

INNOVATION-QUALITY-GLOBAL



LINKWELL[®]
ELECTRIC



Thermal Solutions



HONESTY,
PRAGMATISM AND INNOVATION



Values:

Integrity and law-abiding, performance-oriented and continuous reform.

business philosophy:

Create value for customers, seek development for employees and take responsibility for society.

Corporate vision:

Committed to providing high quality products and services to customers around the world.

APPLICATION AREA

Wind power:

Wind power is the conversion of wind kinetic energy into electrical energy. As a clean and renewable energy source, wind energy is receiving more and more attention from all countries in the world.

Charging pile:

The Chinese government actively promotes the application and development of new energy vehicles, and the replacement of power stations as an important supporting infrastructure necessary for the development of electric vehicles has very important social and economic benefits.

Automatic robot:

The cutting-edge technology of the industry is AI (Artificial Intelligence), an intelligent robot. Automation is the general trend of the future society, and it is more and more closely related to communication engineering and CS (computer science).

Photovoltaic:

The main principle of photovoltaic power generation is the photoelectric effect of semiconductors. When a photon is irradiated onto a metal, its energy can be completely absorbed by some electron in the metal.

High and new technology industry:

The high-tech industry mainly includes three major fields: information technology, biotechnology and new materials technology.





PRODUCT SERIES

The appearance is novel, installation is convenient and quick.
The variety of forms, full-featured, easy for customers to choose.
Provide customized services to meet the needs of customers.
Perfect after-sales service system, so that your choice has no worries.

Cabinet ventilation

Product performance

- The design is novel, the product is highly efficient, energy-saving, safe and reliable, and easy to install.
- With new ABS plastic, the flame retardant performance level meets UL94-V0 standard.
- IP rating up to 54/55, with protective cover up to IP56.
- Diversified appearance choice, reasonable structure of external pull design, easy to replace the filter mat.
- Work indicator light for innovative design, identify that the fan is in normal operation.



Heater / Thermostat / hygostat

Product performance

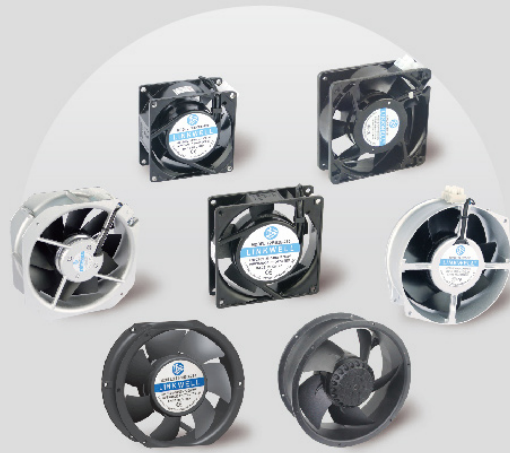
- Novel appearance, compact structure, multi-directional, multi-mode installation.
- Prevents condensation and frosting of electrical cabinets, takes up less space, and has good heating effect.
- A variety of wiring options are available, heaters and fans can be controlled individually or simultaneously.
- With its own temperature control and overheating protection function, it can achieve accurate temperature control.



Multiplane fan

Product performance

- Product specifications, voltage range diversification, for customers to choose.
- AC, DC and EC are diverse, and customized according to customers needs.
- According to the different airflow modes such as axial flow and centrifugation, and various installation methods, it is convenient for customer selection.



Cabinet accessories

Product performance

- Product quality is stable and reliable, complete certification.
- Accessories product diversification, can maximize customer demand.



INTRODUCTION

We are mainly dealing with low voltage electrical products for switchgear board and automation industry, such as panel filter and fans, panel heaters, thermostats and hygrometers, wiring accessories, etc. Through our decades' efforts and developments now LINKWELL become a group company with several factories by entirely holding or partly holding, not only self production but also few trading, in order to provide one-stop-solution for panel builders.

Our main markets are European countries, Americas and China market. You can find us in more than 60 countries all over the world, well-known with very good reputation in the market for the sake of our good quality and competitive prices, kind and prompt services to clients.

LINKWELL ELECTRIC policy is to offer a full support to Clients:

- pre-after sales assistance
- customized products
- fast delivery
- monitoring of customers' satisfaction

Rather than a supplier, LINKWELL ELECTRIC aims to be a Client's industrial PARTNER!

Our company always pays special attention to protecting the benefits of clients' so that both the clients and our company are able to gain the maximum benefits from the relations between us.

We warmly look forward to establishing, reinforcing and expanding long term fruitful relationship with the reliable clients all over the world.

Let's get busy and pull together to create a better future!

CONTENTS 目录



LK/FF/FK series fan and filter

01-41



Cabinet top ventilator

42-47



Industrial air-cooled conditioner

48-50



Thermostat/Hygrostat

51-66



Heater

67-80



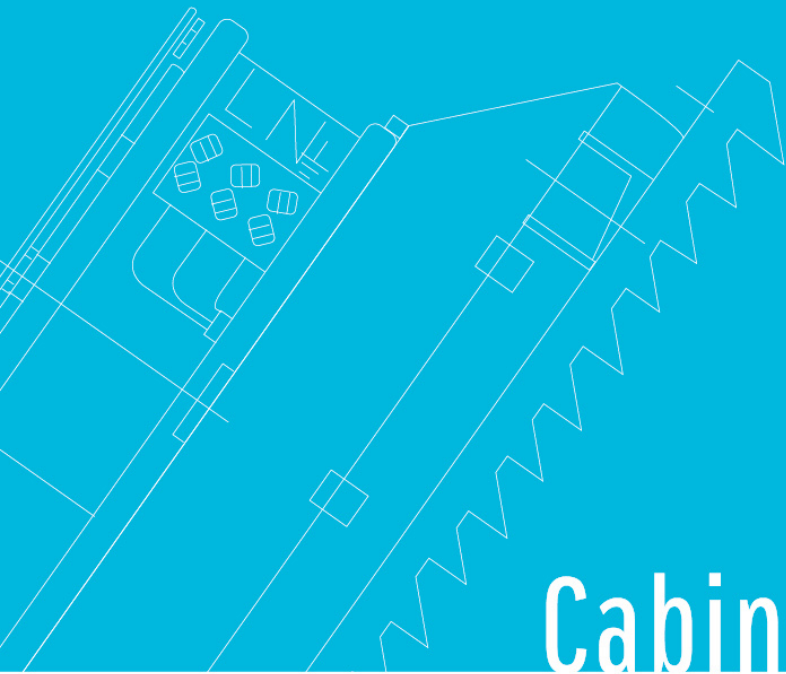
Multiplane fan

81-98



Cabinet accessories

99-114



Cabinet ventilation



Cabinet ventilation system expert

LINKWELL is the system supplier, with energy-saving, environmental protection, efficient product performance, to meet the requirements of cabinet ventilation system.

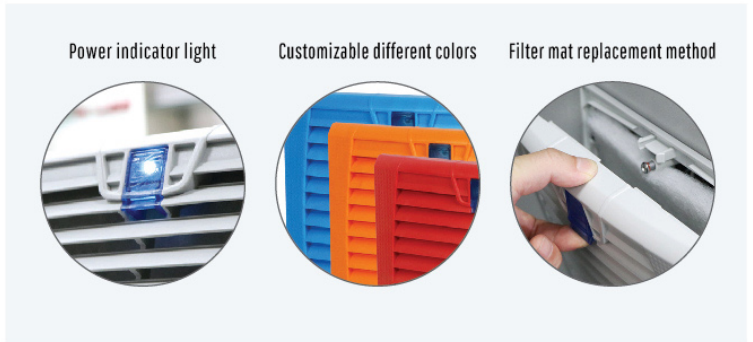


LK3237 series fan-and-filter

116.5x116.5mm | 25-35 m³/h

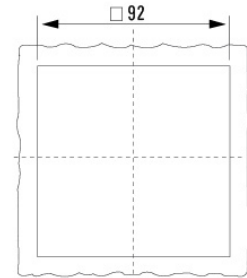
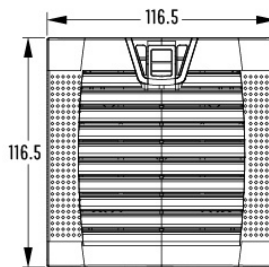
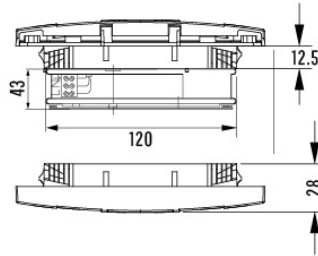


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 3237.300



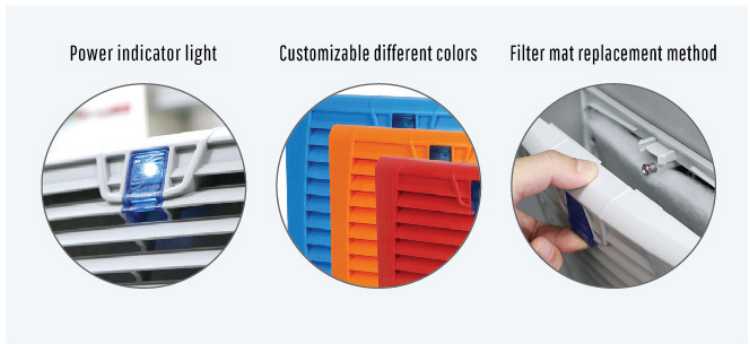
Model No.fan-and-filter unit LK	3237.230-LK	3237.115-LK	3237.024-LK
Model No.fan-and-filter unit EMC	3237.230-EMC	3237.115-EMC	3237.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	25-35 m ³ /h		35 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 3237.300: 20-25 m ³ /h		
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.08 A	0.14 A	0.18 A
Rated Power	18.0-14.0 W		4.3 W
Noise level	37-41 dB(A)		41 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	3237.300 / 3237.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.		

LK3238 series fan-and-filter

148x148mm | 65-85 m³/h

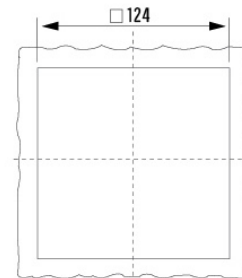
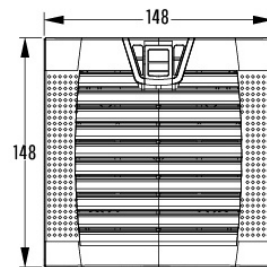
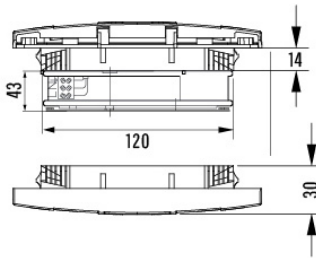


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 3238.300



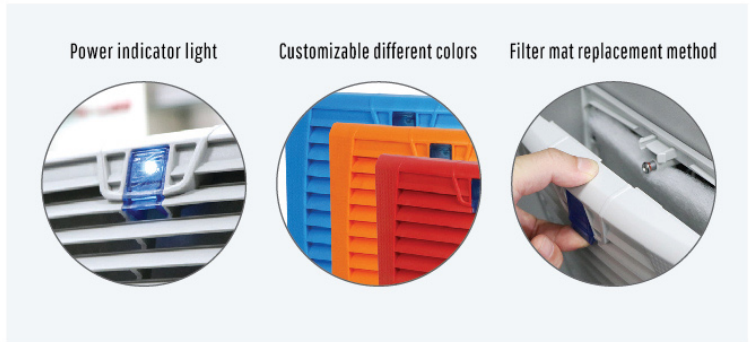
Model No.fan-and-filter unit LK	3238.230-LK	3238.115-LK	3238.024-LK
Model No.fan-and-filter unit EMC	3238.230-EMC	3238.115-EMC	3238.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	65-85 m ³ /h		85 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 3238.300: 55-70 m ³ /h		
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.12-0.10 A	0.24-0.20 A	0.35 A
Rated Power	19.0-14.0 W		7.7 W
Noise level	36-40 dB(A)		40 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	3238.300 / 3238.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.		

LK3239 series fan-and-filter

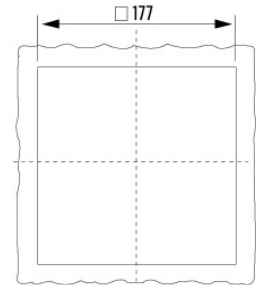
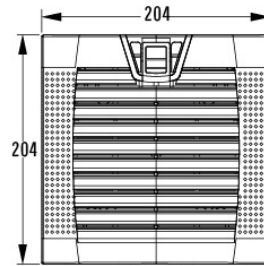
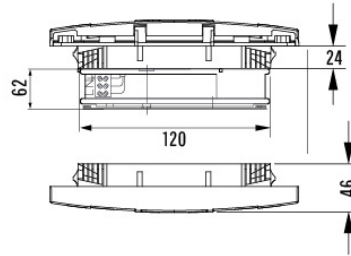
204x204mm | 105-126 m³/h



Colour	RAL7035, color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions



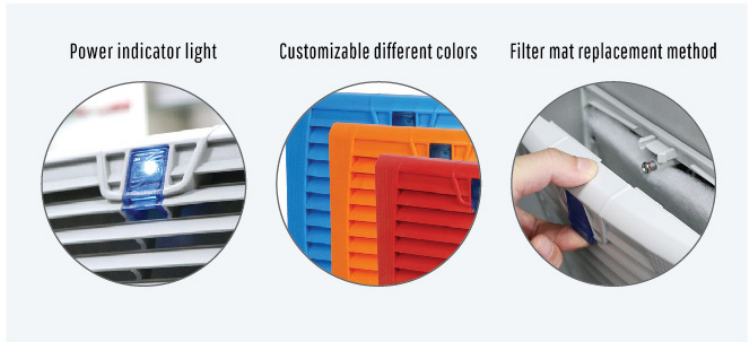
Model No.fan-and-filter unit LK	3239.230-LK	3239.115-LK	3239.024-LK
Model No.fan-and-filter unit EMC	3239.230-EMC	3239.115-EMC	3239.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	105-126 m ³ /h		105 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 3239.300: 71-82 m ³ /h 2 x LK 3239.300: 85-98 m ³ /h		1 x LK 3239.300: 78-90 m ³ /h
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.12-0.10 A	0.24-0.20 A	0.35 A
Rated Power	19.0-14.0 W		7.7 W
Noise level	36-40 dB(A)		40 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	3239.300 / 3239.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.		

LK3240-P series fan-and-filter

254x254mm | 220-240 m³/h

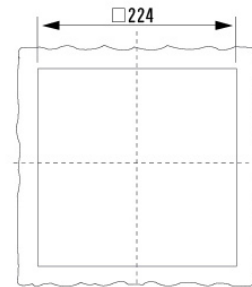
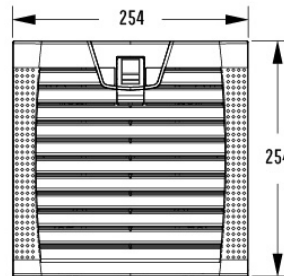
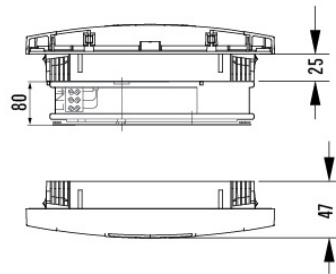


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 3240.300



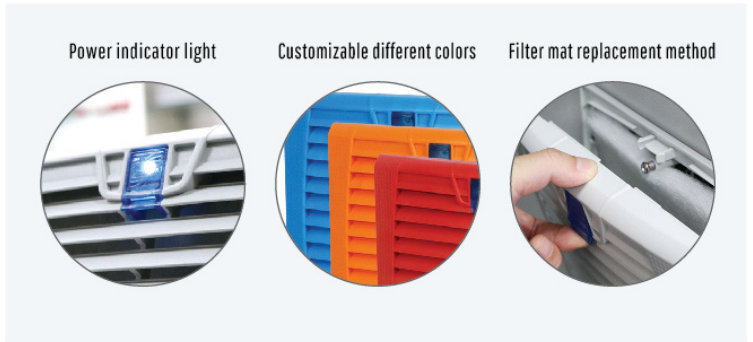
Model No.fan-and-filter unit LK	3240-P.230-LK	3240-P.115-LK	3240-P.024-LK
Model No.fan-and-filter unit EMC	3240-P.230-EMC	3240-P.115-EMC	3240-P.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	240-220 m ³ /h		220 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 3240.300: 110-145 m ³ /h 2 x LK 3240.300: 155-185 m ³ /h		1 x LK 3240.300: 155-185 m ³ /h
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.48-0.46 A	0.26-0.24 A	0.58 A
Rated Power	41.0-38.0 W		14 W
Noise level	48-50 dB(A)		50 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	3240.300 / 3240.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.		

LK3240-M series fan-and-filter

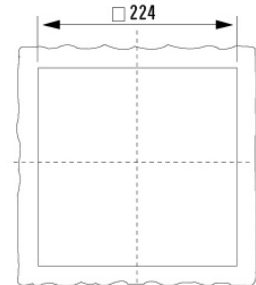
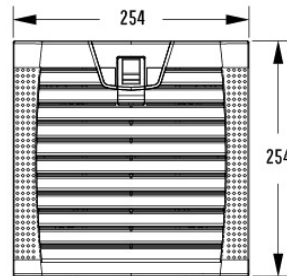
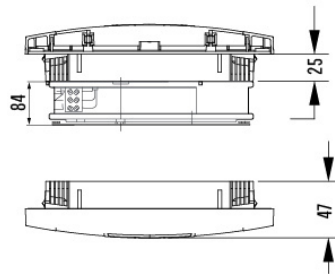
254x254mm | 230-265 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions



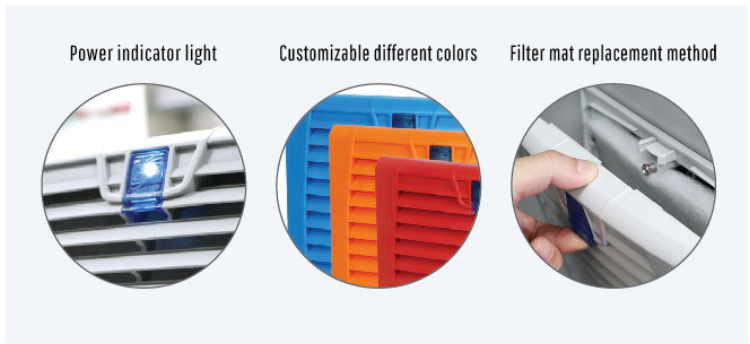
Model No.fan-and-filter unit LK	3240-M.230-LK	3240-M.115-LK
Model No.fan-and-filter unit EMC	3240-M.230-EMC	3240-M.115-EMC
Rated operating voltage,frequency V,HZ	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	230-265 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 3240.300: 170-205 m ³ /h 2 x LK 3240.300: 200-230 m ³ /h	1 x LK 3240.300: 190-215 m ³ /h
Axial fan	Self-starting shaded pole motor	
Rated current max.	0.25-0.20 A	0.52-0.43 A
Rated Power	37.0-33.0 W	
Noise level	46-50 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. Exit filter LK / EMC	3240.300 / 3240.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.	

LK3243 series fan-and-filter

323x323mm | 1150-1350 m³/h

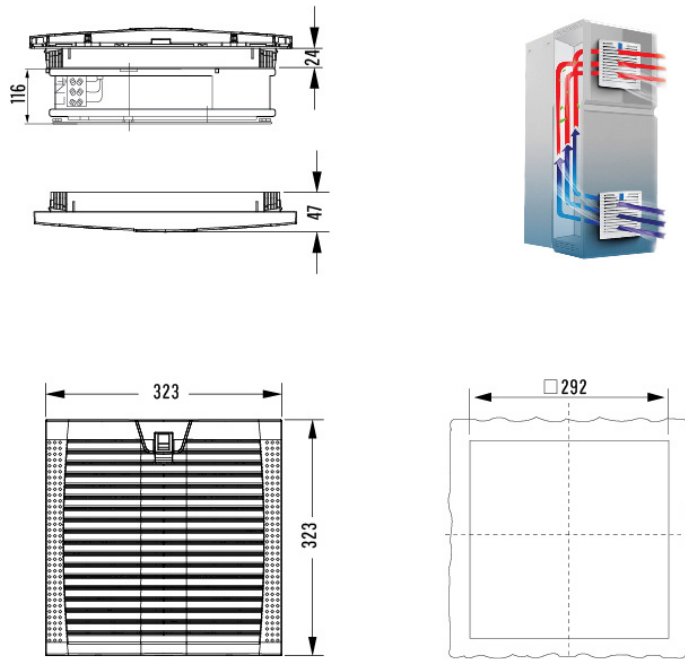


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 3243.300



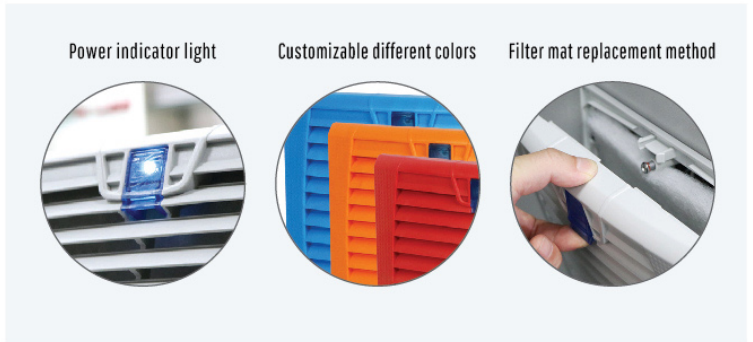
Model No.fan-and-filter unit LK	3243.230-LK	3243.115-LK
Model No.fan-and-filter unit EMC	3243.230-EMC	3243.115-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	1150-1350 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 3243.300: 750-950 m ³ /h	
Axial fan	Capacitor operated	
Rated current max.	0.62-0.48 A	1.20-1.10 A
Rated Power	140-105 W	
Noise level	63-65 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. Exit filter LK / EMC	3243.300 / 3243.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.	

LK3244 series fan-and-filter

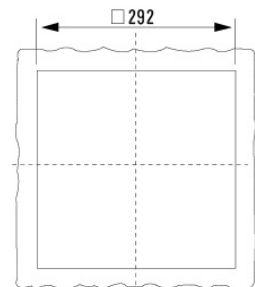
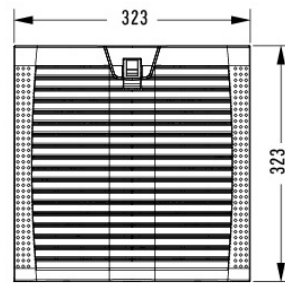
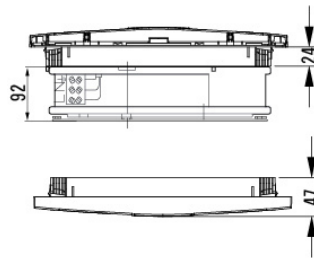
323x323mm | 580-700 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions



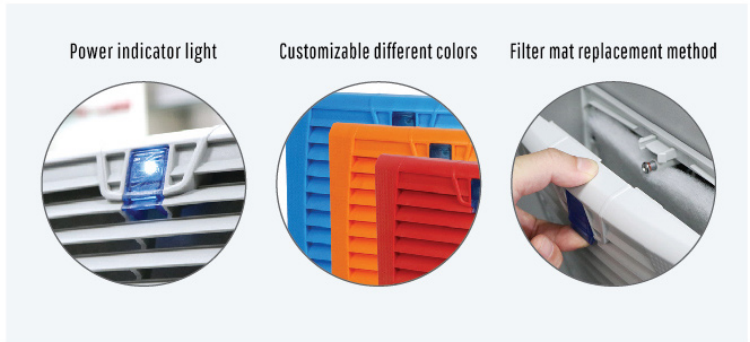
Model No.fan-and-filter unit LK	3244.230-LK	3244.115-LK
Model No.fan-and-filter unit EMC	3244.230-EMC	3244.115-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	580-700 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 3243.300: 490-550 m ³ /h	
Axial fan	Capacitor operated	
Rated current max.	0.62-0.48 A	1.2-1.1 A
Rated Power	75.0-65.0 W	
Noise level	59-62 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. Exit filter LK / EMC	3243.300 / 3243.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.	

LK3245 series fan-and-filter

323x323mm | 1150-1350 m³/h

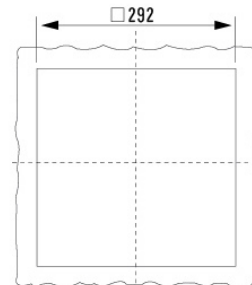
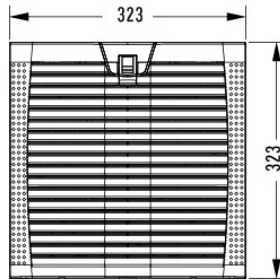
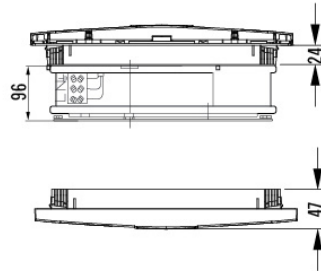


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 3243.300



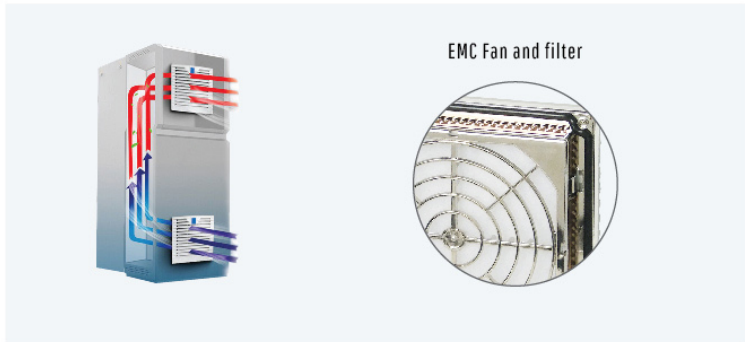
Model No.fan-and-filter unit LK	3245.230-LK	3245.115-LK
Model No.fan-and-filter unit EMC	3245.230-EMC	3245.115-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	1150-1350 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 3243.300: 750-950 m ³ /h	
Axial fan	Capacitor operated	
Rated current max.	0.62-0.48 A	1.2-1.1 A
Rated Power	140.0-105.0 W	136.0-110.0 W
Noise level	63-65 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. Exit filter LK / EMC	3243.300 / 3243.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, consistent with UL94-V0 self-extinguishing.	

LK6621 series fan-and-filter

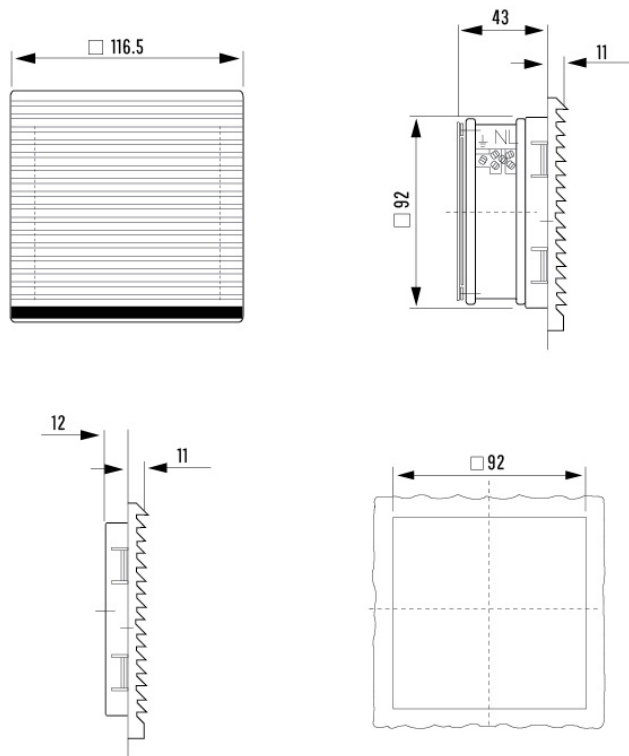
116.5x116.5mm | 25-35 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions



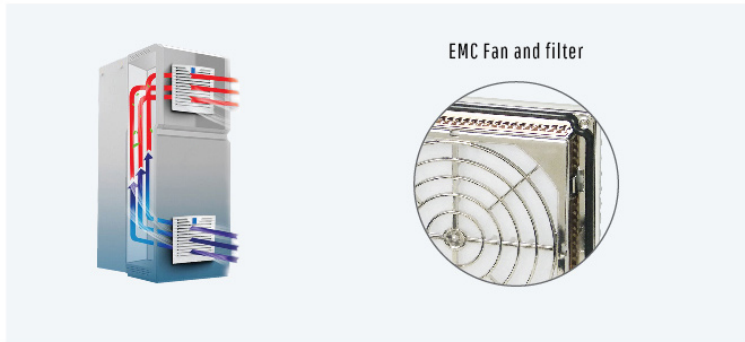
Model No.fan-and-filter unit LK	6621.230-LK	6621.115-LK	6621.024-LK
Model No.fan-and-filter unit EMC	6621.230-EMC	6621.115-EMC	6621.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	25-35 m ³ /h		35 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 6621.300: 20-25 m ³ /h		
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.08 A	0.14 A	0.18 A
Rated Power	18-14 W		4.3 W
Noise level	37-41 dB(A)		41 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	6621.300 / 6621.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6621,consistent with UL94-V0 self-extinguishing.		

LK6622 series fan-and-filter

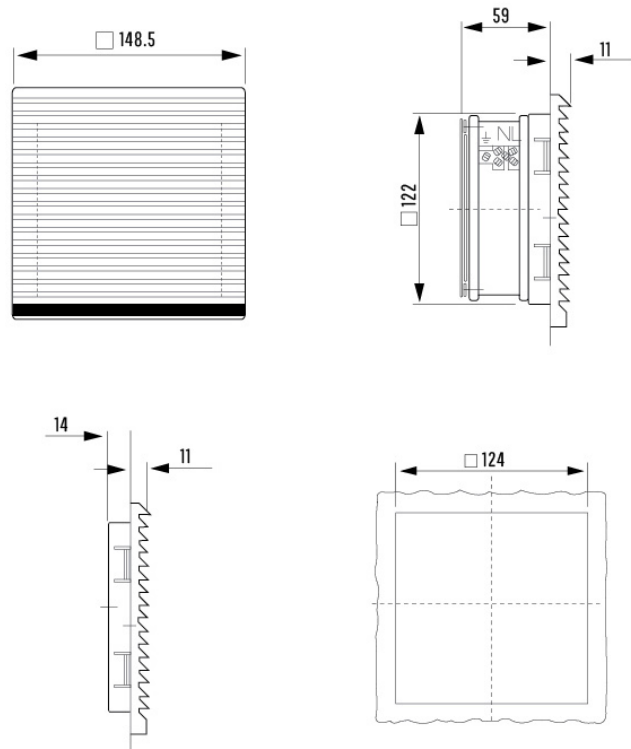
148.5x148.5mm | 65-85 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions



Exit filter LK 6622.300



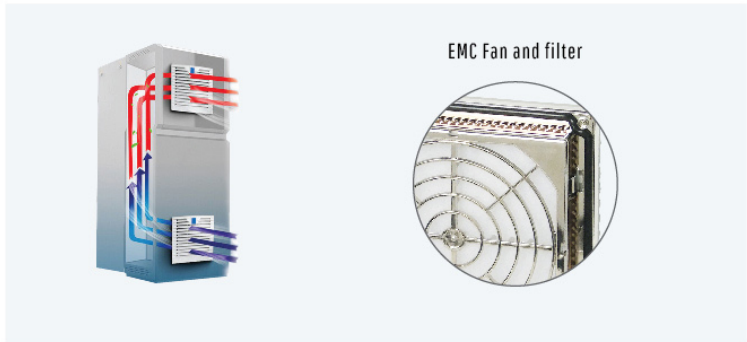
Model No.fan-and-filter unit LK	6622.230-LK	6622.115-LK	6622.024-LK
Model No.fan-and-filter unit EMC	6622.230-EMC	6622.115-EMC	6622.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	65-85 m ³ /h		85 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 6622.300: 55-70 m ³ /h		
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.12-0.10 A	0.24-0.20 A	0.35 A
Rated Power	19.0-14.0 W		7.7 W
Noise level	36-40 dB(A)		40 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	6622.300 / 6622.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6622,consistent with UL94-V0 self-extinguishing.		

LK6623 series fan-and-filter

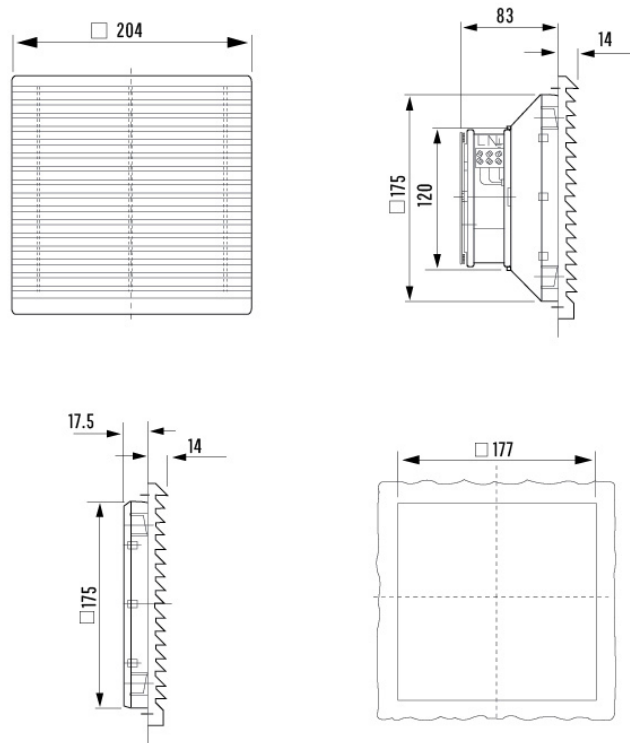
204x204mm | 105-126 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions



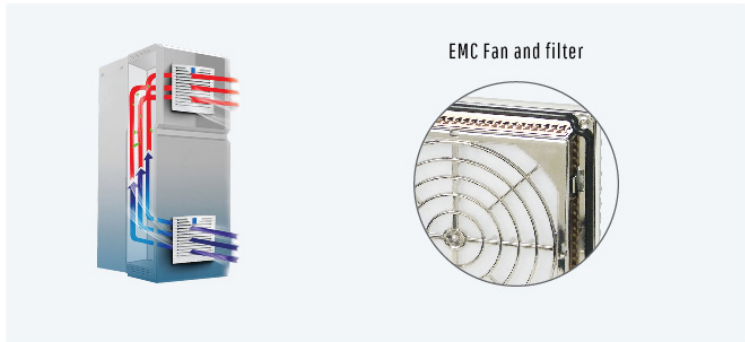
Model No.fan-and-filter unit LK	6623.230-LK	6623.115-LK	6623.024-LK
Model No.fan-and-filter unit EMC	6623.230-EMC	6623.115-EMC	6623.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	105-126 m ³ /h		105 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 6623.300: 71-82 m ³ /h 2 x LK 6623.300: 85-98 m ³ /h		1 x LK 6623.300: 78-90 m ³ /h
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.12-0.10 A	0.24-0.20 A	0.35 A
Rated Power	19.0-14.0 W		7.7 W
Noise level	36-40 dB(A)		40 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. Exit filter LK / EMC	6623.300 / 6623.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6623,consistent with UL94-V0 self-extinguishing.		

