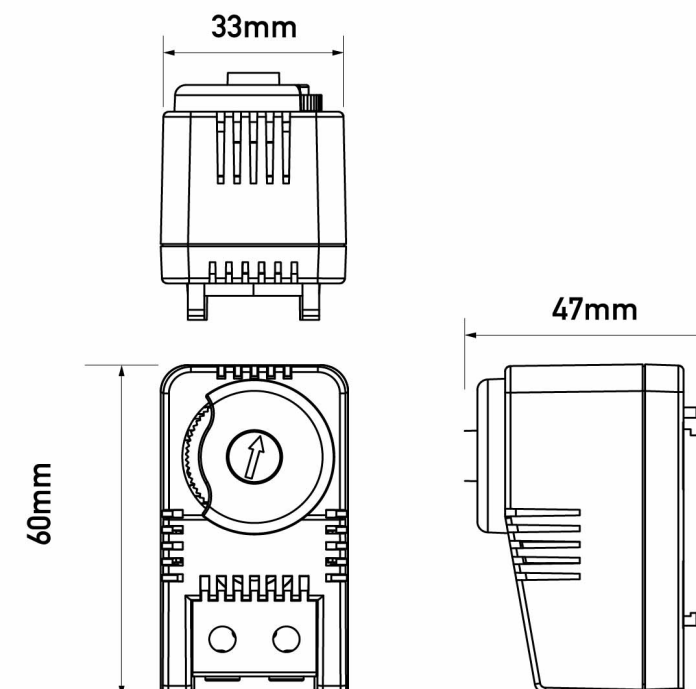


NEW Products Arrival

Picture



TECHNICAL DIMENSIONS



Thermostat

Picture



DSTS01-C

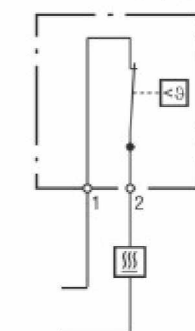
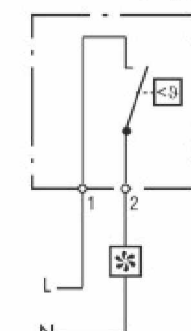


DSTO01-H

TECHNICAL PROPERTIES

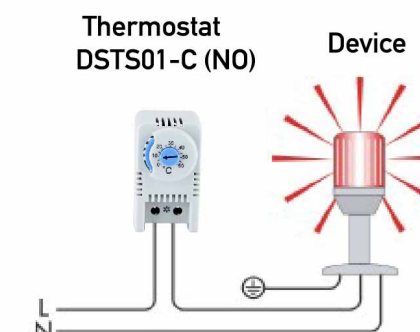
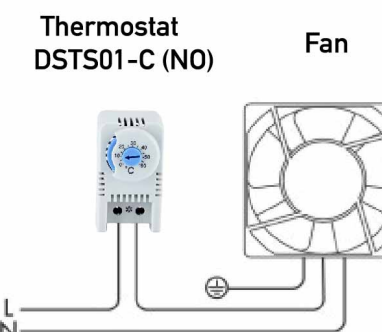
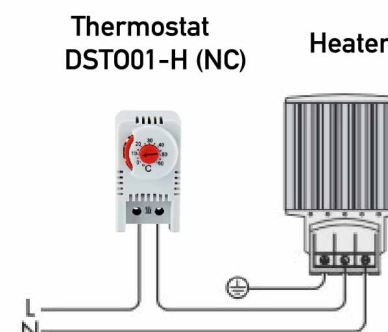
DSTO01-H (Normally Closed)	: When the temperature reaches the set value, open circuit.
DSTS01-C (Normally Open)	: When the temperature exceeds the set value, closed circuit.
Switch temperature difference	: 7K(+4K tolerance)
Sensor element	: Thermostatic bimetal
Contact type	: Snap-action
Contact resistance	: <10m ohm(Incidental connection line)
Service life	: >100,000 cycles
Aaax.Switching capacity	: 250V AC, 10(2)A 120V AC, 15(2)A 30W DC at 24V DC to 72V DC
Connection	: 2-pole terminal, clamping torque 0.5Nm max.: Rigid wire 2.5mm ² 12r stranded wire(with wire end ferrule) 1.5mm ² 12
Casing	: Plastic according to UL94 V-0, light grey
Installation	: 35mm DIN Installation guide
Dimensions	: 60 x 33 x 47 mm
Weight	: 44 g/pcs
Fitting position	: variable
Operating/storage temperature:	: -20 °C to 80 °C
Protection type	: IP20
Carton size	: 33.5x20 x 22 cm 100pcs/carton

