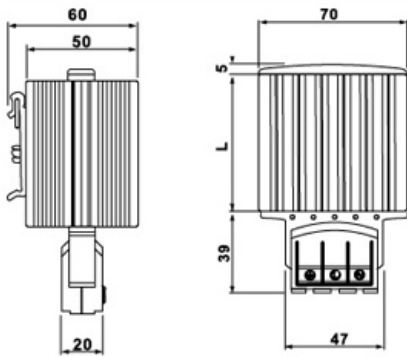




- Pressure clamp connectors
- Dynamic heating up
- wide voltage range
- Temperature limiting
- Energy saving
- Clip fixing
- Quick installation

These heaters are used in enclosures where damage from condensation must be prevented or where the temperature may not fall below a minimum value. The aluminium profile heater body design has a chimney effect and distributes the heat evenly. The pressure clamp connectors save time and simplify installation.

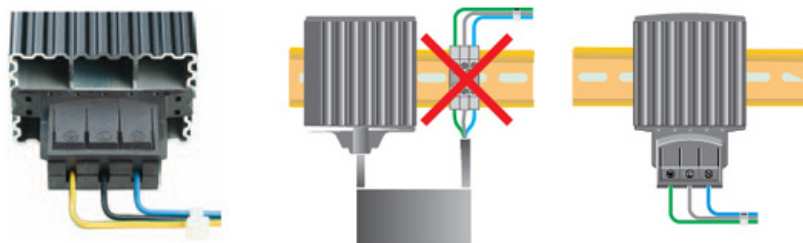
Size chart



Operating voltage	120-250V AC/DC
Heating element	PTC resistor, self regulating and temperature limiting
Heater body	extruded aluminium profile, anodised
Connection casing	3 pressure clamps for stranded wire 0.5-1.5mm <sup>2</sup> (with wire and ferrule) and rigid wire 0.5-2.5mm <sup>2</sup> plastic according to UL94 V-0, black
Mounting	clip for 35mm DIN rail, EN 50022
Fitting position	vertical
Operating/Storage temperature	-45 to + 70°C (-49 to +158°F)
Protection type/Protection class	IP20/I(earthed)
Certificate	CE

Operating with voltages below 140V AC/DC reduces heating performance by approx. 10%

Type	Heating capacity	Inrush current max.	Length(L) (mm)	Weight (approx)
HG 140	15W	1.5	75	0.3
HG 140	30W	3	75	0.3
HG 140	45W	3.5	75	0.3
HG 140	60W	2.5	75	0.3
HG 140	75W	4	75	0.3
HG 140	100W	4.5	145	0.5
HG 140	150W	9	145	0.5



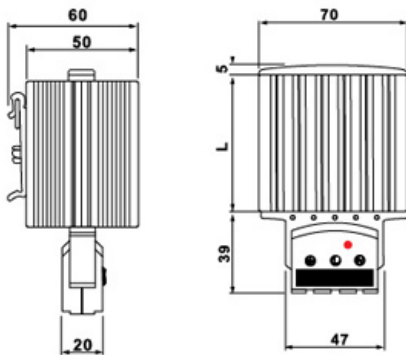
# LK140 Type Compact Fan Heater



- Screw terminal connector
- Dynamic heating up
- wide voltage range
- Temperature limiting
- With indicator showing on/off
- Energy saving
- Clip fixing
- Quick installation

These heaters are used in enclosures where damage from condensation must be prevented or where the temperature may not fall below a minimum value. The aluminium profile heater body design has a chimney effect and distributes the heat evenly. The pressure clamp connectors save time and simplify installation.

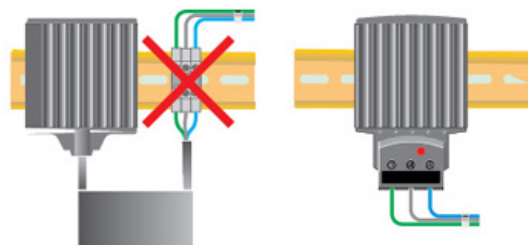
Size chart



Operating voltage	120-250V AC/DC
Heating element	PTC resistor, self regulating and temperature limiting
Heater body	extruded aluminium profile, anodised
Connection casing	3 pressure clamps for stranded wire 0.5-1.5mm <sup>2</sup> (with wire and ferrule) and rigid wire 0.5-2.5mm <sup>2</sup> plastic according to UL94 V-0, black
Mounting	clip for 35mm DIN rail, EN 50022
Fitting position	vertical
Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
Protection type/Protection class	IP20/I(earthed)
Certificate	CE

