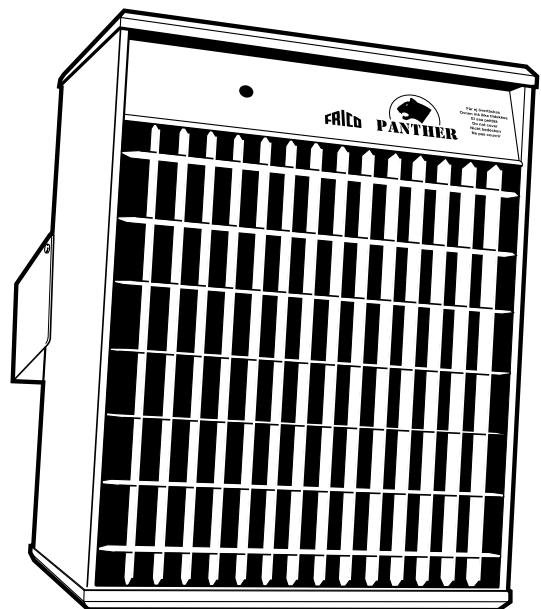


Original instructions

**Panther 20-30 kW****SE** ... 7**GB** ... 9**NO** ... 11**FR** ... 13**DE** ... 15**FI** ... 17**NL** ... 19**RU** ... 22

