



**AIR CONTROL
INDUSTRIES**

shaping air movement since 1969

SPOT DRYER

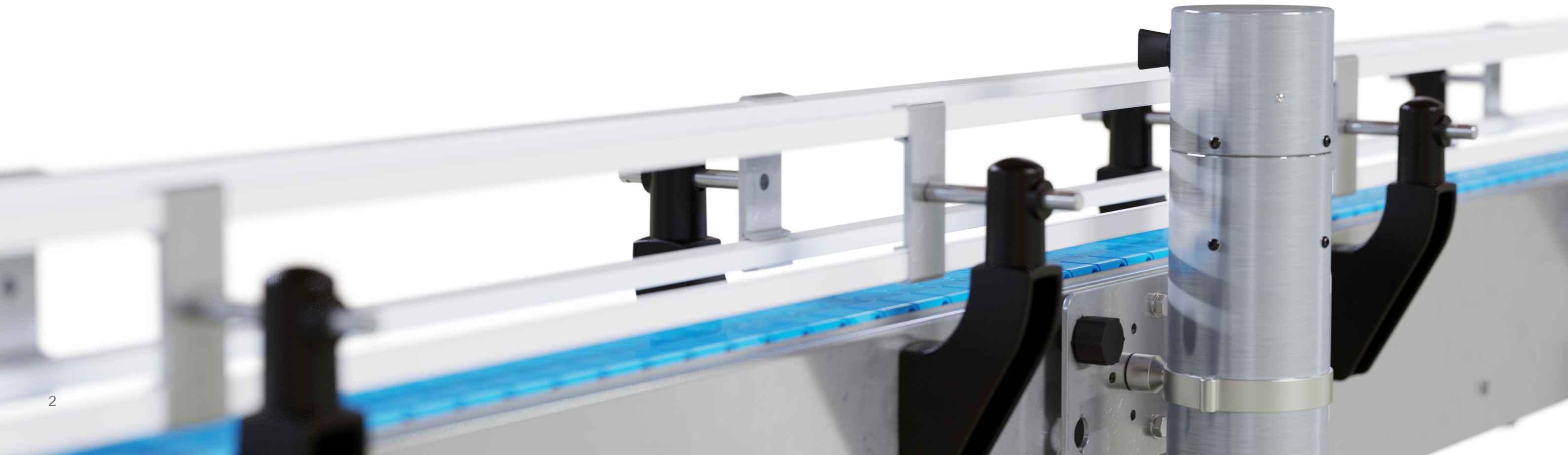
OPERATOR MANUAL

ACM-0133 [ISSUE 2]



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1. General Instructions

The proper use of tools, lifting equipment and safety regulations (PUWER & LOLER) may be applicable. All items will have packing weights and are able to be moved by their pallets. Once off pallets all items are designed to be moved by manual handling equipment.

- Unpack the containers and check off all of the components against the provided delivery notes.
- Check for damage on arrival. Please check for any transit damage and report it to ACI immediately.
- Follow installation procedures, outlined in this manual.



Refer to Manual

Consult the manual for detailed technical information, instructions on installation and commissioning, as well as troubleshooting guides.



Personal Protective Equipment (PPE)

As an industrial machine, it is mandatory to wear appropriate personal protective equipment (PPE) when working on or with it. Failure to adhere to this requirement could lead to personal injury.



Rating Plate

This machinery is exclusively designed for use at the rating plate duty only. Any unauthorised, removal of covers or guards, improper use, incorrect operations, or insufficient maintenance could result in severe personal injury.



Electrically Isolate

Prior to making any adjustments to the system, it is essential to electrically isolate the relevant electrical components.

2. General Safety Instructions

Those responsible for the safety of the installation must ensure that:

- Always install in an area that has been risk assessed.
- Only qualified personnel are entrusted to work on the unit.
- These persons always have at their disposal the operating instructions and other product documentation supplied when they do such work, and that they undertake to follow consistently any such instructions.

Qualified personnel are persons who, on account of their training, experience and knowledge of relevant standards, specifications, accident prevention regulations and operating conditions, have been authorised by those responsible for the safety of the plant to carry out the necessary work and who can recognise and avoid possible dangers. IEE and other relevant regulations should also be observed.



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It is assumed that the basic planning work for the installation and all work concerning transport, assembly, commissioning, maintenance, and repair is carried out by qualified personnel. Note should be taken of the following:

- Technical data and information on permissible use, please see motor & inverter rating plates.
- General building, installation, machine fixing and safety regulations.
- The use of personal protective equipment.
- No covers should be removed before the unit is electrically isolated at source.
- Lock-off the electrical supply before any installation or maintenance work is undertaken.

These instructions cannot claim to cover all details of possible equipment variations, nor can they provide for every possible example of installation, operation or maintenance. The specified maintenance and inspection measures must be carried out regularly by trained service personnel in order to avoid any interruptions or breakdowns. Deviations from 'normal' performance (i.e. higher temperatures or vibrations from the equipment) indicate that there is likely to be a malfunction within the equipment.

In order to avoid faults the responsible maintenance personnel must be notified immediately.



Electric Shock

If the connecting cable to the system sustains damage, there is a potential risk of electric shock that could result in fatalities. It is imperative to promptly address such defects. For electrical safety ensure the unit/ system is properly grounded.



Open Inlet and or Discharge

It is imperative that no object be inserted into the air inlet or discharge. In the interest of safety you must never operate the equipment without the appropriate drying system properly attached.

