ROSE HEATERS

UK INFRARED HEATER COMPANY

PRO Series

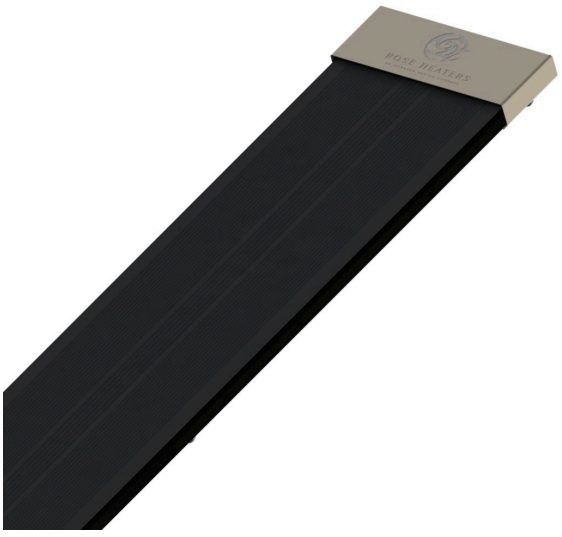
Infrared Aluminium Heater

Models: R-PRO500 | R-PRO800 | R-PRO1000 | R-PRO1300 | R-PRO1600 | R-PRO2000 | R-PRO2600 | R-PRO3000 | R-PRO4000

User and Installation Manual

Read all instructions before installation and use.

Retain this manual for future reference.



1. Safety Information

Symbols Used in This Manual

Symbol	Meaning
⚠ WARNING	Requirements which, if not fulfilled, may result in severe personal injury, or serious damage to equipment.
i NOTE	Important supplementary information to ensure correct and safe operation.

i NOTE

Throughout this manual, the infrared heater may be referred to as: appliance, unit, product, or heater.

If the power cable is damaged, it must be replaced by an authorised service centre, or a qualified technician.

The device must be installed in accordance with applicable local electrical codes and regulations.

The manufacturer reserves the right to make changes to the product without prior notice.

The product is labelled with a rating plate providing technical specifications and other relevant information.

Read and retain this manual. Observe all safety warnings before installing, operating, or maintaining this appliance.

1.1 General Safety

⚠ WARNING

The surface temperature of the heating elements may reach up to 300°C during operation. To prevent the risk of burns, the heater must be installed and positioned so that accidental contact with the heating elements is not possible, ensuring the unit remains out of reach of occupants.

Where installation out of reach is not possible, a site-specific risk assessment must be carried out by the responsible party, and appropriate warning signage and protective measures shall be implemented to minimise the risk of injury.

- This appliance is not intended for use by children or persons with reduced physical, sensory, or mental capabilities unless they are supervised by, or have received instruction from, a person responsible for their safety.
- Keep children and vulnerable individuals away from the heater during operation.
- This is an electrical appliance — protect it from impact, moisture, and excessive dust at all times. Exercise particular care around the radiant elements.
- Do not connect other electrical devices to the same dedicated power circuit as the heater.
- Always disconnect the appliance from the mains supply before cleaning, performing maintenance, or if it is to remain unused for an extended period.

- Do not route the supply cable across the rear surface of the heater.
- Do not install the heaters directly above an electrical socket.

1.2 Electrical Safety

⚠ WARNING

All electrical installation and connection work must be carried out by a qualified electrician in accordance with applicable local wiring regulations. Ensure the mains supply is fully isolated before making any electrical connections.

- A damaged power cord must be replaced immediately to eliminate the risk of electric shock.
- Where the heater is connected to fixed wiring, an automatic disconnection device with full physical contact separation (mechanical switch or circuit breaker) must be installed.
- Ensure reliable connection of the earth (ground) terminal to the protective earth conductor of the fixed wiring.
- Connect the heater through an automatic protection circuit-breaker to enable complete disconnection from the mains supply.
- Do not route the supply cable across the rear surface of the heater.

