

# Fan Heaters

## Type TXI, WBK, WBG, Delta & VLE

Sinus Jevi has an extensive program of high quality fan heaters for every application. From cost effective model TXI to high power stationary model VLE, all heaters represent our many years of experience with electric heating equipment. Sinus Jevi fan heaters are characterized by their robust and efficient design in which only the best materials and most reliable components are integrated.



# SINUS JEVI



Liquids



Gasses



Solids



Spaces



Resistors

## TXI

Cost effective electric fan heater type TXI is suitable for light industrial use and other less demanding applications. These heaters are especially convenient for mobile use.

The fan-heaters are ideally suited for heating small- and medium-sized premises such as living rooms, workshops, garages, shops, storerooms, summer cottages, etc. Even larger premises, such as greenhouses, sports- and factory facilities can, by using or combining several fan-heaters, be sufficiently heated. TXI fan-heaters are manufactured and approved according to current European standards.

TXI fan heaters are produced with coated steel cabinets and with insulated safety handles. Stainless steel tubular heating elements ensure reliable and efficient heat transfer to the air flow. The fan motors do not require any specific maintenance. Both a control thermostat and safety thermostat with manual reset are a part of the heater design. With the aid of a rotary switch it is possible to select the operation mode: heater off, fan only, half power or full power. Model TXI 90 has the possibility to select between 3 power modes: 3 kW, 6 kW and 9 kW. More technical details can be found in table 2.

TXI 33 is equipped with 2 metres power cable including a (230 VAC / 50 Hz) Schuko plug. The other models have to be connected to the mains with an external mains connection cable. See table 1 for available cables.



TXI 33



TXI 50



TXI 90



TXI 150



TXI Mains Connection Cable

| Table 1 Mains Connection Cables for TXI |              |               |              |              |                                         |
|-----------------------------------------|--------------|---------------|--------------|--------------|-----------------------------------------|
| Heater type                             | Article code | EAN code      | Cable type   | Cable length | Description                             |
| TXI 50 / TXI 90                         | 0547531625A  | 8715179007287 | TXI-CAB-16-2 | 2 m          | Cable 2m 2.5mm <sup>2</sup> IP44 16A 5P |
| TXI 50 / TXI 90                         | 0547531625B  | 8715179007294 | TXI-CAB-16-5 | 5 m          | Cable 5m 2.5mm <sup>2</sup> IP44 16A 5P |
| TXI 150                                 | 0547533240A  | 8715179007300 | TXI-CAB-32-2 | 2 m          | Cable 2m 4.0mm <sup>2</sup> IP44 32A 5P |
| TXI 150                                 | 0547533240B  | 8715179007317 | TXI-CAB-32-5 | 5 m          | Cable 5m 4.0mm <sup>2</sup> IP44 32A 5P |

| Table 2 TXI FAN HEATERS TECHNICAL DATA |                                          |                                          |                                                   |                                          |
|----------------------------------------|------------------------------------------|------------------------------------------|---------------------------------------------------|------------------------------------------|
| Type                                   | TXI 33                                   | TXI 50                                   | TXI 90                                            | TXI 150                                  |
| Power                                  | 1,65 / 3,3 kW                            | 2,5 / 5 kW                               | 3 / 6 / 9 kW                                      | 7,5 / 15 kW                              |
| Current                                | 14,3A                                    | 7,2A                                     | 13,5A                                             | 21,6A                                    |
| Supply voltage                         | 230 Volt / 50 Hz                         | 3 x 400 Volt / 50 Hz                     | 3 x 400 Volt / 50 Hz                              | 3 x 400 Volt / 50 Hz                     |
| Mains connection                       | 2m cable with Schuko plug                | surface mounted CEE plug 5P / 16A        | surface mounted CEE plug 5P / 16A                 | surface mounted CEE plug 5P / 32A        |
| Operation modes                        | Off / fan only / half power / full power | Off / fan only / half power / full power | Off / fan only / 1/3 power 2/3 power / full power | Off / fan only / half power / full power |
| Temperature controller                 | built-in thermostat                      | built-in thermostat                      | built-in thermostat                               | built-in thermostat                      |
| Air volume flow                        | 400 m <sup>3</sup> /h                    | 400 m <sup>3</sup> /h                    | 700 m <sup>3</sup> /h                             | 1300 m <sup>3</sup> /h                   |
| Weight                                 | 7.5 kg                                   | 8 kg                                     | 10 kg                                             | 15.5 kg                                  |
| Enclosure colour                       | yellow                                   | yellow                                   | yellow                                            | yellow                                   |
| Fan diameter                           | 230 mm                                   | 230 mm                                   | 254 mm                                            | 300 mm                                   |
| Dimensions Width                       | 250 mm                                   | 250 mm                                   | 350 mm                                            | 350 mm                                   |
| Depth                                  | 250 mm                                   | 250 mm                                   | 330 mm                                            | 440 mm                                   |
| Height                                 | 420 mm                                   | 420 mm                                   | 480 mm                                            | 600 mm                                   |
| Protection degree                      | IP44                                     | IP44                                     | IP44                                              | IP44                                     |
| Article number                         | 753 001 0331A                            | 753 001 0503A                            | 753 001 0903A                                     | 753 001 1503A                            |
| EAN code                               | 8715179007218                            | 8715179007225                            | 8715179007232                                     | 8715179007249                            |

## WBK

Our WBK air heaters have been designed for industrial application. Because of their high reliability, they are especially suitable for all applications at an ambient temperature of up to 35°C.

As the construction of the WBK is in accordance with IP44 insulation class I, it is also suitable for use in damp spaces (spray-proof). Because of the low surface temperature, it is safe to use in places of easy access. However, it is not to be used in spaces containing flammable or combustible materials. The heater is made of stainless steel closed tubular elements, in which a glow-spiral is encased, in a 1- or 3-phase construction. It is designed for durability and provided with pre-heating and lag control. Connection is via cable gland at the back.

## CONSTRUCTION

WBK air heaters consist of a steel housing, containing closed tubular elements, along which a 1-phase fan blows air. In order to distribute warmth evenly, they have a high air-output. These heaters are delivered with a universal bracket, allowing them to be mounted on the floor, the wall or the ceiling.

**Finish:** a durable layer of red epoxy paint for the housing and a layer of black epoxy paint for the bracket. Connection for an external room thermostat is provided as standard.

This appliance meets the CE directives.

## APPLICATION

For industrial application in drying rooms, as frost protection, in engine rooms, workshops, etc.

They can also be used as domestic appliances in garages, cellars, offices, etc.

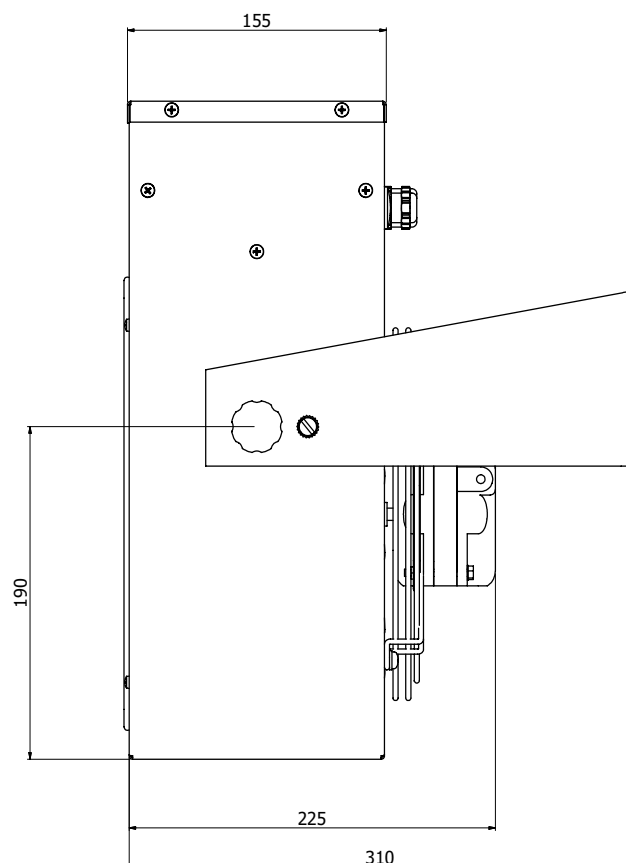
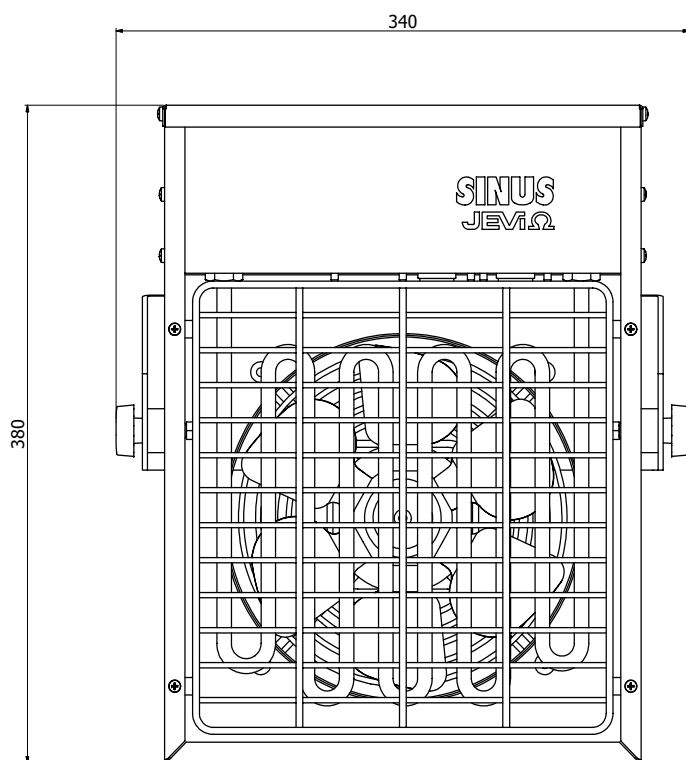
## STANDARD VOLTAGES

230 Volt AC 1-phase, 50 Hz.

3x400 Volt 3-phase, 50 Hz.



| <b>TECHNICAL DATA</b>     |        | <b>WBK-TYPE UNIVERSAL AIR HEATERS</b> |                     |                     |                     |
|---------------------------|--------|---------------------------------------|---------------------|---------------------|---------------------|
| <b>Type</b>               |        | <b>WBK 2</b>                          | <b>WBK 3</b>        | <b>WBK 3/3</b>      | <b>WBK 4,5/3</b>    |
| Output                    |        | 2 kW                                  | 3 kW                | 3 kW                | 4,5 kW              |
| Connection voltage        |        | 230 Volt                              | 230 Volt            | 3x400 Volt          | 3x400 Volt          |
| Current intensity         |        | 8.7 A                                 | 13 A                | 3 x 5.8 A           | 3 x 6.5 A           |
| Control possibilities     |        | -                                     | -                   | -                   | -                   |
| Temperature increase      |        | 20 °C                                 | 28 °C               | 28 °C               | 42 °C               |
| Temperature adjustability |        | external thermostat                   | external thermostat | external thermostat | external thermostat |
| Air volume                |        | 300 m³/h                              | 300 m³/h            | 300 m³/h            | 300 m³/h            |
| Weight                    |        | 9 kg                                  | 9 kg                | 9.5 kg              | 9.5 kg              |
| Dimensions                | Width  | 340 mm                                | 340 mm              | 340 mm              | 340 mm              |
|                           | Depth  | 300 mm                                | 300 mm              | 300 mm              | 300 mm              |
|                           | Height | 380 mm                                | 380 mm              | 380 mm              | 380 mm              |
| Max. height incl. bracket |        | 410 mm                                | 410 mm              | 410 mm              | 410 mm              |
| Article number            |        | 761 098 0223A                         | 761 098 0323A       | 761 098 0340A       | 761 098 0440A       |
| EAN code                  |        | 8715179003456                         | 8715179003463       | 8715179003470       | 8715179003487       |



## WBG

Our WBG air heaters have been designed for industrial application. Because of their high reliability, they are especially suitable for all heating applications at an ambient temperature of up to 35°C.

As the WBG's construction is in accordance with IP44 insulation class I, it is also suitable for use in damp spaces (spray-proof). Because of the low surface temperature, it is suitable for use in places of easy access. However, it is not to be used in spaces containing flammable or combustible materials.

