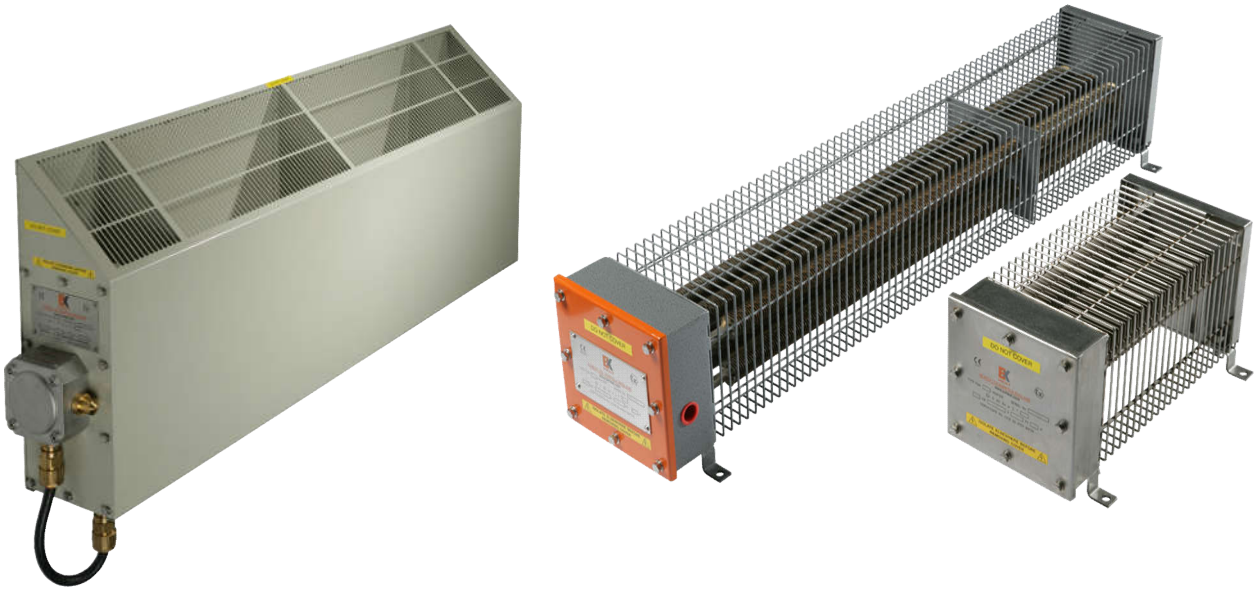
HEAT INDUSTRIAL

INSTALLATION OPERATION AND MAINTENANCE INSTRUCTIONS

FAW, FAW-C & FAW-C-T TYPE AIR WARMERS

FCR & FCR-A TYPE CONVECTORS



Please read these instructions thoroughly before installation and ensure they are passed on to the end-user

Contents

EXHEAT Industrial can provide versions of this manual in German, French, Italian, Spanish, Portuguese, Polish, Chinese and Russian. These versions can be requested at support@exheat-industrial.com .

To maintain the equipment warranty and, if applicable, the Hazardous Area Certification, the instructions contained within this manual must be complied with in full.

Fitting any other device invalidates the hazardous area certification.

1. Contact Details

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Technical Support

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2. Description of Equipment

The EXHEAT Industrial Ltd FAW, FAW-C and FCR type increased safety Air Warmers are designed for lightweight air warming for small work and storage areas. The heaters are what is known as a stabilised design, but it is recommended that they are used in conjunction with an EXHEAT Industrial Ltd. hazardous area thermostat such as the HFT or AFT.

Enclosure

- FAW type is Mild Steel enclosure and mesh body (Stainless Steel available upon request) Floor or wall mounted using EXHEAT Industrial Supplied brackets.
- FAW-C type is a compact version of above made from Stainless Steel. This may be Floor or wall mounted. This Heater is available with an integral HFT thermostat and is named FAW-C-T.
- FCR type is a mild steel sheet construction with perforations for the heat to escape. This is a wall mounted Heater. This Heater is available with an integral HFT thermostat and is named FCR-A.

Connections

- The connection of these heaters is made via the connectors within the terminal boxes. Refer to Section 13 for wiring details.
    - FAW Type Max 6mm² Cable (10AWG) Torque 1.2Nm Min to 2Nm Max
    - FAW-C Type Max 4mm² Cable (12AWG) Torque 0.5Nm Min to 0.6Nm Max
    - FCR Type Max 6mm² Cable (10AWG) Torque 1.2Nm Min to 2Nm Max
    - Terminal box lid bolting Torque 5-6Nm Max

Controls

- Using the heaters within their specified ambient temperature ranges affords them to be a stabilised design type of heater, therefore there are no additional controls required. However, should overall control of the temperature be required an EXHEAT Industrial Ltd certified thermostat may be used, such as the AFT, HFT Type.

Mounting

- FAW: This will have feet supplied that affix to the heater base. The units MUST be installed with the feet facing the floor and not directly to a wall (unless on EXHEAT Industrial Ltd. supplied brackets).
- FAW-C: This will have feet supplied that affix to the heater base. This heater can be mounted directly to a wall
    - On the FAW/FAW-C when fixing to a wall, the heaters must be horizontal and not vertical as the fins will not dissipate the heat if mounted vertically.

- If the FAW has a ‘CSA’ logo on it, there will be an additional plate to install between the heater and feet for personnel protection – this MUST be installed and will only be supplied when required or requested.

- FCR: This will have brackets supplied that are mounted to the wall for the heater to be secured to via locating strips and securing screws. This heater can be affixed to a wall at any height.

Please refer to Section 12 for the General Arrangement Drawings.

Voltage

- The FAW, FAW-C or FCR ranges can be either 120V nominal or 230V nominal single phase with a range between 110V to 690V 3-phase, 50 or 60 Hz. Subject to Sales Approval.
- ‘CSA’ Approved items are 1-3 phase up to 480V Max and ONLY FAW, FAW-C and FAW-C-T versions.
- If the option for an incorporated thermostat is requested, these units are ONLY available in single phase up to 250V Max.

CAUTION – Check that the voltage and current of the heater is compatible with the ratings of the supply or in line thermostat before energising.

3. Markings

ATEX & UKEX Markings:
ATEX No. ETL22ATEX0238X
UKEX No. ITS22UKEX0623X
Ⓔx II 2 G
Ex eb IIC T4…T2 Gb
IP66/67 or IP66 if HFT used

IECEx Markings:

Cert No. IECEx ITS 22.0024X

Ex eb IIC T4…T2 Gb
IP66/67 or IP66 if HFT used

When an 'd' type integral thermostat is used – See relevant thermostat IOM/Certs, for markings and standards applied

HFT Certificate numbers:
ATEX: SIRA 18 ATEX 1238X
IECEx: IECEx SIR 18.0053X
UKEX: ITS 22 UKEX 0280X

Operating Ambient Temperature
-60°C ≤ Tamb ≤ +60°C *** Please refer to the nameplate provided and the certificates in Section 15 for actual ambient temperatures of the heaters. NOTE: When a HFT thermostat is used, the ambient temps must match those listed on the heater

CEC & NEC Markings:

Please see the certificates in Section 15

Korean Markings:

Please see the certificates in Section 15

4. Preservation and Storage Instructions

Storage

- Store the equipment in an inside location that is dry, clean and well ventilated.

CAUTION – The following preservation instructions must be adhered to, failure to do so could result in the equipment warranty being invalidated:

  - Store the equipment at between -60°C and +60°C and only energise between the temperatures as indicated on the nameplates.
  - Ensure that the equipment is not subjected to direct sunlight at ambient temperatures above +30°C.

- Do not store the equipment for more than 3 months unless packed for long term storage (please advise upon RFQ). Ensure preservation material is checked and replaced every 3 months.
- Protect the equipment against external sources of vibration and/or impact.
- If practically possible, leave the equipment in its original sealed packaging until required for installation.
- Suitable preservation materials, such as desiccant bags or equivalent, have been placed inside the packaging. Additionally, spare desiccant bags, or equivalent, can be supplied by contacting EXHEAT Industrial Ltd.
- **CAUTION** – It is the client's responsibility to ensure that, if the terminal box enclosure is opened prior to installation for checking, the desiccant bags are checked and replaced if necessary. When refitting terminal box enclosure lid please ensure the gaskets are not damaged.