1.3 Installation Safety

- These heaters are stationary devices intended for a high installation only.
- The minimum heat resistance of the ceiling or wall-covering material must be 80 °C.
- Maintain a minimum separation of 300 mm between adjacent heaters.

i NOTE

Use of non-approved or self-fabricated mounting hardware will void the manufacturer's warranty.

Only the fasteners supplied in the installation kit, or approved equivalents, are to be used.

2. Product Description

2.1 Overview

The Rose PRO series are electric long-wave infrared aluminium heaters designed for primary, supplementary, and zone-specific heating of a wide range of premises, including:

- Industrial facilities: factories, warehouses, and hangars
- Commercial premises: retail outlets, offices, gyms, and catering establishments
- Institutional buildings: educational institutions and agro-industrial facilities
- Residential applications: apartments and similar domestic spaces

2.2 Principle of Operation

When connected to the mains supply, the internal heating elements draw power and heat up first, after which the aluminium radiant panels reach operating temperature. The panels emit directional infrared radiation that heats the surfaces of objects within the effective heating zone. The surface temperature of objects will vary depending on their absorption properties (surface colour and material), the angle of infrared ray incidence, shape, and surface area. The heated surfaces subsequently transfer thermal energy to the surrounding air by convection.

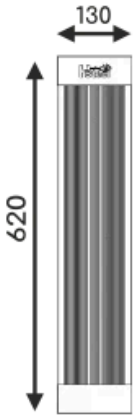
Due to this operating principle, the air temperature at head height (approximately 1.7 m above floor level) is typically 1–2 °C lower than the floor-surface temperature, producing a thermally efficient and comfortable heating profile.

Heaters may be operated individually or in arrays. When installing multiple units, a minimum inter-unit spacing of 300 mm must be maintained.

2.3 Unit Construction

The heater assembly comprises the following main components:

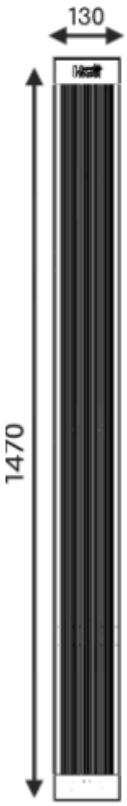
Ref.	Component
1	Steel case (body)
2	Aluminium radiant panel with embedded heating element(s)
3	Steel End Caps
4	Embedded internal insulation
5	Supply cable for connection



R-Pro500

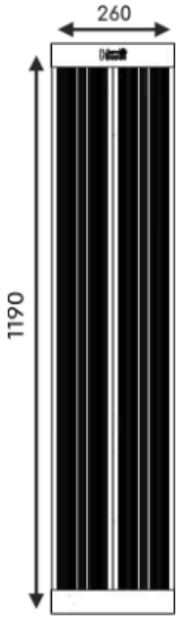
R-Pro800

R-Pro1000

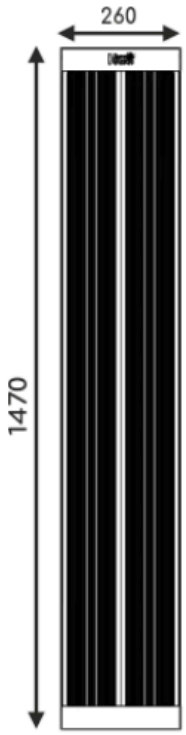


R-Pro1300

R-Pro1600

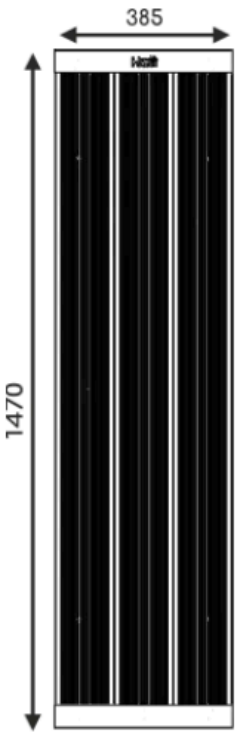


R-Pro2000



R-Pro2600

R-Pro3000



R-Pro4000

3. Technical Specifications

Models R-PRO500 to R-PRO1600:

Parameter	R-Pro500	R-Pro800	R-Pro1000	R-Pro1300	R-Pro1600
Rated Power (W)	500	800	1000	1300	1600
* Rated Current (A)	2.4	3.9	4.8	6.3	7.7
Supply Voltage (V AC)	220–240	220–240	220–240	220–240	220–240
SupplyFrequency (Hz)	50	50	50	50	50
Surface Temperature (°C)	300	300	300	300	300
IP Rating	IP44	IP44	IP44	IP44	IP44
Weight (kg)	1.5	2.2	3.0	3.4	4.2
Time to Reach Operating Temperature (min)	10	10	10	10	10
** Heated Floor Area (m²)	5	8	10	13	16
*** Installation Height (m)	2.4–3.0	2.4–3.0	2.4–3.5	2.4–3.5	2.4–3.5
Dimensions L×W×D (mm)	620 × 130 × 35	920 × 130 × 35	1190 × 130 × 35	1470 × 130 × 35	920 × 260 × 35

Models R-PRO2000 to R-PRO4000:

Parameter	R-Pro2000	R-Pro2600	R-Pro3000	R-Pro4000
Rated Power (W)	2000	2600	3000	4000
* Rated Current (A)	9.7	12.6	4.8 per phase	6.3 per phase
Supply Voltage (V AC)	220–240	220–240	400Y / 230	400Y / 230
Supply Frequency (Hz)	50	50	50	50
IP Rating	IP44	IP44	IP44	IP44
Surface Temperature (°C)	300	300	300	300
Weight (kg)	5.4	6.5	7.8	9.8
Time to Reach Operating Temperature (min)	10	10	10	10
** Heated Floor Area (m²)	20	26	30	40
*** Installation Height (m)	2.8–3.5	2.8–4.0	3.5–4.5	4.0–5.0
Dimensions L×W×D (mm)	1190 × 260 × 35	1470 × 260 × 35	1190 × 390 × 35	1470 × 390 × 35

Use suffix S for silver and B for black after part number to specify the colour (ex. R-Pro500S)

i NOTE

* The stated current is drawn once the heater reaches its operating temperature. Because heating elements have lower resistance when cool, please account for a 10% increase in current during the initial startup.

** The stated heating coverage is provided as a general guide only. The actual area that can be effectively heated will vary depending on the room's heat loss, which is influenced by factors such as building construction, the number of external walls, window size, and insulation quality. For a precise recommendation, please use our online calculator or consult our team

*** The optimal installation height of the infrared heater will vary depending on the desired target temperature and the level of insulation within the space. Well-insulated areas may achieve the required comfort at higher mounting positions, while poorly insulated environments may require lower installation heights for effective heating.

During installation, it is recommended to keep suspension chains and power cables adjustable until the final mounting height has been determined. This allows for on-site optimisation based on actual heating performance.

For applications requiring a faster warm-up time, a lower mounting height is typically recommended.

4. Package Contents

4.1 Models R-Pro 500, 800, 1000, 1300, 1600, 2000, 2600

No.	Item	Quantity
1	Infrared heater unit	1
2	Heater mounting brackets	2
3	M6 screws	2
4	S-hooks	2
5	Hook Screws	2
6	Plastic plugs and screws	4
7	Suspension chains, 1.8 m	2
8	Ceiling mounting brackets	2
9	M4 wing screws	2
10	M4 wing nuts	2
11	M5 screws	2
12	M5 screw nut	2
13	User and Installation Manual	1
14	Packaging	1

4.2 Models R-Pro3000, R-Pro4000

No.	Item	Quantity
1	Infrared heater unit	1
2	Heater mounting brackets	4
3	M6 screws	4
4	S-hooks	4
5	Hook Screws	4
6	Plastic plugs and screws	4
7	Suspension chains, 1.8 m	4
8	User and Installation Manual	1
9	Packaging	1

i NOTE

Verify the completeness of the package against the list above upon receipt. Any claims regarding missing or damaged items should be submitted to the seller within 24 hours of the time of receipt.