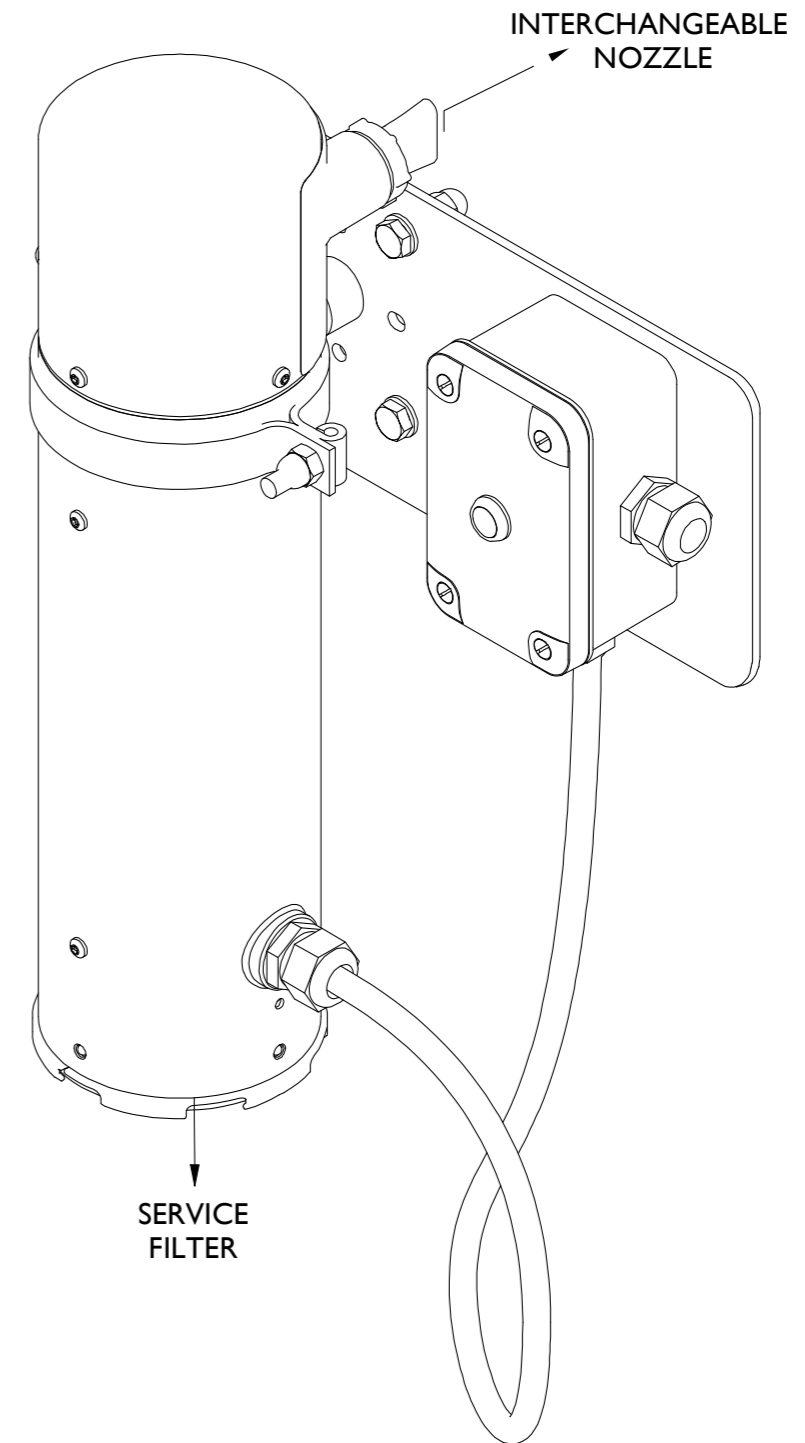
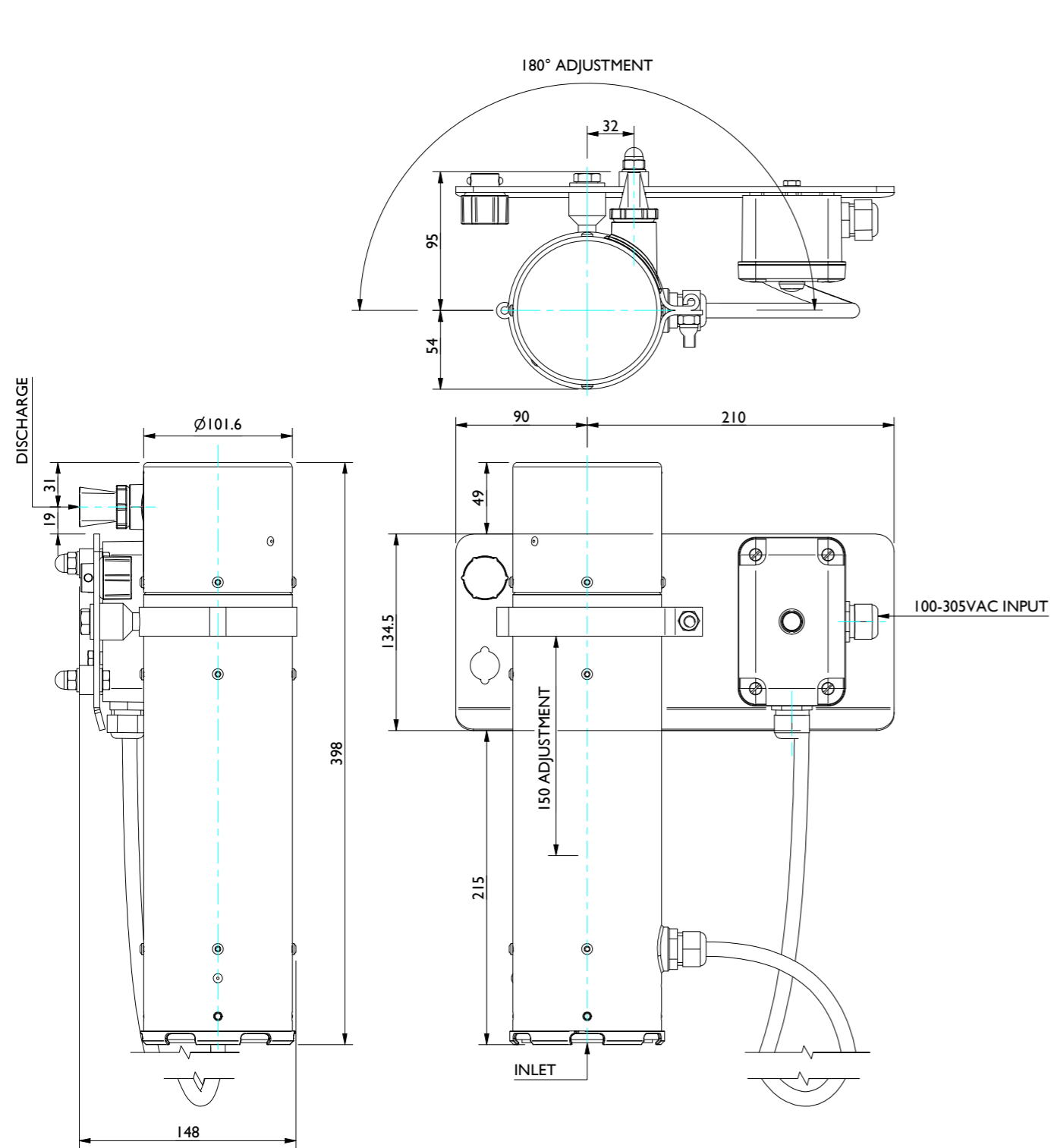
Position away from personal and or guard suitably.