Operating with voltages below 140V AC/DC reduces heating performance by approx, 10%

Type	Heating capacity	Inrush current max.	Length(L) (mm)	Weight (kg)
LK 140	15W	1.5	65	0.2
LK 140	30W	2.5	65	0.2
LK 140	45W	3	65	0.2
LK 140	60W	3.5	65	0.2
LK 140	75W	4	65	0.2
LK 140	100W	4.5	145	0.4
LK 140	150W	9	145	0.4

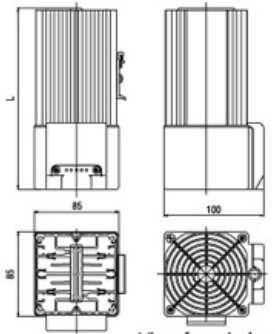




- Compact Design
- Clip fixing
- Long service life
- Maintenance free
- Temperature safety cut-out

Compact fan heater prevents formation of condensation. The integrated high performance axial fan provides forced air circulation and so guarantees an even temperature in enclosures. With internal terminal connector.

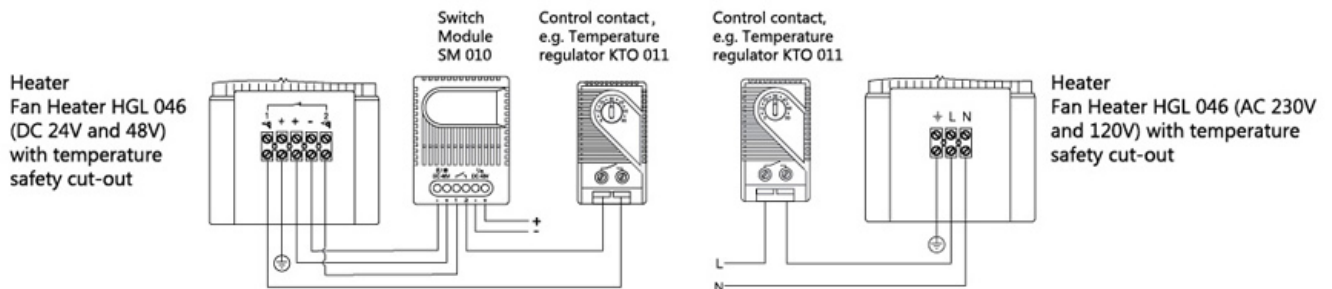
Size chart



View from below

Operating voltage	230V AC 50/60Hz
Heating element	PTC resistor, self regulating and temperature limiting
Temperature safety cut-out	to protect against overheating in case of fan failure
Heater body	anodised extruded aluminium profile
Surface temperature	max. 75 °C(400W)
Axial fan, ball bearing	Airflow, free flow AC: 45m <sup>3</sup> /h (50HZ) or 54m <sup>3</sup> /h (60Hz) DC: 54m <sup>3</sup> /h service life 50 000h at 25°C (77°F)
Connection	internal connection terminal 1.5mm <sup>2</sup> with strain relief clamping torque 0.8Nm max.
Connection casing	plastic according to UL94 V-0,black
Mounting	clip for 35mm DIN rail, EN 50022
Fitting position	vertical
Operating/Storage temperature	-45 to +70 °C(-49 to +158°F)
Protection type/Protection class	IP20 / I (earthed)

Type	Operating voltage	Heating capacity	Length (L)	Weight (approx.)
HGL046-250	230VAC, 50/60HZ	250W	85x182x85mm	1.10kg
HGL046-400	230VAC, 50/60HZ	400W	85x222x85mm	1.40kg



