

RCE016 5W, 9W

产品特性 Features

- 温度限定 Temperature limiting
- 电压范围宽 Wide voltage range
- 高效加热 Dynamic heating up
- 节能 Energy saving
- 轻巧 Compact

小型加热器主要用于开关箱，可预防产生凝露。

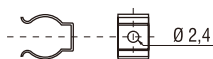
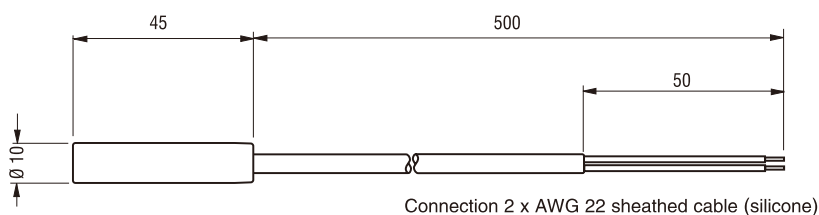
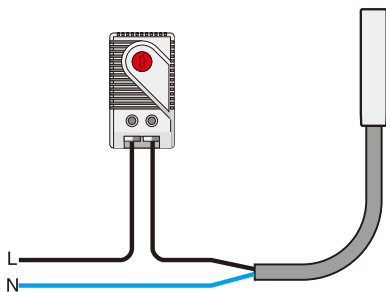
Small heaters designed to prevent condensation and to ensure a minimum operating temperature in small enclosures.

技术参数 Technical Data

操作电压 Operating voltage	120-240V AC/DC (min. 110V, max. 265V)
发热元件 Heating element	PTC发热体 resistor, self regulating and temperature limiting
放热体 Heater body	阳极处理铝型材 aluminium, anodised
安装方式 Connection	螺丝安装 screw fixing
安装位置 Installation position	任选 variable
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP32 / II (double insulated)
外观尺寸 Dimensions	长度 45mm, 直径 10mm length 45mm, Φ 10mm
配件 Accessories	安装夹 mounting clips (see illustration), Art.No.09008.0-01

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

Example of connection
Thermostat KTO 011 (NC)
(contact breaker, normally closed) Heater RCE 016



Mounting clips Art. No. 09008.0-01 (1 packing unit = 2 pieces)

订货代码 Art. No.	功率 (50Hz) Heating capacity	最大电流 Inrush current max.	表面温度 Surface temperature (approx.)	接线方式 Connection	重量 Weight (approx.)
01623.0-00	5W	2.0A	165° C	2xAWG 22 sheathed cable(silicone)	20g
01622.0-00	9W	2.5A	175° C	2xAWG 22 sheathed cable(silicone)	20g

*at 20°C (68°F) ambient temperature

RC 016 8W,10W,13W

产品特性 Features

- 温度限定 Temperature limiting
- 电压范围宽 Wide voltage range
- 高效加热 Dynamic heating up
- 节能 Energy saving
- 轻巧 Compact

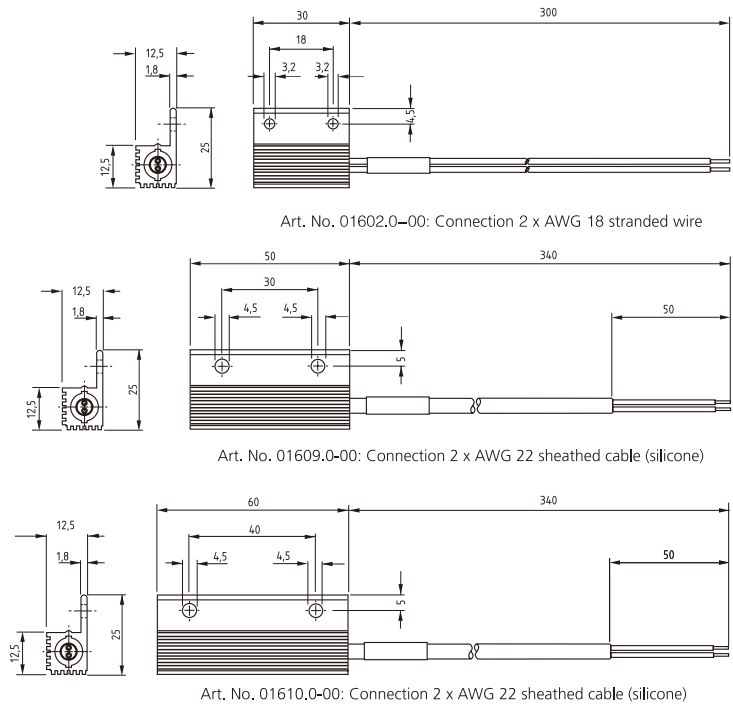
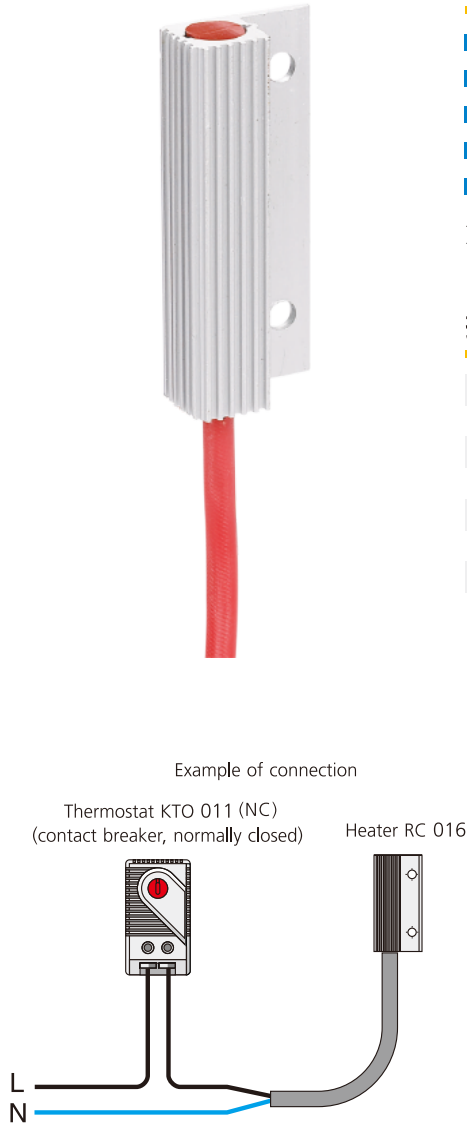
小型加热器主要用于开关箱，可预防产生凝露。

These small heaters are designed to prevent condensation and to ensure a minimum operating temperature in small enclosures.

技术参数 Technical Data

操作电压 Operating voltage	120-240V AC/DC (min. 110V, max. 265V)
发热元件 Heating element	PTC 发热体 resistor, self regulating and temperature limiting
放热体 Heater body	阳极处理铝型材 aluminium, anodised
安装方式 Connection	螺丝安装 screw fixing
安装位置 Installation position	任选 variable
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP32 / II (double insulated)

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



订货代码 Art. No.	功率 Heating capacity	最大电流 Inrush current max.	表面温度 Surface temperature (approx.)	接线方式 Connection	重量 Weight (approx.)
01602.0-00	8W	2.0A	150□	2 x AWG 18 stranded wire	20g
01609.0-00	10W	2.5A	155□	2 x AWG 22 sheathed cable (silicone)	30g
01610.0-00	13W	3.0A	170□	2 x AWG 22 sheathed cable (silicone)	40g

*at 20°C (68°F) ambient temperature



HGK 047 10W -150W

产品特性 Features

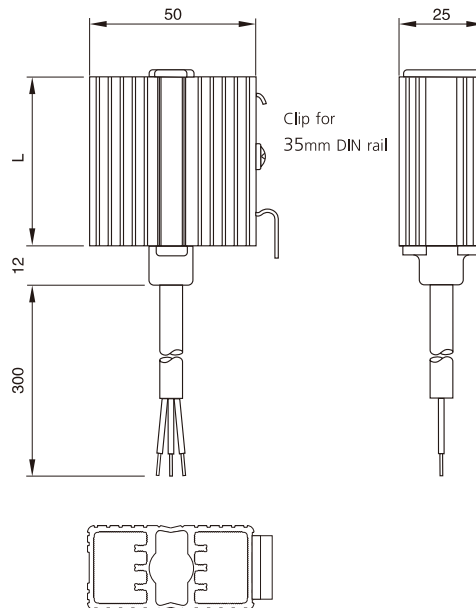
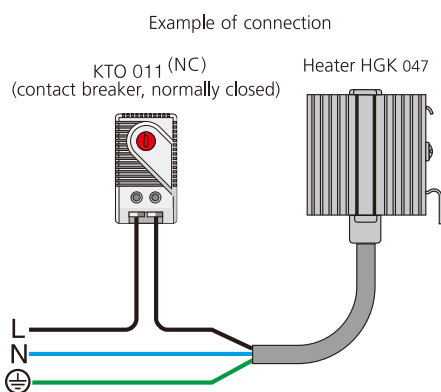
- 高效加热 Dynamic heating up
- 节能 Energy saving
- 电压范围宽 Wide voltage range
- 温度限定 Temperature limiting
- 导轨安装 DIN rail mounted

加热器主要用于开关箱，可避免产生凝露，预防温度降至零下或降至最小需求值时，用此方法可避免生锈，确保箱内温度恒定。

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.