The heater is made of stainless steel closed tubular elements, in which a glow-spiral is encased, in 3-phase construction. It is designed for durability. The WBG can also be connected 1 phase. Connection is via a cable gland at the back. As standard, these air heaters are provided with a group switch, preheating and lag control and have a connection for an external room thermostat.

## CONSTRUCTION

WBG air heaters consist of a steel housing, containing closed tubular elements, along which the built-in fan blows air. In order to distribute warmth evenly, they have a high air-output. This also gives the heaters their high drying capacity.

These heaters are delivered with a universal bracket, allowing them to be mounted on the floor, the wall or the ceiling.

**Finish:** a durable layer of red epoxy paint for the housing and a layer of black epoxy paint for the bracket. The air heater is spray-proof (IP44)

## APPLICATION

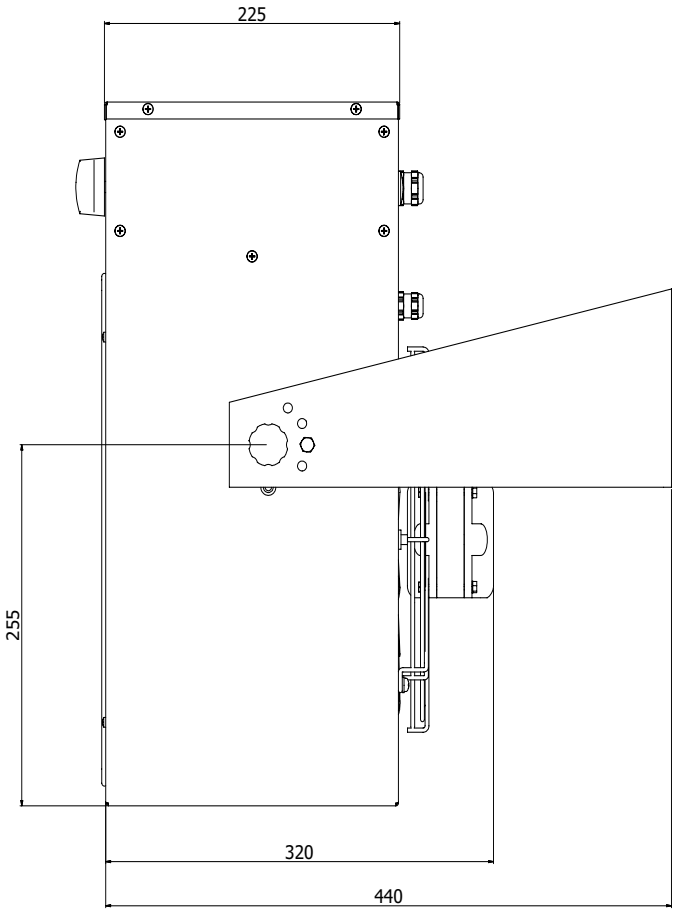
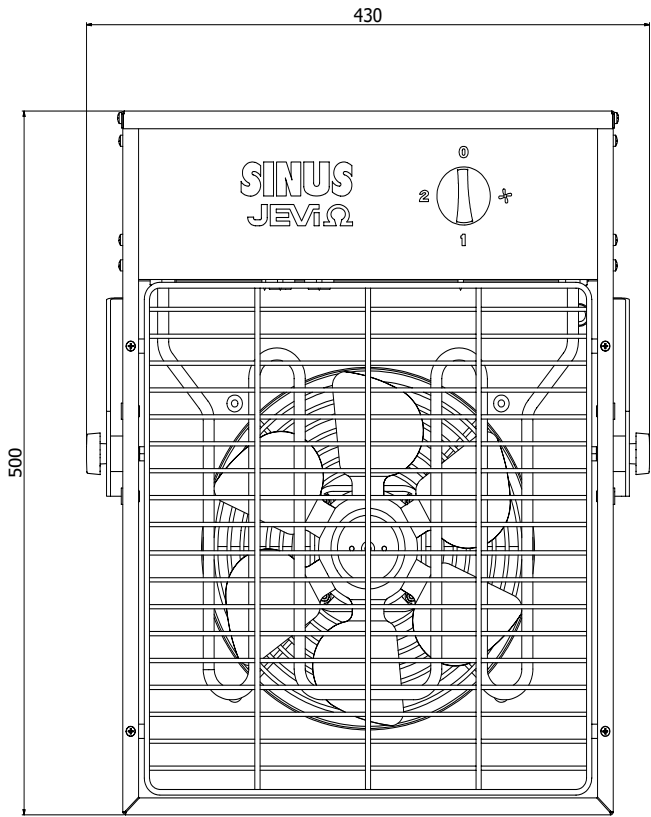
For industrial application in drying rooms, as frost protection, in engine rooms, work shops and so forth. They can also be used as a domestic appliances in garages, cellars, offices, etc.

## STANDARD VOLTAGES

3x400 Volt AC 3 phase, 50 Hz.



| TECHNICAL DATA            |        | WBG-TYPE UNIVERSAL AIR HEATERS |                     |                     |                     |
|---------------------------|--------|--------------------------------|---------------------|---------------------|---------------------|
| Type                      |        | WBG 6                          | WBG 9               | WBG 12              | WBG 15              |
| Output                    |        | 6 kW                           | 9 kW                | 12 kW               | 15 kW               |
| Connection voltage        |        | 3 x 400 Volt                   | 3 x 400 Volt        | 3 x 400 Volt        | 3 x 400 Volt        |
| Current intensity         |        | 3 x 8.7 A                      | 3 x 13 A            | 3 x 17.4 A          | 3 x 21.7 A          |
| Control possibilities     |        | 3 - 6 kW                       | 4.5 - 9 kW          | 6 - 12 kW           | 7.5 - 15 kW         |
| Temperature increase      |        | 25°C                           | 38°C                | 25°C                | 32°C                |
| Temperature adjustability |        | external thermostat            | external thermostat | external thermostat | external thermostat |
| Air volume                |        | 650 m³/h                       | 650 m³/h            | 1300 m³/h           | 1300 m³/h           |
| Weight                    |        | 16.5 kg                        | 16.5 kg             | 17 kg               | 17 kg               |
| Dimensions                | Width  | 430 mm                         | 430 mm              | 430 mm              | 430 mm              |
|                           | Depth  | 360 mm                         | 360 mm              | 360 mm              | 360 mm              |
|                           | Height | 500 mm                         | 500 mm              | 500 mm              | 500 mm              |
| Max. height incl. bracket |        | 565 mm                         | 565 mm              | 565 mm              | 565 mm              |
| Article number            |        | 762 098 0640A                  | 762 098 0940A       | 762 098 1240A       | 762 098 1540A       |
| EAN code                  |        | 8715179003494                  | 8715179003500       | 8715179003517       | 8715179003524       |



## DELTA

Delta is rigid and reliable fan heater designed for harsh weather and rough environments, where fine materials and performance are required for example on building and construction sites or in ship building industries. Delta is also used for more permanent installations in production areas, warehouses, garages, factories and stables. It is easy to change from portable to permanent by using a wall bracket instead of the hand rail. The wall bracket must be ordered separately.

### TECHNICAL DATA

Delta is supplied with a 0 - 40°C thermostat which ensures an optimum service and minimizes the electrical consumption. A thermocut is also installed for safety against superheating. You can also order Delta heaters supplied with a 24 hour timerfunction (T). Delta is designed with an inner round shell which ensures that the entire air flow passes over the heating elements. In this way problems with cold areas and stalling airflow are avoided.

The fan heater is supplied in 3 x 400 V + PE, but very often applications require different voltages, therefore all types are available from 110 V - 690 V.  
Delta is moisture proof to IPX4.

### PERMANENT INSTALLATION

The hand rail is removed, and by using the wall bracket the fan heater can be mounted vertically or in a 15° angle.

### ELECTRICAL INSTALLATION

Permanent installation must be carried out by an authorised electrician in compliance with current regulations.

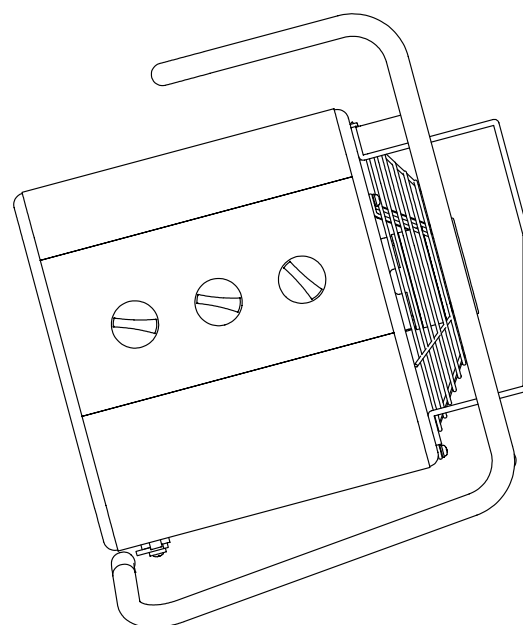
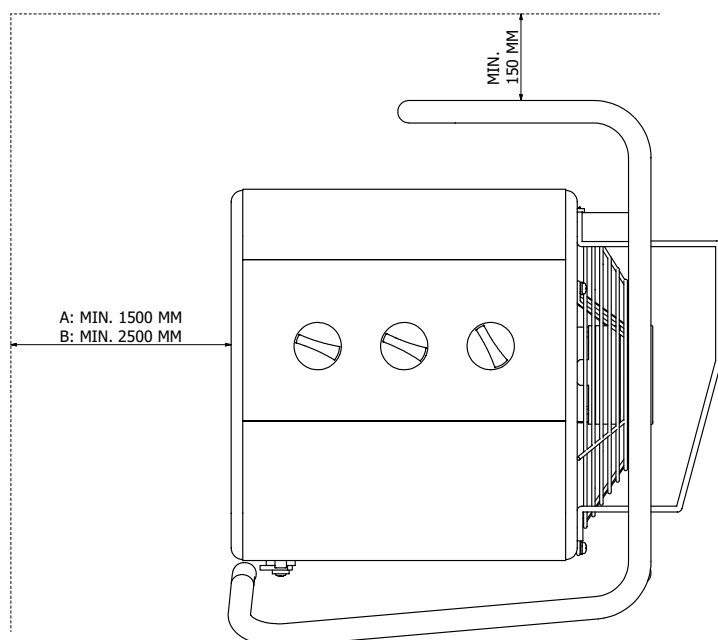
### COATING

Delta is constructed of electrogalvanized steelplates coated with a 20 my coating in RAL 7004 (light grey).