# Panther 20/30

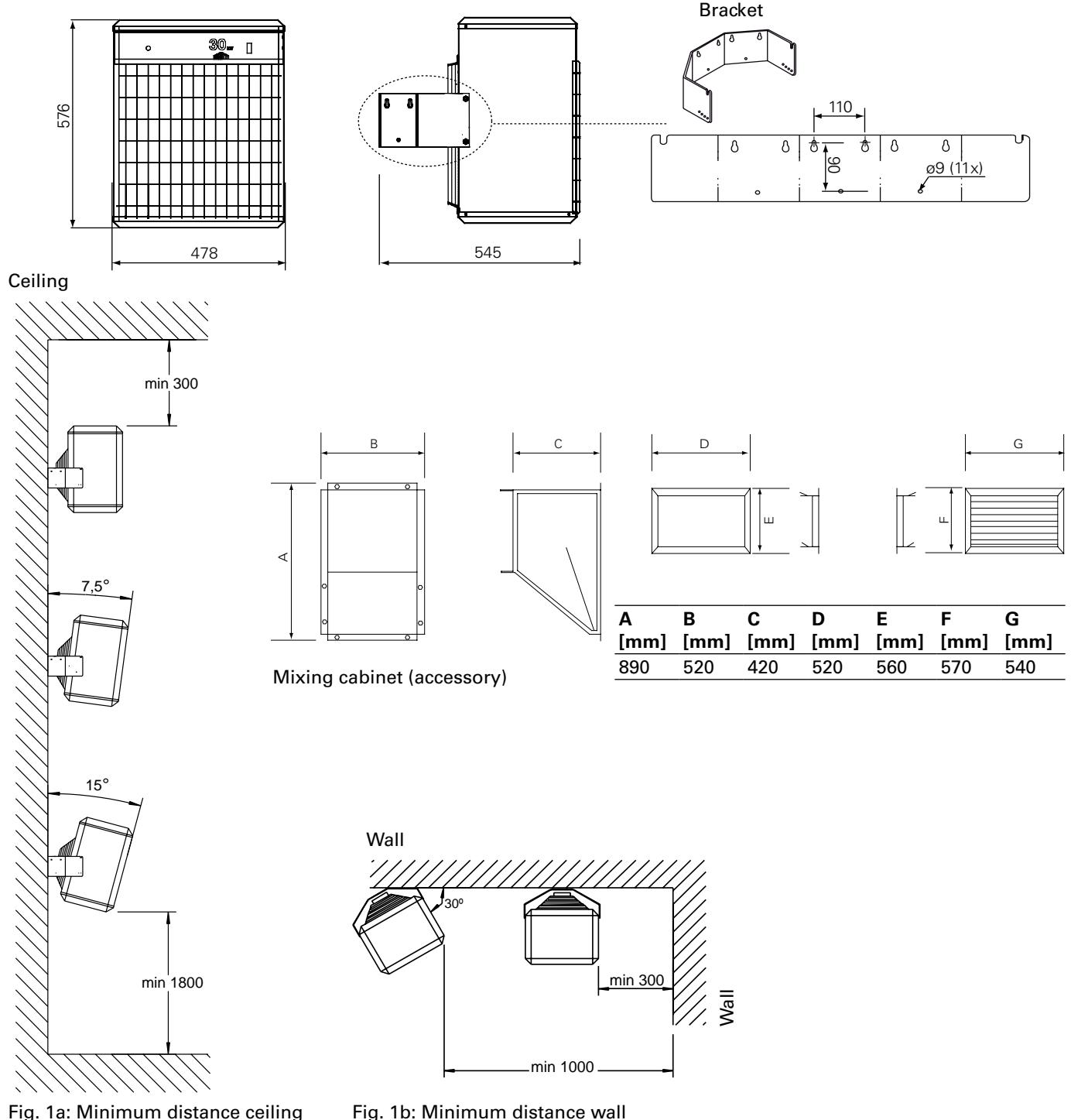


Fig. 1a: Minimum distance ceiling

Fig. 1b: Minimum distance wall

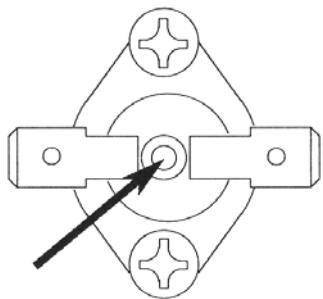


Fig. 2

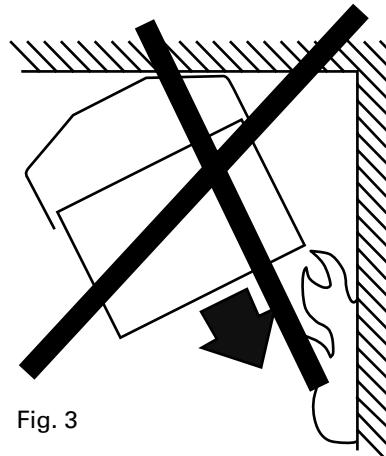
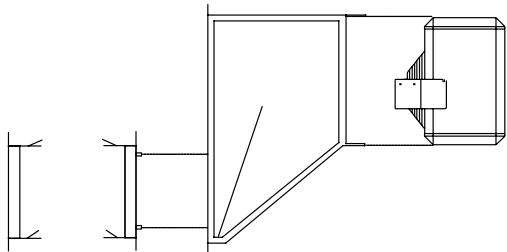
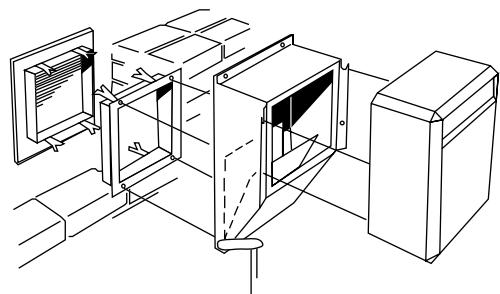
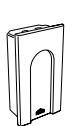