5. Pre-installation Instructions

Pre-Installation Inspection

- Each heater is manufactured to the highest standard with great care and quality materials. All the goods are thoroughly inspected and tested before leaving the manufacturing plant, and they must be handled with care during storage and installation. Before the installation starts it is advised that the heater is checked to ensure the insulation resistance reading is above 2MΩ per element at no less than 500 volts dc.
- Should the heater fail this test please contact the technical help on our website: www.exheat-industrial.com/contact/support
- Inspect the heater for visible signs of damage, paying particular attention to the terminal box and element fins, as this may get damaged during transport, also ensure that the heater is not bent or squashed and that you have the correct feet/brackets for installation.
- Should the heater fail this test, isolate the power and control circuits (if installed), and follow the steps below:
    - Fill the terminal box with silica gel bags, and replace the terminal box lid.
    - Leave for 24hrs to draw any moisture out of the heater elements.
    - If you have a heated blanket, place this over the heater elements to help with the drying. Heater blankets are available to purchase from www.exheat-industrial.com/contact/enquiry
    - If the insulation resistance has not been raised to a sufficient level after 24hrs, repeat the process above with replacement gel bags.
    - Should the above not raise the insulation resistance to the required level please contact the technical help on our website. www.exheat-industrial.com/contact/support

Compliance with these instructions is a warranty requirement. Documented evidence must be maintained in the form of a signed checklist. Copies of completed checklists and records will be required in the event of any warranty claim.

Insulation Resistance and Ohms Reading

- The Insulation Resistance Tester should be applied between the phases and earth. A reading of greater than 2MΩ at 500 volts dc should be recorded. Should the whole heater be below this value each element would need to be checked to ascertain which one was low in resistance.
- Use the continuity (Ohms) setting on the elements and check the resistance of each element matches or is approximately equal to the results as per the electrical test certificate that would have been sent with the heater.

6. Installation Instructions

Should deviation from original design parameters occur, or change of original design structure be required, please contact EXHEAT Industrial Ltd for consultation prior to installation.

- Refer to the relevant code of practice for the equipment:
  - *IEC/EN 60079-14* for selection and installation or the relevant global equivalent.
  - *IEC/EN 60079-17* for inspection and maintenance of electric apparatus for use in potentially explosive atmospheres or the relevant global equivalent.

- Carefully remove the packaging from each product and check for damage. Immediately report any damage to EXHEAT Industrial Ltd. (please keep this IOM and the supplied FAT certificates for future reference).
- Ensure that the product is correctly installed in a suitable location by authorised and competent persons.
- The heaters must be installed correctly:
  - FAW Type: This will have feet supplied that affix to the heater base. The units MUST be installed with the feet facing the floor and not directly to a wall (unless on EXHEAT Industrial Ltd. supplied brackets).
  - FAW-C: This will have feet supplied that affix to the heater base. This heater can be mounted directly to a wall
    - On the FAW/FAW-C when fixing to a wall, the heaters must be horizontal (feet facing the floor) and not vertical as the fins will not dissipate the heat if mounted vertically.
    - On larger FAW heaters, there are additional feet that are installed to support the long body. These are installed by using the 'T-brackets' provided, that are inserted between the mesh, twisted 90° and bolted into place using the FAW foot and nuts, washers & spring washers provided, therefore crimping the foot mesh between the foot and the top of the T-bracket. There will either be one or two additional feet – depending on the heater size.
    - If the FAW has a 'CSA' logo on it, there will be an additional plate to install between the heater and feet for personnel protection – this MUST be installed and will only be supplied when required or requested.
  - FCR: This will have brackets supplied that are mounted to the wall for the heater to be secured to via locating strips and securing screws. This heater can be affixed to a wall at any height.

Please refer to Section 12 for the General Arrangement Drawings.

- Before operating the equipment, have the installation approved by the site authorised person who is responsible to ensure that the installed system is safe for operation.
- Ensure compliance with any instructions and information provided in this manual and on the drawings/certification supplied, also be aware of any additional warning that may be present on the product on any warning labels.
- The installer and the end user shall ensure that the unit has free and unrestricted air flow to allow natural convection to always occur. DO NOT COVER the heater and do not allow anything to rest on or against it. Please allow a minimum 50 – 100mm free air in front of the heater when installed.
- Should you require heaters to be mounted above another, please allow a minimum of 750mm between them.
- The product shall only be energised within its allowed ambient parameters, please check the sales literature, certification, and nameplates for the product ambient temperature range.
- Before energising the product, ensure that the supply conforms to the specified voltage on the products nameplate at a nominal variance of +/- 5% of the specified voltage.
- The terminal box lid must be secured, using the bolts provided. Max torque 5Nm. Ensure the sealing gasket is in good condition with no breaks or damage.

It is the client's responsibility to ensure that safe systems of work are used by all personnel operating and maintaining the equipment, including testing when 'live'.

If there is any uncertainty about these points, contact EXHEAT Industrial Ltd for advice.

Failure to comply could result in the Hazardous Area Certificate being invalidated.

Electrical Supply Connection

- Refer to Wiring Diagrams in Section 13.
  - To remove the terminal box enclosure lids, use an M6 nut spinner or spanner. Ensure that no damage occurs to the gasket.
  - There are pre-drilled cable entries on the heaters. Connection is to be made via a 'installer supplied' supply cable and connected to the terminal blocks following the wiring diagrams. Cable glands to be Exe/Exd IIC IP66/67 Minimum. Any unused entries must be plugged with certified plugs/bungs as mentioned above.
  - Should additional or different entries be required, these – where possible – are to be drilled by EXHEAT Industrial Ltd. Should the installer require additional holes and the unit has left EXHEAT Industrial Ltd, permission must be gained from the support team.
  - Refer to Section 12 for General Arrangement Drawings.
- Before connection ensure that the supply corresponds with that specified on the nameplate label, and that the sizes and types of cables to be used are suitably rated for the load and temperature of the product.

- Each heater circuit must be protected by a suitably rated over current device and earth leakage circuit breaker device. See below for earth connection details.
- Ensure that the sizes and types of cables to be used are suitably rated for the load and temperature of the unit.
- The heaters are not to be rewired internally. There will be removable links to support the transition from single to 3 phase. Refer to section 13 for further details.

- **CAUTION** – Check nameplate for correct voltage and classification.

Earth Connection

WARNING – These heaters MUST BE EARTHED.

- The internal earth connection on the FAW, FAW-C and FCR range is obtained by the connection of the supply cable into the designated terminal block.
- The external earth connection is to be made via an M6 earthing point suitable for a crimp with an M6 diameter hole. This is located to the rear of the heater terminal box.
- Should the heater be an FAW-C-T or and FCR-A type, there will be an additional M5 screw to the corner of the HFT thermostat. This is suitable for a crimp with an M5 diameter hole.

Earth-fault Protection

For safety reasons, it is essential to limit the magnitude and duration of earth-fault currents. It is impractical to cover all possible systems, however, note that, regardless of which system is used, the heater must be protected by a suitable device wired to shut down the heater if a heater element fails to earth. Suitable devices include a residual current device (RCD) – this is the preferred method and should be used whenever possible – or an insulation monitoring device.

- Maximum recommended setting for the RCD: 300mA/10mS. The duration time of 10mS (ten milliseconds) ensures that any fault is detected within a single cycle of a thyristor system (where applicable).
- Maximum recommended setting for the insulation monitoring device: Insulation resistance is not greater than 50 ohms per volt of rated voltage.

Ensure that the equipment is earthed in accordance with the plant earthing philosophy.

Before commissioning the equipment, the completed installation should be approved by an authorised & competent person to ensure that it has been carried out correctly and that the system is safe for commissioning.

Before switching the heater circuit on, ensure that all the relevant requirements, and any special conditions of use requirements have been adhered to. Refer to Section 7 and the associated certificates.

7. Special Conditions of Use

Please adhere to the warnings within this IOM and on the heater/thermostat nameplates, when using the equipment. Please also note the special conditions of use as listed within the certificate in section 15.

8. Operating Instructions

General

Electrical equipment must be designed, tested, and installed such that, when it is used correctly, health and safety risks are kept to a minimum. The client must be provided with information about any necessary safety conditions, warned of any possible hazards that may arise during normal operation and told how to avoid them.