技术参数 Technical Data

发热元件 Heating element	PTC发热体，自我调节和温度控制 PTC resistor, self regulating and temperature limiting
发热体 Heater body	阳极处理挤压铝型材 extruded aluminium profile, anodised
安装方式 Mounting	35mm DIN 轨道, EN 50022 clip for 35mm DIN rail, EN 60715
安装位置 Installation position	垂直方向 vertical
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP54 / I (earthed)



订货代码 Art. No.	操作电压 Operating voltage	功率 Heating capacity ¹⁾	电流最大值 Inrush current max.	长度 Length (L)	重量 Weight (approx.)	接线方式 Connection
04700.0-00	120-240V AC/DC	10W	1.0A	50mm	0.10kg	3 x 0.5mm ² x 300mm sheathed cable(silicone) 护套电缆
04701.0-00	120-240V AC/DC	20W	2.5A	60mm	0.20kg	3 x 0.5mm ² x 300mm sheathed cable(silicone) 护套电缆
04702.0-00	120-240V AC/DC	30W	3.0A	70mm	0.20kg	3 x 0.5mm ² x 300mm sheathed cable(silicone) 护套电缆
04700.9-00	110-120V AC/DC	10W	1.0A	50mm	0.10kg	3 x AWG 20 x 300mm sheathed cable 护套电缆
04701.9-00	110-120V AC/DC	20W	1.5A	70mm	0.20kg	3 x AWG 20 x 300mm sheathed cable 护套电缆
04702.9-00	110-120V AC/DC	30W	1.5A	100mm	0.20kg	3 x AWG 20 x 300mm sheathed cable 护套电缆

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%.

HG 140 15W -150W

产品特性 Features

- 端子式接线 Pressure clamp connectors
- 高效加热 Dynamic heating up
- 电压范围宽 Wide voltage range
- 温度限定 Temperature limiting
- 节能 Energy saving
- 导轨固定 DIN rail mounted
- 快速安装 Quick installation

电热器使用于开关箱当中预防产生凝露，防止温度降至零下或降至最低设定值。

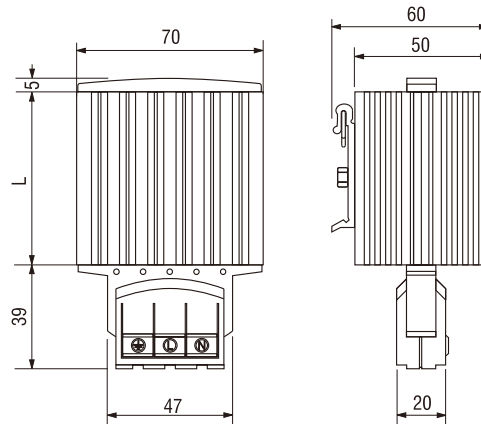
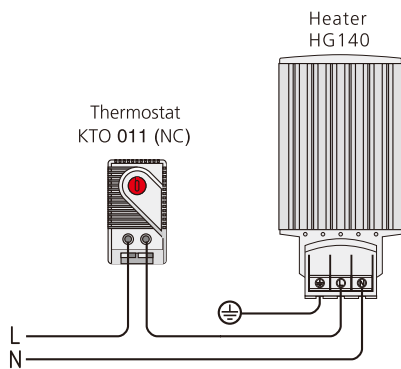
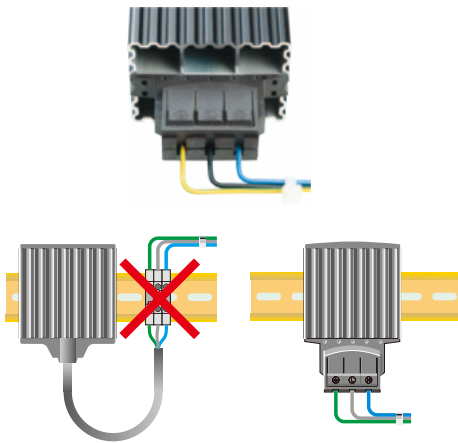
These heaters are used in enclosures where damage from condensation must be prevented, or where the temperature may not fall below a minimum value. The aluminium profile heater body design has a chimney effect and distributes the heat evenly. The pressure clamp connectors save time and simplify installation.

技术参数 Technical Data

操作电压 Operating voltage	120-240V AC/DC*(min.110V,max.265V)
发热原件 Heating element	PTC发热体 PTC resistor, self regulating and temperature limiting
发热体 Heater body	阳极处理挤压铝型材 extruded aluminium profile, anodised
接线方式 Connection	3个接线端子接入线径0.5-1.5mm ² 3 pressure clamps for stranded wire 0.5-1.5mm ² (with wire end ferrule) and rigid wire 0.5-1.5mm ²
外壳材料 Connection casing	黑色塑料,UL94V-0标准,V-0防火等级 plastic according to UL94 V-0,black
安装方式 Mounting	35mmDIN导轨,clip for 35mm DIN rail, EN 60715
安装位置 Installation position	垂直 vertical
操作/储存环境 Operating/Storage temperature	-20 to +70°C(-4 to +158°F)
防护等级 Protection type/Protection class	IP54 / I (earthed)

*工作电压低于140VAC/DC时，加热性能降低约10%

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



订货代码 Art. No.	功率 Heating capacity	最大电流 Inrush current max.	长度(L) Length (L)	重量 Weight (approx.)
14000.0-00	15W	1.5A	65mm	0.30kg
14001.0-00	30W	3.0A	65mm	0.30kg
14003.0-00	45W	3.5A	65mm	0.30kg
14005.0-00	60W	2.5A	140mm	0.40kg
14006.0-00	75W	4.0A	140mm	0.50kg
14007.0-00	100W	4.5A	140mm	0.50kg
14008.0-00	150W	9.0A	220mm	0.70kg

*at 20°C(68°F) ambient temperature

CREx 020 50W, 100W

产品特性 Features

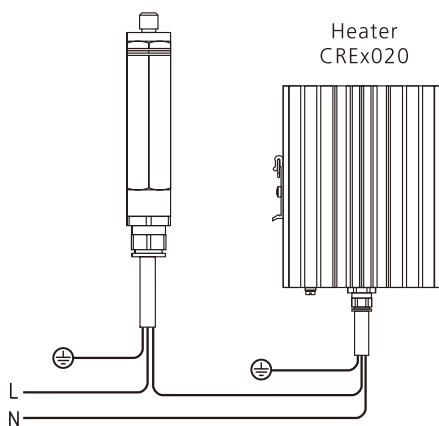
- 高效表面散热 Large convection surface
- 导轨安装 DIN rail mounted
- 使用方便 Ready for use
- 免维护 Maintenance free

防爆加热器用于危险区域场所，防止因环境温度变化时形成凝露。

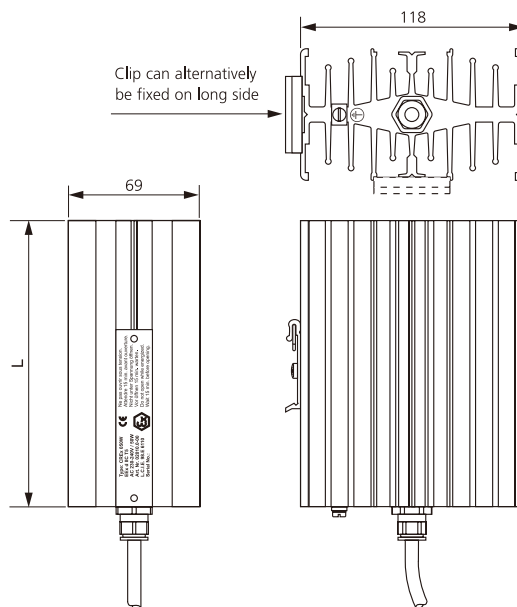
Compact convection heater for use in areas with explosion hazard for prevention of formation of condensation, temperature fluctuations and for protection against frost in transmitter housings, switch cabinets and measuring equipment.

技术参数 Technical Data

防爆认证EN Explosion protection according to EN	LCIE (Laboratoire Central des Industries Electriques)
符合的认证Conformity certificate	01 ATEX 6073/03, LCIE N° 06 ATEX Q8011, IECEx LCI 07. 0020
发热元件Heating element	high performance cartridge
发热体Heater body	阳极处理铝合金aluminium profile, black anodised
接线方式Connection	Si HF-JZ 3 x 0.75mm ² cable, length 1m
PEConnection PE	4mm ²
安装方式Mounting	35mm DIN导轨安装, clip for 35mm DIN rail, EN 60715
安装位置Installation position	垂直方向vertical
操作/储存环境Operating/Storage temperature	-20 to +40°C (-4 to +104°F) / -45 to +70°C (-49 to +158°F)
防护等级Protection type/Protection class	IP65 / I (earthed)

Hazardous Area Thermostat
REX 011

接线示意图 Example of connection

Hazardous area Thermostat REX 011
see page 39

订货代码 Art. No.	操作电压 Operating voltage	功率 Heating capacity	防爆保护类型 Ex protection type	表面温度 Surface temperature	长度(L) Length (L)	重量 Weight (approx.)
02010.0-00	230-240VAC	50W	Ex d IIC T5 – Ex tD A21 IP6X T100° F	100°F	150mm	1.30kg
02011.0-00	230-240VAC	100W	Ex d IIC T4 – Ex tD A21 IP6X T135° F	135°F	180mm	1.50kg
02010.0-01	110-120VAC	50W	Ex d IIC T5 – Ex tD A21 IP6X T100° F	100°F	150mm	1.30kg
02011.0-01	110-120VAC	100W	Ex d IIC T4 – Ex tD A21 IP6X T135° F	135°F	180mm	1.50kg

SM 010 24VDC +48VDC

产品特性 Features

- 高直流分断能力 High DC switching capacity
- 应用广泛 Variety of applications
- 紧凑型设计 Compact design
- 接线简便 Simple connection
- 导轨安装 DIN rail mounted

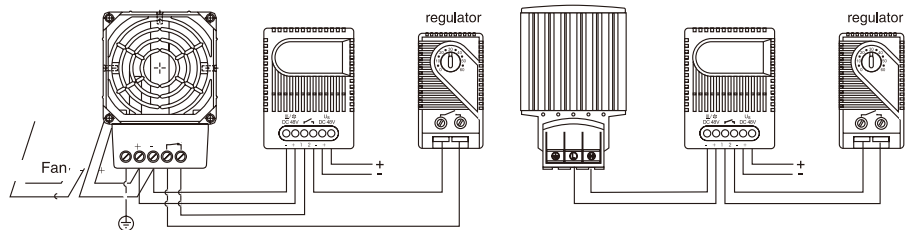
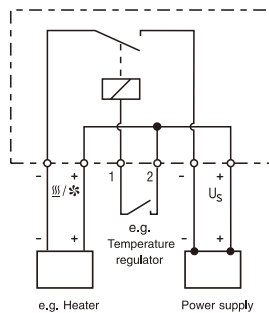
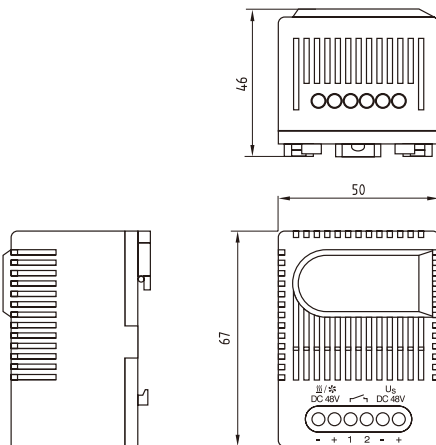
该直流电子式继电器具有较高的直流分断能力，有24VDC和48VDC两种电压可选。

Electronic relay for switching DC appliances with high switching capacity. A separate conventional switch contact is used as controller (e.g. temperature regulator, humidity regulator). The electronic relay is available in 24VDC and 48VDC versions.