Fig. 3

## Accessories



PBS02



RTI2



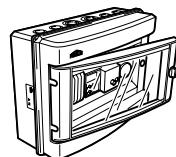
KRT2800



PP20/30



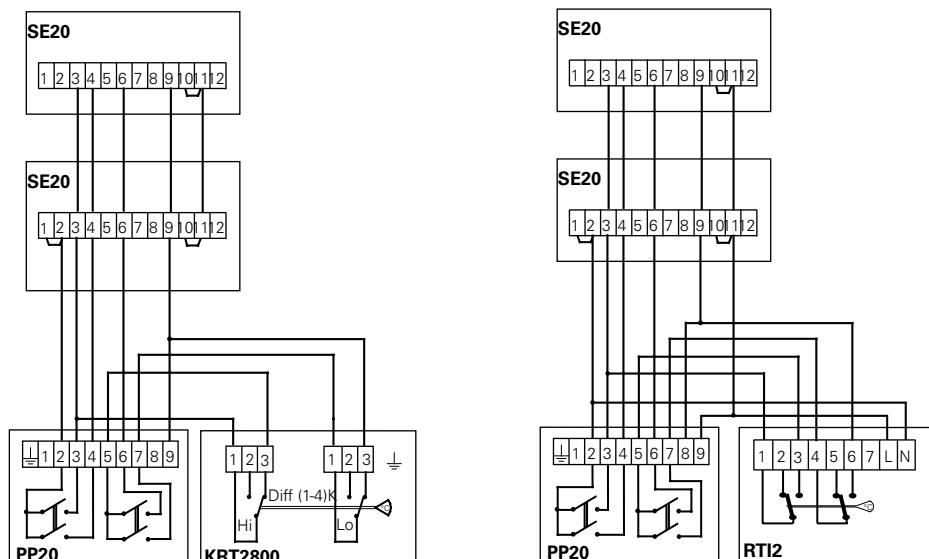
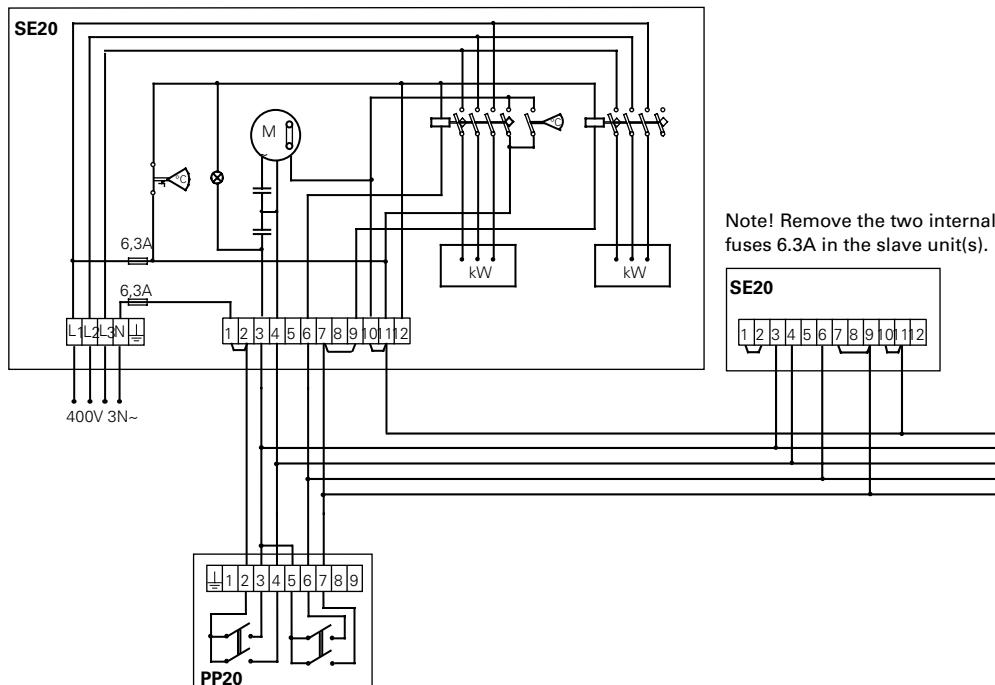
PTA01