In larger quantities the fan heaters can be supplied in other colours.



| TECHNICAL DATA   |        |              | DELTA UNIVERSAL AIR HEATERS |        |        |                 |          |                |
|------------------|--------|--------------|-----------------------------|--------|--------|-----------------|----------|----------------|
| Type             | Output | Voltage      | Width                       | Height | Depth  | Weight          | M³/h     | Article number |
| Delta 3000 (A)   | 3 kW   | 230 Volt     | 410 mm                      | 435 mm | 420 mm | approx. 14 kg   | 400/650  | 754 030 230A   |
| Delta 3000T (A)  | 3 kW   | 230 Volt     | 410 mm                      | 435 mm | 420 mm | approx. 14 kg   | 400/650  | 754 030 230T   |
| Delta 3000 (A)   | 3 kW   | 3 x 400 Volt | 410 mm                      | 435 mm | 420 mm | approx. 14 kg   | 400/650  | 754 030 400A   |
| Delta 3000T (A)  | 3 kW   | 3 x 400 Volt | 410 mm                      | 435 mm | 420 mm | approx. 14 kg   | 400/650  | 754 030 400T   |
| Delta 3000 (A)   | 3 kW   | 3 x 440 Volt | 410 mm                      | 435 mm | 420 mm | approx. 14 kg   | 400/650  | 754 030 440A   |
| Delta 6000 (A)   | 6 kW   | 3 x 400 Volt | 410 mm                      | 435 mm | 420 mm | approx. 14,6 kg | 400/650  | 754 060 400A   |
| Delta 6000T (A)  | 6 kW   | 3 x 400 Volt | 410 mm                      | 435 mm | 420 mm | approx. 14,6 kg | 400/650  | 754 060 400T   |
| Delta 6000 (A)   | 6 kW   | 3 x 440 Volt | 410 mm                      | 435 mm | 420 mm | approx. 14,6 kg | 400/650  | 754 060 440A   |
| Delta 9000 (A)   | 9 kW   | 3 x 400 Volt | 410 mm                      | 435 mm | 420 mm | approx. 16 kg   | 500/800  | 754 090 400A   |
| Delta 9000T (A)  | 9 kW   | 3 x 400 Volt | 410 mm                      | 435 mm | 420 mm | approx. 16 kg   | 500/800  | 754 090 400T   |
| Delta 9000 (A)   | 9 kW   | 3 x 440 Volt | 410 mm                      | 435 mm | 420 mm | approx. 16 kg   | 500/800  | 754 090 440A   |
| Delta 15000 (B)  | 15 kW  | 3 x 400 Volt | 505 mm                      | 540 mm | 510 mm | approx. 23 kg   | 800/1400 | 754 150 400A   |
| Delta 15000T (B) | 15 kW  | 3 x 400 Volt | 505 mm                      | 540 mm | 510 mm | approx. 23 kg   | 800/1400 | 754 150 400T   |
| Delta 15000 (B)  | 15 kW  | 3 x 440 Volt | 505 mm                      | 540 mm | 510 mm | approx. 23 kg   | 800/1400 | 754 150 440A   |
| Delta 21000 (B)  | 21 kW  | 3 x 400 Volt | 505 mm                      | 540 mm | 510 mm | approx. 27 kg   | 800/1400 | 754 210 400A   |
| Delta 21000T (B) | 21 kW  | 3 x 400 Volt | 505 mm                      | 540 mm | 510 mm | approx. 27 kg   | 800/1400 | 754 210 400T   |
| Delta 21000 (B)  | 21 kW  | 3 x 440 Volt | 505 mm                      | 540 mm | 510 mm | approx. 27 kg   | 800/1400 | 754 210 440A   |
| Wall bracket A   |        |              |                             |        |        |                 |          | 754 000 100A   |
| Wall bracket B   |        |              |                             |        |        |                 |          | 754 000 200A   |



## VLE HEATERS



### VLE

The VLE fan heaters are for fix mounting (non-portable) and are ideal for use in areas where high output is needed. It has a very stable construction and can therefore be used where high vibrations can occur. The fan heater is made of materials able to withstand aggressive effects at sea, on offshore installations, in warehouses and for large manufacturing facilities.

VLE is produced in 2 different types of materials, recommended for following uses:

- ° Stainless steel AISI 316L - for outdoor and corrosive areas like offshore and other harsh environments
- ° Cabinet in galvanized steel and with coated steel control panel mainly for indoor use and non-corrosive areas like onshore use, sports halls, warehouses and manufacturing facilities.

Regardless of which material is selected, the heating elements (stainless steel AISI 316L) are bright annealed.

The power is divided into 3 steps (low - medium - full power). This gives you a fan heater with a large window of power in only one unit. The fan provides an airflow/circulation and air heating for outdoor and indoor installation. Power can easily be changed manually on the outside of the control panel to give you the preferred output. For change of airflow you need an *external fan unit adjustment control* - see under "accessories for VLE fan heaters".

### STANDARDS AND APPROVALS

- ° CE
- ° EN 60335-1:2012
- ° EN 60335-2-30:2009
- ° EN 60204-1:2006
- ° EN 62233:2008
- ° IEC/EN 61000-6-2:2006
- ° IEC/EN 61000-6-4:2007
- ° EN 50581:2012

Our VLE fan heaters can be approved by DNV, ABS and other 3 parties.

### TECHNICAL DATA

#### Voltage range

- ° 1x230 Volt and 3x230 Volt to 3x690 Volt

#### Beschermingsklasse voor ventilatormotor:

- ° IP44 (VLE4)
- ° IP54 (VLE5 of VLE6)

#### Beschermingsklasse regelpaneel:

- ° IP66 voor alle 3 de modellen

#### Integrated room thermostat:

0 - 40°C thermostat, ensuring optimum operation and minimising energy consumption

#### Integrated safety components:

- ° TSH with automatic reset and TSHH with manual reset to prevent the motor to overheat

#### Cable glands:

VLE fan heaters above 16A are pre-fitted with M32 cable glands. Reducing parts for M20 and M25 cable glands are also included. Fan heaters under 16A are pre-fitted with M20. Standard material for cable glands - polyamide. Other material on request.

#### Lifting lugs:

Regardless of model, the heater weighs more than 25kg and is therefore supplied with lifting lugs to ensure better working conditions during installation and maintenance.

### ACCESSORIES FOR VLE FAN HEATERS

In addition to our standard range shown on the following pages, optional extras are available:

- ° External room thermostat 0-40°C, IP44
- ° External room thermostat 0-40°C, IP65
- ° External fan unit start/stop circuit breaker, IP66. Allows the heater to be used to circulate cold air
- ° External fan unit adjustment control. Noise level can be reduced to 50dB at low fan speed.

See our standard range on the next 3 pages.

## VLE HEATERS STANDARD PROGRAMME

### VLE-4

- ° Type: VLE 4
- ° Power: 3-6-9 kW or 3-9-12 kW (3 steps)
- ° Material: Stainless steel AISI 316L or cabinet in galvanized steel with coated control panel.
- ° Size: W630 mm x H460 mm x D590 mm
- ° Frequency: 50/60 Hz
- ° Maximum volume of air at nominal fan speed:  
1700/2000 m³/h - 50/60Hz (air volume at low fan speed:  
900/1050 m³/h - 50/60 Hz possible with the purchase of a regulator, see previous page)
- ° Maximum throw at nominal fan speed: 10/11 m - 50/60Hz
- ° Degree of protection for control panel: IP66
- ° Degree of protection for fan motor: IP44
- ° Sound level at nominal fan speed: 58dB (measured at a distance of 5 metres from the unit) Can be reduced to 50dB when using a regulator for the fan unit) see page 9.



| Article number | Material                                                | Type Power (3 steps) | Voltage    | Current (min. supply) | Rise of temperature at nominal fan speed | Weight |
|----------------|---------------------------------------------------------|----------------------|------------|-----------------------|------------------------------------------|--------|
| 4644032302A    | Stainless steel AISI 316L                               | 1-2-3 kW             | 1x230 Volt | 13A                   | 5/4°C                                    | 40kg   |
| 4644092302A    |                                                         | VLE 4 3-6-9 kW       | 3x230 Volt | 23A                   | 5/4°C                                    | 45kg   |
| 4644093802A    |                                                         |                      | 3x380 Volt | 14A                   | 5/4°C                                    | 42kg   |
| 4644094002A    |                                                         |                      | 3x400 Volt | 13A                   | 10/8°C                                   | 42kg   |
| 4644094402A    |                                                         |                      | 3x440 Volt | 12A                   | 10/8°C                                   | 42kg   |
| 4644094802A    |                                                         |                      | 3x480 Volt | 11A                   | 16/13°C                                  | 42kg   |
| 4644096902A    |                                                         |                      | 3x690 Volt | 8A                    | 16/13°C                                  | 42kg   |
| 4644122302A    | Stainless steel AISI 316                                | VLE 4 3-9-12 kW      | 3x230 Volt | 31A                   | 5/4°C                                    | 46kg   |
| 4644123802A    |                                                         |                      | 3x380 Volt | 19A                   | 5/4°C                                    | 46kg   |
| 4644124002A    |                                                         |                      | 3x400 Volt | 18A                   | 16/13°C                                  | 46kg   |
| 4644124402A    |                                                         |                      | 3x440 Volt | 16A                   | 16/13°C                                  | 46kg   |
| 4644124802A    |                                                         |                      | 3x480 Volt | 15A                   | 21/18°C                                  | 43kg   |
| 4644126902A    |                                                         |                      | 3x690 Volt | 11A                   | 21/18°C                                  | 43kg   |
| 4644092301A    | Cabinet Galvanized steel and coated steel control panel | VLE 4 3-6-9 kW       | 3x230 Volt | 23A                   | 5/4°C                                    | 42kg   |
| 4644093801A    |                                                         |                      | 3x380 Volt | 14A                   | 5/4°C                                    | 42kg   |
| 4644094001A    |                                                         |                      | 3x400 Volt | 13A                   | 10/8°C                                   | 42kg   |
| 4644094401A    |                                                         |                      | 3x440 Volt | 12A                   | 10/8°C                                   | 42kg   |
| 4644094801A    |                                                         |                      | 3x480 Volt | 11A                   | 16/13°C                                  | 42kg   |
| 4644096901A    |                                                         |                      | 3x690 Volt | 8A                    | 16/13°C                                  | 42kg   |
| 4644122301A    | Cabinet Galvanized steel and coated steel control panel | VLE 4 3-9-12 kW      | 3x230 Volt | 31A                   | 5/4°C                                    | 46kg   |
| 4644123801A    |                                                         |                      | 3x380 Volt | 19A                   | 5/4°C                                    | 46kg   |
| 4644124001A    |                                                         |                      | 3x400 Volt | 18A                   | 16/13°C                                  | 46kg   |
| 4644124401A    |                                                         |                      | 3x440 Volt | 16A                   | 16/13°C                                  | 46kg   |
| 4644124801A    |                                                         |                      | 3x480 Volt | 15A                   | 21/18°C                                  | 43kg   |
| 4644126901A    |                                                         |                      | 3x690 Volt | 11A                   | 21/18°C                                  | 43kg   |

**VLE-5**

- ° Type: VLE 5
- ° Power: 6-9-15 kW or 9-15-24 kW (3 steps)
- ° Material: Stainless steel AISI 316L or cabinet in galvanized steel with coated control panel.
- ° Size: W740 mm x H570 mm x D690 mm
- ° Frequency: 50/60 Hz
- ° Maximum volume of air at nominal fan speed:  
3500/4200 m³/h - 50/60Hz (air volume at low fan speed:  
2600/3100 m³/h - 50/60 Hz possible with the purchase of a regulator, see previous page)
- ° Maximum throw at nominal fan speed: 12/14 m - 50/60Hz
- ° Degree of protection for control panel: IP66
- ° Degree of protection for fan motor: IP54
- ° Sound level at nominal fan speed: 65dB (measured at a distance of 5 metres from the unit) Can be reduced to 56dB when using a regulator for the fan unit) see page 9.



| Article number | Material                                                | Type Power (3 steps) | Voltage    | Current (min. supply) | Rise of temperature at nominal fan speed | Weight |
|----------------|---------------------------------------------------------|----------------------|------------|-----------------------|------------------------------------------|--------|
| 4645152302A    | Stainless steel AISI 316L                               | VLE 5<br>6-9-15 kW   | 3x230 Volt | 38A                   | 6/5°C                                    | 62kg   |
| 4645153802A    |                                                         |                      | 3x380 Volt | 23A                   | 6/5°C                                    | 58kg   |
| 4645154002A    |                                                         |                      | 3x400 Volt | 22A                   | 9/8°C                                    | 58kg   |
| 4645154402A    |                                                         |                      | 3x440 Volt | 20A                   | 9/8°C                                    | 58kg   |
| 4645154802A    |                                                         |                      | 3x480 Volt | 19A                   | 16/13°C                                  | 58kg   |
| 4645156902A    |                                                         |                      | 3x690 Volt | 13A                   | 16/13°C                                  | 58kg   |
| 4645242302A    | Stainless steel AISI 316                                | VLE 5<br>9-15-24 kW  | 3x230 Volt | 61A                   | 9/7°C                                    | 65kg   |
| 4645243802A    |                                                         |                      | 3x380 Volt | 37A                   | 9/7°C                                    | 65kg   |
| 4645244002A    |                                                         |                      | 3x400 Volt | 35A                   | 16/13°C                                  | 65kg   |
| 4645244402A    |                                                         |                      | 3x440 Volt | 32A                   | 16/13°C                                  | 65kg   |
| 4645244802A    |                                                         |                      | 3x480 Volt | 29A                   | 26/21°C                                  | 61kg   |
| 4645246902A    |                                                         |                      | 3x690 Volt | 21A                   | 26/21°C                                  | 61kg   |
| 4645152301A    | Cabinet Galvanized steel and coated steel control panel | VLE 5<br>6-9-15 kW   | 3x230 Volt | 38A                   | 6/5°C                                    | 62kg   |
| 4645153801A    |                                                         |                      | 3x380 Volt | 23A                   | 6/5°C                                    | 58kg   |
| 4645154001A    |                                                         |                      | 3x400 Volt | 22A                   | 9/8°C                                    | 58kg   |
| 4645154401A    |                                                         |                      | 3x440 Volt | 20A                   | 9/8°C                                    | 58kg   |
| 4645154801A    |                                                         |                      | 3x480 Volt | 19A                   | 16/13°C                                  | 58kg   |
| 4645156901A    |                                                         |                      | 3x690 Volt | 13A                   | 16/13°C                                  | 58kg   |
| 4645242301A    | Cabinet Galvanized steel and coated steel control panel | VLE 5<br>9-15-24 kW  | 3X230 Volt | 61A                   | 9/7°C                                    | 65kg   |
| 4645243801A    |                                                         |                      | 3x380 Volt | 37A                   | 9/7°C                                    | 65kg   |
| 4645244001A    |                                                         |                      | 3x400 Volt | 35A                   | 16/13°C                                  | 65kg   |
| 4645244401A    |                                                         |                      | 3x440 Volt | 32A                   | 16/13°C                                  | 65kg   |
| 4645244801A    |                                                         |                      | 3x480 Volt | 29A                   | 26/21°C                                  | 61kg   |
| 4645246901A    |                                                         |                      | 3x690 Volt | 21A                   | 26/21°C                                  | 61kg   |