技术参数 Technical Data

触点类型 Contact type	接触开关, 常开 contact maker, normally open (Relay/MOSFET)
触点电阻 Contact resistance	< 10mΩ
使用寿命 Service life	> 100,000 cycles
EMC	acc. to EN 55014-1-2, EN 61000-3-2, EN 61000-3-3
接线方式 Connection	6极端子, 2.5mm ² 导线 6-pole terminal, clamping torque 0.5Nm max.: rigid wire 2.5mm ²
安装方式 Mounting	35mm DIN轨道 clip for 35mm DIN rail, EN60715 or for exit filter EF 118 Series
外壳材料 Casing	塑料 UL94标准 V-0 防火等级, plastic according to UL94 V-0, light grey
□□□□ Dimensions	67 x 50 x 46mm
重量 Weight	approx. 85g
安装位置 Installation position	任意 variable
操作/储存温度 Operating/Storage temperature	-20 to +80°C (-4 to +176°F) / -45 to +80°C (-49 to +176°F)
防护等级 Protection type	IP20



接线示意图 Example of connection

订货代码 Art. No.	工作电压 Operating voltage	最大开关容量 Max. Switching capacity
01001.0-00	24VDC (20-28VDC)	28VDC 16A
01000.0-00	48VDC (38-56VDC)	56VDC 16A



CS 060 50W-150W

产品特性 Features

- 表面温度低 Low surface temperature
- 导轨式安装 DIN rail mounted
- 双绝缘 (塑料) Double insulated (plastic)
- 宽电压范围 Wide voltage range
- 小体积 Small size

触摸安全型加热器主要用于有关电气和电子的配件的开关箱中，其设计采用自然对流方案，从产品加热体到外壳表面的设计采用温度逐渐降低的设计理念。我们全系列的温控器和湿度控制器均可直接连接到加热器CS 060上使用。其次该加热器也可与外挂恒温器连接，不用单独接线。

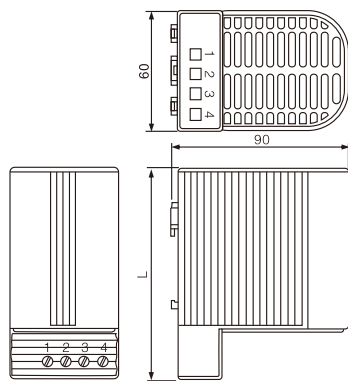
Touch-safe heater for the use in enclosures with electrical/electronic components. The design of the heater supports the natural convection which results in a high air-current of warm air. The surface temperatures on the accessible side surfaces of the housing are kept down as a result of the heater design. Our complete range of thermostats and hygrometers can directly be connected to the heater CS 060. This heater is also available in a version with plug-in thermostat requiring no additional wiring (CSF 060). Both versions are designed for permanent operation.

技术参数 Technical Data

操作电压 Operating voltage	120-240V AC/DC *(min.110V,max.265V)
加热功率 Heating capacity	见下表 see table
加热原件 Heater element	PTC 限温元件 PTC resistor-temperature limiting
表面温度 Surface temperature	除了上部防护的网格均<80°C(176°F) <80°C(176°F), except upper protective grille
接线方式 Connection	螺丝 4-pole terminal 2.5mm ² , torque 0.8Nm max.
外壳材料 Casing	黑色塑料, UL94V-0标准, V-0防火等级 Plastic according to UL94-V-0, black
安装方式 Mounting	35mm DIN导轨安装 clip for 35mm DIN rail, EN 50022
安装位置 Installation position	垂直 Vertical
操作储存环境 Operating/storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20/II (double insulated)
认证 Approvals	CE
注意 Note	其他电压可定做 other voltages on request

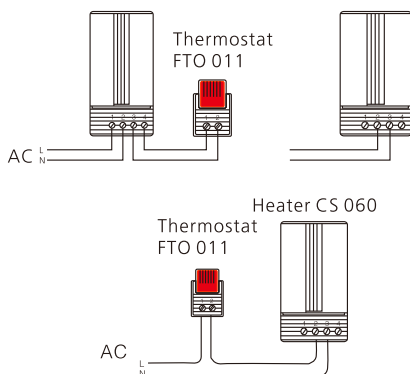
*工作电压低于140VAC/DC时，加热性能降低约10%

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



Heater CS 060

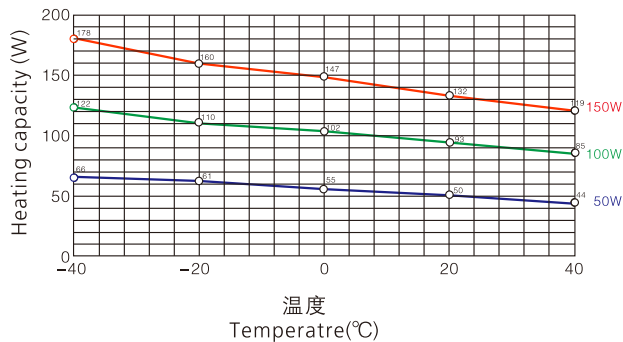
Heater CS 060



接线示意图
Examples of connection

加热功率

Heating capacity / Ambient temperature diagram CS 060



订货代码 Art. No.	功率 Heating capacity	电流最大值 Inrush current max.	空气出口温度 Air outlet temperature	尺寸 Dimensions	重量 Weight (approx.)
06000.0-00	50W	2.5A	+86°C (186.8° F)	110x60x90mm	0.30kg
06010.0-00	100W	4.5A	+120°C (248° F)	110x60x90mm	0.30kg
06020.0-00	150W	8A	+145°C (293° F)	150x60x90mm	0.30kg

1) ambient temperature-see Heating capacity/Ambient temperature diagram; 2) measured 50mm above protective grille;



CSF 060 50W-150W

产品特性 Features

- 表面温度低 Low surface temperature
- 导轨式安装 DIN rail mounted
- 双绝缘 (塑料) Double insulated (plastic)
- 宽电压范围 Wide voltage range
- 小体积 Small size
- 智能温控器 Integrated thermostat

触摸安全型加热器主要用于有关电气和电子配件的开关箱中，其设计采用自然对流方案，从产品加热体到外壳表面的设计采用温度逐渐降低的设计理念，该加热器也可与外挂恒温器连接，不用单独接线，也可以在不加温控器的情况下使用。

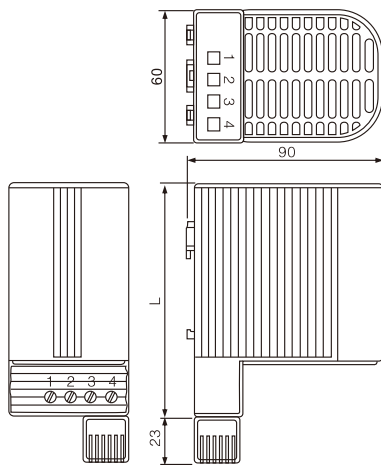
Touch-safe heater for the use in enclosures with electrical/electronic components. The design of the heater supports the natural convection which results in a high air-current of warm air. The surface temperatures on the accessible side surfaces of the housing are kept down as a result of the heater design. This model with plug-in thermostat does not require additional wiring. The heaters are designed for permanent operation. This heater is also available in a version without thermostat (CS 060).

技术参数 Technical Data

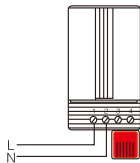
操作电压 Operating voltage	120-240V AC/DC* (min. 110V, max. 265V)
加热功率 Heating capacity	见下表 see table
加热原件 Heater element	PTC 限温元件 PTC resistor-temperature limiting
表面温度 Surface temperature	除了上部防护的网格均 <80°C (176° F) <80°C (176° F), except upper protective grille
接线方式 Connection	螺丝 4-pole terminal 2.5mm ² , torque 0.8Nm max.
外壳材料 Casing	黑色塑料, UL94V-0标准, V-0防火等级 Plastic according to UL94-V-0, black
安装方式 Mounting	35mm DIN 导轨安装 clip for 35mm DIN rail, EN 50022
安装位置 Installation position	垂直 Vertical
操作储存环境 Operating/storage temperature	-20 to +70°C (-4 to +158° F) / -45 to +70°C (-49 to +158° F)
防护等级 Protection type/Protection class	IP20/II (double insulated)
认证 Approvals	VDE+UL File No. E15057 (according to UL499 in combination with UL508A)
注意 Note	其他电压可定做 other voltages on request

*工作电压低于 140VAC/DC 时，加热性能降低约 10%

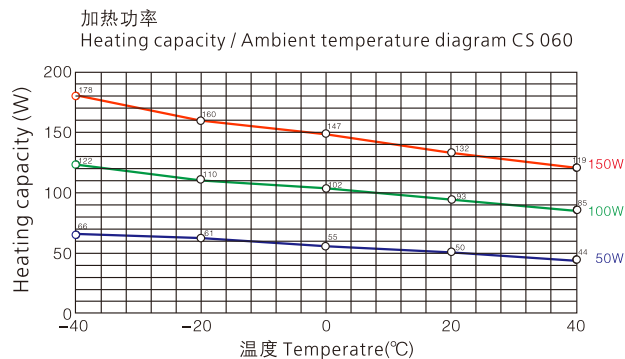
*Operating with voltages below 140V AC/DC reduces heating performance by approx. 10%.



