KEIT INDUSTRIAL ANALYTICS

IRmadillo™

Compressed Air Dryer and Filtration Unit

User Manual

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1. INTRODUCTION

The Air Dryer and Filtration unit is designed to provide dry clean compressed air at a controlled flow rate and pressure. The unit is intended to run on a compressed air source.

1.1. How it works

The Atlas Copco CD1.5+ adsorption dryer is a twin tower heatless regenerative desiccant dryer.

The general working principle of adsorption dryers is simple. Moist air flows over hygroscopic material (typical materials are silica gel, molecular sieves, activated alumina) and is thereby dried. The exchange of the water vapour in the moist compressed air into the hygroscopic material or “desiccant” causes the hygroscopic medium to be gradually saturated with adsorbed water.

The desiccant needs to be regenerated regularly to regain its drying capacity. Adsorption dryers are typically built with two drying vessels for this reason. Only one tower is operational at a time, while the other is regenerated.

The typical dew point that can be achieved at operational pressure is -70°C, which makes these dryers suitable for providing very dry air for more critical applications.

The pre-filters are required to prevent contaminants in the air supply from damaging the desiccant media, reducing efficiency and shortening the service life.

The air dryer is designed to be used for both individual or multiple instrument installs. If the intended use is for multiple instruments additional steps should be taken to maintain appropriate purge rates to all instruments. See Appendix 4 for a system diagram.

1.2. Components – External

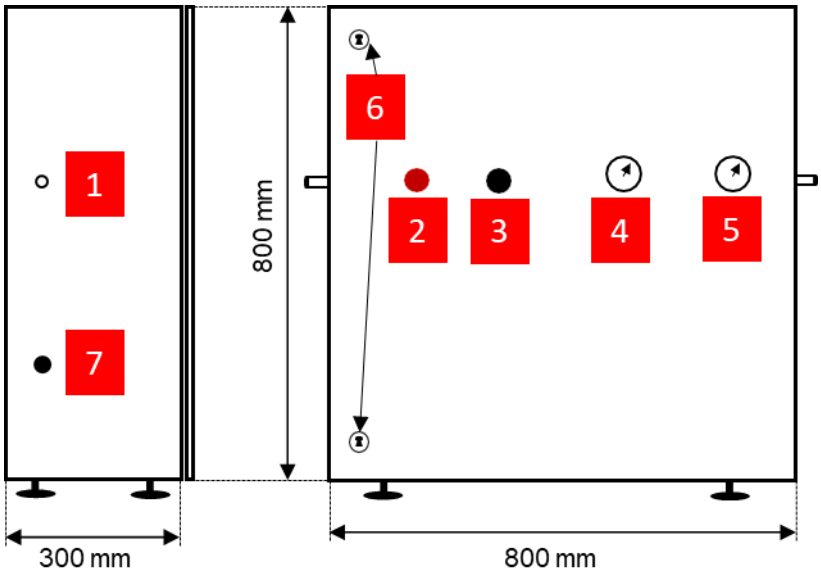


Figure 1: Cabinet Left Side and Front Exterior

1. **Air inlet**
   Inlet pressure: 6-10 bar
   Flow rate: ≤60 litres/minute
   Fitting: ¼" BSP female (¼" NPT adaptors supplied)
   Minimum inlet air quality: ISO 8573-1 Class 5.-.4
2. **Emergency stop button (twist to release)**
3. **Power switch**
4. **Inlet pressure gauge**
5. **Outlet pressure gauge**
6. **Locks**
   The cabinet must be locked to maintain its IP rating.
7. **Mains power input gland**
   Input power: 230 VAC or 110 VAC. Customer must wire power cable.

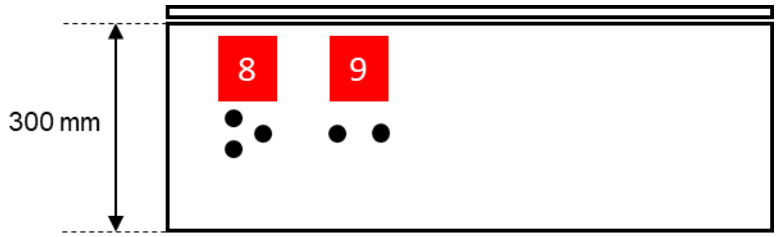


Figure 2: Cabinet Bottom Exterior

8. **Oil and water drains**
   Do not obstruct the drains.
9. **Exhaust silencers (also see Figure 5)**
   The unit will vent at timed intervals during normal operation. Do not obstruct the exhaust silencers.

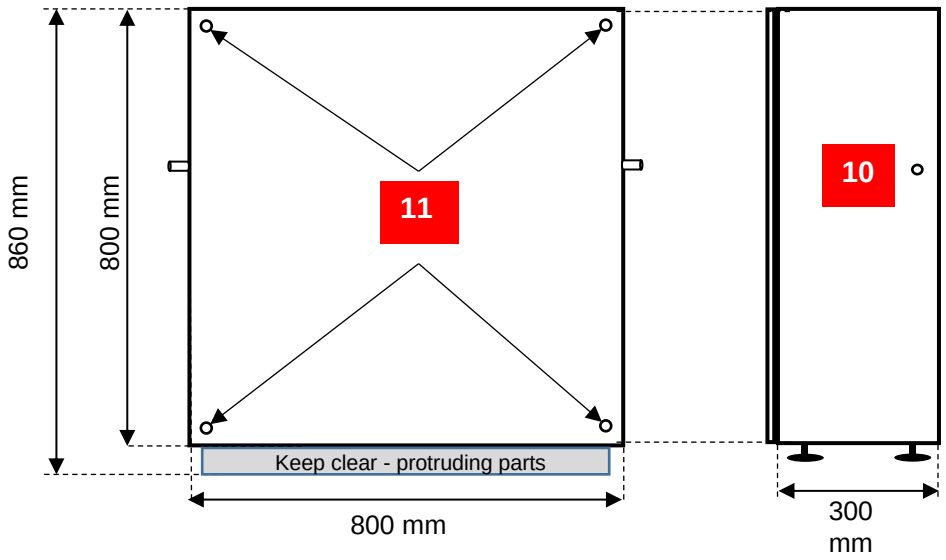


Figure 3: Cabinet Back Exterior and Right Side

10. Air outlet

¼" BSP female fitting. (¼" NPT adaptors supplied)

11. Rear through holes for wall mounting

Ø 9 mm. Keit recommends wall-mounting the unit, but it may also be free-standing on the provided feet.