5. Installation

5.1 Pre-Installation Requirements

Before commencing installation, verify that:

- The mains supply voltage and frequency match the rating label on the appliance.
- The electrical supply has sufficient current capacity to support the heater load.
- The ceiling or overhead support structure is capable of bearing the weight of the heater and its mounting hardware.
- No electrical cables, water pipes, or other services are present in the area where drilling is to take place.
- The intended installation position provides a minimum clearance of 150 mm from the edge of the panel to all ceiling and walls.
- The ceiling surface material has a minimum heat resistance rating of 80 °C.
- The installation height complies with the values specified in Section 3.
- A dedicated circuit with an appropriately rated circuit breaker is available.

⚠ WARNING

All installation and maintenance operations must be carried out by qualified technical personnel.

Avoid touching the heating elements with bare hands during installation. Contamination from skin oils and other materials can cause localised discolouration and odour during initial operation.

5.2 Panel Pre-Conditioning (Initial Burn-Off)

Prior to final installation, perform the following pre-conditioning procedure:

1. **Clean the panels:** Wipe the surface of the radiant panels thoroughly with a soft cloth dampened with isopropyl alcohol, then wipe dry. This removes residual manufacturing oils and prevents discolouration or burn marks on first use.
2. **Initial burn-off:** Before mounting, operate the heater for 10–20 minutes in a well-ventilated area. During this period, a faint odour and minor smoke may be observed as residual manufacturing oils burn off from the heating element surface. This is normal and will cease after initial operation.

i NOTE

Once powered, the heater will begin emitting infrared radiation rapidly.

To prevent dust accumulation, which can cause odour during subsequent operation, keep the unit and surrounding area clean.

5.3 Mounting Procedure — Ceiling Height up to 3 m (R-Pro 500 - 2600)

Use the brackets for installation on walls and ceilings at or below 3 m above finished floor level.

1. Determine the mounting positions in accordance with the hole spacing dimensions in Table 1 (Section 5.5). Mark and drill four holes of 8 mm diameter in the ceiling.
2. Insert four anchor plugs (Item 6 Part 1) into the drilled holes.
3. Secure the ceiling brackets (Item 8) to the ceiling using four screws (Item 6 Part 2). Refer to pic. 1.
4. Attach the heater mounting brackets (Item 2) to the upper side of the heater using M6 screws (Item 3). Refer to pic. 2.
5. Join the ceiling brackets (Item 8) to the heater brackets (Item 2) using M5 screws (Item 11) and M5 screw nuts (Item 12). Refer to pic. 3.

To mount the heater at an angle, install the wing screws (Item 9) and wing nuts (Item 10) in the corresponding adjustment holes on the brackets. This allows angular tilt of the heater.
Refer to pic. 4.

5.4 Mounting Procedure — Ceiling Height above 3 m (Chain Suspension)

Use the chain suspension method for ceilings exceeding 4 m. The R-Pro 3000 - 4000 require 4 suspension points; the R-Pro 500 - 2600 require 2.

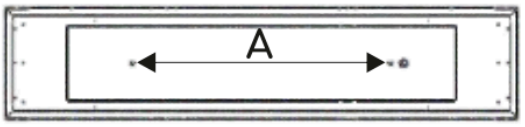
1. Determine the mounting positions in accordance with Table 1 (Section 5.5). Mark and drill 2 holes (R-Pro 500 - 2600) or 4 holes (R-Pro 3000 - 4000), each 8 mm in diameter.
2. Insert 2 or 4* anchor plugs (Item 6) into the drilled holes.
3. Install 2 or 4* hook screws (Item 5) into the plugs and tighten securely. Refer to pic. 5.
4. Attach heater brackets (Item 2) on the upper side of the heater, securing each with an M6 screw (Item 3). Refer to pic. 2.
5. Hang the heater from the hook screws using the suspension chains (Item 7), connecting each chain to an S-hook (Item 4). Refer to pic. 6.
6. Adjust the installation height as required by repositioning the chain link engaged in the hook screws.