Heater CS 060



接线示意图
Examples of connection



订货代码 Art. No.	功率 Heating capacity	电流最大值 Inrush current max.	空气出口温度 Air outlet temperature	关断温度 Switch-off temperature	尺寸 Dimensions	重量 Weight (approx.)
06001.0-00	50W	2.5A	+86°C (186.8° F)	+15°C (59° F)	110x60x90mm	0.30kg
06002.0-00	50W	2.5A	+86°C (186.8° F)	+25°C (77° F)	110x60x90mm	0.30kg
06011.0-00	100W	4.5A	+120°C (248° F)	+15°C (59° F)	110x60x90mm	0.30kg
06012.0-00	100W	4.5A	+120°C (248° F)	+25°C (77° F)	110x60x90mm	0.30kg
06021.0-00	150W	8A	+145°C (293° F)	+15°C (59° F)	150x60x90mm	0.50kg
06022.0-00	150W	8A	+145°C (293° F)	+25°C (77° F)	150x60x90mm	0.50kg

1) ambient temperature-see Heating capacity/Ambient temperature diagram; 2) measured 50mm above protective grille;

HGL 046 250W-400W

产品特性 Features

- 紧凑的设计 Compact design
- 导轨式安装 DIN rail mounted
- 使用寿命长 Long service life
- 免维护 Maintenance free
- 安全温度断流功能 Temperature safety cut-out

轻巧型风机加热器可预防冷凝的形成，一体化高性能轴流风扇可提供强力空气循环，使开关箱内温度恒定。当风扇发生故障时，加热器内安全切断开关会自动停止加热器的工作。

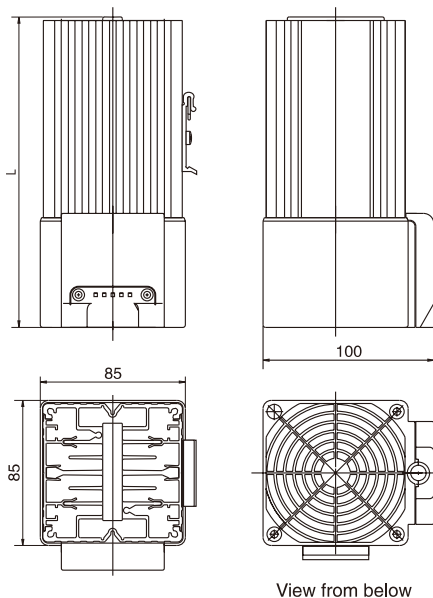
Compact fan heater prevents formation of condensation. The integrated high performance axial fan provides forced air circulation and so guarantees an even temperature in enclosures. With internal terminal connector.

技术参数 Technical Data

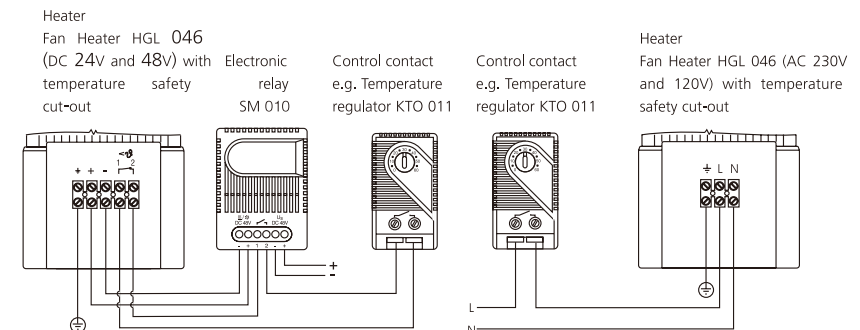
发热元件 Heating element	电阻加热器 resistance heater
温度保护 Temperature safety cut-out	防止过热引起风扇不运转 to protect against overheating in case of fan failure
发热体 Heater body	通过极化处理的铝型材 anodised extruded aluminium profile
表面温度 Surface temperature	最高 75°C max. 75°C (400W)
滚珠轴流式风扇 Axial fan, ball bearing	气流自由流动 Airflow, free flow AC: 45m³/h (50Hz) or 54m³/h (60Hz) DC: 54m³/h 使用寿命 50,000 小时 service life 50,000h at 25°C (77°F)
接线方式 Connection	1.5mm² 导线引入 internal connection terminal 1.5mm² with strain relief, clamping torque 0.8Nm max.
外壳材料 Connection casing	黑色塑料, UL94V-0 标准 V-0 防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	35mm DIN 导轨安装, clip for 35mm DIN rail, EN 60715
安装位置 Installation position	垂直 vertical
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / I (earthed)

注意：在 24VDC 和 48VDC 情况下，风机加热器经过电子继电器转换，因此我们推荐我们的继电器 SM010 (Art. No. 01000.0-00 and 01001.0-00)

Note: In the case of 24VDC and 48VDC the fan heater has to be switched via a relay. For this purpose we recommend our electronic relay SM 010 (Art. No. 01000.0-00 and 01001.0-00).



View from below



订货代码 Art. No.	操作电压 Operating voltage	功率 Heating capacity	长度(L) Length (L)	重量 Weight (approx.)
04640.0-00	230VAC, 50/60Hz	250W	182mm	1.10kg
04641.0-00	230VAC, 50/60Hz	400W	222mm	1.40kg
04640.9-00	120VAC, 50/60Hz	250W	182mm	1.10kg
04641.9-00	120VAC, 50/60Hz	400W	222mm	1.40kg
04640.1-00	24VDC	250W	182mm	1.10kg
04640.2-00	48VDC	250W	182mm	1.10kg
04641.2-00	48VDC	400W	222mm	1.40kg

HV SPACE-AVING FAN HEATER

HVL 风机加热器



HV 031/HVL 031 100W- 400W

产品特性 Features

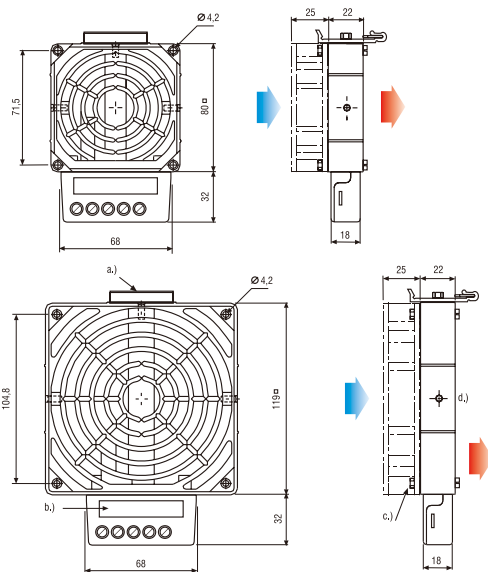
- 紧凑 Compact
- 扁平设计 Flat design
- 空气流动性好 High air through-flow
- 温度安全保护开关 Temperature safety cut-out
- 导轨安装 DIN rail mounted

紧凑高性能风机加热器可预防凝露的形成，该产品有带风机式加热器，型号为HVL031，也有不带风机式的，型号为HV031。

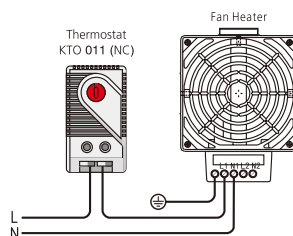
The compact high-performance fan heater prevents formation of condensation in control or switch systems and provides an evenly distributed interior air temperature in enclosures. This fan heater is available without fan (HV 031) as well as with fan (HVL 031).

技术参数 Technical Data

HV 031	无风机加热器 Heater without fan (fan mounting kit included)
HVL 031	带风机加热器 Heater with fan
发热元件 Heating element	高性能芯子 high performance cartridge
温度安全保护 Temperature safety cut-out	保护过热引起的风扇不工作 to protect against overheating in case of fan failure
加热体材料 Heater body	铝 die-cast aluminium (glass bead blasted)
接线方式 Connection	3极钳压 2.5mm ² , 最大扭矩 0.8Nm 3-pole screw connector 2.5mm ² clamping torque 0.8Nm max.
端子接线盒材料 Connection casing	黑色塑料, UL94V-0标准, V-0防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	35mm DIN 导轨安装, clip for 35mm DIN rail, EN 60715
安装位置 Installation position	水平 horizontal
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / I (earthed)
滚珠风机 Axial fan, ball bearing	使用寿命 50,000 小时 25°C (77°F) airflow see table service life 50,000h at 25°C (77°F)
风机连接方式 Connection (axial fan)	2极螺丝连接 2.5mm ² 导线 (L2/N2) 2-pole screw connector 2.5mm ² (L2/N2)



a.) Clip b.) Type plate c.) Axial fan d.) Air direction



重要！加热器只能与风扇一起操作，过热危险！
Important! Heater may only be operated together with fan. Danger of overheating!