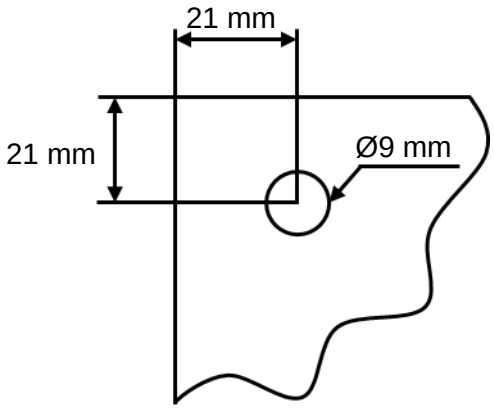


Figure 4: Rear through hole locations

1.3. Components – Internal

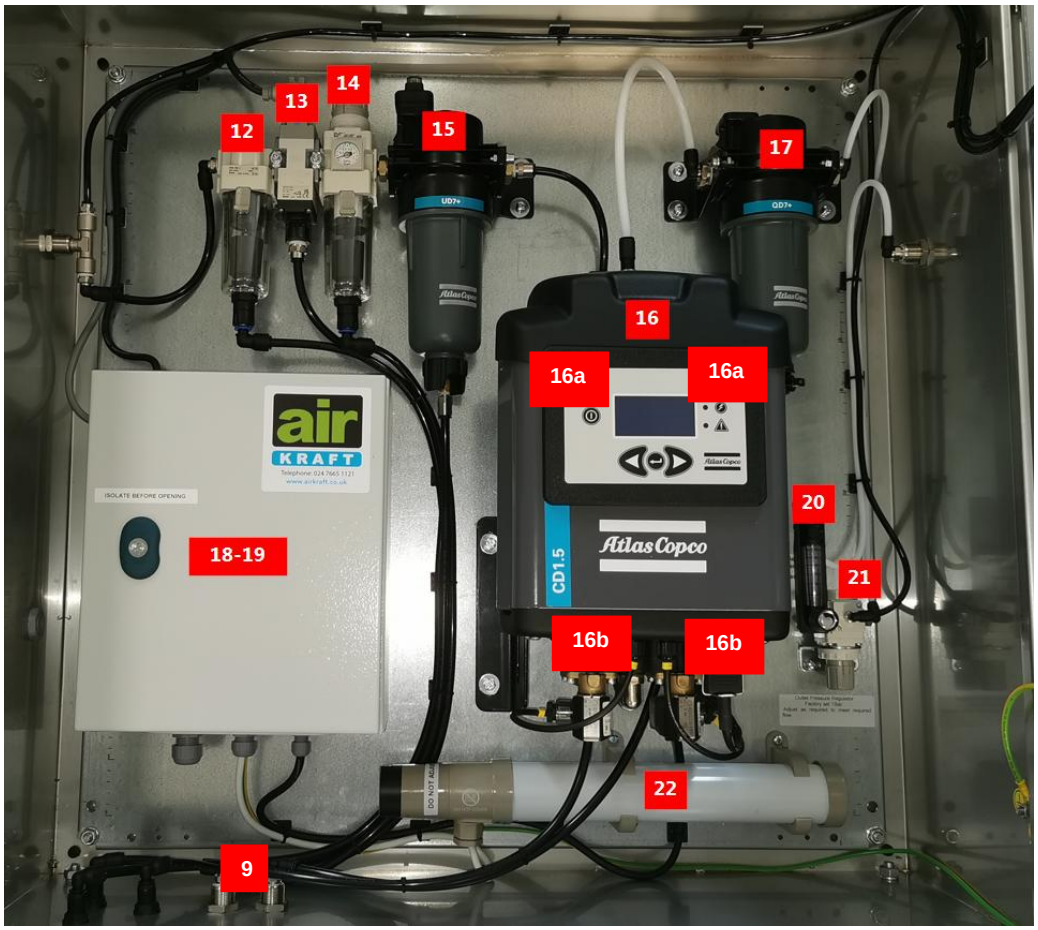


Figure 5: Internal view

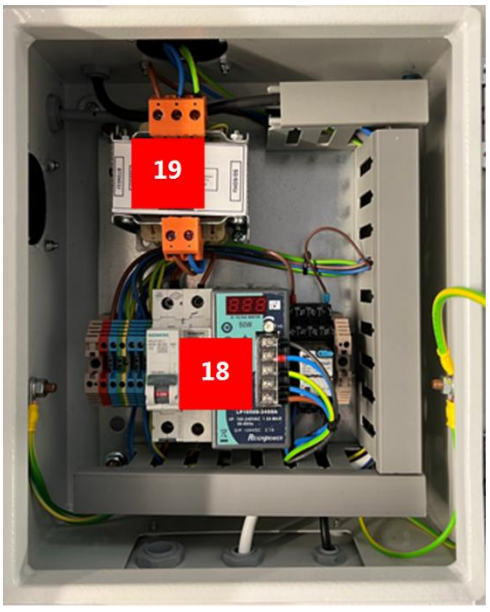


Figure 6: Electrical enclosure

12. **SMC AFD30 Mist separator**
13. **Shut-off valve**
14. **SMC AW30 Filter (5µm) with inlet pressure regulator**
    The regulator is factory set to 10 bar. Do not adjust.
15. **UD7+ Coalescing filter**
    rough filtering of oil aerosol & wet dust
16. **CD1.5+ Desiccant Dryer**
    removal of moisture
    16a. Desiccant cartridges
    16b. Solenoid valves
17. **QD7+ Activated carbon filter**
    removal of oil vapour
18. **24 V power supply**
    supplies item 13
19. **110 V-230 V transformer**
    (model-dependent)
20. **Outlet flow regulator**
    0-30 litres/min; factory set to 2 L/min
21. **Outlet pressure regulator**
    Factory set to 1 bar-g.
22. **Frost protection**
    Factory-set thermostat. Do not adjust.

2. USING THE DRYER

2.1. Starting the unit

1. Check that the Emergency shut off button (2) has not been engaged by twisting the button and feeling for a release.

2. Close the outlet flow control valve (10).

3. Connect the unit to a single-phase power supply (7) and to your compressed air supply (1).

4. Ensure that air is not escaping through the drain valve (8). If the inlet pipe is undersized, the initial pressure is too low, or pressure increases too slowly, the spring valve in the mist separator may fail to close—causing air to vent through the drain valve. If this occurs, briefly block the drain valve vents for a few seconds to allow the input pressure to rise, then rapidly release the vent to help the spring valve close properly.

5. Turn the unit on using the front panel switch (3). If the unit does not respond, check that the emergency stop button has not been depressed; twist to release.

6. Ensure that the inlet pressure gauge (4) reads the between 6 and 10 bar. The recommended pressure is 7 bar.

7. Leave the unit running for a minimum of three hours. This will ensure that the desiccant has regenerated, and the air outlet is dry.

8. Open the outlet flow control valve (10). Do not connect your spectrometer to the outlet valve at this point.

9. Set the outlet flow rate such that each spectrometer connected to the unit will receive 2 +/- 0.5 L/min, do this by opening the flow regulator (20). Take note of the flow rate set. For example, 5 spectrometers require a flow of 10 L/min.