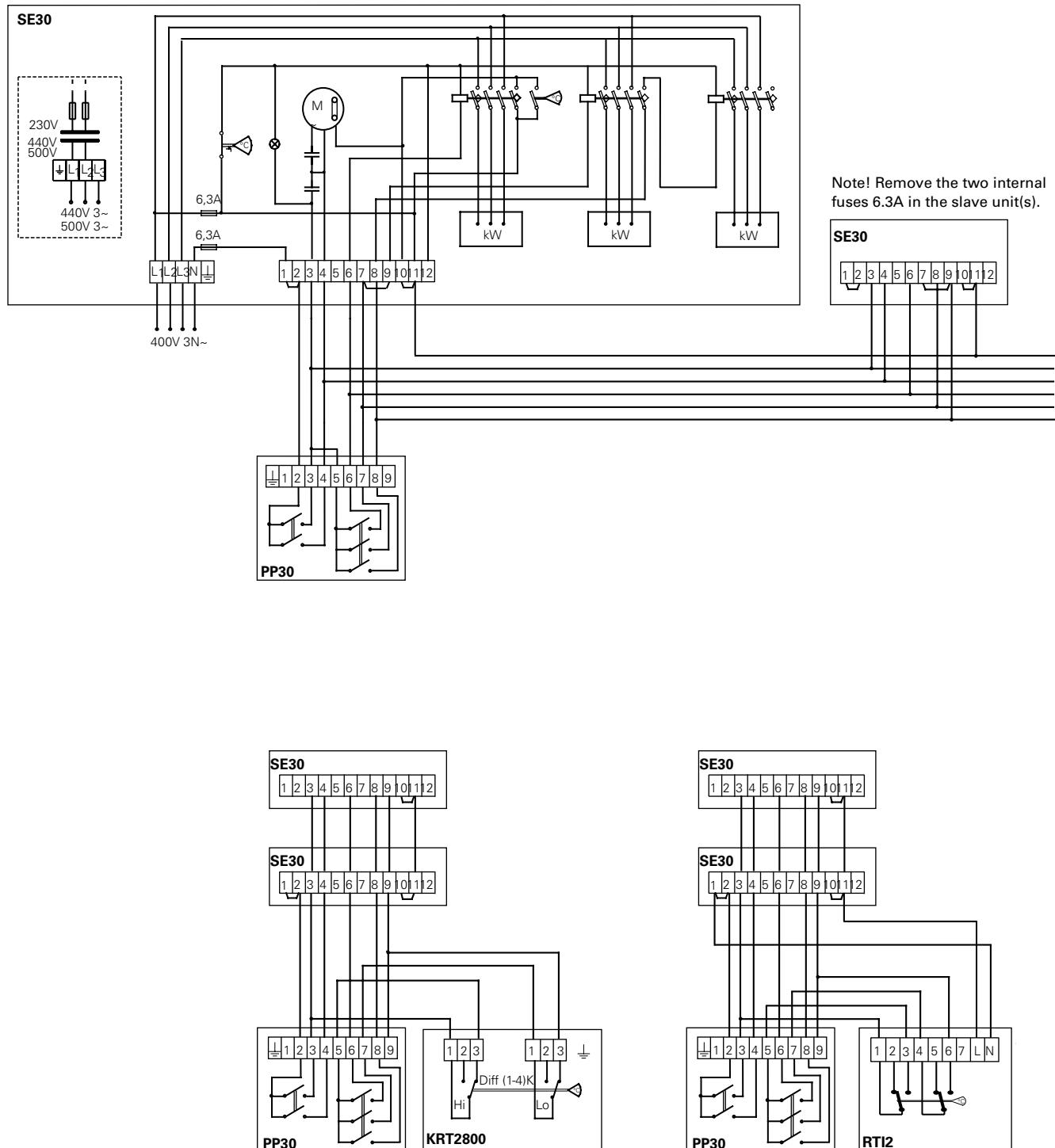
PSA01

Type	E-nr	EL-nr	HxWxD [mm]
<b>RTI2</b>	85 811 44	54 910 90	155x87x43
<b>KRT2800</b>	85 810 44	54 910 59	165x60x57
<b>PP20</b>	87 112 29	49 315 82	160x120x96
<b>PP30</b>	87 112 30	49 315 83	160x120x96
<b>PTA01</b>	87 112 31	49 315 75	185x215x115
<b>PBS02</b>	87 112 34	49 315 71	890x520x420
<b>PSA01</b>	87 112 35	49 315 76	305x215x115
<b>PHR01</b>	87 112 37	49 315 77	
<b>PSM01</b>	87 112 38	49 315 74	180x100x70
<b>PLR30</b>	87 112 40	49 315 73	415x445x60
<b>PFF30</b>	87 112 45		

## Panther 20



## Panther 30



# Panther 20/30

## Technical specifications | Panther 20/30

Type	E-nr (SE)	EL-nr (NO)	Output stages [kW]	Airflow [m³/h]	Sound level*¹ [dB(A)]	Δt*² [°C]	Voltage [V]	Amperage [A]	HxWxD [mm]	Weight [kg]
<b>SE20</b>	87 112 54	49 306 30	0/10/20	1900/2600	52/60	31/23	400V3N~	29.5	576x478x545	27
<b>SE30</b>	87 112 55	49 306 32	0/10/20/30	1900/2600	52/60	47/34	400V3N~	43.9	576x478x545	31
<b>SE305</b>	87 112 56		0/7.5/15/23 0/10/20/30	1900/2600	52/60	36/26 47/34	440V3N~*³ 500V3N~	30.8 35.1	576x478x545	32
<b>SE2023</b>		49 306 31	0/10/20	1900/2600	52/60	31/23	230V3~	29.5	576x478x545	27
<b>SE3023</b>		49 306 33	0/10/20/30	1900/2600	52/60	47/34	230V3~	43.9	576x478x545	31

\*¹) Conditions: Distance to the unit 3 metres. Directional factor: 2. Equivalent absorption area: 200 m<sup>2</sup>.