订货代号 Art. No. HV 031	订货代号 Art. No. HV 031	功率	尺寸	重量
230VAC, 50/60Hz	120VAC, 50/60Hz	Heating capacity	Dimensions	Weight (approx.)
03100.0-00	03100.9-00	100W	80 x 112 x 22mm	0.40kg
03101.0-00	03101.9-00	150W	80 x 112 x 22mm	0.40kg
03110.0-00	03110.9-00	200W	119 x 151 x 22mm	0.50kg
03111.0-00	03111.9-00	300W	119 x 151 x 22mm	0.50kg
03112.0-00	03112.9-00	400W	119 x 151 x 22mm	0.50kg

订货代号 Art. No. HVL 031	订货代号 Art. No. HVL 031	功率	最小风流量	尺寸	重量
230VAC, 50/60Hz	120VAC, 50/60Hz	Heating capacity	Airflow min., free flow	Dimensions	Weight (approx.)
03102.0-00	03102.9-00	100W	35m ³ /h	80 x 112 x 47mm	0.60kg
03103.0-00	03103.9-00	150W	35m ³ /h	80 x 112 x 47mm	0.60kg
03113.0-00	03113.9-00	200W	108m ³ /h	119 x 151 x 47mm	0.90kg
03114.0-00	03114.9-00	300W	108m ³ /h	119 x 151 x 47mm	0.90kg
03115.0-00	03115.9-00	400W	108m ³ /h	119 x 151 x 47mm	0.90kg

CR027

产品特性 Features

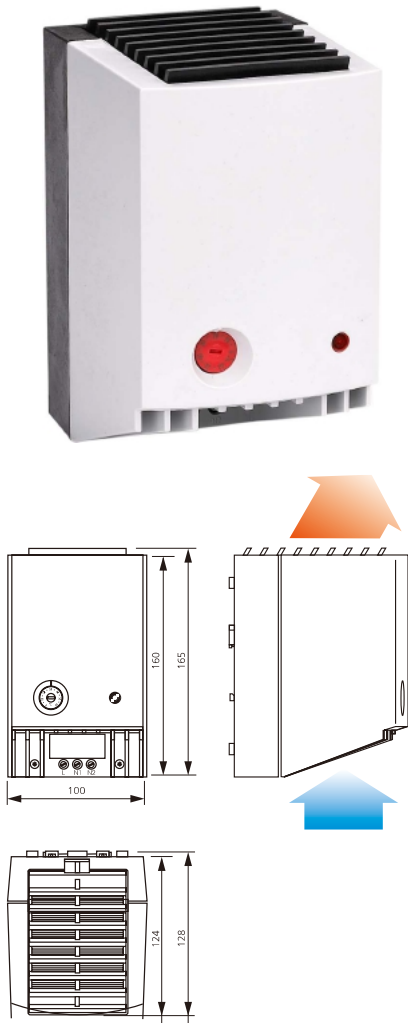
- 紧凑型加热器 Compact heater
- 加热功率可调 Heating capacity adjusts to ambient temperature
- 温度范围可调 Adjustable temperature range
- 导轨安装 DIN rail mounted
- 信号指示 Optical indicator
- 温度安全保护 Temperature safety cut-out

半导体式风机加热器主要用于配电柜体内，防止产生凝露，一体设计的调节器用于调整温度的变化。

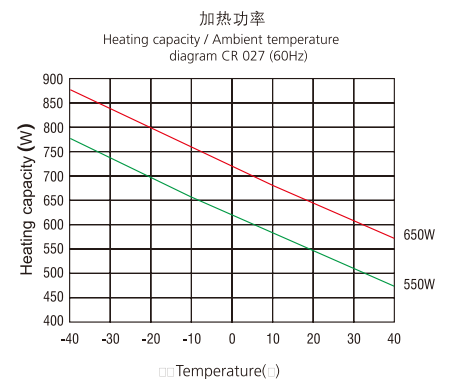
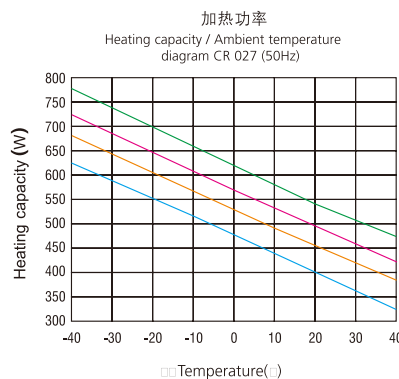
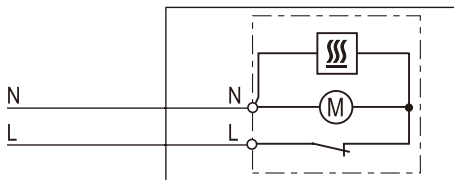
Semiconductor fan heaters prevent the formation of condensation and ensure an even temperature in switch and control equipment. The built-in regulator is used to set the desired temperature.

技术参数 Technical Data

发热体 Heater body	PTC resistor, self regulating and temperature limiting
温度保护 Temperature safety cut-out	过热保护 to protect against overheating in case of fan failure
滚珠风机 Axial fan, ball bearing	风量见如下图表 airflow see table service life 50,000h at 25°C (77°F)
接线方式 Connection	两极钳压 2.5mm ² , 最大扭矩 0.8Nm 2-pole clamp max. 2.5mm ² clamping screw torque 0.8Nm max.
外壳材料 Casing	浅灰色塑料, UL94V-0标准, V-0防火等级 plastic according to UL94 V-0, light grey
信号指示 Optical indicator	恒温控制灯 thermostat control lamp
安装方式 Mounting	35mm DIN 导轨安装, clip for 35mm DIN rail, EN 60715
安装位置 Installation position	垂直 vertical
外观尺寸 Dimensions	100 x 128 x 165mm
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / II (double insulated)



接线示意图
Connection Diagram



订货代码 Art. No.	工作电压 Operating voltage	功率(50Hz) Heating capacity	功率(60Hz) Heating capacity	最大电流 Inrush current max.	风量 Airflow, free flow	温度范围 Setting range Temp. regulator	重量 Weight
02700.0-00	220-240VAC, 50/60Hz	475W	550W	11.0A	35m ³ /h	0 to +60°C	0.90kg
02701.0-00	220-240VAC, 50/60Hz	550W	650W	13.0A	45m ³ /h	0 to +60°C	1.10kg
02700.9-00	100-120VAC, 50/60Hz	400W	550W	14.0A	35m ³ /h	+32 to +140°F	0.90kg
02701.9-00	100-120VAC, 50/60Hz	510W	650W	15.0A	45m ³ /h	+32 to +140°F	1.10kg

*at 20°C(68°F) ambient temperature



CR 030 750W,850W,950W

产品特性 Features

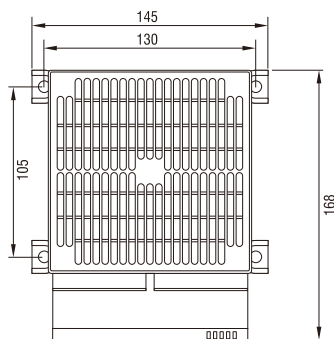
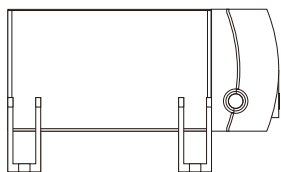
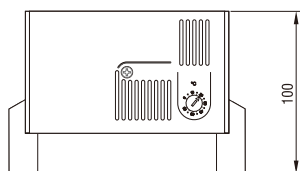
- 紧凑型设计 Compact design
- 双绝缘 Double insulated
- 智能温控器 Integrated thermostat (optional)

这种紧凑高性能风机加热器能防止产生凝露，为机箱内部提供分布均匀的空气温度环境。塑料外壳具有双绝缘功能，起接触保护作用。这款风机加热器可提供集成的恒温或先的温度或湿度控制恒温器。CR130可固定在配电柜的底部，也可以固定在上。

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 CR 030 was designed as a stationary unit for the bottom of the enclosure.

For wall fixing the fan heater CR 130 is recommended.



技术参数 Technical Data

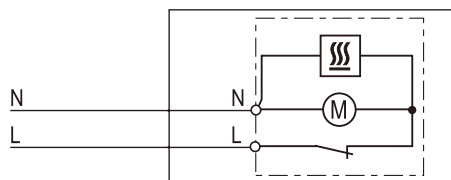
加热元件 Heater element	高性能管壳 High performance cartridge
温度保护 Temperature safety cut-out	过热保护 to protect against overheating in case of fan failure
	自动复位 automatic reset
加热主体 Heater body	极化处理铝型材 extruded aluminium profile
滚珠轴流式风机 Axial fan, ball bearing	气流 160m³/h, 自由流动 Airflow 160m³/h, free flow
	使用寿命 50,000 小时 at 25°C (77°F) service life 50,000h at 25°C (77°F)
接线方式 Connection	2-极点最大值。2.5mm² 固定螺丝溢放口力矩最大值 2-pole max. 2.5mm², clamping screw with strain relief, torque 0.8Nm max.
外壳材料 Casing	黑色塑料, UL94V-0 标准, V-0 防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	螺丝固定 (M5) screw fixing (M5)
安装位置 Installation position	水平 horizontal
外观尺寸 Dimensions	168 x 145 x 100mm
重量 Weight	大约 1.40 千克 approx. 1.40kg
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / II 双绝缘 (double insulated)
备注 Note	功率达到 2000W 以上可定制 Other heating capacities from 200W up available on request

*加热器的工作温度: 0 到 +60°C (+32 to +140°F)

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

接线示意图

Connection Diagram



订货代码 Art. No.	型号 Model	工作电压 Operating voltage	功率 Heating capacity	设定范围 Setting range
03051.0-00	支持恒温器的暖风机 Fan Heater with thermostat	230VAC, 50/60Hz	950W	0 to +60°C
03051.0-01	支持恒温器的暖风机 Fan Heater with hygrostat	230VAC, 50/60Hz	950W	65% RH, Factory-set
03059.9-00	支持恒温器的暖风机 Fan Heater with thermostat	120VAC, 50/60Hz	950W	+32 to +140°F

*根据 UL499 并结合 UL508A; according to UL499 in combination with UL508A

CR 130 750W,850W,950W

产品特性 Features

- 紧凑型设计 Compact design
- 双绝缘 Double insulated
- 智能温控器 Integrated thermostat (optional)
- 导轨或螺丝固定 DIN rail or screw fixing

这种紧凑高性能风机加热器能防止产生凝露，为机箱内部提供分布均匀的空气温度环境。塑料外壳具有双绝缘功能，起接触保护作用。这款风机加热器可提供集成的恒温或先的温度或湿度控制恒温器。CR130可固定在配电柜的底部，也可以固定在上。

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 CR 130 was designed as a stationary unit for the bottom of the enclosure.