- The FAW and FCR Ranges are designed to work as a stabilised design, meaning that so long as they are only energised within the ambient temperatures listed on their nameplates, they will not get hot enough to breach their T class. Should overall temperature regulation be required it can be wired in series with an EXHEAT Industrial Ltd thermostat, such as the AFT or HFT range.
- There is no temperature adjustment required for this heater. Should a thermostat be installed, refer to the relevant thermostat IOM for temperature setting instructions.
- The FAW/FCR range is designed to operate in ambient temperatures of between -60°C to +60°C (refer to individual nameplate for exact details) and the user must ensure that these ambient temperatures are not exceeded at any time. Refer to section 15 - Certification.
- Should the integral thermostat be used, please refer to the AFT/HFT IOM for all relevant details re the setting of the thermostat, removing and fixing of the enclosure lid, and any other Special Conditions of use. Refer to exheat-industrial.com/product/hft for more details

CAUTION – If a remote thermostat is used, check that the voltage and current of the FAW/FCR to be controlled by the thermostat is compatible with the ratings of the thermostat before energising.

The user must ensure that the following is adhered to:

- Any employees working on the equipment are authorised & competent in the proper working procedures to ensure their and others safety. The plant must be maintained in a safe condition.
- Carefully remove all protective packaging and visually inspect product for any transit damage.
- The heaters must be handled with care and stored in clean and dry conditions, as per Section 4.
- All prevailing rules, regulations, and bylaws in force at the time and place of installation must be observed.
- The heater should be securely fixed in position (adhering to the correct orientation if applicable) and all the client/installer made terminal connections checked for tightness before energising.
- Refer to the relevant code of practice for the equipment:
  - IEC/EN 60079-14 for selection and installation or the relevant global equivalent.

- IEC/EN 60079-17 for inspection and maintenance of electric apparatus for use in potentially explosive atmospheres or the relevant global equivalent.

- Ensure that any special conditions for use detailed on the Hazardous Area Certification are complied with.

- At no time is the ambient temperature to be allowed to rise above +40°C for T3 & T4 variants or +60°C (T2 variants). This can be achieved using Exheat Industrial Ltd integral (if option available) or separate flameproof air sensing thermostats (HFT & AFT type).

Any modification not carried out by EXHEAT Industrial Ltd could invalidate certification and warranty.

Provided the above conditions are adhered to, the equipment should be safe for use under normal operating conditions.

It is virtually impossible to achieve conditions which are completely hazard-free when working on energised circuits. Responsibility for safe conduct of the authorised & competent person or persons operating on the equipment rests with those under whose authority they act.

9. Maintenance Instructions

General Safety Precautions

The end user must ensure that maintenance, installations, commissioning and testing of the equipment is only carried out by authorised and competent persons.

The following rules must be adhered to:

- All prevailing site safety regulations shall be adhered to at all times.
- Check for hazardous gases before and during any maintenance activity.
- Fully isolate the equipment from the electrical supply before and whilst any work is being carried out.
- Before removing the terminal box enclosure lid, allow sufficient time for the internal elements to further cool.
- Comply with safe working conditions.
- Do not work alone on the equipment when it is energised.
- Familiarise all persons working on the equipment with the instructions and information provided within this manual.
- Be aware of hazards which may arise when working on energised equipment and take all necessary precautions.
- Replacement parts required must be obtained directly from Exheat Industrial Ltd. The use of any other parts will void any certification and warranty.

The following preventative maintenance should be carried out at the intervals shown below, for any replacement parts, please contact EXHEAT Industrial Ltd.

Compliance with these maintenance instructions is a mandatory requirement. Documented evidence must be maintained in the form of a signed checklist. Copies of completed checklists and records will be required in the event of a warranty claim. Refer to Section 14.

If the heaters are not used for more than three months they must be tested for insulation resistance.

Three-monthly Maintenance Inspections

- Generally, inspect the equipment for external damage.
- Ensure that the product is clear of obstruction and that the airflow remains unrestricted, especially between the fins.

Six-monthly Maintenance Inspections

The following should be undertaken every six months with the addition to the three-monthly maintenance inspections above:

- Isolate the electrical supply.
- The heaters (and integral thermostat if fitted) should be clean, dry and free from debris.
- Ensure that electrical terminations and cable glands are undamaged and secure.
- Measure the overall insulation resistance of the heater. Use a 500V dc megohmmeter to take a reading between the earth and the phase terminals. The reading should be greater than 2 megohm. If it is not, refer to Section 5.
- Earth continuity must be maintained between all earth points and the main structure, ensure that any earth conductors are correctly and securely fitted between all earth points and main structure.
- Ensure all trip devices are working properly.
- If an Ex d thermostat is integral, please refer to its own IOM for the maintenance instructions.

Annual Inspections and Long-Term Storage Inspections

Ensure that the following inspections are carried out if equipment is in storage or in use for a year or more:

  - Undertake the recommended three-monthly and six-monthly inspections as above.
  - Inspect for low insulation resistance, as Section 5.
- Only EXHEAT Industrial Ltd can undertake any replacements in hazardous area equipment, any unauthorised modifications will invalidate the hazardous area certification and any warranty.
- If equipment is being left unused for a period greater than three months, undertake the 6-monthly maintenance before energizing.

Only EXHEAT Industrial Ltd or approved Services Representative are authorised to replace FAW/FCR related components. The hazardous area certification and warranty will be invalidated if this requirement is not strictly observed.

10. Fault Finding, Correction and Spares

All FAW and FCR Type Heaters

See Maintenance instructions for procedures relating to these faults.

Fault	Check	Resolution
Heater fails to achieve required design air temperature	• Isolated power supply. • Supply fuses. • Is the ambient temperature greater than that required (when thermostat is being used) • The designed heating output is less than the required amount, or is there greater heat loss due to a change in location.	Contact EXHEAT Industrial Ltd for advice.
Air temperature too high	• Temperature control device set points correct? • Does the room have a thermostat switch? If so, is it switching the heater correctly?	Check with the installer.
Earth leakage trip	Limiting earth-fault currents (magnitude and/or duration) is essential for safety. The earth-fault protection device is intended to provide critical safety protection if there is current leakage to earth. Fully investigate and rectify any trip condition **before** resetting the system and operating the unit again.	Where an earth leakage trip has occurred, isolate the unit and: • Check insulation resistance is according to Section 4. • Check settings of earth leakage protection device are according to Section 5.

Spares

The only spares available are the terminal blocks.

Contact us via www.exheat-industrial.com/contact/support

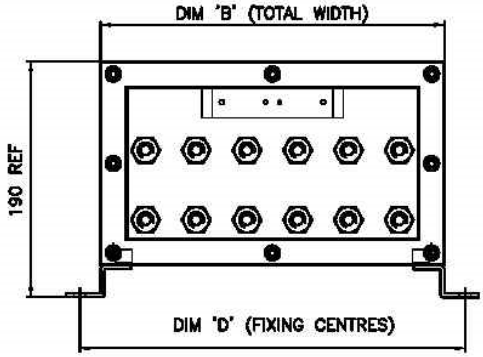
11. COSHH Statement

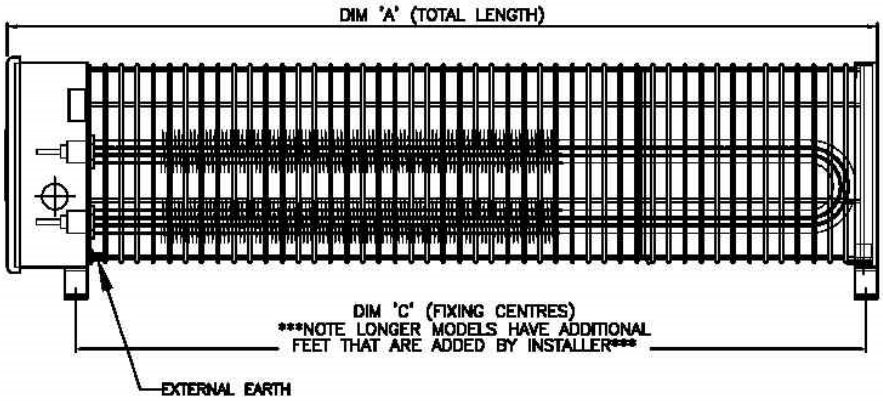
Health and Safety Information

There are no hazardous or toxic substances applied with this order as defined in COSHH (control of substances hazardous to health) regulations (2002).