\*²) Δt = temperature rise of passing air at maximum heat output at lowest/highest air flow.

\*³) Can be connected to both 440V3~and 500V3~.

Protection class: IP44.

CE compliant.

GB:	<b>Technical specifications</b>	GB:	<b>Airflow</b>	GB:	<b>Voltage</b>	GB:	<b>Weight</b>
SE:	Tekniska data	SE:	Luftflöde	SE:	Spänning	SE:	Vikt
NO:	Tekniske data	NO:	Luftstrøm	NO:	Spenning	NO:	Vekt
FR:	Caractéristiques techniques	FR:	Débit d'air	FR:	Tension	FR:	Poids
DE:	Technische daten	DE:	Luftmenge	DE:	Spannung	DE:	Gewicht
FI:	Tekniset tiedot	FI:	Ilmavirta	FI:	Jännite	FI:	Paino
NL:	Technische specificaties	NL:	Luchtstroom	NL:	Voltage	NL:	Gewicht
RU:	Технические характеристики	RU:	Расх.возд.	RU:	Напряжение	RU:	Вес

GB:	<b>Output stages</b>	GB:	<b>Sound level</b>	GB:	<b>Amperage</b>
SE:	Effektsteg	SE:	Ljudnivå	SE:	Ström
NO:	Effekttrinn	NO:	Lydnivå	NO:	Strøm
FR:	Puissances	FR:	Niveau sonore	FR:	Intensité
DE:	Abgabestufen	DE:	Geräuschpegel	DE:	Strom
FI:	Tehoportaat	FI:	Melutaso	FI:	Virta
NL:	Capaciteit	NL:	Geluids niveau	NL:	Stroomsterkte
RU:	Ур. мощности	RU:	Ур. шума <sup>¹</sup>	RU:	Сила тока

\*¹) Förutsättningar: Avstånd till aggregat 3 meter. Riktningsfaktor: 2. Ekvivalent absorptionsarea 200 m<sup>2</sup>.

\*²) Δt = temperaturhöjning på genomgående luft vid maximal värmeeffekt och lägst respektive högst luftflöde.

\*³) Kan anslutas till både 440V3~och 500V3~.

Kapslingsklass: IP44.

CE-märkt.

\*¹) Betingelser: Avstand til aggregat 3 meter. Retningsfaktor: 2. Ekvivalent absorpsjonsareal: 200 m<sup>2</sup>.

\*²) Δt = temperaturøkning på gjennomstrømmende luft ved maksimal varmeeffekt og lav/høy luftmengde.

\*³) Kan kobles til både 440V3~ og 500V3~.

Kapslingsklasse: IP44.

CE-merket.

\*¹) Conditions : Distance de l'appareil : 3 mètres. Facteur directionnel : 2. Surface d'absorption : 200 m<sup>2</sup>.

\*²) Δt = augmentation de température sous un débit d'air mini / maxi et une puissance maximale.

\*³) Peut être raccordé sur 440V3~ et 500V3~.

Indice de protection: IP44.

Marquage CE.

\*¹) Bedingungen: Abstand zum Gerät: 3 Meter. Richtungsfaktor: 2. Entsprechende Absorptionsfläche: 200 m<sup>2</sup>.

\*²) Δt = Temperaturanstieg bei maximaler Heizleistung und hohem/niedrigem Volumenstrom.

\*³) Kann an 440V3~ und 500V3~ angeschlossen werden.

Schutzart: IP44.

CE-konform.

\*¹) Mittaushärsjelyt: Etäisyys laitteeseen 3 m. Suuntaavuuskerroin 2. Ekvivalentti absorptioala: 200 m<sup>2</sup>.

\*²) Δt = läpivirtaan ilman lämpötilan nousu suurimalla lämpöteholla ja pienellä/suurella ilmavirralla.

\*³) Voiotaan kytkää 440V3~ ja 500V3~ jännitteeseen.

Kotelointiluokka: IP44.

CE-merkity.

\*¹) Conditios: Afstand tot de unit 3 meter. Richtingsfactor: 2. Equivalent absorptiegebied: 200 m<sup>2</sup>.

\*²) Δt = Temperatuurstijging van de passerende lucht op maximale verwarming en laagste/hoogste luchtstroom.

\*³) Kan worden aangesloten op 440V3~ en 500V3~.

Beschermingsklasse: IP44.

Voldoet aan CE.