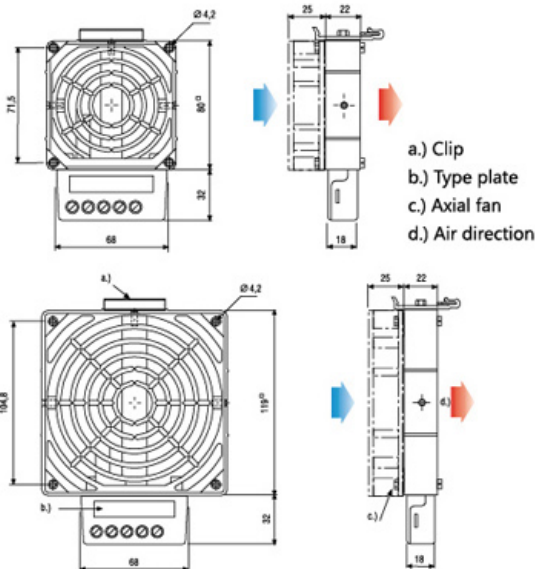
# HV/HVL 031 Heater



- Compact / Flat design
- High air through-flow
- Temperature safety cut-out
- Clip fixing

Compact high-performance fan heater prevents formation of condensation and frost and provides an evenly distributed interior air temperature in enclosures with electric/electronic components. This fan heater is available without fan (HV 031) and with fan (HVL 031).

Size chart



**Important!**  
Heater may only be operated together with fan. Danger of overheating!

HV 031	Heater without fan (fan mounting kit included)
HVL 031	Heater with fan
Heating element	high performance cartridge
Temperature safety cut-out	to protect against overheating in case of fan failure
Heater body	die-cast aluminium(glass bead blasted)
Connection	3-pole screw connector 2.5mm <sup>2</sup> , clamping torque 0.8Nm max
Connection casing	plastic according to UL94 V-0, BLACK
Mounting	clip for 35mm DIN rail, EN50022
Fitting position	horizontal
Operating/Storage temperature	-45 to +70°C/(-49 to +158°F)
Protection type/Protection class	IP20/1(earthed)
Service life	service life 50,000h at 25°C/(77°F)
Connection(axial fan)	2-pole screw connector 2.5mm <sup>2</sup> (L2/N2)

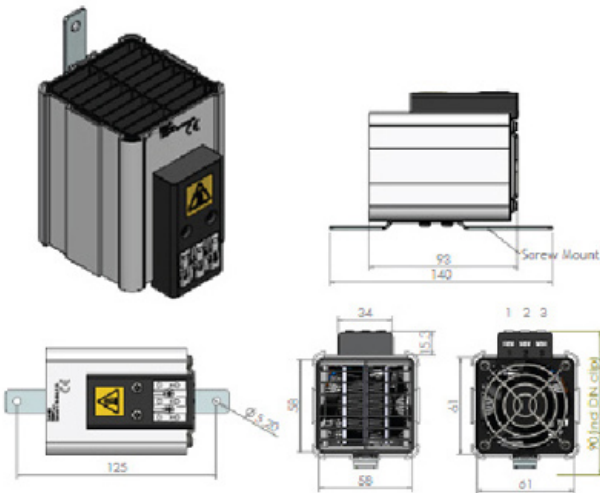
Art.no.HV 031	Art.no.HV 031	Heating capacity	Dimensions	Weight(approx.)
230vac,50/60Hz	120 vac,50/60Hz			
03100.0-00	03100.9-00	100W	80×112×22mm	0.40kg
03101.0-00	03101.9-00	150W	80×112×22mm	0.40kg
03110.0-00	03110.9-00	200W	119×151×22mm	0.50kg
03111.0-00	03111.9-00	300W	119×151×22mm	0.50kg
03112.0-00	03112.9-00	400W	119×151×22mm	0.50kg

Art.no.HVL 031	Art.no.HVL 031	Heating capacity	Airflow min	Dimensions	Weight(approx.)
230vac,50/60Hz	120 vac,50/60Hz		free flow		
03102.0-00	03102.9-00	100W	35m <sup>3</sup> /h	80×112×47mm	0.60kg
03103.0-00	03103.9-00	150W	35m <sup>3</sup> /h	80×112×47mm	0.60kg
03113.0-00	03113.9-00	200W	108m <sup>3</sup> /h	119×151×47mm	0.90kg
03114.0-00	03114.9-00	300W	108m <sup>3</sup> /h	119×151×47mm	0.90kg
03115.0-00	03115.9-00	400W	108m <sup>3</sup> /h	119×151×47mm	0.90kg