**VLE-6**

- ° Type: VLE 6
- ° Power: 12-18-30 kW or 12-24-36 kW (3 steps)
- ° Material: Stainless steel AISI 316L or cabinet in galvanized steel with coated control panel.
- ° Size: W855 mm x H685 mm x D760 mm
- ° Frequency: 50/60 Hz
- ° Maximum volume of air at nominal fan speed:  
5300/6300 m<sup>3</sup>/h - 50/60Hz (air volume at low fan speed:  
3700/4400 m<sup>3</sup>/h - 50/60 Hz possible with the purchase of a regulator, see previous page)
- ° Maximum throw at nominal fan speed: 15/18 m - 50/60Hz
- ° Degree of protection for control panel: IP66
- ° Degree of protection for fan motor: IP54
- ° Sound level at nominal fan speed: 68dB (measured at a distance of 5 metres from the unit) Can be reduced to 58dB when using a regulator for the fan unit) see page 9.



| Article number | Material                                                | Type Power (3 steps) | Voltage    | Current (min. supply) | Rise of temperature at nominal fan speed | Weight |
|----------------|---------------------------------------------------------|----------------------|------------|-----------------------|------------------------------------------|--------|
| 4646304002A    | Stainless steel AISI 316L                               | VLE 6<br>12-18-30 kW | 3x400 Volt | 44A                   | 7/6°C                                    | 80kg   |
| 4646304402A    |                                                         |                      | 3x440 Volt | 40A                   | 12/9°C                                   | 80kg   |
| 4646304802A    |                                                         |                      | 3x480 Volt | 37A                   | 19/15°C                                  | 80kg   |
| 4646306902A    |                                                         |                      | 3x690 Volt | 26A                   | 19/15°C                                  | 80kg   |
| 4646364002A    | Stainless steel AISI 316                                | VLE 6<br>12-24-36 kW | 3x400 Volt | 52A                   | 7/6°C                                    | 82kg   |
| 4646364402A    |                                                         |                      | 3x440 Volt | 48A                   | 16/12°C                                  | 82kg   |
| 4646364802A    |                                                         |                      | 3x480 Volt | 44A                   | 23/18°C                                  | 82kg   |
| 4646366902A    |                                                         |                      | 3x690 Volt | 31A                   | 23/18°C                                  | 82kg   |
| 4646304001A    | Cabinet Galvanized steel and coated steel control panel | VLE 6<br>12-18-30 kW | 3x400 Volt | 44A                   | 7/6°C                                    | 80kg   |
| 4646304401A    |                                                         |                      | 3x440 Volt | 40A                   | 12/9°C                                   | 80kg   |
| 4646304801A    |                                                         |                      | 3x480 Volt | 37A                   | 19/15°C                                  | 80kg   |
| 4646306901A    |                                                         |                      | 3x690 Volt | 26A                   | 19/15°C                                  | 80kg   |
| 4646364001A    | Cabinet Galvanized steel and coated steel control panel | VLE 5<br>12-24-36 kW | 3x400 Volt | 52A                   | 7/6°C                                    | 82kg   |
| 4646364401A    |                                                         |                      | 3x440 Volt | 48A                   | 16/12°C                                  | 82kg   |
| 4646364801A    |                                                         |                      | 3x480 Volt | 44A                   | 23/18°C                                  | 82kg   |
| 4646366901A    |                                                         |                      | 3x690 Volt | 31A                   | 23/18°C                                  | 82kg   |

**SHK 15 (TORNADO)**

3 x 400 Volt. With built-in room thermostat (0-40°C and frost protection). Unique residual heat control, thermal protection, fan setting and wheel set. There is a connection for an external room thermostat (RTC) and flexi pipe. The SHK15 is waterproof IP44.

**SHK 10 (TYPHOON)**

3 x 400 Volt. With unique residual heat control, thermal protection, fan setting and wheel set.

There is a connection for an external room thermostat (RTC) and flexi pipe. The SHK 15 is waterproof IP44.

**FLEXI-PIPE**

A flexible air hose of 6 meters with coupler. For heating in inaccessible places.

Applicable for SHK 10 and 15.

| <b>TECHNICAL DATA</b>     |  | <b>ELECTRICAL HOT-AIR BLOWERS</b> |                |
|---------------------------|--|-----------------------------------|----------------|
| <b>Type</b>               |  | <b>SHK 10</b>                     | <b>SHK 15</b>  |
| Output                    |  | 10 kW                             | 15 kW          |
| Current intensity         |  | 14.5A                             | 21.8A          |
| Connection voltage        |  | 3 x 400 Volt                      | 3 x 400 Volt   |
| Control possibilities     |  | 6.5 - 10 kW                       | 7.5 - 15 kW    |
| Temperature increase      |  | 50°C                              | 60°C           |
| Temperature adjustability |  | RTC                               | 0 - 40°C (RTC) |
| Air volume                |  | 600 m³/h                          | 700 m³/h       |
| Weight                    |  | 28.8 kg                           | 38.4 kg        |
| Dimensions Width          |  | 990 mm                            | 1115 mm        |
| Depth                     |  | 580 mm                            | 650 mm         |
| Height                    |  | 360 mm                            | 390 mm         |
| Article number            |  | 745 096 0001A                     | 747 092 001A   |
| EAN code                  |  | 8715179001780                     | 8715179001797  |

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# Fan Heaters

## Type VLEx

Fan Heater type VLEx has been designed for Explosion Proof industrial applications. Our Fan Heaters are characterized mainly by their quality, both in used materials and design.



**SINUS**  
**JEVIO**



Liquids



Gasses



Solids



Spaces



Resistors

## VLEx Fan Heaters

VLEx fan heaters are for fix mounting (non-portable) and are ideal for use in classified zone 1 & 2, where high performance of heating is required. It has a very robust construction. The fan heater is made of materials able to withstand aggressive effects at sea, on offshore installations, in warehouses and for large manufacturing facilities. The fan provides an airflow/circulation and air heating for outdoor or indoor installation.

### MATERIALS

- Cabinet and heater junction box: stainless steel AISI 316L
- d-enclosure: casted aluminium
- Heating elements: stainless steel AISI 316L, bright annealed

### STANDARDS AND APPROVALS

- |                      |                         |
|----------------------|-------------------------|
| • CE                 | • IEC/EN 61000-6-2:2006 |
| • EN 60335-1:2012    | • IEC/EN 61000-6-4:2007 |
| • EN 60335-2-30:2009 | • IEC/EN 60079-1        |
| • EN 60204-1:2006    | • IEC/EN 60079-7        |
| • EN 62233:2008      | • IEC/EN 60079-11       |
| • EN 50581:2012      | • IEC/EN 60079-14       |

VLEx fan heaters approved by DNV and/or ABS on request.

### MARKING

#### ATEX & IEC

- Ex db eb IIC T3 Gb or
- Ex db eb [ia] IIC T3 Gb



Back view VLEx

### TECHNICAL DATA

#### Voltage range:

- 3x400V, 3x440V, 3x480V and 3x690V

#### Degree of protection for fan motor:

- IP55

#### Degree of protection for heater junction box (e-enclosure) and d-enclosure:

- IP66

#### Integrated safety components

- TSHH, with manual outside reset to prevent overheating
- Overcurrent protection to prevent the motor to overheat

#### Cable glands

- Supplied with M32 cable glands for Ø17 - Ø26,3 cable
- Type: CMP
- Material: nickle plated brass

#### Lifting lugs

Supplied with lifting lugs to ensure safe working conditions during installation and maintenance.

#### Control:

- On/Off control with circuit breaker

#### Ambient temperature:

- -25°C to +50°C

#### Storage temperature:

- -25°C to +50°C

### ACCESSORIES FOR VLE Ex FAN HEATERS

In addition to our standard range shown on next page, optional extras are available:

- Integrated room thermostat: 0-40°C thermostat, ensuring optimum operation and minimising energy consumption. Choose between location inside:
  - the Ex e control panel or
  - the Ex d control panel
- Room thermostat for wall mounting 0-40°C
- TSH, temperature range 0-200°C
- Flow switch
- Main switch
- RTD (PT100 sensor and 4-20mA transmitter instead of integrated room thermostat, for external control
- Cable gland reducer nickle plated brass to M25 for Ø11,1 - Ø20 cable
- Cable gland reducer nickle plated brass to M20 for Ø6,5 - Ø14 cable
- Gland nickle plated brass M32
- Gland nickle plated brass M32 + M25 + M20

See our standard range on the following pages.

## STANDARD PROGRAMME

- Type: VLEx - S (small)
- Power: 3.5 - 7 - 10.6 kW
- Material:
  - Cabinet and heater junction box: Stainless steel AISI 316L
  - d-enclosure: casted aluminium
  - Heating elements: stainless steel AISI 316L, bright annealed
- Size: W776 x H500 x D755 mm
- Frequency: 50/60 Hz
- Maximum volume of air at nominal fan speed for:
  - 3.5kW: 1550/1890 m³/h
  - 7 and 10.6 kW: 2500/3500 m³/h - 50/60Hz
- Degree of protection for control panels: IP66
- Degree of protection for fan motor: IP55
- Ambient temperature: -25°C to +50°C
- Storage temperature: -25°C to +50°C



| Type<br>Power       | Item no.<br>Frequency 50Hz | Item no.<br>Frequency 60Hz | Voltage | Current<br>(min. supply) | dB (A)<br>(50/60Hz) |
|---------------------|----------------------------|----------------------------|---------|--------------------------|---------------------|
| VLEx - S<br>3.5 kW  | 21960201                   | 21960202                   | 3x400V  | 6 A                      | 51/55               |
|                     | 21960203                   | 21960204                   | 3x440V  | 6 A                      |                     |
|                     | 21960205                   | 21960206                   | 3x480V  | 5 A                      |                     |
|                     | 21960207                   | 21960208                   | 3x690V  | 4 A                      |                     |
| VLEx - S<br>7 kW    | 21960209                   | 21960210                   | 3x400V  | 11 A                     | 56/61               |
|                     | 21960211                   | 21960212                   | 3x440V  | 10 A                     |                     |
|                     | 21960213                   | 21960214                   | 3x480V  | 9 A                      |                     |
|                     | 21960215                   | 21960216                   | 3x690V  | 7 A                      |                     |
| VLEx - S<br>10.6 kW | 21960217                   | 21960218                   | 3x400V  | 16 A                     |                     |
|                     | 21960219                   | 21960220                   | 3x440V  | 15 A                     |                     |
|                     | 21960221                   | 21960222                   | 3x480V  | 14 A                     |                     |
|                     | 21960223                   | 21960224                   | 3x690V  | 10 A                     |                     |



