

Cooling systems for electrical enclosures









Index

Wall Mount Coolers	
Wall Mount version	
300 W	
500 W	
800 W	
1000 W	
1500 W	
2000 W	
3000 W	
4000 W	
Roof Mount version	38
1000 W	
1500 W	
2000 W	
3000 W	
4000 W	
Slim and Slim IN coolers	60
Slim 1000 W	
Slim 1500 W	
Slim 2000 W	
Slim 3000 W	
Slim IN 1000 W	
Slim IN 1500 W	
Slim IN 2000 W	
Slim IN 2000 W	
Siiii 1N 3000 W	
Thermoelectric coolers	
Accessories	80
Ventilation	84
Fan-filter	
Roof exhaust unit	
Anti-condensation heaters	
Accessories	



DKC, the leading manufacturer of cable duct systems, is based in **Russia**, **Ukraine**, **Italy**, **Hungary**, **Romania** and **Tunisia**.

In Europe it is represented under DKC Europe brand with seven product lines:

COMBITECH

Metal cable trays



Photovoltaic panels mounting system



Fitting system







Coolers for electrical enclosures



Polycarbonate boxes



Bus way

The company history started in the sixties, when Cepi Italia S.p.A. chose to specialize in development and manufacture of metallic cable trays, extending to creating the first and original snap-on cable tray. After this positive experience of partnership, Cepi Italia felt it was time to go directly to the market presenting itself under the brand of "SCM – Sistemi di Canalizzazioni Metalliche".



In 2007 SCM was acquired by DKC becoming therefore a part of international context. The acquaintance of SMC with Italian market joined to experience of the Russian brand creates an optimal combination of quality, price, proficiency and service.

In view of continuous development in order to better satisfy the clients' requirements on the market, which is continuously moving on, in 2008 DKC decided to complete another important transaction: the acquisition of Cost.e.l, a company being active since over 25 years in manufacturing metal enclosures for electric boards. The incorporation to DKC group allowed the company continuing its internationalization course started with news plant opening first in Hungary and then in Romania.

In 2010 DKC opened a new branch in Rome with a sales department and a warehouse of 1.500 sqm. This investment reflects the will of the company to be always closer to its clients and give a better service to the center-south market. Rome branch became even more important the year later after the start-up of the production of coolers for electrical enclosures of Ramklima series.

New products and an enlarged service are the fundamental points of the development policy characterizing our company, which in 2012 assisted to opening a new branch in Tunisia called DKC Maghreb with a goal to become a reference point for North African Market. The new branch located in Tunis brings DKC branded products all over Maghreb (the western area of North Africa).





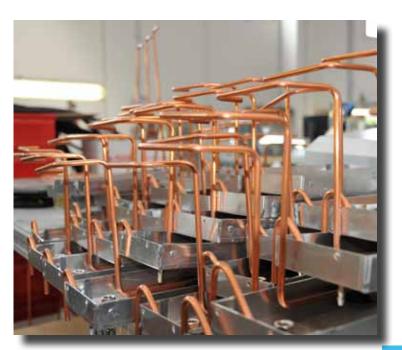
An up-to-date manufacturing line with a possibility to view digital copies of assembly manuals.



Quick delivery thanks to products always available on stock.



High skilled operators.



Semi-finished products are stored at the warehouse to optimize the production time.



Wall Mount Coolers



The new coolers by DKC represent an ideal solution for all applications, where it is necessary to cool and to keep separate an electrical board from the environment.

This system proves to be an optimal solution, whenever it is required to prevent the components installed inside an electrical board from damaging by high temperatures (with T ambient > T internal enclosure) maintaining a high protection degree against water, dust and chemical agents.

In order to simplify the installation the design provides for a reduced number of mounting cutout templates, so that units with different power may be managed with the same cutouts, satisfying whatever requirement of cooling.

The coolers are available in wall mount and roof mount versions, the power range is from 300 to 4000W (as per DIN 3168/EN815). Special voltage and frequency options are available upon request.



MAIN ADVANTAGES

Seal

 polyurethane seal applied by continuous moulding as standard on all the units contributing to a considerable installation time saving.

Filter grid

- provided with the innovating click&go fixing system simplifying service activities
- customizable both in terms of colour and logo

Frame

optional for semi-inbuilt/inbuilt installation (only for wall mount version)

Mounting cutouts

 possibility to install coolers of different power using the same mounting cutout

Metallic filter

 optional, to be used in particularly harsh environments (presence of oils and particularly aggressive substances)

Stainless steel cover

 Covers of AISI 304 or AISI 316L stainless steel are available for food industry environments or wherever high hygiene standards are required

Condensation sink

provided for BASE and TOP wall mount versions

Internal deflector

 optional purposed to prevent thermal short circuits inside the enclosure (only for wall mount version)

Lifting eyebolts

provided with all the versions in order to facilitate installation activities

Easy maintenance

 by virtue of the accessibility to components with no necessity of particular disassembly operations

Service

 purposed to guarantee a prompt assistance and continuous support over time.







Wall mount version





Digital thermostat



Polyurethane seal applied by continuous molding



Condensation sink standard for the whole range for TOP version.

Condensation sink standard from power 3000 W for BASE version.

Security pressostat for the whole range.



Only for TOP version. Terminal block for ON/OFF alarm management (door micro switch). RS485 serial interface for remote control of up to 32 units.



Standard air filter



Wall mount coolers 300 W - 230 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

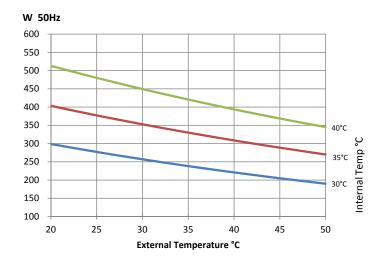
	R5KLM03021LB	R5KLM03021LT
Version	BASE	TOP
Supply voltage	230 Vac - 1 ph	230 Vac - 1 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	330 / 360 W	330 / 360 W
Refrigerating power L35/L50 as per DIN 3168	270 / 280 W	270 / 280 W
Dimensions H x W x D (height x width x depth)	500 x 310 x 188 mm	500 x 310 x 188 mm
FLA Full Load Amperes	1,3 / 1,5 A	1,3 / 1,5 A
Starting current	9 A	9 A
T fuse	4 A	4 A
Absorption L35L35	190 / 220 W	190 / 220 W
Absorption L35L50	220 / 270 W	220 / 270 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	61 dB (A)	61 dB (A)
Weight	20 kg	20 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

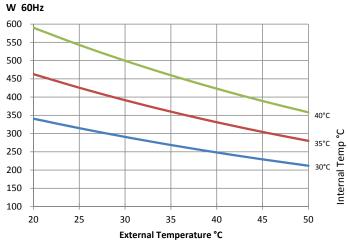
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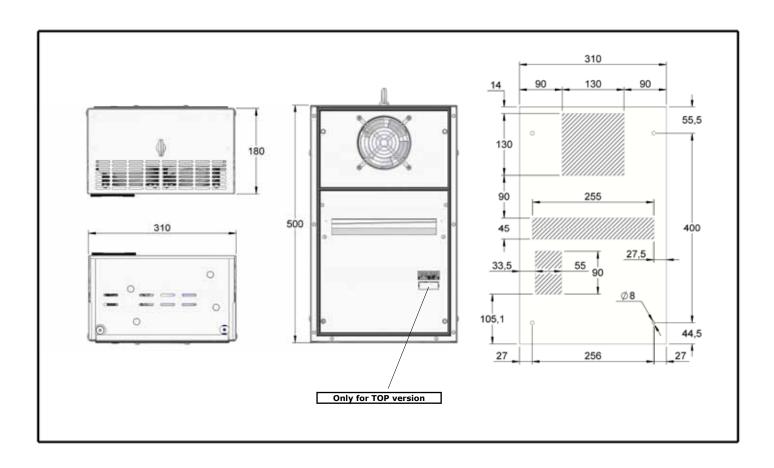
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 300 W - 400 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

	R5KLM03042LB*	R5KLM03042LT*
Version	BASE	TOP
Supply voltage	400 Vac - 2 ph	400 Vac - 2 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	330 / 360 W	330 / 360 W
Refrigerating power L35/L50 as per DIN 3168	270 / 280 W	270 / 280 W
Dimensions H x W x D (height x width x depth)	500 x 310 x 188 mm	500 x 310 x 188 mm
FLA Full Load Amperes	0,8 /0,9 A	0,8 /0,9 A
Starting current	6 A	6 A
T fuse	4 A	4 A
Absorption L35L35	190 / 220 W	190 / 220 W
Absorption L35L50	220 / 270 W	220 / 270 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	61 dB (A)	61 dB (A)
Weight	20 kg	20 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

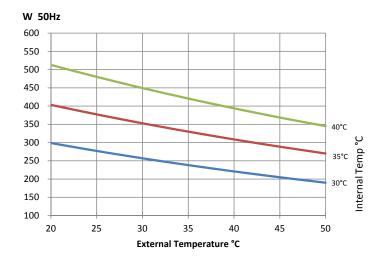
^{*} External power supply transformer

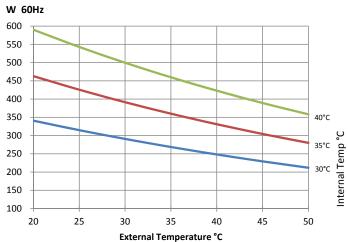
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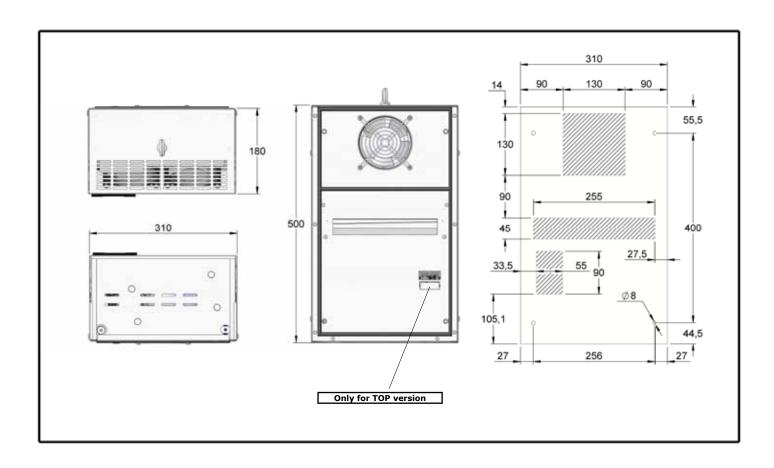
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 500 W - 230 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

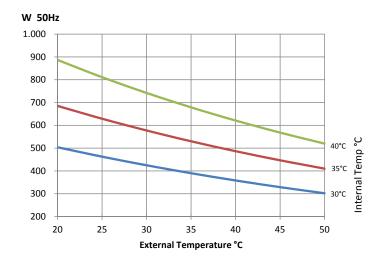
	R5KLM05021LB	R5KLM05021LT
Version	BASE	TOP
Supply voltage	230 Vac - 1 ph	230 Vac - 1 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	530 / 560 W	530 / 560 W
Refrigerating power L35/L50 as per DIN 3168	410 / 430 W	410 / 430 W
Dimensions H x W x D (height x width x depth)	630 x 310 x 230 mm	630 x 310 x 230 mm
FLA Full Load Amperes	2 / 2,2 A	2 / 2,2 A
Starting current	11 A	11 A
T fuse	6 A	6 A
Absorption L35L35	280 / 330 W	280 / 330 W
Absorption L35L50	320 / 390 W	320 / 390 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	67 dB (A)	67 dB (A)
Weight	24 kg	24 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

