACE EAST KILBRIDE GLASGOW G75 0QB SCOTLAND

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Guardmaster®

## MINOTAUR MSR9T

INSTALLATION INSTRUCTIONS / MONTAGEANLEITUNG / NOTICE D'INSTALLATION



### Technical Specifications

Power Supply: 24V AC/DC or 110/230 VAC selectable.  
 Power Consumption: 6VA.  
 Safety Inputs: 1N/O & 1N/C.  
 Safety Outputs: 2N/O & 1N/C.  
 Max. Switch: 250VAC/4A/1000VA Resistive  
 Voltage/Current/Load: 30VDC/2A/60VA Resistive.  
 Drop Out Time: 60ms.  
 Internal Fuse: 500mA T (Replaceable).  
 L.E.D Indication: Red = Power On  
 Green = Output Relays Closed.  
 Ambient Temperature: -10°C to +55°C.  
 Mounting: 35mm Din Rail.  
 Enclosure Protection: Housing IP40, Terminals IP20.  
 Housing: 16 Way, D=120mm, H=73mm, W=45mm.  
 Standard Conformity: EN 60204 - 1, EN 1088.

### Technische Daten

Entspricht den Normen: EN 60204-1, EN 1088.  
 Gehäuse: 16 Anschlüsse, T = 120mm, H = 73mm, B = 45mm.  
 Montage: Schnellbefestigung auf DIN-Normschiene.  
 Schutzart: Gehäuse IP 40, Anschlüsse IP 20.  
 LED-Anzeige: Rot = Betriebsspannung  
 Grün = Ausgangsrelais.  
 Betriebsspannung: 24 VAC/DC oder 110/230 VAC (umschaltbar).  
 Leistungsverbrauch: <2 VA.  
 Eingänge: 1 Ö und 1 S.  
 Freigabeausgänge: Relais 2 S + 1 Ö.  
 Schaltleistung: 4 A / 250 VAC / 1000 VA ohmsch  
 Sicherung: 2 A / 30 VDC / 60 W ohmsch.  
 Abfallzeit: 60 ms.  
 Umgebungstemperatur: -10°C bis +55°C.

### Specifications Techniques

Alimentation: 24V AC/DC ou 110/230 VAC  
 Sélection VAC.  
 Consommation: 6 VA.  
 Canal de sécurité: 1 N/O & 1 N/C.  
 Sortie de sécurité: 2 N/O & 1 N/C.  
 Pouvoir de coupure, Tension/Courant/Charge: 250 VAC / 4A / 1000 VA Résistant.  
 30 VDC / 2A / 60 VA Résistant.  
 Temps de scrutation: 60 ms.  
 Fusible interne: 500 MA T (Remplaçable).  
 Indication par LED: Rouge = ON  
 Vert = Relais de sortie connectés.  
 Température d'ambiance: de -10°C à 55°C.  
 Montage: Rail Din 35mm.  
 Etanchéité et résistance: Boîtier: IP 40  
 Terminaux: IP 20.  
 Boîtier: 16 voies, D = 120mm, H = 73mm  
 W = 45mm.  
 Conformité aux normes: EN 60204-1, EN 292.

 Allen-Bradley

Guardmaster®

Drawing No. 23879  
 Issue No. 0



## DS1200P6 & XP DOOR / LID / TUBE RELAY INFORMATION



- R1; LEFT HAND SIDE TUBE SENSOR LEFT
- R2; LEFT HAND SIDE TUBE SENSOR RIGHT
- R3; LEFT HAND SIDE DOOR SENSOR TOP
- R4; LEFT HAND SIDE DOOR SENSOR BOTTOM
- R5; RIGHT HAND SIDE TUBE SENSOR LEFT
- R6; RIGHT HAND SIDE TUBE SENSOR RIGHT
- R7; RIGHT HAND SIDE DOOR SENSOR TOP
- R8; RIGHT HAND SIDE DOOR SENSOR BOTTOM
- R9; LEFT HAND SIDE LID SENSOR LEFT
- R10; LEFT HAND SIDE LID SENSOR RIGHT
- R11; RIGHT HAND SIDE LID SENSOR LEFT
- R12; RIGHT HAND SIDE LID SENSOR RIGHT

THE MACHINE IS HANDED FROM LOOKING AT MACHINE FROM THE TUBE END