CONNECTION DIAGRAMS

Thermostat
DSTO01-H (NC)Thermostat
DSTS01-C (NO)

Heater
Filter fan,
Cooling equipment,
Signal device

Connection diagrams



Examples of connection

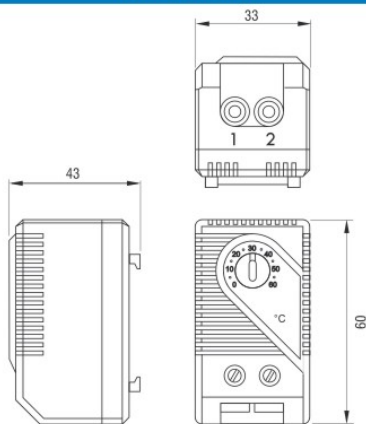


- Large setting range
- Small size
- Simple to mount
- High switching performance

KTS 01 1-2: Thermostat(normally closed); contact breaker for regulating heaters.

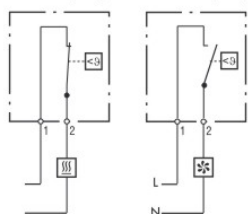
KTS 01 1-2: Thermostat (normally open): contact maker for regulating filter fans and heat exchangers or for switching signal device when temperature limit has been exceeded.

Installing method



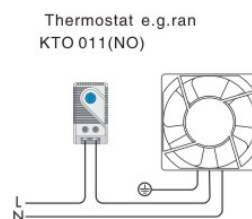
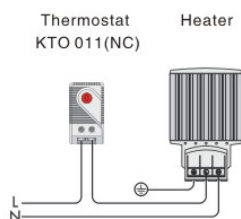
Kt0 01 1-2 NC(Normally closed)	When the temperature reaches the set value, open circuit
KTS 01 1-2 NO(Normally open)	When the temperature exceeds the set value action, closed circuit
Switch temperature difference	7K(+4K tolerance)
Sensor element	thermostatic bimetal
Contact type	Snap-action
Contact resistance	< 10m ohm(Incidental connection line)
Service life	>100,000 cycles
Max. Switching capacity	250VAC, 10(2)A 120VAC, 15(2)A 30WDC at 24VDC to 72V DC
Connection	2-pole terminal, clamping torque 0.5Nm max.: rigid wire 2.5mm ² 12r stranded wire (with wire end ferrule) 1.5mm ² 12
Casing	plastic according to UL94 V-0, light grey
Installation	35mm DIN Installation guide
Dimensions	60 x 33 x 43mm
Weight	40g
fitting position	variable
Operating/Storage temperature	-20°C to +80°C
Protection type	IP20 e.g. Signal

Thermostat KTO 011 (NC) Thermostat KTS 011 (NO)

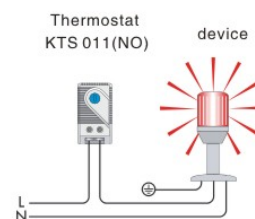


Connection diagrams

Heater
Filter fan,
Cooling equipment,
Signal device



Examples of connection

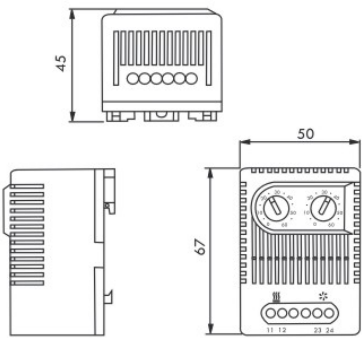


Setting range	Art. No. Contact Breaker (NC)	Art. No. Contact Maker (NO)	Approvals
0 to +60°C	01140.0-00	01141.0-00	CE
-10 to +50.0 °C	01142.0-00	01143.0-00	CE
+20 to +80.0 °C	01159.0-00	01158.0-00	CE
0 to +60°C	01146.9-00	01147.9-00	CE



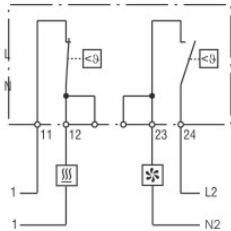
- NO and NC in one casing
 - Separate adjustable temperatures
 - High switching capacity
 - Terminals easily accessible
 - Clip Fixing
- Two thermostats in one casing:
Thermostat(contact breaker, normally closed)for regulating heaters
Thermostat(contact make, normally open) for regulating filter-fans and
heat exchangers or switching signal devices when temperature limit has
been exceeded.
Heaters and cooling equipment can be switched independently from
each other with a temperature offset as opposed to the usual
change-over contacts.