LK6624 series fan-and-filter

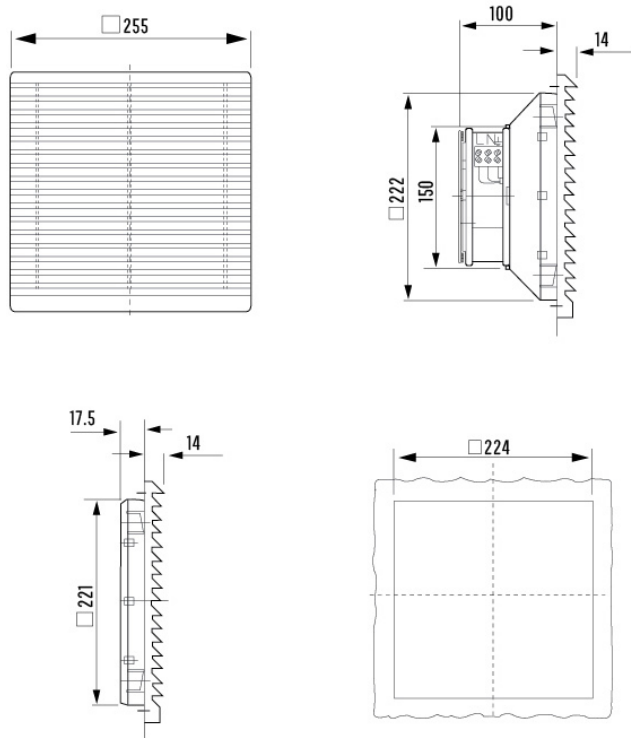
255x255mm | 220-240 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions



Exit filter LK 6624.300



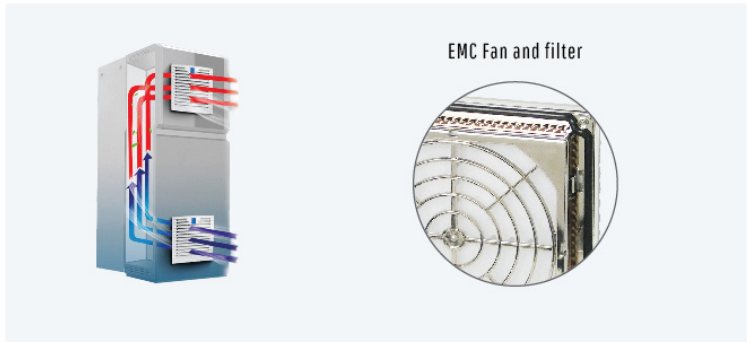
Model No.fan-and-filter unit LK	6624.230-LK	6624.115-LK	6624.024-LK
Model No.fan-and-filter unit EMC	6624.230-EMC	6624.115-EMC	6624.024-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz	24V (DC)
Air throughput,unimpeded air flow	240-220 m ³ /h		220 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 6624.300: 110-145 m ³ /h 2 x LK 6624.300: 155-185 m ³ /h		1 x LK 6624.300: 155-185 m ³ /h
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.48-0.46 A	0.26-0.24 A	0.58 A
Rated Power	41.0-38.0 W		14 W
Noise level	48-50 dB(A)		50 dB(A)
Operating temperature range	-30 to +70 °C		
Model No. Exit filter LK / EMC	6624.300 / 6624.300-EMC		
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6624,consistent with UL94-V0 self-extinguishing.		

LK6625 series fan-and-filter

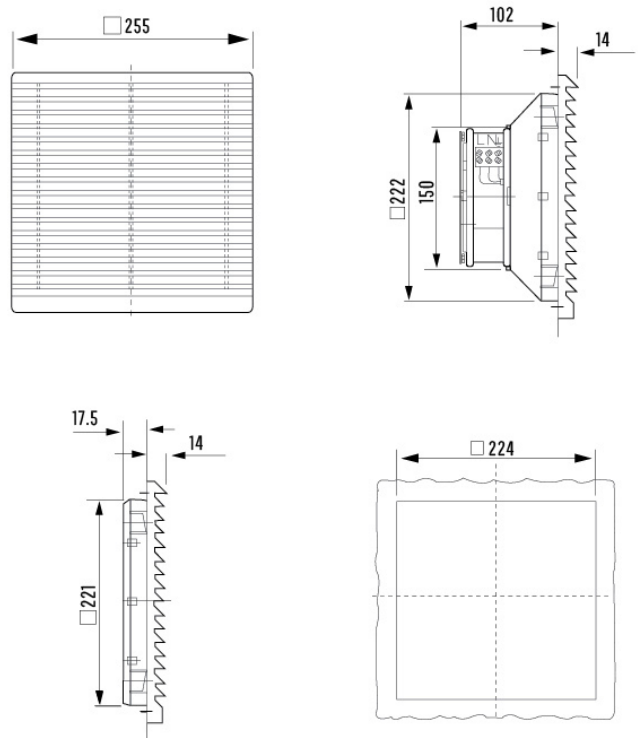
255x255mm | 230-265 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions



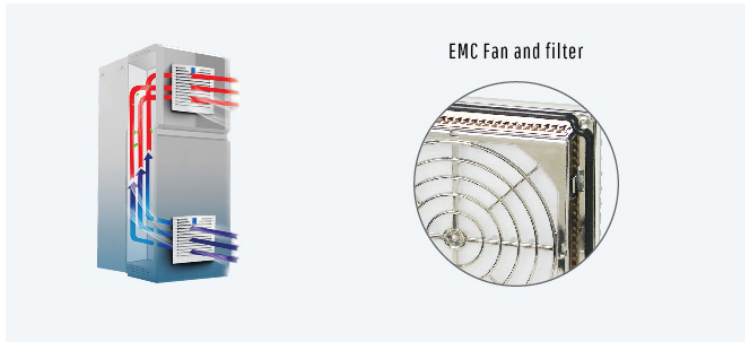
Model No.fan-and-filter unit LK	6625.230-LK	6625.115-LK
Model No.fan-and-filter unit EMC	6625.230-EMC	6625.115-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	230-265 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 6625.300: 170-205 m ³ /h 2 x LK 6625.300: 200-230 m ³ /h	1 x LK 6625.300: 190-215 m ³ /h
Axial fan	Self-starting shaded pole motor	
Rated current max.	0.25-0.20 A	0.52-0.43 A
Rated Power	37.0-33.0 W	
Noise level	46-50 dB(A)	
Operating temperature range	-30 to +70 °C	
Model No. Exit filter LK / EMC	6625.300 / 6625.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6625,consistent with UL94-V0 self-extinguishing.	

LK6626 series fan-and-filter

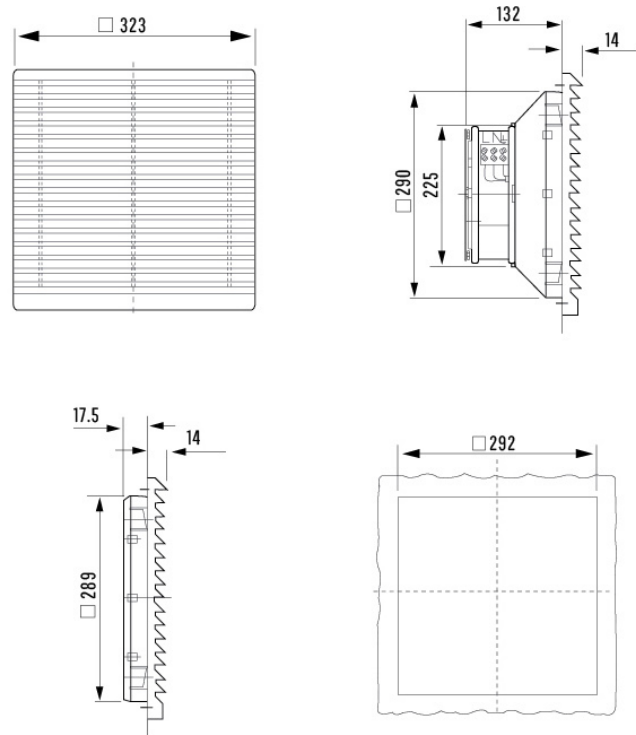
323x323mm | 580-700 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions



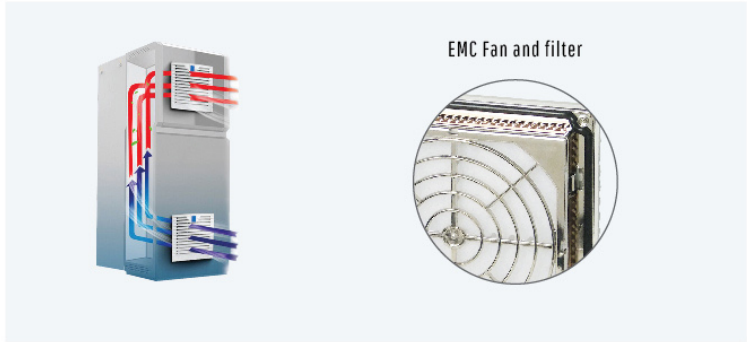
Model No.fan-and-filter unit LK	6626.230-LK	6626.115-LK
Model No.fan-and-filter unit EMC	6626.230-EMC	6626.115-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	580-700 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 6626.300: 380-410 m ³ /h 2 x LK 6626.300: 460-515 m ³ /h	
Axial fan	Capacitor operated	
Rated current max.	0.34-0.30 A	0.64-0.60 A
Rated Power	75.0-65.0 W	
Noise level	55-57 dB(A)	
Operating temperature range	-30 to +70 °C	
Model No. Exit filter LK / EMC	6626.300 / 6626.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6626,consistent with UL94-V0 self-extinguishing.	

LK6627 series fan-and-filter

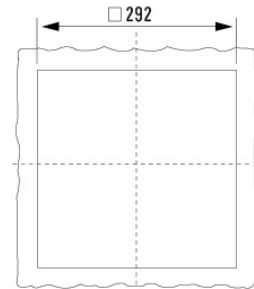
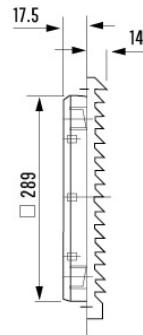
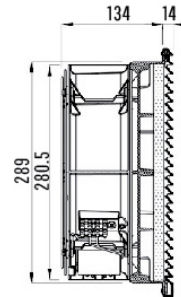
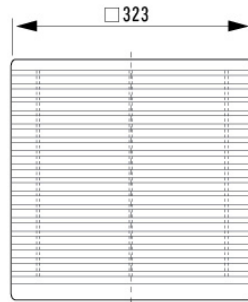
323x323mm | 1150-1350 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard



Dimensions

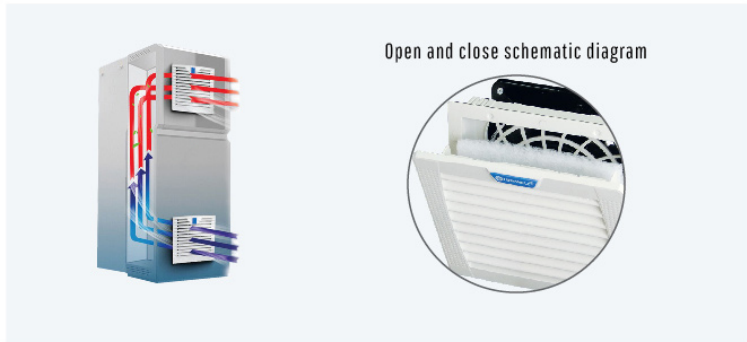


Model No.fan-and-filter unit LK	6627.230-LK	6627.115-LK
Model No.fan-and-filter unit EMC	6627.230-EMC	6627.115-EMC
Rated operating voltage,frequency V,Hz	230V, 50/60Hz	115V, 50/60Hz
Air throughput,unimpeded air flow	1150-1350 m³/h	
Air throughput with Exit filter including standard filter mat	1 x LK 6626.300: 750-950 m³/h	
Axial fan	Capacitor operated	
Rated current max.	0.62-0.48 A	1.2-1.1 A
Rated Power	140.0-105.0 W	136.0-110.0 W
Noise level	63-65 dB(A)	
Operating temperature range	-30 to +70 °C	
Model No. Exit filter LK / EMC	6626.300 / 6626.300-EMC	
Design	Made of injection-moulded thermoplastic, customizable flame retardant materials, model LK6627,consistent with UL94-V0 self-extinguishing.	

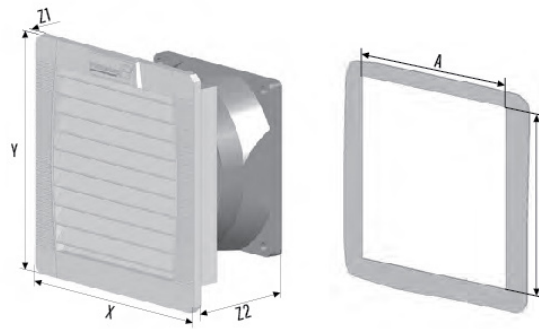
FF109 series fan-and-filter

109x109mm | 25-29 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions



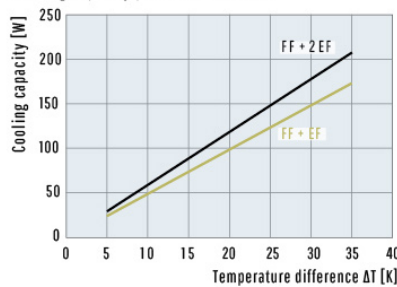
mm	FF109		EF 109
	AC	DC	
X	109	109	109
Y	109	109	109
Z1	4	4	4
Z2	62	62	19
A ¹	92	92	92
B ¹	92	92	92

¹ for material thickness up to 2 mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

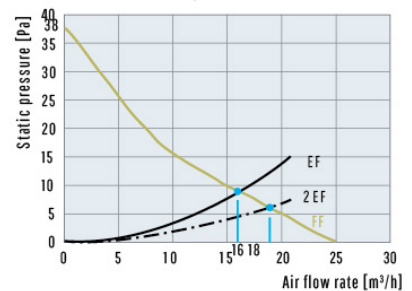
Exit filter EF 109.300



Cooling capacity performance curves



Characteristics of static pressure



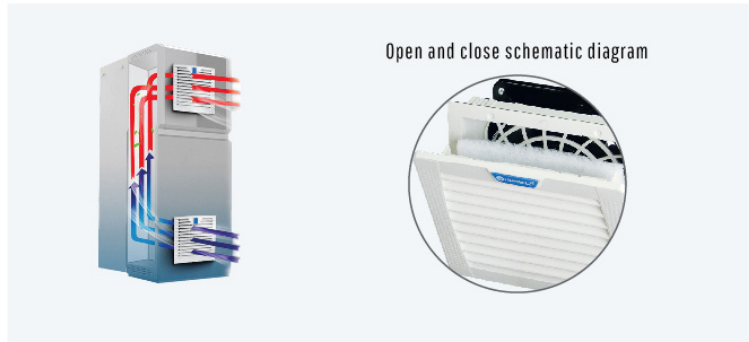
Model FF	Unit	FF109.230	FF109.115	FF109.012	FF109.024	FF109.048
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60			DC 12/24/48, 50/60	
Unimpeded air flow	m ³ /h	25-29				
Combined air volume	m ³ /h	16-18				
Rated Power	W	9-7	15-14	2.4	2.4	2.6
Rated current max.	A	0.08-0.07	0.15-0.13	0.2	0.1	0.05
Noise level	dB(A)	33			33	
Type of connection		Terminal row				
Filtration efficiency	%	88				
Filter pad performance level		63				
Duty cycle	%	100				
Bearing type		sleeve bearing			ball bearing	
Service life	h	52,500	55,000		70,000	
Operating temperature range	°C	-40-+70				
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0				

FF145 series fan-and-filter

145x145mm | 56-70 m³/h

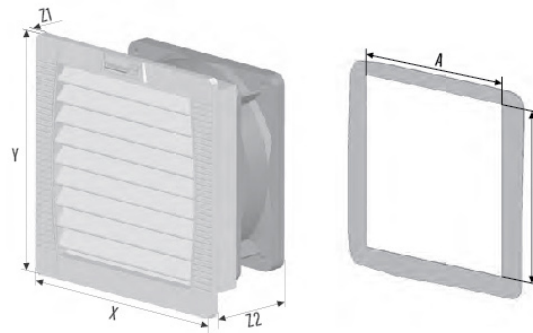


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

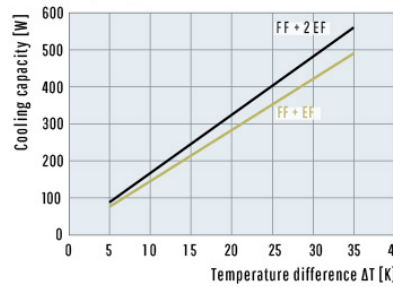
Exit filter EF 145.300



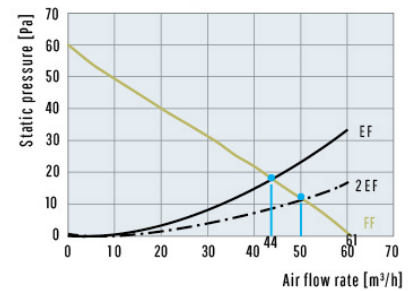
mm	FF145		EF 145
	AC	DC	
X	145	145	145
Y	145	145	145
Z1	5	5	5
Z2	70	70	27
A'	125	125	125
B'	125	125	125

¹for material thickness up to 2mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure

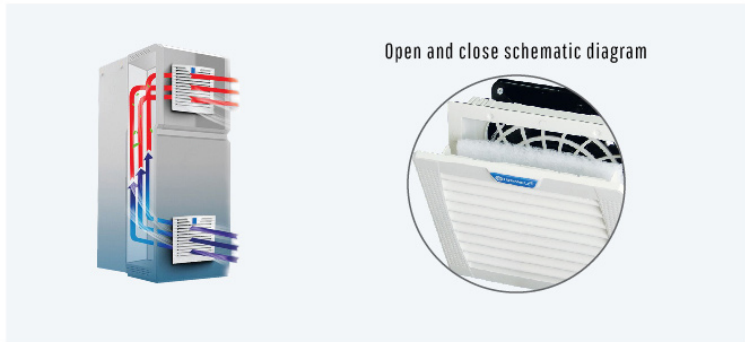


Model FF	Unit	FF145.230	FF145.115	FF145.012	FF145.024	FF145.048
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60			DC 12/24/48, 50/60	
Unimpeded air flow	m ³ /h				IP54-61-70	IP55-56-64
Combined air volume	m ³ /h				IP54-44-52	IP55-40-46
Rated Power	W	19-14	18-15	5	5	5
Rated current max.	A	0.12-0.10	0.24-0.20	0.42	0.21	0.1
Noise level	dB(A)	44			44	
Type of connection		Terminal row				
Filtration efficiency	%	88				
Filter pad performance level		G3				
Duty cycle	%	100				
Bearing type		sleeve bearing			ball bearing	
Service life	h	37,500	40,000		62,500	
Operating temperature range	°C	-40-+70				
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0				

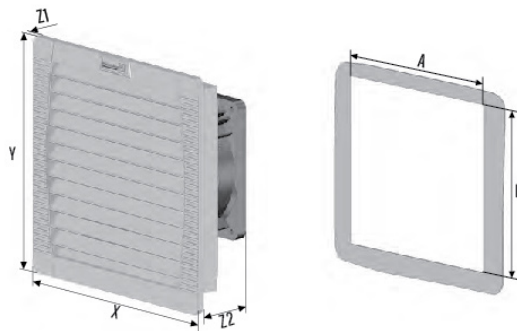
FF202 series fan-and-filter

202x202mm | 55-125 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions



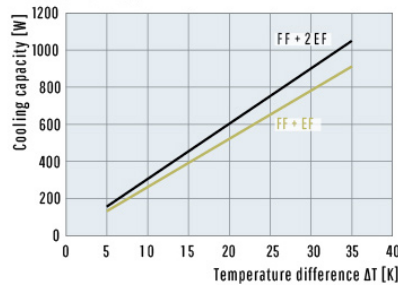
mm	FF 202		EF 202
	AC	DC	
X	202	202	202
Y	202	202	202
Z1	6.5	6.5	6.5
Z2	87	87	30
A ¹	177	177	177
B ¹	177	177	177

¹ for material thickness up to 2 mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

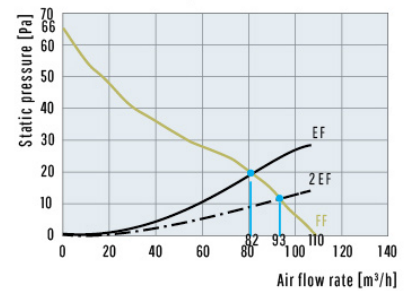
Exit filter EF 202.300



Cooling capacity performance curves



Characteristics of static pressure



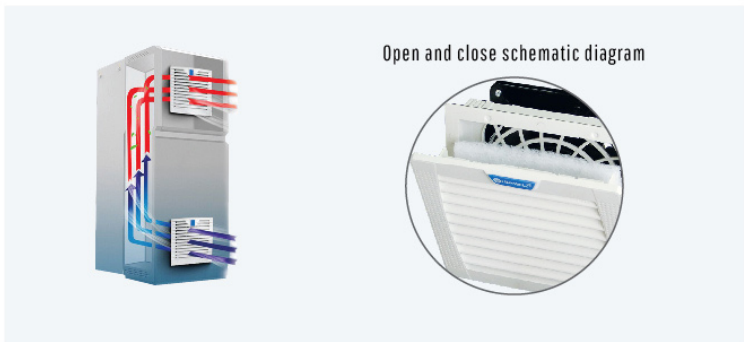
Model FF	Unit	FF202.230	FF202.115	FF202.012	FF202.024	FF202.048
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60			DC 12/24/48, 50/60	
Unimpeded air flow	m ³ /h	IP54-110-125			IP55-100-110	
Combined air volume	m ³ /h	IP54-82-93			IP55-55-64	
Rated Power	W	19-18	20	5	5	5
Rated current max.	A	0.12-0.10	0.24-0.20	0.42	0.21	0.1
Noise level	dB(A)	40			40	
Type of connection		Terminal row				
Filtration efficiency	%	88				
Filter pad performance level		63				
Duty cycle	%	100				
Bearing type		sleeve bearing			ball bearing	
Service life	h	37,500	40,000		62,500	
Operating temperature range	°C	-40-+70				
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0				

FF252-P series fan-and-filter

252x252mm | 155-260 m³/h

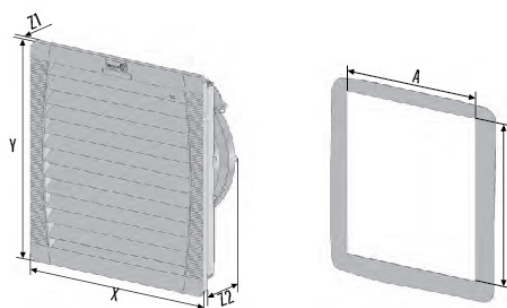


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

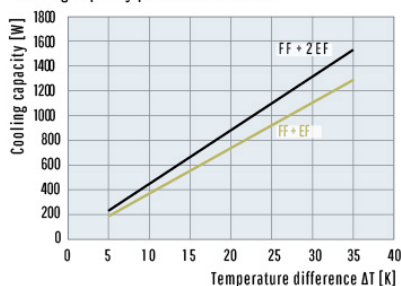
Exit filter EF 252.300



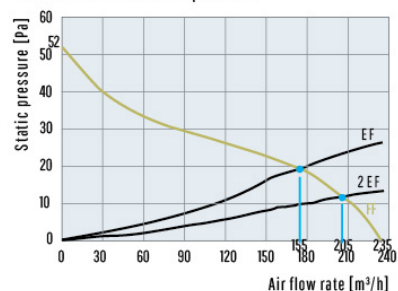
mm	FF 252-P	EF 252	
	AC	DC	
X	252	252	252
Y	252	252	252
Z1	6.5	6.5	6.5
Z2	111	111	33
A'	223	223	223
B'	223	223	223

¹for material thickness up to 2mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure

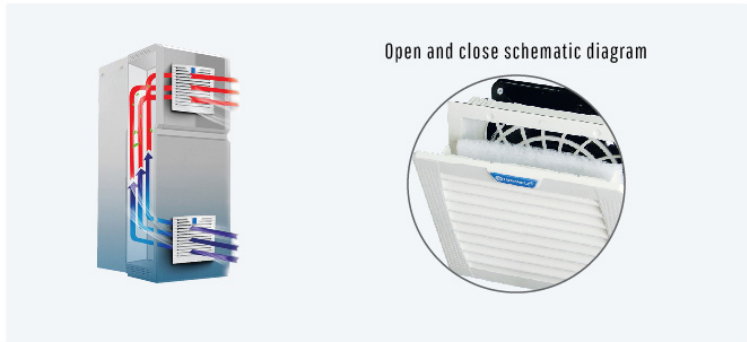


Model FF	Unit	FF252-P.230	FF252-P.115	FF252-P.012	FF252-P.024	FF252-P.048
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60			DC 12/24/48, 50/60	
Unimpeded air flow	m ³ /h	IP54-225-260			IP55-205-235	
Combined air volume	m ³ /h	IP54-202-235			IP55-155-185	
Rated Power	W	36-30	36-30	6	4.7	4.6
Rated current max.	A	0.25-0.21	0.49-0.45	0.5	0.2	0.1
Noise level	dB(A)	40-43			40	
Type of connection		Terminal row				
Filtration efficiency	%	88				
Filter pad performance level		G3				
Duty cycle	%	100				
Bearing type		ball bearing				
Service life	h	40,000	42,500	57,500	70,000	
Operating temperature range	°C	-40-+70				
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0				

FF252-M series fan-and-filter

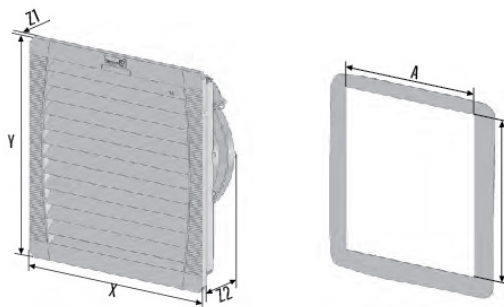
252x252mm | 180-292 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

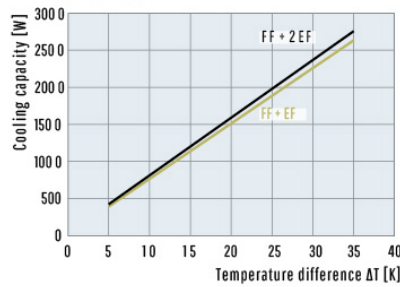
Exit filter EF 252.300



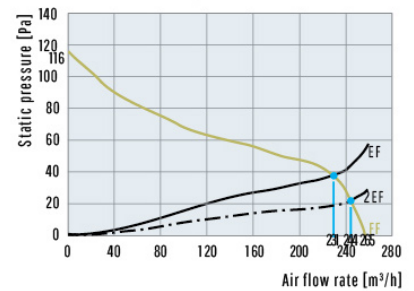
mm	FF252-M	EF 252
X	252	252
Y	252	252
Z1	6.5	6.5
Z2	114	33
A ¹	223	223
B ¹	223	223

¹ for material thickness up to 2 mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure



Model FF	Unit	FF252-M.400	FF252-M.230	FF252-M.115
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60		
Unimpeded air flow	m ³ /h	IP54-256-292 IP55-233-265		
Combined air volume	m ³ /h	IP54-231-265 IP55-180-207		
Rated Power	W	42-37	37-33	40-40
Rated current max.	A	0.16-0.14	0.25-0.20	0.52-0.43
Noise level	dB(A)	42-46		
Type of connection		Terminal row		
Filtration efficiency	%	88		
Filter pad performance level		G3		
Duty cycle	%	100		
Bearing type		ball bearing		
Service life	h	40,000		
Operating temperature range	°C	-40-+70		
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0		

FF320 series fan-and-filter

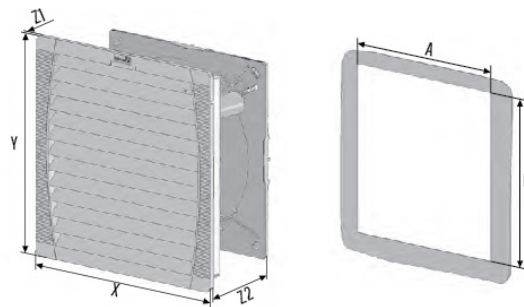
320x320mm | 470-700 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

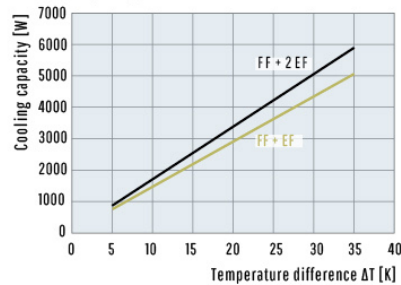
Exit filter EF 320.300



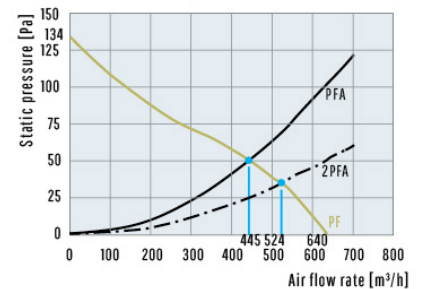
mm	FF 320	EF 320
X	320	320
Y	320	320
Z1	7	7
Z2	162	36
A'	291	291
B'	291	291

¹ for material thickness up to 2mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure



Model FF	Unit	FF320.230	FF320.115
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60	
Unimpeded air flow	m ³ /h	IP54-580-700	IP55-550-670
Combined air volume	m ³ /h	IP54-490-550	IP55-470-530
Rated Power	W	75-65	
Rated current max.	A	0.59-0.47	1.2-1.1
Noise level	dB(A)	59-62	
Type of connection		Terminal row	
Filtration efficiency	%	91	
Filter pad performance level		64	
Duty cycle	%	100	
Bearing type		ball bearing	
Service life	h	40,000	
Operating temperature range	°C	-40-+70	
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0	

FF320-D series fan-and-filter

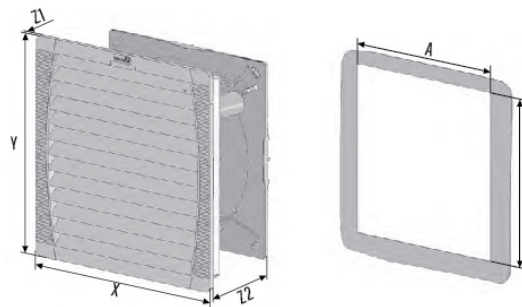
320x320mm | 750-1350 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

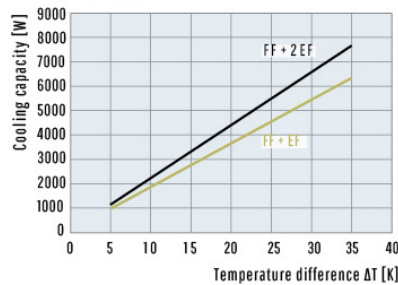
Exit filter EF 320.300



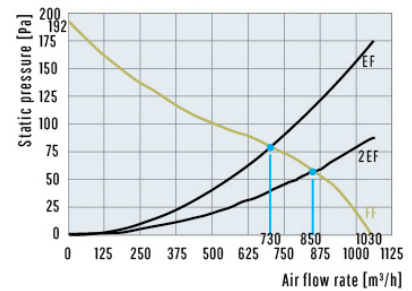
mm	FF 320-D	EF 320
X	320	320
Y	320	320
Z1	7	7
Z2	162	36
A ¹	291	291
B ¹	291	291

¹ for material thickness up to 2 mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure

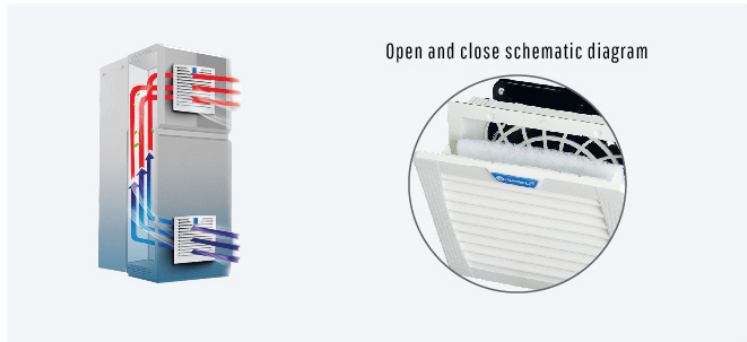


Model FF	Unit	FF320-D.230	FF320-D.115
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60	
Unimpeded air flow	m ³ /h	IP54-1150-1350	IP55-950-1150
Combined air volume	m ³ /h	IP54-800-1030	IP55-750-950
Rated Power	W	135-104	149-110
Rated current max.	A	0.59-0.47	1.2-1.1
Noise level	dB(A)	63-65	
Type of connection		Terminal row	
Filtration efficiency	%	91	
Filter pad performance level		G4	
Duty cycle	%	100	
Bearing type		ball bearing	
Service life	h	40,000	
Operating temperature range	°C	-40-+70	
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0	

FF5000 series fan-and-filter

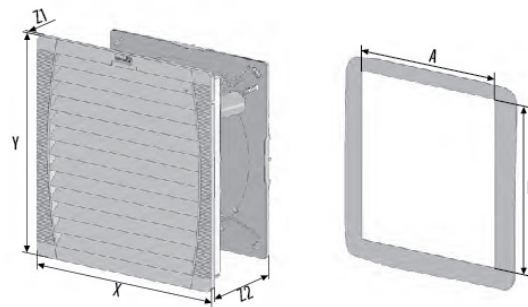
320x320mm | 425-650 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