Connections  
 Pos 1 Heater, Live  
 Pos 2 Neutral  
 Pos 3 Fan, Live

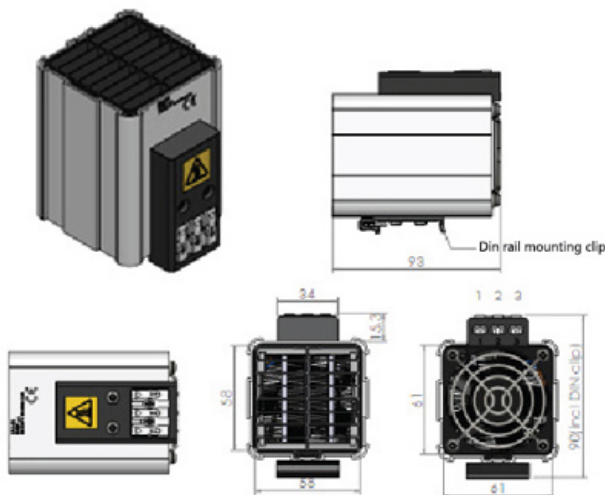
Note: Heater must be mounted vertically with air exit at the top



**LK143 220-240V 150W Screw Mount**

60mm Axial fan PTC heating element, with cage clamp connection

Type Number	LK143
Nominal Power Output (+5/-10%) at 10°C	150W (+5/-10%)
Input Voltage	220-240 VAC
Frequency	50-60Hz
Max. body temperature (25°C Ambient)	74°C
Connection (Cage Type)	Push In
Fan Lifetime (MTTF)	329,447hrs (30°C 65%RH)
Operating & Storage Temperature	-40°C to 70°C (RH<20%)
Air Flow Rate (zero static pressure)	30m <sup>3</sup> /hr (18 CFM)
Weight	300g
Ingress Protection (EN60529)	IP20
Electrical Protection	SK II
Recommended Fuse (time Delay)	TBD
Mounting	Screw Mount



**LK143 220-240V**

60mm Axial fan PTC heating element, with cage clamp connection

Type Number	LK143		
Nominal Power Output (+5/-10%) at 10°C	300W	400W	500W
Input Voltage	220-240 VAC		
Frequency	50-60Hz		
Max. body temperature (25°C Ambient)	74°C		
Connection (Cage Type)	Push In		
Fan Lifetime (MTTF)	329,447hrs (30°C 65%RH)		
Operating & Storage Temperature	-40°C to 70°C (RH<20%)		
Air Flow Rate (zero static pressure)	30m <sup>3</sup> /hr (18 CFM)		
Weight	300g		
Ingress Protection (EN60529)	IP20		
Electrical Protection	SK II		
Recommended Fuse (time Delay)	6.3A	6.3A	8A
Mounting	Aluminum DIN Clip 35mm EN50022 Compliant		

# KHL120 Fan heaters 75-230W Space-saving Heater

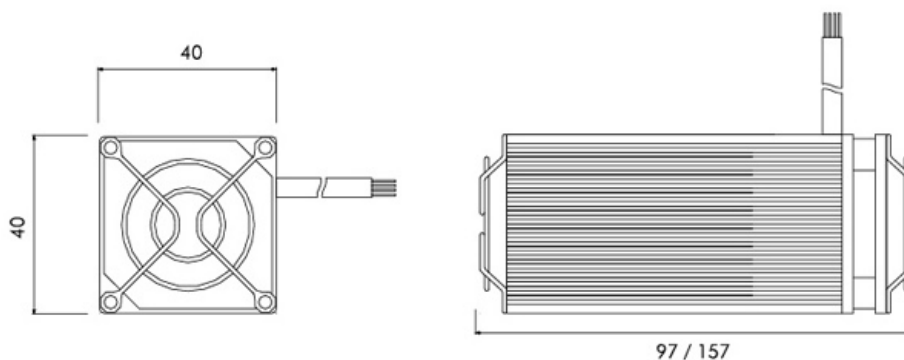


- Compact design
- Long service life
- Clip fixing
- Maintenance free

Compact fan heater prevents formation of condensation. The integrated high performance axial fan provides forced air circulation and so guarantees an even temperature in enclosure.