## STANDARD PROGRAMME

- Type: VLEx - M (medium)
- Power: 11.7 - 15.6 - 19.5 kW
- Material:
  - Cabinet and heater junction box: Stainless steel AISI 316L
  - d-enclosure: casted aluminium
  - Heating elements: stainless steel AISI 316L, bright annealed
- Size: W936 x H665 x D755 mm
- Frequency: 50/60 Hz
- Maximum volume of air at nominal fan speed for: 3800/4600 m³/h
- Degree of protection for control panels: IP66
- Degree of protection for fan motor: IP55
- Ambient temperature: -25°C to +50°C
- Storage temperature: -25°C to +50°C



| Type<br>Power       | Item no.<br>Frequency 50Hz | Item no.<br>Frequency 60Hz | Voltage | Current<br>(min. supply) | dB (A)<br>(50/60Hz) |
|---------------------|----------------------------|----------------------------|---------|--------------------------|---------------------|
| VLEx - M<br>11.7 kW | 21960225                   | 21960226                   | 3x400V  | 18 A                     | 60/64               |
|                     | 21960227                   | 21960228                   | 3x440V  | 16 A                     |                     |
|                     | 21960229                   | 21960230                   | 3x480V  | 15 A                     |                     |
|                     | 21960231                   | 21960232                   | 3x690V  | 11 A                     |                     |
| VLEx - M<br>15.6 kW | 21960233                   | 21960234                   | 3x400V  | 24 A                     |                     |
|                     | 21960235                   | 21960236                   | 3x440V  | 21 A                     |                     |
|                     | 21960237                   | 21960238                   | 3x480V  | 20 A                     |                     |
|                     | 21960239                   | 21960240                   | 3x690V  | 14 A                     |                     |
| VLEx - M<br>19.5 kW | 21960241                   | 21960242                   | 3x400V  | 29 A                     |                     |
|                     | 21960243                   | 21960244                   | 3x440V  | 27 A                     |                     |
|                     | 21960245                   | 21960246                   | 3x480V  | 24 A                     |                     |
|                     | 21960247                   | 21960248                   | 3x690V  | 17 A                     |                     |



## STANDARD PROGRAMME

- Type: VLEx - L (large)
- Power: 23.4 - 27.3 - 31.2 - 35.1 kW
- Material:
  - Cabinet and heater junction box: Stainless steel AISI 316L
  - d-enclosure: casted aluminium
  - Heating elements: stainless steel AISI 316L, bright annealed
- Size: W936 x H665 x D950 mm
- Frequency: 50/60 Hz
- Maximum volume of air at nominal fan speed for: 4800/6800 m³/h
- Degree of protection for control panels: IP66
- Degree of protection for fan motor: IP55
- Ambient temperature: -25°C to +50°C
- Storage temperature: -25°C to +50°C



| Type<br>Power       | Item no.<br>Frequency 50Hz | Item no.<br>Frequency 60Hz | Voltage | Current<br>(min. supply) | dB (A)<br>(50/60Hz) |
|---------------------|----------------------------|----------------------------|---------|--------------------------|---------------------|
| VLEx - L<br>23.4 kW | 21960249                   | 21960250                   | 3x400V  | 35 A                     | 65/68               |
|                     | 21960251                   | 21960252                   | 3x440V  | 32 A                     |                     |
|                     | 21960253                   | 21960254                   | 3x480V  | 30 A                     |                     |
|                     | 21960255                   | 21960256                   | 3x690V  | 21 A                     |                     |
| VLEx - L<br>27.3 kW | 21960257                   | 21960258                   | 3x400V  | 41 A                     |                     |
|                     | 21960259                   | 21960260                   | 3x440V  | 37 A                     |                     |
|                     | 21960261                   | 21960262                   | 3x480V  | 34 A                     |                     |
|                     | 21960263                   | 21960264                   | 3x690V  | 24 A                     |                     |
| VLEx - L<br>31.2 kW | 21960265                   | 21960266                   | 3x400V  | 47 A                     |                     |
|                     | 21960267                   | 21960268                   | 3x440V  | 42 A                     |                     |
|                     | 21960269                   | 21960270                   | 3x480V  | 39 A                     |                     |
|                     | 21960271                   | 21960272                   | 3x690V  | 27 A                     |                     |
| VLEx - L<br>35.1 kW | 21960273                   | 21960274                   | 3x400V  | 52 A                     |                     |
|                     | 21960275                   | 21960276                   | 3x440V  | 48 A                     |                     |
|                     | 21960277                   | 21960278                   | 3x480V  | 44 A                     |                     |
|                     | 21960279                   | 21960280                   | 3x690V  | 30 A                     |                     |



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# Fan Heater Explosion-Proof type FE2

FE2 heaters are CE Marked & ATEX Approved to Directive 94/4/EC for use in hazardous locations. They are designed for dry indoor industrial applications such as oil refineries, petrochemical plants, pulp and paper mills, hazardous waste storage facilities, wastewater treatment plants, etc., where specific explosive gases or dusts maybe present.



**SINUS  
JEVI  $\Omega$**



Liquids



Gasses



Solids



Spaces



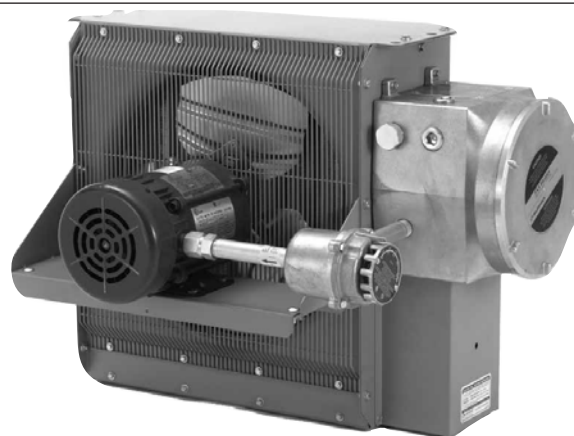
Resistors

FE2 heaters are CE Marked & ATEX Approved to Directive 94/4/EC for use in hazardous locations. They are designed for dry indoor industrial applications such as oil refineries, petrochemical plants, pulp and paper mills, hazardous waste storage facilities, wastewater treatment plants, etc., where specific explosive gases or dusts may be present.

All FE2 heaters utilize the Vacucore® liquid-to-air heat exchanger. The induced vacuum within the sealed core provides greater efficiency, even distribution of heat across the face of the exchanger, and a faster warm-up.

When necessary, the entire core can be safely and easily replaced with a new exchanger or core.

The heater core assembly is contained in a sturdy, epoxy-coated, 14 gauge steel cabinet which also carries the motor and fan assembly. Adjustable louvers allow directional control of the airflow. A narrow gap, two-piece fan guard is provided



to shield all moving parts. All fasteners are zinc plated for corrosion protection.

All aspects and details of the FE2 are subjected to exhaustive technical analysis and testing during design and development, and are manufactured under a registered quality assurance program. As a result, they have consistently proven their safety and reliability.



## General specification for all FE2 models

|                                     |                                                                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals                           | ATEX Approved (Directive 94/9/EC)                                                                                                            |
| Hazardous Location Classifications  | CE DEMKO 10 ATEX 0910365X Ex II 2 G, Ex d IIB T3 Gb                                                                                          |
| Enclosures                          | NEMA Type 7 & 9. For dry, indoor use only. Do not immerse in water. Do not store or use in areas exposed to rain or snow.                    |
| Motor Type                          | Explosion-proof. Thermally protected. Permanently lubricated ball bearings. 1425 RPM @50 Hz or 1725 RPM @ 60Hz.                              |
| Fan                                 | Aluminium blade. Steel spider and hub with 15.875 mm (5/8") bore.                                                                            |
| Fan guard                           | Split design with close wire spacing. Meets latest EN standards.                                                                             |
| Mounting holes                      | Four 16 mm (5/8") diameter holes at top of the heater.                                                                                       |
| Heating elements                    | Three long-life, low Watt-density, high grade metal-sheathed elements.                                                                       |
| Temperature High-Limit              | Automatic reset type, snap-action bimetal, open on temperature rise. Rated 100,000 cycles at 10 amp, handles 0.130 amps.                     |
| Control Circuit                     | 115 Volts, 0.130 amps, 15VA. (Grounded)                                                                                                      |
| Optional Built-in Thermostat        | Explosion-proof. 2°C to 28°C (36°F to 82°F)                                                                                                  |
| Control Transformer                 | Multi-tap primary, 115 V secondary, 50 VA.                                                                                                   |
| Contactors                          | 60 or 80 amp. Rated for 1,00,000 mechanical operations. 120 Volts, 15VA coil (seperately fuse protected).                                    |
| Heat Transfer Fluid                 | Long life formulated ethylene glycol and water, freeze protected to -45°C (-49°F)                                                            |
| Cabinet Material                    | 14 gauge (0.075") (1.90 mm) steel. Epoxy coated with five stage pretreatment, including iron phosphate.                                      |
| Core                                | Steel with integral aluminium fins, vacuum charged and hermetically sealed.                                                                  |
| Conduit Material                    | Heavy wall, 0.122" (3.1 mm) steel                                                                                                            |
| Overpressure Protection             | Preset 100 psig (690 kPa) seep pressure relief valve, aluminium body, no field serviceable.                                                  |
| Operational Temperature Limitations | -20°C to 40°C (-4°F to 104°F).                                                                                                               |
| Storage Limitations                 | -45°C to 80°C (-49°F to 176°F), short therm to 120°C (248°F). Do not immerse in water. Do not store or use in areas exposed to rain or snow. |

**50 HERTZ**

| 50 HERTZ                               | 2.5 to 3 kW          | 3.7 to 5 kW         | 6.3 to 7.5 kW          | 8.4 to 10 kW        | 12.5 to 13.9 kW         | 14.9 to 20 kW       | 20.9 to 21 kW           | 22.4 to 23.1 kW     |
|----------------------------------------|----------------------|---------------------|------------------------|---------------------|-------------------------|---------------------|-------------------------|---------------------|
| Max. Altitude                          | 12,000 ft<br>3,658 m | 8,000 ft<br>2,438 m | 10,000 ft<br>3,048 m   | 7,000 ft<br>2,134 m | 10,000 ft<br>3,048 m    | 7,000 ft<br>2,134 m | 10,000 ft<br>3,048 m    | 7,000 ft<br>2,134 m |
| Air Delivery @70°F<br>@ 21°C           | 400 CFM<br>679 m³/hr |                     | 700 CFM<br>1,189 m³/hr |                     | 1,450 CFM<br>2463 m³/hr |                     | 3,000 CFM<br>5096 m³/hr |                     |
| Horizontal Throw                       | 25 ft (7.6 m)        |                     |                        |                     | 35 ft (10.7 m)          |                     | 60 ft (18.2 m)          |                     |
| Maximum Mounting Height (to underside) | 7 ft<br>2.1 m        |                     | 10 ft<br>3.0 m         |                     | 10 ft<br>3.0 m          |                     | 20 ft<br>6.1 m          |                     |
| Motor Speed                            | 1,425 RPM            |                     |                        |                     | 1,425 RPM               |                     | 1,425 RPM               |                     |
| Fan Diameter                           | 12" (305 mm)         |                     |                        |                     | 16" (406 mm)            |                     | 20" (508 mm)            |                     |
| Net Weight                             | 140 lbs (63.5 kg)    |                     |                        |                     | 168 lbs (76 kg)         |                     | 201 lbs (91 kg)         |                     |
| Shipping Weight                        | 194 lbs (88 kg)      |                     |                        |                     | 218 lbs (99 kg)         |                     | 252 lbs (114 kg)        |                     |