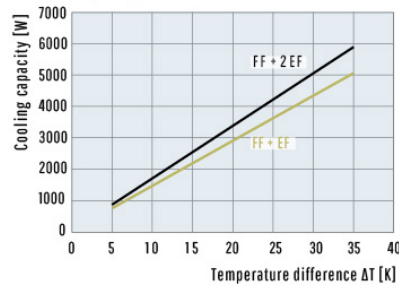
Exit filter EF 320.300



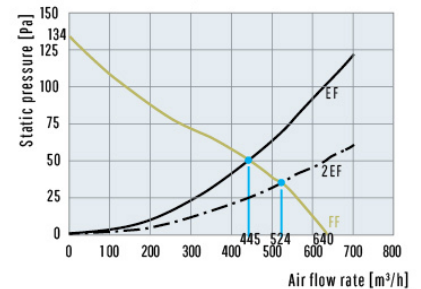
mm	FF 5000	EF 320
X	320	320
Y	320	320
Z1	7	7
Z2	125	36
A'	291	291
B'	291	291

¹for material thickness up to 2mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure

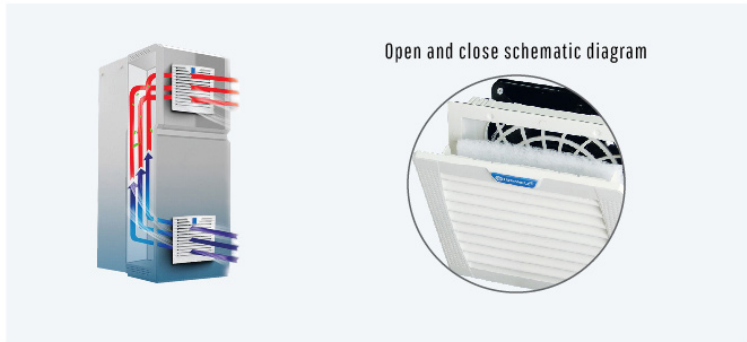


Model FF	Unit	FF5000.230	FF5000.115
Rated operating voltage,frequency	V/Hz	AC 230 /115, 50/60	
Unimpeded air flow	m ³ /h	IP54-550-650	IP55-460-515
Combined air volume	m ³ /h	IP54-490-540	IP55-425-475
Rated Power	W	71-62	
Rated current max.	A	0.34-0.30	0.64-0.62
Noise level	dB(A)	54-52	
Type of connection		Terminal row	
Filtration efficiency	%	91	
Filter pad performance level		64	
Duty cycle	%	100	
Bearing type		ball bearing	
Service life	h	40,000	
Operating temperature range	°C	-40-+70	
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0	

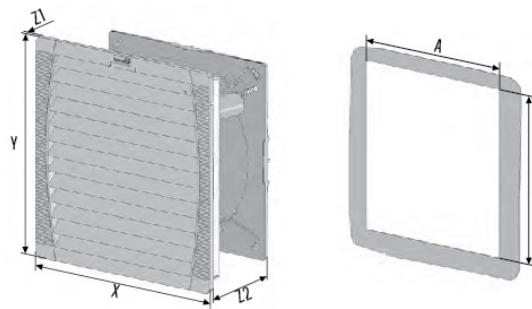
FF7000 series fan-and-filter

320x320mm | 700-1250 m³/h

Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



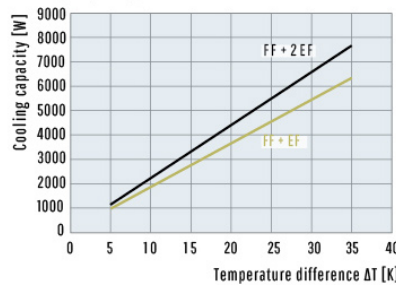
Dimensions



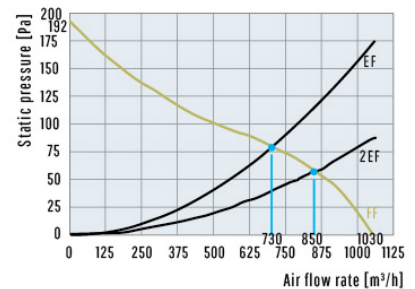
mm	FF 7000	EF 320
X	320	320
Y	320	320
Z1	7	7
Z2	127	36
A ¹	291	291
B ¹	291	291

¹ for material thickness up to 2 mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

Cooling capacity performance curves



Characteristics of static pressure



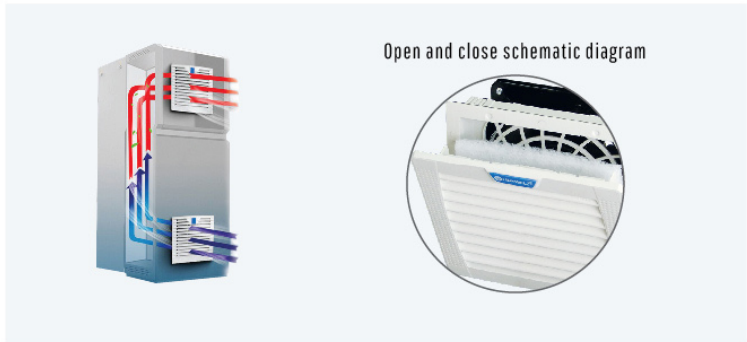
Model FF	Unit	FF7000.400	FF7000.230	FF7000.115
Rated operating voltage,frequency	V/Hz	AC 400 / 230 /115, 50/60		
Unimpeded air flow	m ³ /h	IP54-1050-1250 IP55-900-1100		
Combined air volume	m ³ /h	IP54-700-930 IP55-650-850		
Rated Power	W	155-120	135-104	149-110
Rated current max.	A	0.26-0.25	0.59-0.47	1.2-1.1
Noise level	dB(A)	63-64		
Type of connection		Terminal row		
Filtration efficiency	%	91		
Filter pad performance level		64		
Duty cycle	%	100		
Bearing type		ball bearing		
Service life	h	40,000		
Operating temperature range	°C	-40-+70		
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0		

FF130 series fan-and-filter

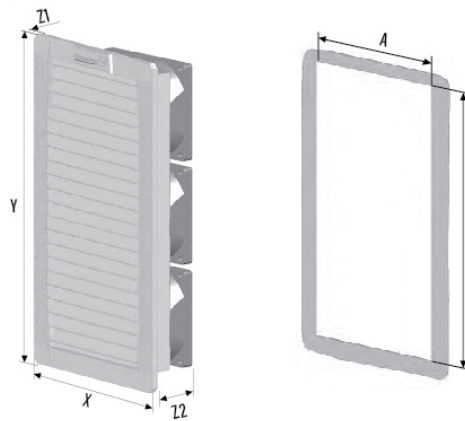
130x290mm | 53-120 m³/h



Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions



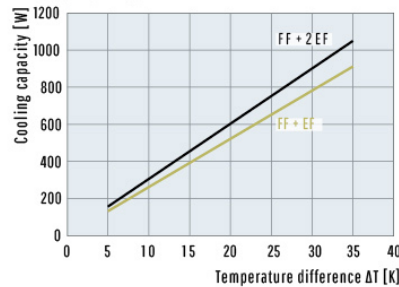
mm	FF 130	EF 130	
	AC	DC	
X	130	130	130
Y	290	290	290
Z1	5	5	5
Z2	74	74	26
A'	105	105	105
B'	265	265	265

¹for material thickness up to 2mm
+1 mm for thickness of material
> 2 mm ≤ 3 mm

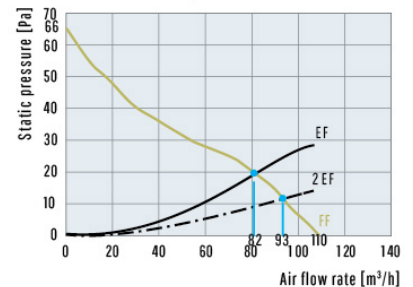
Exit filter EF130.300



Cooling capacity performance curves



Characteristics of static pressure



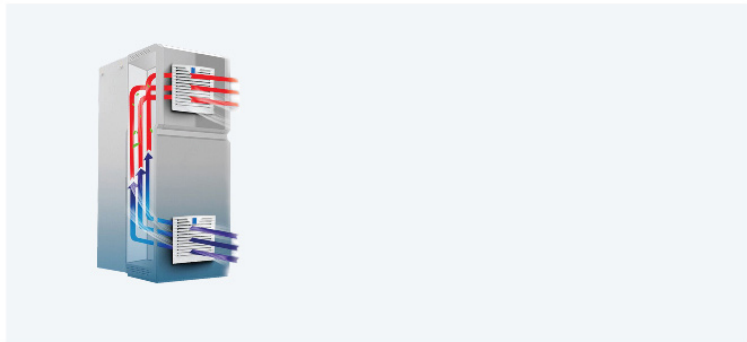
Model FF	Unit	FF130.230	FF130.115	FF130.012	FF130.024	FF130.048
Rated operating voltage,frequency	V/Hz	AC 230/115, 50/60			DC 12/24/48, 50/60	
Unimpeded air flow	m ³ /h				IP54 105-120	IP55 95-105
Combined air volume	m ³ /h				IP54 80-91	IP55 53-62
Rated Power	W	(9-7)x3	(15-14)x3	2.4x3	2.4x3	2.6x3
Rated current max.	A	(0.08-0.07)x3	(0.15-0.13)x3	0.2x3	0.1x3	0.05x3
Noise level	dB(A)	45			45	
Type of connection		Terminal row				
Filtration efficiency	%	88				
Filter pad performance level		G3				
Duty cycle	%	100				
Bearing type		Sleeve			Ball	
Service life	h	52,500	55,000		70,000	
Operating temperature range	°C	-40~+70				
Design		made of injection-moulded thermoplastic, self-extinguishing UL 94 V0				

FK5521 series fan-and-filter

109x109mm | 24-35 m³/h

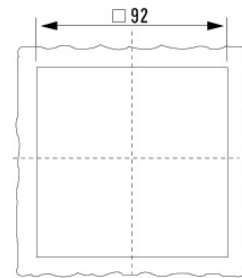
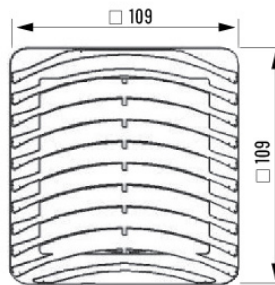
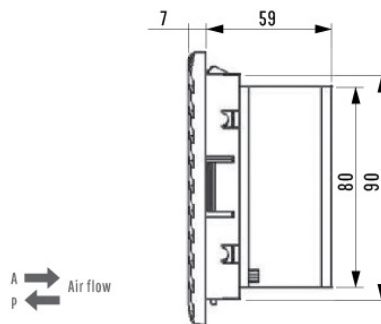


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

Exit filter FK 5521.300



Model FK	Unit	FK5521.300	FK5521.230	FK5521.115	FK5521.024
Rated voltage	V		220-240	110-120	24DC
Rated frequency	Hz		50/60	50/60	
phase	ph		1	1	
Height/Width/Depth	mm	109×109×21	109×109×59	109×109×59	109×109×59
Rated Power	W		13	15	9.6
Rated current max.	A		0.08-0.07	0.15-0.13	0.4
Operating temperature range	°C		-30-+70	-30-+70	-30-+70
Protection degree	IP	54	54	54	54
Noise level	dB(A)		35	30	30
Air flow	m ³ /h		35	35	35
Air flow (+FK5521.300)	m ³ /h		24-27	24-27	24-27
Air flow direction			A/P	A/P	A/P

FK5522 series fan-and-filter

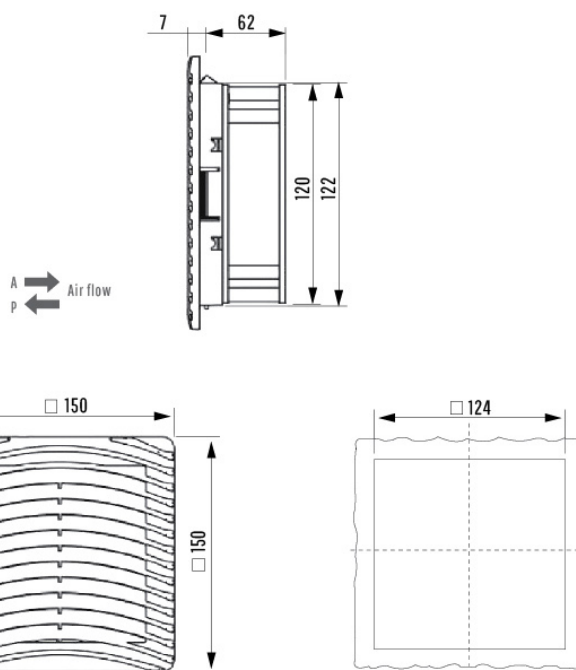
150x150mm | 50-67 m³/h



Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions



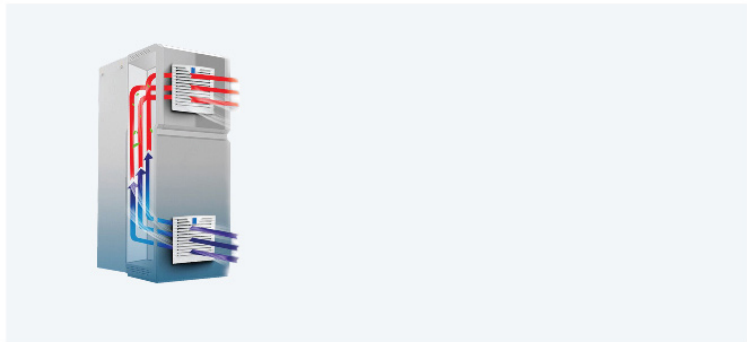
Model FK	Unit	FK5522.300	FK5522.230	FK5522.115	FK5522.024
Rated voltage	V		230	115	240C
Rated frequency	Hz		50/60	50/60	
phase	ph		1	1	
Height/Width/Depth	mm	150×150×21	150×150×62	150×150×62	150×150×62
Rated Power	W		30-22	26-22	7.2
Rated current max.	A		0.14-0.1	0.24-0.21	0.43
Operating temperature range	°C		-30-+70	-30-+70	-30-+70
Protection degree	IP	54	54	54	54
Noise level	dB(A)		45	45	45
Air flow	m ³ /h		67	67	67
Air flow (+FK5522.300)	m ³ /h		50-58	50-58	50-58
Air flow direction			A/P	A/P	A/P

FK5523 series fan-and-filter

204x204mm | 85-120 m³/h

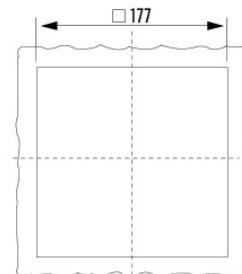
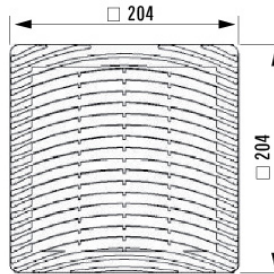
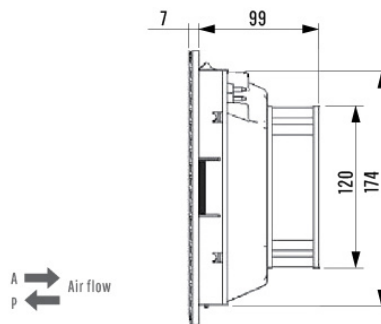


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

Exit filter FK 5523.300



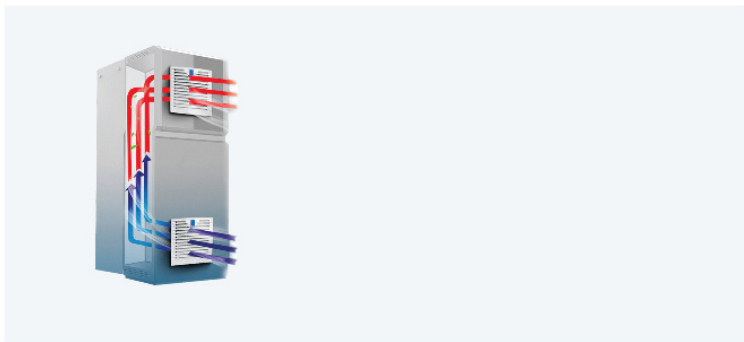
Model FK	Unit	FK5523.300	FK5523.230	FK5523.115	FK5523.024
Rated voltage	V		230	115	24DC
Rated frequency	Hz		50/60	50/60	
phase	ph		1	1	
Height/Width/Depth	mm	204×204×25	204×204×99	204×204×99	204×204×99
Rated Power	W		30-22	26-22	7.2
Rated current max.	A		0.14-0.1	0.24-0.21	0.43
Operating temperature range	°C		-30-+70	-30-+70	-30-+70
Protection degree	IP	54	54	54	54
Noise level	dB(A)		45	45	45
Air flow	m ³ /h		105-120	105-120	105-120
Air flow (+FK5523.300)	m ³ /h		85-100	85-100	85-100
Air flow direction			A/P	A/P	A/P

FK5524 series fan-and-filter

250x250mm | 120-240 m³/h

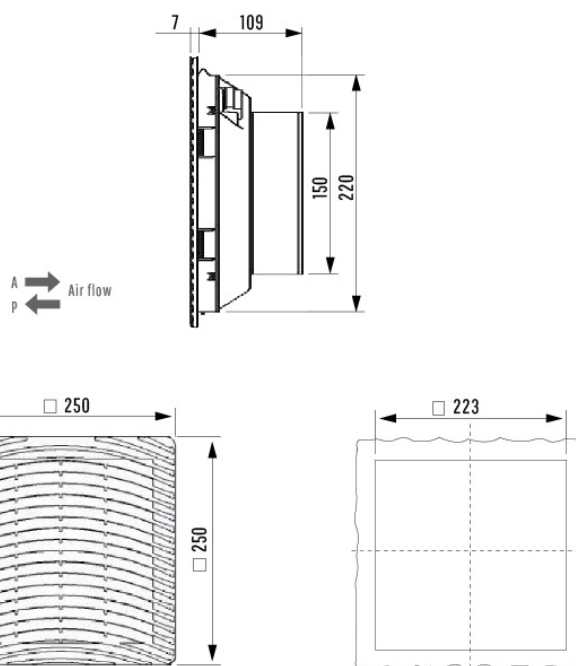


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

Exit filter FK 5524.300



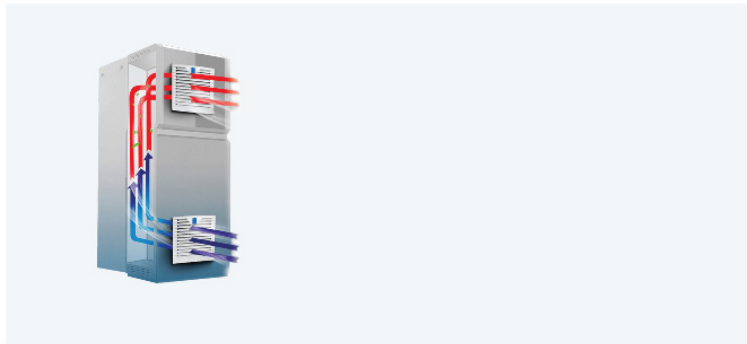
Model FK	Unit	FK5524.300	FK5524.230	FK5524.115	FK5524.024
Rated voltage	V		230	115	240C
Rated frequency	Hz		50/60	50/60	
phase	ph		1	1	
Height/Width/Depth	mm	250×250×25	250×250×109	250×250×109	250×250×109
Rated Power	W		41-38	41-38	14
Rated current max.	A		0.48-0.46	0.26-0.24	0.58
Operating temperature range	°C		-30-+70	-30-+70	-30-+70
Protection degree	IP	54	54	54	54
Noise level	dB(A)		48-50	48-50	50
Air flow	m ³ /h		240-220	240-220	220
Air flow (+FK5524.300)	m ³ /h		120-150	120-150	120-150
Air flow direction			A/P	A/P	A/P

FK5525 series fan-and-filter

250x250mm | 170-265 m³/h

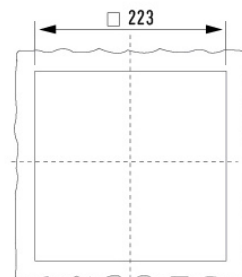
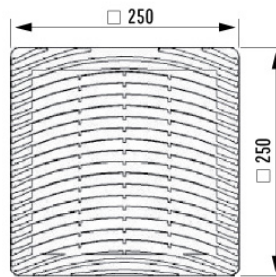
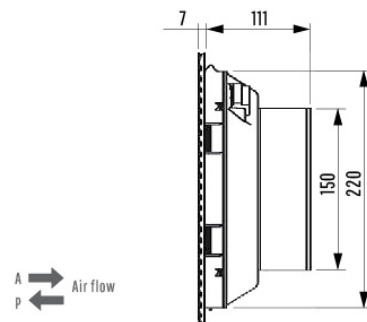


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

Exit filter FK 5525.300



Model FK	Unit	FK5525.300	FK5525.230	FK5525.115
Rated voltage	V		230	115
Rated frequency	Hz		50/60	50/60
phase	ph		1	1
Height/Width/Depth	mm	250×250×25	250×250×111	250×250×111
Rated Power	W		59-46	47-42
Rated current max.	A		0.33-0.28	0.50
Operating temperature range	°C		-30-+70	-30-+70
Protection degree	IP	54	54	54
Noise level	dB(A)		52	52
Air flow	m ³ /h		230-265	230-265
Air flow (+FK5525.300)	m ³ /h		170-230	170-230
Air flow direction			A/P	A/P

FK5526 series fan-and-filter

325x325mm | 360-600 m³/h

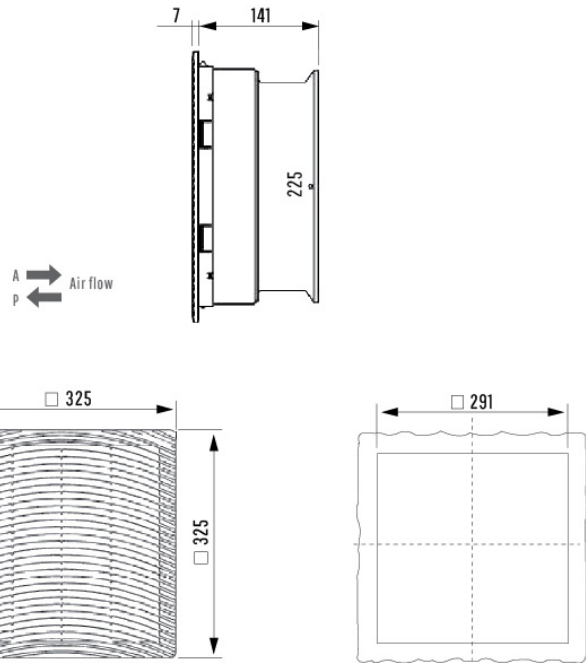


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

Exit filter FK 5526.300



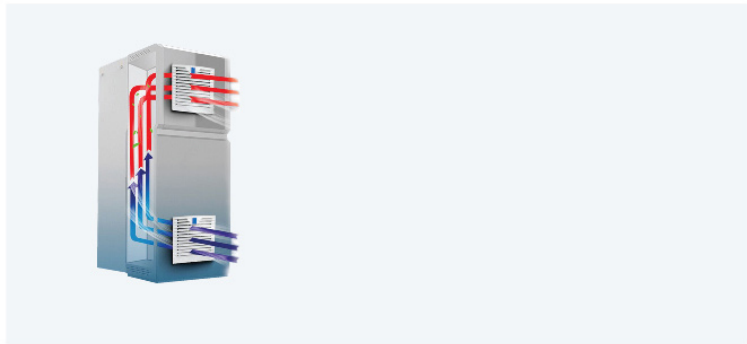
Model FK	Unit	FK5526.300	FK5526.230	FK5526.115
Rated voltage	V		230	115
Rated frequency	Hz		50/60	50/60
phase	ph		1	1
Height/Width/Depth	mm	325×325×25	325×325×141.5	325×325×141.5
Rated Power	W		63	61
Rated current max.	A		0.29	0.61
Operating temperature range	°C		-30-+70	-30-+70
Protection degree	IP	54	54	54
Noise level	dB(A)		59	59
Air flow	m ³ /h		550-600	550-600
Air flow (+FK5526.300)	m ³ /h		360-490	360-490
Air flow direction			A/P	A/P

FK5527 series fan-and-filter

325x325mm | 500-800 m³/h

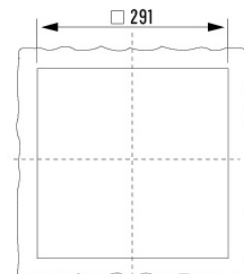
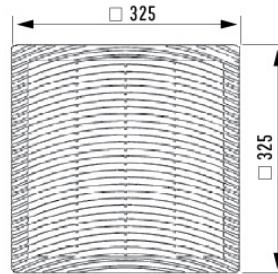
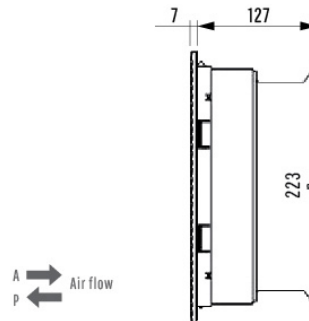


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

Exit filter FK 5527.300



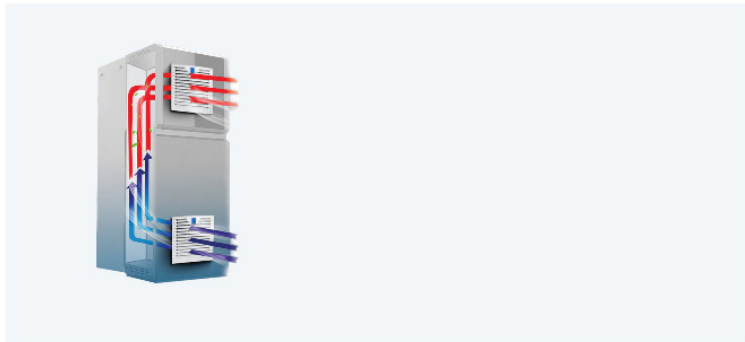
Model FK	Unit	FK5527.300	FK5527.230	FK5527.115
Rated voltage	V		230	115
Rated frequency	Hz		50/60	50/60
phase	ph		1	1
Height/Width/Depth	mm	325×325×25	325×325×127	325×325×127
Rated Power	W		50	50
Rated current max.	A		0.26	0.46
Operating temperature range	°C		-30-+70	-30-+70
Protection degree	IP	54	54	54
Noise level	dB(A)		59	59
Air flow	m ³ /h		650-800	650-800
Air flow (+FK5527.300)	m ³ /h		500-600	500-600
Air flow direction			A	A

FK5528 series fan-and-filter

325x325mm | 360-1350 m³/h

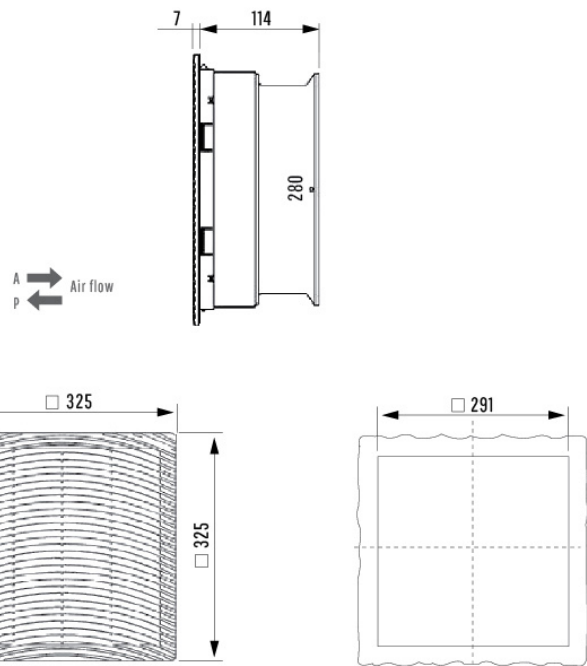


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter, IP54 standard, IP55 plus precision filter mat.



Dimensions

Exit filter FK 5528.300



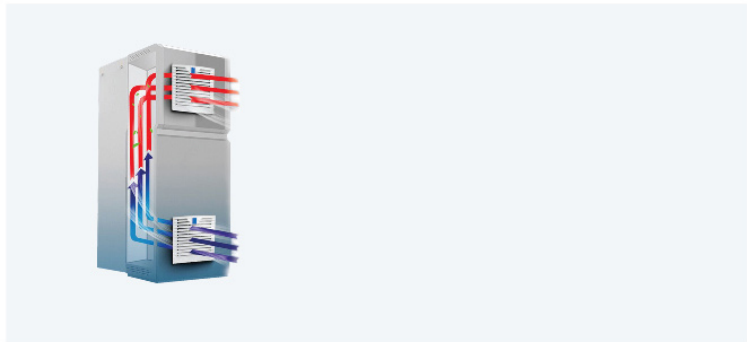
Model FK	Unit	FK5528.300	FK5528.230	FK5528.115
Rated voltage	V		230	115
Rated frequency	Hz		50/60	50/60
phase	ph		1	1
Height/Width/Depth	mm	325×325×25	325×325×114	325×325×114
Rated Power	W		63	61
Rated current max.	A		0.29	0.61
Operating temperature range	°C		-30-+70	-30-+70
Protection degree	IP	54	54	54
Noise level	dB(A)		59	59
Air flow	m ³ /h		1150-1350	1150-1350
Air flow (+FK5528.300)	m ³ /h		360-490	360-490
Air flow direction			A	A

FK5529 series fan-and-filter

325x325mm | 500-1350 m³/h

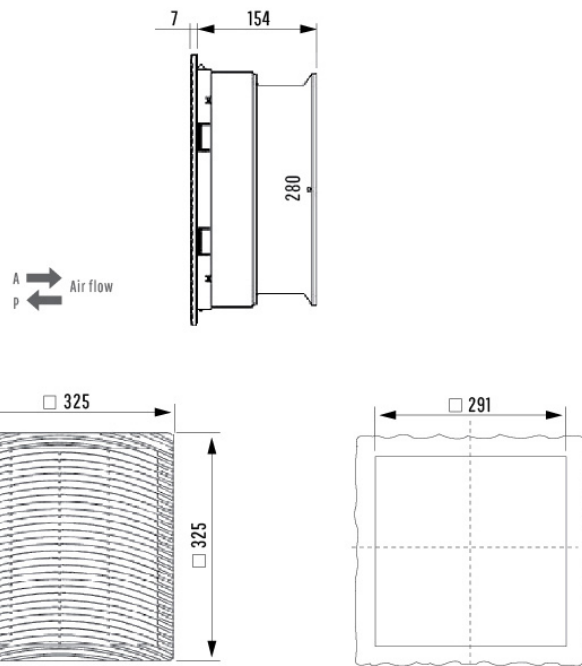


Colour	RAL7035,color can be customized
Protection category	NEMA 12-standard filter , IP54 standard , IP55 plus precision filter mat.



Dimensions

Exit filter FK 5529.300



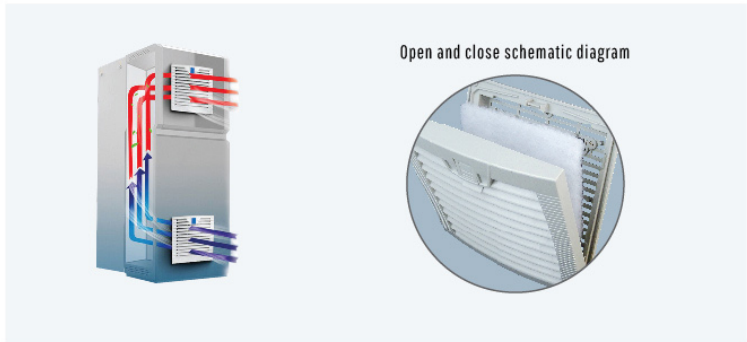
Model FK	Unit	FK5529.300	FK5529.230	FK5529.115
Rated voltage	V		230	115
Rated frequency	Hz		50/60	50/60
phase	ph		1	1
Height/Width/Depth	mm	325×325×25	325×325×154	325×325×154
Rated Power	W		140-105	136-110
Rated current max.	A		0.62-0.48	1.2-1.1
Operating temperature range	°C		-30-+70	-30-+70
Protection degree	IP	54	54	54
Noise level	dB(A)		63-65	63-65
Air flow	m ³ /h		1150-1350	1150-1350
Air flow (+FK5529.300)	m ³ /h		750-950	750-950
Air flow direction			A	A

LK148 series fan-and-filter

148x148mm | 65-85 m³/h

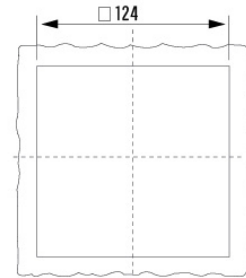
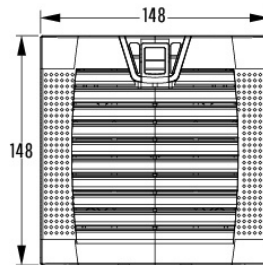
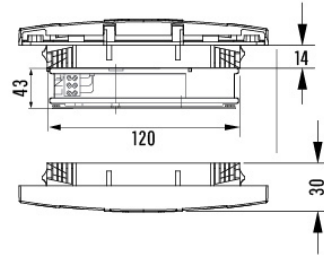


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 148.300



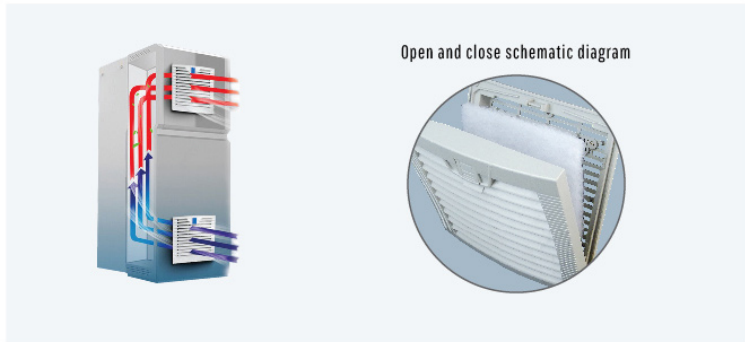
Model No. fan-and-filter unit LK	LK148.230	LK148.115	LK148.024
Rated voltage	230 V	115 V	24V (DC)
Rated frequency	50/60 Hz	50/60 Hz	
Air throughput,unimpeded air flow	65-85 m ³ /h		85 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 148.300: 55/70 m ³ /h		
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.12/0.10 A	0.24/0.20 A	0.35 A
Rated Power	19.0/14.0 W		7.7 W
Noise level	36/40 dB(A)		40 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. exit filter LK	148.300		
Design	Made of injection-moulded thermoplastic, Can install 12038 fan.		