10. For a single unit installation, connect the spectrometer to the dryer outlet (10) using Ø4 mm stainless steel or PTFE tube.
    For a multi-unit installation, connect your air drier to a manifold with an appropriate number of outlets. Connect to each spectrometer individually with Ø4 mm stainless steel or PTFE tube via a flow controller and balance the flow rate to each system so they each receive the recommended 2 L/min. See Appendix 4 for a system diagram.

11. Confirm that the measured flow rate is as set in step 8. If not, adjust the outlet flow control valve (20).

12. Close and lock the panel doors (6).

2.2. During regular use

The reservoirs on the mist separator (12) and 5μm filter (14) will gradually fill up as water is condensed out of the air. When full they will automatically empty themselves out of the drain vents (8) on the base of the unit.

A periodic observation check is advised to confirm they are draining effectively.

The bulbs can be manually emptied by turning the unit off using the front panel switch (3) and disconnect or isolate the air supply. This will open the spring valves on the mist separator and filter and allow the water to drain through the drain vents (8).

2.3. Stopping the unit

1. Turn off the unit using the front panel switch (3).

2. The compressed air in the unit will vent via the exhaust silencers on the base of the unit (9).

2.4. Long-term storage

The unit may be stored for up to six months at a temperature of 1-30°C in a non-condensing atmosphere. Keit recommends storing the unit in an indoor location. Maintenance should be carried out as per the schedule (see section 3.1).

3. MAINTENANCE

Maintenance must be performed periodically and only carried out by a suitably qualified and experienced person. Always turn off the unit by following the instructions in section 2.3 and isolate from power and compressed air supplies before conducting any maintenance.

While undertaking maintenance on the compressed air dryer and filtration unit, the accompanying spectrometer measurements may drift due to increased humidity levels. Please see the section on “Purging the IRmadillo” in the relevant spectrometer user manual for more information on purging and stabilisation period.

For maintenance parts, please contact your Keit technical support team or email us at support@keit.co.uk. Alternatively, you can reach out to your local Atlas Copco distributor for replacement kits.

For long term stability of IRmadillo measurements preventative maintenance must be performed. See section 3.1 for the schedule.

For instructions on how to replace individual components, please refer to section 4, Dryer Maintenance.

3.1. Maintenance schedule

Frequency	Item & Part No.	Activity
Monthly	**Visual Inspections**	
	Whole Unit	• Pressure gauges read correct values • Flow regulator set correctly • No internal air or liquid leaks • Internal cables in good condition
Every year	**Service A**	
	SMC AFD30 line filters PN: AFD30P-060AS	Replace filter elements found in: **Figure 5: Item 12, Follow section 4.1**
	SMC AW30 line filters PN: AF30P-060S	Replace filter elements found in: **Figure 5: Item 14, Follow section 4.2**
	Atlas Copco UD7+ line filter PN: 2901 2079 50	Replace filter elements found in: **Figure 5: Item 15, Follow section 4.3**
	Atlas Copco QD7+ line filter PN: 2901 2080 30	Replace filter elements found in: **Figure 5: Item 17, Follow section 4.2**
	Exhaust silencers PN: 04 01 7010	Replace silencers found in: **Figure 5: Item 9, Follow section 4.5**
Every 2 years	**Service B**	
	Includes Service A	Follow maintenance steps in Service A
	Atlas Copco CD1.5+ Dryer PN: 1629 2302 53	Replace desiccant cartridges found in: **Figure 5: Item 16a, Follow section 4.6**
Every 4 years	**Service C**	
	Includes Service A & B	Follow maintenance steps in Service A & B
	Atlas Copco CD1.5+ Dryer PN: 1629 2302 56	Replace exhaust solenoid valves found in: **Figure 5: Item 16b, Follow section 4.7**

4. DRYER MAINTENANCE

4.1. SMC AFD30 Filter Replacement

Figure 7: SMC AW30 Element

Figure 8: SMC AW30 disassembly

Figure 9: Bowl removed showing old filter

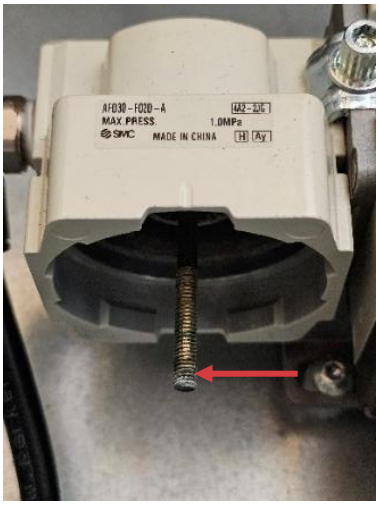


Figure 10: Old filer removed to reveal threaded core fastener

Task requires SMC AFD30 Filter Element (black); Part number AFD30P-060AS

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify SMC AFD30 filter element Figure 7.

2. Remove push fit drain hose Figure 8.

3. Push down the locking tab shown in Figure 8 and twist and pull the clear plastic filter bowl away from the filter head socket until the bowl disconnects from the assembly and set aside in a clean place.

4. The filter should now be visible, Figure 9.

5. Remove old the black filter, by twisting the filter down a standard right handed thread. Figure 10, the old sealing o-ring on the filter must be removed with the old filter.

SMC AFD30 Filter Replacement Continued

Figure 11: New filter

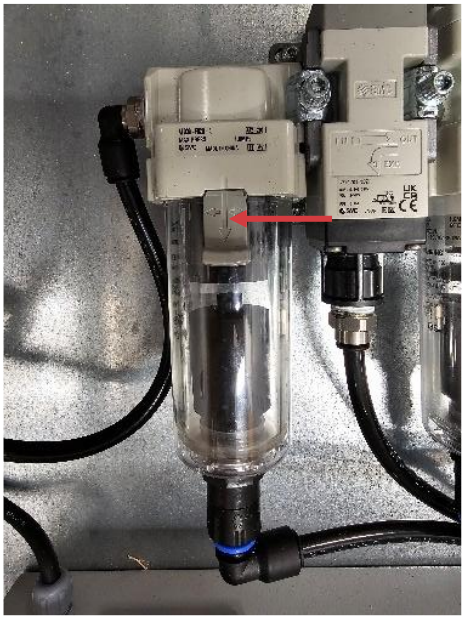


Figure 12: Maintenance complete, unit reassembled

6. Insert the black replacement filter with new o-ring seal onto the filter head socket threaded shaft and tighten until resistance is felt and the filter is fully inserted. Figure 11.