Weights are an approximate maximum

**Specifications for 50 Hz models**

| Model          | Voltage | Nominal Wattage | Phase | Total Current | Air Temperature Rise |        | Article number |
|----------------|---------|-----------------|-------|---------------|----------------------|--------|----------------|
|                |         |                 |       |               | °F                   | °C     |                |
| FE2-220150-025 | 220 V   | 2.5 kW          | 1     | 11.4 A        | 10.3°F               | 5.7°C  | D220 152 025   |
| FE2-220150-042 | 220 V   | 4.2 kW          | 1     | 19.1 A        | 33.2°F               | 18.5°C | D220 152 042   |
| FE2-220150-063 | 220 V   | 6.3 kW          | 1     | 28.6 A        | 28.4°F               | 15.8°C | D220 152 063   |
| FE2-220150-084 | 220 V   | 8.4 kW          | 1     | 38.2 A        | 38.0°F               | 21.1°C | D220 152 084   |
| FE2-220150-126 | 220 V   | 12.6 kW         | 1     | 57.3 A        | 27.5°F               | 15.3°C | D220 152 126   |
| FE2-230150-028 | 230 V   | 2.8 kW          | 1     | 12.0 A        | 22.1°F               | 12.3°C | D230 152 028   |
| FE2-230150-046 | 230 V   | 4.6 kW          | 1     | 20.0 A        | 36.3°F               | 20.2°C | D230 152 046   |
| FE2-230150-069 | 230 V   | 6.9 kW          | 1     | 29.9 A        | 31.2°F               | 17.3°C | D230 152 069   |
| FE2-230150-138 | 230 V   | 13.8 kW         | 1     | 59.9 A        | 30.1°F               | 16.7°C | D230 152 138   |
| FE2-240150-030 | 240 V   | 3.0 kW          | 1     | 12.4 A        | 23.7°F               | 13.2°C | D240 152 030   |
| FE2-240150-050 | 240 V   | 5.0 kW          | 1     | 20.8 A        | 39.6°F               | 22.0°C | D240 152 050   |
| FE2-240150-075 | 240 V   | 7.5 kW          | 1     | 31.2 A        | 33.9°F               | 18.8°C | D240 152 075   |
| FE2-240150-100 | 240 V   | 10.0 kW         | 1     | 41.7 A        | 45.2°F               | 25.1°C | D240 152 100   |
| FE2-240150-150 | 240 V   | 15.0 kW         | 1     | 62.5 A        | 32.7°F               | 18.2°C | D240 152 150   |
| FE2-380350-025 | 380 V   | 2.5 kW          | 3     | 3.8 A         | 19.8°F               | 11.0°C | D380 352 025   |
| FE2-380350-042 | 380 V   | 4.2 kW          | 3     | 6.4 A         | 33.2°F               | 18.5°C | D380 352 042   |
| FE2-380350-063 | 380 V   | 6.3 kW          | 3     | 9.6 A         | 28.4°F               | 15.8°C | D380 352 063   |
| FE2-380350-084 | 380 V   | 8.4 kW          | 3     | 12.8 A        | 38.0°F               | 21.1°C | D380 352 084   |
| FE2-380350-125 | 380 V   | 12.5 kW         | 3     | 19.0 A        | 27.3°F               | 15.1°C | D380 352 125   |
| FE2-380350-167 | 380 V   | 16.7 kW         | 3     | 25.4 A        | 36.4°F               | 20.2°C | D380 352 167   |
| FE2-380350-209 | 380 V   | 20.9 kW         | 3     | 31.8 A        | 22.0°F               | 12.2°C | D380 352 209   |
| FE2-400350-028 | 400 V   | 2.8 kW          | 3     | 4.1 A         | 22.1°F               | 23.3°C | D400 352 028   |
| FE2-400350-046 | 400 V   | 4.6 kW          | 3     | 6.6 A         | 36.3°F               | 20.2°C | D400 352 046   |
| FE2-400350-069 | 400 V   | 6.9 kW          | 3     | 10.0 A        | 31.2°F               | 17.3°C | D400 352 069   |
| FE2-400350-093 | 400 V   | 9.3 kW          | 3     | 13.4 A        | 42.0°F               | 23.3°C | D400 352 093   |
| FE2-400350-139 | 400 V   | 13.9 kW         | 3     | 20.1 A        | 30.3°F               | 16.8°C | D400 352 139   |
| FE2-400350-185 | 400 V   | 18.5 kW         | 3     | 26.7 A        | 40.4°F               | 22.4°C | D400 352 185   |
| FE2-400350-231 | 400 V   | 23.1 kW         | 3     | 33.3 A        | 24.4°F               | 13.5°C | D400 352 231   |
| FE2-415350-037 | 415 V   | 3.7 kW          | 3     | 5.1 A         | 16.3°F               | 29.3°C | D415 352 037   |
| FE2-415350-075 | 415 V   | 7.5 kW          | 3     | 10.4 A        | 33.9°F               | 18.8°C | D415 352 075   |
| FE2-415350-149 | 415 V   | 14.9 kW         | 3     | 20.7 A        | 32.5°F               | 18.1°C | D415 352 149   |
| FE2-415350-224 | 415 V   | 22.4 kW         | 3     | 31.2 A        | 23.6°F               | 13.1°C | D415 352 224   |
| FE2-440350-042 | 440 V   | 4.2 kW          | 3     | 5.5 A         | 33.2°F               | 18.5°C | D440 352 042   |
| FE2-440350-084 | 440 V   | 8.4 kW          | 3     | 11.0 A        | 38.0°F               | 21.1°C | D440 352 084   |
| FE2-440350-168 | 440 V   | 16.8 kW         | 3     | 22.0 A        | 36.7°F               | 20.4°C | D440 352 168   |
| FE2-440350-210 | 440 V   | 21.0 kW         | 3     | 27.6 A        | 22.1°F               | 12.3°C | D440 352 210   |

To order a heater with a built-in room thermostat, add a "T" suffix to model number.

To order a heater with stainless steel cabinet add a "U" suffix to model number.

**60 HERTZ**

| 60 HERTZ                               | 2.5 to 3 kW          | 3.7 to 5 kW         | 6.3 to 7.5 kW          | 8.4 to 10 kW        | 12.5 to 13.9 kW         | 14.9 to 20 kW       | 20.9 to 21 kW           | 22.4 to 23.1 kW     |
|----------------------------------------|----------------------|---------------------|------------------------|---------------------|-------------------------|---------------------|-------------------------|---------------------|
| Max. Altitude                          | 12,000 ft<br>3,658 m | 8,000 ft<br>2,438 m | 10,000 ft<br>3,048 m   | 7,000 ft<br>2,134 m | 10,000 ft<br>3,048 m    | 7,000 ft<br>2,134 m | 10,000 ft<br>3,048 m    | 7,000 ft<br>2,134 m |
| Air Delivery @70°F<br>@ 21°C           | 500 CFM<br>850 m³/hr |                     | 850 CFM<br>1,444 m³/hr |                     | 1,750 CFM<br>2973 m³/hr |                     | 3,600 CFM<br>6116 m³/hr |                     |
| Horizontal Throw                       | 15 ft (4.6 m)        |                     | 30 ft (9.1 m)          |                     | 40 ft (12.2 m)          |                     | 70 ft (21.3 m)          |                     |
| Maximum Mounting Height (to underside) | 7 ft<br>2.1 m        |                     | 10 ft<br>3.0 m         |                     | 10 ft<br>3.0 m          |                     | 20 ft<br>6.1 m          |                     |
| Motor Speed                            | 1,725 RPM            |                     |                        |                     | 1,725 RPM               |                     | 1,725 RPM               |                     |
| Fan Diameter                           | 12" (305 mm)         |                     |                        |                     | 16" (406 mm)            |                     | 20" (508 mm)            |                     |
| Net Weight                             | 140 lbs (63.5 kg)    |                     |                        |                     | 168 lbs (76 kg)         |                     | 201 lbs (91 kg)         |                     |
| Shipping Weight                        | 194 lbs (88 kg)      |                     |                        |                     | 218 lbs (99 kg)         |                     | 252 lbs (114 kg)        |                     |

Weights are an approximate maximum

*Specifications for 60 Hz models*

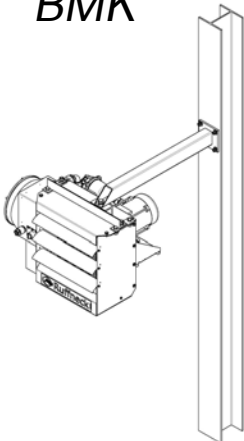
| Model          | Voltage | Nominal Wattage | Phase | Total Current | Air Temperature Rise |        | Article number |
|----------------|---------|-----------------|-------|---------------|----------------------|--------|----------------|
|                |         |                 |       |               | °F                   | °C     |                |
| FE2-220160-025 | 220 V   | 2.5 kW          | 1     | 11.4 A        | 15.8°F               | 8.8°C  | D220 162 025   |
| FE2-220160-042 | 220 V   | 4.2 kW          | 1     | 19.1 A        | 26.6°F               | 14.8°C | D220 162 042   |
| FE2-220160-063 | 220 V   | 6.3 kW          | 1     | 28.6 A        | 23.4°F               | 13.0°C | D220 162 063   |
| FE2-220160-084 | 220 V   | 8.4 kW          | 1     | 38.2 A        | 31.3°F               | 17.4°C | D220 162 084   |
| FE2-220160-126 | 220 V   | 12.6 kW         | 1     | 57.3 A        | 22.8°F               | 12.7°C | D220 162 126   |
| FE2-230160-028 | 230 V   | 2.8 kW          | 1     | 12.0 A        | 17.7°F               | 9.8°C  | D230 162 028   |
| FE2-230160-046 | 230 V   | 4.6 kW          | 1     | 20.0 A        | 29.1°F               | 16.2°C | D230 162 046   |
| FE2-230160-069 | 230 V   | 6.9 kW          | 1     | 29.9 A        | 25.7°F               | 14.3°C | D230 162 069   |
| FE2-230160-092 | 230 V   | 9.2 kW          | 1     | 39.9 A        | 34.2°F               | 19.0°C | D230 162 092   |
| FE2-230160-138 | 230 V   | 13.8 kW         | 1     | 59.9 A        | 24.9°F               | 13.9°C | D230 162 138   |
| FE2-240160-030 | 240 V   | 3.0 kW          | 1     | 12.4 A        | 19.0°F               | 10.5°C | D240 162 030   |
| FE2-240160-050 | 240 V   | 5.0 kW          | 1     | 20.8 A        | 31.7°F               | 17.6°C | D240 162 050   |
| FE2-240160-075 | 240 V   | 7.5 kW          | 1     | 31.2 A        | 27.9°F               | 15.5°C | D240 162 075   |
| FE2-240160-100 | 240 V   | 10.0 kW         | 1     | 41.7 A        | 37.2°F               | 20.7°C | D240 162 100   |
| FE2-240160-150 | 240 V   | 15.0 kW         | 1     | 62.5 A        | 27.1°F               | 15.1°C | D240 162 150   |
| FE2-440360-042 | 440 V   | 4.2 kW          | 3     | 5.5 A         | 26.6°F               | 14.8°C | D440 362 042   |
| FE2-440360-084 | 440 V   | 8.4 kW          | 3     | 11.0 A        | 31.3°F               | 17.4°C | D440 362 084   |
| FE2-440360-168 | 440 V   | 16.8 kW         | 3     | 22.0 A        | 30.4°F               | 16.9°C | D440 362 168   |
| FE2-440360-210 | 440 V   | 21.0 kW         | 3     | 27.6 A        | 18.4°F               | 10.2°C | D440 362 210   |
| FE2-480360-030 | 480 V   | 3.0 kW          | 3     | 3.6 A         | 19.0°F               | 10.5°C | D480 362 030   |
| FE2-480360-050 | 480 V   | 5.0 kW          | 3     | 6.0 A         | 31.7°F               | 17.6°C | D480 362 050   |
| FE2-480360-075 | 480 V   | 7.5 kW          | 3     | 9.0 A         | 27.9°F               | 15.5°C | D480 362 075   |
| FE2-480360-100 | 480 V   | 10.0 kW         | 3     | 12.0 A        | 37.2°F               | 20.7°C | D480 362 100   |
| FE2-480360-150 | 480 V   | 15.0 kW         | 3     | 18.0 A        | 27.1°F               | 15.1°C | D480 362 150   |
| FE2-480360-200 | 480 V   | 20.0 kW         | 3     | 24.1 A        | 36.1°F               | 20.1°C | D480 362 200   |

To order a heater with a built-in room thermostat, add a "T" suffix to model number.

To order a heater with stainless steel cabinet add a "U" suffix to model number.