For wall fixing the fan heater CR 130 is recommended.

技术参数 Technical Data

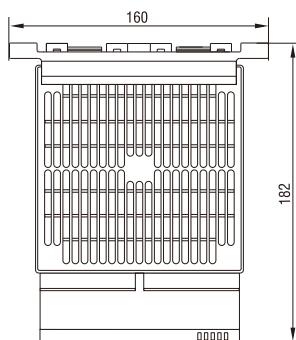
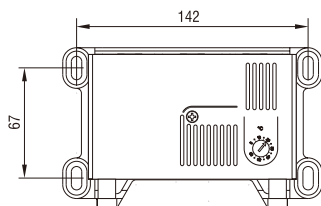
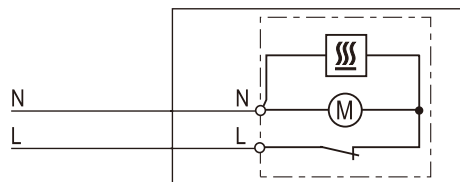
加热元件 Heater element	高性能管壳 High performance cartridge
温度保护 Temperature safety cut-out	过热保护 to protect against overheating in case of fan failure
	自动复位 automatic reset
加热主体 Heater body	极化处理铝型材 extruded aluminium profile
滚珠轴流式风机 Axial fan, ball bearing	气流 160m³/h, 自由流动 Airflow 160m³/h, free flow
	使用寿命 50,000 小时 at 25°C (77°F) service life 50,000h at 25°C (77°F)
接线方式 Connection	2-极点最大值, 2.5mm² 固定螺丝 溢放口力矩最大值 2-pole max. 2.5mm², clamping screw with strain relief, torque 0.8Nm max.
外壳材料 Casing	黑色塑料, UL94V-0 标准 V-0 防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	35mm DIN 导轨安装, Clip for 35mm Din rail, EN 50022, Screw fixing (M6)
安装位置 Installation position	水平 horizontal
外观尺寸 Dimensions	182 x 160 x 99mm
重量 Weight	大约 1.45 千克 approx. 1.45kg
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / II 双绝缘 (double insulated)
备注 Note	功率达到 2000W 以上可定制 Other heating capacities from 200W up available on request

*加热器的工作温度: 0 到 +60°C (+32 to +140°F)

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

接线示意图

Connection Diagram



订货代码 Art. No.	型号 Model	工作电压 Operating voltage	功率 Heating capacity	设定范围 Setting range
13051.0-00	支持恒温器的暖风机 Fan Heater with thermostat	230VAC, 50/60Hz	950W	0 to +60°C
13051.0-01	支持恒湿器的暖风机 Fan Heater with hygrostat	230VAC, 50/60Hz	950W	65% RH, Factory-set
13059.9-00	支持恒温器的暖风机 Fan Heater with thermostat	120VAC, 50/60Hz	950W	+32 to +140°F

*根据 UL499 并结合 UL508A; according to UL499 in combination with UL508A



CS 030 750W,850W,950W

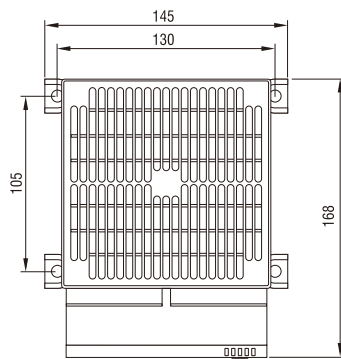
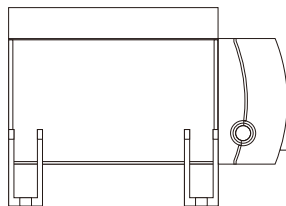
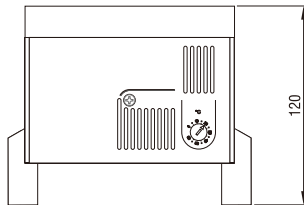
产品特性 Features

- 紧凑型设计 Compact design
- 双绝缘 Double insulated
- 智能温控器 Integrated thermostat (optional)
- 导轨或螺丝固定 DIN rail or screw fixing

这种紧凑高性能风机加热器能防止产生凝露，为机箱内部提供分布均匀的空气温度环境。塑料外壳具有双绝缘功能，起接触保护作用。这款风机加热器可根据要求与温控器连起来控制温度。CS 030可固定在配电柜的底部，也可以固定在墙上。

The compact high performance fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric/electronic components.

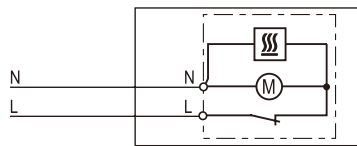
The plastic enclosure provides double insulation and acts as protection against contact. The fan heater is available with optional integrated thermostat for temperature control. The CS 030 was designed as a stationary unit for wall fixing. For fixing on the bottom of the enclosure the fan heater CS 130 is recommended.



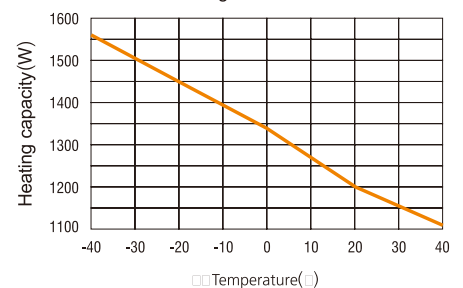
技术参数 Technical Data

温度保护 Temperature safety cut-out	过热保护 to protect against overheating in case of fan failure
滚珠风机 Axial fan, ball bearing	气流 160m ³ /h, 自由流动 160m ³ /h, free flow,
	使用寿命 50,000小时 service life 50,000h at 25°C (77°F)
接线方式 Connection	2-极点最大值。2.5mm ² 固定螺丝溢放口力矩最大值 2-pole clamp max. 2.5mm ² clamping screw
	torque 0.8Nm max.
外壳材料 Casing	黑色塑料, UL94V-0标准, V-0防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	螺丝安装 (M5) Screw fixing (M5)
安装位置 Installation position	横向 horizontal
外观尺寸 Dimensions	168 x 145 x 120mm
重量 Weight	大约 1.20 千克 approx. 1.20kg
工作温度 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / II 双绝缘 (double insulated)

接线示意图
Connection Diagram



加热功率 CS 030
Heating capacity / Ambient temperature diagram CS 030



订货代码 Art. No.	型号 Model	工作电压 Operating voltage	功率 Heating capacity	最大电流 Inrush current max.	设定范围 Setting range
03060.0-00	支持恒温器的暖风机 Fan Heater with thermostat	230VAC, 50/60Hz	1200W	13A	0 to +60°C
03060.0-01	不支持恒温器的暖风机 Fan Heater without thyrostat	230VAC, 50/60Hz	1200W	13A	—
03060.9-00	支持恒温器的暖风机 Fan Heater with thermostat	120VAC, 50/60Hz	1200W	16A	+32 to +140° F
03060.9-01	不支持恒温器的暖风机 Fan Heater without thyrostat	120VAC, 50/60Hz	1200W	16A	—

* 室温 at 20°C (68°F) , at 20°C (68°C) ambient temperature

CS 130 700W,900W,1200W

产品特性 Features

- 紧凑型设计 Compact design
- 高效率散热 High heating performance
- 双绝缘 Double insulated
- 智能温控器 Integrated thermostat (optional)
- 导轨或螺丝固定 DIN rail or screw fixing

这种紧凑高性能风机加热器能防止产生凝露，为机箱内部提供分布均匀的空气温度环境。塑料外壳具有双绝缘功能，起接触保护作用。根据要求可与温控器连用来控制温度。CS130具有墙上固定功能，如果需要安装在配电柜底部的话，建议选用CS030。

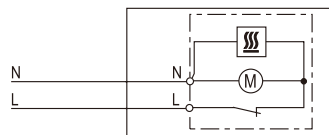
The compact high performance fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric/electronic components. The plastic enclosure provides double insulation and acts as protection against contact. The fan heater is available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

技术参数 Technical Data

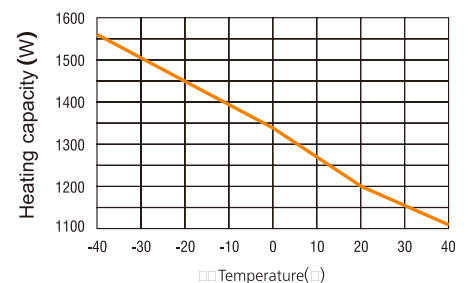
加热元件 Heater element	PTC 自动限温调节元件 PTC resistor, self regulating and temperature limiting
温度保护 Temperature safety cut-out	过热保护 to protect against overheating in case of fan failure
滚珠风机 Axial fan, ball bearing	风量见如下图表 airflow see table service life 50,000h at 25°C (77°F)
接线方式 Connection	螺丝 2-pole clamp max. 2.5mm ² clamping screw torque 0.8Nm max.
外壳材料 Casing	黑色塑料, UL94V-0 标准, V-0 防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	35mm DIN 导轨安装, clip for 35mm DIN rail, EN 60715
安装位置 Installation position	横向 horizontal
外观尺寸 Dimensions	182 x 160 x 142mm
重量 Weight	大约 1.25 千克 approx. 1.25kg
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / II (double insulated)

接线示意图

Connection Diagram



加热功率
Heating capacity / Ambient temperature
diagram CS 130



订货代码 Art. No.	型号 Model	工作电压 Operating voltage	功率 Heating capacity	最大电流 Inrush current max.	设定范围 Setting range
13060.0-00	Fan Heater with thermostat	230VAC, 50/60Hz	1,200W	13A	0 to +60°C
13060.0-01	Fan Heater without thermostat	230VAC, 50/60Hz	1,200W	13A	-
13060.9-00	Fan Heater with thermostat	120VAC, 50/60Hz	1,200W	16A	+32 to +140°F
13060.9-01	Fan Heater without thermostat	120VAC, 50/60Hz	1,200W	16A	-