High Pressure Liquids

Do not direct pressurized water/ liquid into the inlet or discharge as this may cause water ingress and lead to permanent damage to the system!

3. Technical Data: Outline Drawing



4. Technical Data: Installation



Refer to Manual

Consult the manual for detailed technical information, instructions on installation and commissioning, as well as troubleshooting guides.



Personal Protective Equipment (PPE)

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Rating Plate

This machinery is exclusively designed for use at the rating plate duty only. Any unauthorised, removal of covers or guards, improper use, incorrect operations, or insufficient maintenance could result in severe personal injury.

Risk Assessment: Prior to commencing the installation, a thorough risk assessment must be conducted to identify potential hazards, evaluate associated risks, and implement necessary mitigation measures.

Qualified Personnel: The installation must be carried out by a trained, competent, and certified individual and install in accordance with applicable local laws, standards, and regulations.

The spot dryer is a fixed installation integrated directly with production equipment, typically associated with a conveyor system.

Before performing any installation, commissioning, maintenance, or cleaning tasks on the spot dryer, you must switch off and isolate the conveyor system. Or other nearby conveying/ moving equipment.

Be vigilant of any approaching or moving elements within the environment. Failing to eliminate these risks can result in severe injuries or fatal accidents.

Always ensure the equipment is fully powered down, isolated, and secured against unintentional startup before beginning work. Follow all lockout/tagout LOTO procedures as required.

Power Supply Protection: The power supply to the installation must be safeguarded with a 30mA Residual Current Device (RCD) or Residual Current Breaker with Overcurrent Protection (RCBO).

Cable and Gland Selection: It is essential to ensure the input cable is appropriate for the application, The power input must be terminated using the gland provided. Should the supplied gland be unsuitable for the specific conditions of use, replace it with a suitable IP66-rated gland.

Restricted Use: This equipment is to be installed, maintained, and operated solely by trained personnel who are familiar with the relevant safety protocols and operational requirements.



The Spot Dryer AZ-100 comes standard with a mounting bracket, designed to offer a stable and hygienic solution for attaching the dryer directly to production equipment, typically conveyors.

Mounting Features

The mounting bracket allows for secure installation on production infrastructure with adjustable height (up and down) and rotational adjustment via the included hinge clamp. The mount also features temporary storage slots for up to two (2) interchangeable nozzles. An IP66-rated switch box is integrated into the mount.

4. Technical Data: Installation Continued



Open Inlet and or Discharge

It is imperative that no object be inserted into the air inlet or discharge. In the interest of safety you must never operate the equipment without the appropriate drying system properly attached. Position away from personal and or guard suitably.



Refer to Manual

Consult the manual for detailed technical information, instructions on installation and commissioning, as well as troubleshooting guides.