LK204 series fan-and-filter

204x204mm | 220-240 m³/h

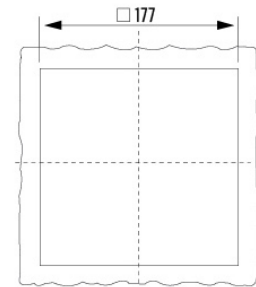
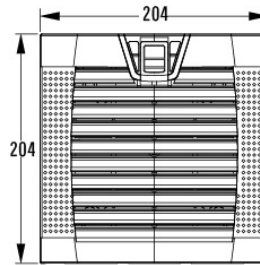
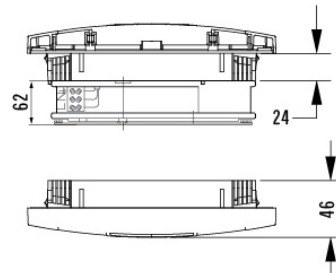


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 204.300



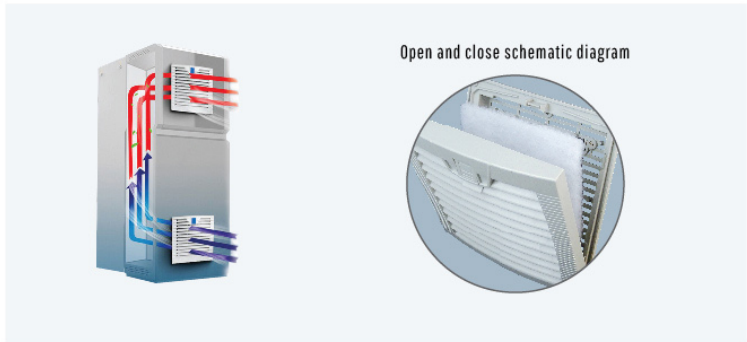
Model No. fan-and-filter unit LK	LK204.230	LK204.115	LK204.024
Rated voltage	230 V	115 V	24V (DC)
Rated frequency	50/60 Hz	50/60 Hz	
Air throughput,unimpeded air flow	240-220 m ³ /h		220 m ³ /h
Air throughput with Exit filter including standard filter mat	1 x LK 204.300: 110-145 m ³ /h 2 x LK 204.300: 155-185 m ³ /h		1 x LK 204.300: 155-185 m ³ /h
Axial fan	Self-starting shaded pole motor		DC motor
Rated current max.	0.48-0.46 A	0.26-0.24 A	0.58 A
Rated Power	41.0-38.0 W		14 W
Noise level	48-50 dB(A)		50 dB(A)
Operating temperature range	-30 - +70 °C		
Model No. exit filter LK	204.300		
Design	Made of injection-moulded thermoplastic, Can install 12038, 17251 and 1628 fan.		

LK254 series fan-and-filter

254x254mm | 550-600 m³/h

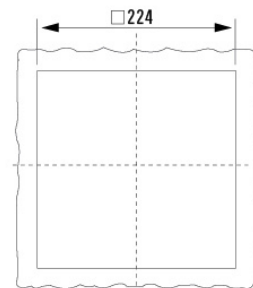
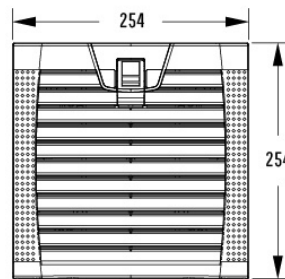
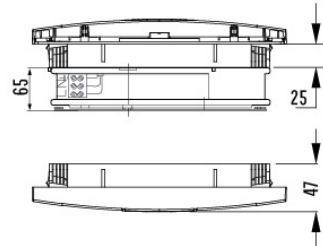


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 254.300



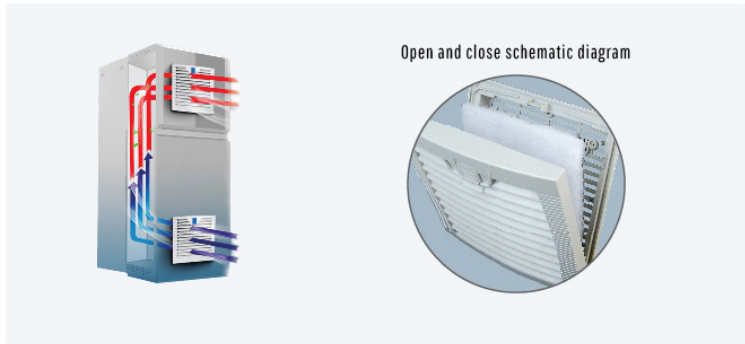
Model No. fan-and-filter unit LK	LK254.230	LK254.115
Rated voltage	230 V	115 V
Rated frequency	50/60 Hz	50/60 Hz
Air throughput,unimpeded air flow	550-600 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 254.300: 500-600 m ³ /h 2 x LK 254.300: 650-800 m ³ /h	
Axial fan	Capacitor start	
Rated current max.	0.48-0.46 A	0.24-0.26 A
Rated Power	50 W	
Noise level	59 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. exit filter LK	254.300	
Design	Made of injection-moulded thermoplastic, Can install 17251, 162B, 18060, 20572 and 220B fan.	

LK323 series fan-and-filter

323x323mm | 580-700 m³/h

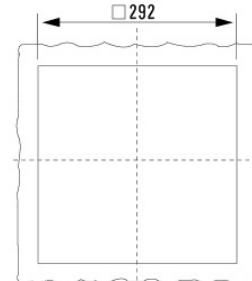
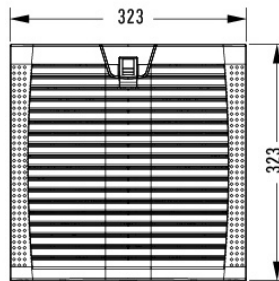
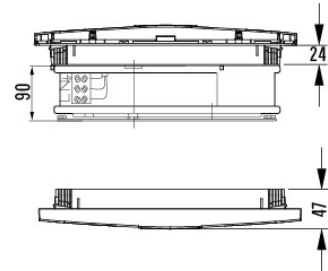


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Exit filter LK 323.300



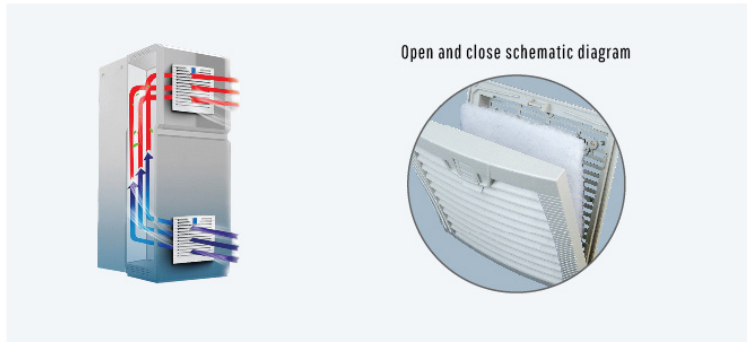
Model No. fan-and-filter unit LK	LK323.230	LK323.115
Rated voltage	230 V	115 V
Rated frequency	50/60 Hz	50/60 Hz
Air throughput,unimpeded air flow	580-700 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 323.300: 380-410 m ³ /h 2 x LK 323.300: 460-515 m ³ /h	
Axial fan	Capacitor start	
Rated current max.	0.34-0.30 A	0.64-0.60 A
Rated Power	75.0-65.0 W	
Noise level	55-57 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. exit filter LK	323.300	
Design	Made of injection-moulded thermoplastic, Can install 220B, 250B and 260B fan.	

LK323-D series fan-and-filter

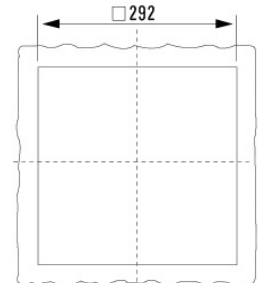
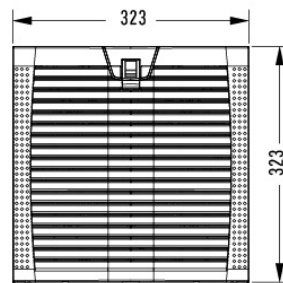
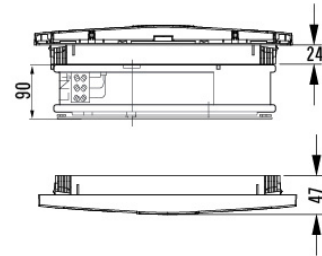
323x323mm | 1150-1350 m³/h



Colour	RAL7035, color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions



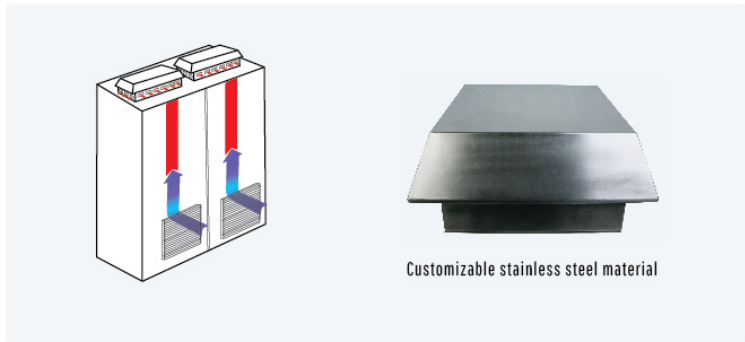
Model No. fan-and-filter unit LK	LK323-D.230	LK323-D.115
Rated voltage	230 V	115 V
Rated frequency	50/60 Hz	50/60 Hz
Air throughput, unimpeded air flow	1150-1350 m ³ /h	
Air throughput with Exit filter including standard filter mat	1 x LK 323.300: 750-950 m ³ /h	
Axial fan	Capacitor start	
Rated current max.	0.62-0.48 A	1.2-1.1 A
Rated Power	140.0-105.0 W	136.0-110.0 W
Noise level	63-65 dB(A)	
Operating temperature range	-30 - +70 °C	
Model No. exit filter LK	323.300	
Design	Made of injection-moulded thermoplastic, Can install 320B fan.	

PTF60290 series cabinet top ventilator

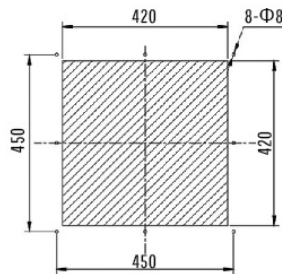
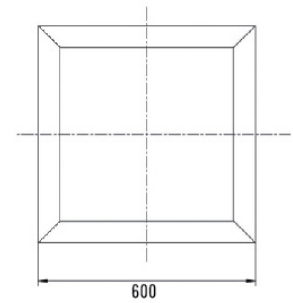
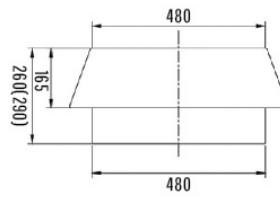
600x600x290mm | 2500-3150 m³/h



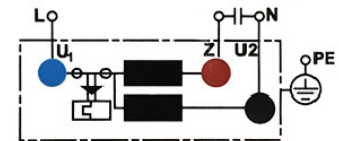
Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions



hole size



Electrical wiring diagram

Installation conditions:

- The ambient temperature should be lower than the required temperature in the control cabinet.
- When the space in the cabinet is insufficient to install the side-mounted filter fan, the top-mounted fan can be considered.
- The fan on the top of the cabinet protects the electrical components of the cabinet by pumping hot air from the top of the control cabinet and dispersing the heat inside the cabinet out of the cabinet.
- The use of centrifugal fan can not only avoid the eddy current caused by the discharge of ordinary shielded pole fan, but also reduce the noise caused by air friction.



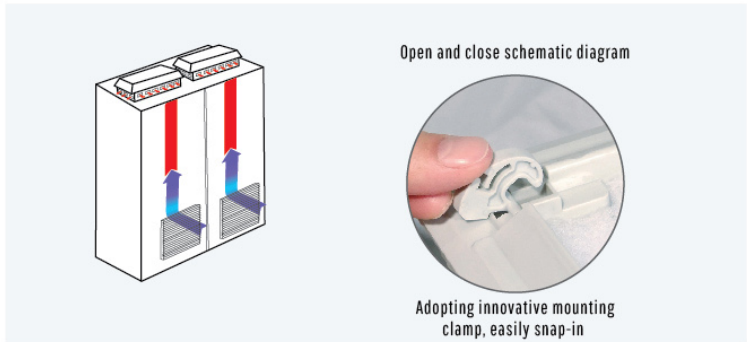
Model No.	unit	PTF60260	PTF60290
Rated operating voltage,frequency	V/Hz	230, 50	230, 50
Air flow	m ³ /h	2500	3150
Rated current max.	A	0.80-1.20	1.18
Centrifugal fan		Capacitor start	Capacitor start
Rated Power	W	180-270	180-270
Noise level	dB(A)	66-68	70
Operating temperature range	℃	-25-+60	-25-+60
Dimensions	mm	600x260x600	600x290x600
Fans dimensions	mm	Φ 355	Φ 400
Mounting section size	mm	420x420	450x450

REF600 series cabinet top ventilator

350x350x148mm | 415-500 m³/h



Colour	RAL7035, color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.

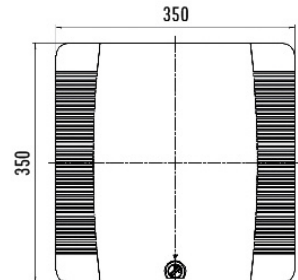
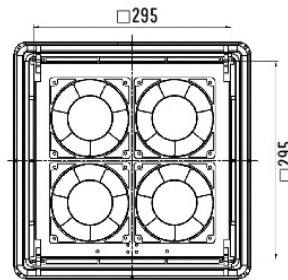
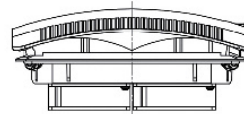
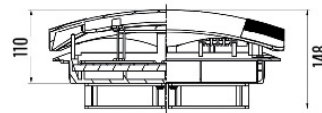


Features:

- Easy and fast snap in mounting that does not require screw
- Adjustable mounting clamps fit for different cabinet thickness range from 1.5 to 3.5mm
- IP54 protection, G3 standard filter pad
- Tool-less and quick replacement of the filter pad, just turn the button on the top
- The standard color is RAL7035, other colors as per request.
- AC voltages as standard type, DC voltages could be offered



Dimensions

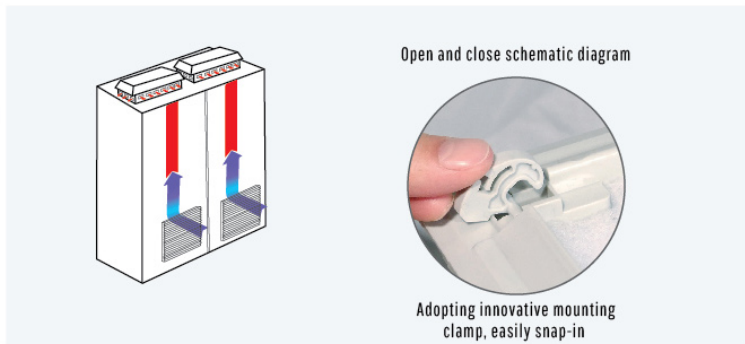


Model No.	unit	REF600.230	REF600.115	REF600.024
Rated operating voltage, frequency	V/Hz	230, 50/60	115, 50/60	24V (DC)
Air flow	m ³ /h	50/60	50/60	
Rated current max.	A	415-500	415-500	430-500
Centrifugal fan		0.14-0.1	0.24-0.18	0.28-0.35
Rated Power	W	19-14	19-14	7.7
Noise level	dB(A)	46-48	46-48	47-49
Operating temperature range	°C	-30-+70	-30-+70	-30-+70
Dimensions	mm	350x350x148	350x350x148	350x350x148
Fans dimensions	mm	120x120x38*4	120x120x38*4	120x120x38*4
Mounting section size	mm	295x295	295x295	295x295

REF700/1400 series cabinet top ventilator

350x350x178mm | 580-1400 m³/h

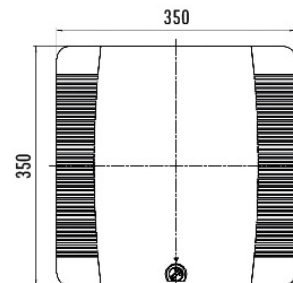
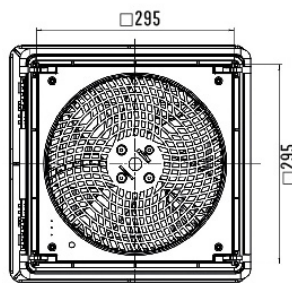
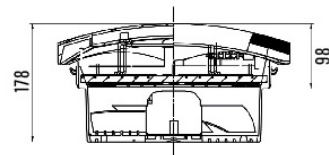
Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions

Features:

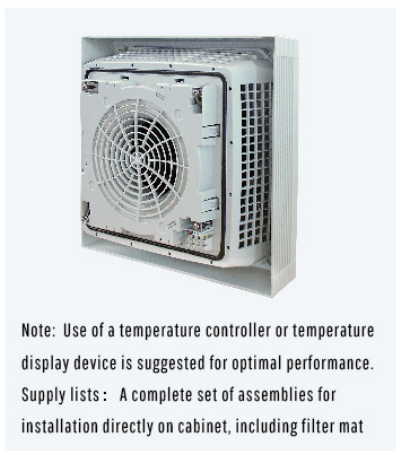
- Easy and fast snap in mounting that does not require screw
- Adjustable mounting clamps fit for different cabinet thickness range from 1.5 to 3.5mm
- IP54 protection, G3 standard filter pad
- Tool-less and quick replacement of the filter pad, just turn the button on the top
- RAL7035, other colors as per request
- AC voltages as standard type, DC voltages could be offered



Model No.	unit	REF700.230	REF700.115	REF1400.230	REF1400.115
Rated operating voltage,frequency	V/Hz	230, 50/60	115, 50/60	230, 50/60	115, 50/60
Air flow	m ³ /h	580-700	580-700	1150-1400	1150-1400
Rated current max.	A	0.35-0.28	0.65-0.58	0.60-0.46	0.95-1.20
Centrifugal fan		Capacitor start	Capacitor start	Capacitor start	Capacitor start
Rated Power	W	63-79	61-71	140-100	140-100
Noise level	dB(A)	55-57	55-57	63-65	63-65
Operating temperature range	°C	-30--+70	-30--+70	-30--+70	-30--+70
Dimensions	mm	350x350x178	350x350x178	350x350x178	350x350x178
Fans dimensions	mm	Φ 200	Φ 200	Φ 250	Φ 250
Mounting section size	mm	295x295	295x295	295x295	295x295

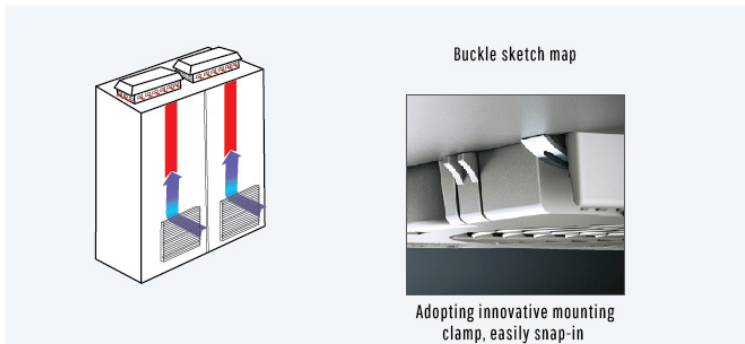
KTF series cabinet top ventilator

400x133x400mm | 500-942 m³/h



Note: Use of a temperature controller or temperature display device is suggested for optimal performance.
Supply lists: A complete set of assemblies for installation directly on cabinet, including filter mat

Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Features:

Easy to fit and maintain

- Innovative mounting clamps enables flexible snap-in the filter fan either from inside or outside of the enclosure
- Easily connecting with power supply via a plug
- Easy maintain, safe and quick replacement of filter pad

color: RAL 7035

Protection class, conform to IEC60529 standard:

without filter mat

with filter mat

Large air throughput range and high efficiency

- Air throughput range: 500-1500m³/h

High protection level

- An exquisite labyrinth construction and super quality polyurethane foam seal ensures the ingress protection rate up to IP55
- International certification and approval

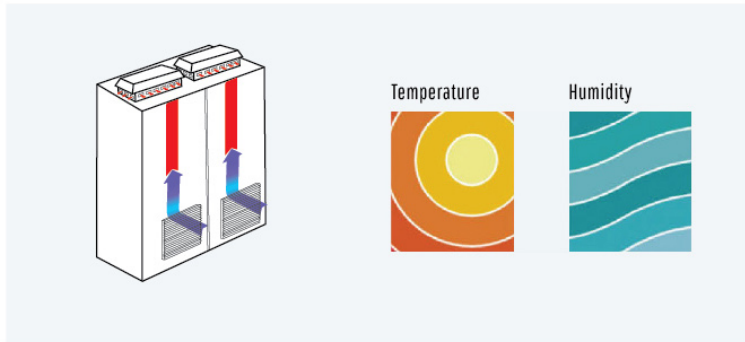
Model No.	unit	KTF3139.230 (115V、400V customizable)	KTF3140.230 (115V、400V customizable)	KTF3141.230 (115V、400V customizable)
Rated voltage	V	230	230	230
Rated frequency	Hz	50/60	50/60	50/60
Phase	ph	1	1	1
Air throughput (without filter mat)	m ³ /h	570-620	873-965	1300-1450
Air throughput (with filter mat)	m ³ /h	456-496	725-759	1050-1180
Rated current	A	0.27-0.22	0.56-0.43	0.99-0.88
Fuse current	A	6	6	6
Motor short circuiter	A	-	-	-
Rated Power	W	62-50	130-98	180-135
Width/Height/Depth	mm	400x133x400	400x133x400	400x133x400
Max.mounting depth	mm	34.6	34.6	34.6
Required mounting section size	mm	258x258	258x258	258x258
Fan type		Centrifugal, capacitor motor		
Operating temperature range	°C	-30~+55		
Storage temperature range	°C	-40~+70		

KRF series cabinet top ventilator

366x366x98mm | 620-1410 m³/h



Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Technical explanation:

The premise of using top-mounted fan:

Ambient temperature should be lower than the temperature that is required to be in the switchboard. Taking top-mounted fan into account when there isn't enough space for a side-mounted filter fan in the cabinet.

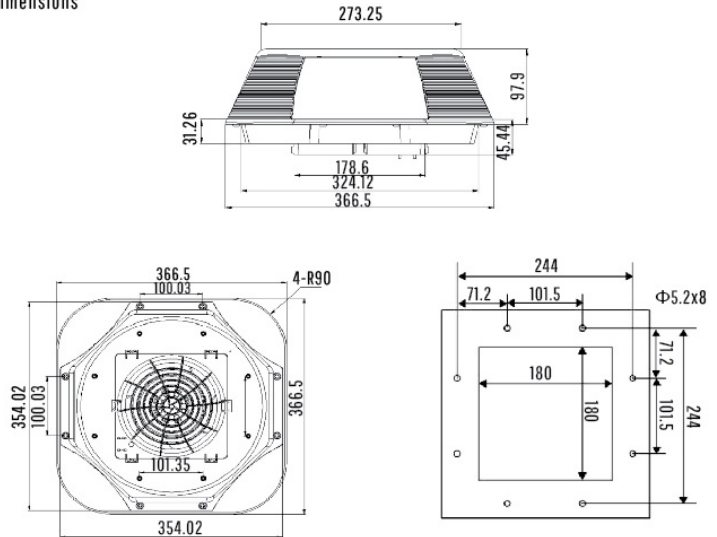
Top-mounted fan of the cabinet will bleed the air from the top of the cabinet and drive the heat out so as to protect the electric apparatus and keep them running at the temperature within controllable range. And the structure is more proper because it won't take up space in the cabinet.

EN 60529/10.91 reaches IP54. The retractable high-power centrifugal fan is able to prevent moisture as well as mechanical damage, with its labyrinth rain-proof structure, which with the help of the sealing frame, can reach an IP code up to IP54 as per EN 60 529/10.91. The centrifugal fan is mainly useful for discharge of high-heat load at peak efficiency. Adoption of the centrifugal fan will be able to reduce the noise resulting from air friction as well as avoiding the vortex discharged by normal shaded pole fan.



Using LK33 or EF series Exit Filters at the side of the cabinet not only can prevent water and dust entering the cabinet, also make the air through the whole cabinet for cooling.

Dimensions



Model	unit	KRF-670	KRF-950	KRF-1410
Rated voltage	V	230	230	230
Rated frequency	Hz	50/60	50/60	50/60
Air flow	m³/h	620	910	1250
free discharge of air	m³/h	670	950	1410
Centrifugal fan		Capacitor start	Capacitor start	Capacitor start
Rated current	A	0.31-0.24	0.38-0.36	0.62-0.58
Rated Power	W	72-56	88-82	190-130
Noise level	dB(A)	55-56	60-62	65-70
Operating temperature range	°C	-10-+55	-10-+55	-10-+55

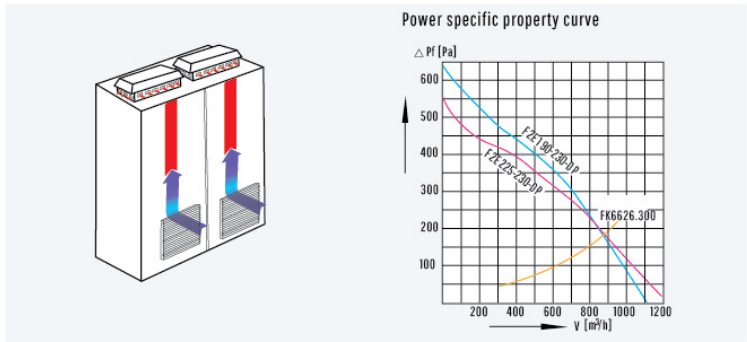
The quantity and size of the air inlet filter meet the requirements of particular users

F2E series cabinet top ventilator

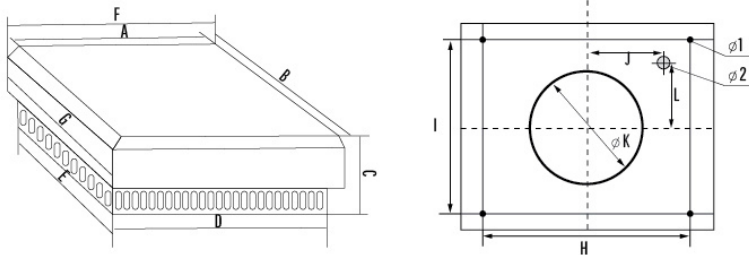
310x310x130mm | 570-1340 m³/h



Colour	RAL7035, color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.



Dimensions



Interior

The precondition to use the top fan is that the ambient temperature should be lower than the temperature required in the cabinet.

Function

The high-power centrifugal top fan can vent the high heat load by the greatest degree. The centrifugal fan not only can avoid the vortex vented by the general shield magnetic fan, but also can reduce the noise caused by the friction of air. The FK series of Exit Filter can be used in the inlet in order to prevent from entering the humidity and dust.

Type	A/B	C	D/E	F/G	H/I	J	Φ K	Φ 1	Φ 2	L
F2E190-230-DP	270	130	267	310	226.8	98.4	195	7.8	15	97
F2E 220-230-DP	270	130	267	310	226.8	98.4	195	7.8	15	97
F2E 225-230-DP	270	130	267	310	226.8	98.4	195	7.8	15	97

Model	unit	F2E190-230-DP	F2E220-230-DP	F2E225-230-DP
Rated voltage	V	230	230	230
Rated frequency	Hz	50/60	50/60	50/60
Air flow, Ventilation freely	m ³ /h	570-620	860-900	1200-1340
Flux of air equip filter exported Include filtering pad of standard	m ³ /h	1xFK6626.300 456-496	1xFK6626.300 688-540	1xFK6626.300 960-1072
Axle flow blower		capacitance electromotion	capacitance electromotion	capacitance electromotion
Rated current	A	0.34-0.26	0.40-0.38	0.88-0.60
Rated Power	W	75-58	90-85	200-135
Noise level	dB(A)	62-64	73-74	69-71
Operating temperature range	°C	-10-+55	-10-+55	-10-+60

The quantity and size of the wind inlet filter can be decided according to the concrete requirement

EIA Industrial Air-cooled Conditioner (500W)

550x280x210mm | 500 W

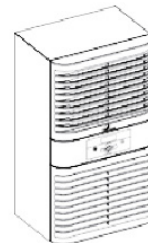


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.

Features:

- Intelligent inverter control , without transient electric current, up to 40 % less energy-consumption.
- Complete isolation inside and outside,dust-proof, oil&mist proof,moisture-proof etc.
- Compact size , Compatible with main models in the industry.
- Flexible working temperature adjustment from -15~+55 °C .
- Chinese and English bilingual LCD display menu , easy access to parameter setting and alarm information checking.
- Providing MODBUS communication , with power on START-UP function.
- Dust-proof net plug,quick change conveniently.
- Condensate water treatment, efficient solution to the problem of condensate discharge.
- Nano coating, anti-corrosion ability.
- Selectable smoke, access control and flooding alarm.
- 7*24*365 uninterrupted operation for more than 10 years.

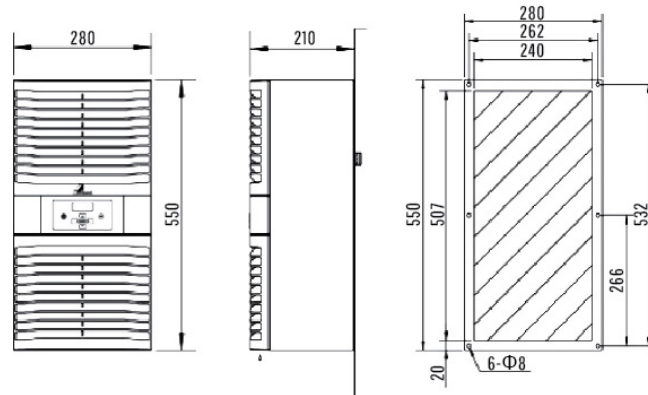
Dimensions



Side mounting



Installation opening size



Model	unit	EIA05
Height/Width/Depth	mm	550/280/210
Quality-kg	kg	<17
Installation Mode		outdoor (side mounting)
Working Temperature	°C	-15 ~ +55
Noise Level	dB(A)	65
IP protection class		IP54
Refrigerant		R134a
Refrigerating capacity@L35/L35	W	500-550
Input power@L35/L35	W	260-280
Input current @L35/L35	A	1.3-1.35
Rated Voltage	V, Hz	1-,220,50/60

EIA Industrial Air-cooled Conditioner (1000-2000W)

950x400x280mm | 1000-2000 W

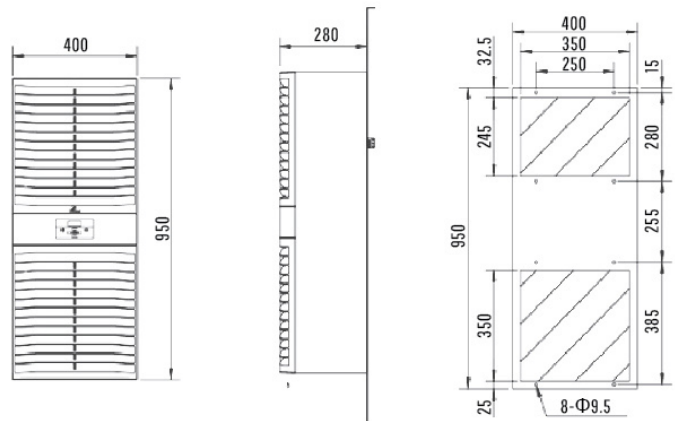
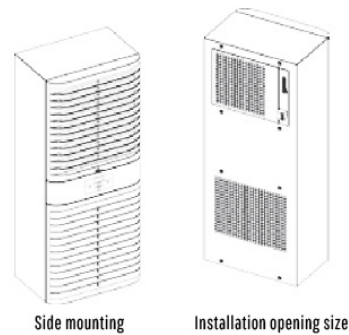


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.

Features :

- Intelligent inverter control , without transient electric current, up to 40 % less energy-consumption.
- Complete isolation inside and outside,dust-proof, oil&mist proof,moisture-proof etc.
- Compact size , Compatible with main models in the industry.
- Flexible working temperature adjustment from -15~+55 C .
- Chinese and English bilingual LCD display menu , easy access to parameter setting and alarm information checking
- Providing MODBUS communication , with power on START-UP function.
- Dust-proof net plug,quick change conveniently.
- Condensate water treatment, efficient solution to the problem of condensate discharge.
- Nano coating, anti-corrosion ability.
- Selectable smoke, access control and flooding alarm.
- 7*24*365 uninterrupted operation for more than 10 years.

Dimensions



Model	unit	EIA10	EIA15	EIA20
Height/Width/Depth	mm	950/400/280	950/400/280	950/400/280
Quality-kg	kg	<41	<41	<41
Installation Mode		outdoor (side mounting)	outdoor (side mounting)	outdoor (side mounting)
Working Temperature	°C	-15 ~ +55	-15 ~ +55	-15 ~ +55
Noise Level	dB(A)	65	65	65
IP protection class		IP 54	IP 54	IP 54
Refrigerant		R134a	R134a	R134a
Refrigerating capacity@L35/L35	W	1100-1300	1500-1700	2000-2100
Input power@L35/L35	W	540-680	750-900	1000-1200
Input current @L35/L35	A	2.5-3.2	3.5-4.2	4.6-5.7
Rated Voltage	V, Hz	1-,220,50/60	1-,220,50/60	1-,220,50/60

EIA Industrial Air-cooled Conditioner (4000W)

1580x500x340mm | 4000 W

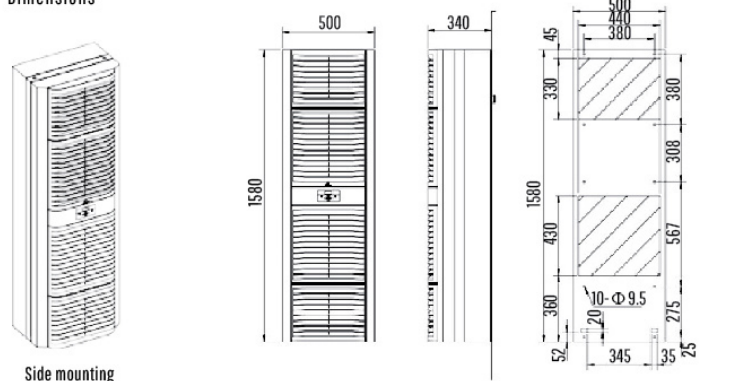


Colour	RAL7035,color can be customized
Protection category	IP54 standard, IP55 plus precision filter mat, IP56 plus precision filter mat and protective cover.