* 室温 at 20°C (68°F), * at 20°C (68°F) ambient temperature

HGM050 200W-1500W

产品特性 Features

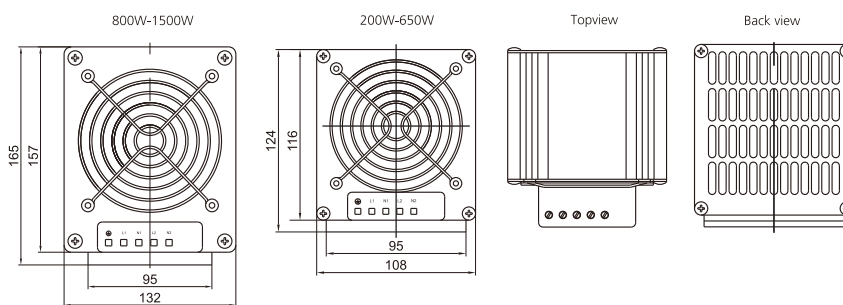
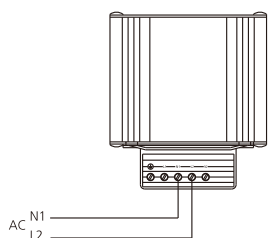
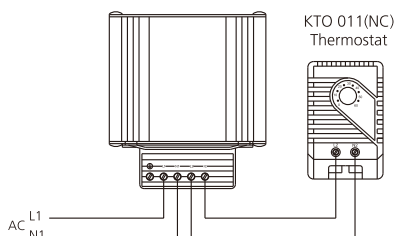
- 紧凑的设计 Compact design
- 导轨式安装 DIN rail mounted
- 使用寿命长 Long service life
- 免维护 Maintenance free
- 安全温度断流功能 Temperature safety cut-out

轻巧型风机加热器可预防冷凝的形成，一体化高性能轴流风扇可提供强力空气循环，使开关箱内温度恒定。当风扇发生故障时，加热器内安全切断开关会自动停止加热器的工作。

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.

技术参数 Technical Data

发热元件 Heating element	PTC
温度保护 Temperature safety cut-out	防止过热引起风扇不运转 to protect against overheating in case of fan failure
发热体 Heater body	通过极化处理的铝型材 anodised extruded aluminium profile
表面温度 Surface temperature	最高 75°C max. 75°C
滚珠轴流式风扇 Axial fan, ball bearing	气流自由流动 Airflow, free flow AC: 45m³/h (50Hz) or 54m³/h (60Hz) DC: 54m³/h 使用寿命 50,000 小时 service life 50,000h at 25°C (77°F)
接线方式 Connection	导线引入 internal connection terminal 1.5mm² with strain relief, clamping torque 0.8Nm max.
外壳材料 Connection casing	黑色塑料, UL94V-0 标准, V-0 防火等级 plastic according to UL94 V-0, black
安装方式 Mounting	35mm DIN 导轨安装, clip for 35mm DIN rail, EN 60715
安装位置 Installation position	垂直 vertical
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
防护等级 Protection type/Protection class	IP20 / I (earthed)

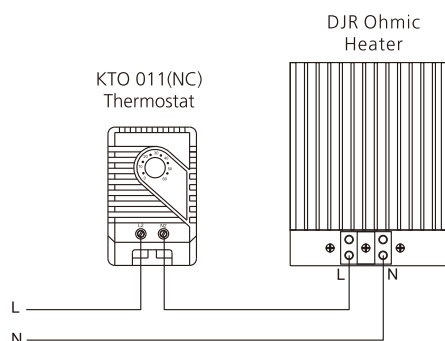
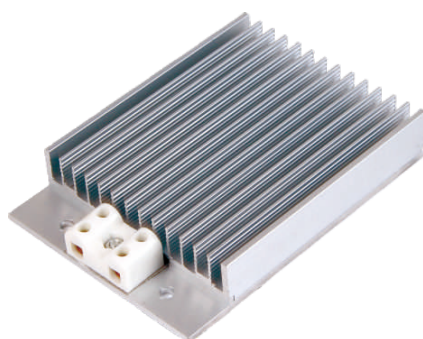


订货代码 Art. No.	工作电压 Operating voltage	功率 Heating capacity	长度(L) Length (L)	重量 Weight (approx.)
05040.0-00	230VAC, 50/60Hz	200W	122mm	0.90kg
05041.0-00	230VAC, 50/60Hz	250W	122mm	0.93kg
05042.0-00	230VAC, 50/60Hz	300W	122mm	0.95kg
05043.0-00	230VAC, 50/60Hz	400W	122mm	1.00kg
05044.0-00	230VAC, 50/60Hz	650W	132mm	1.15kg
05045.0-00	230VAC, 50/60Hz	800W	136mm	1.50kg
05046.0-00	230VAC, 50/60Hz	1000W	136mm	1.54kg
05047.0-00	230VAC, 50/60Hz	1200W	136mm	1.58kg
05049.0-00	230VAC, 50/60Hz	1500W	136mm	1.65kg

*注意: 110VAC; 24VDC; 48VDC 可订做 Notice: 110VAC; 24VDC; 48VDC available

DJR

产品特性 Features



DJR加热器，是根据国标(GB/T-15470-1995)研制生产的散热式电加热器。该产品采用6063-T5特制铝合金型材为传导散热体，为增大其散热面积，每个散热片上都设计有细小的波纹。其内部采用优质Ni80Cr20镍铬合金电阻丝为发热芯，精工制作而成。该产品体积小，重量轻，散热面积大，使用寿命长。接线装置安全可靠，不易损坏。整体设计，结构合理，外型美观。主要应用于高低压开关柜、中置柜、环网柜、端子箱、箱式变电站等电力设备防潮、防凝露、提高电气元件工作环境温度及一切需要除湿加热的场所，与我司的KT0011系列凝露温度监控器配套使用，可实现除湿升温自动化。该加热器具有加热效果好，使用安全可靠，平均无故障工作时间长，安装方便，国内各型号加热器通用等特点。

DJR Heater, is the development and Production of the heat dissipation electrical heater based on national standard GB/T-15470-1995. The Product adopts a special aluminum extrusions of 6063-T5 for conducting the radiator, in order to increase the cooling area, and designs small ripples on each heat sink. Its internal uses the quality Ni80Cr20 nickel-chromium alloy resistance wire for heater, seiko produced The Product has small size, light weight, big heat dissipation area and long service life. And the terminal device is safe and reliable, not easy to damage. As for the overall design, it has reasonable structure and beautiful appearance, mainly used in high and low voltage switch cabinet, centrally installed cabinet, ring counter, terminal box, substation and other power equipment for moisture-proof, anti-condensation, dehumidification to improve the working environment temperature and all the spaces need dehumidification and heating. Supporting the use of KT0011 series condensation temperature division monitor can realize the dehumidification and warming automation. The heater has the features of good heating effect, safe and reliable usage, long working time without failures, easy installation and universally used for the domestic various models of heater.

技术参数 Technical Data

工作电压：AC110V、220V、380V或DC220V、380V(客户根据需求来选型)
Working voltage: AC110V、220V、380V or DC220V、380V(to select by the custom)

工作频率：50Hz(仅适用于交流电压)
Operating frequency: 50Hz(only apply to the AC voltage)

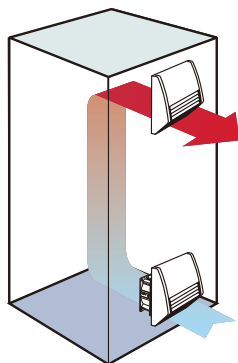
绝缘电阻：>50M欧姆
Insulation resistance: >50M Ohm

抗电强度：>2000V(接线端与铝介质之间)
Dielectric strength: >2000V(between terminal and aluminum medium)

连续工作时间：>5000小时
Continuous working time: >5000 hours

额定功率：50-500W
Rated power: 50-500W

订货代码 Art. No.	工作电压 Operating voltage	功率 Heating capacity	外观尺寸 (MM) Dimensions	安装孔距 (MM) Mounting Holes
DJR-A-1	220V	50-300W	148 X 75 X 22	55
DJR-A-2	220V	50-600W	200 X 104 X 22	55
DJR-B-1	220V	50-300W	132 X 85 X 23	55
DJR-B-2	220V	50-300W	155 X 100 X 25	55
DJR-C-1	220V	50-300W	148 X 75 X 21	55
DJR-C-1	220V	50-300W	148 X 75 X 21	55
DJR-C-2	220V	50-300W	210 X 104 X 26	55
DJR-C-2	220V	50-300W	210 X 104 X 26	55



Enclosure air-conditioning using
a filter fan and exit filter

机箱空调使用一个过滤器
的风机和出口过滤器

FF 018 200M/3H

产品特性 Features

- 低噪音 Very low noise
- 体积小 Minimal depth in enclosure
- 多功能设计 Functional design
- 易安装 Time-saving installation
- 防腐蚀, 防紫外线 Weather proof and UV resistant

技术参数 Technical Data

轴流式滚珠风机 Axial fan, ball bearing	使用寿命最小50,000小时 service life min. 50,000h at 25°C/77° F (65% RH) fan body aluminium, rotor plastic
连接方式 Connection	2 wires with pressure clamps 2.5mm ² , length 100mm
外壳材料 Casing (filter fan and exit filter)	淡灰色塑料, UL94V-0, V-0 防火等级 plastic according to UL94 V-0, light grey
机罩(风机过滤器和风机出口) Hood (filter fan and exit filter)	淡灰色塑料, UL94V-0, V-0 防火等级, 防腐和防紫外线 UL746C (f1) weather proof and UV light resistant according to UL746C (f1)
安装架 Mounting frame	用工业双面粘合剂固定在外面的附件上, 在确定操作的情况下可以用另外的螺丝。 with double-sided industrial adhesive band for fixing to the outside of enclosure; certain operating circumstances can make the additional use of screws necessary (see drilling template); included in the delivery of the filter fans is a template for the enclosure cut-out
过滤垫 Filter mat	过滤度94% , G4 acc. to DIN EN 779, filtering degree 94%
过滤材料 Filter material	高级合成纤维构造, 100°C 耐高温, F1 型自灭材料, 可循环清理洗涤或用吸尘器清理 synthetic fibre with progressive construction, temperature resistant to 100°C, self-extinguishing class F1; moisture resistant to 100% RH, reusable—cleaning by washing or vacuuming
操作/储存环境 Operating/Storage temperature	-45 to +70°C (-49 to +158° F)
防护等级 Protection type/Protection class	IP54 / I (earthed)

*可用F5过滤器增加保护等级到IP55, 但会减少空气流量。

*Using fine filter mats type F5 increases the protection type to Ip55, but reduces the air volume.