Size chart



Temperature range	N07NC:0–600C
Switch temperature difference	7K(+4K tolerance)
Sensor element	thermostatic bimetal
Contact type	Snap-action
Contact resistance	<10m ohm
Service life	>1 00,000 cycles
Max. Switching capacity	250VAC,1 0(2)A 120VAC,1 5(2)A DC 30W
Connection	4-pole terminal, clamping torque 0.5Nm max: rigid wire 2.5mm ² , stranded wire with wire end ferrule) 1.5mm ²
Insallation	35mm DIN Installation guide
Casing	UL94 V-O Plastic, light gray
Dimensions	67x50x46mm
Weight	90g
fitting position	variable
Operating/Storage temperature	–20°C to +80°C
Profection type	Ip20

Thermostar
ZR 011(NC/NO)



- Heater
- Filter fan, Cooling equipment, Signal device

Connection diagram

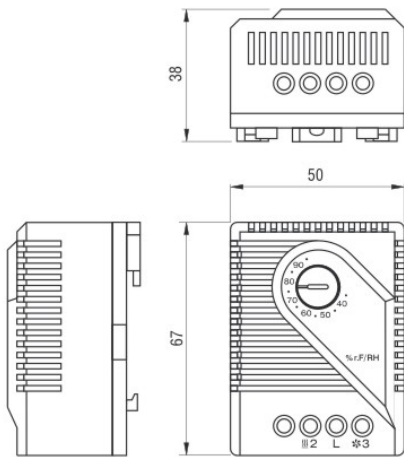
Art. No.	Setting Range	Setting Range
ZR 011-2	Contact breaker (NC)	Contact maker (NO)
	0 to +60°C	0 to +60°C



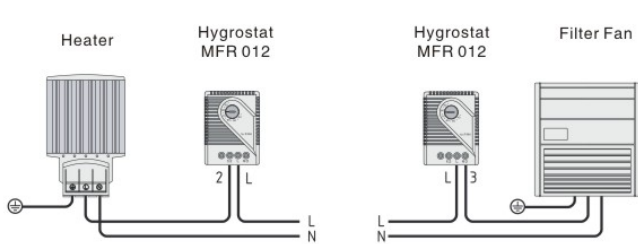
- Adjustable relative humidity
- Easily accessible terminals
- Change-over contact
- Clip fixing
- High switching capacity

The eledromechanical hygrostat is designed to control enclosure heaters so that the dew point is raised when a critical relative humidity of 65% is exceeded. In this way condensation and corrosion in enclosures with electric/electronic components is effedively prevented.

Connection

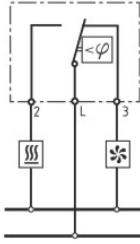


Switch difference*	4070 RH (+ 3% tolerance)
Permissible air velocity	15m/sec.
Contact type	change-over contact
Service life	>50,000 cycles
Mix. Switching capacity	250VAC, 5A 20WDC
Max. Switching capacity	5AAC
Connection	3-pole terminal for 2.5mm ² , clamping torque 0.5Nm max:rigid wire 2.5mm ² stranded wire (with wire end ferrule) 1.5mm ²
Mounting	plastic according to UL94 V-O, light grey
Casing	67 x 50 x 38mm
Dimensions	approx. 60g
Weight	variable
Fitting position	0 to +60°C (+32 to +140° F) / –40 to +600C (–40 to +140° F)
Operating / Storage temperature	max. 90% RH (non-condensing)
Operating / Storage humidity	IP20
Protection type	UL File No. E164102
Approvals	