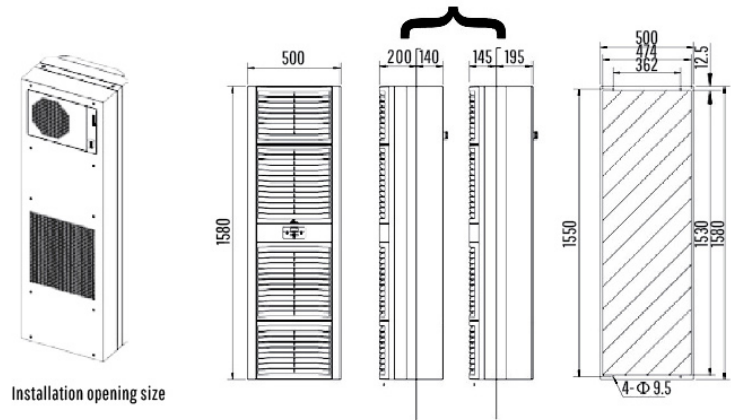
Features:

- Intelligent inverter control , without transient electric current, up to 40 % less energy-consumption.
- Complete isolation inside and outside,dust-proof, oil&mist proof,moisture-proof etc.
- Compact size , Compatible with main models in the industry.
- Flexible working temperature adjustment from -15~+55 °C .
- Chinese and English bilingual LCD display menu , easy access to parameter setting and alarm information checking.
- Providing MODBUS communication , with power on START-UP function.
- Dust-proof net plug,quick change conveniently.
- Condensate water treatment, efficient solution to the problem of condensate discharge.
- Nano coating, anti-corrosion ability.
- Selectable smoke, access control and flooding alarm.
- 7*24*365 uninterrupted operation for more than 10 years.

Dimensions



Side mounting



Installation opening size

Model	unit	EIA40
Height/Width/Depth	mm	1580/500/340
Quality-kg	kg	89
Installation Mode		Side mounting / door mounting
Working Temperature	°C	-15 ~ +55
Noise Level	dB(A)	65
IP protection class		IP54
Refrigerant		R134a
Refrigerating capacity@L35/L35	W	4000-4500
Input power@L35/L35	W	1900-2600
Input current @L35/L35	A	3.1-4.2
Rated operating voltage,frequency	V, Hz	3~,380,50/60
Air switch	P,A	3,10

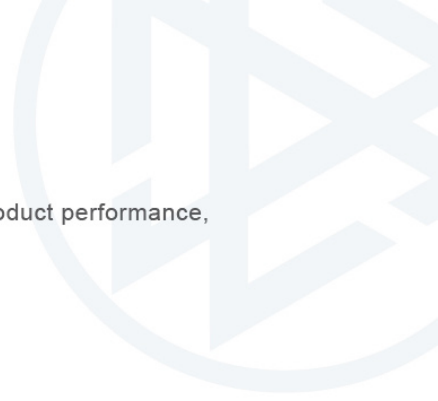


Heater /Thermostat/hygrostat



Heater and thermostat system expert

LINKWELL is the system supplier, with energy-saving, environmental protection, efficient product performance, to meet the requirements of temperature control system.



KTH-082 Temperature&Humidity Remote Controller

20-90%RH (No condensation)



(Energized state)

Overview

Adopting the MCU control system, the product provide a real time monitoring and controlling over temperature and humidity, which assures an appropriate ambient temperature and humidity through intelligent climate control.

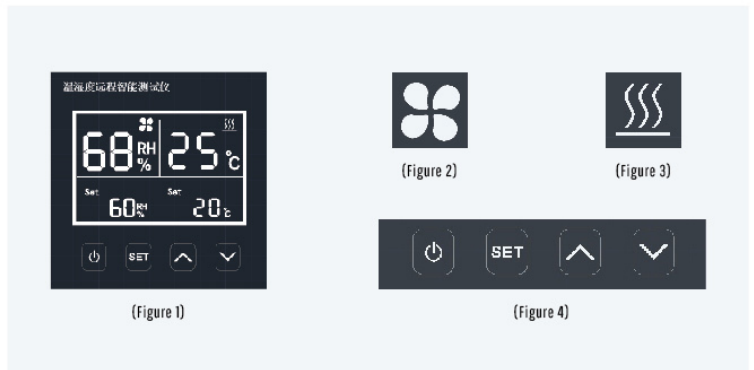
1.Functions

1.1The temperature and humidity values are displayed on a high definition LCD screen.Displaying diagram as below, i.e.(Figure 1):

- Displaying humidity measurement by 2 digits, i.e: 60%RH.
- Displaying humidity set value : In the set state, 500ms/time, humidity set value is blinking ,i.e: 40%RH.
- Displaying temperature measurement value by 2 digits, i.e: 25 °C .
- Displaying temperature set value: In set state, 500ms/time.temperature set value is blinking: i.e.: 25 °C .
- Dehumidifying mode indication, i.e.(Figure 2):
When the equipment is in dehumidifying mode, it display the status by the dynamic fan.
- Heating mode indication, i.e.(Figure 2):
when the equipment is in heating mode, it display the status by heating signal.

1.2Button, i.e.(Figure 4):

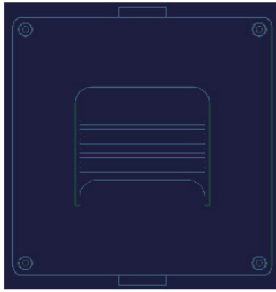
- "POWER": Press this button to switch on or off.
- "SET": In the boot state, press this button, the product is in setting mode for temperature of humidity. Meanwhile, the digital display of humidity or temperature blinking.If no button press within 10 seconds, it automatically exit the setting status .
- "PLUS":In the set state, press this button, the set values increase one as per each single press. The max. Humidity set value is 80%RH,and the max. temperature set value is 60 °C .Exiting setup automatically, if no button press in 10 seconds.
- "MINUS":In the set state, press this button, the set values decrease one as per each single press. The min. Humidity set value is 10%RH,and the min. temperature set value is 5 °C .Exiting setup automatically, if no button press in 10 seconds2.



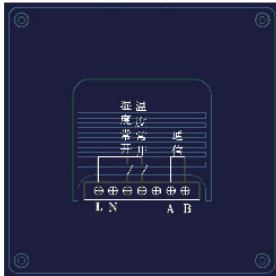
Input voltage	AC220V±10% , Other voltages can be customized
Humidity range	20-90%RH (no condensation)
Humidity accuracy	±5%RH (at 25 °C)
Temperature range	-20 ~ 80 °C
Temperature Accuracy	±1 °C (at 25 °C)
Humidity set range	20-80%RH
Operating temperature/humidity	temperature -20 °C ~ 60 °C , humidity 10 ~ 95 %RH (no condensation)
Storage temperature/humidity	temperature -10 °C ~ 40 °C , humidity 10 ~ 90%RH (no condensation)
Switching capacity	pure resistance load AC250V/10A , DC30V/5A
Power down memory	Intelligent memory for its preset parameter in case of power failure

KTH-082 Temperature&Humidity Remote Controller

20-90%RH (No condensation)



(Figure 1)



(Figure 2)



(Figure 3)

2. Output Control

2.1 Humidity Output Control

If the measured humidity exceeds the set value, output relay closed for dehumidifying. And the dynamic fan displays the operation status. If the measured humidity are 5% RH less than the set value, dehumidifying stopped, the dynamic fan indicator off. The humidity difference are 5%RH so as to avoid the frequent switch over the critical point which shorten service time.

With initial power on, there are 3 seconds' time-delay from output control, i.e. The dehumidifying controller starts action in 3 seconds under the right humidity, indicator display the running mode.

2.2 Temperature Control Output

If the measured temperature exceeds the set value, the output relay closed for heating. Thus the heating signal display the operation status. If the measured temperature are 2 °C less than the set value, heating stopped, the heating signal off. The heating difference are 2 °C so as to avoid the frequent switch over the critical point which shorten the service time.

With initial power on, there are 3 seconds' time-delay from output control, i.e. The heating relay controller starts action in 3 seconds under the right humidity, indicator displays the running mode.

Power down memory protection.

With power down memory protection, it could save user's setting parameter on equipment in case of sudden power off.

Communication

This product adopts 485 communication mode, which allow the temperature, humidity parameter and running status to be uploaded to the remote computers. The display mode as below.

3. Dimensions and connection diagram, i.e.(Figure 1)

3.1 Flush mounted controller, opening size 82.5x82.5mm.

3.2 Terminal block diagram at backside of controller, i.e.(Figure 2)

- (1) Power: AC220V/50HZ: Connect power supply with terminal L and N
- (2) Load Terminal: Connect the heater with NO contact ; Connect the fan with NC contact .
- (3) 485 communication terminals; connect A and B.

4. USB Converter Connector, i.e.(Figure 3)

4.1 USB terminal on the left side :

Connect with the USB port on the computer, installation requires a USB drive (see details on 485USB drive);

4.2 RS485 on the right side: connect controller with terminal A and B.

Temperature&Humidity Remote Control Display System

Enclosure No.	Measured Temperature	Measured Humidity	Running State
1#	25°C	60%RH	Running
2#	25°C	60%RH	Stop
3#	25°C	60%RH	Running
4#	25°C	60%RH	Stop
5#	25°C	60%RH	Stop

It can display the temperature, humidity parameter and running status of 5 cabinet enclosures at same time.



Superiority:

- Integrated integration: AC input, AC output, offering convenience in use.
- With LED indicator, easier to recognize working state.
- Small size for a variety of applications.
- Stable long - time operating.
- ROHS compliant.

Features:

- Humidity control: If the relative humidity exceeds the value set on the humidity dial, the electric circuit is cut off. Return difference is 5 - 10% RH.
- Temperature control: If the ambient temperature rises above the value set on the temperature dial, the electric circuit is cut off. A tolerance of 1 - 3°C is allowed.
- Power: AC220V. Other voltage is alternative.
- Current: Max 46mA.
- Storage conditions: Temperature: - 20 - 60°C; Humidity: 20 - 95%RH.
- Operating conditions: Temperature: - 10 - 50°C; Humidity: 40 - 90%RH.
- Humidity sensor: Polymer humidity resistance.
- Temperature sensor: Bimetal sensor.

Elements:

- Set up the operation range by adjusting the knob. When the ambient temperature drops below the value pre - set, the electric circuit is closed via terminal LED illuminates. When the ambient temperature rises above the value pre - set, the electric circuit is opened via terminal LED blacks out.
- Set up the operation range by adjusting the knob. When the relative humidity drops below the value pre - set, the electric circuit is closed via terminal LED illuminates. When the relative humidity rises above the value pre - set, the electric circuit is cut off via terminal LED blacks out. In order to protect the loads not to work too frequently, the return difference is 5 - 10%RH, means the electric circuit is closed when the humidity drops 5 - 10% below more than the value pre - set.

Temperature switching difference	7k(±4k tolerance)
Humidity switching difference	4%RH(±3% tolerance)
Temperature sensor element	Bimetal sensor
Relative humidity range	35%~95%RH
Temperature control contact mode	Step type contact point
Humidity control contact mode	Chang - over switch
Mean life	750,000 cycles
Min Switching capacity	20VAC/DC 100m A
Max Switching capacity	250VAC/DC 5(1)A DC30W
Connection	5 - pole terminal, clamping torque 0.5Nm Max for solid wire 2.5mm ² and stranded wire(with wire and ferrule) 1.5mm ²
Installation	35mm Din rail
Casing	UL94V - 0, light grey
Dimension	70x63x40mm
Weight	90g
Fitting position	Cabinet top
Operating temperature	0~+60°C(+32~+140°F)
Storage temperature	-20~+80°C(-4~+176°F)
Protection level	IP20

KTO 011/KTS 011 Thermostat

IP20

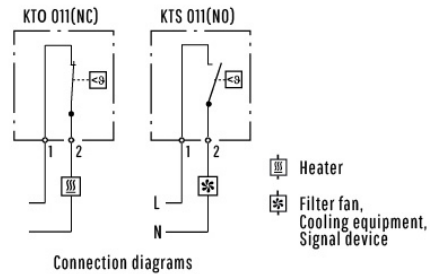
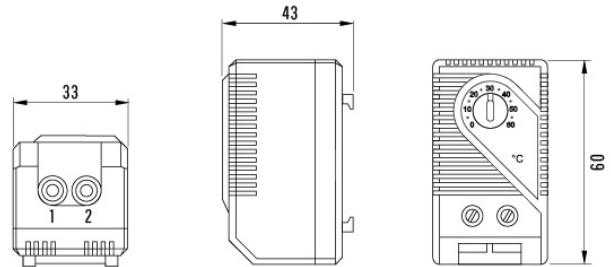
- Large setting range
- Small size
- Simple to mount
- High switching performance

KTO 011: Thermostat (normally closed); contact breaker for regulating heaters.

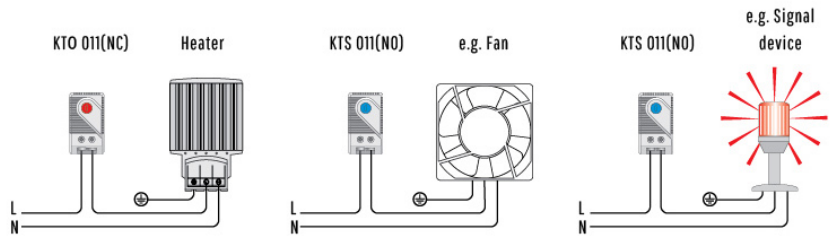
KTS 011: Thermostat (normally open): contact maker for regulating filter fans and heat exchangers or for switching signal device when temperature limit has been exceeded.



Dimensions



Connection diagrams



Examples of connection

Temperature range	0-+60 °C		
KTO 011 NC(Normally closed)	When the temperature reaches the set value, open circuit		
KTS 011 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 72VDC		
Connection	2-pole terminal, clamping torque 0.5Nm max.:rigid wire 2.5mm ² ,stranded wire (with wire end ferrule) 1.5mm ²		
Casing	plastic according to UL94 V-0, light grey		
Installation	35mm DIN Installation guide		
Dimensions	60×33×43mm		
Weight	40g		
fitting position	variable		
Operating/Storage temperature	-20-+80 °C		
Protection type	IP20		

Setting range	Art. No. Contact Breaker (NC)	Art. No. Contact Maker (NO)	Approvals
0 to +60°C	KTO 011	KTS 011	CE

KNO 011/KNC 011 New Panel Thermostat

IP20



Panel thermostat

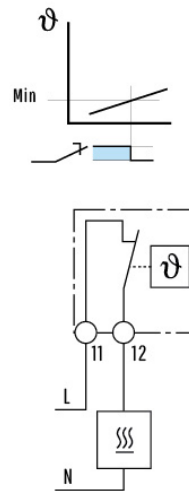
- Small, compact size (17.5mm wide)
- Long electrical life
- Snap action thermostatic bimetal sensor
- 35mm rail (EN 60715) mount
- Wide temperature setting range

Heating control - Should the panel temperature fall below the (minimum) set temperature the contact will close to call for heat. The contact will open when this set temperature is exceeded.

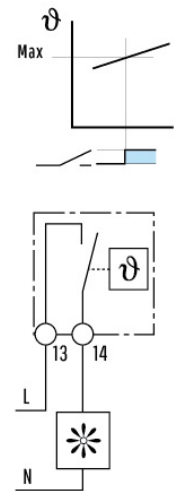
Ventilation control - Should the panel temperature exceed the (maximum) set temperature then the contact will close to call for cooling. The contact will open when the temperature falls below this set temperature.

Dimensions

• Heating control



• Ventilation control



Contact configuration		1 NC	1 NO
Rated current/Maximum peak current	A	10/20	10/20
Rated voltage/Maximum switching voltage	V AC	250/250	250/250
Rated load AC1	VA	2500	2500
Rated load AC 15 (230V AC)	VA	250	250
Single phase motor rating AC 3 (230V AC)	kW	0.125	0.125
Breaking capacity DC 1:30/110/220 V	A	1/0.3/0.15	1/0.3/0.15
Minimum switching load	mW (V/mA)	500 (12/10)	500 (12/10)
Standard contact material		AgNi	AgNi
Setting range (ventilation)	°C	-	-20...+40 +0...+60
Switch temperature differential	K	-	7±4
Setting range (heating)	°C	-20...+40 +0...+60	-
Switch temperature differential	K	7±4	-
Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³
Ambient temperature range	°C	-45...+80	-45...+80
Protection category		IP 20	IP 20

Outline drawings

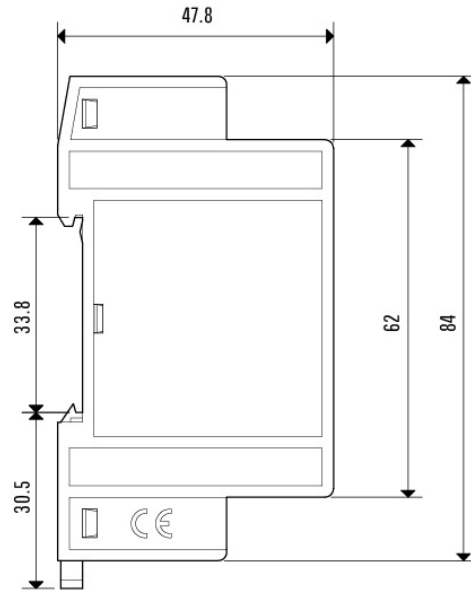
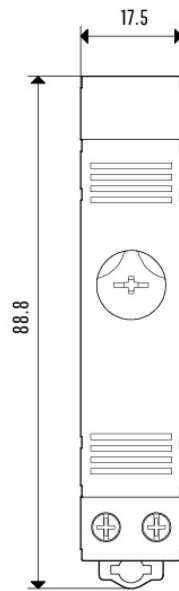
Screw terminal



Alarm output contact, Passive contact, AC250V 5A.

NO, close while function of dehumidifier is out of order.

Function out of order defined: Temperature sensor or humidity sensor fault; Duration of Dehumidifier work is over 24 hours, RH ≥ 80%RH.



Ordering information

Example: KNC/KNO Series, thermostat for ventilation control, contact activates ventilation should the panel temperature exceed the set value (max+60°C), 35mm rail (EN 60715) mount.

Insulation			
Dielectric strength between open contacts	V AC	500	
Other data			
Screw torque	Nm	0.5	0.5
Max. wire size		solid cable	stranded cable
	mm ²	1×2.5	1×1.5
	AWG	1×12	1×16
Model No.		KNO 011	NC Type for heating
		KNC 011	NO Type for cooling



ZR 011 Dual Thermostat

IP20



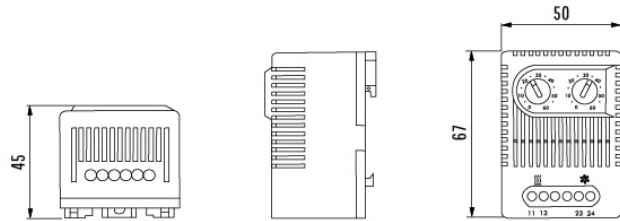
- NO and NC in one casing
- High switching capacity
- Clip Fixing
- Separate adjustable temperatures
- Terminals easily accessible

Two thermostats in one casing:

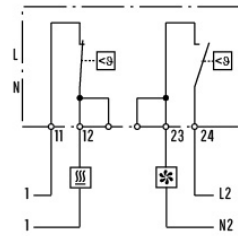
Thermostat(contact breaker, normally closed)for regulating heaters Thermostat(contact make, normally open) for regulating filter fans and heat exchangers or switching signal devices when temperature limit has been exceeded.

Heaters and cooling equipment can be switched independently from each other with a temperature offset a he usual change-over contacts.

Dimensions



ZR 011(NC/NO)



Connection diagrams

- Heater
- Filter fan, Cooling equipment, Signal device

Temperature range	NO/NC:0-+60 °C		
Switch temperature difference	7K(+4K tolerance)		
Sensor element	thermostatic bimetal		
Contact type	Snap-action		
Contact resistance	<10m ohm		
Service life	>100,000 cycles		
Max. Switching capacity	250VAC,10(2)A , 120VAC,15(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		
Installation	35mm DIN Installation guide		
Casing	UL94 V-0 Plastic, light gray		
Dimensions	67×50×46mm		
Weight	90g		
fitting position	variable		
Operating/Storage temperature	-20~+80 °C		
Protection type	IP20		

Setting range	Art. No. Contact Breaker (NC)	Art. No. Contact Maker (NO)	Approvals
0 to +60°C	ZR 011	ZR 011	CE

JWT 6011 Enclosure Internal Thermostat

IP20



- Bi-metal controller as a temperature sensitive element with thermal feedback.
- Contact population: Single-pole change-over contact as a quick-break contact.
- Permissible contact load:

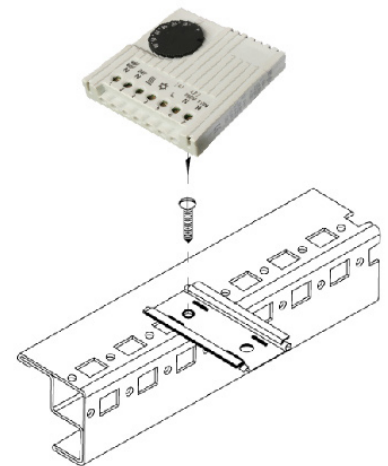
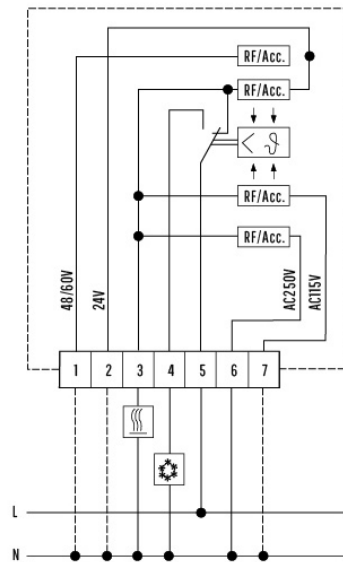
Cat. 5 - 3 (heating) AC 10 (4*) A, DC = 30 W Cat. 5 - 4 (cooling) AC 5 (4*) A,
 DC = 30 W * () = inductive load at cos phi = 0.6
 Setting range: 0 - + 60 °C

- Weight: 105g appr Size: 71x71x33.5mm Switch discrepancy: 1K ± 0.8K
- Voltage scope is wide, any type could be used from 24- 230 V
- Time-saving connection, terminal block could be installed screw from outside
- Easy installation, could be installed to 35mm din rail vertically or horizontally, according to EN50 022,it could be clipped to TS/35 cabinet profile with its accessory adapter.

Application Especially suitable for controlling fan-and-filter units, heaters and heat exchangers, this thermostat can also be used as a signal generator for monitoring the enclosure internal temperature.



Dimensions



Rated voltage: 230/115/60/48/24V (AC), 60/48/24V (DC)

48V/60V N	24V N			(L1*)L	(L2*)250V N	115V N
1	2	3	4	5	6	7

MFR 012 Electromechanical Hygostat

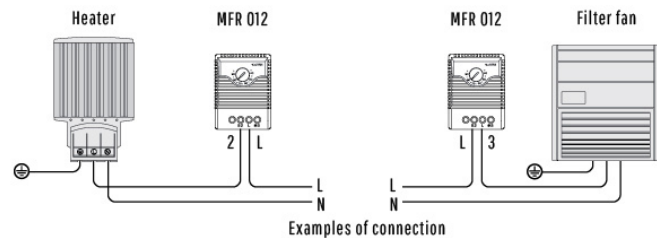
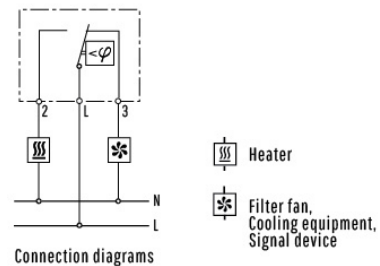
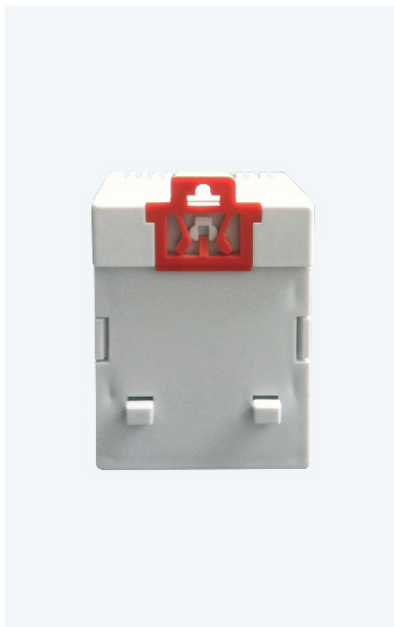
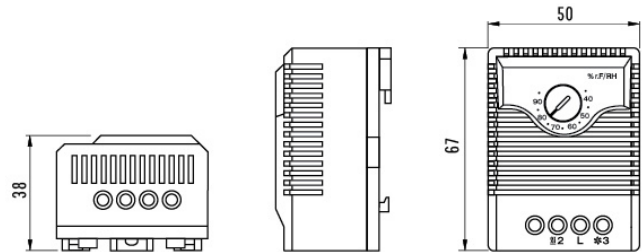
IP20



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

The electromechanical hygostat 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 effectively prevented.

Dimensions



Switching error	4% RH ($\pm 3\%$ tolerance)
Relative humidity range	35 - 95 %
Allow wind speed	15m/sec
Contact type	Changeover contact
Contact resistance	< 10m ohm
Service life	> 50,000 cycles
Mix. Switching capacity	20V AC/DC 100 mA
Max. Switching capacity	250V AC, 5(1)A, DC 20W
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
Installation	35mm DIN Installation guide
Casing	UL94 V-0 Plastic, light gray
Dimensions	67x50x38mm
Weight	about 60g
Fitting position	variable
Operating/Storage temperature	0 - +60°C (+32 - +140°F) / -20 - +80°C (-4 - +176°F)
Protection type	IP20
Model No.	Setting range
MFR 012	35 - 95% RH

MFR 012-2 Mechanical Hygrostat

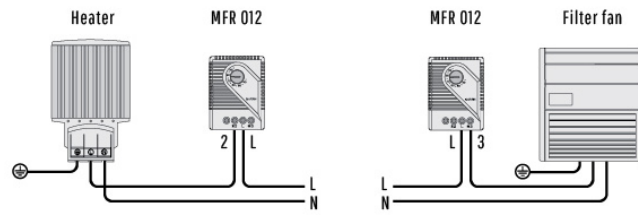
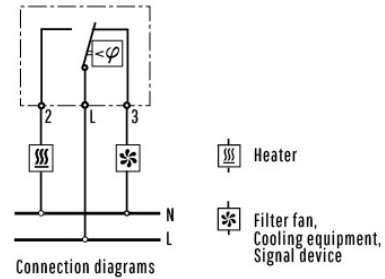
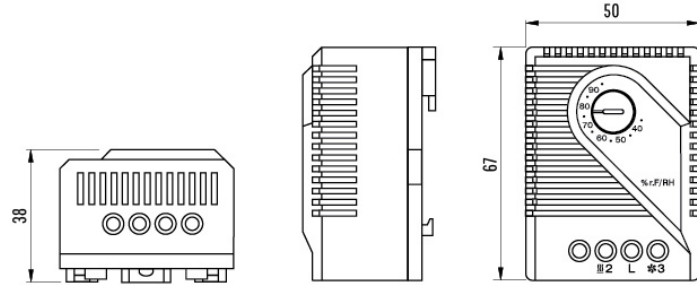
IP20



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

The electromechanical 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 effectively prevented.

Dimensions



Examples of connection

Switch difference*	4% 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	clip for 35mm DIN rail, EN 60715
Casing	plastic according to UL94 V-0, light grey
Dimensions	67 x 50 x 38mm
Weight	approx. 60g
Fitting position	variable
Operating / Storage temperature	0 - +60°C (+32 - +140°F) / -40 - +60°C (-40 - +140°F)
Operating / Storage humidity	max. 90% RH (non-condensing)
Protection type	IP20
Model No.	Setting range
MFR012-2	35 - 95% RH

EFR 012 Electronic Hygrostat

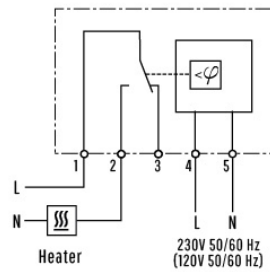
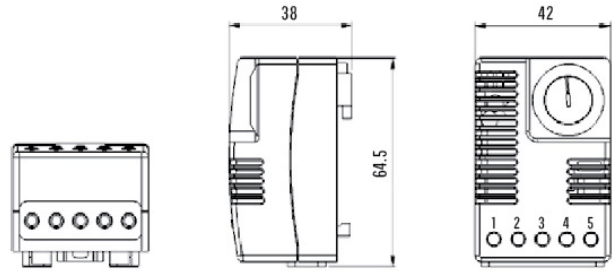
IP20



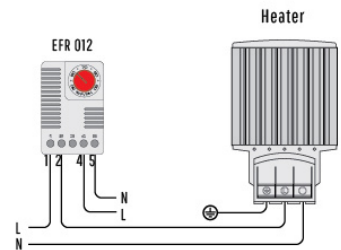
- Temperature and humidity adjustable
- Optical operating display (LED)
- High switching capacity
- Clip fixing

The electronic hygrotherm senses the ambient temperature and relative humidity in an enclosure with electric / electronic components and turns on a heater (or alternatively a fan) at either set point, helping prevent the formation of condensation in the enclosure. The LED integrated in the adjustment knob on the active controller is lit when the connected device is in operation.

Dimensions



Connection diagrams



Examples of connection

Switch difference	5% RH ($\pm 1\%$ RH tolerance) at 25°C/77°F (50% RH)
Reaction time	5 sec.
Contact type	change-over contact (relay)
Service life	> 50,000 cycles
Max. switching capacity (relay output)	240VAC, 8(1.6) A ; 120VAC, 8 (1.6)A; 100WDC at 24VDC
EMC	acc.to EN 55014-1-2, EN 61000-3-2, EN 61000-3-3
Optical indicator	LED
Connection	5-pole terminal, clamping torque 0.5Nm max.; rigid wire 2.5mm ² stranded wire (with wire end ferrule) 1.5mm ²
Mounting	clip for 35mm DIN rail (EN50022)
Casing	UL94 V-0, light grey
Dimensions	64.5 x 42 x 38mm
Weight	approx. 70g
Fitting position	vertical
Operating / Storage temperature	0 - +60°C(+32 - +140°F) / -20 - +70°C(-4 - +158°F)
Operating / Storage humidity	max. 90 % RH (non-condensing)
Protection type	IP20

Model No.	Rated operating voltage, frequency	Setting range	Approvals
01245.0-00	230VAC, 50/60Hz	40 - 90% RH	CE
01246.0-00	230VAC, 50/60Hz	65% RH pre-set	CE
01245.9-00	120VAC, 50/60Hz	40 - 90% RH	CE
01246.9-00	120VAC, 50/60Hz	65% RH pre-set	CE

ETR 011 Electronic Thermostat

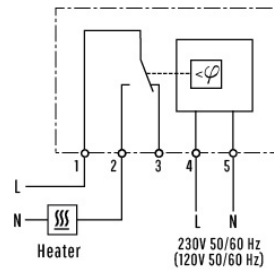
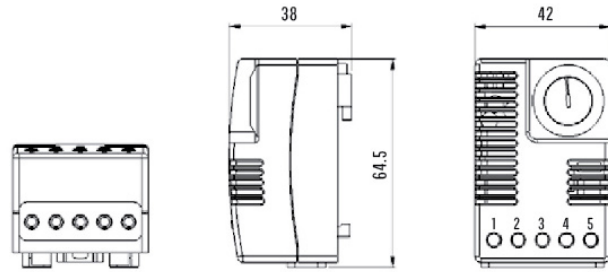
IP20



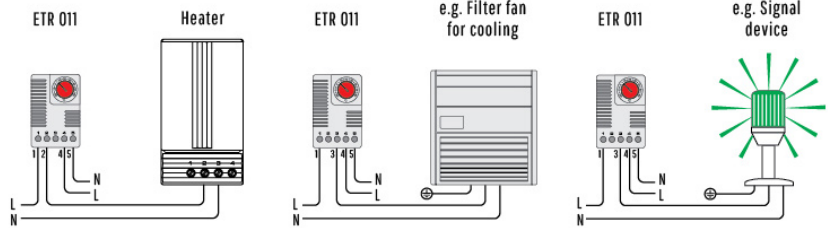
- Large setting range
- Optical operating display (LED)
- Change-over contact
- Small hysteresis
- Clip fixing

The electronic thermostat is used for controlling heating and cooling equipment, filter fans or signal devices. The thermostat registers the surrounding air and can switch both inductive and resistive loads via relay with change-over contact. The LED integrated in the adjustment knob is lit when the NC contact is closed (e.g. when a connected heater is operating).

Dimensions



Connection diagrams



Examples of connection

Switch difference	4K (±1K tolerance) at 20 °C/68 °F		
Sensor element	NTC		
Reaction time	5 sec		
Contact type	change-over contact (relay)		
Service life	> 50,000 cycles		
Max. switching capacity (relay output)	240VAC, 8(1.6)A/120VAC, 8(1.6)A 100WDC at 24VDC		
Max. inrush current	16AAC for 10 sec.		
Optical indicator	LED		
Connection	5-pole terminal, clamping torque 0.5Nm max.:rigid wire 2.5mm ² stranded wire (with wire end ferrule) 1.5mm ²		
Mounting	clip for 35mm DIN rail, EN 60715		
Casing	plastic according to UL94 V-0, light grey		
Dimensions	64.5 x 42 x 38mm		
Weight	approx. 70g		
Fitting position	vertical		
Operating / Storage temperature	-40 - +85°C (-40 - +185°F)		
Operating / Storage humidity	max. 90 % RH (non-condensing)		
Protection type	IP20		

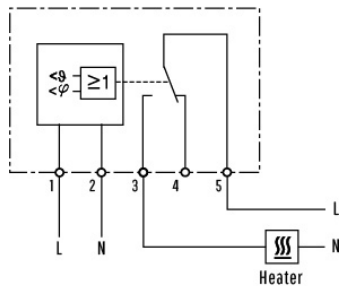
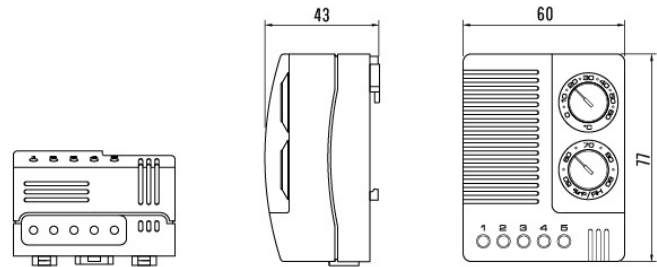
Model No.	Rated operating voltage, frequency	Setting range temperature	Approvals
01131.0-00	230VAC, 50/60Hz	-20 - 60 °C	CE



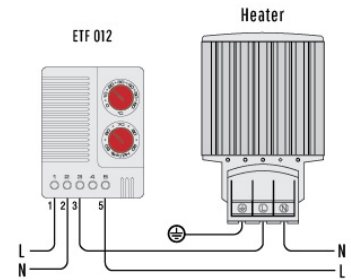
- Temperature and humidity adjustable
- High switching capacity
- Optical operating display (LED)
- Clip fixing

The electronic hygrotherm senses the ambient temperature and relative humidity in an enclosure with electric / electronic components and turns on a heater (or alternatively a fan) at either set point, helping prevent the formation of condensation in the enclosure. The LED integrated in the adjustment knob on the active controller is lit when the connected device is in operation.