\*¹) Условия: Расстояние до прибора 3 метров. Фактор направленности 2. Эквивалентная площадь звукопоглощения 200 м<sup>2</sup>.

\*²) Δt = Увеличение температуры проходящего воздуха при полной выходной мощности и min/max расходе воздуха.

\*³) может подключаться на напряжение 440В3~ и 500В3~.

Класс защиты: IP44.

Сертифицированы ГОСТ, стандарт СЕ.

## Assembly and operation instructions

### General Instructions

Read these instructions carefully before installation and use. Keep this manual for future reference.

*The product may only be used as set out in the assembly and operating instructions. The guarantee is only valid if the product is used in the manner intended and in accordance with the instructions.*

### Application area

Panther 20–30 is a range of powerful and quiet fan heaters for stationary use. They are intended for heating, drying and ventilation of large premises, for example, industries.

The mixing cabinet (accessory) allows heating and ventilation to be combined, through mixing the return air and outdoor air.

Protection class: IP44

### Electrical installation

Installation shall be permanent and performed by a qualified technician in accordance with applicable directives. The installation shall be preceded by a fully isolating switch with at least a 3 mm contact opening and preferably fitted with a status lamp.

Panther must be supplemented with control panel PP20/30 and an external thermostat, for example. RTI2. There are four knockouts at the back for the external connections. These should be fitted with a grommet when used to guarantee the protection class. SE305 can be connected to both 440V3~ and 500V3~. Check that the main voltage and the data on the type plate correspond. The wiring diagram can be found attached to the inside of the top cover and in these assembly instructions.

*NOTE! All work should be carried out when the unit is not voltage fed.*

### Start up

When the unit is used for the first time or after a long period of disuse, smoke or odour may result from dust or dirt that has collected on the element. This is completely normal and disappears after a short time.

### Mounting

The Panther fan heater is mounted on the wall with a wall bracket making it possible to direct the airflow down and to the side.

- The heater fans should be mounted on a wall.
- Note that the minimum spacing as set out in fig. 1, on page 2 must be kept. The heater fan must not be mounted so the output is directed towards the wall, fig. 3.
- Loosen the bracket from the unit by unscrewing the lower screws completely and the upper screws as far as required.
- Mark off and drill holes for the screws as shown in the diagram on page 2.
- Screw in the screws for the keyhole slots until approx. 10 mm remains. Put up the bracket.
- Screw the upper screws into the unit until 10 mm remains.
- Suspend the unit on the bracket and adjust to the desired angle.
- Screw in the lower screws and then tighten all screws.

### Installation with mixing cabinet

Mixing cabinet PBS is available as an accessory and consists of an outer wall grille and a walling-in frame. The walling-in frame and outer wall grille are built or screwed to the wall. The mixing cabinet and the unit are then fitted. See diagram 2. The hand controller (PHR01, accessory) consists of a lever, a wall bracket, a control ball and two associated joints. A pull-rod is used between the joints (not included).

### Operation

Switching the unit on-off, output selection and speed settings are all made using a selector located away from the unit; even a thermostat and other controls (timer, etc.) are fitted away from the unit.

If the unit does not work the first time it is used, the temperature cut-out may have tripped during transport. See "Overheating".

## Overheating

If the unit overheats the in-built temperature cut-out will trip. Reset the temperature cut-out once the unit has cooled and the fault has been rectified. (Fig. 2)

*NOTE! All work inside the unit's connection area must be carried out by a qualified technician and while the unit is not voltage fed.*

## Maintenance

Normally the heater fan does not require any maintenance. Dirt and dust can however cause overheating and represent a fire risk. Consequently, the unit should be cleaned periodically.

## Residual current circuit breaker

When the installation is protected by means of a residual current circuit breaker, which trips when the appliance is connected, this may be due to moisture in the heating element. When an appliance containing a heater element has not been used for a long period or stored in a damp environment, moisture can enter the element.

This should not be seen as a fault, but is simply rectified by connecting the appliance to the mains supply via a socket without a safety cut-out, so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should occasionally be run for a short time when it is not being used for extended periods of time.

## Safety

- For all installations of electrically heated products should a residual current circuit breaker 300 mA for fire protection be used.
- During operation the surfaces of the unit are hot!
- The unit should not be positioned so that inflammable materials can ignite!
- The unit must not be partly or fully covered with clothes or similar material as overheating can represent a fire risk!
- The unit must not be placed directly under a permanent wall socket!



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