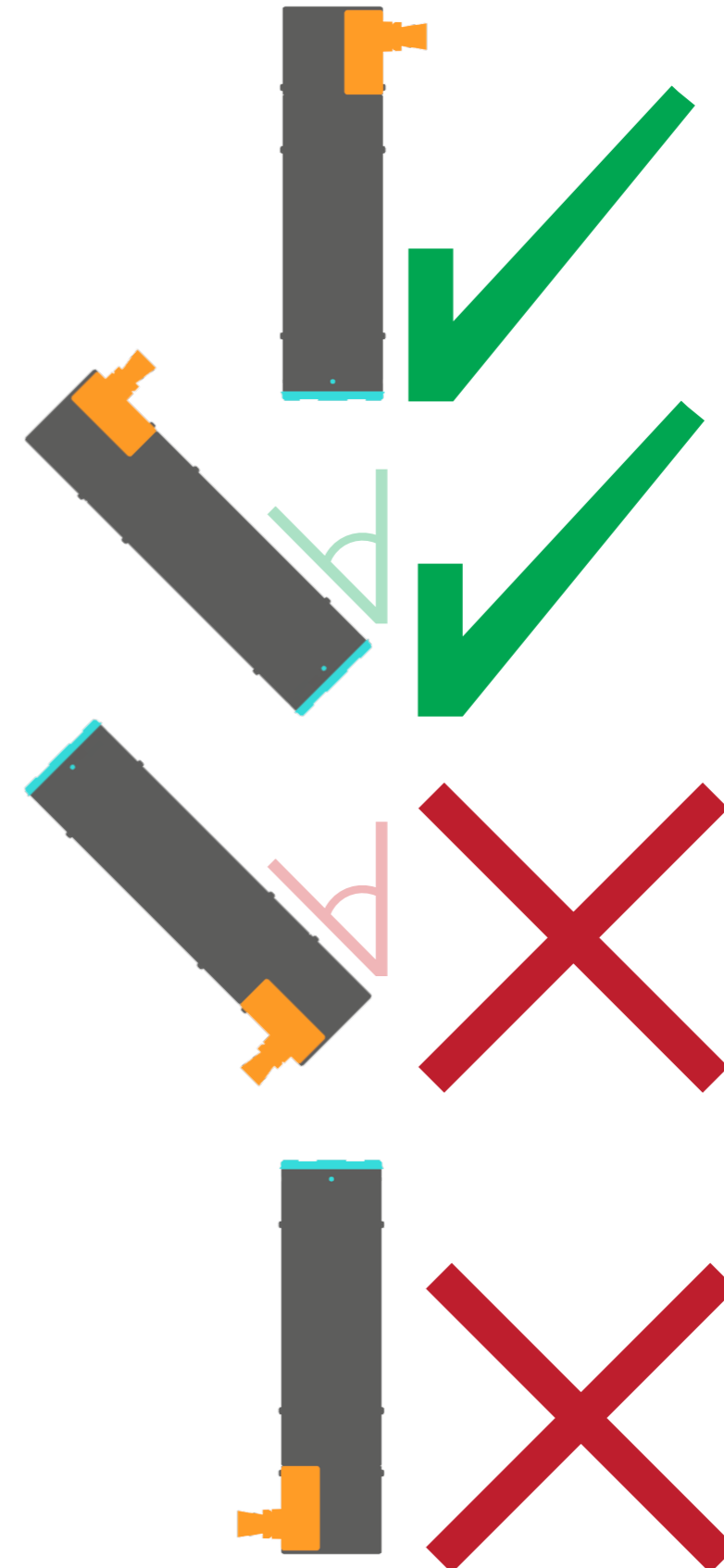
The spot dryer functions as a micro blower, requiring both an inlet and discharge opening. It is crucial to install it so that the inlet is positioned lower than the discharge. The filter (inlet) must be orientated below the nozzle (discharge).

See Page 14 for Mounting Plate Template

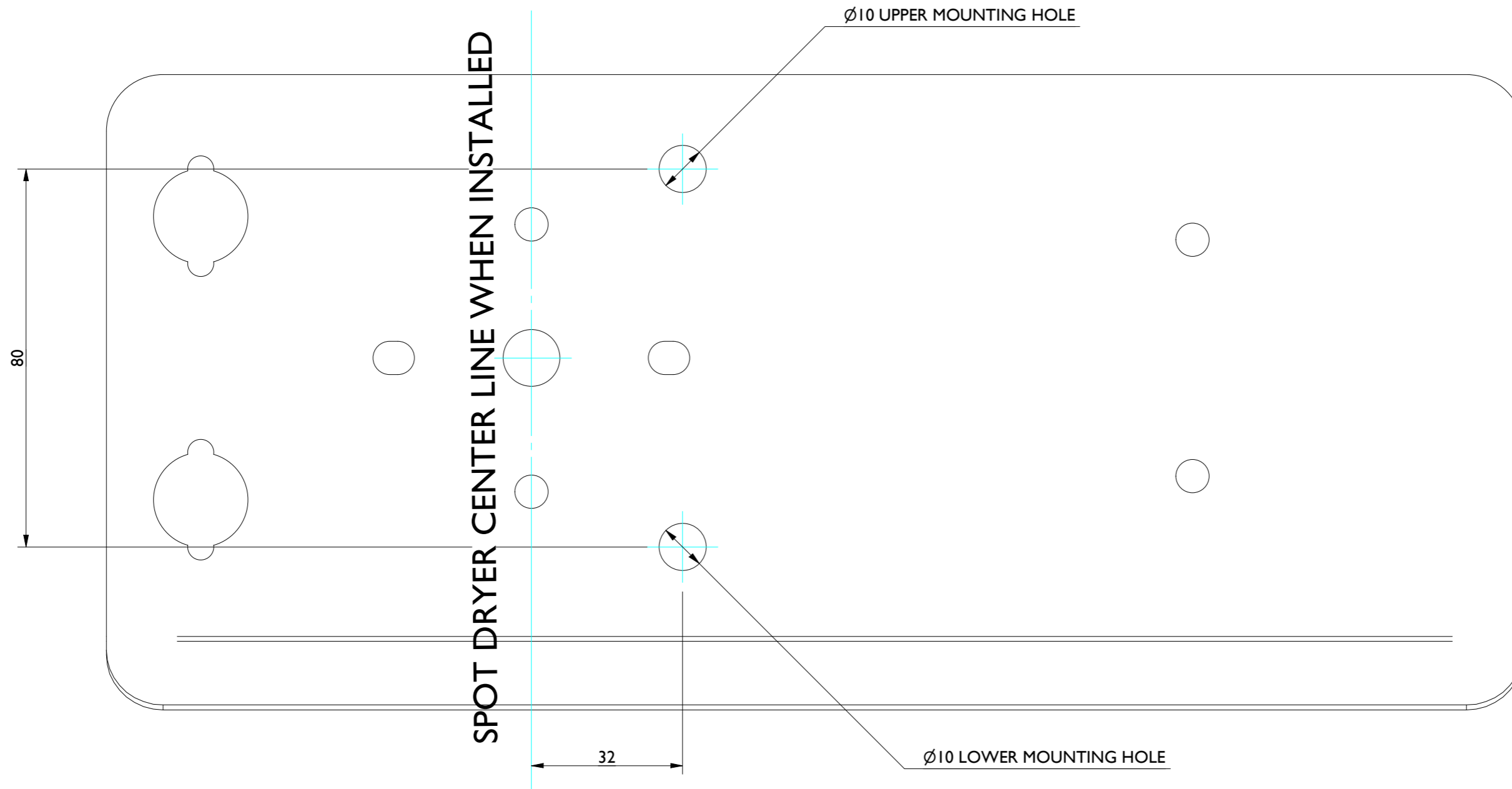
Additional Adjustments

For enhanced flexibility, articulated hose coolant nozzle adapter can be attached. This allows the use of an articulated hose coolant nozzle which can be positioned as needed for effective drying.