7. Insert the filter bowl. The filter bowl's grey tab should insert in an off-centre position.

8. Push filter bowl into filter head socket with barbs and slots engaged until hard stop.

9. Twist the filter bowl until the grey tab is in a centred position and clicks into the filter head groove. Figure 12.

10. Fully reinsert the drainage hose back into the push fitting in the base of the filter bowl. Figure 12.

11. SMC AFD30 maintenance complete.

4.2. SMC AW30 Filter Replacement

Figure 13: SMC AW30 Element

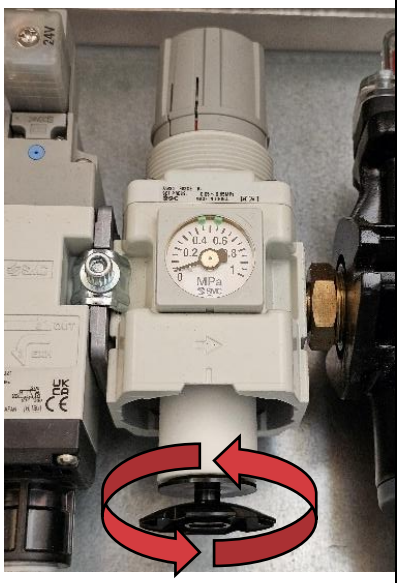


Figure 14: Bowl removed showing old filter

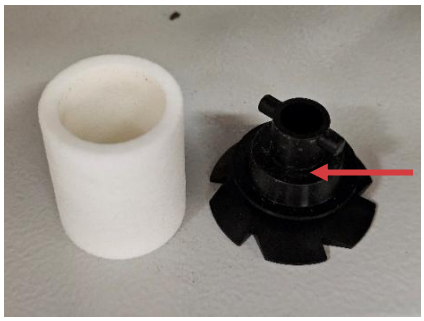


Figure 15: New filter and bayonet fastener

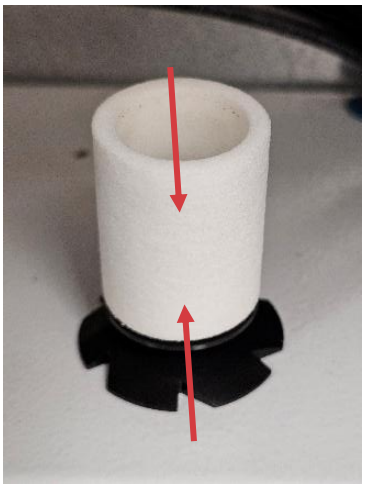


Figure 16: New filter preassembly ready for insertion

Task requires SMC AW30 Filter Element (white); Part number AF30P-060S

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify SMC AW30 filter element Figure 13.
2. Remove push fit drain hose Figure 13.
3. Pull down the grey locking tab shown in Figure 13 and twist and pull the clear plastic filter bowl away from the filter head socket until the bowl disconnects from the assembly and set aside in a clean place. Figure 14.
4. Remove the old white filter, by twisting the black plastic bayonet cap anticlockwise. Figure 14.
5. Discard old white filter.
6. Keep black bayonet fastener in a safe place. Figure 15.
7. With the black plastic bayonet fastener mounted inside the white filter as shown in figure 16.

SMC AW30 Filter Replacement Continued

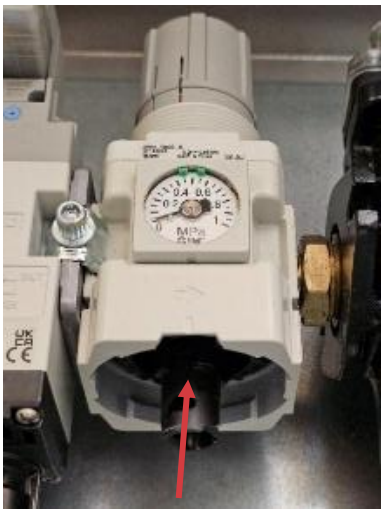


Figure 17: Female bayonet reciprocal on SMC AW30

Figure 18: Maintenance complete, unit reassembled

8. Insert the loose assembly into the filter head socket. Figure 17.

9. Fasten the filter by twisting the black plastic bayonet cap on to the filter clockwise until the barbs locate into the female connector channels. Figure 17.

10. Tighten until the filter is locked into position.

11. Insert the filter bowl. Align the filter bowl's grey tab as shown in Figure 18.

12. Push filter bowl into filter head socket with barbs and slots engaged until hard stop.

13. Twist the filter bowl until the grey tab clicks into the filter head groove.

14. Reinsert the drainage hose back into the push fitting in the base of the filter bowl. Figure 18.

15. SMC AW30 maintenance complete.

4.3. UD7+ Filter Replacement

Figure 19: UD7+ Filter Element

Figure 20: Push fit drain removed

Figure 21: Filter bowl removed showing old UD7+ filter

Figure 22: Filter with excessive O-ring lubricant grease

Task requires UD7+ Filter Element Kit; Part number 2901 2079 50

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify UD7+ Filter element Figure 19.
2. Remove push fit drain hose Figure 20.
3. Unscrew filter bowl and set aside in a clean place. Figure 21.
4. Remove old UD7+ filter, make note of its orientation in the filter head socket. Figure 21.
5. Discard of the old filter.

WARNING: if o-ring grease is on any parts, wipe it clean. Do not use solvent. The presents of grease in the air dryer filtration system could irreparably damage the IRmadillo. Figure 22.

UD7+ Filter Replacement Continued

Figure 23: New UD7+ filter

Figure 24: Inserting new UD7+ filter

Figure 25: New UD7+ filter inserted

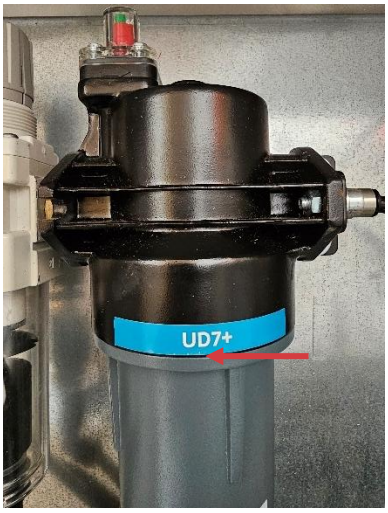


Figure 26: Filter bowl fastened with no gap at seam

6. Insert the replacement filter into the filter head socket. The filter should click into place in the same orientation as the old filter. Figure 24.

7. Replace o-ring on filter bowl, with new part found in filter kit. Figure 25.

8. Screw filter bowl back into filter head until their flanges meet a hard stop.

9. Reinsert the drainage hose back into the push fitting in the base of the filter bowl. Figure 26.

10. UD7+ maintenance complete.

4.4. QD7+ Filter Replacement

Figure 27: QD7+ Filter Element

Figure 28: Filter bowl removed showing old QD7+ filter

Figure 29: Filter with excessive O-ring lubricant grease

Figure 30: New QD7+ filter

Task requires QD7+ Filter Element Kit; Part number 2901 2080 30

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify QD7+ Filter element Figure 27.
2. Unscrew filter bowl and set aside in a clean place. Figure 28.
3. Remove old QD7+ filter, make note of its orientation in the filter head socket. Figure 28.
4. Discard of the old filter.

WARNING: if o-ring grease is on any parts, wipe it clean. Do not use solvent. The presents of grease in the air dryer filtration system could irreparably damage the IRmadillo. Figure 29.

QD7+ Filter Replacement Continued

Figure 31: New QD7+ filter inserted

Figure 32: Filter bowl fastened with no gap at seam

5. Insert the replacement filter into the filter head socket. The filter should click into place in the same orientation as the old filter. Figure 31.