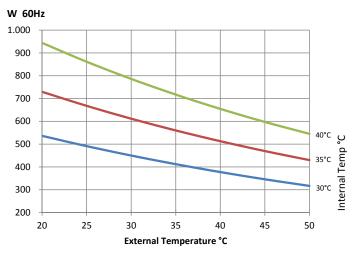
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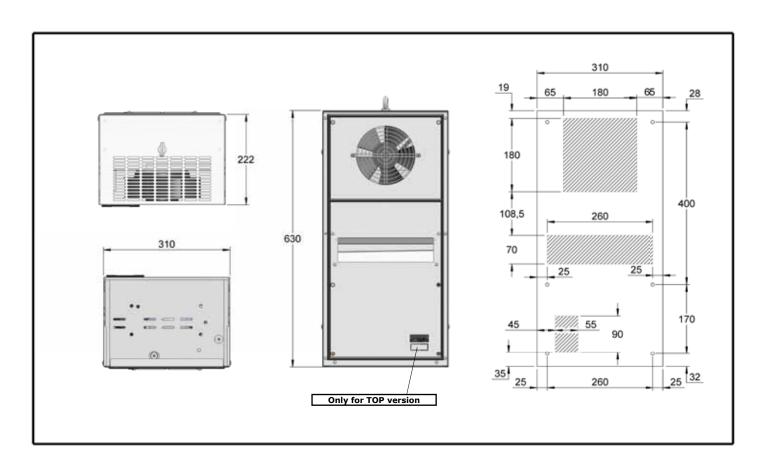
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 500 W - 400 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

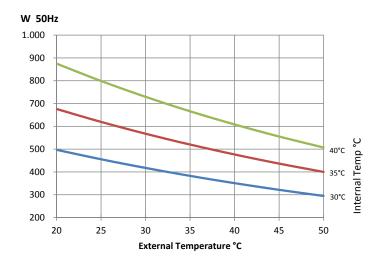
	R5KLM05042LB	R5KLM05042LT
Version	BASE	TOP
Supply voltage	400 Vac - 2 ph	400 Vac - 2 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	520 / 550 W	520 / 550 W
Refrigerating power L35/L50 as per DIN 3168	400 / 420 W	400 / 420 W
Dimensions H x W x D (height x width x depth)	595 x 280 x 228 mm	595 x 280 x 228 mm
FLA Full Load Amperes	1,2 / 1,3 A	1,2 / 1,3 A
Starting current	7 A	7 A
T fuse	4 A	4 A
Absorption L35L35	280 / 330 W	280 / 330 W
Absorption L35L50	320 / 390 W	320 / 390 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	67 dB (A)	67 dB (A)
Weight	26 kg	26 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

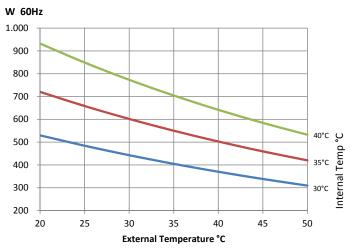
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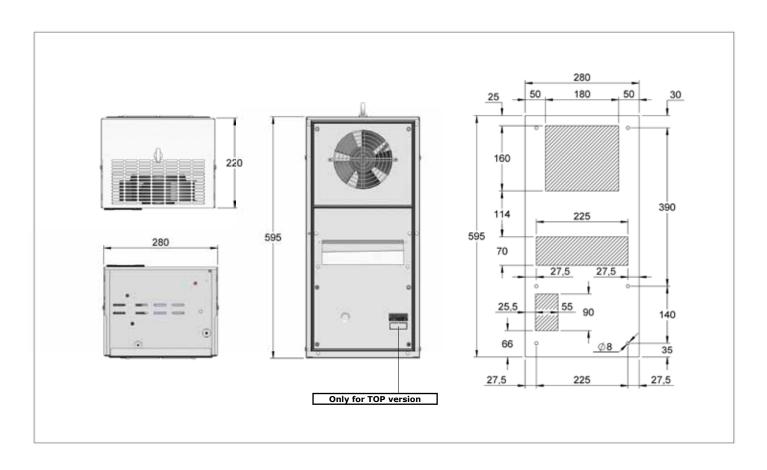
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 800 W - 230 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

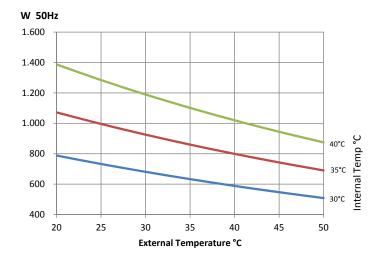
	R5KLM08021LB	R5KLM08021LT
Version	BASE	TOP
Supply voltage	230 Vac - 1 ph	230 Vac - 1 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	860 / 940 W	860 / 940 W
Refrigerating power L35/L50 as per DIN 3168	690 / 720 W	690 / 720 W
Dimensions H x W x D (height x width x depth)	630 x 310 x 230 mm	630 x 310 x 230 mm
FLA Full Load Amperes	2,9 / 3,2 A	2,9 / 3,2 A
Starting current	17 A	17 A
T fuse	6 A	6 A
Absorption L35L35	400 / 460 W	400 / 460 W
Absorption L35L50	450 / 540 W	450 / 540 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	67 dB (A)	67 dB (A)
Weight	28 kg	28 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

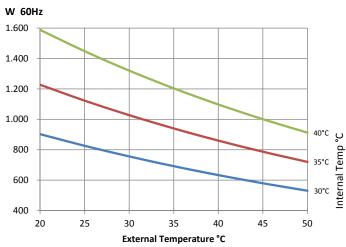
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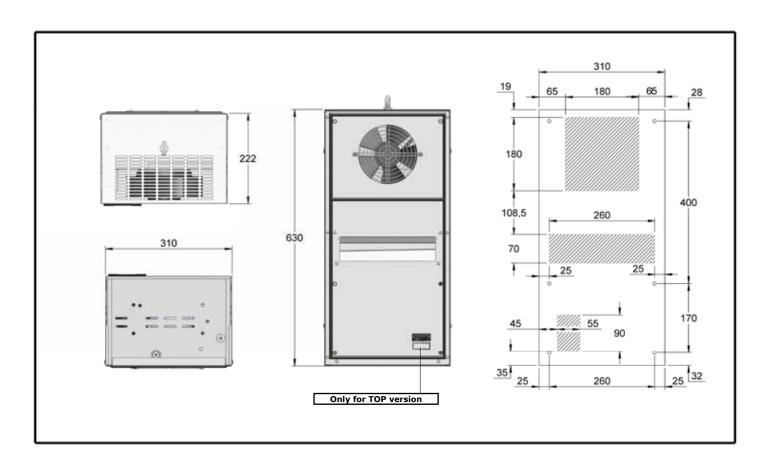
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 800 W - 400 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

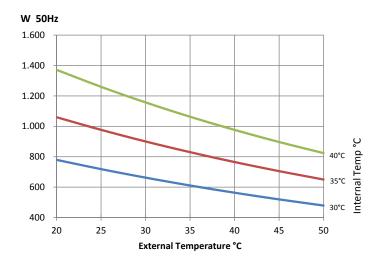
	R5KLM08042LB	R5KLM08042LT
Version	BASE	TOP
Supply voltage	400 Vac - 2 ph	400 Vac - 2 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	830 / 900 W	830 / 900 W
Refrigerating power L35/L50 as per DIN 3168	650 / 690 W	650 / 690 W
Dimensions H x W x D (height x width x depth)	630 x 280 x 278 mm	630 x 280 x 278 mm
FLA Full Load Amperes	1,7 / 1,9 A	1,7 / 1,9 A
Starting current	9 A	9 A
T fuse	4 A	4 A
Absorption L35L35	400 / 460 W	400 / 460 W
Absorption L35L50	450 / 540 W	450 / 540 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	67 dB (A)	67 dB (A)
Weight	31 kg	31 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

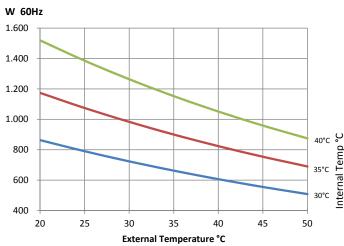
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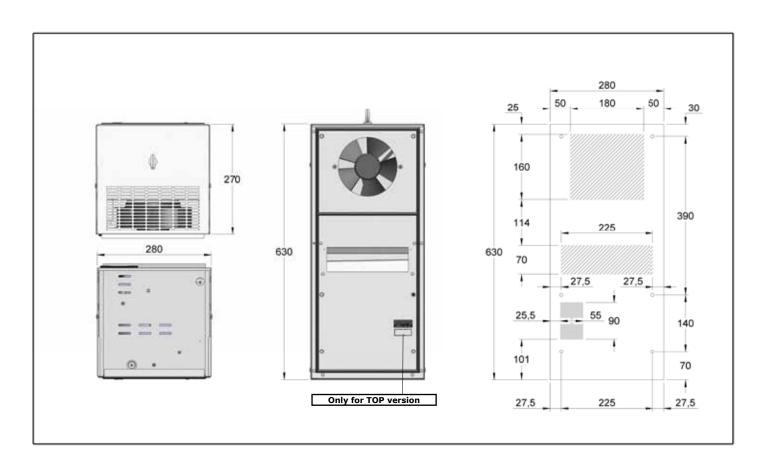
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 1000 W - 230 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

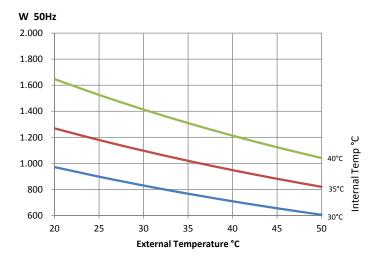
	R5KLM10021LB	R5KLM10021LT
Version	BASE	ТОР
Supply voltage	230 Vac - 1 ph	230 Vac - 1 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1020 / 1120 W	1020 / 1120 W
Refrigerating power L35/L50 as per DIN 3168	820 / 860 W	820 / 860 W
Dimensions H x W x D (height x width x depth)	950 x 400 x 245 mm	950 x 400 x 245 mm
FLA Full Load Amperes	3,7 / 4,1 A	3,7 / 4,1 A
Starting current	20 A	20 A
T fuse	8 A	8 A
Absorption L35L35	490 / 570 W	490 / 570 W
Absorption L35L50	540 / 650 W	540 / 650 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	69 dB (A)	69 dB (A)
Weight	38 kg	38 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

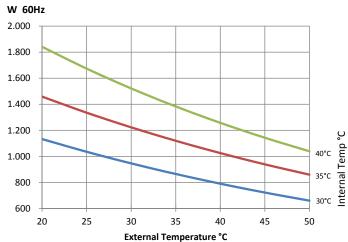
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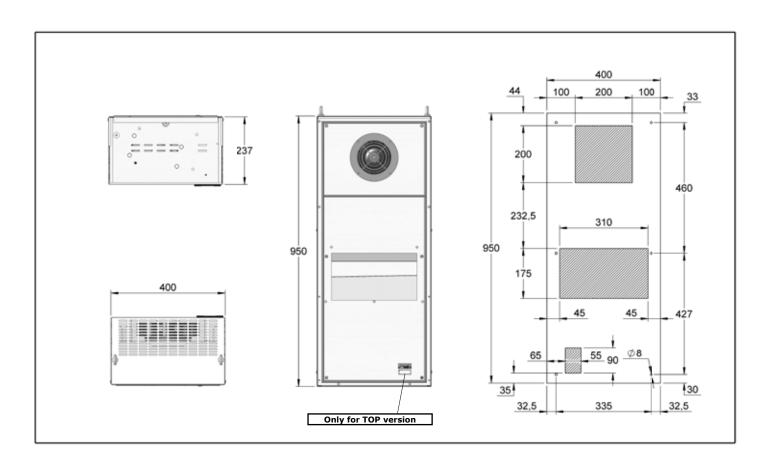
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 1000 W - 400 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