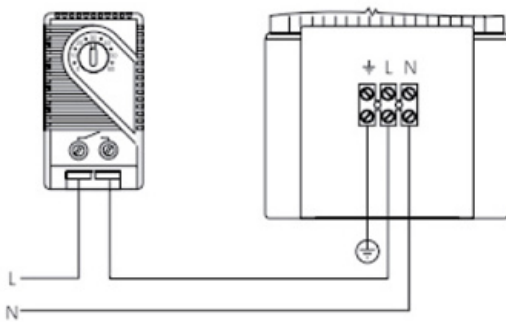
Features	Unit	KHL120075.0-00	KHL120100.0-00	KHL120150.0-00	KHL120230.0-00	KHL120300.0-00
Heating Capacity*	W	75	100	150	230	300
Power supply	V/Hz	Heater 110-250V AC/DC-Fan 24V AC/DC				
Max. current	A	4	4	6	6	8
Heating element type	-	PTC resistor, self regulating				
Radiator	-	Extruded aluminium profile, anodized				
Axial fan	-	Ball bearing, service life 50.000 hrs at 25 °C (77°F), air flow rate 11m <sup>3</sup> /h, free flow				
		air flow rate 11m <sup>3</sup> /h, free flow				air flow rate 33m <sup>3</sup> /h, free flow
Electrical connections	-	Silicon cable, 4x0.5mm <sup>2</sup> , length 400mm				
Protection class IEC	-	Class I				
Protection degree EN60529	-	IP20				
Operating temperature	°C (°F)	-20/+70 (-4/+158)				
Storage temperature	°C (°F)	-25/+70 (-13/+158)				
Mounting	-	Clip for mounting on DIN rail 35mm EN50022				
Installation position	-	Best performance in vertical installation				
Dimensions HxWxD	mm	97x40x40	97x40x40	132x40x40	142x40x40	157x40x40
Cable length	mm	400	400	400	400	400
Weight (with packaging)	kg	0.20(0.21)	0.20(0.21)	0.26(0.28)	0.28(0.30)	0.40(0.42)
Conformity	-	CE				

\*at 20 °C (68°F) ambient temperature

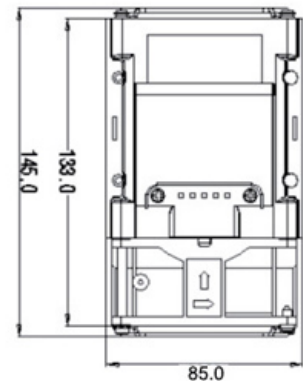
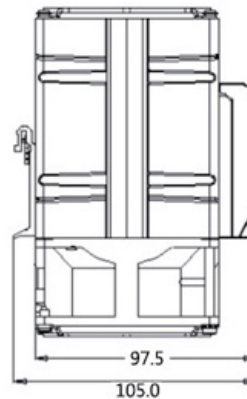
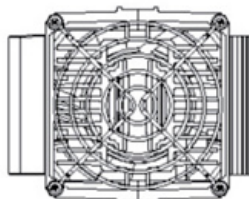
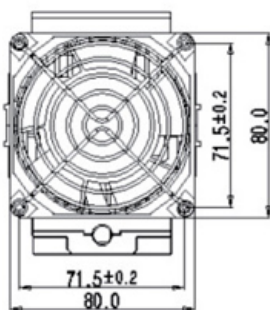




- Compact Design
- Clip fixing
- Temperature safety cut-out
- Long service life
- Maintenance free

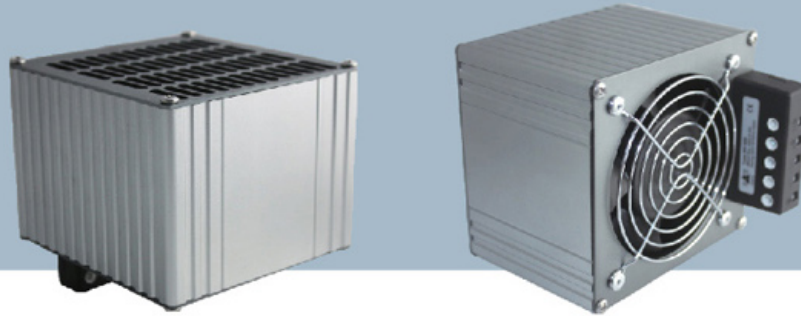
**Technical Drawing**

**Technical Data**

KHP300	With Fan
Heating element	PTC heater PTC
Input	AC 230V 50/60Hz 300-350W
Insulating strength	2000V/0.5mA/5s
Surface Temperature	60°C (at 30°C ambient temperature)
Axial fan, ball bearing	Airflow: AC: 24m³/h (50Hz) or 31m³/h (60Hz)
RPM	2400
Heater body	Aluminium alloy castings+PPS profile
Cooling method	Natural cooling
Connection Casing	Plastic according to UL94V-0, black
Mounting	Clip for 35mm DIN rail, EN50022
Fitting position	Vertical
Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
Protection type/Protection class	IP20/I (earthed)
Service life	50,000h at 25°C (77°F)