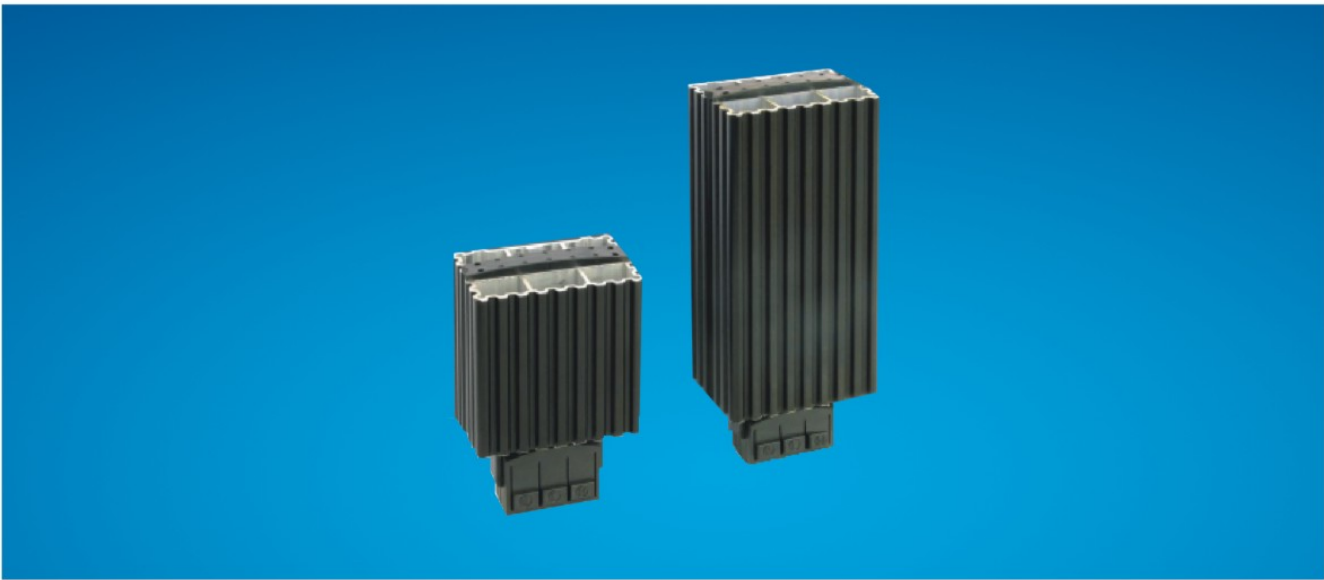
Exzmples of connection

Connection
diagram



- Enclosure heater
- Filter fan, Cooling equipment, Signal deVice

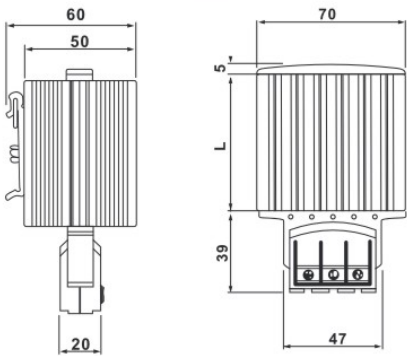
Art. No.	Setting range
MFR01 2-2	35 to 95% RH



- 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.

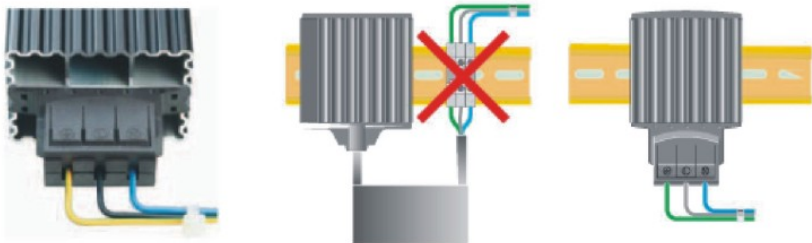
Size chart



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 ² (with wire and ferrule) and rigid wire 0.5–2.5mm ² 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%

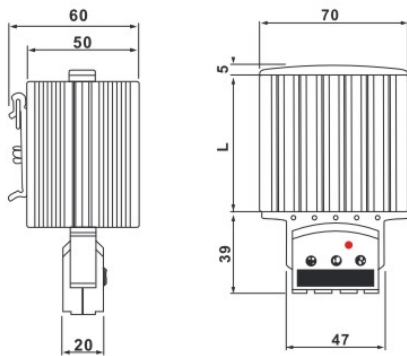
Type	Heating capacity	Inrush current max.	Length(L) (mm)	Weight (approx)
HG 140	15W	1.5	75	0.3
HG 140	30W	3	75	0.3
HG 140	45W	3.5	75	0.3
HG 140	60W	2.5	75	0.3
HG 140	75W	4	75	0.3
HG 140	100W	4.5	145	0.5
HG 140	150W	9	145	0.5



- 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.