Dimensions



Connection diagrams



Examples of connection

Switch difference (temperature)	2K (±1K tolerance) at 25°C/77°F (50% RH)			
Switch difference (humidity)	4% RH (±1% tolerance) at 25°C/77°F (50% RH)			
Reaction time (humidity)	5 sec.			
Contact type	change-over contact (relay)			
Contact resistance	<10mΩ			
Service life	NC: 50,000 cycles, NO: 100,000 cycles			
Max. Switching capacity (relay output)	NC:240VAC,6(1)A NO:240VAC,8(1.6)A, NC:120VAC,6(1)A NO:120VAC,8(1.6)A 24VDC,4A			
EMC	acc.to EN 55014-1-2,EN 61000-3-2,EN 61000-3-3			
Optical indicator	LED			
Connection	5-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	clip for 35mm DIN rail, EN 60715			
Casing	plastic according to UL94 V-0.light grey			
Dimensions	77x60x43mm			
Weight	approx. 0.2kg			
Fitting position	vertical			
Operating / Storage temperature	0-+60°C(+32-+140°F)/-20-+80°C(-4-+176°F)			
Protection type	IP20			

Model No.	Rated operating voltage,frequency	Setting range temperature	Setting range humidity	Approvals
01230.0-00	230VAC, 50/60Hz	0 - +60 °C	50 - 90% RH	CE
01230.9-01	120VAC, 50/60Hz	0 - +60 °C	50 - 90% RH	CE

KTC 3150 Temperature Controller

IP20



Features:

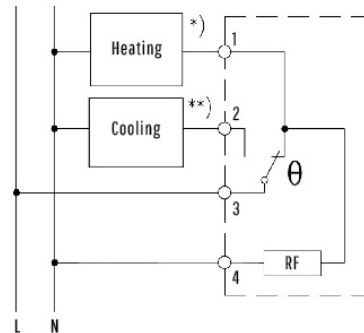
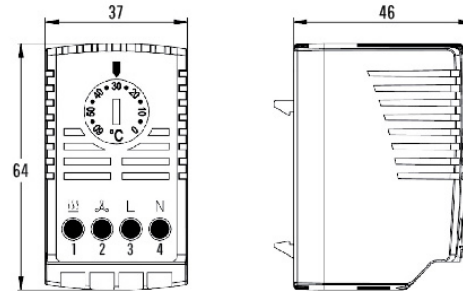
- Easily mounted on 35mm DIN rails with snap on attachment per EN50022

Product Description:

Temperature controller for controlling cabinet heaters, filter fans, slide-in fans, heat exchangers etc.

- Locking adjusting knob grey scale
- Standard thermic reduction

Dimensions



Storage temperature	-20° bis + 80°C
Rated operating voltage	100-250VAC
Heating (opened con.)	10 A (2) DC 30W
Cooling (closed con.)	5 A (2) DC 30W
Switching hysteresis	Approx. 5 K (with thermic reduction approx.1K)
Contact	2 way
Connection	4 screw terminals 2,5 mm ²
Sensor element	Bimetal
Service life time	> 100.000 switching cycles
Temperature control range	0-+60 °C
Surface finish	Plastic light grey UL94V0
Dimensions (WxHxD)	37x64x46mm
Weight	0.06 kg
Protection type	IP20

HG 140 Type Heater

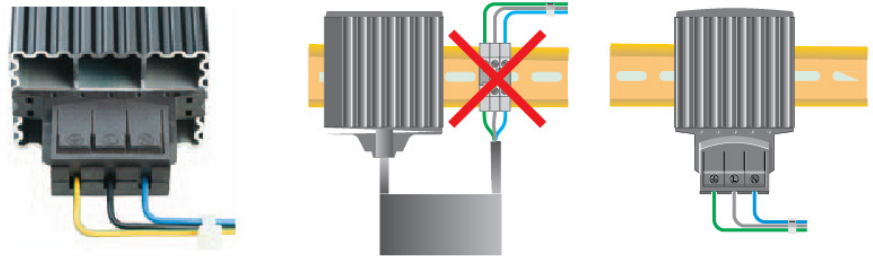
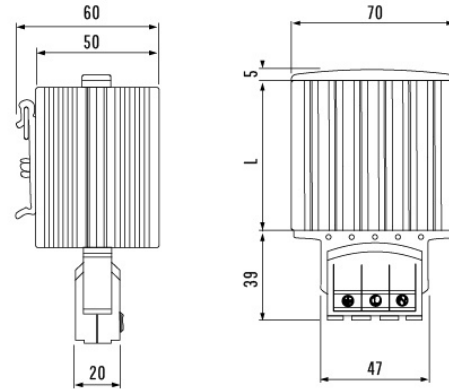
IP20



- 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.

Dimensions



Operating voltage	110-250V 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 - +70°C (-49 - +158°F)
Protection type/Protection class	IP20/I(earthed)
Certificate	CE

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

Model No.	Heating capacity	Inrush current max.	Length (mm)	Weight (approx. kg)
HG 140-15	15W	1.5	70	0.25
HG 140-30	30W	2.5	70	0.25
HG 140-45	45W	3.0	70	0.25
HG 140-60	60W	3.5	70	0.25
HG 140-75	75W	4.0	70	0.25
HG 140-100	100W	4.5	140	0.40
HG 140-150	150W	9.0	140	0.40

LK 140 Type Heater

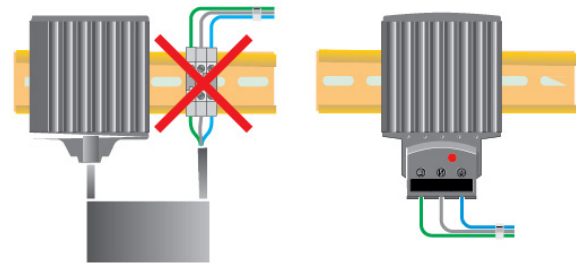
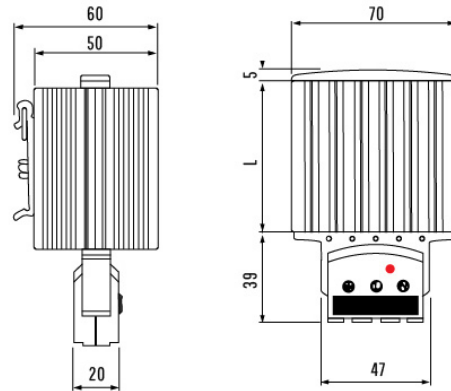
IP20



- 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.

Dimensions



Operating voltage	110-250V 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 - +70°C (-49 - +158°F)
Protection type/Protection class	IP20/I(earthed)
Certificate	CE

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

Model No.	Heating capacity	Inrush current max.	Length (mm)	Weight (approx. kg)
LK 140-15	15W	1.5	70	0.25
LK 140-30	30W	2.5	70	0.25
LK 140-45	45W	3.0	70	0.25
LK 140-60	60W	3.5	70	0.25
LK 140-75	75W	4.0	70	0.25
LK 140-100	100W	4.5	140	0.40
LK 140-150	150W	9.0	140	0.40

HGL 046 Type Compact Fan Heater

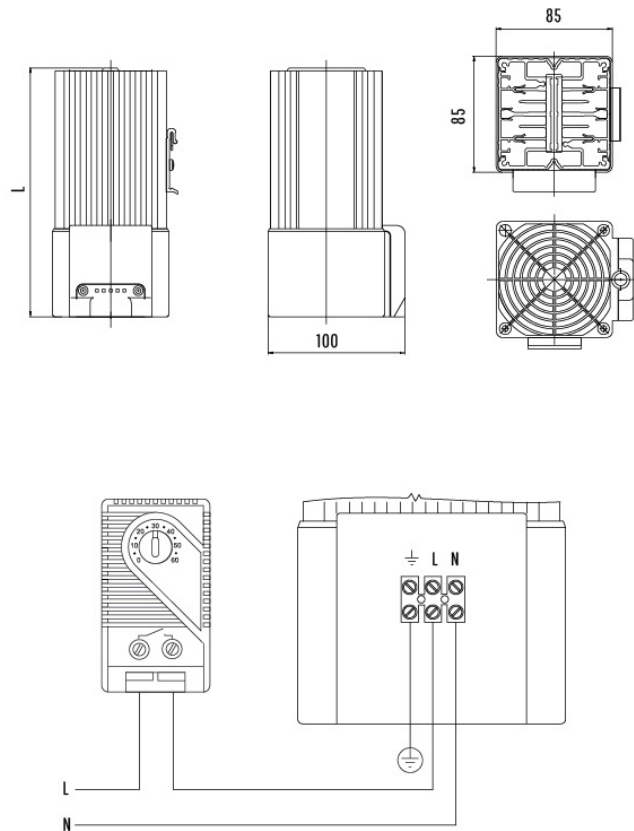
IP20



- 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.

Dimensions



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	Airflow, free flow AC: 45m³/h (50HZ) or 54m³/h (60Hz) DC: 54m³/h
Mean life	50 000h at 25 °C
Connection	internal connection terminal 1.5mm² 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 - +70 °C (-49 - +158°F)
Protection type/Protection class	IP20 / I (earthed)

Model No.	Operating voltage	Heating capacity	Width/Height/Depth (mm)	Weight (approx.)
HGL046-250	230VAC, 50/60HZ	250W	85x183x85mm	1.10kg
HGL046-400	230VAC, 50/60HZ	400W	85x216x85mm	1.40kg

HV/HVL 031 Heater

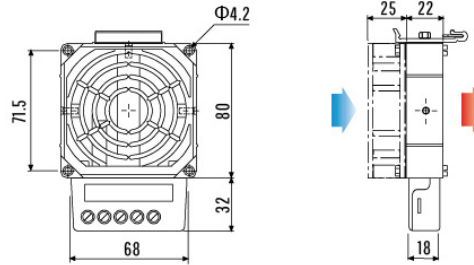
IP20



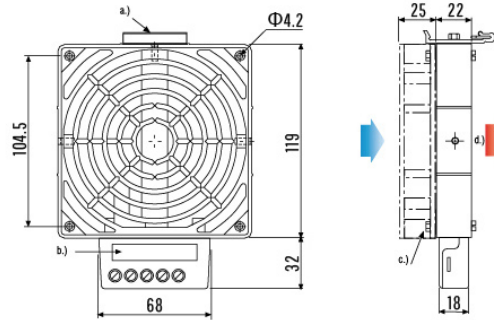
- Compact / Flat design
- Temperature safety cut-out
- High air through-flow
- Clip fixing

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).

Dimensions



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



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 ² ,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 - +70°C/(-49 - +158°F)
Protection type/Protection class	IP20/1(earthed)
HVL 031	
Mean life	50,000h at 25°C/(77°F)
Connection(axial fan)	2-pole screw connector 2.5mm ² (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 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

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 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

LK143 Series Compact Fan Heater

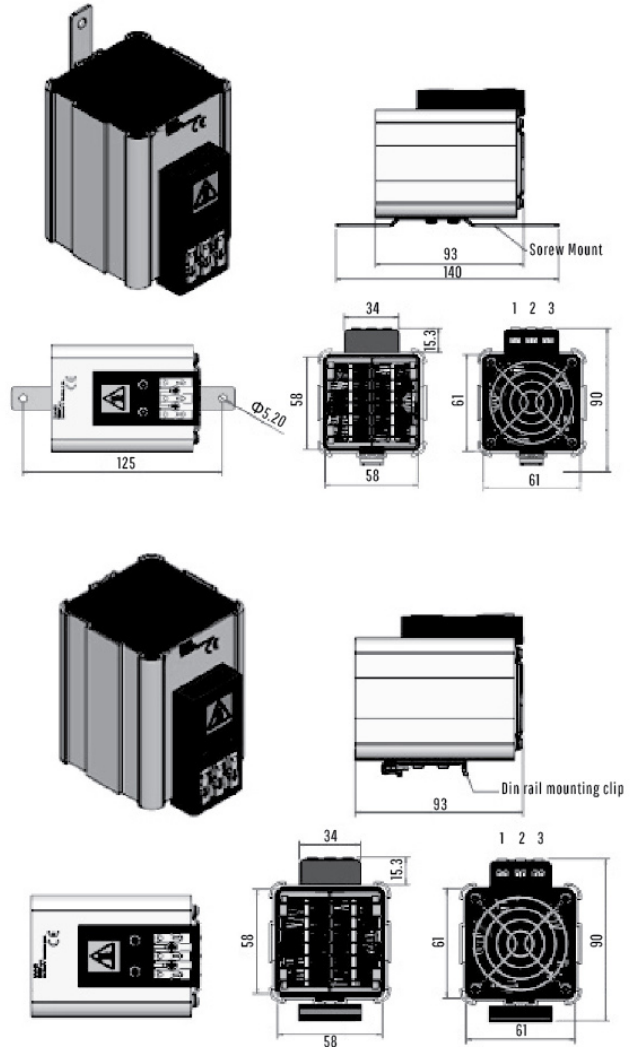
150-500W



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

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

Dimensions



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%)	300W	400W	500W
Input Voltage	220-240V AC			
Rated frequency	50/60Hz			
Max. body temperature (25 °C Ambient)	74 °C			
Connection (Cage Type)	Push In			
Fan Lifetime (MTTF)	329,447h (30 °C 65%RH)			
Operating & Storage Temperature	-40- +70 °C (RH < 20%)			
Air Flow Rate (zero static pressure)	30m ³ /hr (18 CFM)			
Weight	300g			
Ingress Protection (EN60529)	IP20			
Electrical Protection	SK II			
Recommended Fuse (time Delay)	TBD	6.3A	6.3A	8A
Mounting	Screw Mount	Aluminum DIN Clip 35mm EN50022 Compliant		

KHL 120 Fan heaters

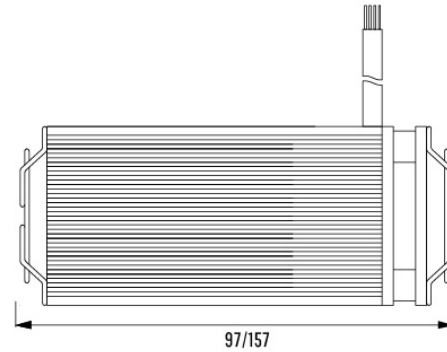
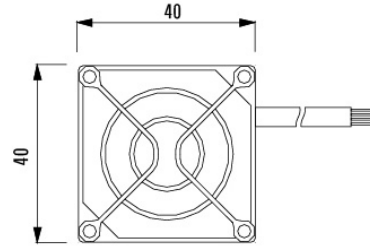
75-300W



- 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.

Dimensions



Type number		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	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 h at 25 °C (77°F), air flow rate 11m ³ /h, free flow				
		air flow rate 11m ³ /h, free flow				air flow rate 33m ³ /h, free flow
Electrical connections	-	Silicon cable, 4x0.5m ³ , 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 (H/W/D)	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)
Approvals	-	CE				

*at 20 °C (68°F) ambient temperature

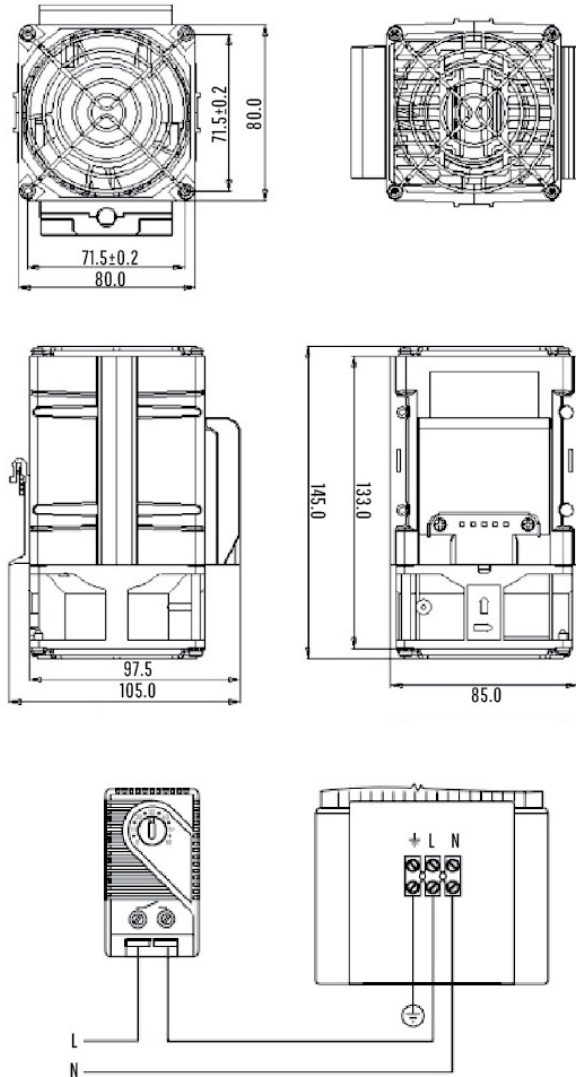
KHP 300(B) Series Space-saving Heater

300W



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

Dimensions



KHP300	With Fan	
Heating element	PTC	
Input voltage, frequency, power	AC 230V, 50/60HZ, 300-350W	
Insulating property	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 - +70 °C (-49 - +158 °F)	
Protection type/Protection class	IP20/I(earthed)	
Mean life	50,000h at 25 °C (77°F)	
Model No.	Rated operating voltage, frequency	Heating capacity
30005.0-00	230VAC, 50/60Hz	300W

KH150-650/800-1500 Series Fan heaters

150-1500W



150-650W

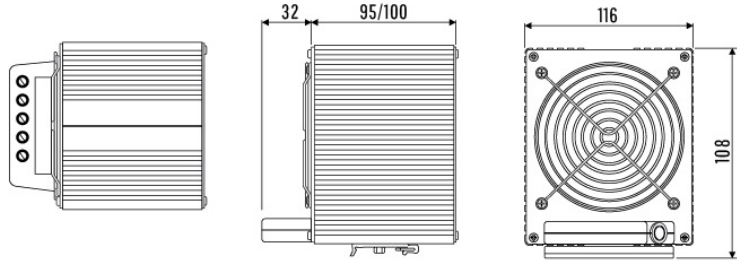


800-1500W

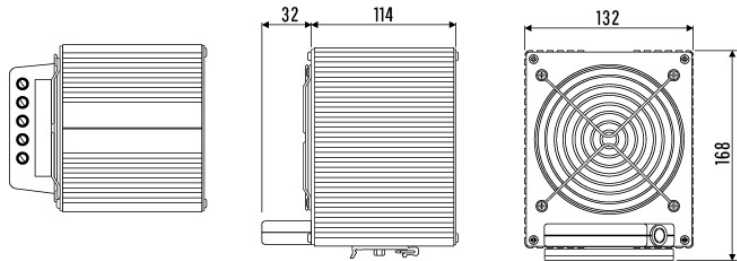
- Compact Design
- Clip fixing
- Temperature safety cut-out
- Long service life
- Maintenance free

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.

Dimensions



150-650W



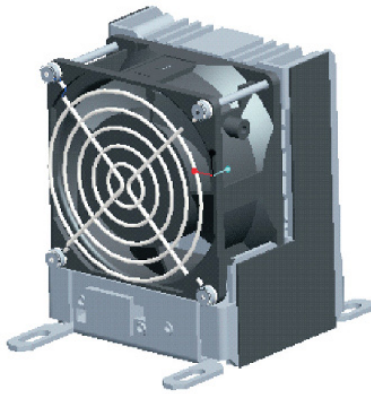
800-1500W

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 ³ /h, DC: 54m ² /h, service life 50.000h at 25 °C (77°F)
Connection	5-pole screw connector 2.5mm ²
Mounting	clip for 35mm DIN rail, EN 50022
Fitting position	vertical
Operating temperature	-25 - +70 °C (-13 - +158°F)
Storage temperature	-25 - +70 °C (-13 - +158°F)
Protection class	IP20 / I(earthed)

Model No.	Model No.	Heating capacity	Dimensions	Weight
230vac,50/60Hz	115VAC,50/60Hz			
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
800.0-00	800.9-00	800W	168*132*146mm	1.5kg
1000.0-00	1000.9-00	1000W	168*132*146mm	1.5kg
1200.0-00	1200.9-00	1200W	168*132*146mm	1.5kg
1500.0-00	1500.9-00	1500W	168*132*146mm	1.5kg

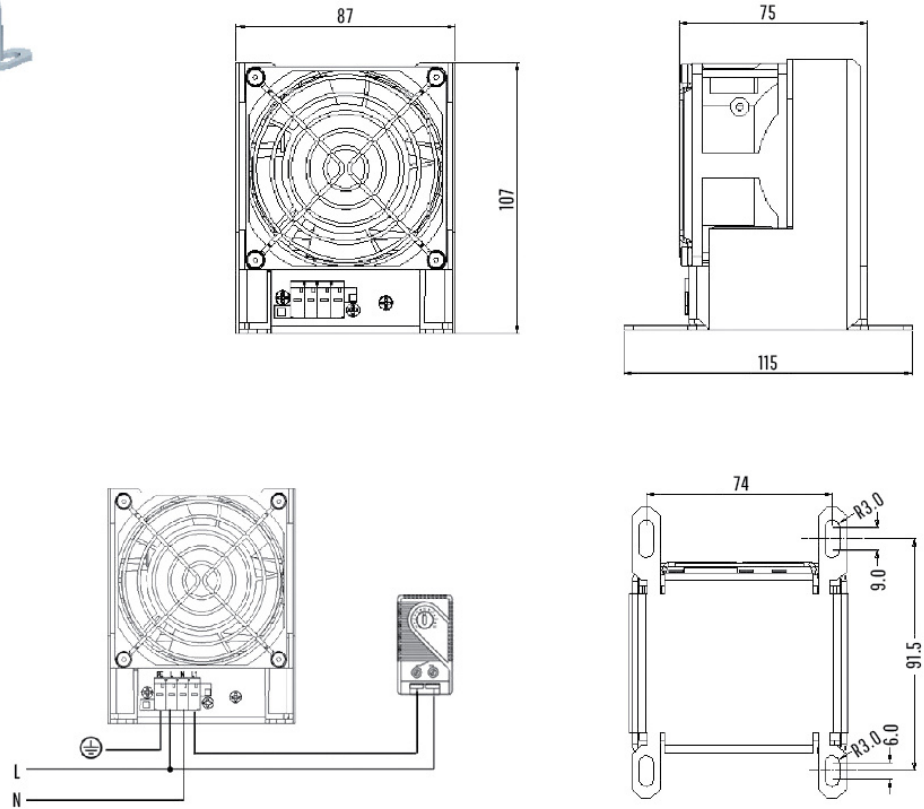
LKHB 300 Fan heaters

300W



The product is composed of high-quality nickel-chromium alloy heat pipe, die-casting aluminum structure heat sink, high-performance axial fan, and temperature control switch. The electric heat pipe is placed in the center of the radiator body. The temperature control switch is near the electric heat pipe and hidden in the radiator body. The axial flow fan is close to the loose body.

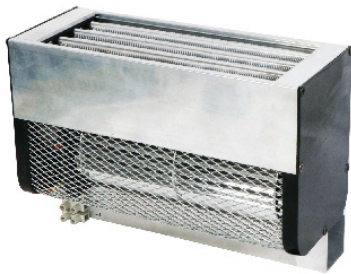
Dimensions



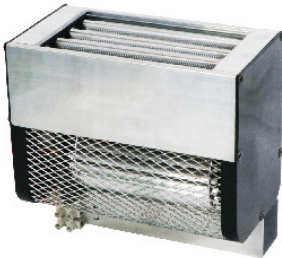
LKHB 300	With fan
Heating element	High performance core
Input voltage, frequency, power	AC 230V, 50/60HZ, 300W
Insulating property	2000V/0.5mA/5s
Temperature safety cut-out	to protect against overheating in case of fan failure
heating body	Die-cast aluminium(glass bead blasted)
speed	2700rpm
Mounting	Use M6 screws for fixation
connection type	Plug terminal connection
Connect terminal press line range	Single Line: 0.08-4.0mm ² (AWG 28-12)
Fitting position	Vertical
Operating/storage temperature	-40 - +70 °C (-49 - +158°F)
Protection class	IP20/1 (earthed)
Mean life	50,000h at 25 °C (77°F)
Cooling mode	Automatic cooling

LKB 2000/2800 Fan heaters

2000W-2800W



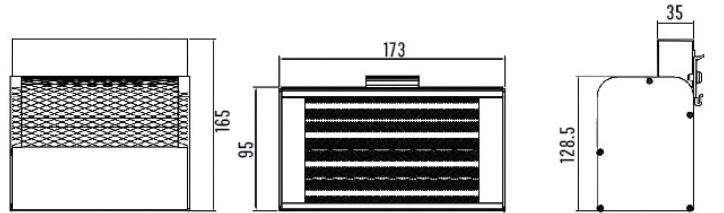
LKB-2000W



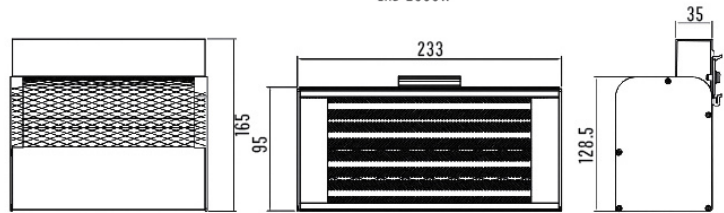
LKB-2800W

- High power, high efficiency heating.
- Thickened aluminum body for a stronger.
- Temperature safe disconnect function
- Ceramic PTC heating element.
- Quick installation, guide rail mounting.
- Protection degree: IP20
- Product color: silver
- Power : 2000-2800W

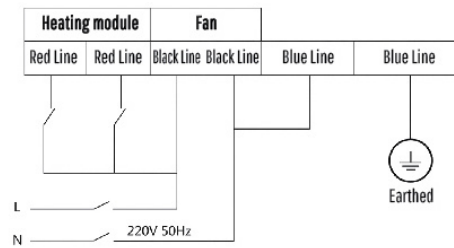
Dimensions



LKB-2000W



LKB-2800W



Electrical wiring diagram

Model	LKB-2000W	LKB-2800W
Voltage (V)	120-240	120-240
Frequency (Hz)	50/60	50/60
Power (W)	2000	2800
Air flow (m ³ /h)	240	330
Noise (dB)	30	30
Size (mm)	175x95x165	233x95x165
Weight (KG)	1.4	1.8
Temperature range (°C)	-45-+85	-45-+85

KCR 030 Compact Heater

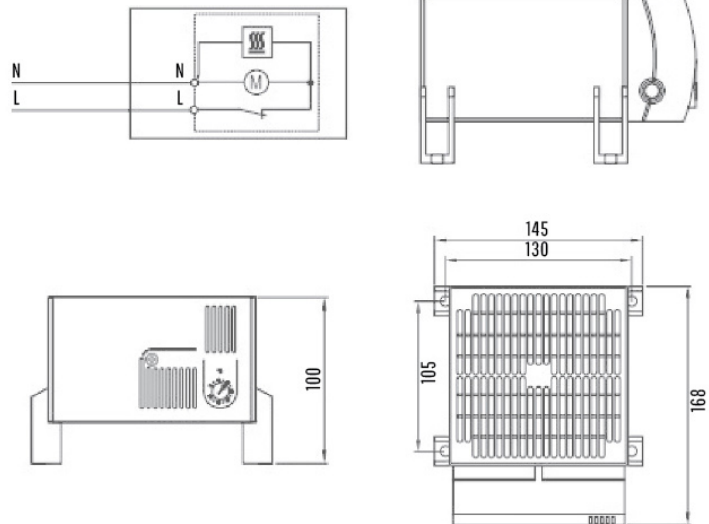
250W-1000W



- 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 CR 130 is recommended.

Dimensions



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 ³ /h, free flow
Connection	2-pole max. 2.5mm ² , 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 - +70 °C (-49 - +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	Rated operating voltage, frequency	Heating capacity	Setting range
KCR03047.0-00	Fan Heater with thermostat	230VAC, 50/60Hz	250W	0 - 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 - 140°F
KCR03048.0-00	Fan Heater with hygrostat	230VAC, 50/60Hz	400W	0 - 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 - 140°F
KCR03049.0-00	Fan Heater with thermostat	230VAC, 50/60Hz	600W	0 - 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 - 140°F
KCR03050.0-00	Fan Heater with hygrostat	230VAC, 50/60Hz	800W	0 - 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 - 140°F
KCR03051.0-00	Fan Heater with thermostat	230VAC, 50/60Hz	900W	0 - 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 - 140°F
KCR03052.0-00	Fan Heater with hygrostat	230VAC, 50/60Hz	1000W	0 - 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 - 140°F

*according to UL 499 in combination with UL 508A

KCS 030 Compact Heater

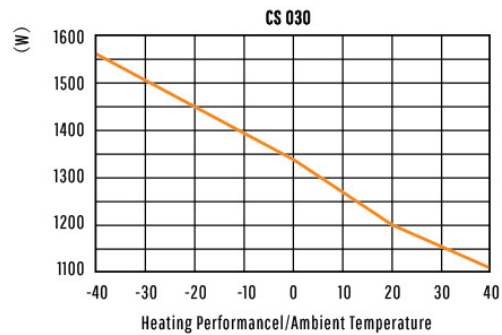
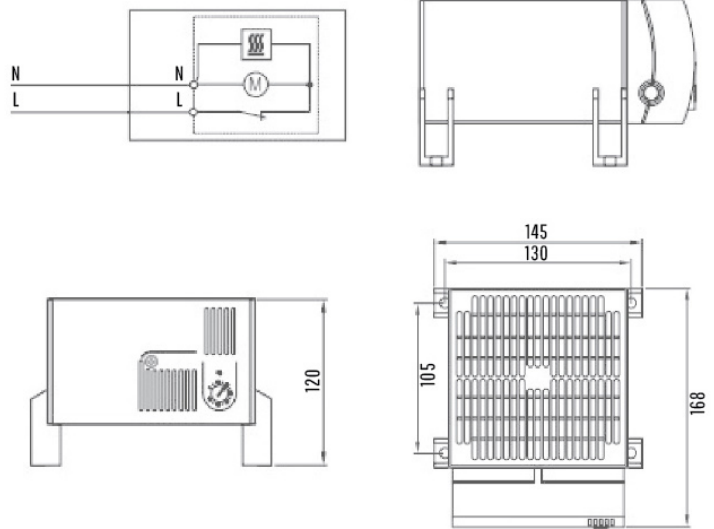
1200W



- 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.

Dimensions



Heating element	high performance cartridge
Temperature safety cut-out	to protect against overheating in case of fan failure. automatic reset
Mean life	60,000h at 20 °C (68°F)
Heater body	extruded alumin profile
Axial fan, ball bearing	airflow 160 m³/h, free flow
Connection	2-pole max. 2.5mm², 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 - +70 °C (-49 - +158°F)
Protection type/Production class	IP20 / II (double insulated)

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

DA 084 Pressure Compensation Device

IP55

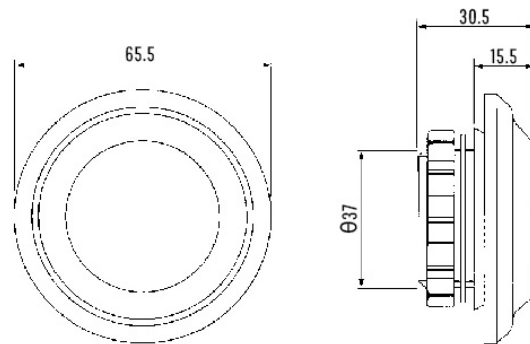


- High degree of protection
- Easy to install

It has become more and more important to provide a protected enclosure environment for valuable and crucial electrical and electronic components. In a tightly closed enclosure, pressure differentials can occur during extreme temperature variations. The specially designed pressure compensation device DA 084 permits a controlled change in pressure and avoids the entering of dust and water. The pressure compensation device is suitable for the use in enclosures and housings in accordance with DIN EN 62208.

Make cut-out ϕ 37mm 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. Installation

Dimensions



Mounting	PG 29 thread with union nut
Material	plastic according to UL94 V-0
Air interface	approx. 7cm ²
Dimensions	Φ 65.5x30.5mm
Fitting position	Vertical installation
Operating / Storage temperature	-45 - +70 °C (-49 - +158°F)

Art. No.	Protection type	1 packing unit	Weight (approx.)
08400.0-04	IP55	2	62g (31g/piece)

DA 284 Pressure Compensation Device

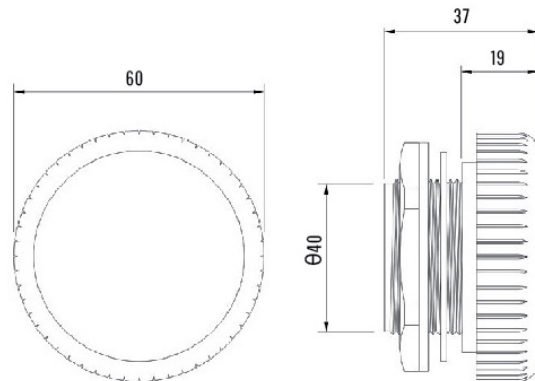
IP66



- High degree of protection
- Waterproof membrane
- Easy to install

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. Make cut-out $\varnothing 40.5 \pm 0.5\text{mm}$ 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.

Dimensions



Mounting	thread M40 x 1.5 with nut
Torque	5Nm (max. 10Nm)
Depth in enclosure	approx. 16mm
Sealing	sealing gasket NBR
Filter	waterproof membrane
Air permeability	1200l/h at a pressure difference of min. 70mbar
Dimensions	$\varnothing 60 \times 37\text{mm}$
Fitting position	variable
Operating/Storage temperature	-35 - +70°C (-31 - +158°F)

Art. No.	Protection type	1 packing unit	Weight (approx.)
28400.0-00	IP66	2	90g (45g/piece)



Multiplane fan



Multiplane fan system expert

LINKWELL is the system supplier, with energy-saving, environmental protection, efficient product performance, to meet the requirements of multiplane fan system.