12. General Arrangement Drawings

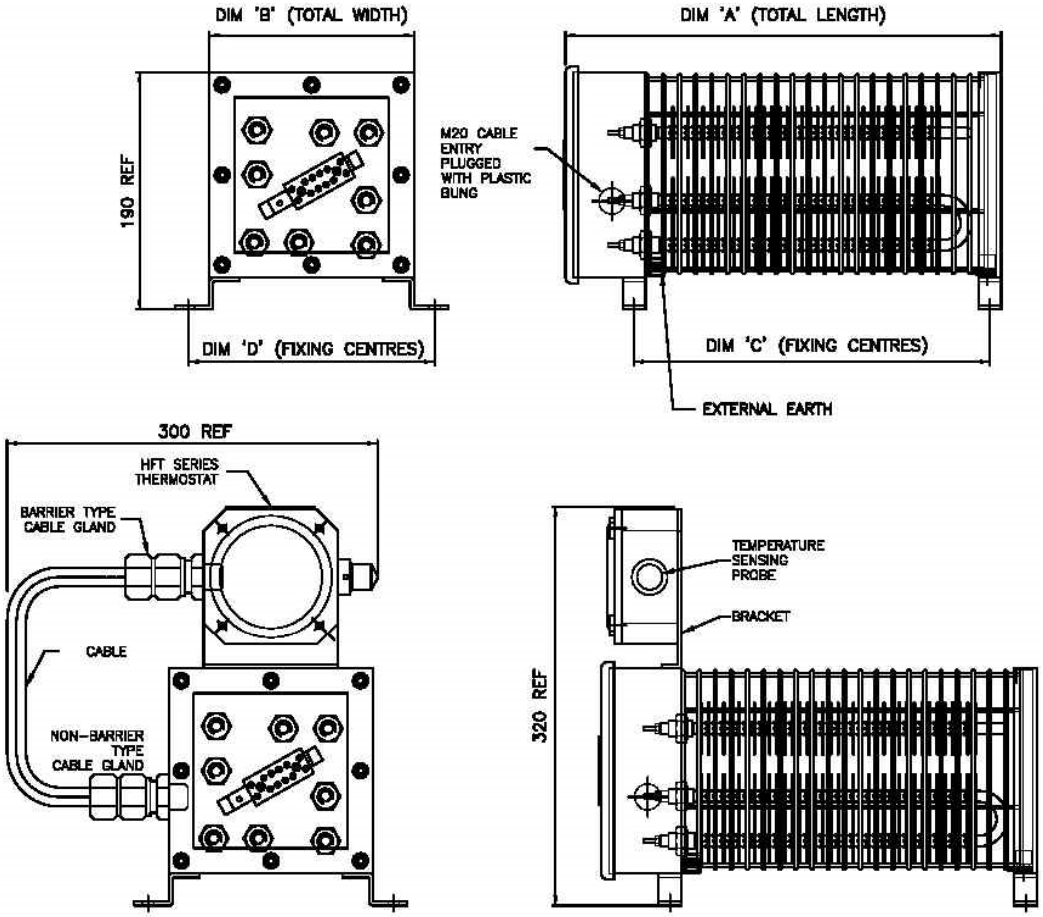
FAW RANGE GENERAL ARRANGEMENT





ITEM	MODEL	'T' CLASS	WATTS	VOLTS	DIM 'A'	DIM 'B'	DIM 'C'	DIM 'D'	WEIGHT
1	FAW-250	T2/T3	250	240	971	161	860	191	8kg
2	FAW-500	T2/T3	500	240 OR 110	971	161	860	191	10kg
3	FAW-750	T2/T3	750	240/415 or 110	971	161	860	191	12kg
4	FAW-1000	T2/T3	1000	240/415 or 110	1221	161	1145	191	14kg
5	FAW-1500	T2/T3	1500	240/415 or 110	1741	161	1640	191	20kg
6	FAW-2000	T2/T3	2000	240 or 110	1741	272	1640	302	32kg
7	FAW-2000-SB	T2/T3	2000	110/254 or 415/440	1221	272	1145	302	34kg
8	FAW-2500	T2/T3	2500	240	1741	272	1640	302	38kg
9	FAW-3000	T2/T3	3000	240/415	1741	272	1640	302	42kg
10	FAW-250	T4	250	240	1886	161	1784	191	13kg
11	FAW-500	T4	500	240	1886	161	1784	191	17kg
12	FAW-750	T4	750	240/415	1886	161	1784	191	21kg
13	FAW-1000	T4	1000	240	1886	272	1784	302	33kg
14	FAW-1250	T4	1250	240	1886	272	1784	302	38kg
15	FAW-1500	T4	1500	240/415	1886	272	1784	302	42kg