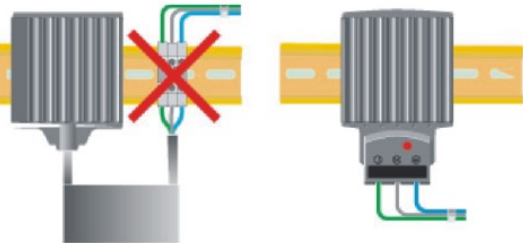
Size chart



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 ² (with wire and ferrule) and rigid wire 0.5–2.5mm ² 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)
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

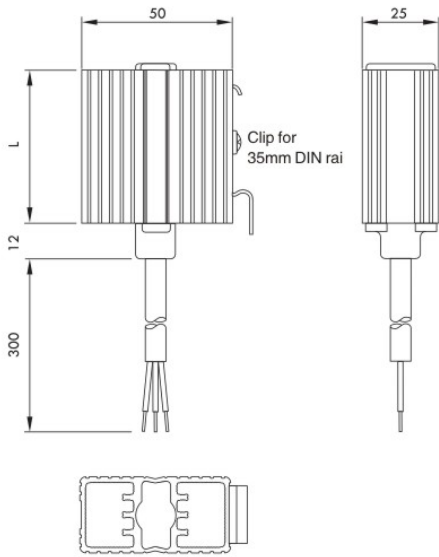
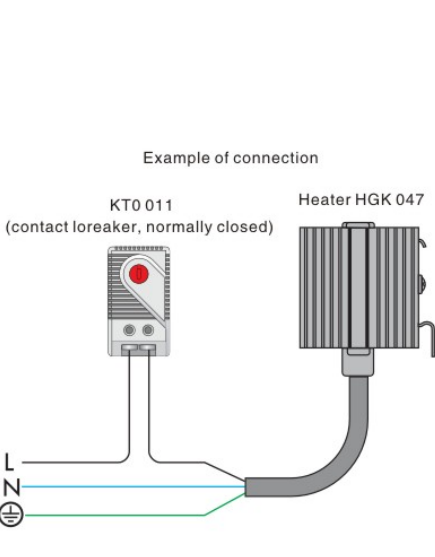




- Dynamic heating up
- Energy saving
- Wide voltage range
- Clip fixing

The heaters are used in enclosures where condensation is to be prevented or the temperature may not fall below a minimum value. In this way corrosion is avoided and an even temperature is ensured. The heaters are designed for permanent operation.

Heating element	PTC resistor – temperature limiting
Heater body	extruded aluminium profile, anodised
Mounting	clip for 35mm DIN rail, EN 60715
Fitting position	vertical airflow (air outlet up, connection on bottom)
Operating / Storage	–45 to +70°C (–49 to +158° F)
Operating / Storage humidity	max. 90% RH (non–condensing)
Protection type / Protection class	IP44/I(earthed)
Accessories	screw fixing
Note	other voltages on request



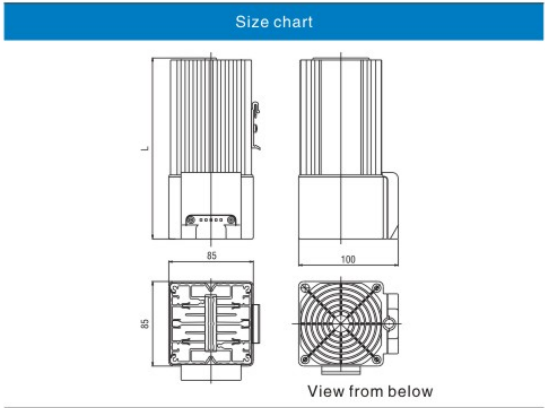
Art.No.	Operating voltage	Heating capacity ¹⁾	Inrush current max.	Pre–fuse T(time–delay)	Length(L)	Weight (approx.)	Connection	Approvals
04700.0–00	120–240V AC/DC ²⁾	10W	1.0A	1A	52mm	0.1kg	3 x 0.5mm ² x 300mm cable (silicone)	CE
04701.0–00	120–240V AC/DC ²⁾	20W	2.5A	2A	60mm	0.2kg	3 x 0.5mm ² x 300mm cable (silicone)	CE
04702.0–00	120–240V AC/DC ²⁾	30W	3.0A	2A	70mm	0.2kg	3 x 0.5mm ² x 300mm cable (silicone)	CE
04700.9–00	110–120V AC/DC	10W	1.0A	1A	52mm	0.1kg	3 x AWG 20 x 300mm cable	CE
04701.9–00	110–120V AC/DC	20W	1.5A	2A	70mm	0.2kg	3 x AWG 20 x 300mm cable	CE
04702.9–00	110–120V AC/DC	30W	1.5A	2A	100mm	0.2kg	3 x AWG 20 x 300mm cable	CE

¹⁾ at 20°C (68° F) ambient temperature; ²⁾ (min. 110V, max 265V) Operating with voltages below 140V AC/DC reduces heating performance by approx. 10%.