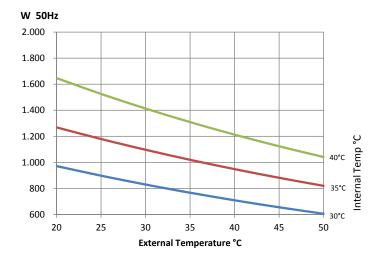
	R5KLM10042LB	R5KLM10042LT
Version	BASE	TOP
Supply voltage	400 Vac - 2 ph	400 Vac - 2 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1020 / 1120 W	1020 / 1120 W
Refrigerating power L35/L50 as per DIN 3168	820 / 860 W	820 / 860 W
Dimensions H x W x D (height x width x depth)	1050 x 400 x 245 mm	1050 x 400 x 245 mm
FLA Full Load Amperes	2,1 / 2,4 A	2,1 / 2,4 A
Starting current	13 A	13 A
T fuse	4 A	4 A
Absorption L35L35	490 / 570 W	490 / 570 W
Absorption L35L50	540 / 650 W	540 / 650 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	69 dB (A)	69 dB (A)
Weight	47 kg	47 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

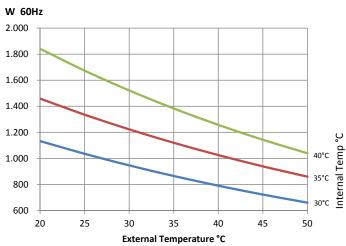
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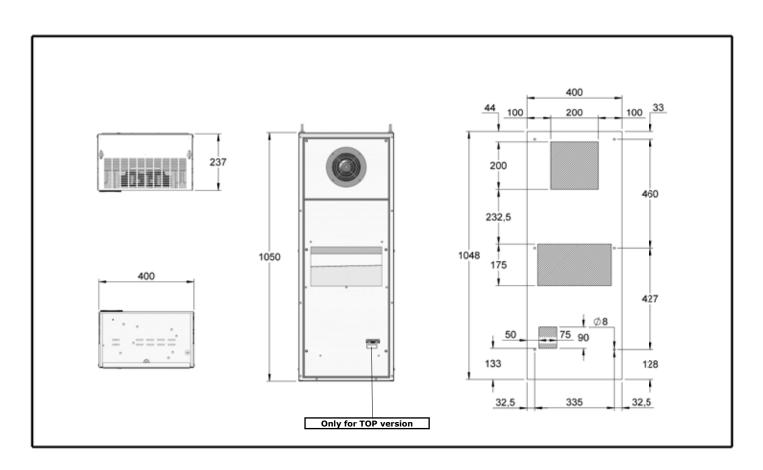
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 1500 W - 230 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

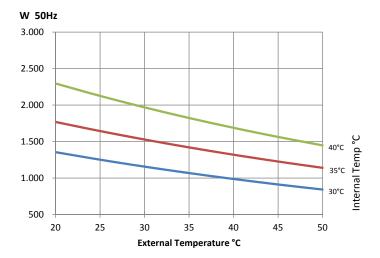
	R5KLM15021LB	R5KLM15021LT
Version	BASE	TOP
Supply voltage	230 Vac - 1 ph	230 Vac - 1 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1420 / 1560 W	1420 / 1560 W
Refrigerating power L35/L50 as per DIN 3168	1140 / 1190 W	1140 / 1190 W
Dimensions H x W x D (height x width x depth)	950 x 400 x 245 mm	950 x 400 x 245 mm
FLA Full Load Amperes	5,2 / 5,8 A	5,2 / 5,8 A
Starting current	24 A	24 A
T fuse	8 A	8 A
Absorption L35L35	660 / 760 W	660 / 760 W
Absorption L35L50	760 / 920 W	760 / 920 W
Temperature regulating range (factory set)	da 30° C a 40 ° C	da 30° C a 40 ° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	69 dB (A)	69 dB (A)
Weight	40 kg	40 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

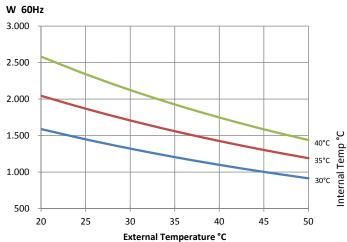
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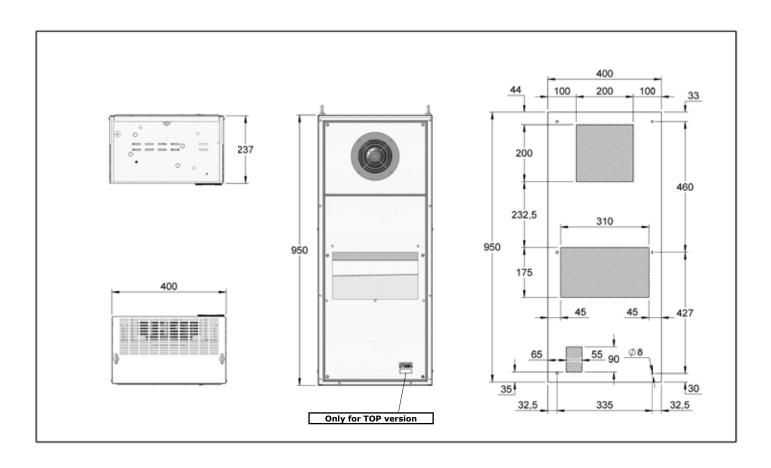
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 1500 W - 400 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

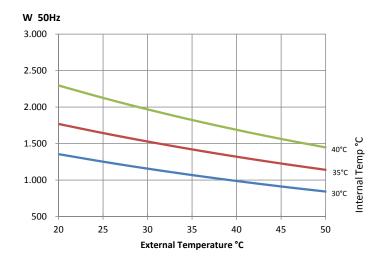
	R5KLM15042LB	R5KLM15042LT
Version	BASE	TOP
Supply voltage	400 Vac - 2 ph	400 Vac - 2 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1420 / 1560 W	1420 / 1560 W
Refrigerating power L35/L50 as per DIN 3168	1140 / 1190 W	1140 / 1190 W
Dimensions H x W x D (height x width x depth)	1050 x 400 x 245 mm	1050 x 400 x 245 mm
FLA Full Load Amperes	3 / 3,3 A	3 / 3,3 A
Starting current	16 A	16 A
T fuse	5 A	5 A
Absorption L35L35	660 / 760 W	660 / 760 W
Absorption L35L50	760 / 920 W	760 / 920 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	69 dB (A)	69 dB (A)
Weight	48 kg	48 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

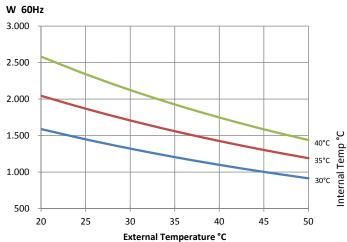
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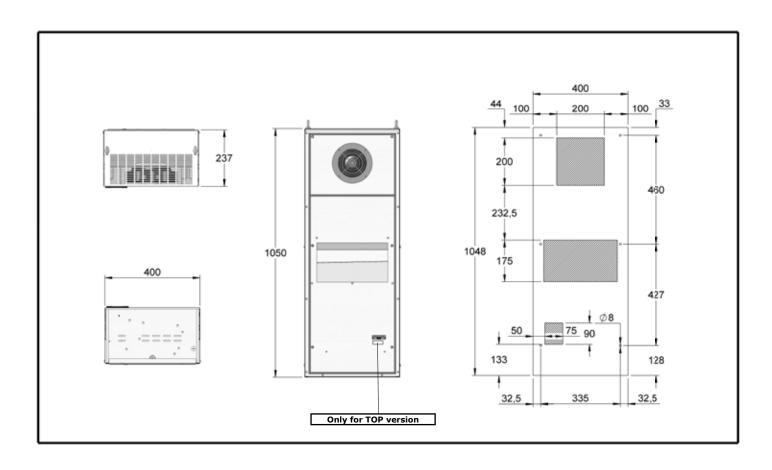
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 1500 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

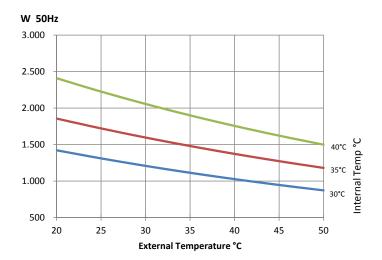
	R5KLM15043LB	R5KLM15043LT
Version	BASE	TOP
Supply voltage	400 / 440 Vac - 3 ph	400 / 440 Vac - 3 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1480 / 1620 W	1480 / 1620 W
Refrigerating power L35/L50 as per DIN 3168	1180 / 1230 W	1180 / 1230 W
Dimensions H x W x D (height x width x depth)	1050 x 400 x 245 mm	1050 x 400 x 245 mm
FLA Full Load Amperes	2 / 2,1 A	2 / 2,1 A
Starting current	11 A	11 A
T fuse	4 A	4 A
Absorption L35L35	690 / 780 W	690 / 780 W
Absorption L35L50	780 / 940 W	780 / 940 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 36	IP 54 / IP 36
Noise level	69 dB (A)	69 dB (A)
Weight	50 kg	50 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

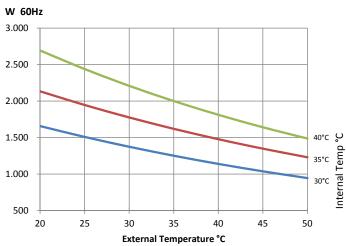
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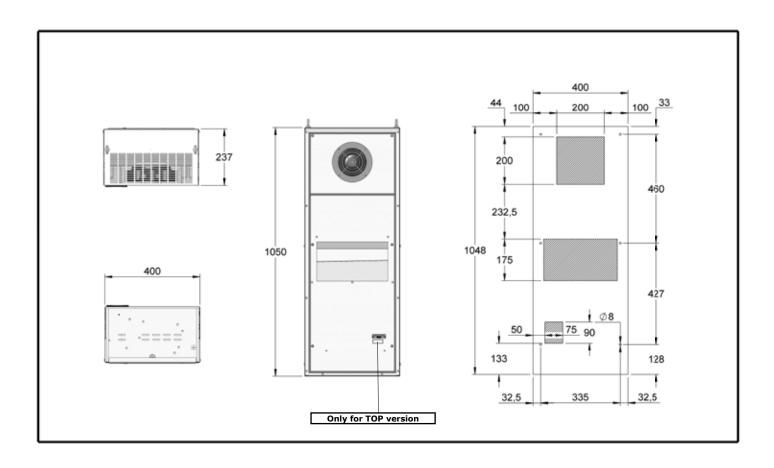
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 2000 W - 230 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