- 安装架带粘性的封条阻止了灰尘和水进入到柜内。
- 通风口多功能的设计有效阻止了掉落的灰尘和水, 其优势是过滤垫不会很快的被灰尘弄脏, 这样就不需要经常更换。
- 风道使风机过滤器在操作中特别安静。
- 多功能和现代化的设计使安装时间减少。
- 所有的风机过滤器, 都有气流监控器。
- EMC版本和其它电压可按要求提供。
- 空气的方向可以随轴流式风机方向的改变而改变。
- The self-adhesive seal of the mounting frame prevents dust and water from entering the cabinet.
- Functional design of the intake and exit fan hoods very effectively prevents direct intrusion of falling water and dust. The advantage is that the filter mat does not get so quickly contaminated with dirt and thus does not need to be exchanged so often.
- The air channelling makes the filter fan particularly quiet in operation.
- Functional and modern design enables time-saving assembly and maintenance.
- All filter fan models are also available with integrated airflow monitor.
- EMC versions and other voltages on request.
- The direction of air can easily be switched by reversing the axial fan (sizes 1 to 3).

订货代号	操作电压	空气流量	空气流量 (带过滤罩)	电流	功率	平均噪音	箱体深度	开孔尺寸	重量
Art. No.	Operating voltage	Air volume free flow	Air volume free flow	Current consumption	Power consumption	Average noise level (DIN EN ISO4871)	Depth in enclosure	Enclosure cut-out	Weight (approx.)
01800.0-00	230VAC, 50Hz	21m ³ /h	16m ³ /h	80mA	13W	31dB (A)	45mm	97 x 97mm + 0.4	0.60kg
01801.0-00	230VAC, 50Hz	55m ³ /h	42m ³ /h	100mA	15W	40dB (A)	58mm	125 x 125mm + 0.4	1.00kg
01802.0-00	230VAC, 50Hz	102m ³ /h	68m ³ /h	100mA	15W	39dB (A)	86mm	176 x 176mm + 0.4	1.30kg
01800.0-01	120VAC, 60Hz	24m ³ /h	18m ³ /h	160mA	13W	31dB (A)	45mm	97 x 97mm + 0.4	0.60kg
01801.0-01	120VAC, 60Hz	63m ³ /h	48m ³ /h	180mA	15W	40dB (A)	58mm	125 x 125mm + 0.4	1.00kg
01802.0-01	120VAC, 60Hz	117m ³ /h	78m ³ /h	180mA	15W	39dB (A)	86mm	176 x 176mm + 0.4	1.30kg

DA 084

产品特性 Features

■ 高度保护 High degree of protection

■ 易于安装 Easy to install

- ① 该装置为电气配电柜，提供一个安全的有气密保护性的环境。
 - ② 密闭的箱子当中，因为昼夜交替时温度的变化而引起箱内气压变化。
 - ③ 避免灰尘及湿气的吸入。
 - ④ DA084气压密封装置允许气压在允许的范围内发生变化。
 - ⑤ 因为气密装置有IP45高度保护能力，所以当我们把它安装在任何箱子里，都不会影响箱体的功能。
- ① It has become more and more important to provide a protected enclosure environment for valuable and crucial electrical and electronic components.
 - ② In a tightly closed enclosure, pressure differentials can occur during extreme temperature variations, such as day/night operation.
 - ③ When this occurs, the risk of dust and humidity being absorbed into the control panel increases dramatically.
 - ④ The specially designed pressure compensation plug DA 084 permits a controlled change in pressure.
 - ⑤ It can be installed easily in any enclosure. Because of the pressure compensation plug's high degree of protection (IP45), the protection type of the enclosure will not be affected.

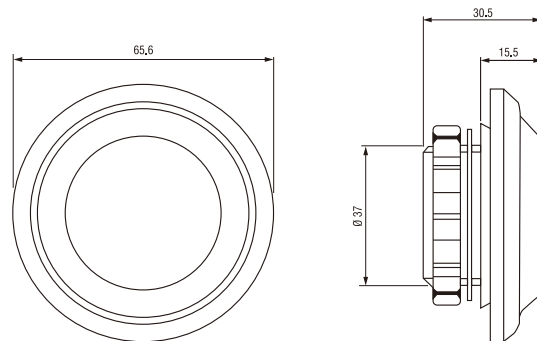
技术参数 Technical Data

安装方式 Mounting	PG 29 thread with union nut
材料 Material	UL94标准材料 V-0防火等级塑料 according to UL94 V-0
与空气的接触面积 Air interface	approx. 7cm ²
外观尺寸 Dimensions	Φ 65.5 x 30.5mm
安装位置 Installation position	任意 variable
操作/储存温度 Operating/Storage temperature	-45 to +70°C (-49 to +158°F)

安装 Installation

在箱壁上开一个直径为37mm的孔，用螺丝钉把气密装置安装上去。请确保密封圈放在箱板的外侧，为了达到最佳密封效果，建议在箱子两侧各安装一个。

Make cut-out Φ 37 mm in enclosure wall and mount pressure compensation device with nut. Please make sure that the sealing gasket is put in place on the outer side panel of the enclosure. For optimal pressure compensation we recommend to use two devices on opposite sides towards the top of the enclosure.



接线示意图 Example of connection

订货代码 Art. No.	型号 Model	保护等级 Protection type	包装 Packing unit	重量 Weight (approx.)
08400.0-00	without gasket	IP45	2 pieces	62g (31g/piece)
08400.0-04	with gasket	IP55	2 pieces	62g (31g/piece)

DA 284

产品特性 Features

- 高防护等级 High degree of protection
- 防水膜 Waterproof membrane
- 便于安装 Easy to install

内部和外部的温度变化导致防护配电箱具有高度压力差。在负压或真空环境下，灰尘和湿气通过密封门进入配电箱。当外壳内的空气冷却下来，由于湿气无法逃出外壳，可能会出现冷凝。易于安装的压力补偿装置DA284在IP66防护等级下提供压力补偿。即使有轻微的过压，塞子里面的防水膜允许湿气排出而阻止水和灰尘进入外壳。

Pressure differentials in enclosures with a high degree of Protection are a result of internal and external temperature changes. In the case of negative pressure or partial vacuum. Dust and humidity can enter the enclosure through the door seal. When the air inside the enclosure cools down, condensation may occur because the humidity cannot escape the enclosure. The easy-to-install pressure compensation device DA 284 Provides compensation of Pressure at a Protection degree of IP66. Even with a slight overpressure, a waterproof membrane inside the Plug allows the humidity to escape whilst blocking water and dirt from entering the enclosure.

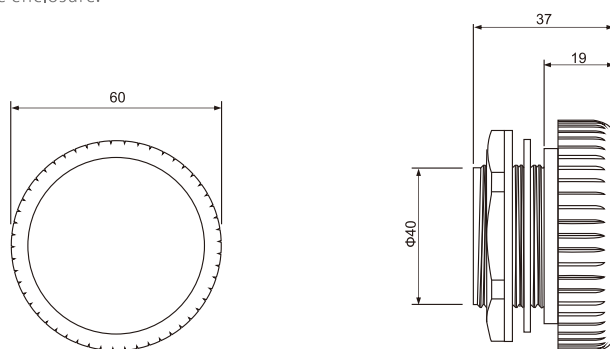
技术参数 Technical Data

安装 Mounting	M40X1.5螺母 thread M40 x 1.5 with nut
扭矩 Torque	5Nm(最大.10Nm) 5Nm(max.10Nm)
外壳深度 Depth in enclosure	大约 approx.16mm
材质 Material	塑料, 浅灰色 plastic, light grey
密封 Sealing	密封垫 sealing gasket NBR
过滤器 Filter	防水膜 waterproof membrane
透气性 Air permeability	最小压力差 1200l/h at a pressure difference of min.70mbar
尺寸 Dimensions	φ60 x 37mm
安装位置 Fitting position	可变的 variable
工作/储存温度 Operating/Storage temperature	-35 to +70° C (-31 to +158° F)

安装 Installation

用 $\phi 40.5^{+0.5}$ mm的螺母将压力补偿装置安装在外壳上。请确保密封垫片放在外壳的外侧面板上适当的位置，为了获得最佳压力补偿，我们建议使用两个DA284D外壳顶部的两侧。

Make cut-out $\phi 40.5^{+0.5}$ mm in enclosure wall and mount pressure compensation device with nut. Please make sure that the sealing gasket is put in place on the outer side panel of the enclosure. For optimal pressure compensation we recommend to use two devices on opposite sides towards the top of the enclosure.



接线示意图 Example of connection

订货代码 Art. No.	保护等级 Protection type	包装 Packing unit	重量 Weight (approx.)
28400.0-00	IP66(EN 60529)/IPX9K(EN 40050-9)	2 pieces	90g(45g/piece)
28400.0-01	IP66(EN 60529)/IPX9K(EN 40050-9)	1 pieces	45g