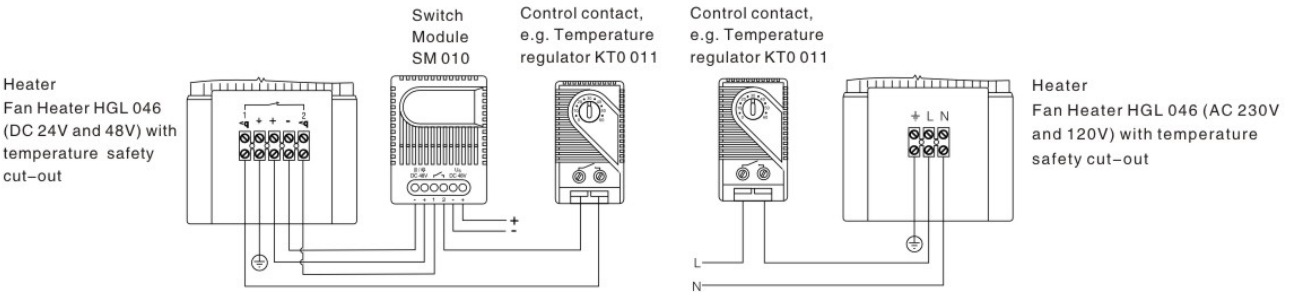
- Compact Design
- Clip fixing
- Long service life
- Maintenance free
- Temperature safety cut–out

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.



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(400VV)
Axial fan, ball bearing	Airflow, free flow AC: 45m3/h (50HZ) or 54m3/h (60Hz) DC: 54m3/h service life 50 000h at 25°C (770F)
Connection	internal connection terminal 1.5mm ² with strain relief clamping torque 0.8Nm max.
Connection casing	plastic according to UL94 V–O,black
Mounting	clip for 35mm DIN rail, EN 50022
Fitting position	vertical
Operating/Storage temperature	–45 to +70 0C(–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

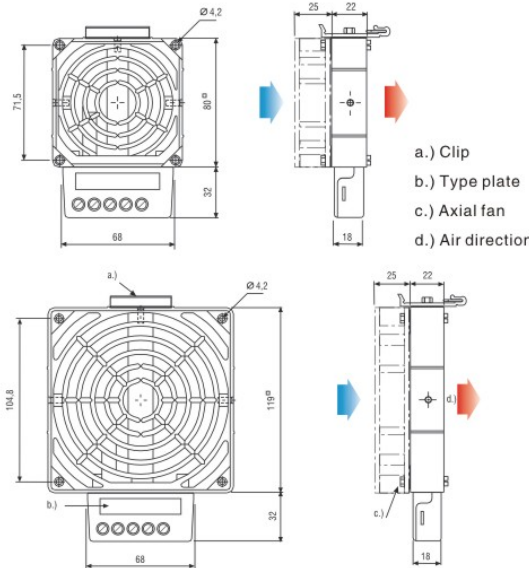




- Compact / Flat design
- High air through-flow
- Temperature safety cut-out
- Clip fixing

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 clip 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)
Connexion	3-pole screw connector 2.5mm ² , clamping torque 0.8Nm max
Connection casing	plastic according to UL94 V-O, 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 ² (L2/N2)

Art.no.HV 031	03100.9-00	Heating capacity	Dimensions	Weight(approx.)
230vac,50/60Hz	03101.9-00			
03100.0-00	03110.9-00	100W	80x112x22mm	0.40kg
03101.0-00	0311.9-00	150W	80x112x22mm	0.40kg
03110.0-00	03112.9-00	200W	19x151x22mm	0.50kg
03111.0-00		300W	19x151x22mm	0.50kg
03112.0-00		400W	19x151x22mm	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 low		
03102.0-00	03102.9-00	100W	35m ³ /h	80x112x47mm	0.60kg
03103.0-00	03103.9-00	150W	35m ³ /h	80x112x47mm	0.60kg
03113.0-00	03113.9-00	200W	108m ³ /h	119x151x47mm	0.90kg
03114.0-00	03114.9-00	300W	108m ³ /h	119x151x47mm	0.90kg
03115.0-00	03115.9-00	400W	108m ³ /h	119x151x47mm	0.90kg

Blank area for notices or additional information.