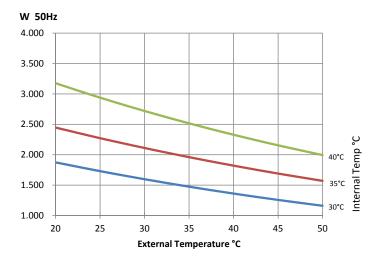
	R5KLM20021LB	R5KLM20021LT
Version	BASE	TOP
Supply voltage	230 Vac - 1 ph	230 Vac - 1 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1960 / 2150 W	1960 / 2150 W
Refrigerating power L35/L50 as per DIN 3168	1570 / 1640 W	1570 / 1640 W
Dimensions H x W x D (height x width x depth)	950 x 400 x 245 mm	950 x 400 x 245 mm
FLA Full Load Amperes	6 / 6,6 A	6 / 6,6 A
Starting current	26 A	26 A
T fuse	12 A	12 A
Absorption L35L35	930 / 1070 W	930 / 1070 W
Absorption L35L50	1080 / 1300 W	1080 / 1300 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	70 dB (A)	70 dB (A)
Weight	46 kg	46 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

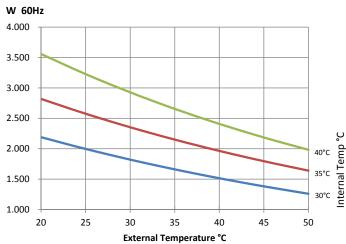
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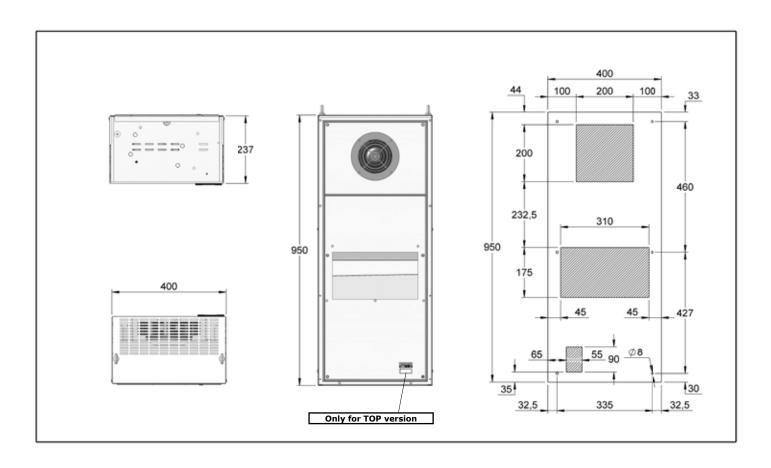
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 2000 W - 400 Vac



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

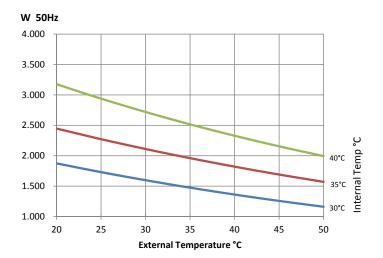
	R5KLM20042LB	R5KLM20042LT
Version	BASE	TOP
Supply voltage	400 Vac - 2 ph	400 Vac - 2 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1960 / 2150 W	1960 / 2150 W
Refrigerating power L35/L50 as per DIN 3168	1570 / 1640 W	1570 / 1640 W
Dimensions H x W x D (height x width x depth)	1050 x 400 x 245 mm	1050 x 400 x 245 mm
FLA Full Load Amperes	3,4 /3,8 A	3,4 /3,8 A
Starting current	17 A	17 A
T fuse	6 A	6 A
Absorption L35L35	930 / 1070 W	930 / 1070 W
Absorption L35L50	1080 / 1300 W	1080 / 1300 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	70 dB (A)	70 dB (A)
Weight	56 kg	56 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

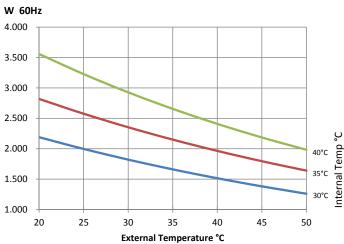
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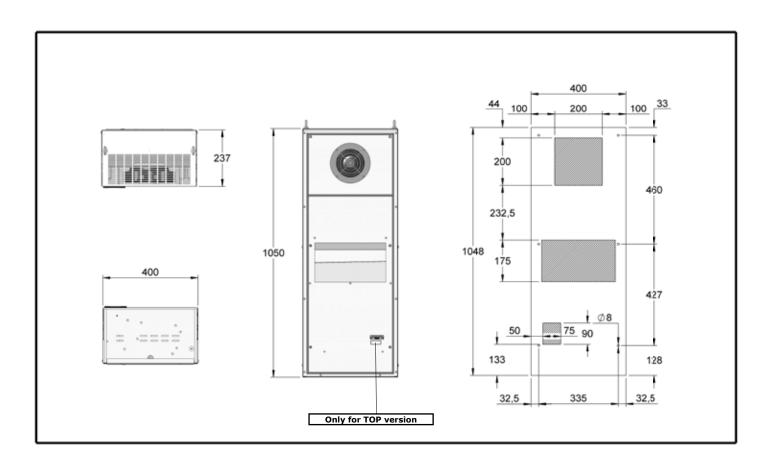
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 2000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

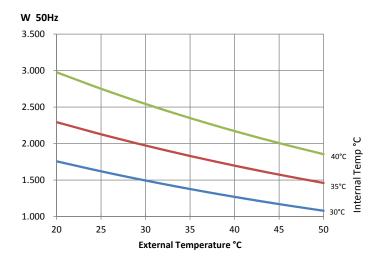
	R5KLM20043LB	R5KLM20043LT
Version	BASE	TOP
Supply voltage	400 / 440 Vac - 3 ph	400 / 440 Vac - 3 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1830 / 2000 W	1830 / 2000 W
Refrigerating power L35/L50 as per DIN 3168	1460 / 1530 W	1460 / 1530 W
Dimensions H x W x D (height x width x depth)	1050 x 400 x 245 mm	1050 x 400 x 245 mm
FLA Full Load Amperes	2,3 / 2,6 A	2,3 / 2,6 A
Starting current	10 A	10 A
T fuse	4 A	4 A
Absorption L35L35	900 / 1040 W	900 / 1040 W
Absorption L35L50	1030 / 1250 W	1030 / 1250 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	70 dB (A)	70 dB (A)
Weight	53 kg	53 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

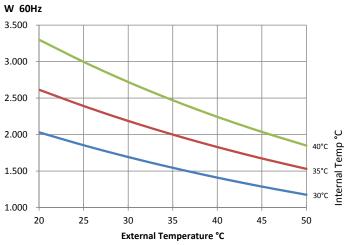
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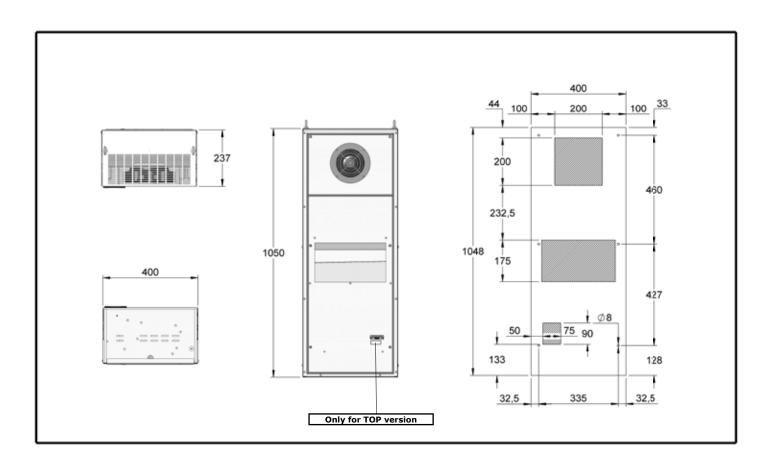
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 3000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond\quad$ BASE 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

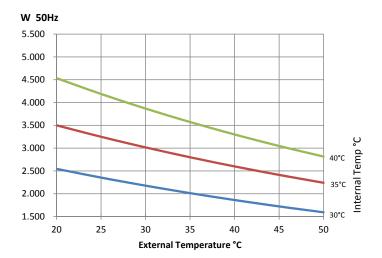
	R5KLM30043LB	R5KLM30043LT
Version	BASE	TOP
Supply voltage	400 / 460 Vac - 3 ph	400 / 460 Vac - 3 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	2800 / 3080 W	2800 / 3080 W
Refrigerating power L35/L50 as per DIN 3168	2240 / 2350 W	2240 / 2350 W
Dimensions H x W x D (height x width x depth)	1100 x 500 x 353 mm	1100 x 500 x 353 mm
FLA Full Load Amperes	2,6 / 2,9 A	2,6 / 2,9 A
Starting current	12 A	12 A
T fuse	8 A	8 A
Absorption L35L35	1100 / 1270 W	1100 / 1270 W
Absorption L35L50	1260 / 1520 W	1260 / 1520 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	71 dB (A)	71 dB (A)
Weight	72 kg	72 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

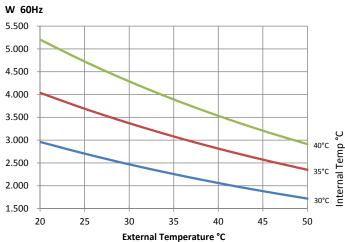
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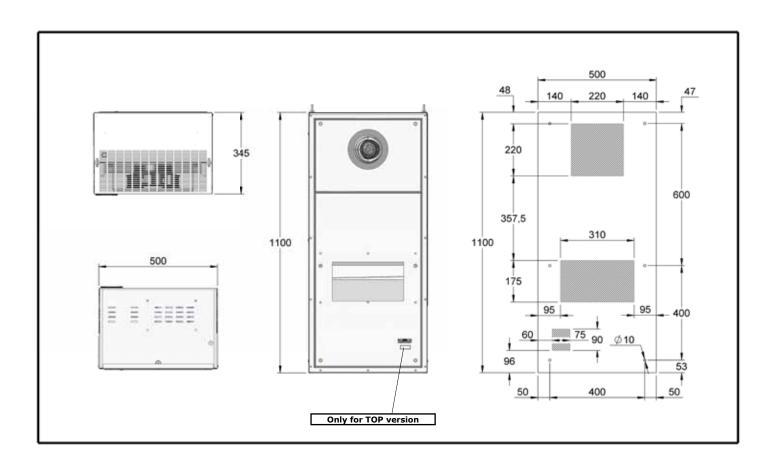
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Wall mount coolers 4000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface of the coolers of BASE and TOP version
- Inbuilt condensation sink on BASE and TOP versions
- Standard air filter on BASE and TOP versions.
- Textured RAL 7035 standard colour. Other colours are available upon request.
- The connection is performed by means of PLUG-IN terminal boards:
 - $\diamond \quad \textsc{BASE}$ 1 PLUG-IN power supply. Visual alarm of minimum/maximum temperature.
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