Nozzle Requirements: Ensure any nozzle installed on the spot dryer has a minimum diameter of 6mm.



4. Technical Data: Installation Continued



5. Technical Data: Inlet & Discharge



Open Inlet and or Discharge

It is imperative that no object be inserted into the air inlet or discharge. In the interest of safety you must never operate the equipment without the appropriate drying system properly attached.

Position away from personal and or guard suitably.



Electrically Isolate

Prior to making any adjustments to the system, it is essential to electrically isolate the relevant electrical components.

The Spot Dryer AZ-100 is a compact, integrated micro blower drying system consisting of three main components: a filter unit, a power supply housing, and a blower module. This blower-based system requires proper air intake and discharge to function effectively.

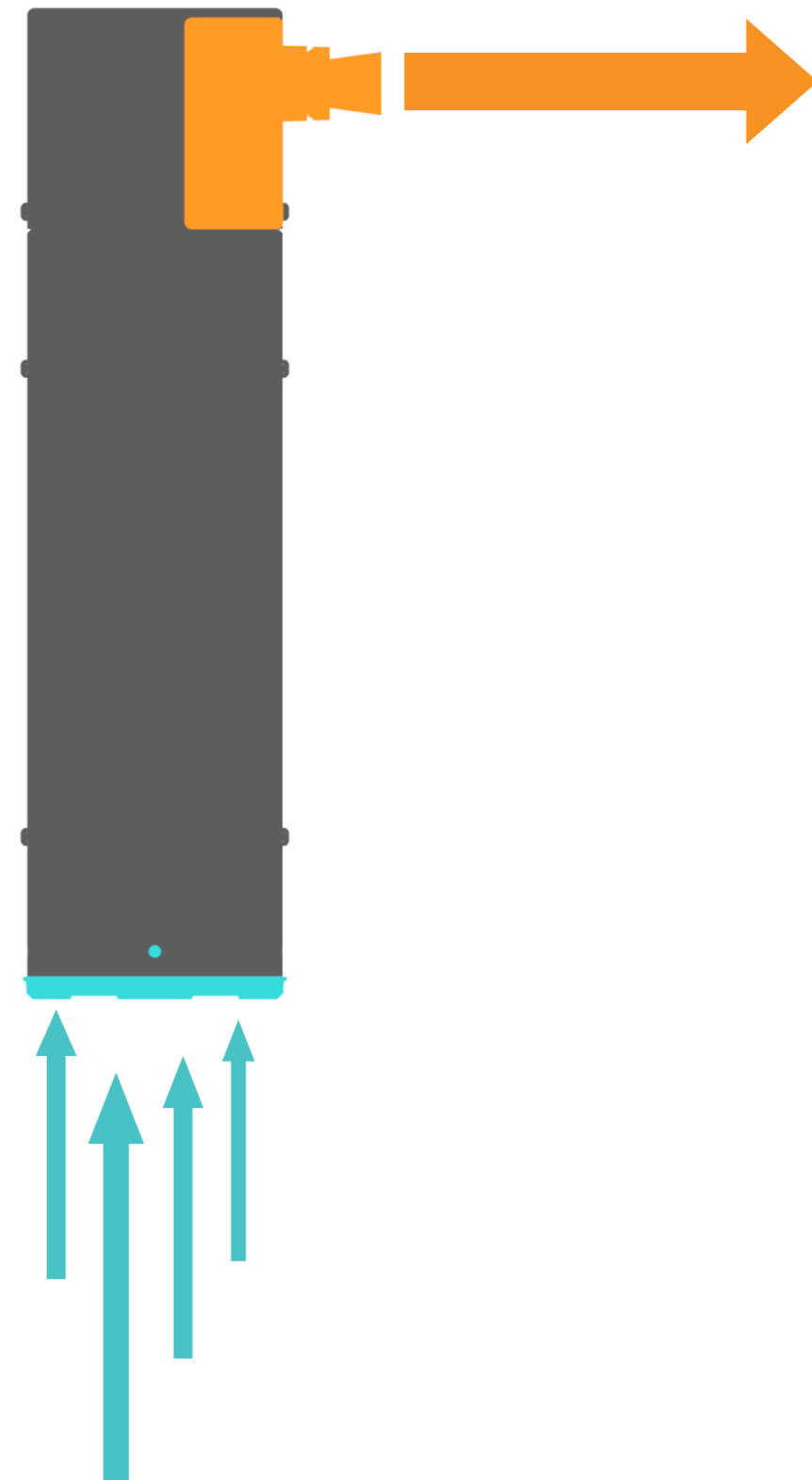
The filter unit is located at the base of the spot dryer. It is mounted in a carrier with flexible tabs that lock it securely in place when inserted.

The spot dryer features interchangeable nozzles that allow users to adjust the airflow, pressure, and drying area based on specific needs.

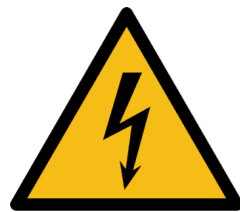
Nozzles can be quickly and easily swapped by rotating them into the faceplate, where they lock in place and seal with an O-ring.

Always turn off and electrically isolate the spot dryer before performing any inspection, cleaning, or maintenance tasks.