# Mounting Kits

## BMK



### Basic Mounting Kit

The BMK is suitable for applications where the support arm can be bolted or welded directly to structural steel or concrete

| Model         | Approximate Shipping Weight |      |
|---------------|-----------------------------|------|
| FE2 (12" fan) | 16.5 lbs                    | 7 kg |
| FE2 (16" fan) | 18.2 lbs                    | 8 kg |
| FE2 (20" fan) | 19.3 lbs                    | 9 kg |

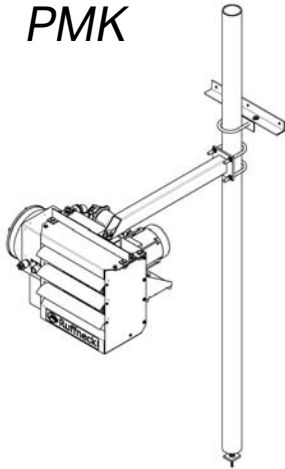
### NOTE:

Mounting kits are made of steel with a wet applied enamel paint. If the heater is installed on a structure that is to be transported, provide additional support for the heater during transit. The suspended weight should not exceed 300 lbs (136 kg).

When ordering mounting kits, specify the type of kit required and the basic model of the heater to be mounted.

# Mounting Kits on request

## PMK

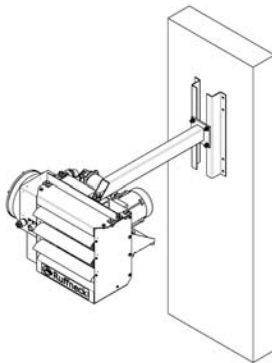


### Pipe Mounting Kit

Particularly useful in buildings with insufficient structural strength to use other types of mounts. Requires 3" pipe (3½" O.D.) (not supplied).

| Model         | Approximate Shipping Weight |       |
|---------------|-----------------------------|-------|
| FE2 (12" fan) | 24.3 lbs                    | 11 kg |
| FE2 (16" fan) | 25.4 lbs                    | 12 kg |
| FE2 (20" fan) | 26.5 lbs                    | 12 kg |

## WMK

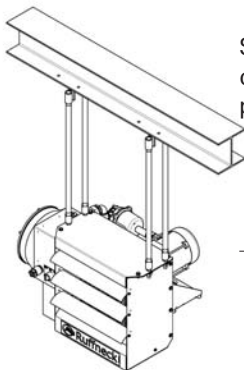


### Wall Mounting Kit

Ideal for use in buildings that have substantial walls. The Z sections provide additional support where necessary.

| Model         | Approximate Shipping Weight |       |
|---------------|-----------------------------|-------|
| FE2 (12" fan) | 24.3 lbs                    | 11 kg |
| FE2 (16" fan) | 25.4 lbs                    | 12 kg |
| FE2 (20" fan) | 26.5 lbs                    | 12 kg |

## HMK

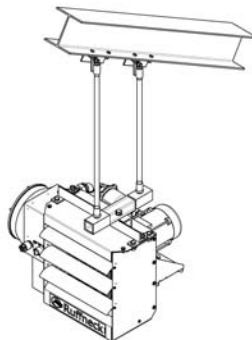


### Hanging Mounting Kit

Simple and economical if an adequate overhead structure exists. Requires ½" pipe, cut and threaded (not supplied).

| Model          | Approximate Shipping Weight |      |
|----------------|-----------------------------|------|
| Alle FE2 types | 4.5 lbs                     | 2 kg |

## SHMK



### Swivel Hanging Mounting Kit

Swivels 360°. Requires ½" pipe, cut and threaded (not supplied).

| Model         | Approximate Shipping Weight |      |
|---------------|-----------------------------|------|
| FE2 (12" fan) | 18.2 lbs                    | 8 kg |
| FE2 (16" fan) | 19.4 lbs                    | 9 kg |
| FE2 (20" fan) | 20.4 lbs                    | 9 kg |

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# Ventilatorkachel type CRE1

CRE1 Triton Serie is de nieuwe generatie IP55  
corrosiebestendige afspuitbare heaters. Een heater met modellen variërend  
van 2,5 kW tot 40 kW.



**SINUS  
JEVI  $\Omega$**



Liquids



Gasses



Solids



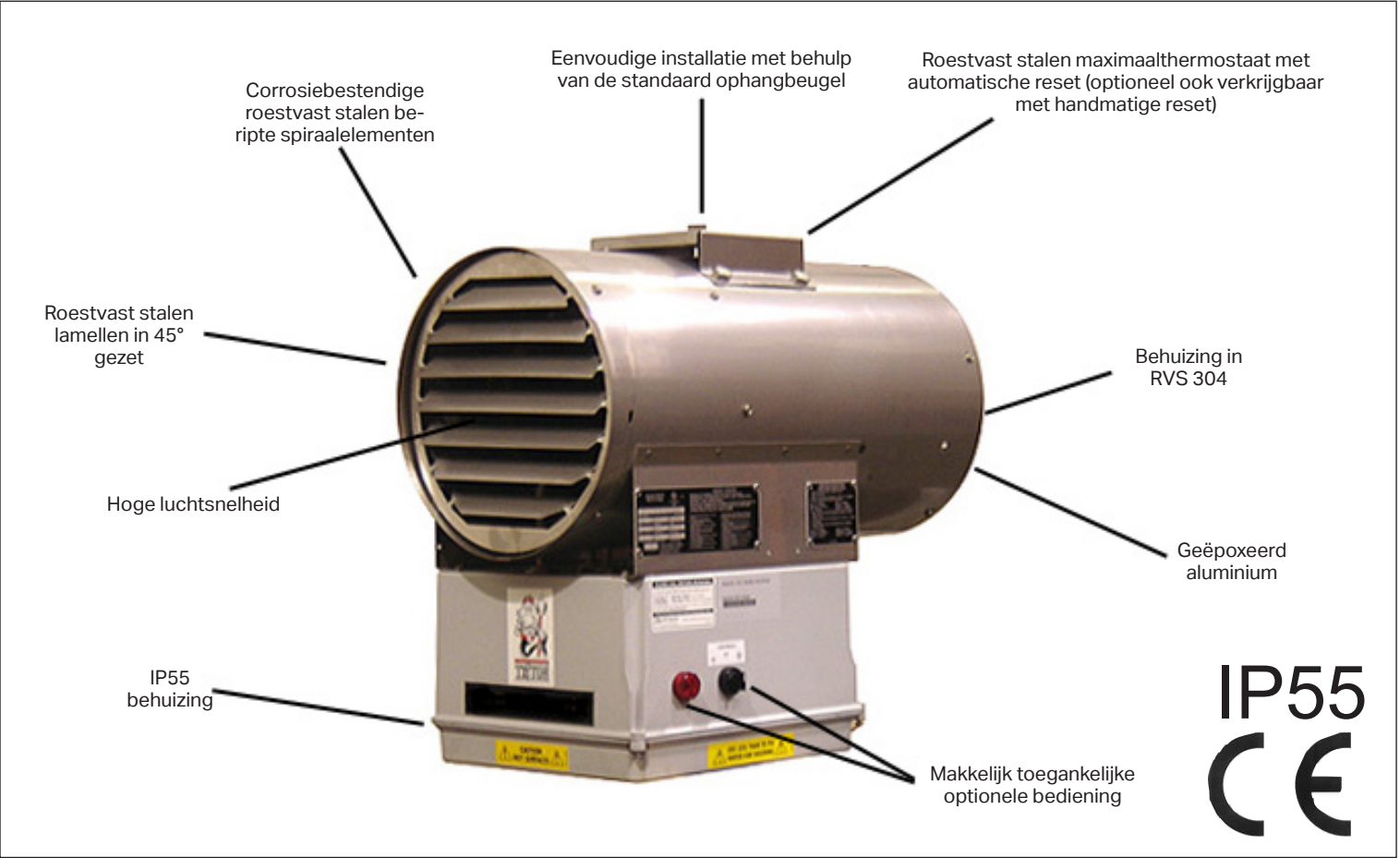
Spaces



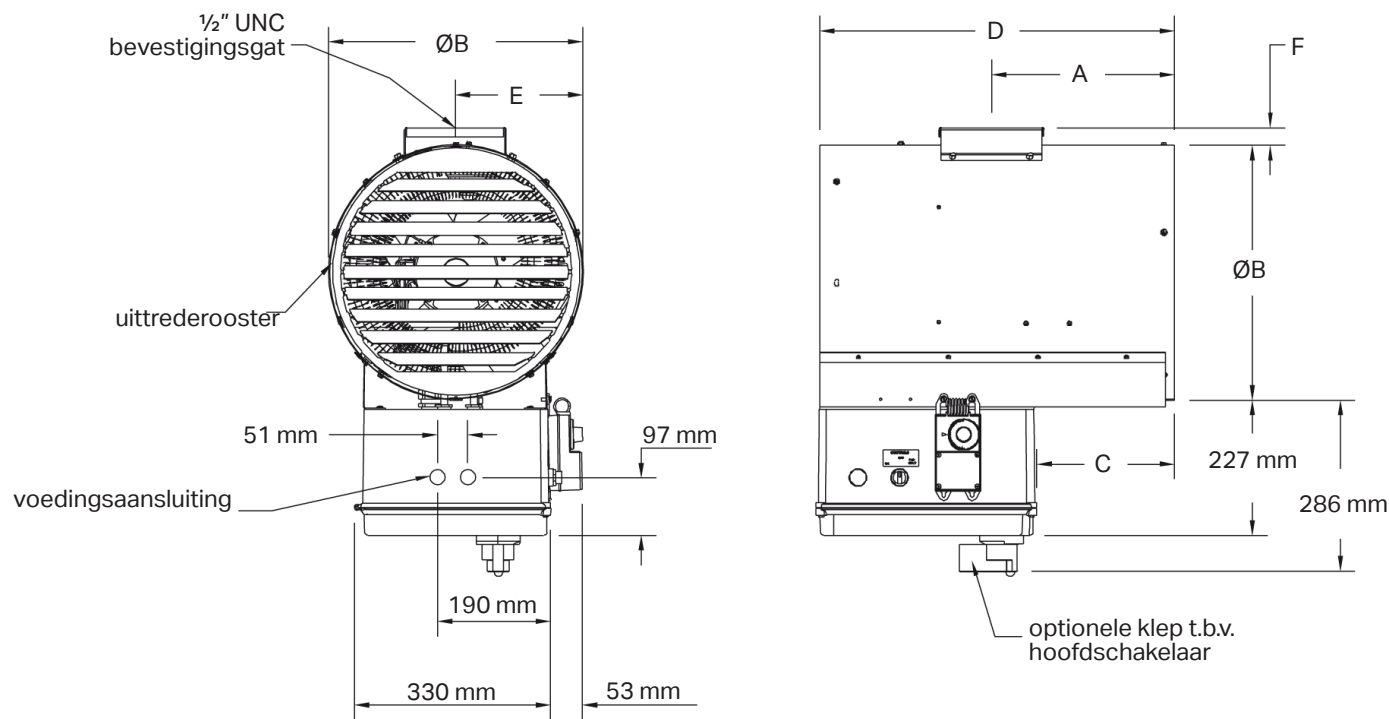
Resistors

CRE1 Triton Serie is de nieuwe generatie IP55 corrosiebestendige afspuitbare heaters. Een heater met modellen variërend van 2,5 kW tot 40 kW.