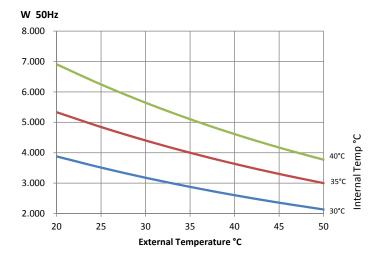
	R5KLM40043LB	R5KLM40043LT
Version	BASE	TOP
Supply voltage	400 / 460 Vac - 3 ph	400 / 460 Vac - 3 ph
Frequency	50 / 60 Hz	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	4000 / 4200 W	4000 / 4200 W
Refrigerating power L35/L50 as per DIN 3168	3000 / 3150 W	3000 / 3150 W
Dimensions H x W x D (height x width x depth)	1100 x 500 x 353 mm	1100 x 500 x 353 mm
FLA Full Load Amperes	3,3 / 3,7 A	3,3 / 3,7 A
Starting current	15 A	15 A
T fuse	8 A	8 A
Absorption L35L35	1800 / 2000 W	1800 / 2000 W
Absorption L35L50	2120 / 2500 W	2120 / 2500 W
Temperature regulating range (factory set)	da 30° C a 40° C	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34	IP 54 / IP 34
Noise level	72 dB (A)	72 dB (A)
Weight	75 kg	75 kg
Coolant type	R134a	R134a
Operating cycle type	100%	100%
Approvals	CE	CE

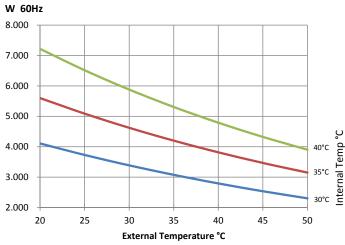
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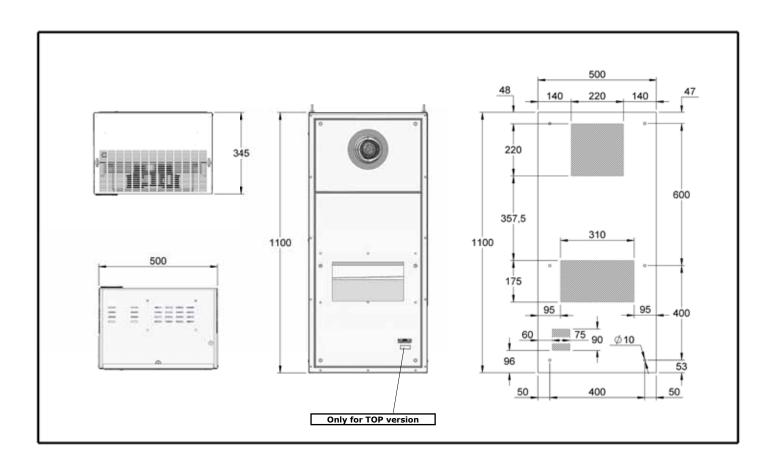
Non-standard colour = R9KLMxxxxxLB/T (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxLB/T











Roof mount coolers



Roof mount coolers are particularly suitable for bayed enclosures cooling and for all those applications, where the space at the sides of an electrical board is particularly reduced.

All the models are equipped with a digital thermostat, a display indicating low and high internal temperature values, a compressor delay, remote on/off, a contact for micro door switch and serial control for remote monitoring.

The roof mount version also includes a condensate dissipating device with a special safety unit, which stops the device in case of a condensate drain failure.

During the whole engineering phase a particular attention has been focused on the following:

- the internal ventilation circuit has been created maintaining a considerable distance between the air suction and discharge units, providing a homogeneous and efficient cooling, consequently avoiding thermal short circuits inside the enclosure;
- the external ventilation circuit has been created optimizing the air flow (ambient), allowing a side by side installation of several coolers, keeping unchanged the coolers performance, avoiding the hot air retrieval.

"RAM KLIMA" roof mount coolers represent the best solution as regards the quality, reliability and completeness in terms of interface and settings. As in case of BASE and TOP wall mount versions the inlet air filter is provided as standard equipment on all the devices and is customizable upon request.

Non-standard voltage and frequency versions are available upon request.



Seal

 polyurethane seal applied by continuous molding as standard on all the units contributing to a considerable installation time saving.

Filter arid

- provided with the innovating click&go fixing system simplifying service activities
- customizable both in terms of colour and logo.

Mounting cutouts

 possibility to install coolers of different power using the same mounting cutout.

Metallic filter

 optional, to be used in particularly harsh environments (presence of oils and particularly aggressive substances)

Stainless steel cover

 Covers of AISI 304 or AISI 316L stainless steel are available for food industry environments or wherever high hygiene standards are required.

Condensation sink

 standard inbuilt for the whole range, complete with a safety unit blocking the device in case of condensate drain failure.

Lifting eyebolts

provided with all the versions in order to facilitate installation activities.

Easy maintenance

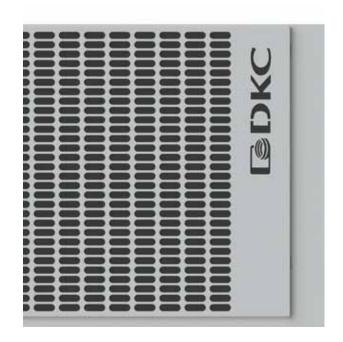
 by virtue of the accessibility to components with no necessity of particular disassembly operations.

Service

 purposed to guarantee a prompt assistance and continuous support over time.









Roof mount version





Digital thermostat

Remote on/off alarm management (door

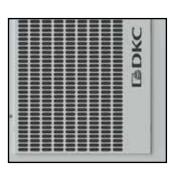
micro switch) RS485 serial interface for remote control of up to 32 units.



Polyurethane seal applied by continuous molding



Condensation sink standard for the whole range, complete with a safety device blocking the cooler in case of a condensate drain failure



Standard air filter





Roof mount cooler 1000 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

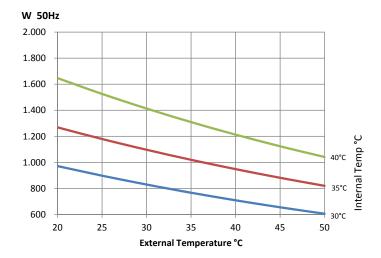
	DEVI M10021DT
	R5KLM10021RT
Version	TOP
Supply voltage	230 Vac - 1 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1020 / 1120 W
Refrigerating power L35/L50 as per DIN 3168	820 / 860 W
Dimensions H \times W \times D (height \times width \times depth)	455 x 600 x 408 mm
FLA Full Load Amperes	3,7 / 4,1 A
Starting current	20 A
T fuse	8 A
Absorption L35L35	490 / 570 W
Absorption L35L50	540 / 650 W
Temperature regulating range (factory set)	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	69 dB (A)
Weight	43 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

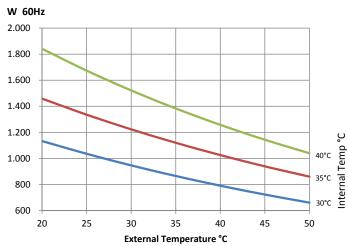
Optional:

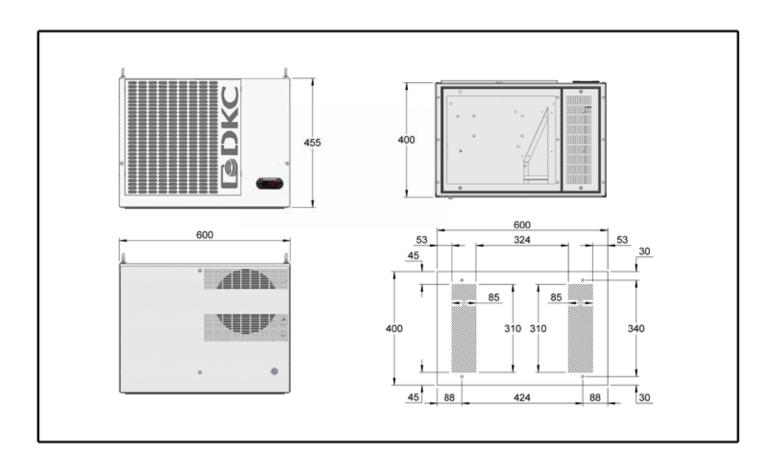
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 1000 W - 400 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

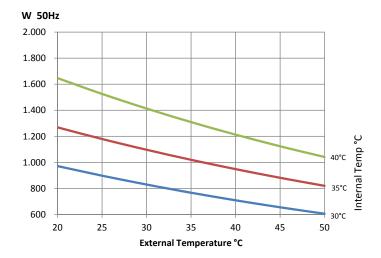
	DEVI MA COADET
	R5KLM10042RT
Version	TOP
Supply voltage	400 Vac - 2 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1020 / 1120 W
Refrigerating power L35/L50 as per DIN 3168	820 / 860 W
Dimensions $H \times W \times D$ (height x width x depth)	455 x 600 x 408 mm
FLA Full Load Amperes	2,1 / 2,4 A
Starting current	13 A
T fuse	4 A
Absorption L35L35	490 / 570 W
Absorption L35L50	540 / 650 W
Temperature regulating range (factory set)	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	69 dB (A)
Weight	48 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

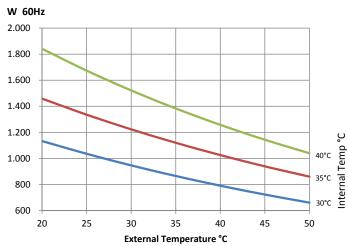
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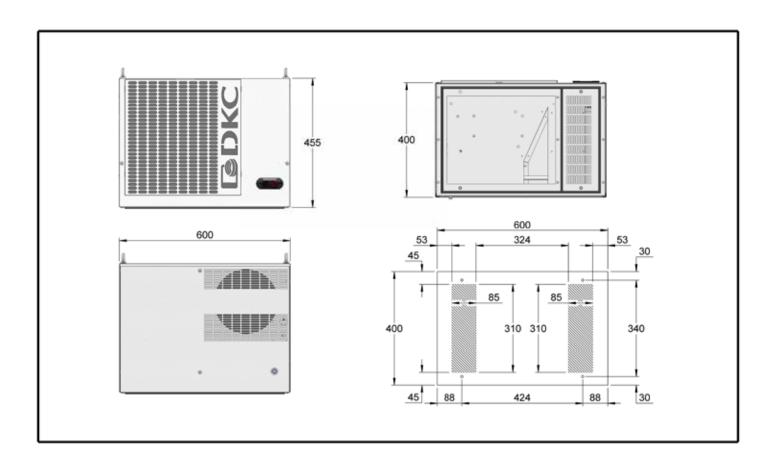
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 1500 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

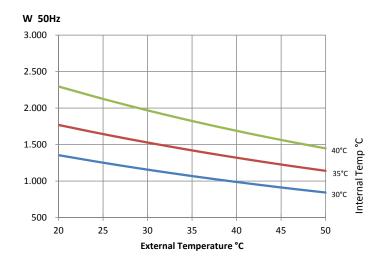
	R5KLM15021RT
Version	ТОР
Supply voltage	230 Vac - 1 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1420 / 1560 W
Refrigerating power L35/L50 as per DIN 3168	1140 / 1190 W
Dimensions H \times W \times D (height \times width \times depth)	455 x 600 x 408 mm
FLA Full Load Amperes	5,2 / 5,8 A
Starting current	24 A
T fuse	8 A
Absorption L35L35	660 / 760 W
Absorption L35L50	760 / 920 W
Temperature regulating range (factory set)	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	69 dB (A)
Weight	45 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