The spot dryer must be installed with the discharge nozzle positioned above the inlet filter. This orientation allows for natural drainage of water and debris, preventing potential damage or clogging. For additional details on installation, please refer to the diagrams provided.



6. Technical Data: Wash-down & Cleaning



Electrically Isolate
Prior to making any adjustments to the system, it is essential to electrically isolate the relevant electrical components.



Open Inlet and or Discharge
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Position away from personal and or guard suitably.



High Pressure Liquids
Do not direct pressurized water/ liquid into the inlet or discharge as this may cause water ingress and lead to permanent damage to the system!

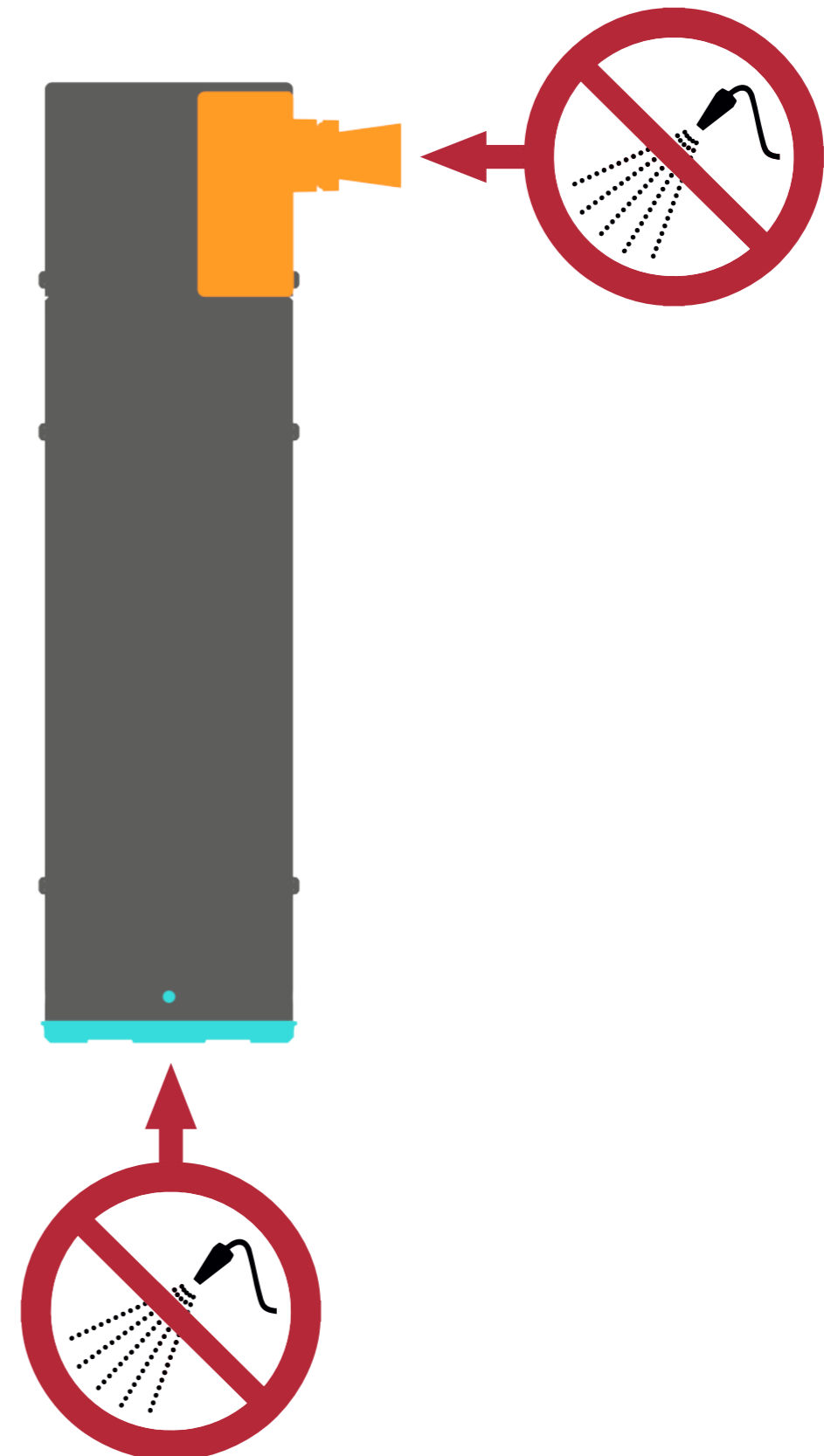
Clean the Spot Dryer using a mild detergent and manual means, ensuring removal of dirt and moisture with a dry cloth.

IMPORTANT: Do not spray water or liquids directly into the inlet or discharge.

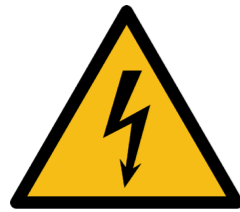
For wash down: Remove any operational nozzle, including LOC-LINE adaptor nozzle, and install the provided blanking plug nozzle. This will ensure no detergent + water can enter the blower housing.

IMPORTANT: Visually inspect the spot dryer. Replace the blanking plug nozzle with the desired operational nozzle once cleaning is complete.

IMPORTANT: DO NOT RUN SPOT DRYER WITH BLANKING PLUG NOZZLE STILL INSTALLED.



7. Technical Data: Filter Replacement



Electrically Isolate
Prior to making any adjustments to the system, it is essential to electrically isolate the relevant electrical components.



Carefully pull down on the filter and carrier assembly while pressing the carrier tabs inward using a small flathead screwdriver.



Once all tabs are pressed in, firmly pull the filter and carrier assembly out from the base of the spot dryer.

With the assembly removed, gently pry apart the carrier to release the filter.



Replace the old filter with a new one.



Reinsert the filter and carrier assembly back into the spot dryer, ensuring that the detent tabs align properly with the holes in the spot dryer.