5.5 Fixing Points Spacing (Table 1)

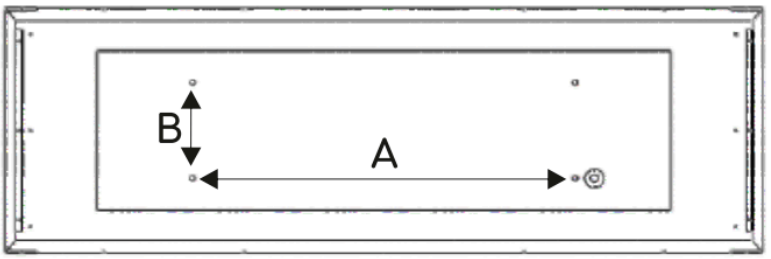
Dimension A is the longitudinal (length-axis) spacing; dimension B is the transverse (width-axis) spacing, applicable to R-Pro 3000 and 4000 only.

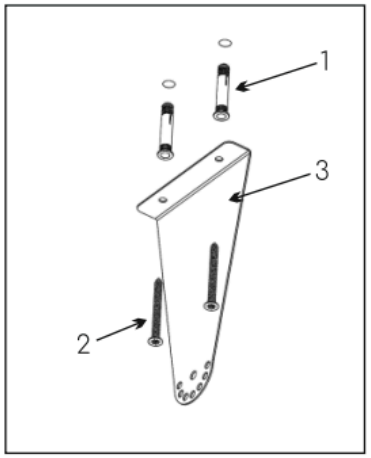
Model	A (mm)	B (mm)
R-Pro500	400	—
R-Pro800	700	—
R-Pro1000	600	—
R-Pro1300	800	—
R-Pro1600	600	—
R-Pro2000	600	—
R-Pro2600	800	—
R-Pro3000	600	150
R-Pro4000	900	150