Art. No.	Operating voltage	Heating capacity
30005.0-00	230VAC, 50/60Hz	300W

# KH 150-650 Series 150W-650W Compact fan heater Heater



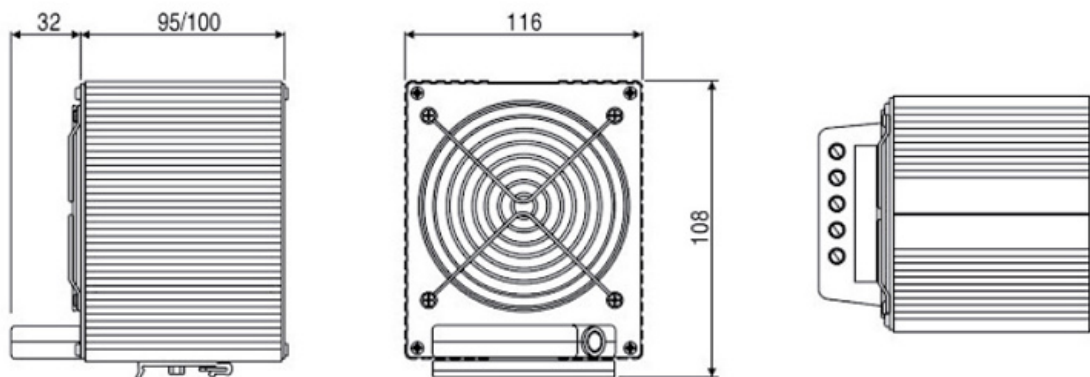
- Compact Design
- Clip fixing
- Temperature safety cut-out
- Long service life
- Maintenance free

Compact fan heater prevents formation of condensation. The integrated high performance axial fan provides forced air circulation and so guarantees an even temperature in enclosure.

## Technical Data

Heating element	PTC
Temperature safety cut-out	to protect against overheating in case of fan failure
Heater body	anodised extruded aluminium profile
Axial fan, ball bearing	Airflow, free flow Air volume: 35m <sup>3</sup> /h DC: 54m <sup>2</sup> /h service life 50.000h at 25 °C (77°F)
Connection	5-pole screw connector 2.5mm <sup>2</sup>
Mounting	clip for 35mm DIN rail, EN 50022
Fitting position	vertical
Operating temperature	-25 to +70 °C (-13 to +158°F)
Storage temperature	-25 to +70 °C (-13 to +158°F)
Protection class	IP20 / I(earthed)

Heater/Thermostat/Hygrostat

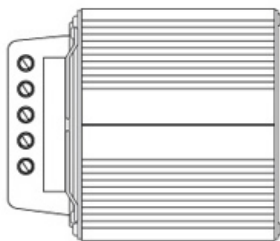
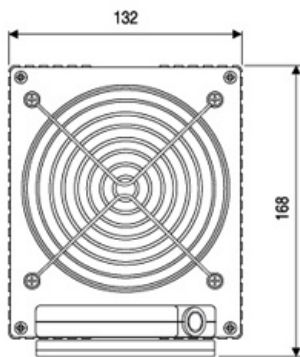
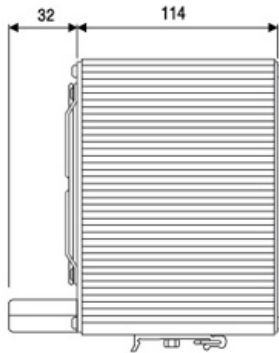


Art. No. 230VAC,50/60Hz	Art. No. 115VAC,50/60Hz	Heating capacity	Dimension	Weight
150.0-00	150.9-00	150W	108x116x127mm	0.6kg
200.0-00	200.9-00	200W	108x116x127mm	0.6kg
250.0-00	250.9-00	250W	108x116x127mm	0.6kg
300.0-00	300.9-00	300W	108x116x127mm	0.6kg
400.0-00	400.9-00	400W	108x116x127mm	0.6kg
650.0-00	650.9-00	650W	108x116x132mm	1.1kg