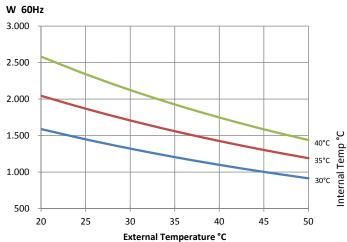
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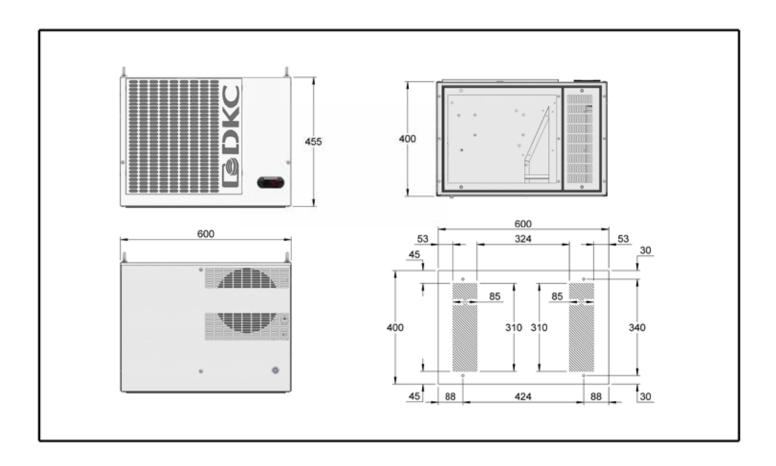
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 1500 W - 400 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

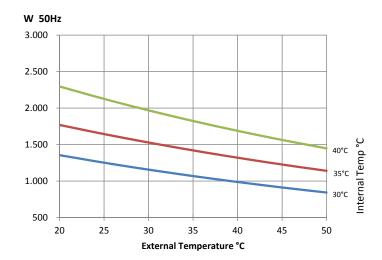
DEVI M1E042DT
R5KLM15042RT
TOP
400 Vac - 2 ph
50 / 60 Hz
1420 / 1560 W
1140 / 1190 W
455 x 600 x 408 mm
3 / 3,3 A
16 A
5 A
660 / 760 W
760 / 920 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
69 dB (A)
51 kg
R134a
100%
CE

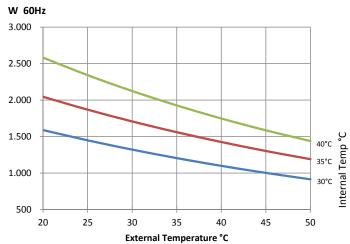
Optional:

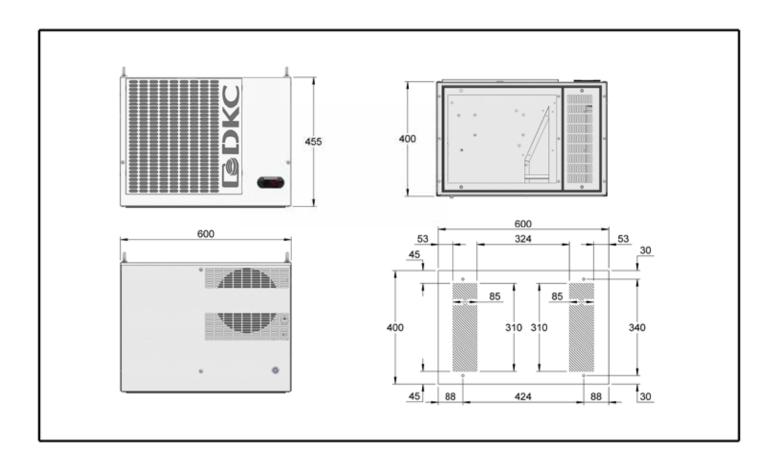
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 1500 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

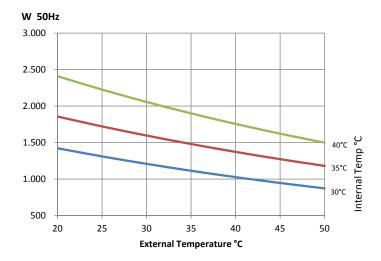
	R5KLM15043RT
Version	TOP
Supply voltage	400 / 440 Vac - 3 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1480 / 1620 W
Refrigerating power L35/L50 as per DIN 3168	1180 / 1230 W
Dimensions H x W x D (height x width x depth)	455 x 600 x 408 mm
FLA Full Load Amperes	2 / 2,1 A
Starting current	11 A
T fuse	4 A
Absorption L35L35	690 / 780 W
Absorption L35L50	780 / 940 W
Temperature regulating range (factory set)	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	69 dB (A)
Weight	55 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

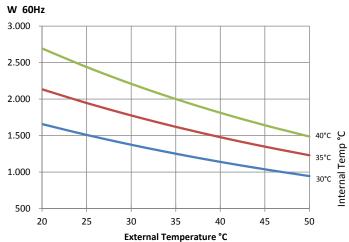
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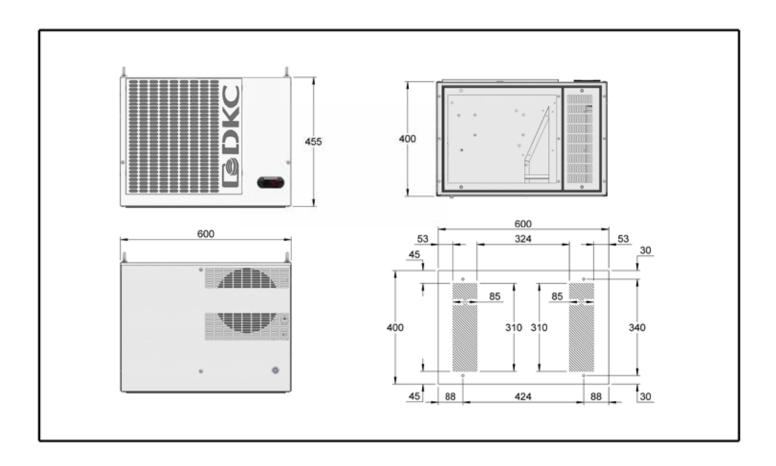
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 2000 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

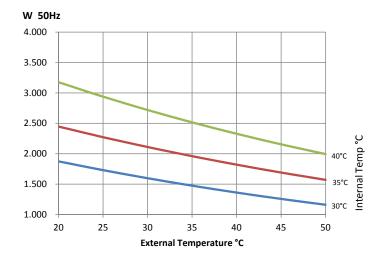
DEKI MANASIRT
R5KLM20021RT
TOP
230 Vac - 1 ph
50 / 60 Hz
1960 / 2150 W
1570 / 1640 W
455 x 600 x 408 mm
6 / 6,6 A
26 A
8 A
930 / 1070 W
1080 / 1300 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
70 dB (A)
51 kg
R134a
100%
CE

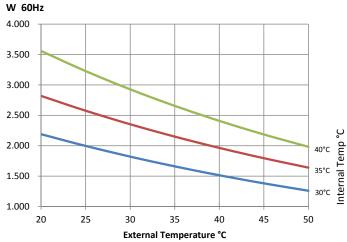
Optional:

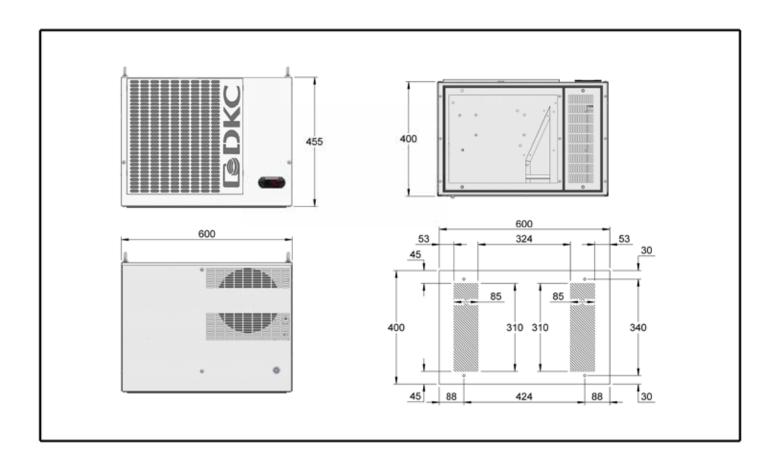
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 2000 W - 400 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

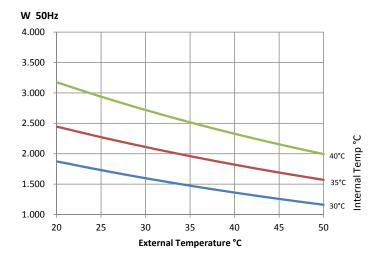
DEVI MAGGAART
R5KLM20042RT
TOP
400 Vac - 2 ph
50 / 60 Hz
1960 / 2150 W
1570 / 1640 W
455 x 600 x 408 mm
3,4 /3,8 A
17 A
6 A
930 / 1070 W
1080 / 1300 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
70 dB (A)
57 kg
R134a
100%
CE

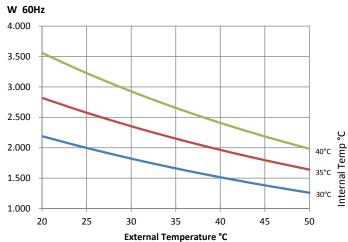
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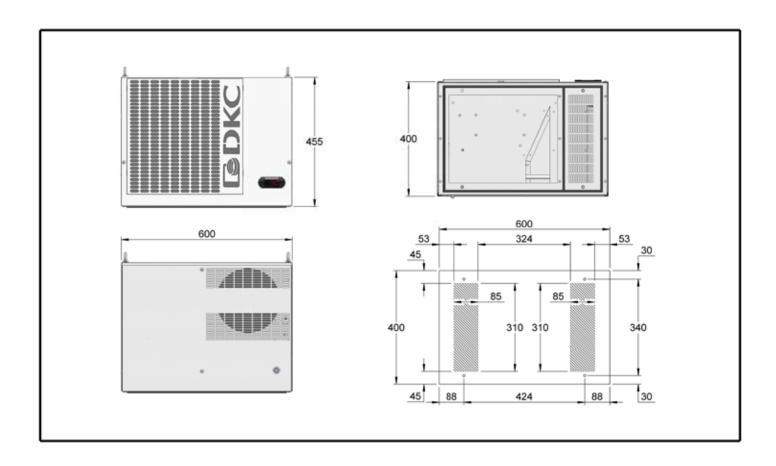
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 2000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

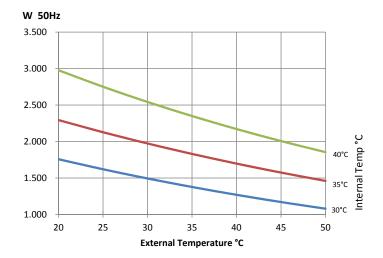
DEI/UMAAA 42DT
R5KLM20043RT
TOP
400 / 440 Vac - 3 ph
50 / 60 Hz
1830 / 2000 W
1460 / 1530 W
455 x 600 x 408 mm
2,3 / 2,6 A
10 A
4 A
900 / 1040 W
1030 / 1250 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
70 dB (A)
58 kg
R134a
100%
CE