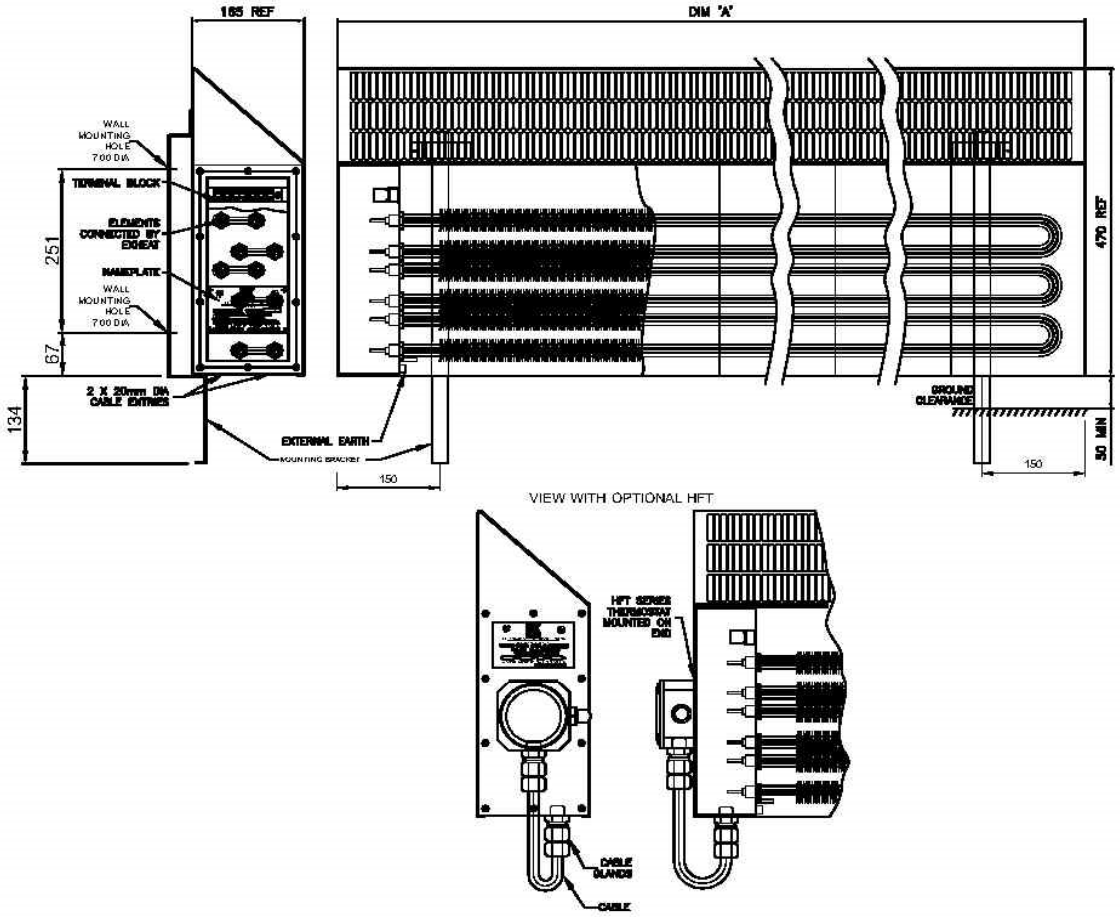
FAW-C & FAW-C-T GENERAL ARRANGEMENT



ALL DIMENSIONS OF HEATER AS PER BELOW

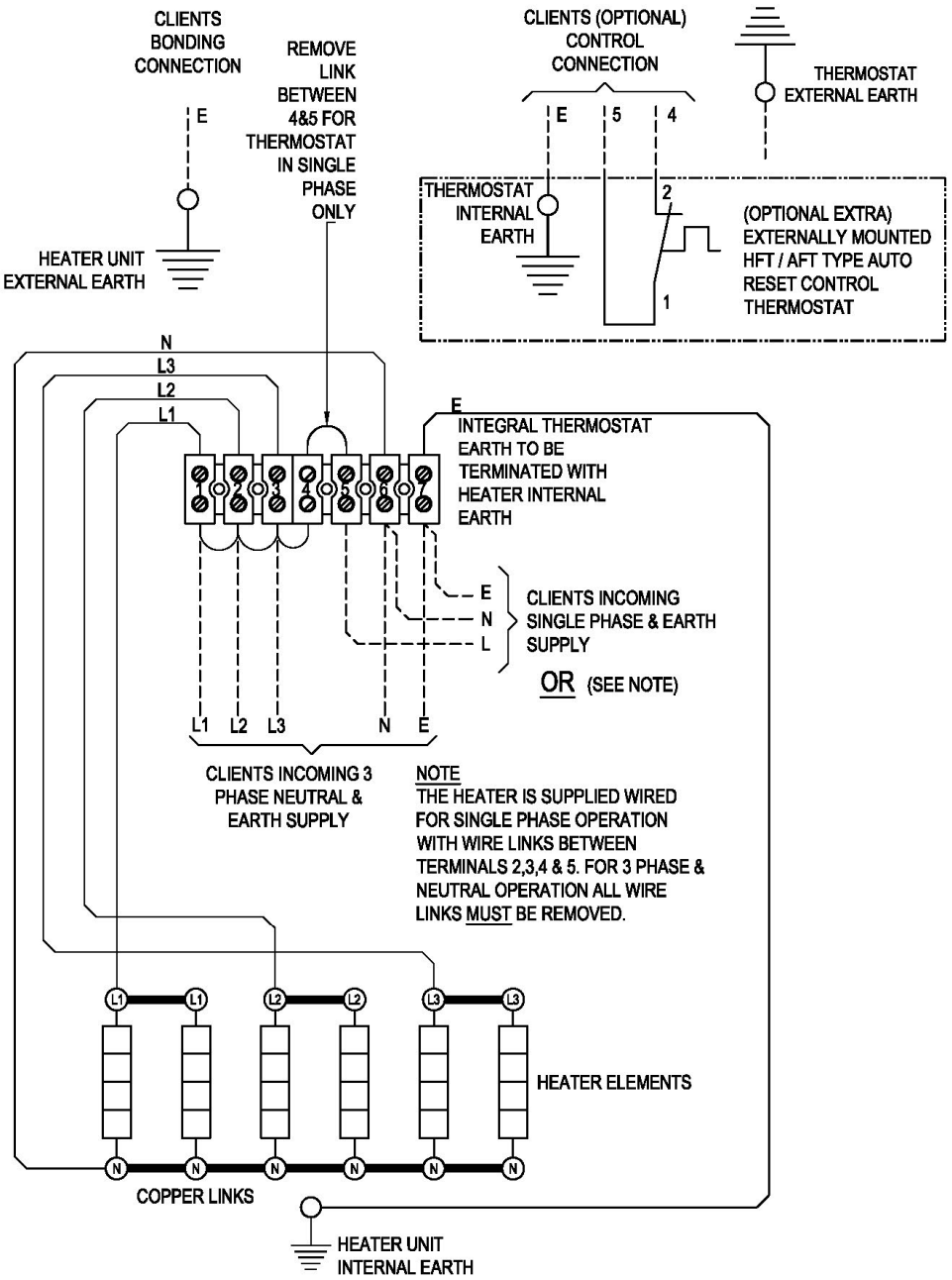
ITEM	MODEL	'T' CLASS	WATTS	VOLTS	DIM 'A'	DIM 'B'	DIM 'C'	DIM 'D'	WEIGHT
1	FAW-C-250	T2/T3	250	110/240	350	161	282	193	5kg
2	FAW-C-500	T2/T3	500	110/240	350	161	282	193	6kg
3	FAW-C-750	T2/T3	750	110/240	615	161	545	193	8kg
4	FAW-C-1000	T2/T3	1000	110/240	615	161	545	193	9kg
5	FAW-C-250-T	T3	250	110/240	350	161	282	193	7kg
6	FAW-C-500-T	T3	500	110/240	350	161	282	193	8kg
7	FAW-C-750-T	T3	750	110/240	615	161	545	193	10kg
8	FAW-C-1000-T	T3	1000	110/240	615	161	545	193	11kg

FCR GENERAL ARRANGEMENT

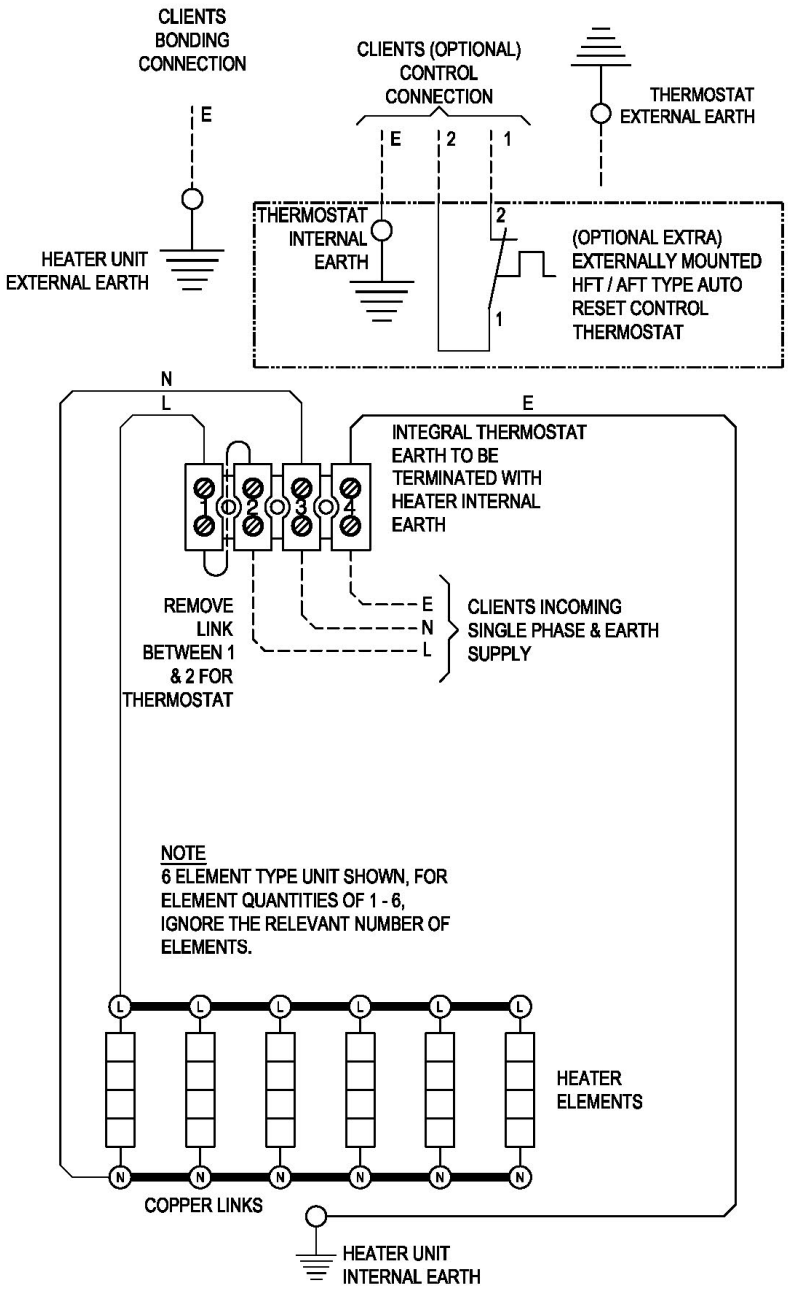


ITEM	MODEL	WATTS	No OF ELEMENTS	VOLTS	WEIGHT	DIM 'A'
1	FCR-1-110	1000	3	110	17kg	1240mm
2	FCR-1-110-A	1000	3	110	17kg	1240mm
3	FCR-1-240	1000	3	240/415	17kg	1240mm
4	FCR-1-240-A	1000	3	240 ONLY	17kg	1240mm
5	FCR-2-110	2000	6	110	32kg	1240mm
6	FCR-2-110-A	2000	6	110	32kg	1240mm
7	FCR-2-240	2000	6	240/415	32kg	1240mm
8	FCR-2-240-A	2000	6	240 ONLY	32kg	1240mm
9	FCR-3-240	3000	6	240/415	47kg	1750mm
10	FCR-3-240-A	3000	6	240 ONLY	47kg	1750mm