6. Replace o-ring on filter bowl, with new part found in filter kit. Figure 31.

7. Screw filter bowl back into filter head until their flanges meet a hard stop. Figure 32.

8. QD7+ maintenance complete.

4.5. Exhaust Silencers Replacement

Figure 33: Exhaust silencers location

Figure 34: Identifying which fitting to remove

Figure 35: Exhaust silencer

Figure 36: Fastened silencers

Task requires 2x Exhaust Silencers; Part number 04 01 7010

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify Exhaust Silencers Figure 33.
2. The silencer is the smaller of the two hexagonals. Figure 34.
3. Remove both old silencers by unscrewing the body with a spanner Figure 34.
4. Fit new Exhaust silencers. Figure 35.
5. Tighten the threaded silencer until hard stop. Figure 36.
6. Perform this for procedure again for the opposite silencer.
7. Exhaust silencers maintenance complete.

4.6. CD1.5 Desiccant Cartridge Replacement

Figure 37: CD1.5 desiccant dryer

Figure 38: Removing push fit piping

Figure 39: Cover fasters locations

Figure 40: Cover removed exposing desiccant chamber cap

Task requires CD1.5 Desiccant Cartridge Kit; Part number 1629 2302 53

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify CD1.5 Desiccant Dryer Figure 37.
2. Remove push fit drain hose from the top of the dryer Figure 38.
3. Remove the 4x Screws (2x screws on either side) shown in figure 39.
4. Lift off black dryer top cover Figure 40.

CD1.5 Desiccant Cartridge Replacement Continued

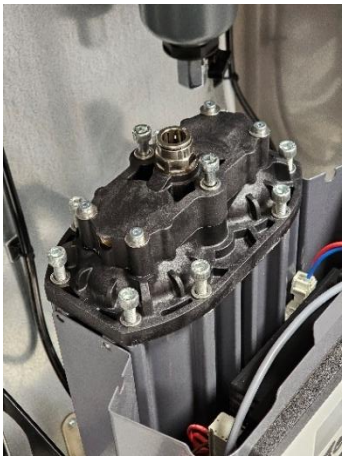


Figure 41: Removing cap fasteners

Figure 42: Removed cap reveals desiccant cartridges

Figure 43: New desiccant cartridge

Figure 44: Desiccant chamber cartridge key ways

Figure 45: Cartridge reciprocal keys

Figure 46: Desiccant chamber cap with new gasket

5. Remove the 10x Screws. Making note of which screws came from which holes. Figure 41.
6. Remove black desiccant cap shown in figure 41.
7. Pull out old cartridges by the black handles shown in figure 42.
8. Discard old desiccant cartridges.
9. Insert new cartridges into the desiccant chambers. Figure 43.
10. The cartridges can only be inserted in the correct orientation due to the keyed tips. Rotate until the cartridge vertically drops into place. Figure 44 & 45.

CD1.5 Desiccant Cartridge Replacement Continued

Figure 47: (LEFT) Good cartridge installation cartridge – (RIGHT) Bad cartridge installation

Figure 48: Cap fastened with screws

Figure 49: Maintenance completed

11. Push cartridges in firmly. You should feel resistance from their o-ring seals. The Cartridge should click into place and sit fully inserted into the chamber. see figure 47.

12. Replace end cap with new gasket from kit. Figure 46.

13. Assembly end cap back over the desiccant chambers, check that the gasket placement on the end cap is well positioned for a good seal. See figure 48.

14. Return all 10x screws to their end cap hole loactions as noted earlier and tighten screw to 8 N.m.

15. Reattach black dryer top cover with 4x screws.

16. Insert purge pipe back into push fit fitting on the top of the dryer. Figure 49.

17. CD1.5 Desiccant maintenance complete.

4.7. CD1.5 Solenoid Valve Replacement

Figure 50: Solenoid valves location

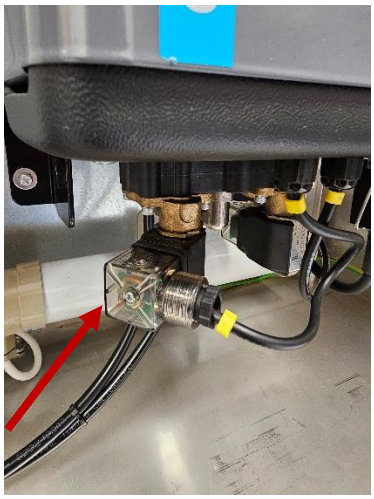


Figure 51: Solenoid valve plug fastener removal

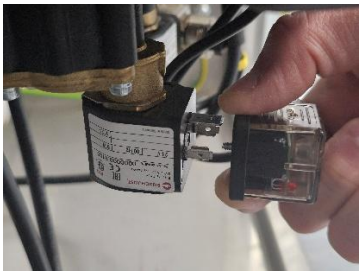


Figure 52: Correctly disconnecting solenoid valve plug

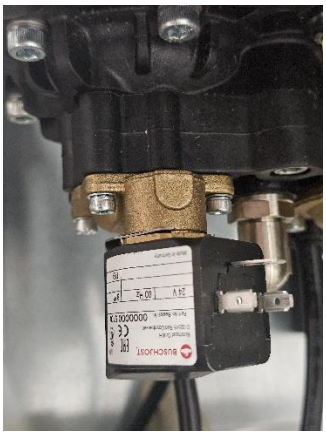


Figure 53: Removing solenoid body fasteners

Task requires CD1.5 Solenoid Valve Kit; Part number 1629 2302 56

WARNING: UNIT MUST BE POWERED OFF AND DEPRESSURISED BEFORE PERFORMING THIS MAINTENANCE PROCEDURE.

1. Identify CD1.5 dryer solenoid valves Figure 50.

2. Rotate the solenoids black body until the clear plastic plugs faces toward you with the fastening screw showing. Figure 51.

3. Loosen the screw fastening the clear plastic plug to the solenoid body until plug can be removed. Figure 52.

4. Disconnect the solenoid valve plug.

   BEWARE: The clear plastic cover is now loose.

   TO REMOVE CORRECTLY: Pinch the top and bottom of the clear plastic cover and the rubber gasket at the same time. The plug internal must disconnect with the cover. See figure 52.

   STOP IF: the plug is seized onto the solenoid pins and the internals are coming out when pulling the plug cover. Incorrect removal will damage the wiring.

   An insulated tool may be used to aid the removal of the plug internals.

5. Making note of which screws came from which holes. Remove the 4x screws holding the solenoids brass plate to the base of the dryer. Figure 53.