R-Pro 500, 800, 1000, 1300, 1600, 2000, 2600

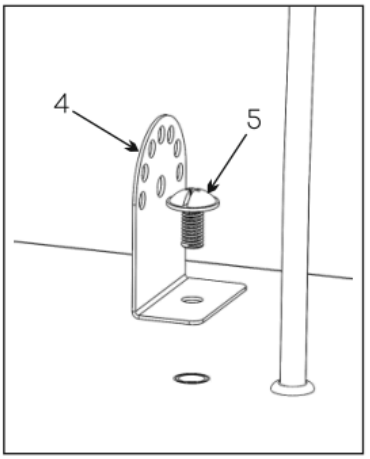


R-Pro 3000 and 4000

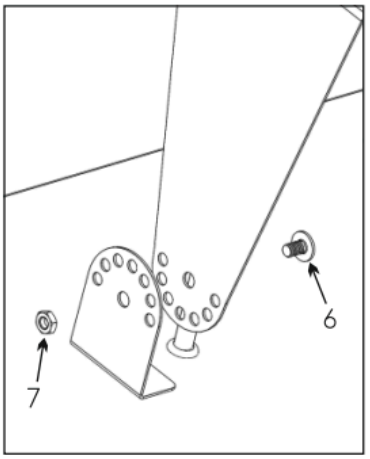




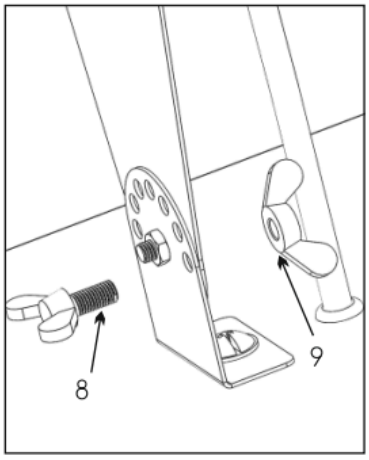
pic. 1



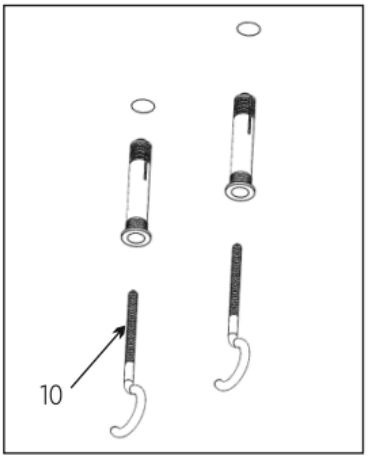
pic. 2



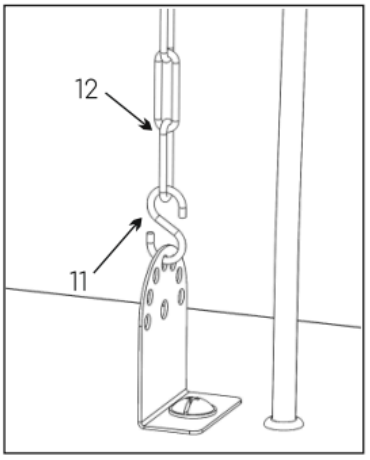
pic. 3



pic. 4



pic. 5



pic. 6

6. Electrical Connection

⚠ WARNING

All electrical installation work must be carried out by a qualified electrician in accordance with local wiring regulations.

Ensure the mains supply is isolated before making any electrical connections.

Do not route the supply cable across the rear surface of the heater.

6.1 Cable Sizing

Models	Supply	Cable	Colour Code
R-PRO 500 - 1000	230 V AC, 1-phase	3-core, 1.0 mm², 1.8m length	L (brown), N (blue), PE (yellow-green)
R-PRO 1300 - 1600	230 V AC, 1-phase	3-core, 1.5 mm², 1.8m length	L (brown), N (blue), PE (yellow-green)
R-PRO 2000 - 2600	230 V AC, 1-phase	3-core, 2.5 mm², 1.8m length	L (brown), N (blue), PE (yellow-green)
R-PRO 3000 - 4000	400Y / 230 V AC, 3-phase	5-core, 4 mm², 1.8m length	L1 (white), L2 (brown), L3 (black), N (blue), PE (yellow-green)

6.2 Earthing (Grounding)

⚠ WARNING

When connecting the heater to the mains, pay particular attention to the reliable connection of the protective earth (PE) terminal to the earth conductor of the fixed wiring. The heater must not be operated without a functional earth connection.

6.3 Control Options

Option A — Direct Switch Control

Where temperature regulation is not required, connect the heater through a fused spur switch. Manual switching provides full on/off control. When sizing the switch, ensure its rated switching current exceeds the total current draw of all heaters on the circuit. If the combined current load exceeds the switch rating, install a suitable intermediate contactor or relay.

Option B — Thermostat Control (Recommended)

For automatic temperature regulation within a defined heating zone, connect the heater through an appropriately rated room thermostat or other suitable controller. The thermostat will cycle the heater on and off to maintain the set-point temperature. When the heater is used as the primary heat source, thermostat control is strongly recommended.

- Install one thermostat per heating zone (room or defined area).
- Where multiple heaters serve the same zone, wire them in parallel to a single thermostat with a suitable intermediate contactor or relay.
- Verify the thermostat's rated switching current against the total connected load before installation.
- Mount the thermostat at 1.5 m above floor level, away from heat sources and near a window or external door for representative air temperature sensing.

i NOTE

The heater must be connected only to fixed wiring and must incorporate a disconnection device with full physical contact separation — a mechanical switch or automatic circuit breaker with a contact separation of at least 3 mm.

Do not route the supply cable across the rear surface of the heater.