## Fan Assisted PTC Heaters



Heating Capacity		W	800W	1000W	1200W	1500W
Aticic number	230	V/HZ	800.0-00	1000.0-00	1200.0-00	1500.0-00
	110		800.9-00	1000.9-00	1200.9-00	1500.9-00
Max. current		A	8.0	9.0	12.0	13.0
Heating element	PTC					
Thermal protection	Thermal out out fuse in cose of fan failure					
Radieter	Extruded aluminium profile, anodized					
Axial fan	Ball bearing, service life 50.000 hrs at 25°C(77°F), air flow rate 35m³/h, free flow					
Electrical connections	5 screw terminals for stranded or rigid wire 2.5mm²					
Terminal block	plastic according to V-0, black					
Protection class IEC	Class°C ,Earthed					
Protection degree EN80529	IP20					
Operating/Storage temperature	-25/+70°C					
Mounting	clip for 35MM DIN rail, EN 50022					
Fitting position	vertical					
Dimensions H*W*D		mm	132×168×146			
Weight		KG	1.5			
Conformity	CE					

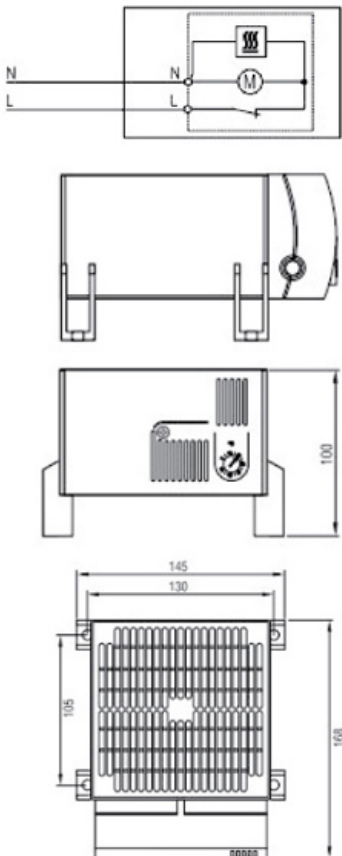
# KCR 030 250W-1000W Compact Heater



- Compact design
- Double insulated
- Integrated thermostat or hygrostat

The compact high performance fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric/electronic components. The plastic enclosure provides double insulation and acts as protection against contact. The fan heater is available with integrated thermostat or pre-set hygrostat for temperature or humidity control. The CT 030 was designed as a stationary unit for the bottom of the enclosure. For wall fixing the fan heater KCR 130 is recommended.

Technical Drawing



## Technical Data

Heating element	high performance cartridge
Temperature safety cut-out	to protect against overheating in case of fan failure automatic reset
Heater body	extruded alumin profile
Axial fan, ball bearing	airflow 160 m <sup>3</sup> /h, free flow
Connection	2-pole max. 2.5mm <sup>2</sup> , clamping screw with strain relief torque 0.8Nm max.
Casing	plastic according to UL94 V-0,black
Mounting	screw fixing (M5)
Fitting position	horizontal
Dimensions	168×145×100mm
Weight	approx. 1.40kg
Operating/storage temperature	-45 to +70 °C (-49 to +158°F)
Protection type/Production class	IP20 / II (double insulated)

Note: other heating capacities from 200W up available on request

\* Operating temperature of heater with integrated hygrostat: 0 to +60 °C (+32 to 140°F)