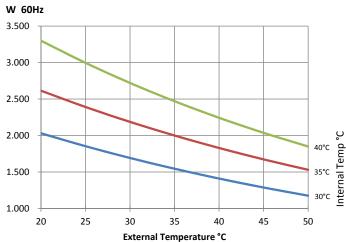
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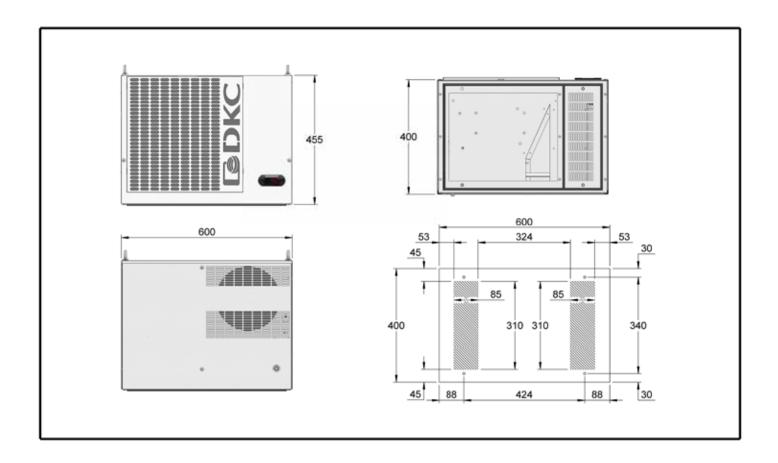
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 3000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

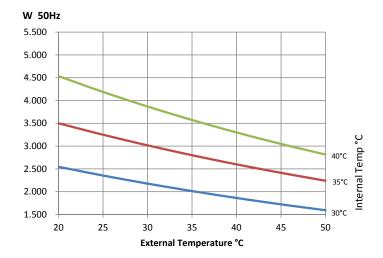
	DEW MOOADDT
	R5KLM30043RT
Version	TOP
Supply voltage	400 / 460 Vac - 3 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	2800 / 3080 W
Refrigerating power L35/L50 as per DIN 3168	2240 / 2350 W
Dimensions H x W x D (height x width x depth)	505 x 800 x 508 mm
FLA Full Load Amperes	2,6 / 2,9 A
Starting current	12 A
T fuse	8 A
Absorption L35L35	1100 / 1270 W
Absorption L35L50	1260 / 1520 W
Temperature regulating range (factory set)	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	71 dB (A)
Weight	72 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

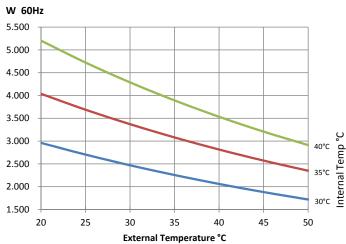
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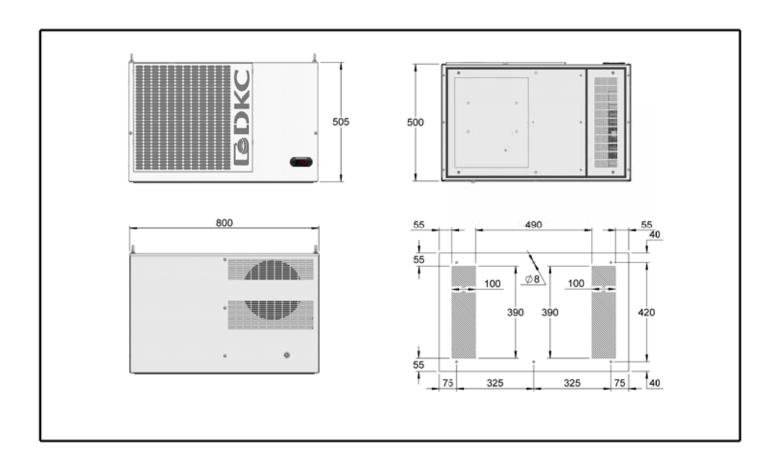
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Roof mount cooler 4000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink with a particular safety unit blocking the device in case
 of a condensate drain failure.
- Standard air filter.
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- · Versions with non-standard supply voltage are available upon request.

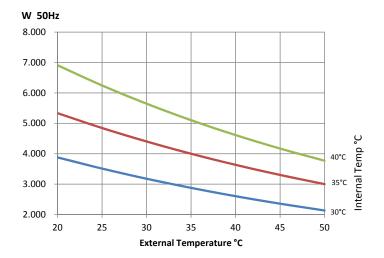
DEW M40042DT
R5KLM40043RT
TOP
400 / 460 Vac - 3 ph
50 / 60 Hz
4000 / 4200 W
3000 / 3150 W
505 x 800 x 508 mm
3,3 / 3,7 A
15 A
8 A
1800 / 2000 W
2120 / 2500 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
72 dB (A)
75 kg
R134a
100%
CE

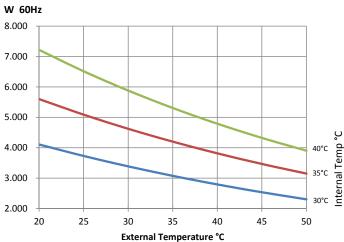
Optional:

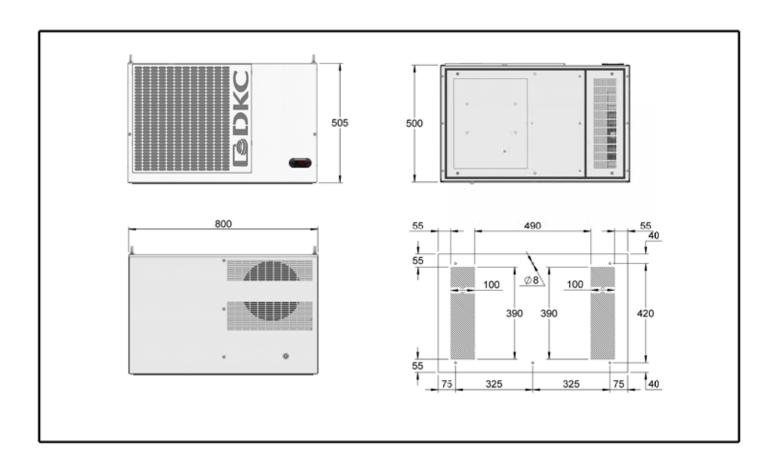
Non-standard colour = R9KLMxxxxxRT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxRT











Slim and Slim IN coolers



In order to meet the exigency to reduce the protrusion of coolers from electrical boards as much as possible, DKC has decided to complete the range with SLIM series.

Slim and Slim IN coolers are particularly suitable for bayed cabinets cooling and for all those applications where it is important to reduce the protrusion of the cooler.

Slim IN coolers differ from those of SLIM series, since the whole unit is mounted inside a cabinet being fastened to the cabinet door by means of an external frame.

Like wall mount and roof mount versions, also SLIM models have been designed with technical characteristics unique on the market.

The product line includes cooling power from 1000 to 3000 Watt (as per DIN3168/EN815) with a reduced number of cut-out templates in order to manage several power options with the same cut-out. Special voltage and frequency versions are available upon request.



MAIN ADVANTAGES

Seal

 polyurethane seal applied by continuous molding as standard on all the units contributing to a considerable installation time saving.

Filter grid

- provided with the innovating click&go fixing system simplifying service activities
- customizable both in terms of colour and logo.

Mounting cutouts

 possibility to install coolers of different power using the same mounting cutout.

Metallic filter

 optional, to be used in particularly harsh environments (presence of oils and particularly aggressive substances)

Stainless steel cover

 Covers of AISI 304 or AISI 316L stainless steel are available for food industry environments or wherever high hygiene standards are required.

Condensation sink

 standard inbuilt for the whole range, complete with a safety unit blocking the device in case of condensate drain failure.

Lifting eyebolts

 provided with all the versions in order to facilitate installation activities.

Easy maintenance

 by virtue of the accessibility to components with no necessity of particular disassembly operations.

Service

 purposed to guarantee a prompt assistance and continuous support over time.





Slim and Slim IN coolers





Digital thermostat



Polyurethane seal applied by continuous molding

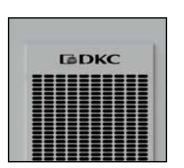


Condensation sink standard for the whole range





Terminal block for ON/OFF alarm management (door micro switch) RS485 serial interface for remote control of up to 32 units



Standard air filter



Slim coolers 1000 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

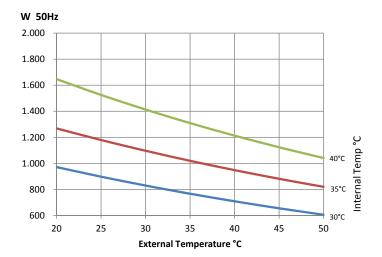
DEVI M40034COT
R5KLM10021SOT
Тор
230 Vac - 1 ph
50 / 60 Hz
1020 / 1120 W
820 / 860 W
1500 x 400 x 190 mm
3,7 / 4,1 A
20 A
8 A
490 / 540 W
570 / 650 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
69 dB (A)
38 kg
R134a
100%
CE

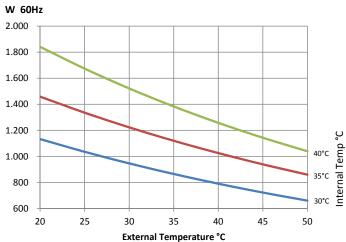
Optional:

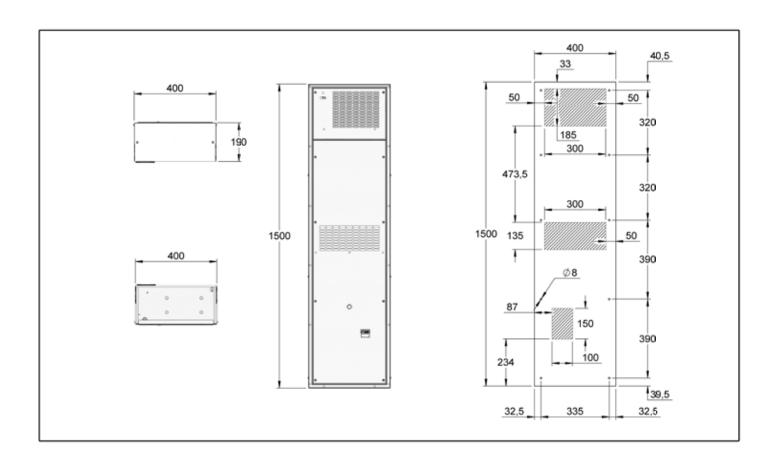
Non-standard colour = R9KLMxxxxxSOT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSOT











Slim coolers 1500 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

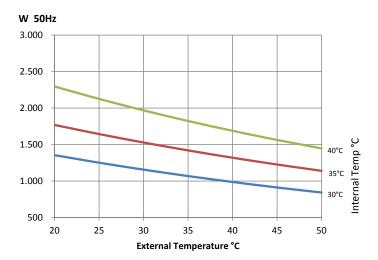
	R5KLM15021SOT
Version	TOP
Supply voltage	230 Vac - 1 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1420 / 1560 W
Refrigerating power L35/L50 as per DIN 3168	1140 / 1190 W
Dimensions H x W x D (height x width x depth)	1500 x 400 x 190 mm
FLA Full Load Amperes	5,2 / 5,8 A
Starting current	24 A
T fuse	8 A
Absorption L35L35	660 / 760 W
Absorption L35L50	760 / 920 W
Temperature regulating range (factory set)	da 30° C a 40 ° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	69 dB (A)
Weight	40 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