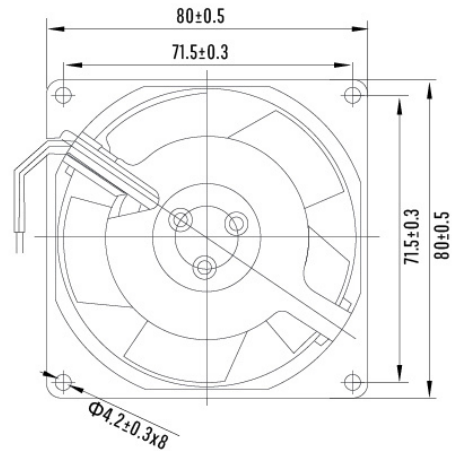
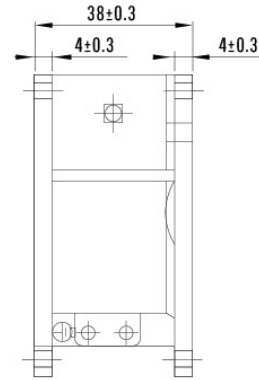


F2E 80S/B Multiplane fan

80x80x38mm



Dimensions



Motor Structure	Shaded pole motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings. (single sleeve bearing)
Allowable Ambient Temperature Range	(under unconcretionary condition) -20~+65°C(ball bearing) , -10~+45°C.(Sleeve bearing)
Insulation	B Class
Protection Grade	IP34

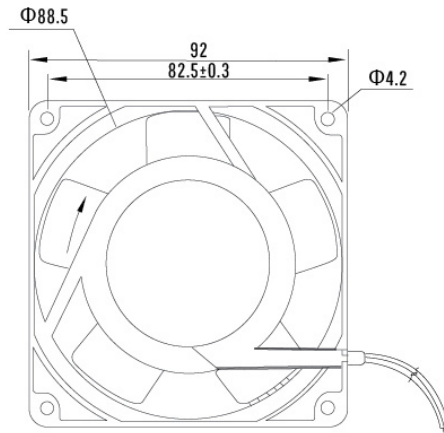
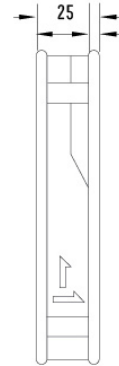
Type	F2E-80S/B-230	F2E-80S/B-115
Bearing	Sleeve/Ball	Sleeve/Ball
Rated operating voltage(V)	220/230	110/115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.06-0.07	0.13-0.15
Rated Power(w)	15-12	15-12
Speed(RPM)	2600-3000	2600-3000
Wind volume(m³/h)	45-55	45-55
Noise dB(A)	29-35	29-35
Weight(g)	335g	335g

F2E 92S/B Multiplane fan

92x92x25mm



Dimensions



Motor Structure	Shaded pole motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings.(single sleeve bearing)
Allowable Ambient Temperature Range	(under unconcretionary condition) -20-+65°C(ball bearing) , -10-+45°C.(Sleeve bearing)
Insulation	B Class
Protection Grade	IP34

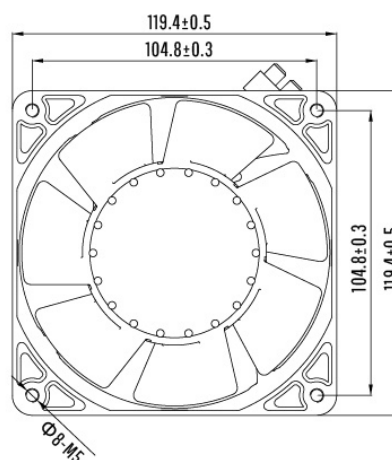
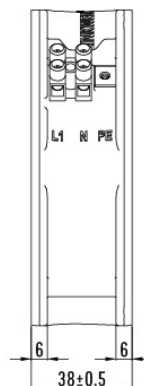
Type	F2E-92S/B-230	F2E-92S/B-115
Bearing	Sleeve/Ball	Sleeve/Ball
Rated operating voltage(V)	220/230	110/115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.07-0.08	0.12-0.14
Rated Power(w)	13.2-15.4	13.2-15.4
Speed(RPM)	2200-2600	2200-2600
Wind volume(m ³ /h)	60-68	60-68
Noise dB(A)	29-35	29-35
Weight(g)	255g	255g

F2E 120S/B Multiplane fan

120x120x38mm



Dimensions



Motor Structure	Shaded pole motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings. (single sleeve bearing)
Allowable Ambient Temperature Range	(under unconcretionary condition) -20-+65°C(ball bearing) , -10-+45°C.(Sleeve bearing)
Insulation	B Class
Protection Grade	IP34

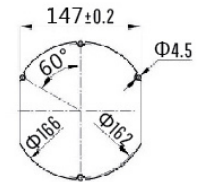
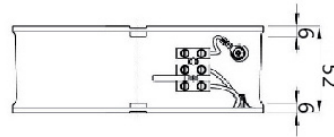
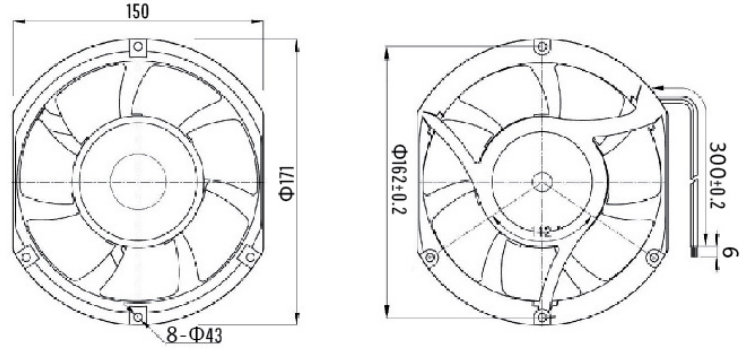
Type	F2E-120S/B-230	F2E-120S/B-115
Bearing	Sleeve/Ball	Sleeve/Ball
Rated operating voltage(V)	220-230	110-115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.12-0.10	0.24-0.20
Rated Power(w)	19-14	18-15
Speed(RPM)	2500-2700	2500-2800
Wind volume(m³/h)	145-160	145-170
Noise dB(A)	34-37	34-37
Weight(g)	530g	510g

F2E 150S/B Multiplane fan

Φ 150×51mm



Dimensions



安装开口尺寸图

Motor Structure	Shaded pole motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings. (single sleeve bearing)
Allowable Ambient Temperature Range	(under unconcretionary condition) -25-+65°C(ball bearing) , -25-+65°C.(Sleeve bearing)
Insulation	B Class
Protection Grade	IP34

Type	F2E-150S/B-230	F2E-150S/B-115
Bearing	Sleeve/Ball	Sleeve/Ball
Rated operating voltage(V)	220-230	110-115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.19-0.17	0.48-0.46
Rated Power(w)	38-36	41-38
Speed(RPM)	2500-2800	2500-2800
Wind volume(m ³ /h)	402-460	402-460m
Noise dB(A)	50	50
Weight(g)	900g	880g

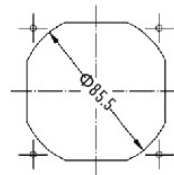
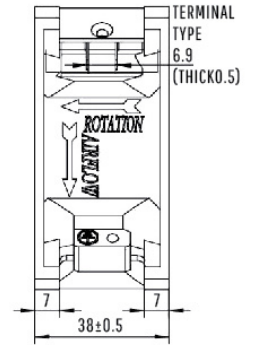
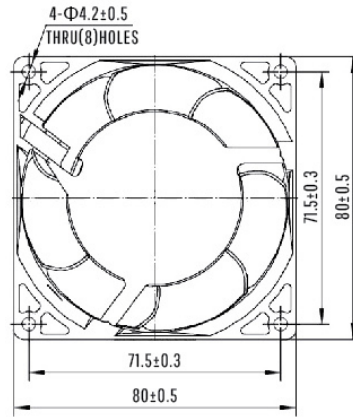
FL 8038 Multiplane fan

80x80x38mm

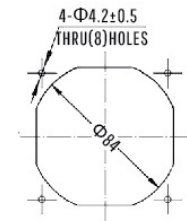


Metal Blades

Dimensions



Inlet



Outlet

Size	80x80x38mm
Airflow	42-54m ³ /hr 25-33CFM
Weight	403g
Noise	28-36dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+105°C

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL8038HA ₁ B-7P	Ball	100-125	50/60	0.18	17-14	2700-3100	30-36	44-54	28-33	1	/
FL8038HA ₂ B-7P		200-240	50/60	0.1	17-14	2700-3100	30-36	44-54	28-33	1	/
FL8038MA ₁ B-7P		100-125	50/60	0.12	11	2300-2700	28-30	42-49	25-29	1	/
FL8038MA ₂ B-7P		200-240	50/60	0.07	11	2300-2700	28-30	42-49	25-29	1	/

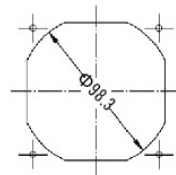
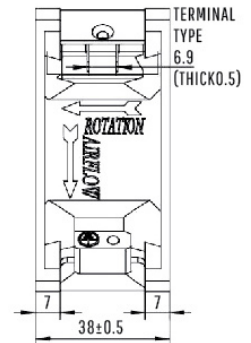
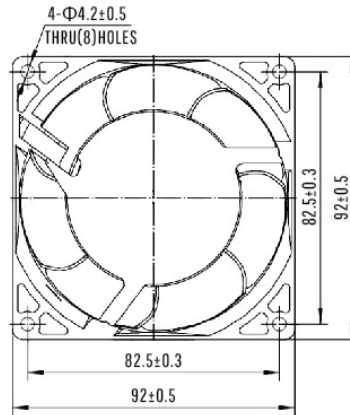
FL 9238 Multiplane fan

92x92x38mm

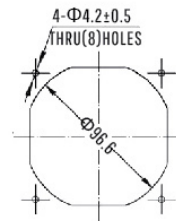


Metal Blades

Dimensions



Inlet



Outlet

Size	92x92x38mm
Airflow	71-91m ³ /hr 42-54CFM
Weight	480g
Noise	35-40dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+105 °C

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL9238HA ₁ B-7P	Ball	100-125	50/60	0.18	17-14	2600-3000	38-40	78-91	46-54	1	/
FL9238HA ₂ B-7P		200-240	50/60	0.1	17-14	2600-3000	38-40	78-91	46-54	1	/
FL9238MA ₁ B-7P		100-125	50/60	0.12	11	2300-2700	35-40	71-85	42-50	1	/
FL9238MA ₂ B-7P		200-240	50/60	0.07	11	2300-2700	35-40	71-85	42-50	1	/

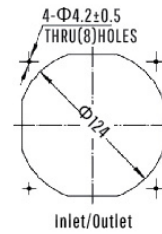
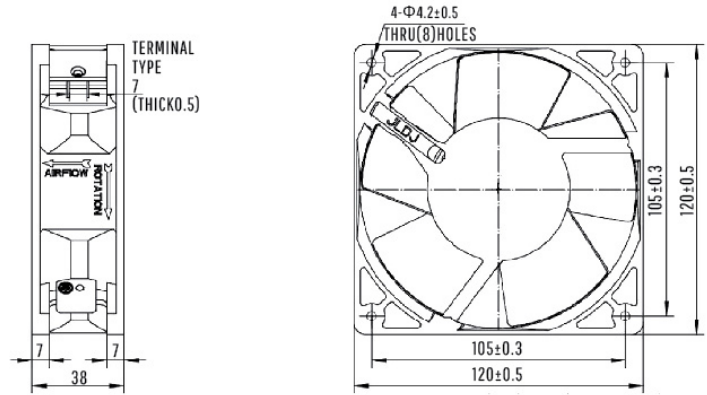
FL 12038 Multiplane fan

120x120x38mm



Metal Blades

Dimensions



Size	120x120x38mm
Airflow	134-204m ³ /hr 79-120CFM
Weight	600g
Noise	39-50dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+105°C

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL12038HA ₁ B	Ball	100-125	50/60	0.21	21	2600-3000	46-50	180-204	106-120	1	/
FL12038HA ₂ B		200-240	50/60	0.11	19	2600-3000	46-50	180-204	106-120	1	/
FL12038MA ₁ B		100-125	50/60	0.21	17	2000-2200	39-41	134-149	79-87	1	/
FL12038MA ₂ B		200-240	50/60	0.10	16	2000-2200	39-41	134-149	79-87	1	/

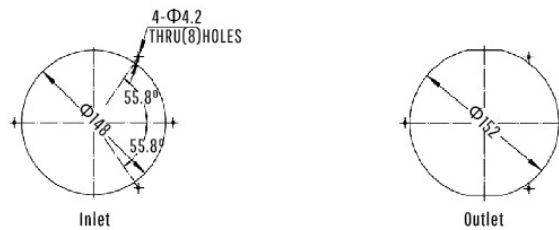
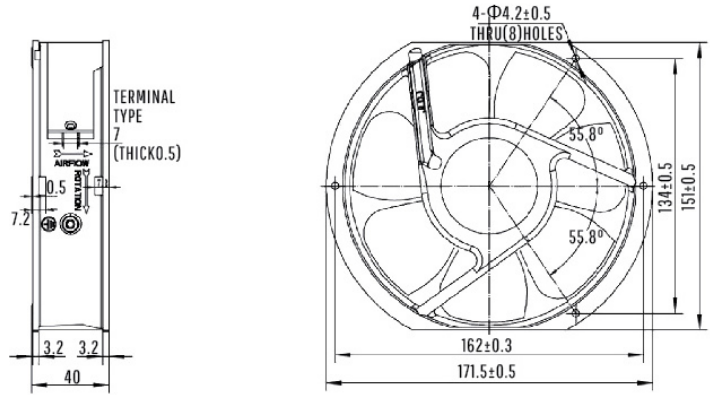
FL 17040 Multiplane fan

172x150x38mm



Metal Blades

Dimensions



Size	172x150x38mm
Airflow	348-390m ³ /hr 205-230CFM
Weight	860g
Noise	56-59dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10-+105 °C

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL17040HA,B	Ball	100-125	50/60	0.2-0.2	24-24	2700-3200	56-59	348-390	205-230	1	3.3uf/250v
FL17040HA ₂ ,B		200-240	50/60	0.1-0.1	24-24	2700-3200	56-59	348-390	205-230	1	1uf/630v

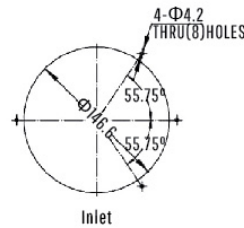
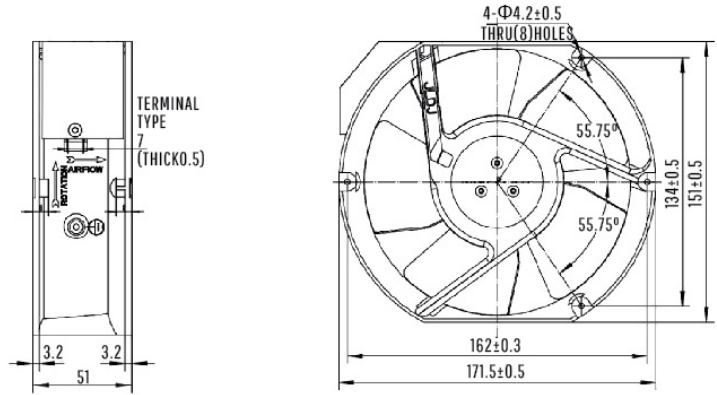
FL 17050 Multiplane fan

172x150x51mm



Metal Blades

Dimensions



Size	172x150x51mm
Airflow	210-390m ³ /hr 205-230CFM
Weight	900g
Noise	56-59dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+105°C

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL17050HA ₁ B	Ball	100-125	50/60	0.38-0.34	37-35	2700-3200	54-57	357-419	210-247	1	3.3uf/250v
FL17050HA ₂ B		200-240	50/60	0.13-0.15	29-33	2700-3200	54-57	357-419	210-247	1	1uf/630v

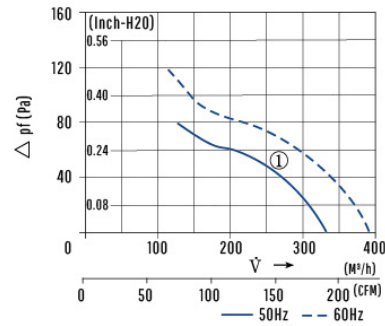
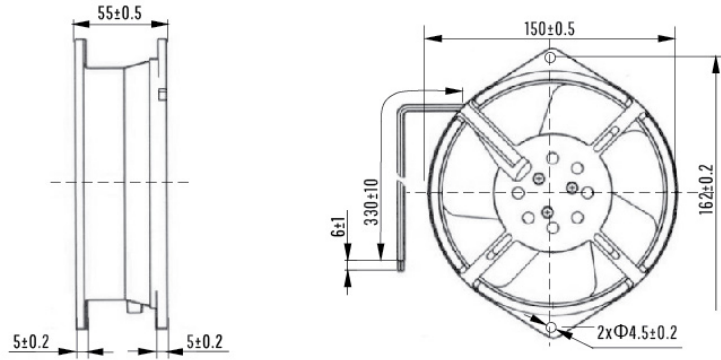
F2E 162B Multiplane fan

172×162×51mm



Metal Blades

Dimensions



Motor Structure	Shaded pole motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings. (single sleeve bearing)
Allowable Ambient Temperature Range	-25~+80 °C
Insulation	F
Protection degree	IP44
Material	Aluminum alloy molding, surface silver treatment, metal plate forming, welding on motor rotor.
Impeller	Black anti-corrosion treatment, metal blades.
Bearing Type	B: Ball
Power Connection	Terminal connection

Type	F2E-162B-230	F2E-162B-115
Bearing	Ball	Ball
Rated operating voltage(V)	220-230	110-115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.20-0.26	0.42-0.51
Rated Power(w)	53-43	40-35
Speed(RPM)	2700-3000	2700-3000
Wind volume(m³/h)	325-380	325-380
Noise dB(A)	48-52	48-52
Weight(g)	1100g	1100g

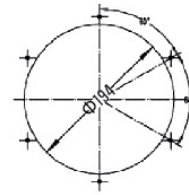
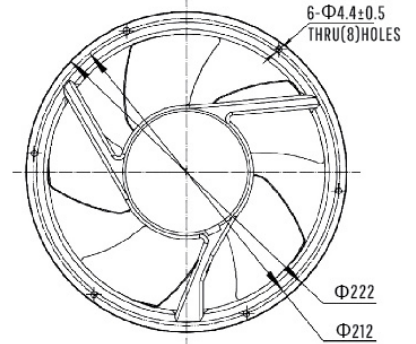
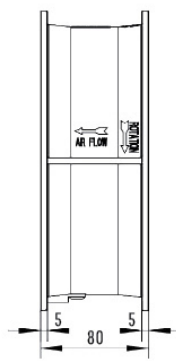
FL 22080 Multiplane fan

Φ 220×80mm



Metal Blades

Dimensions



Size	Φ 220x80mm
Airflow	849-925m ³ /hr 500-545CFM
Weight	2000g
Noise	59-61dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+105℃

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL22080HA ₁ B-C	Ball	100/125	50/60	0.58/0.65	67/77	2600/2800	59/61	849/925	500/545	1	4.0uf/250v
FL22080HA ₂ B-C		200/240	50/60	0.28/0.35	62/80	2600/2800	59/61	849/925	500/545	1	2uf/630v
FL22080HA ₃ B		380/420	50/60	0.25	65	2600/2800	59/61	849/925	500/545	3	/
FL22080HA ₆ B-C		380/420	50/60	0.25	65	2600/2800	59/61	849/925	500/545	1	1uf/630v

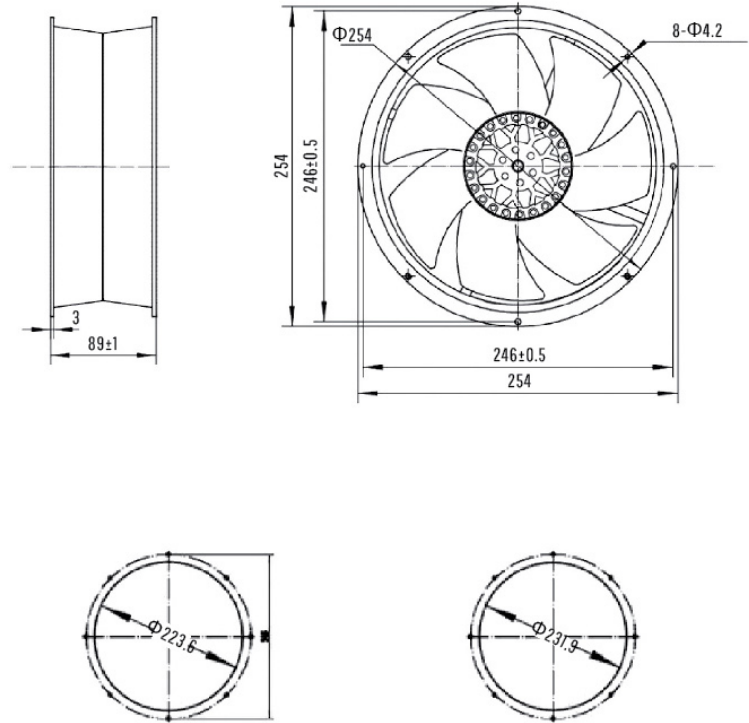
FL 25489 Multiplane fan

Φ 254×89mm



Metal Blades

Dimensions



Size	Φ 254x89mm
Airflow	1392-1528m ³ /hr 800-900CFM
Weight	2600g
Noise	59-61dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+105℃

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL25489HA ₁ B-C-7P	Ball	100/125	50/60	0.98/1.15	67/77	2700/3100	59/61	1392/1528	500/545	1	4.0uf/250v
FL25489HA ₂ B-C-7P		200/240	50/60	0.5/0.65	62/80	2700/3100	59/61	1392/1528	500/545	1	2.2uf/400v
FL25489HA ₃ B-7P		380/420	50/60	0.25	65	2700/3100	59/61	1392/1528	500/545	3	/
FL25489HA ₆ B-C-7P		380/420	50/60	0.25	65	2700/3100	59/61	1392/1528	500/545	1	1uf/630v

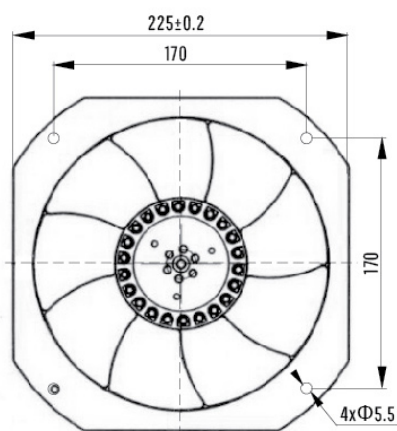
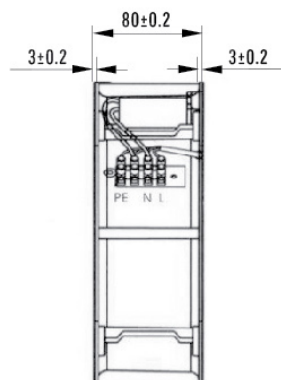
F2E 260B Multiplane fan

260×225×80mm



Metal Blades

Dimensions



Motor Structure	Cage type structure motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings. (single sleeve bearing)
Allowable Ambient Temperature Range	(under unconcretionary condition) -20-+65°C(ball bearing) , -10-+45°C.(Sleeve bearing)
Insulation	B Class
Protection Grade	IP34

Type	F2E-260B-230	F2E-260B-115
Bearing	Ball	Ball
Rated operating voltage(V)	220-230	110-115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.34-0.29	0.63-0.61
Rated Power(w)	63-79	61-71
Speed(RPM)	2450-2700	2500-2750
Wind volume(m³/h)	915-1010	925-1030
Noise dB(A)	59-61	59-61
Weight(g)	2200g	2200g

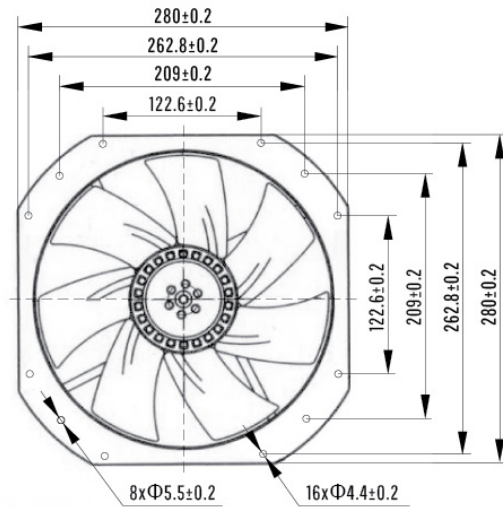
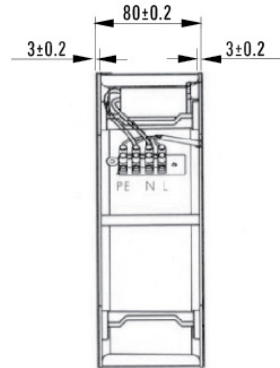
F2E 320B Multiplane fan

320×280×80mm



Metal Blades

Dimensions



Motor Structure	Cage type structure motor.
Safety	Impedance Protected
Operation System	Dual high Precision ball bearings. (single sleeve bearing)
Allowable Ambient Temperature Range	(under unconcretionary condition) -20~+65°C(ball bearing) , -10~+45°C.(Sleeve bearing)
Insulation	B Class
Protection Grade	IP34

Type	F2E-320B-230	F2E-320B-115
Bearing	Ball	Ball
Rated operating voltage(V)	220-230	110-115
Rated frequency(Hz)	50/60	50/60
Rated current max.(A)	0.46-0.60	0.95-1.20
Rated Power(w)	140-100	140-100
Speed(RPM)	2500-2650	2480-2600
Wind volume(m ³ /h)	1800-1950	1800-1950
Noise dB(A)	68-70	68-70
Weight(g)	2900g	2900g

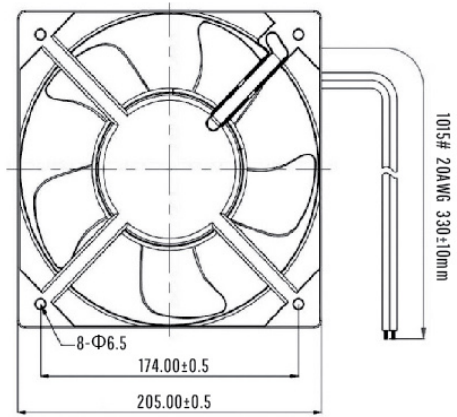
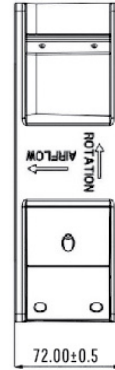
FL 20572 Multiplane fan

205x205x72mm



Metal Blades

Dimensions



Size	205x205x72mm
Airflow	905-1248m ³ /hr 533-735CFM
Weight	2100g
Noise	61-68dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+65℃

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL20572HA1B-C	Ball	100-125	50/60	0.8-0.9	88-98	2850-3250	61-68	905-1248	533-735	1	10uf/250v
FL20572HA2B-C		200-240	50/60	0.35-0.45	68-78	2850-3250	61-68	905-1248	533-735	1	5uf/500v

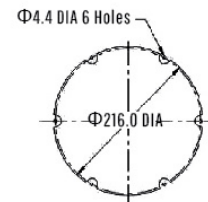
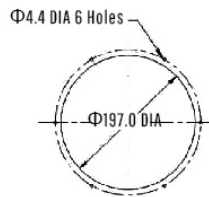
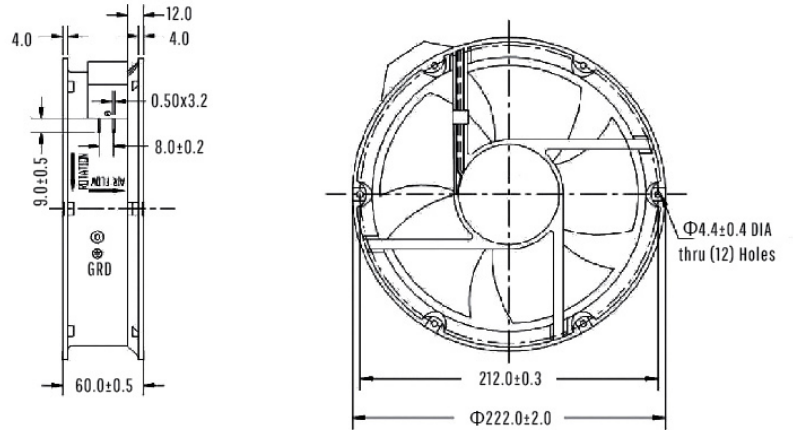
FL 22060 Multiplane fan

Φ 200×60mm



Metal Blades

Dimensions

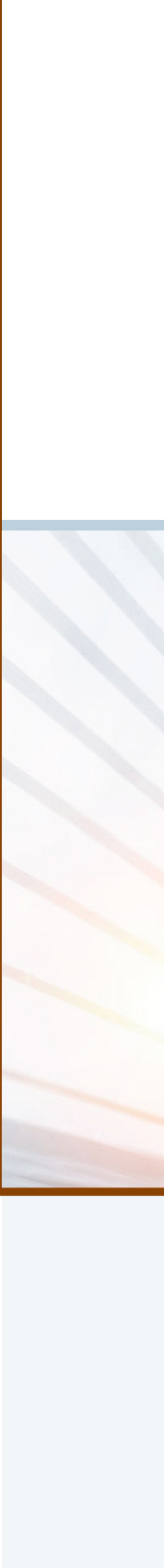


Size	Φ 200x60mm
Airflow	730-824m ³ /hr 430-485CFM
Weight	1250g
Noise	55-67dBA
Impeller	Metal
Frame	Aluminum Alloy
Terminals	0.5mm
Lead Wire	Teflon 22#UL 1332(Optional)
Motor	Shaded Pole And External Rotor Induction Motor
Operating Temperature	-10~+65℃

Model	Bearing System	Voltage V (AC)	Freq. Hz	Current A	Power W	Speed RPM	Noise dBA	Air Flow		Phase	Capacitor
								M ³ /hr	CFM		
FL22060HA ₁ B-C	Ball	100-125	50/60	0.42-0.46	50-60	2800-3100	55-67	730-824	430-485	1	3.3uf/630v
FL22060HA ₂ B-C		200-240	50/60	0.25-0.26	50-60	2800-3100	55-67	730-824	430-485	1	1.8uf/630v

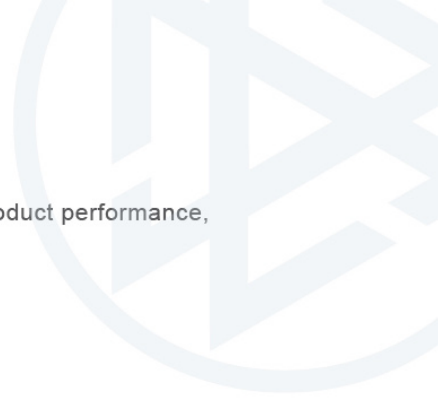


Cabinet accessories

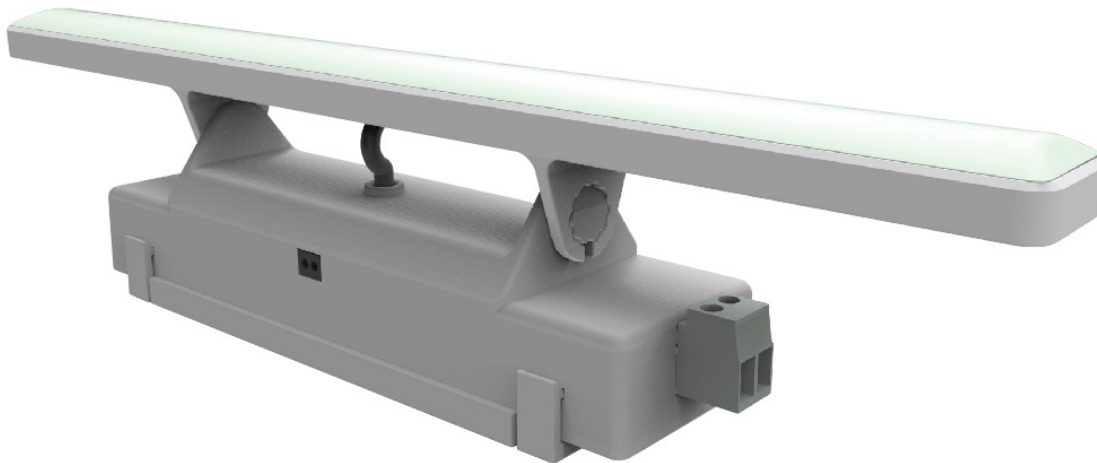


Cabinet accessories system expert

LINKWELL is the system supplier, with energy-saving, environmental protection, efficient product performance, to meet the requirements of cabinet accessories system.



6W



Application

LK12-W Series LED light is designed for instrument cabinet illumination of various switchgear, built in infrared sensor switch, and simplify the user's application design.

Features and advantage

- Built in infrared sensor switch, the user do not install additional switch.
- Economize on energy, In the case of illuminate effect same alike the traditional light, economizing on energy is 75% above.
- Life span is long, the LED light source, someone call it the longevity light, meaning to extinguish never. It's the solid cold light source, adopt a special electric circuit design, the life span can reach to for 100,000 hours, comparing traditional light source life span to grow 1000% above.
- The environmental protection performance is better, without ultraviolet ray and infrared rays in the spectrum, without calories and radiate, the dizzy light is small, and the castoff can recover, without pollution and do not contain the mercury chemical Element. The cold light source, can be touched, belong to typical model of the green illuminate light source.
- Special circuit design, if anyone LED is bad, it isn't without influence to normal illumination of others LED.
- Special structure design, light body position can be adjusted, that solves the problem of less illumination angle of LED.