CD1.5 Solenoid Valve Replacement Continued

Figure 54: Solenoid valve with diaphragm correctly orientated

Figure 55: Solenoid diaphragm key hole alignment

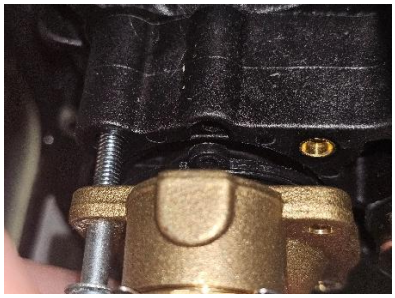


Figure 56: Diaphragm key alignment with housing key way

Figure 57: Solenoid seated without gap or diaphragm pinching

Figure 58: Pin insert alignment for plug and fastener

6. Discard the old solenoid.

7. Fit the new solenoid valve assembly with the rubber diaphragm points facing up as see in Figure 54.

8. The rubber diaphragm has a key on one side with a hole in it. The keys hole must be aligned with the hole in the solenoid brass base. Figure 55.

9. Lift the replacement solenoid into its assembly position with the diaphragm facing up. The key on the diaphragm must locate into the keyed profile seen in Figure 56.

10. The solenoid brass base must seat with no gaps present. The diaphragm must not be pinched. Figure 57.

11. Tighten all 4x screws back into their holes. All screw must have their locking washers on. Figure 57.

12. Reconnect the solenoid plug on to the 3 pin solenoid terminal. See Figure 58.

13. Tighten the fastening screw at the core of the plug until the rubber gasket is compressed. Do not over tighten.

14. Repeat this procedure on the opposite solenoid.

15. CD1.5 Solenoid maintenance complete.

5. TECHNICAL SPECIFICATIONS

Power Supply	Value
Voltage (Standard)	240 VAC
Voltage (Option)	110 VAC
Recommended Supply Type	Single phase, 13 A
Approximate Maximum Load	100 W
Recommended Fuse	5 A

Limits	Units	Min	Recommended	Max
Compressed air inlet pressure	Bar(g)	6	7	10
Ambient temperature	°C	-10	-	55
Inlet compressed air temperature	°C	1.5	35	60
Inlet compressed air humidity	%RH	0	-	100
Inlet compressed air flow	litres/min	-	-	60

Compressed Air Quality to ISO 8573-1	Particulate	Water	Oil
Inlet compressed air quality - minimum class requirement	5	-	4
Outlet compressed air quality class	1	2	1

Other	Value
Dimensions	H800 x W800 x D300 mm
Panel IP rating (doors shut and locked)	IP54 (Nema 3)
Siting requirements	Avoid direct sunlight

6. LIST OF PARTS

Refer to the parts list checklist attached to the inside of the door to confirm the following (expected) part numbers:

DFU01 Parts List	Part No.
Atlas Copco Dryer CD1.5+	8102361763
Atlas Copco UD+ series, Coalescing filter (G1/2")	See part
Atlas Copco CD1.5+ Mount Bracket	CDBR261802
Atlas Copco QD+ series, Activated carbon filter (1/2")	See part
SMC Mist Separator G1/4"	SMAFD30
SMC 3/2 Valve G3/8" 24Vdc Modular	SMVP517Y
Flow Controller (1 l/min)	2510A4A40BVBN
Filter/Reg G1/4 (Auto drain) square gauge	SMAW30
Regulator G1/4"	SMAR20
Heater & Thermostat Control - 40W	1FT-TUHE-STAT
Electrical Enclosure H186 x W120 x D126 (230V Small)	EUMC18CD-230
Power Supply - 40v-24VDC 2.5A	OMPS230-24
Relay - 24CDC	RERN2-2012
Breaker -Europa B2 230V	EUBRB2-230
Breaker -Europa C6 230V	EUBRC6-230
Large Internal Enclosure (110/230V Transformer)	EUMC65C-110
Transformer 110V/230V 100W (100VA)*	110-230-BT58711

*Transformer is fitted to 110 V models only.

7. WARRANTY

The manufacturer's warranty lasts 12 months from the date of shipment.

Warranty is on a return to manufacturer basis although the major components are covered globally by the respective manufacturers via local distributor networks.

Find your nearest distributor or service centre via the manufacturers' websites:

Atlas Copco: https://www.atlascopco.com/en-uk/sys/in-your-country

SMC Pneumatics: https://www.smc.eu/en-gb/worldwide-addresses

8. APPENDIX 1 – ELECTRONICS ENCLOSURE DETAIL VIEW

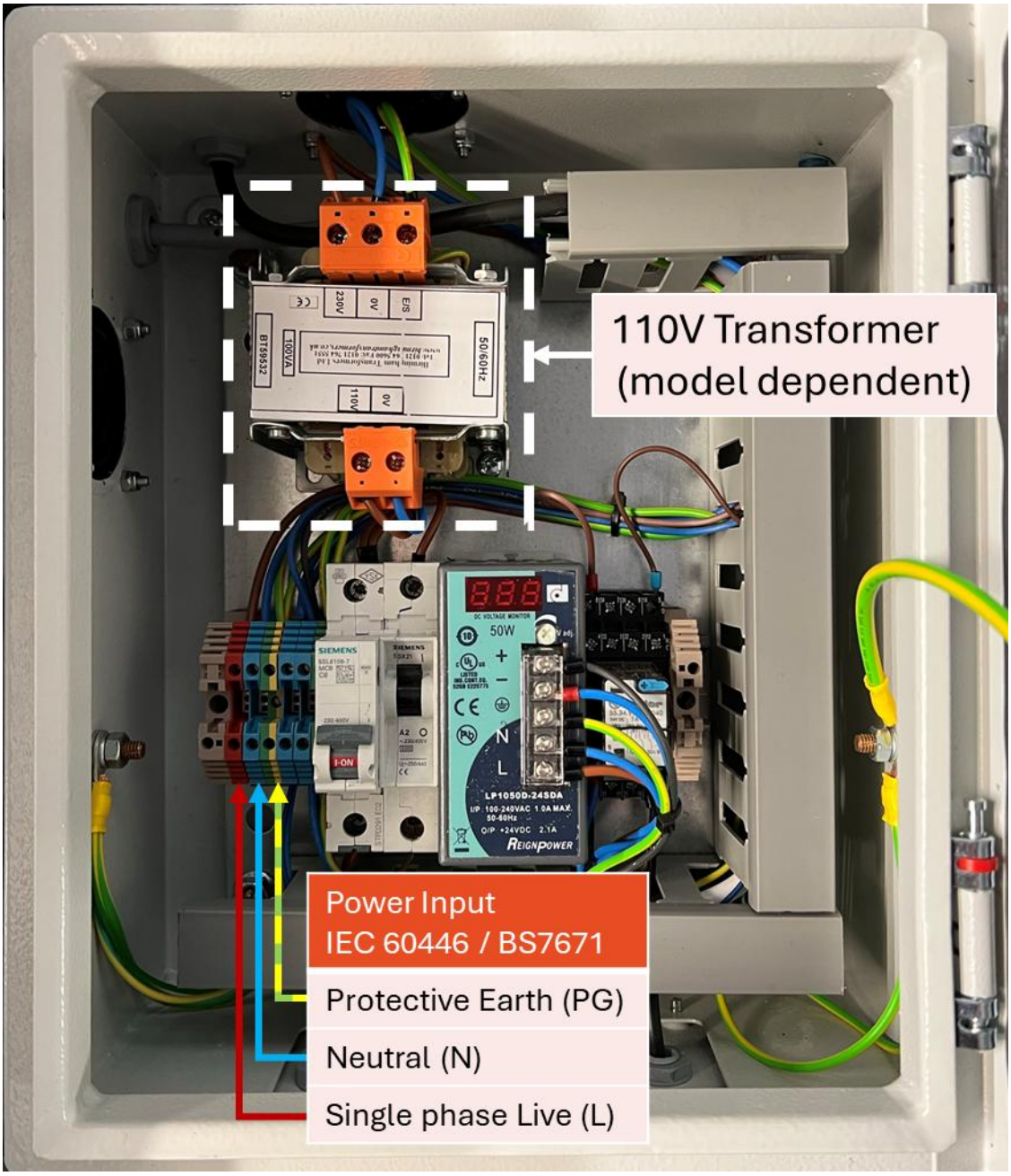
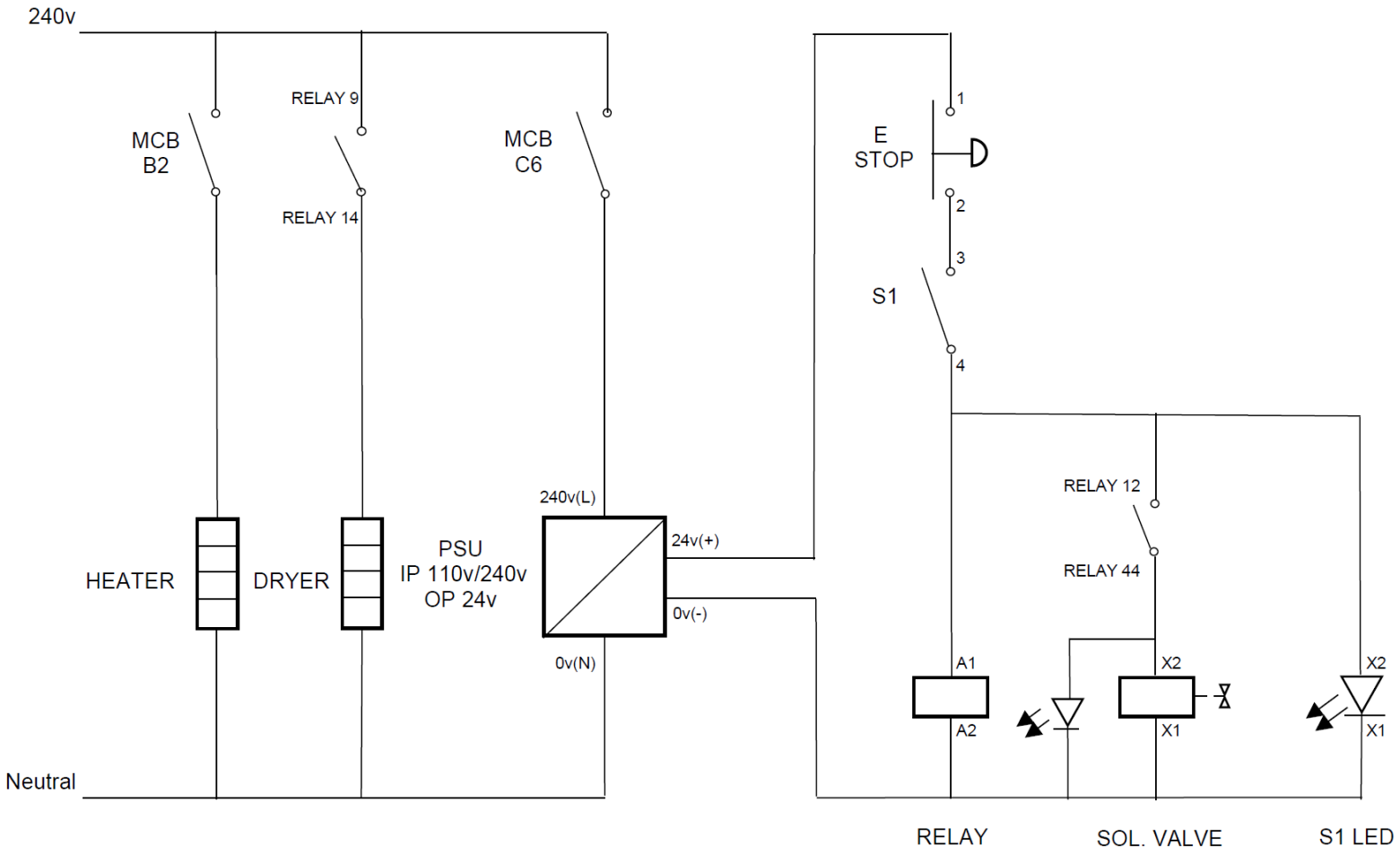
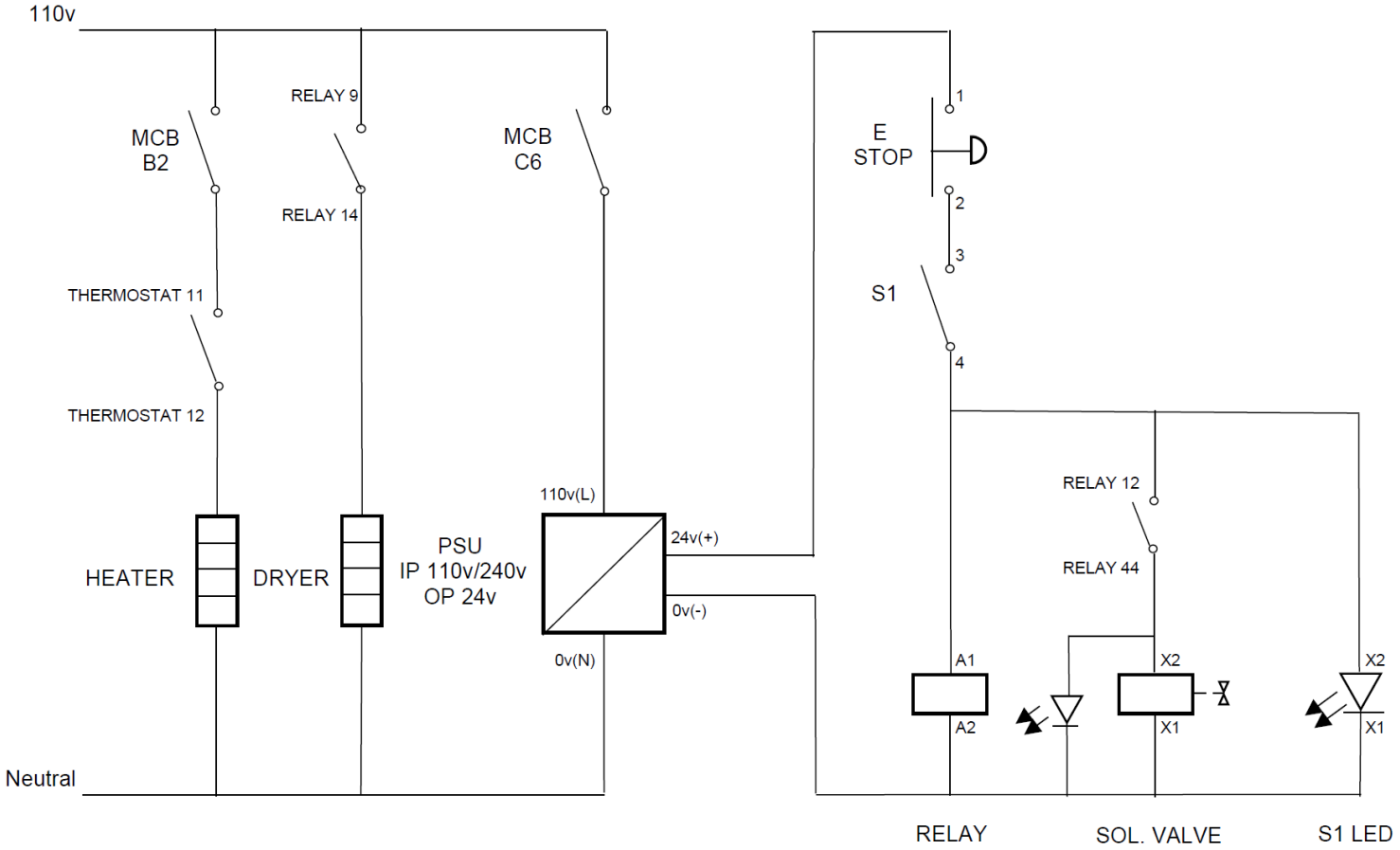