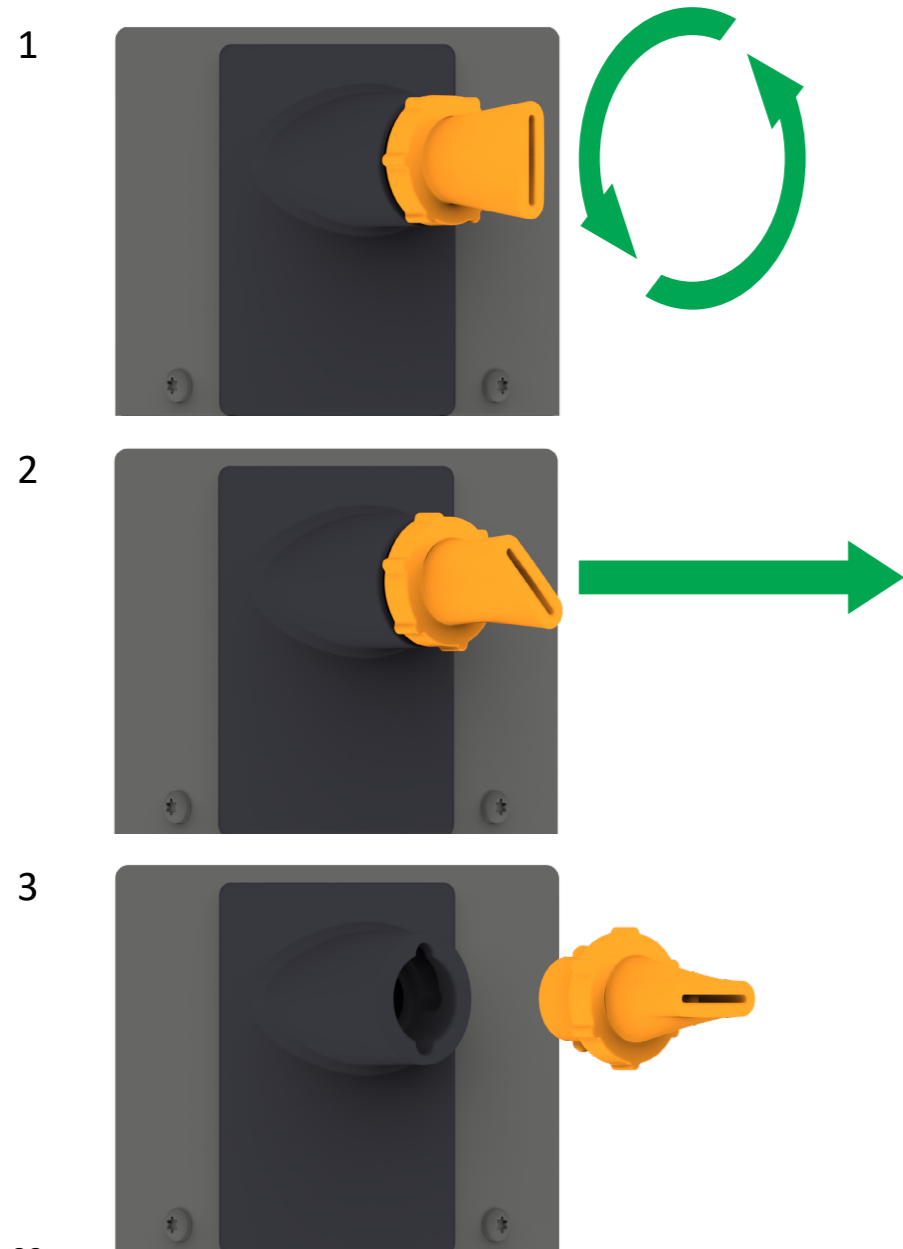


8. Technical Data: Nozzle Installation

IMPORTANT: Ensure the O-ring is properly seated on the nozzle to be installed.

To remove the installed nozzle: firmly rotate the nozzle 90 degrees counterclockwise, then pull it out from the spot dryer.

Place the removed nozzle into the designated nozzle storage slot on the spot dryer mount plate.