7. Care and Maintenance

The Rose PRO series heaters are designed to operate with minimal maintenance. To ensure continued reliable performance, observe the following:

1. **Cleaning — Enclosure:** Disconnect and allow the heater to cool fully before cleaning. Wipe the steel enclosure with a soft, damp cloth. Do not use abrasive cleaners or solvents on the enclosure.
2. **Cleaning — Radiant Panels:** Wipe the radiant panels with a soft cloth dampened with isopropyl alcohol. Allow the panels to dry completely before turning on the heater.
3. **Cable and Connections:** Periodically inspect the supply cable and terminal connections for signs of damage, corrosion, or loosening. Any damaged cable must be replaced before the heater is returned to service.
4. **Dust Management:** Keep the heater and immediate surroundings free from dust accumulation. Excessive dust on the radiant elements may produce odour during operation.
5. **Bracket and Fixing Inspection:** Periodically verify that all ceiling fixings, screws, and brackets remain tight and in good condition.

⚠ WARNING

Never clean the heater while it is connected to the mains supply.

Allow the unit to cool fully (minimum 30 minutes after power off) before performing any cleaning or inspection.

⚠ WARNING

Do not use aggressive or solvent-based cleaning agents to clean the heating panels. Such agents may damage the panel surface finish and void the warranty.

8. Troubleshooting

⚠ WARNING

All repair and reconnection work must be carried out by a qualified technician. For faults involving component replacement or broken circuits, contact an authorised service centre.

Fault	Probable Cause	Recommended Action
No radiated heat	No mains voltage present	Verify supply voltage and cable integrity; replace if defective
No radiated heat	Circuit breaker tripped or defective	Inspect and reset; replace if defective
No radiated heat	Open circuit in supply circuit	Inspect wiring, thermostat and terminal connections; rectify as required
No radiated heat	Heating element(s) defective	Contact authorised service centre for replacement
Persistent odour	Dust on heating elements	Switch off, cool fully, clean with isopropyl alcohol, allow to dry before turning on
Discolouration of upper enclosure	Normal operating effect on steel casing	Not a defect — no action required
Discolouration of the heating element	Substance on heating elements or overuse	Switch off, cool fully, clean with isopropyl alcohol, allow to dry before turning on

9. Warranty Terms and Conditions

9.1 Warranty Period

The warranty period for the Rose PRO Series is 5 years. The warranty period commences on the date of purchase, as evidenced by the purchase receipt or a warranty card bearing the retailer's signature and stamp.

9.2 Warranty Service

- Manufacturing defects identified during the warranty period will be rectified within fourteen (14) calendar days of acceptance by the authorised warranty centre. This period may be extended to thirty (30) working days where the repair requires component replacement or referral to a specialist service facility.
- Goods must be returned to the designated service centre of the manufacturer within the applicable region. Where goods are delivered to the manufacturer's own service centre, the service centre will determine the applicable rectification timeframe.
- All goods submitted for warranty service must be accompanied by original packaging and all accessories included at the time of purchase.
- Goods purchased from the manufacturer are not subject to return more than fourteen (14) calendar days after the date of purchase (certain statutory exceptions may apply).

9.3 Warranty Exclusions

The warranty will be voided in any of the following circumstances:

- The product has been used outside the conditions or for purposes other than those specified in this manual.
- The instructions in this manual have not been observed.
- Non-standard, third-party, or self-fabricated mounting hardware has been used in place of the supplied installation kit.
- The product has been modified by the customer without prior written consent of the manufacturer.
- Mechanical damage (chips, cracks, deformation) is present on the unit.
- Damage has resulted from excessive force, chemically aggressive substances, abnormal temperatures, high humidity, concentrated vapours, or foreign objects entering the device.
- Repair, adjustment, or commissioning work has been carried out by persons not authorised by the manufacturer.
- Damage has resulted from careless handling causing physical or cosmetic damage.
- Transport, storage, installation, or operating regulations have been violated.
- Damage has resulted from natural disasters or causes beyond the control of the seller or manufacturer.
- Incorrect connection to the electrical supply, or supply network faults (voltage mismatch, surges, etc.).
- Periodic maintenance items — including cleaning and consumable part replacement — are not covered under warranty.

Following inspection at the authorised service centre, if a breach of warranty conditions is confirmed, warranty coverage will be withdrawn and the customer notified in writing.