**BELANGRIJK:** CRE1 heaters zijn alleen geschikt voor niet explosiegevaarlijke locaties. Bij gebruik van een hogedrukreiniger dient u geen waterdruk hoger dan 482 kPa toe te passen.



| Kenmerk                                                             | Voordeel                                                          |
|---------------------------------------------------------------------|-------------------------------------------------------------------|
| • gehele heater in IP55                                             | • verbeterde veiligheid en bescherming tegen binnendringend water |
| • geëpoxeerd ventilatorblad                                         | • voorzien van corrosiebescherming                                |
| • roestvast stalen behuizing                                        | • betere bestendigheid tegen corrosie voor een langere levensduur |
| • roestvast stalen elementen met meerdere configuratiemogelijkheden | • verbeterde warmtedistributie en corrosiebescherming             |
| • optioneel ingebouwde accessoires                                  | • flexibiliteit en lagere installatiekosten                       |
| • roestvast stalen wand/plafond bevestigingsset                     | • flexibele plaatsingsmogelijkheden                               |
| • 120 Volt besturing                                                | • betrouwbaarder relaiskrachtiging                                |
| • roestvast stalen max. temperatuurbeveiliging                      | • verbeterde veiligheid en betrouwbaarheid                        |

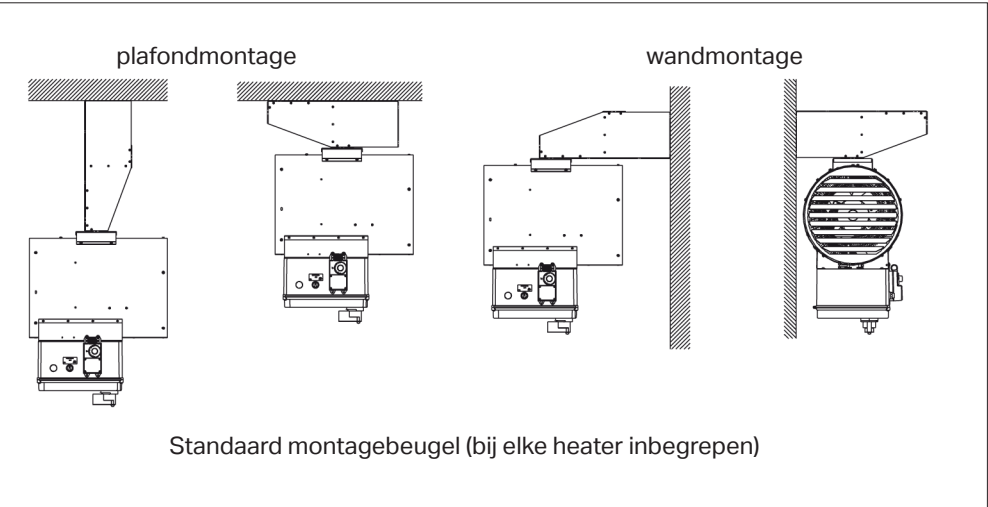


AFMETINGEN

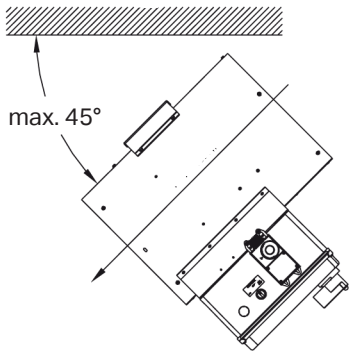
| Verwarmingscapaciteit | A      | B      | C      | D      | E        | F     |
|-----------------------|--------|--------|--------|--------|----------|-------|
| tot 10 kW             | 318 mm | 325 mm | 216 mm | 620 mm | 162,5 mm | 23 mm |
| 15 tot 20 kW          | 307 mm | 425 mm | 190 mm | 595 mm | 212,5 mm | 30 mm |
| 25 tot 40 kW          | 307 mm | 526 mm | 190 mm | 595 mm | 262,5 mm | 33 mm |

SPECIFICATIES

| Verwarmingscapaciteit | Luchtverplaatsing | Luchtsnelheid | Horizontaal bereik | Netto gewicht |
|-----------------------|-------------------|---------------|--------------------|---------------|
| tot 10 kW             | 1190 m³/h         | 4,0 m/s       | 6,7 m              | 34 kg         |
| 15 tot 20 kW          | 2465 m³/h         | 4,8 m/s       | 10,7 m             | 41 kg         |
| 25 tot 40 kW          | 3570 m³/h         | 4,6 m/s       | 13,4 m             | 59 kg         |



Heater kan gemonteerd worden onder een hoek van max. 45°



Door klant zelf geleverde beugel

## Specificaties voor 50 Hz modellen

| Type            | Spanning | Nominaal vermogen | Fase | Stroomsterkte | Grootte behuizing | Artikelnummer |
|-----------------|----------|-------------------|------|---------------|-------------------|---------------|
| CRE1-220150-025 | 220 Volt | 2,52 kW           | 1    | 13,6 A        | 12"               | F220 150 025  |
| CRE1-220150-042 | 220 Volt | 4,20 kW           | 1    | 21,2 A        | 12"               | F220 150 042  |
| CRE1-220150-063 | 220 Volt | 6,30 kW           | 1    | 30,7 A        | 12"               | F220 150 063  |
| CRE1-240150-030 | 240 Volt | 3,00 kW           | 1    | 14,6 A        | 12"               | F240 150 030  |
| CRE1-240150-050 | 240 Volt | 5,00 kW           | 1    | 22,9 A        | 12"               | F240 150 050  |
| CRE1-240150-075 | 240 Volt | 7,50 kW           | 1    | 33,4 A        | 12"               | F240 150 075  |
| CRE1-240150-100 | 240 Volt | 10,00 kW          | 1    | 43,8 A        | 12"               | F240 150 100  |
| CRE1-380350-025 | 380 Volt | 2,52 kW           | 3    | 5,0 A         | 12"               | F380 350 025  |
| CRE1-380350-042 | 380 Volt | 4,21 kW           | 3    | 7,6 A         | 12"               | F380 350 042  |
| CRE1-380350-063 | 380 Volt | 6,31 kW           | 3    | 10,8 A        | 12"               | F380 350 063  |
| CRE1-380350-094 | 380 Volt | 8,41 kW           | 3    | 14,0 A        | 12"               | F380 350 084  |
| CRE1-380350-126 | 380 Volt | 12,62 kW          | 3    | 20,4 A        | 16"               | F380 350 126  |
| CRE1-380350-168 | 380 Volt | 16,82 kW          | 3    | 26,8 A        | 16"               | F380 350 168  |
| CRE1-380350-210 | 380 Volt | 21,03 kW          | 3    | 33,2 A        | 20"               | F380 350 210  |
| CRE1-380350-252 | 380 Volt | 25,23 kW          | 3    | 39,5 A        | 20"               | F380 350 252  |
| CRE1-400350-028 | 400 Volt | 2,79 kW           | 3    | 5,2 A         | 12"               | F400 350 028  |
| CRE1-400350-047 | 400 Volt | 4,65 kW           | 3    | 7,9 A         | 12"               | F400 350 047  |
| CRE1-400350-070 | 400 Volt | 6,97 kW           | 3    | 11,3 A        | 12"               | F400 350 070  |
| CRE1-400350-093 | 400 Volt | 9,29 kW           | 3    | 14,6 A        | 12"               | F400 350 093  |
| CRE1-400350-139 | 400 Volt | 13,94 kW          | 3    | 21,3 A        | 16"               | F400 350 139  |
| CRE1-400350-186 | 400 Volt | 18,58 kW          | 3    | 28,0 A        | 16"               | F400 350 186  |
| CRE1-400350-232 | 400 Volt | 23,23 kW          | 3    | 34,7 A        | 20"               | F400 350 232  |
| CRE1-400350-279 | 400 Volt | 27,87 kW          | 3    | 41,4 A        | 20"               | F400 350 279  |
| CRE1-415350-030 | 415 Volt | 3,00 kW           | 3    | 5,4 A         | 12"               | F415 350 030  |
| CRE1-415350-050 | 415 Volt | 5,00 kW           | 3    | 8,2 A         | 12"               | F415 350 050  |
| CRE1-415350-075 | 415 Volt | 7,50 kW           | 3    | 11,6 A        | 12"               | F415 350 075  |
| CRE1-415350-100 | 415 Volt | 10,00 kW          | 3    | 15,1 A        | 12"               | F415 350 100  |
| CRE1-415350-150 | 415 Volt | 15,00 kW          | 3    | 22,1 A        | 16"               | F415 350 150  |
| CRE1-415350-200 | 415 Volt | 20,00 kW          | 3    | 29,0 A        | 16"               | F415 350 200  |
| CRE1-415350-250 | 415 Volt | 25,00 kW          | 3    | 36,0 A        | 20"               | F415 350 250  |
| CRE1-415350-300 | 415 Volt | 30,00 kW          | 3    | 42,9 A        | 20"               | F415 350 300  |
| CRE1-690350-030 | 690 Volt | 3,00 kW           | 3    | 3,1 A         | 12"               | F690 350 030  |
| CRE1-690350-050 | 690 Volt | 5,00 kW           | 3    | 4,8 A         | 12"               | F690 350 050  |
| CRE1-690350-075 | 690 Volt | 7,50 kW           | 3    | 6,9 A         | 12"               | F690 350 075  |
| CRE1-690350-100 | 690 Volt | 10,00 kW          | 3    | 9,0 A         | 12"               | F690 350 100  |
| CRE1-690350-150 | 690 Volt | 15,00 kW          | 3    | 13,2 A        | 16"               | F690 350 150  |
| CRE1-690350-200 | 690 Volt | 20,00 kW          | 3    | 17,3 A        | 16"               | F690 350 200  |
| CRE1-690350-250 | 690 Volt | 25,00 kW          | 3    | 21,5 A        | 20"               | F690 350 250  |
| CRE1-690350-300 | 690 Volt | 30,00 kW          | 3    | 25,7 A        | 20"               | F690 350 300  |
| CRE1-690350-350 | 690 Volt | 35,00 kW          | 3    | 29,9 A        | 20"               | F690 350 350  |
| CRE1-690350-400 | 690 Volt | 40,00 kW          | 3    | 34,1 A        | 20"               | F690 350 400  |

Voor het bestellen van een heater met ingebouwde ruimtethermostaat, voeg de letter "T" toe aan het artikelnummer.

## Algemene specificaties voor alle CRE1 modellen

|                               |                                                                                                                                                             |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certificaten                  | CE Merk conform Europese standaard EN60335-1 & 60335-2-30                                                                                                   |
| Behuizing                     | IP55 non-ferrometaal behuizing                                                                                                                              |
| Motortype                     | Thermisch beveiligd, ½ HP, 1725 RPM, permanent gesmeerde kogellagers                                                                                        |
| Ventilator                    | Geëpoxeerd aluminium blad met stalen as                                                                                                                     |
| Inlaatrooster                 | RVS 304, minimaal 1,21 mm dik, 6,3 mm mazen                                                                                                                 |
| Uittrede rooster              | RVS 304, minimaal 1,21 mm dik, draaibaar in 45° uittredehoek                                                                                                |
| Ophangbeugel                  | Universele ophangbeugel, RVS 304, minimaal 1,21 mm dik.                                                                                                     |
| Verwarmingselementen          | RVS 321 buis met ANSI beripte spiralen.                                                                                                                     |
| Maximaal thermostaat          | Automatische reset, roestvast stalen sensor en capillair<br>optioneel handmatige reset, roestvast stalen sensor en capillair<br>vervangt automatische reset |
| Stuurspanning circuit         | 120 Volts AC                                                                                                                                                |
| Inbouwthermostaat (optioneel) | IP55 thermostaat                                                                                                                                            |
| Transformator                 | Div. spanningen primair, 120 Volt secundair, 50 VA                                                                                                          |
| Relais                        | 40 of 75 amp. Gegarandeerd voor 500.000 mechanische acties                                                                                                  |
| Materiaal behuizing           | RVS 304 (1,52 mm)                                                                                                                                           |
| Temperatuur limiet            | Opslag: -20°C tot 60°C.<br>In bedrijf: -20°C tot 40°C.                                                                                                      |

| Nominaal vermogen                                | 2,5 - 10 kW | 12,62 - 20 kW | 23,23 - 40 kW |
|--------------------------------------------------|-------------|---------------|---------------|
| Ventilator diameter                              | 305 mm      | 406 mm        | 508 mm        |
| Lucht verplaatsing                               | 1190 m³/hr  | 2465 m³/hr    | 3570 m³/hr    |
| Luchtsnelheid (ca.)                              | 4,0 m/s     | 4,8 m/s       | 4,6 m/s       |
| Horizontaal bereik                               | 6,7 m       | 10,7 m        | 13,4 m        |
| Maximale montage hoogte                          | 2,6 m       | 3,5 m         | 3,7 m         |
| Maximale montage hoogte bij 45° (tot onderzijde) | 3,9 m       | 5,5 m         | 5,7 m         |
| Min. montage hoogte                              | 1,8 m       | 1,8 m         | 1,8 m         |
| Netto gewicht                                    | 34,1 kg     | 40,9 kg       | 59,1 kg       |
| Verzendgewicht                                   | 56,8 kg     | 63,6 kg       | 81,8 kg       |



Sinus is één van de pioniers op het gebied van explosieveilige verwarming, tot de dag van vandaag zijn wij nog op de voorgrond actief. Wij produceren volgens ATEX, IECEx en EAC richtlijnen.

Voor de productie van Explosieveilige heaters wordt een PQAN (Product Quality Assurance Notification) door TUV-Nord afgegeven. Tevens ISO-9001 en ISO-14001 certificeringen worden gecontroleerd door deze organisatie.

**NIBE**