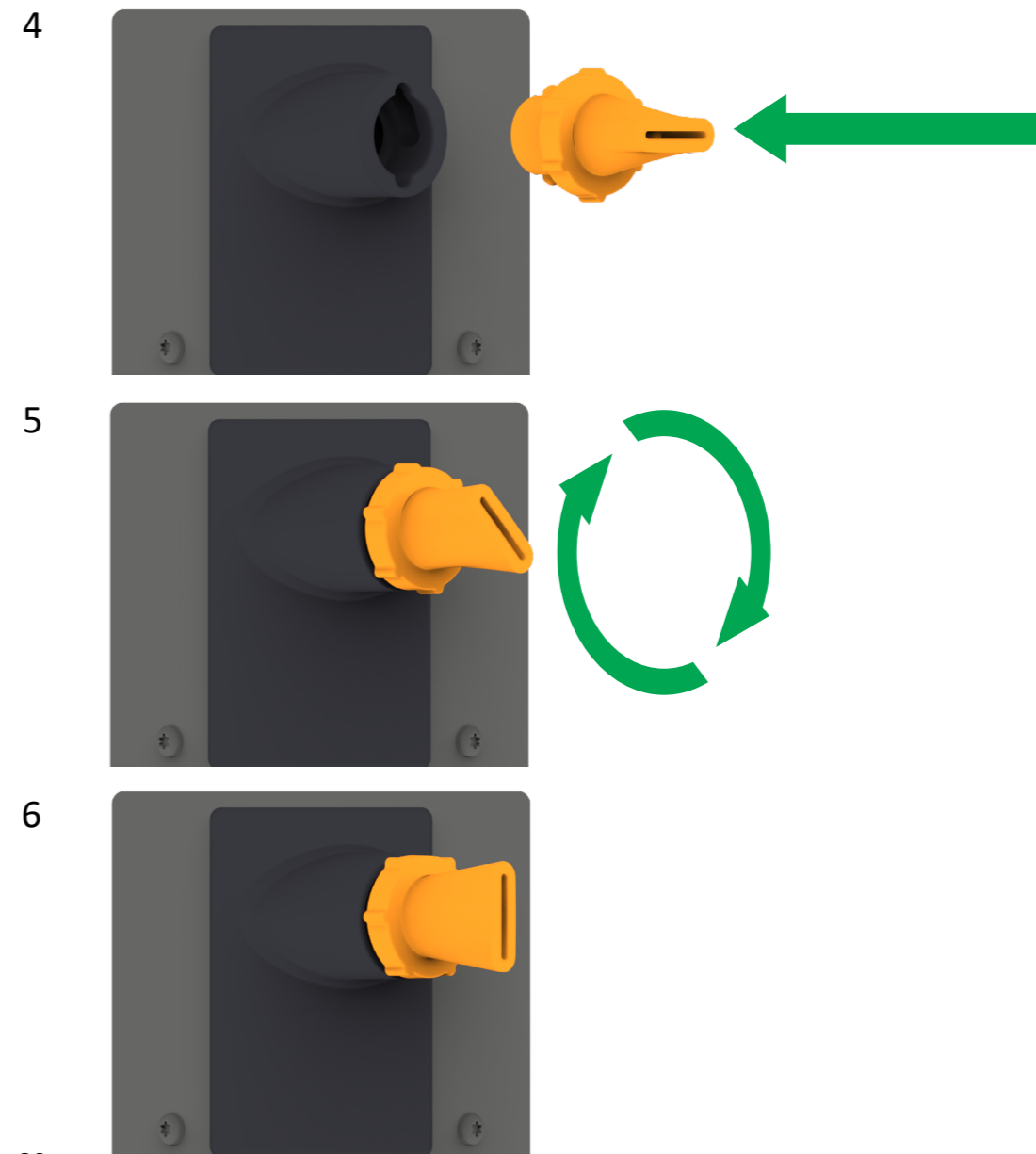
Open Inlet and or Discharge

It is imperative that no object be inserted into the air inlet or discharge. In the interest of safety you must never operate the equipment without the appropriate drying system properly attached.


Position away from personal and or guard suitably.

To install a new nozzle, align the nozzle lobes with the corresponding notches on the spot dryer.


Push the nozzle in and rotate it 90 degrees clockwise until it drops securely into place, ensuring it seals against the spot dryer via the O-ring.



9. Technical Data: Product Data



Electrically Isolate
Prior to making any adjustments to the system, it is essential to electrically isolate the relevant electrical components.



Rating Plate
This machinery is exclusively designed for use at the rating plate duty only. Any unauthorised, removal of covers or guards, improper use, incorrect operations, or insufficient maintenance could result in severe personal injury.

DIMENSIONS	Compact Design <300mm line space
POWER SUPPLY	100-305 VAC 50/60Hz 1Ph
WEIGHT	5KG
NOISE LEVEL	75 dBA
CONSTRUCTION	Stainless Steel & Polyamide
INSTALLATION	Direct Conveyor Mount
Certification	UKCA, CE Suitable FOR Food & Beverage Environments

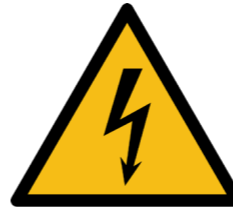
PN: AZ-100-SP
SN:
POWER: 100-305VAC 1PH 50/60Hz 200w
2024



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Millwey Rise Industrial Estate, Axminster, EX13 5HU, UK
Air Control Industries INC 76 Augusta Rockland Road,
Windsor, Maine, USA
www.aircontrolindustries.com



10. Technical Data: Trouble Shooting

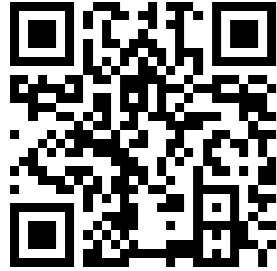


Electrically Isolate
Prior to making any adjustments to the system, it is essential to electrically isolate the relevant electrical components.

Operation/ Symptom	Actions
Install Nozzle	See section 8: Nozzle Installation
Install new filter	See Section 7: Filter Replacement
Switch On	Turn spot dryer on from the switch box installed on the spot dryer mount
Spot dryer not switching on	Try both switch positions
	Check to see if spot dryer has been isolated before the spot dryer on/off switch
	Isolate the spot dryer
	Check the supply to the switchbox power switch
	If the supply is suitable but the spot dryer is non-functioning contact ACI
Spot dryer not switching off	Try both switch positions
	Isolate the spot dryer & contact ACI
Reduced performance	Isolate the spot dryer
	Ensure a suitable nozzle has been installed
	Ensure the filter is clean & operational
	Replace the filter should it have become clogged
	Check to see any blockages inside the spot dryer, both behind the filter & in the discharge nozzle
	If performance remains below what previously has been observed contact ACI

11. Warranty Information

<https://www.aircontrolindustries.com/terms-conditions/>



12. WEEE Recycling & Material Disposal

<https://www.aircontrolindustries.com/about-us/certificates-approvals/>



13. Manufacturing Service Address

Our products are manufactured in compliance with applicable international standards and regulations. If you have any queries regarding the use of our products, please contact:

Air Control Industries Ltd
Weycroft Avenue, Millwey Rise Industrial Estate,
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www.aircontrolindustries.com
sales@aircontrolindustries.com
Tel: +44(0)1297 529242

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Tel: 207-445-2518

14. Declaration of Conformity

<https://www.aircontrolindustries.com/about-us/certificates-approvals/>





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shaping air movement since 1969