Figure 59: Single phase power should be connected via the labelled connectors for both 110V and 240V models.

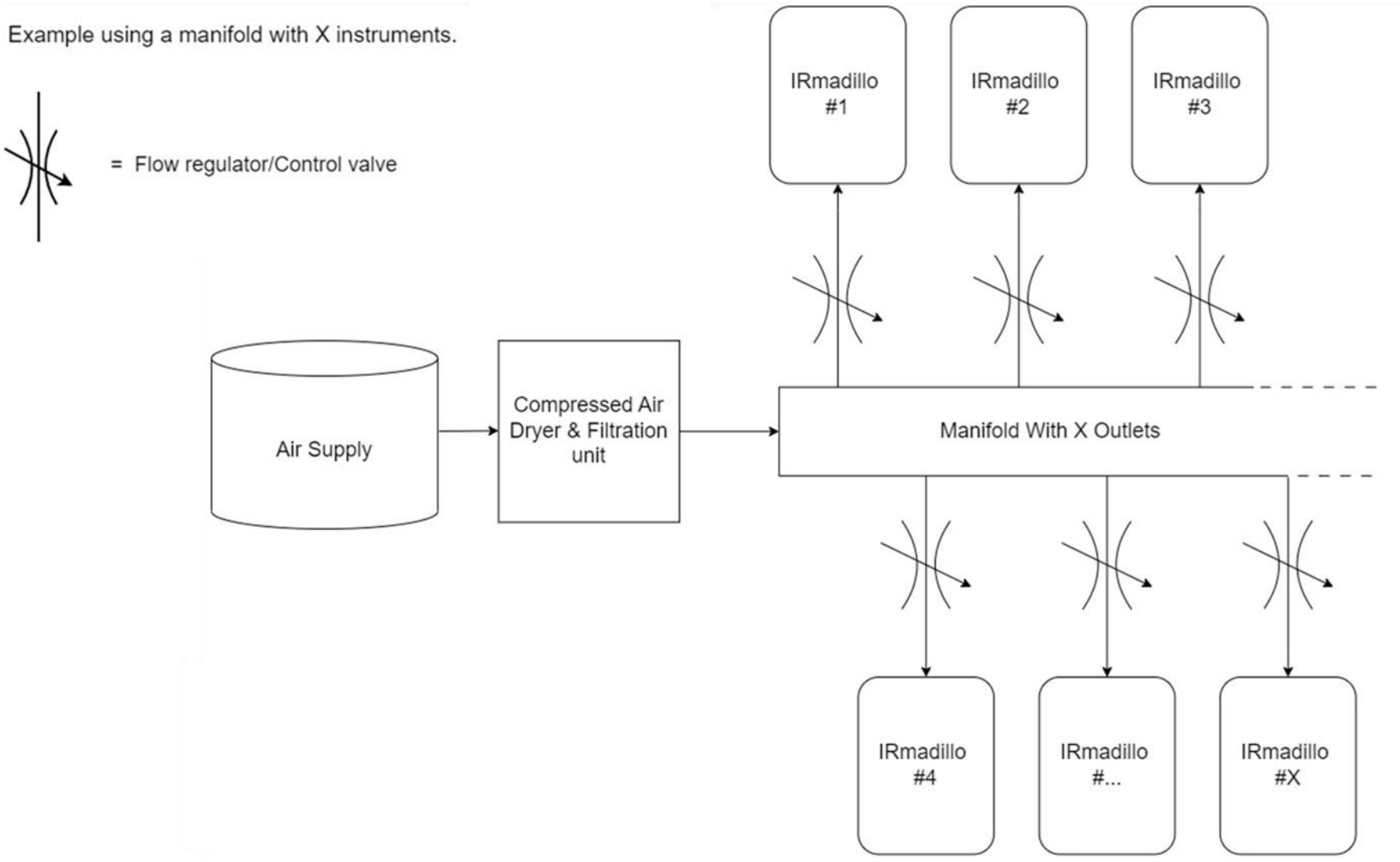
9. APPENDIX 2 – CIRCUIT DIAGRAM FOR 240V VERSION



10. APPENDIX 3 – CIRCUIT DIAGRAM FOR 110V VERSION



11. APPENDIX 4 – PURGE SETUP FOR MULTIPLE INSTRUMENTS



MAINTENANCE SCHEDULE TABLE PRINT OUT

ATTACH TO DRYER UNIT

SERVICE	DATE OF INSTALL:……	DATE MAINTAINED			
	Item	Year 1	Year 2	Year 3	Year 4
S-A	SMC AFD30 Filter Element (black) Part Number: AFD30P-060AS				
	SMC AW30 Filter Element (white) Part Number: AF30P-060S				
	UD7+ Filter Element Kit Part Number: 2901 2079 50				
	QD7+ Filter Element Kit Part Number: 2901 2080 30				
	Exhaust Silencers Part Number: 04 01 7010				
S-B	Cartridge Kit Desiccant Part Number: 1629 2302 53				
S-C	Solenoid Valve Kit Part Number: 1629 2302 56				