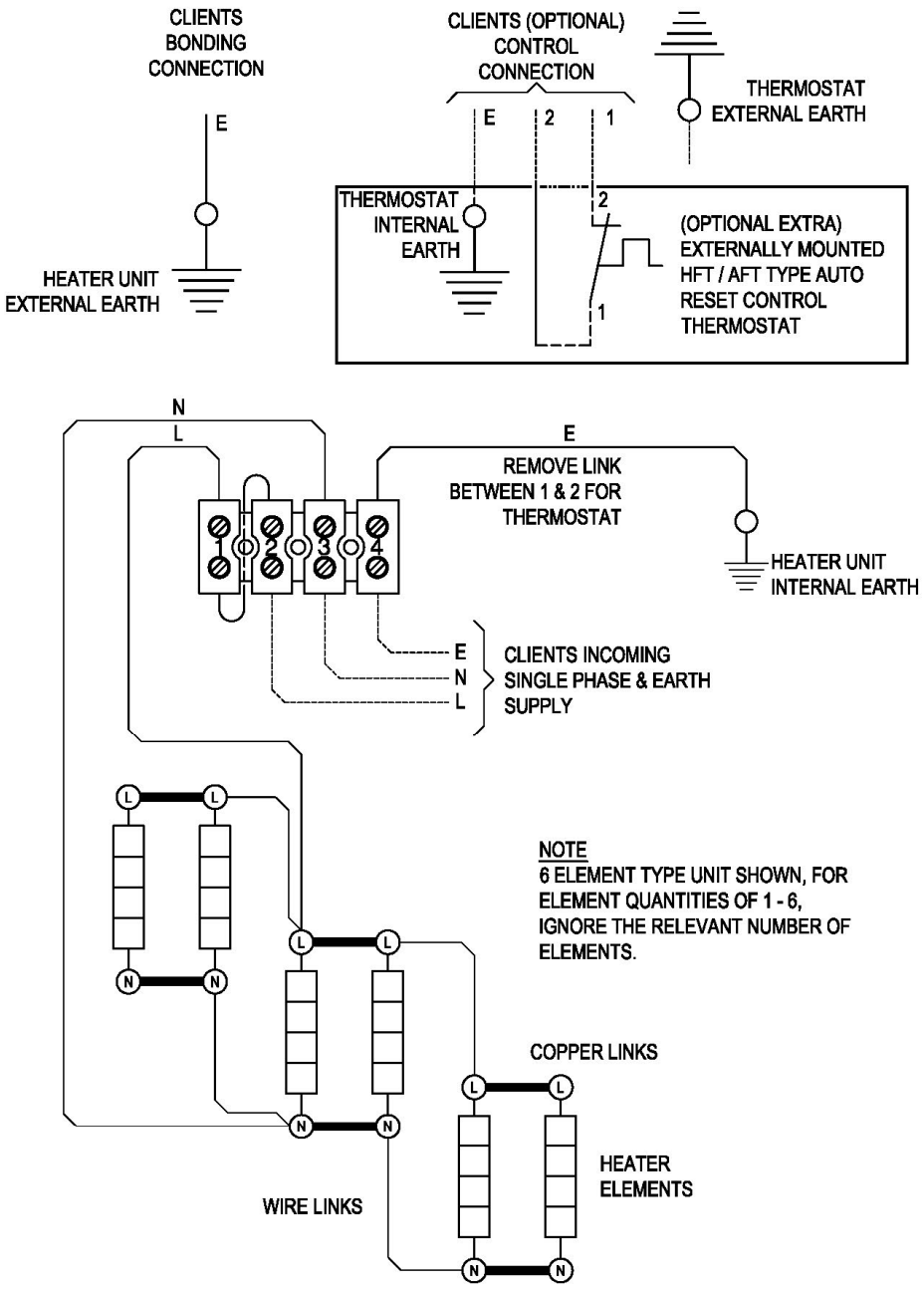
13. Wiring Diagrams



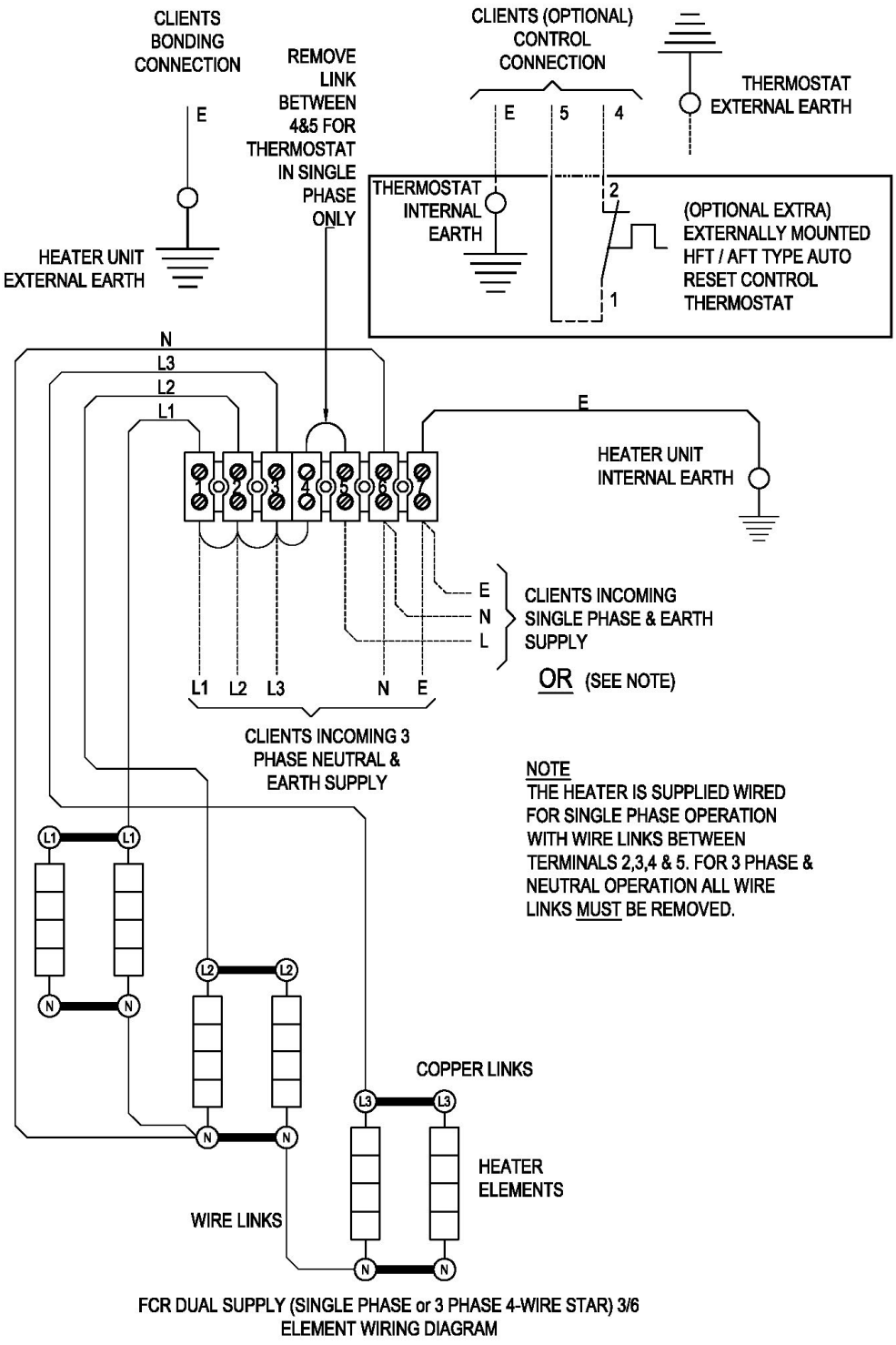
FAW DUAL SUPPLY (SINGLE PHASE or 3 PHASE 4-WIRE STAR) 3/6 ELEMENT WIRING DIAGRAM