Power supply	AC(50/60Hz)/DC (80-265V), or other voltage customer demand.
Average illuminance at 300mm from lamp	>300lx
Color rendering index Ra	> 85
Switch	built in infrared switch, active distance 20-80mm
Terminal	screw terminal, 0.5-2.5mm ²
Working environment temperature	-25~+55 ℃
Fix method	Two hole fixation
Color of the light	white
Protection class	IP20
Withstand voltage	AC2500V, 1Min
luminescence component	LED
Rated humidity	25~95%
Mean life	More than 100,000h
Power	6W

Models explanation

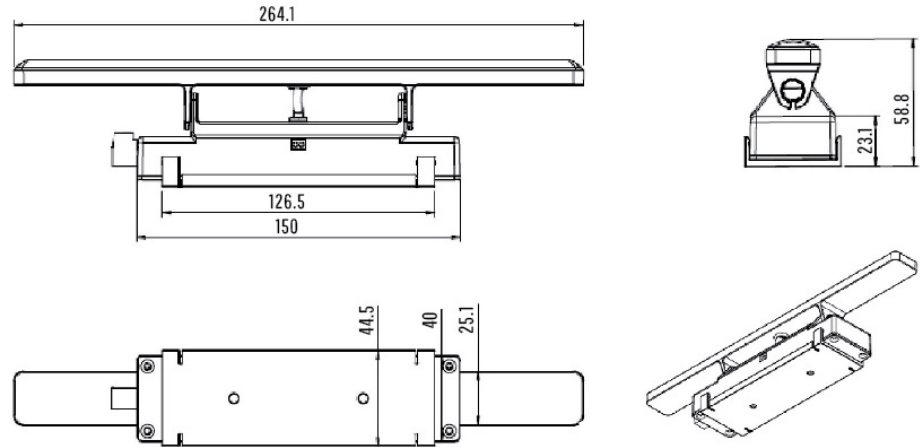
LK 12 - W - □

Voltage code A: AC(50/60Hz)/DC (80-265V), C: DC48V, D: DC24V

Light color: White

Design number

Dimensions



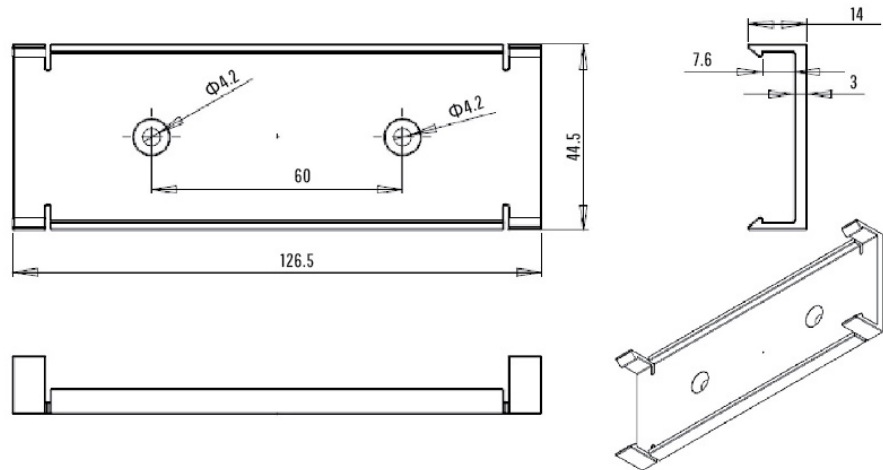
Mounting

Installation: first fix the fixed plate on the position that the lamp need to be install , and then push the lamp into the fixed plate to complete the installation.

Remove: use a screwdriver to remove 4 bayonet from the slot of the fixed plate, and then extract the lamp to complete the disassembly.

Fixed screw: Slotted countersunk flat head screws (common head style), M4x8, ISO 2009

The following drawing specify a fixed plate size , please use this drawing to design the mounting hole.



Note: Infrared sensor should be parallel to the reflecting surface.



Infrared sensor



Application

LK13-W Series LED light is designed for instrument cabinet illumination of various switchgear, built in switch , and simplify the user's application design.

Features and advantage

- Built in switch, the user do not install additional switch.
- Economize on energy, In the case of illuminate effect same alike the traditional light, economizing on energy is 75% above.
- Life span is long, the LED light source, someone call it the longevity light, meaning to extinguish never. It's the solid cold light source, adopt a special electric circuit design, the life span can reach to for 100,000 hours, comparing traditional light source life span to grow 1000% above.
- The environmental protection performance is better, without ultraviolet ray and infrared rays in the spectrum, without calories and radiate, the dizzy light is small, and the castoff can recover, without pollution and do not contain the mercury chemical Element. The cold light source, can be touched, belong to typical model of the green illuminate light source.
- Special circuit design, if anyone LED is bad, it isn't without influence to normal illumination of others LED.
- Special structure design, light body position can be adjusted, that solves the problem of less illumination angle of LED.

Power supply	AC(50/60Hz)/DC (80-265V) , or other voltage customer demand.
Average illuminance at 300mm from lamp	>300lx
Color rendering index Ra	> 85
Switch	built in switch
Terminal	screw terminal, 0.5-2.5mm ²
Working environment temperature	-25~+55 ℃
Fix method	Two hole fixation,
Color of the light	white
Protection class	IP20
Withstand voltage	AC2500V, 1Min
luminescence component	LED
Rated humidity	25~95%
Mean life	More than 100,000h
Power	6W

Models explanation

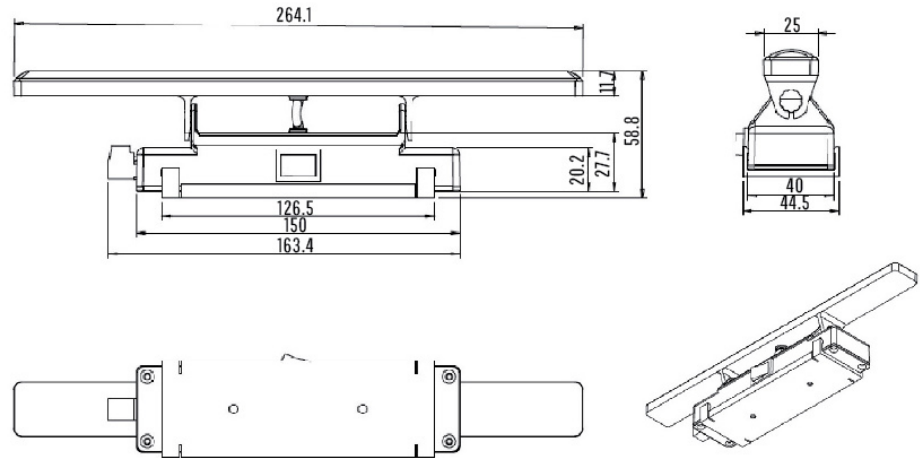
LK 13 - W - □

Voltage code A: AC(50/60Hz)/DC (80-265V), C: DC48V, D: DC24V

Light color: White

Design number

Dimensions



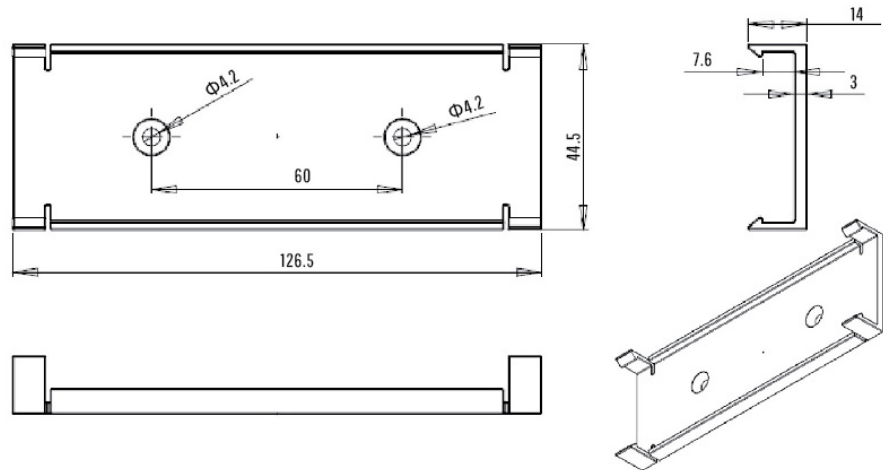
Mounting

Installation: first fix the fixed plate on the position that the lamp need to be install , and then push the lamp into the fixed plate to complete the installation.

Remove: use a screwdriver to remove 4 bayonet from the slot of the fixed plate, and then extract the lamp to complete the disassembly.

Fixed screw: Slotted countersunk flat head screws (common head style), M4x8, ISO 2009

The following drawing specify a fixed plate size , please use this drawing to design the mounting hole.

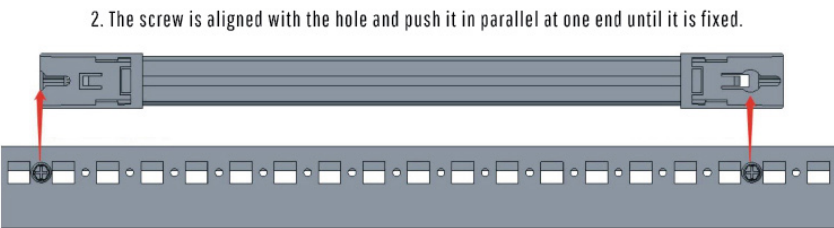
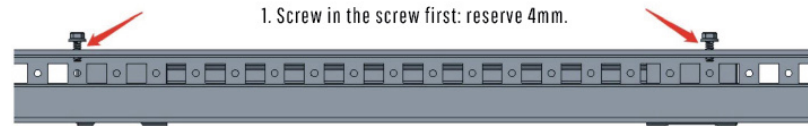


LCL-6W LED Lamp for Cabinet

6W



Installation diagram



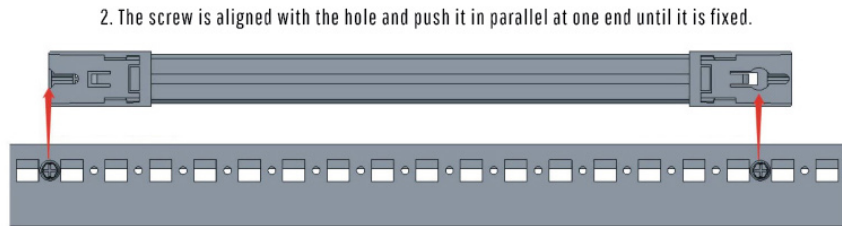
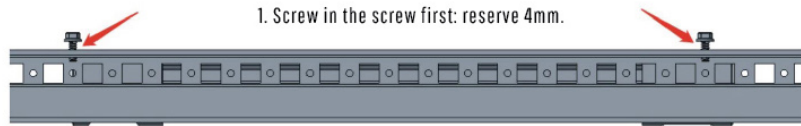
Model	LCL-6W.024	LCL-6W.230
Dimensions(L/W/H)	390x30x45	390x30x45
lamp body material	Aluminum+PC	Aluminum+PC
Surface treatment	Oxidation	Oxidation
Flame retardant grade (plastics)	V-1	V-1
power supply	Constant current	Constant current
input power	6W	6W
input voltage	24V	220V
Rated frequency	50/60	50/60
Input current	65mA	65mA
Consumed power	6kW/h	6kW/h
Luminous flux	500LM	500LM
Color temperature	6500±575K	6500±575K
Mean life	20,000h	20,000h
environment temperature	-30 - +50 °C	-30 - +50 °C

LCL-12W LED Lamp for Cabinet

12W



Installation diagram



Model	LCL-12W.024	LCL-12W.230
Dimensions(L/W/H)	500x30x45	500x30x45
lamp body material	Aluminum+PC	Aluminum+PC
Surface treatment	Oxidation	Oxidation
Flame retardant grade (plastics)	V-1	V-1
power supply	Constant current	Constant current
input power	12W	12W
input voltage	24V	220V
Rated frequency	50/60	50/60
Input current	65mA	65mA
Consumed power	6kW/h	6kW/h
Luminous flux	500LM	500LM
Color temperature	6500±575K	6500±575K
Mean life	20,000h	20,000h
environment temperature	-30 - +50 °C	-30 - +50 °C

LKL10-W / LKL10-W-3 LED Light Used For Switchgear Instrument Cabinet

1.2-3W



Application

LKL10-W Series LED light is designed for instrument cabinet illumination of various switchgear.

Features and advantage

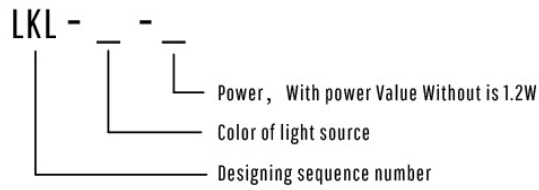
- Economize on energy, In the case of illuminate effect same alike the traditional light, economizing on energy is 75% above.
- Life span is long, the LED light source, someone call it the longevity light, meaning to extinguish never. It's the solid cold light source, adopt a special electric circuit design, the life span can reach to for 100,000 hours, comparing traditional light source life span to grow 1000% above.
- The environmental protection performance is better, without ultraviolet ray and infrared rays in the spectrum, without calories and radiate, the dizzy light is small, and the castoff can recover, without pollution and do not contain the mercury chemical Element. The cold light source, can be touched, belong to typical model of the green illuminate light source.
- Special circuit design, if anyone LED is bad, it isn't without influence to normal lamination of others LED.
- Special structure design, light body position can be adjusted, that solves the problem of less lamination angle of LED.
- The power supply adapt to AC/DC 110-230V, suitable in application case of switchgear especially .
- With two mounting methods of clamp and fixation.

Enclosure material	PC-ABS(halogen-free)
Protection category	IP 20
Power supply	AC(50/60Hz)/DC 110V-230V
Wire connection	1×4mm ² or 2×1.5mm ²
Insulating strength	AC2500V, 1Min
luminescence component	LED
Ambient temperature	-25-50 °C
Relative humidity	25~95 %
Mean life	More than 100,000h

LKL10-W / LKL10-W-3 LED Light Used For Switchgear Instrument Cabinet

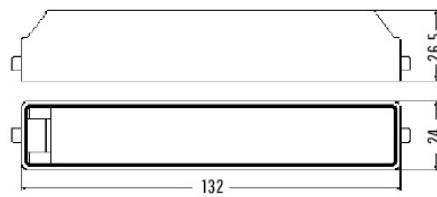
1.2-3W

Models explanation

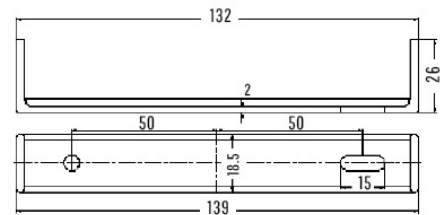


TYPE	LKL10-W	LKL10-W-3
Color of light source	White	Black
Power	1.2W	3W

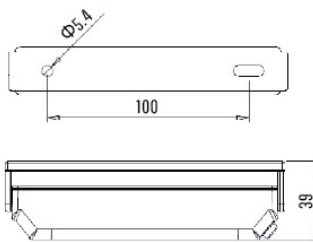
Dimensions



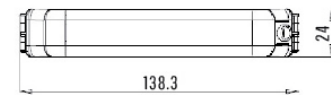
Dimension of LKL10-W light body



Dimension of LKL10-W light bracket



Dimension of LKL10-W-3 light body



Dimension of LKL10-W-3 light bracket

Mounting

Assemble by clamp or bolt fixation. Assemble bracket first, then connect the power cable into light body terminal, insert the terminal side of light body into assemble hole of bracket, another side insert into the another side of bracket with screwdriver.

The angle between the support and the light body can be adjust according to the lumination need.

LKL10-W Light body



LKL10-W Bracket

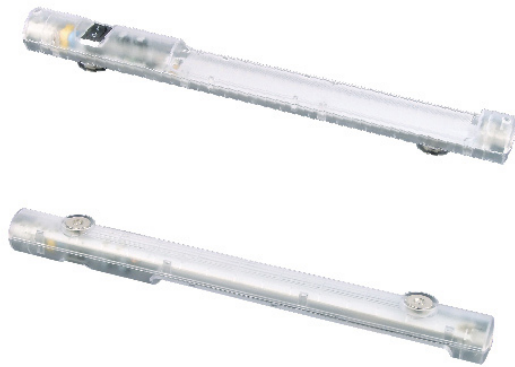


LKL10-W assembled



LK 025 Energy-saving light

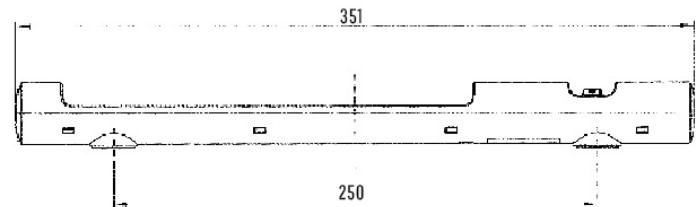
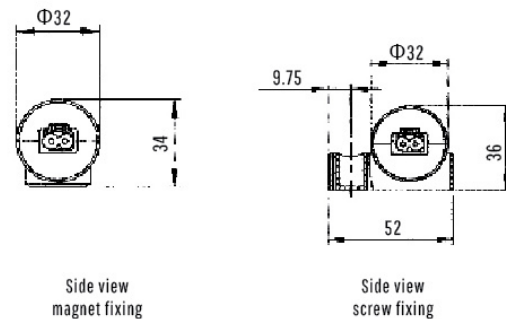
5W



- Wide voltage range
- Integrated power unit
- Long-lived, maintenance-free
- Energy-saving by LED technology
- Daisy chain
- Magnet or screw fixing
- Quick connection

The lamp series LK 025 is suitable for all types of panels and enclosures, especially where space is at a premium. The lamps have a very long service life thanks to the use of LED technology. They are available with powerful non-slip rubberized magnets allowing them to be quickly positioned in any steel enclosure. Alternatively they can be fixed mechanically. The power output allows up to 10 lamps to be connected to each other (daisy chain). Both the power input and output connectors snap lock into their sockets. With the integrated power unit and the plugs the lamp can quickly be connected.

Dimensions

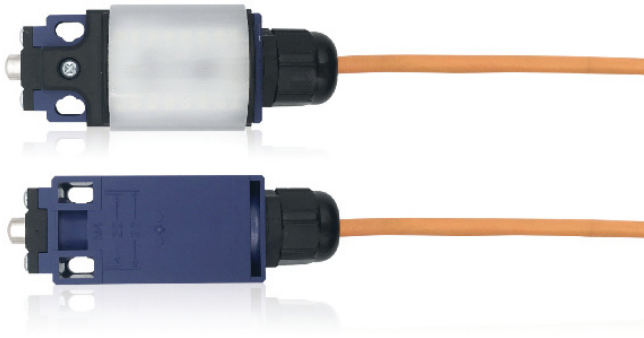


Power consumption	max. 5W
Luminosity	290lm at 120 °C (870lm at 360 °C or equivalent 75W light bulb)
Lamp type	LED, angle of radiation 120° Light color: daylight, color temperature: 6,500K
Service life	60,000h at 20 °C (68°F) 2-pole connector with snap lock
Connection	AC: max. 2.5A / 240VAC, color: white DC: max. 2.5A / 60VDC, color: blue
Mounting	magnet fixing or screw fixing, M5, 250mm centers
Casing	plastic, transparent
Dimensions	351 x 34 x 32mm (with magnet fixing) 351 x 36 x 32mm (with screw fixing)
Operating / Storage temperature	-30 - +60 °C (-22 - +140°F) / -40 - +85 °C (-40 - +185°F)
Operating / Storage humidity	max. 90% RH (non-condensing)
Protection type / Protection class	IP20 / II (double insulated)

Art. No. magnet fixing	Art. No. Screw fixing	Rated operating voltage, frequency	Switch	Weight (approx.)
02540.0-00	02540.0-01	100-240VAC, 50/60Hz (min. 90VAC, max. 265VAC)	on/off light switch	0.2kg
02540.1-00	02540.1-01	24-48VDC (min. 20VDC, max. 60VDC)	on/off light switch	0.2kg

PCLS-LED40 lamp for cabinet

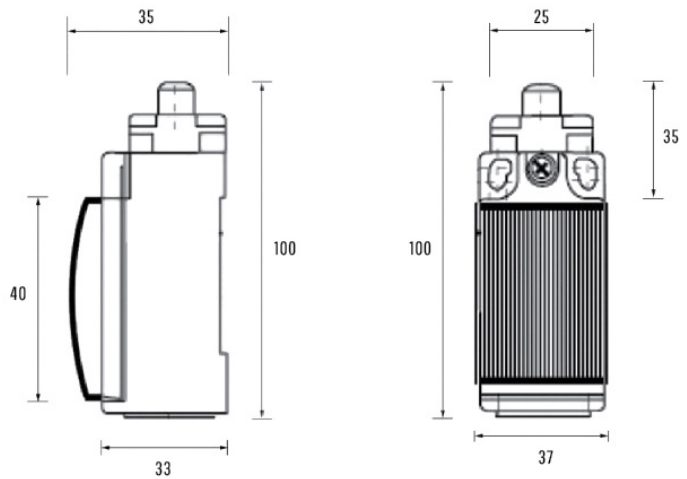
7W



Features

- Small size, high light efficiency.
- Smooth movement, stable performance.
- Switch life up to 1 million times.
- High quality nylon waterproof cable head.
- Precision stainless steel punch switch.
- High performance flame retardant ABS.

Dimensions



Model No.	PCLS LED40
Rated voltage	AC 180-230 V
Rated power	7 W
Luminous flux	>600 LM
Color temperature	6000-6500 K
Mean life	20,000 h
Operating temperature range	-10-+70°C
Weight	176g
Dimensions	W37×D35×H100mm
Switch Mode	Stroke (gated) switch
Mounting	Screw fixing
Cable length	2000mm
Protection degree	IP20
Power interface	Positive and negative pole (L/N)
Operation frequency	Mechanical 120 operations/min, Electrical 30 operations/min

KAC30 series Rail-type modular socket (Euro-standard)

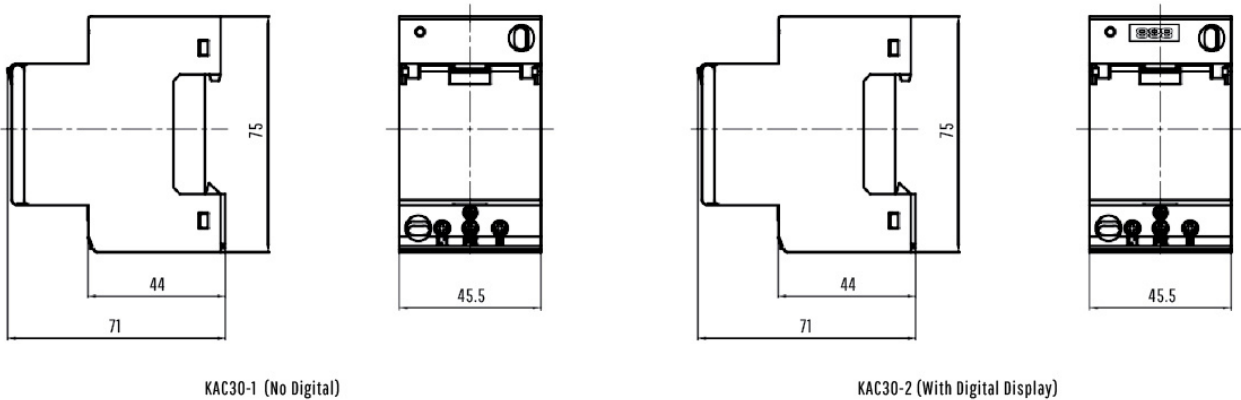
IP20



This product series is the latest rail-type modular jack (Euro-standard) developed by LINKWELL. It can be divided into KAC30-1 and KAC30-2 for different users. It can be installed in the cabinet, suitable for DIN-rail installation, and can be used with other modular terminal electrical appliances, with good contact reliability. The KAC30-2 features humanized digital display, real-time display of high and low voltage changes, which can reduce the fault tolerance caused by voltage, its observability and safety are better guaranteed.

1. Modular is in accordance with a certain standard size and structure composition, can be arbitrarily combined out of the required configuration.
2. The products are mainly used in homes, offices, farms, light industries, etc., and can be used by non-professionals. In most cases, they are connected to electricity and equipment.
3. The sockets in the modular socket are of standard size (mainly with Euro-standard or DIN-Standard plug). The structure has single phase 2 holes, single phase 3 holes, three phase 3 holes, three phase 4 holes.
4. The main installation method is DIN-rail installation (or screw installation), which is easy to install and disassembly.

Dimension



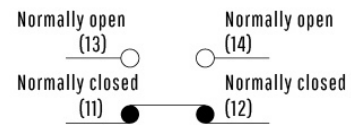
Model	KAC30-1 (No Digital), KAC30-2 (With Digital Display)
Rated voltage	180-250V
Rated current	10-16A
Protection class	IP20
Shell material	Polyamide PA66
Product dimensions (H/W/D)	75×45.5×71mm
Conductive material	Copper
Pole	2P
Weight	66g
Operating temperature range	-20- +150℃
Service life	30000h
Wiring cross-section	Solid 0.2-4mm ² Flexible 0.25-2.5mm ² AWG24-12
Screw-thread	M3
Mounting	35mm DIN DIN-rail
Approvals	CE/3C



Features

- Economic thermoplastic
- Stainless steel roller, punch, and Spring
- Max. ±95° rotary lever
- Cable gland size M20*1.5

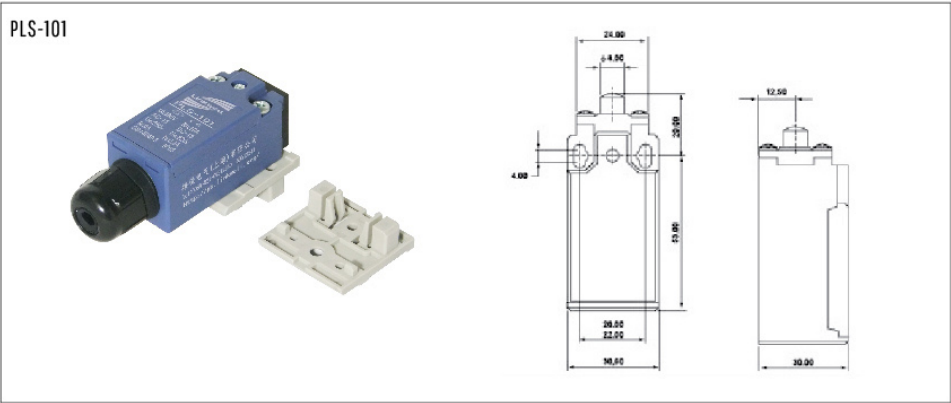
Contact configurations



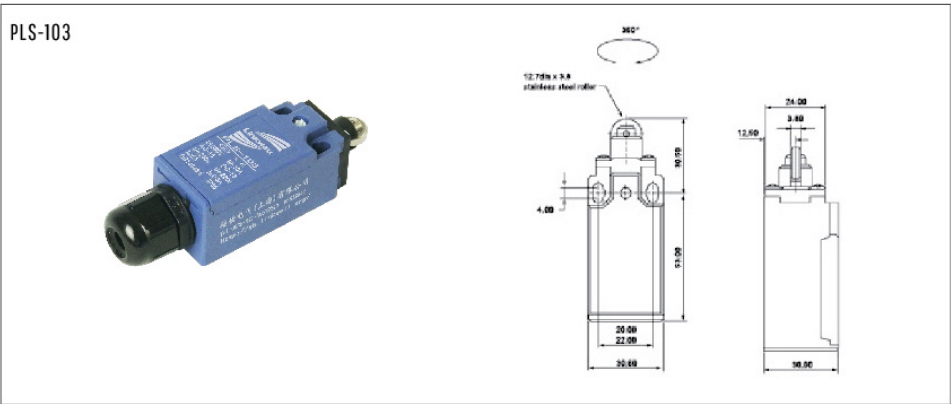
Operating speed	0.5 mm/s to 50cm/s (in case of pin plunger)
Operating frequency	Mechanical: 120 operations/ min Electronic: 30 operations/ min
Contact Resistance	25mΩ (mm) (Initial)
Insulation resistance	100mΩ Min. at 500VDC
Dielectric strength	1000VAC, 50/60Hz/ 1 min between terminals of same polarity 1500VAC , 50/60Hz/ 1 min between current-carrying metal parts and ground 1500VAC , 50/60Hz/ 1 min between each terminal and non- current-carrying metal part
Vibration resistance	10-55 Hz, 1.5mm double amplitude
Shock resistance	Mechanical durability: 1,000m/Sec2(approx.100G`S) False action durability: 300m/Sec2(approx.30G`S)
Ambient operating temperature	Operating -10 -- 70 °C (no icing)
Ambient operating Humidity	95%RH Max
Service life	Mechanical >10,000,000 operations, Electrical >500,000 operations
Degree of protection	IP65 (IEC standard)

Code	PLS	101	103	111	121	127	131	161	171	181	191
		301	303	311	321	327	331	361	371	381	391
Operating force	OF(Max.)	700g	700g	700g	500g	700g	500g-cm	100g	100g	100g	500g-cm
Release force	RF(Min.)	200g	200g	200g	100g-cm	200g	100g-cm	40g	40g	40g	100g-cm
Pre-Travel	PT(Max.)	1.8mm	1.8mm	1.8mm	20°	1.8mm	20°	30mm	30mm	30mm	20°
Tripping position	TP±10%	2.0mm	2.0mm	2.0mm	22.5°	2.0mm	22.5°	22.5°	22.5°	22.5°	22.5°
Movement differential	MD(Max.)	1.2mm	1.2mm	1.2mm	10°	1.2mm	10°	14°	14°	14°	10°
After travel	OT(Min.)	4.0mm	4.0mm	4.0mm	75°	4.0mm	75°	20mm	20mm	20mm	75°
Total travel	TT(Min.)	5.8mm	5.8mm	5.8mm	95°	5.8mm	95°	50mm	50mm	50mm	95°
Angle of rotary lever					22.5°		22.5°				22.5°

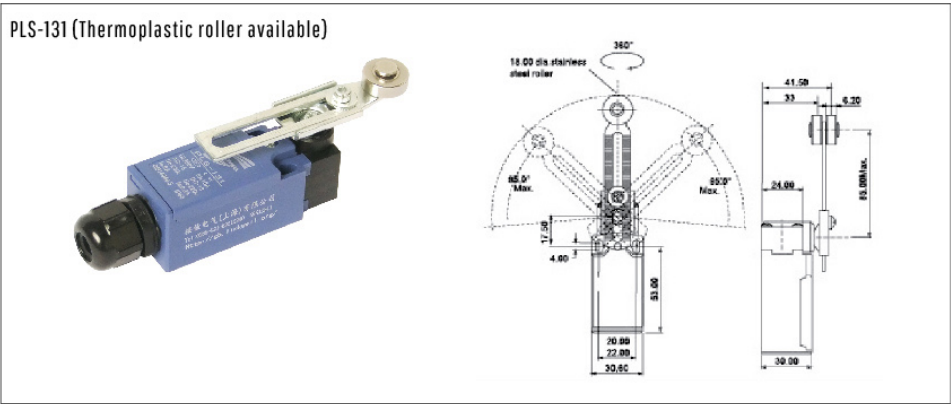
PLS-101



PLS-103



PLS-131 (Thermoplastic roller available)

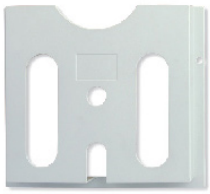


Ratings

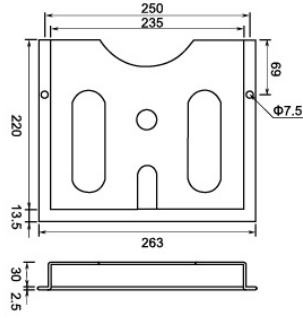
Rated voltage	Non-inductive load (A)				Inductive load (A)			
	Resistive load		Lamp load		Inductive load		Motor load	
	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	5	5	1.5	0.7	3	3	2	1
250VAC	5	5	1	0.5	3	3	1.5	0.8
8VDC	5	5	3	3	5	4	3	3
14VDC	5	5	3	3	4	4	3	3
30VDC	5	5	3	3	4	4	3	3
125VDC	0.4	0.4						
250VDC	0.2	0.2						
Inrush current	N.C.:24A max.、N.O.:12A max.							

Note: 1. Inductive loads have a power factor of 0.4 min. (AC) and a time constant of 7 msec max. (DC).
 2. Lamp loads have an inrush current of 10 times the steady-state current. Motor loads have an inrush current of 6 times the steady-state current.
 3. For the products with spring, the operating range is limited to the part from the front of the spring to the 1/3 full length of the spring.

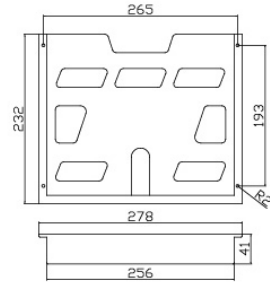
WJ-1/2/3/4 Documents Pocket



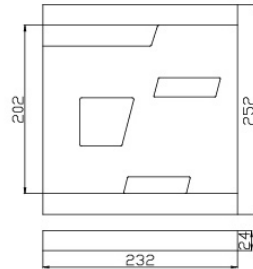
Documents Pocket WJ-1



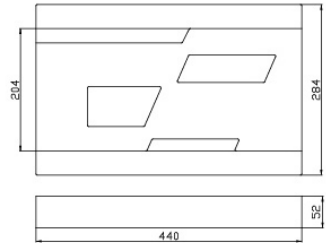
Documents Pocket WJ-2



Documents Pocket WJ-3



Documents Pocket WJ-4



Product back

WJ-1



WJ-2



WJ-3



WJ-4



Plastic Documents Pockets
For affixing to the inside surfaces of panel doors

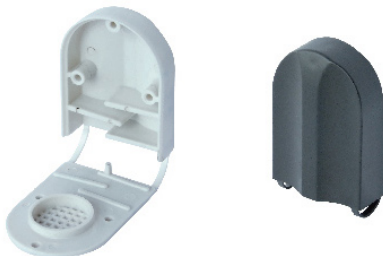
Material :
plastic ABS with self-adhesive fastening strips 3M adhesive tape

Installation:
Screw mounting or adhesive tape mounting

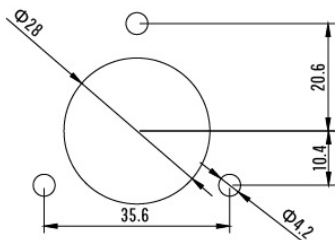
Colour:
Similar to RAL7035

LK-705 Air Pressure Ventilator

IP54



Sealed enclosures when subject to external temperature fluctuations develop pressure differential toward the ambient. As a consequence entrance of dust and/or humidity is likely to happen through leakage points. Installing a LK-705 prevents this risk while preserving a high protection degree for the enclosure.



Features	unit	Characters
Material	-	ABS self-extinguishing
Color	-	Grey(RAL7035), Black(RAL9005)
Protection degree	-	IP54
Fixing	-	Screws with rubber gasket
Dimensions H/W/D	mm	70x50x21
Weight	kg	0.03

2019-2020



Email: info@linkwell.org

Web: www.linkwell.org, www.cnlinkwell.com