Art. No.	Model	Operating voltage	Heating capacity	Setting range
KCR03047.0-00	Fan Heater with thermostat	230VAC,50/60Hz	250W	0 to 60 °C
KCR03047.0-02	Fan Heater with hygrostat	230VAC,50/60Hz	250W	65% RH, factory-set
KCR03047.9-00	Fan Heater with thermostat	120VAC,50/60Hz	250W	+32 to 140°F
KCR03048.0-00	Fan Heater with hygrostat	230VAC,50/60Hz	400W	0 to 60 °C
KCR03048.0-02	Fan Heater with thermostat	230VAC,50/60Hz	400W	65% RH, factory-set
KCR03048.9-00	Fan Heater with hygrostat	120VAC,50/60Hz	400W	+32 to 140°F
KCR03049.0-00	Fan Heater with thermostat	230VAC,50/60Hz	600W	0 to 60 °C
KCR03049.0-02	Fan Heater with hygrostat	230VAC,50/60Hz	600W	65% RH, factory-set
KCR03049.9-00	Fan Heater with thermostat	120VAC,50/60Hz	600W	+32 to 140°F
KCR03050.0-00	Fan Heater with hygrostat	230VAC,50/60Hz	800W	0 to 60 °C
KCR03050.0-02	Fan Heater with thermostat	230VAC,50/60Hz	800W	65% RH, factory-set
KCR03050.9-00	Fan Heater with hygrostat	120VAC,50/60Hz	800W	+32 to 140°F
KCR03051.0-00	Fan Heater with thermostat	230VAC,50/60Hz	900W	0 to 60 °C
KCR03051.0-02	Fan Heater with hygrostat	230VAC,50/60Hz	900W	65% RH, factory-set
KCR03051.9-00	Fan Heater with thermostat	120VAC,50/60Hz	900W	+32 to 140°F
KCR03052.0-00	Fan Heater with hygrostat	230VAC,50/60Hz	1000W	0 to 60 °C
KCR03052.0-02	Fan Heater with thermostat	230VAC,50/60Hz	1000W	65% RH, factory-set
KCR03051.9-00	Fan Heater with hygrostat	120VAC,50/60Hz	1000W	+32 to 140°F

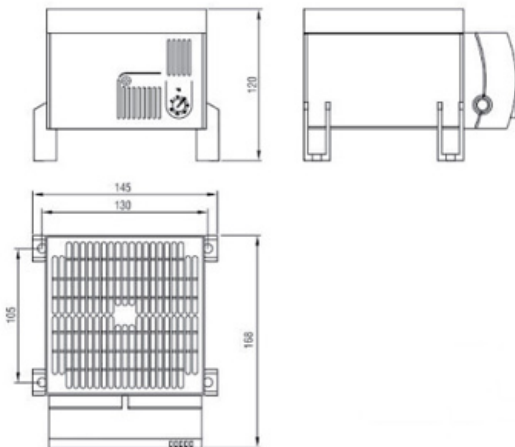
\*according to UL 499 in combination with UL 508A



- Compact design
- Double insulated
- Integrated thermostat or hygrostat

The compact high performance fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric /electronic components. The plastic enclosure provides double insulation and acts as protection against contact. The fan heater is available with optional integrated thermostat for temperature control. The RCS 030 was designed as a stationary unit for the bottom of the enclosure. For wall fixing the fan heater RCS 130 is recommended.

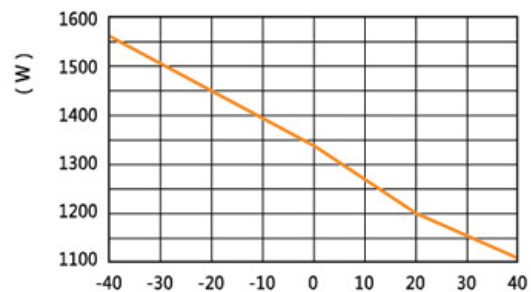
### Technical Drawing



### Technical Data

Heating element	high performance cartridge
Temperature safety cut-out	to protect against overheating in case of fan failure. automatic reset
Service life	60,000h at 20°C (68°F)
Heater body	extruded alumin profile
Axial fan, ball bearing	airflow 160 m <sup>3</sup> /h, free flow
Connection	2-pole max. 2.5mm <sup>2</sup> , clamping screw with strain relief torque 0.8Nm max.
Casing	plastic according to UL94 V-0, black
Mounting	screw fixing (M5)
Fitting position	horizontal
Dimensions	168×145×100mm
Weight	approx. 1.20kg
Operating/storage temperature	-45 to +70°C (-49 to +158°F)
Protection type/Production class	IP20 / II (double insulated)

Heating Performance/Ambient Temperature  
CS 030



Art. No.	Model	Operating voltage	Heating capacity	Inrush current max.	Setting range
KCS03060.0-00	Fan Heater with thermostat	230VAC, 50/60Hz	1200W	13A	0 to +60°C
KCS03060.0-01	Fan Heater without thermostat	230VAC, 50/60Hz	1200W	13A	-
KCS03060.9-00	Fan Heater with thermostat	120VAC, 50/60Hz	1200W	16A	+30 to +140°F
KCS03060.9-01	Fan Heater without thermostat	120VAC, 50/60Hz	1200W	16A	-