FAW SINGLE PHASE SUPPLY 3 / 6 ELEMENT WIRING DIAGRAM

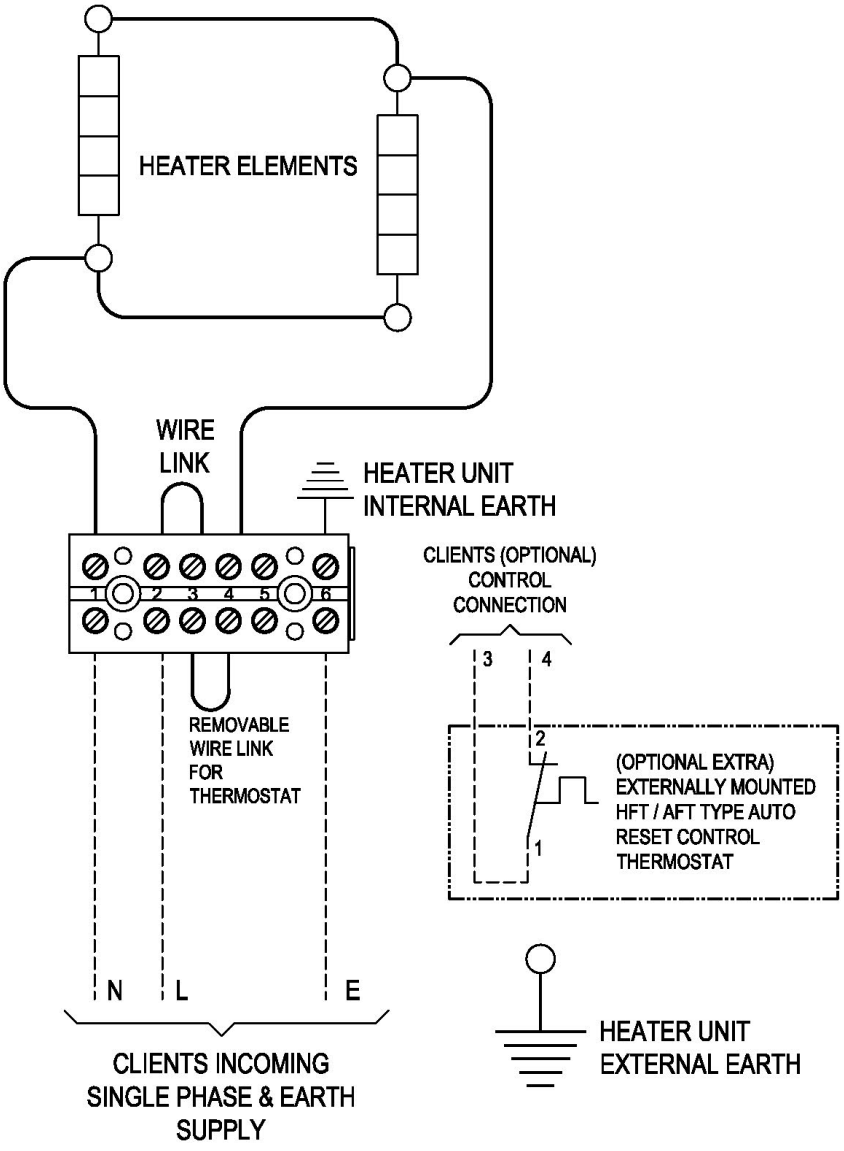


FCR SINGLE PHASE SUPPLY 3 / 6 ELEMENT WIRING DIAGRAM

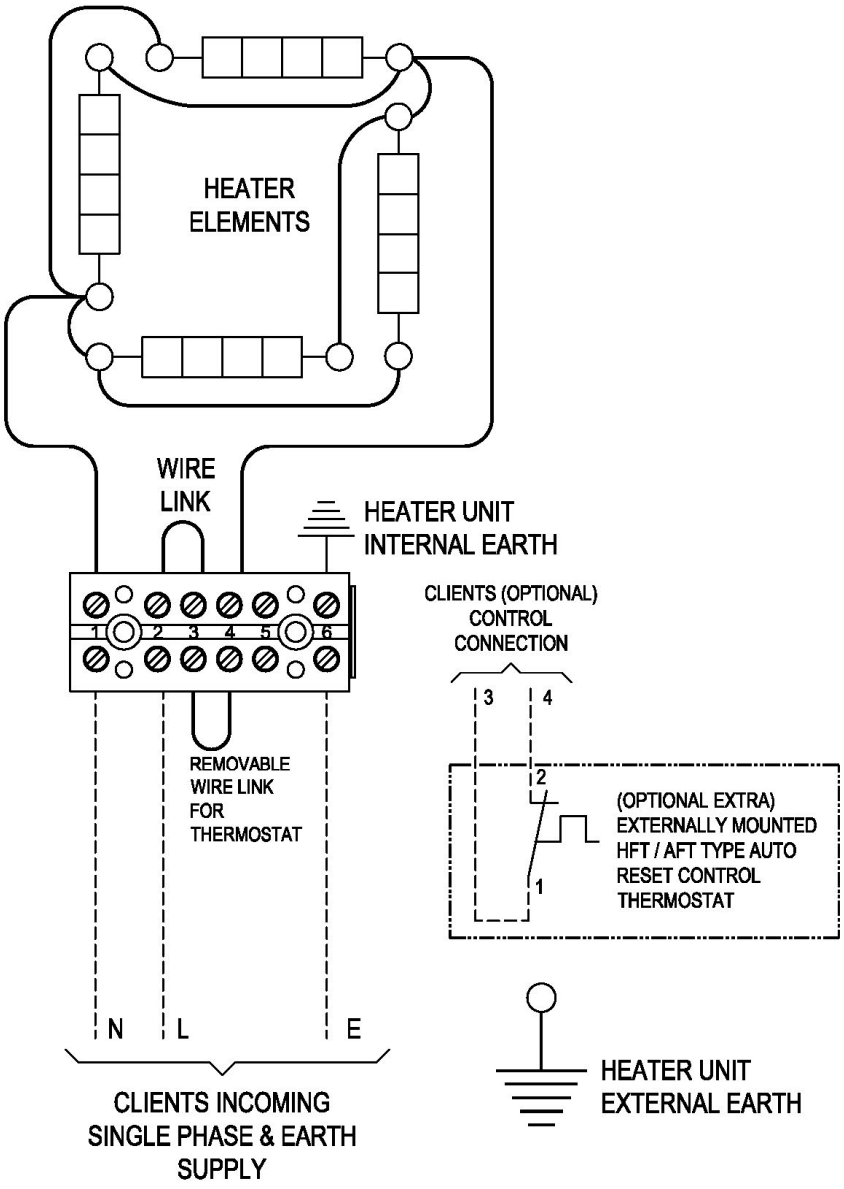


FCR DUAL SUPPLY (SINGLE PHASE or 3 PHASE 4-WIRE STAR) 3/6 ELEMENT WIRING DIAGRAM

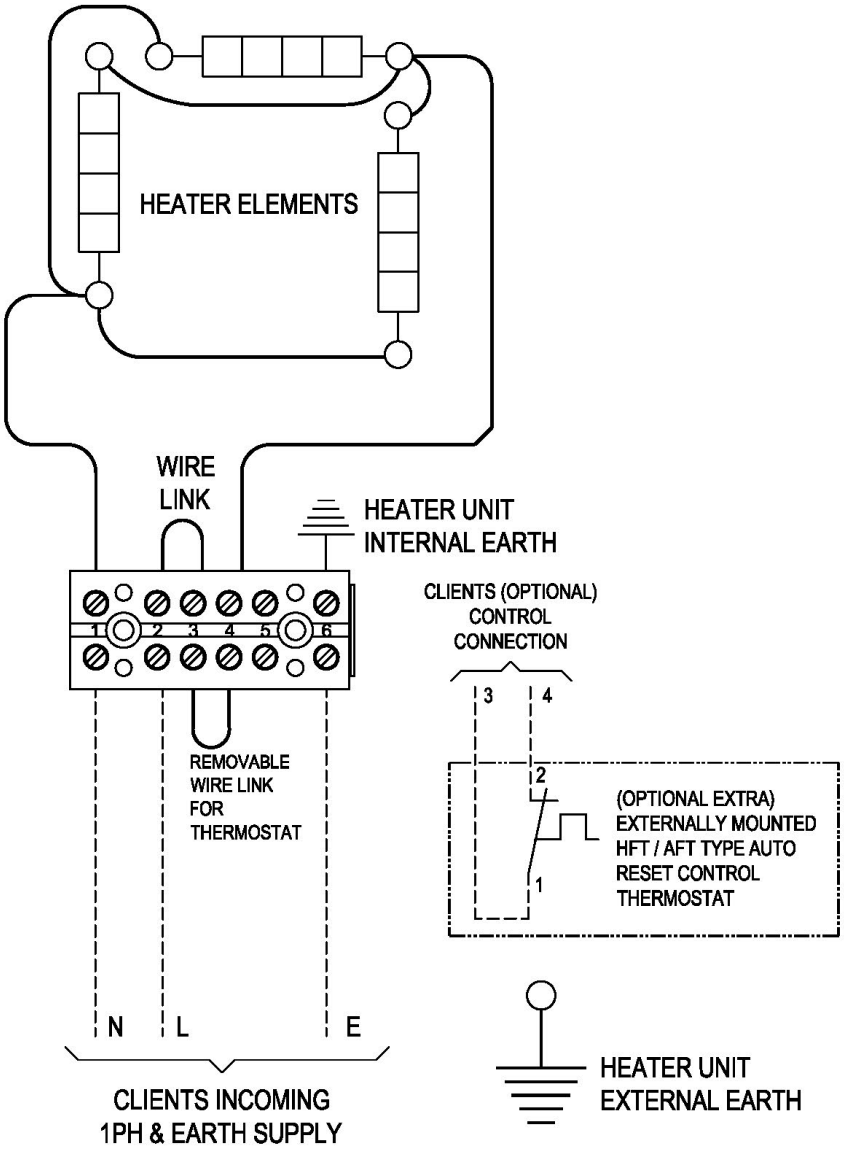
FAW -C250


HEATER ELEMENTS
WIRE
LINK
HEATER UNIT
INTERNAL EARTH
CLIENTS (OPTIONAL)
CONTROL
CONNECTION
1 2 3 4 5 6
3
4
2
1
REMOVABLE
WIRE LINK
FOR
THERMOSTAT
(OPTIONAL EXTRA)
EXTERNALLY MOUNTED
HFT / AFT TYPE AUTO
RESET CONTROL
THERMOSTAT
N
L
E
CLIENTS INCOMING
SINGLE PHASE & EARTH
SUPPLY
HEATER UNIT
EXTERNAL EARTH

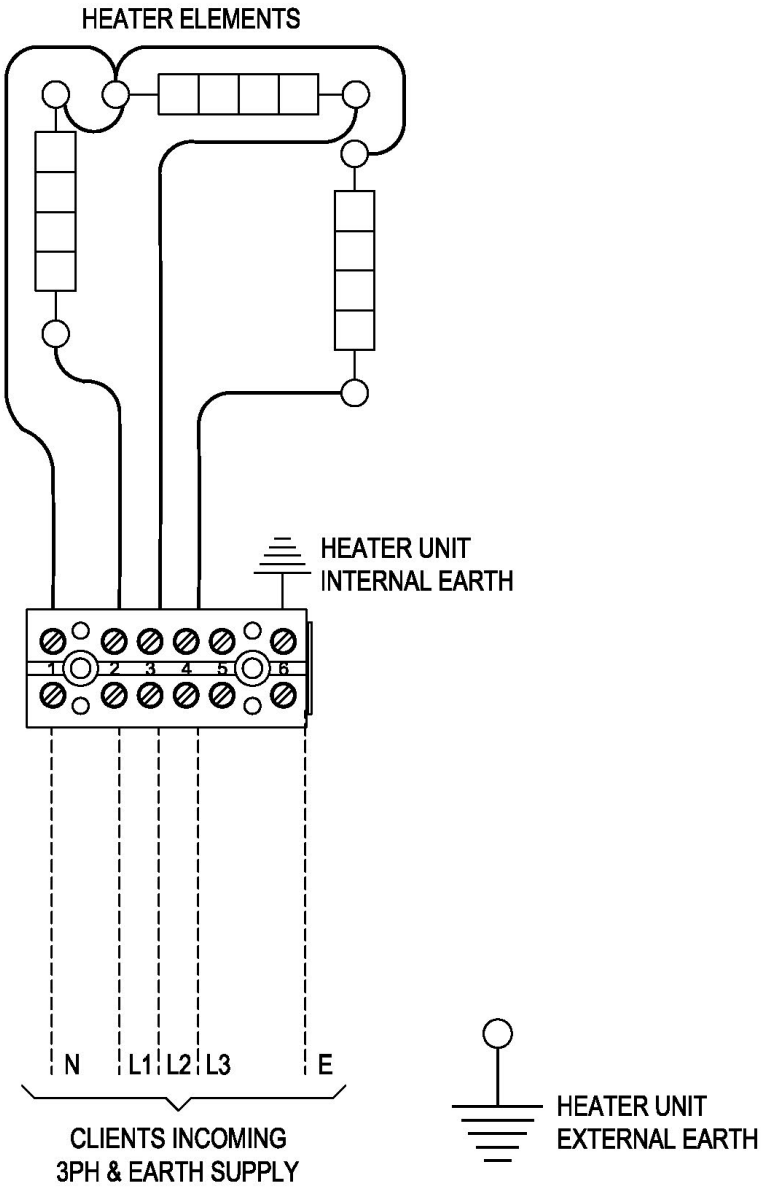
FAW-C500 & FAW-C1000



FAW-C750


HEATER ELEMENTS
WIRE LINK
HEATER UNIT INTERNAL EARTH
CLIENTS (OPTIONAL) CONTROL CONNECTION
1 2 3 4 5 6
3 4
2
1
(OPTIONAL EXTRA) EXTERNALLY MOUNTED HFT / AFT TYPE AUTO RESET CONTROL THERMOSTAT
REMOVABLE WIRE LINK FOR THERMOSTAT
N L E
CLIENTS INCOMING 1PH & EARTH SUPPLY
HEATER UNIT EXTERNAL EARTH

FAW-C750 3 PHASE SUPPLY



14. Routine Maintenance Inspection Records

EXHEAT Industrial Ltd
Threxton House
Threxton Road Ind. Est.
Watton, Thetford, Norfolk
IP25 6NG, United Kingdom
Tel: +44 (0) 1953 886 269
Fax: +44 (0) 1953 883 853
www.exheat-industrial.com

ROUTINE MAINTENANCE INSPECTION RECORD

FAW/FCR Heater

Serial No	
Description	
PO No	
Reference No	

	Inspection Checklist	**Status Codes**	**Name**	**Date**	**Comment**
	3 Monthly Inspection				
a	Check equipment for external damage or signs of deterioration				
b	Check for dust build up or restricted air flow and clean				
	6 Monthly Inspection (in addition to 3 Monthly Inspection)				
c	Check that there is no dirt, debris, loose items or moisture within the enclosure/cabinet the heater is installed within				
d	Check that all electrical connections are undamaged and tight.				
e	Check the heater insulation resistance				
f	Check all trip devices are set and functioning correctly				
g					
	12 Monthly Inspection (in addition to 3 & 6 Monthly Inspections)				
h	Check heater load resistance values				
i					

Carry out the inspection in accordance with relevant standards concerning inspection and maintenance of electrical installations in non-hazardous or hazardous areas whichever is applicable.

Verified	**Installation**	**Energised**	**EXHEAT Industrial Ltd**
Name			
Signature			
Date			

Document: FAW/FCR Inspection Check List

EXHEAT Industrial Ltd
Threxton House
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Fax: +44 (0) 1953 883 853
www.exheat-industrial.com

CHECK RECORD

Insulation Resistance

Serial Number	
Description	
PO No	
Reference No	

	Insulation Resistance M.ohm											**Supplier**	**Fabrication**	**Energised**	**Megger Test Date**
	Stage to Stage								**Phase to Earth**						
Stage	1	2	3	4	5	6	7	8	L1						
1															
2															
3															
4															
5															
6															
7															
8															

Verified	**Installation**	**Energised**	**EXHEAT Industrial Ltd**
Name			
Signature			
Date			

15. Certification Documentation

HEAT
Industrial Ltd

FAW FCR HFT

exheat-industrial.com

First Edition (OCT 2022)

Author: P. Bumstead

Refer to EXHEAT Industrial Ltd website for latest edition.

exheat-industrial.com/product