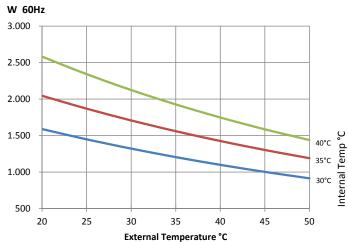
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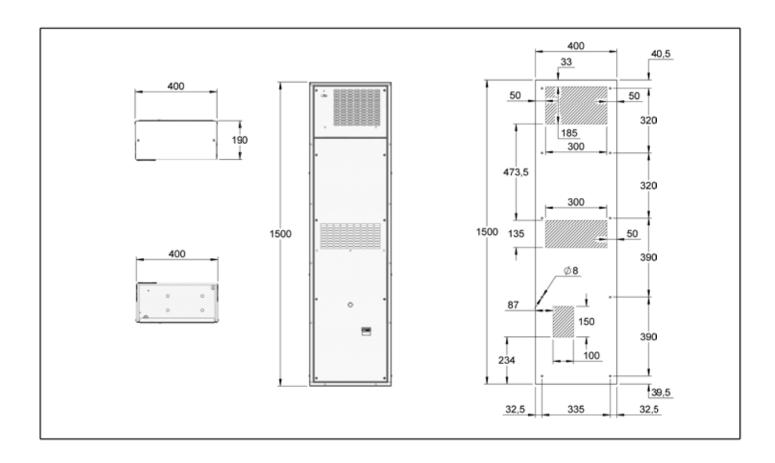
Non-standard colour = R9KLMxxxxxSOT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSOT











Slim coolers 2000 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

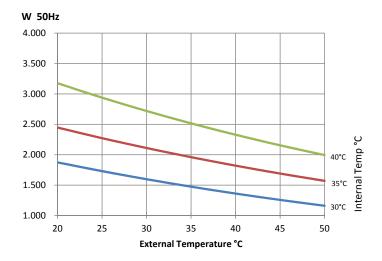
	R5KLM20021SOT
Version	TOP
Supply voltage	230 Vac - 1 ph
Frequency	50 / 60 Hz
Refrigerating power L35/L35 as per DIN 3168	1960 / 2150 W
Refrigerating power L35/L50 as per DIN 3168	1570 / 1640 W
Dimensions H x W x D (height x width x depth)	1650 x 400 x 220 mm
FLA Full Load Amperes	6 / 6,6 A
Starting current	26 A
T fuse	12 A
Absorption L35L35	930 / 1070 W
Absorption L35L50	1080 / 1300 W
Temperature regulating range (factory set)	da 30° C a 40° C
Operating temperature (Environment)	da + 20° C a + 50° C
Protection degree of cabinet facing side / External side	IP 54 / IP 34
Noise level	70 dB (A)
Weight	46 kg
Coolant type	R134a
Operating cycle type	100%
Approvals	CE

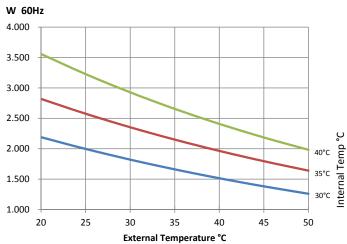
Optional:

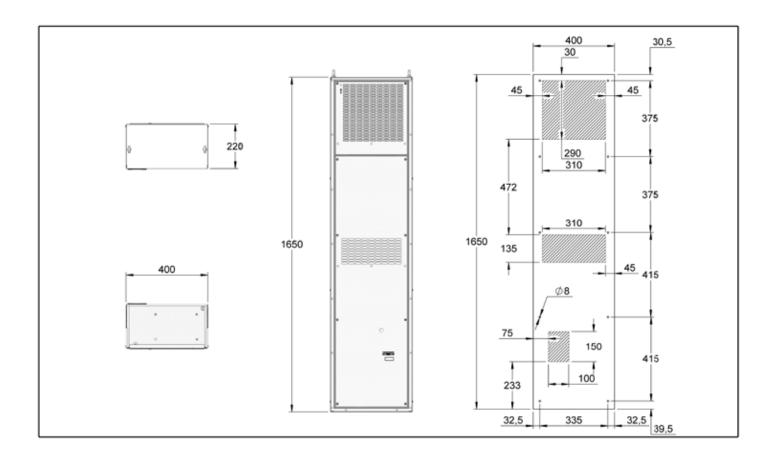
Non-standard colour = R9KLMxxxxxSOT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSOT











Slim coolers 3000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

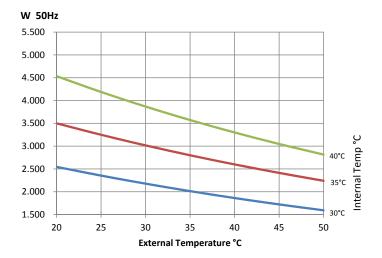
R5KLM30043SOT
TOP
400 / 460 Vac - 3 ph
50 / 60 Hz
2800 / 3080 W
2240 / 2350 W
1650 x 400 x 220 mm
2,6 / 2,9 A
12 A
8 A
1100 / 1270 W
1260 / 1520 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
71 dB (A)
72 kg
R134a
100%
CE

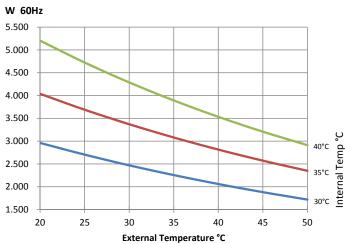
Optional:

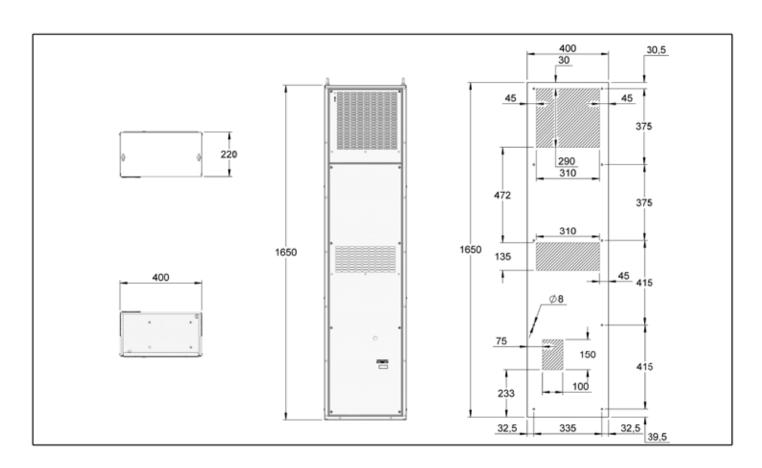
Non-standard colour = R9KLMxxxxxSOT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSOT











Slim IN coolers 1000 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

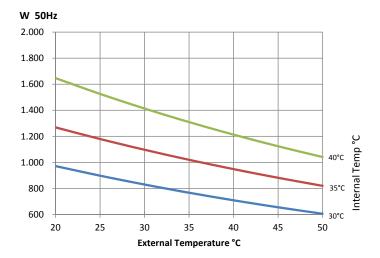
R5KLM10021SIT
Тор
230 Vac - 1 ph
50 / 60 Hz
1020 / 1120 W
820 / 860 W
1570 x 490 x 35 mm (155 internally to electrical board)
3,7 / 4,1 A
20 A
8 A
490 / 540 W
570 / 650 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
69 dB (A)
38 kg
R134a
100%
CE

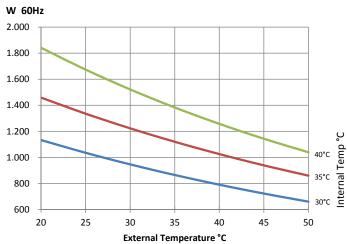
Optional:

Non-standard colour = R9KLMxxxxxSIT (Required RAL code is to be specified)

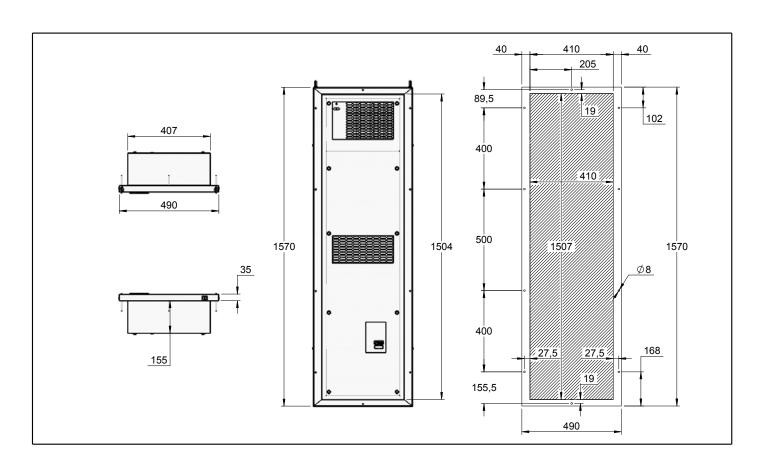
AISI 304 case = RIKLMxxxxxSIT







Dimensions and mounting cut-outs (mm)





Slim IN coolers 1500 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - ♦ TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

	R5KLM15021SIT		
Version	TOP		
Supply voltage	230 Vac - 1 ph		
Frequency	50 / 60 Hz		
Refrigerating power L35/L35 as per DIN 3168	1420 / 1560 W		
Refrigerating power L35/L50 as per DIN 3168	1140 / 1190 W		
Dimensions H x W x D (height x width x depth)	1570 x 490 x 35 mm (155 internally to electrical board)		
FLA Full Load Amperes	5,2 / 5,8 A		
Starting current	24 A		
T fuse	8 A		
Absorption L35L35	660 / 760 W		
Absorption L35L50	760 / 920 W		
Temperature regulating range (factory set)	da 30° C a 40 ° C		
Operating temperature (Environment)	da + 20° C a + 50° C		
Protection degree of cabinet facing side / External side	IP 54 / IP 34		
Noise level	69 dB (A)		
Weight	40 kg		
Coolant type	R134a		
Operating cycle type	100%		
Approvals	CE		

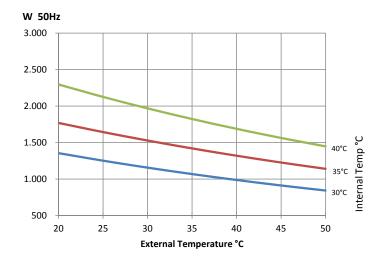
Optional:

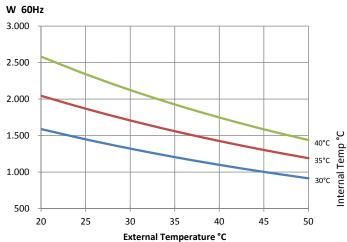
Non-standard colour = R9KLMxxxxxSIT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSIT

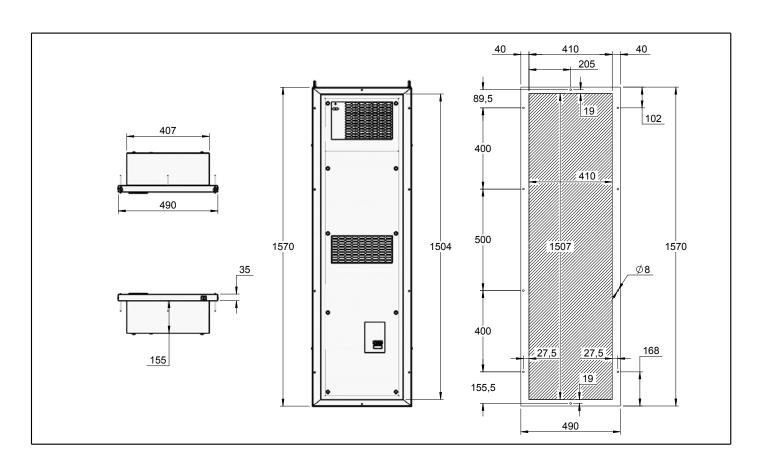
AISI 316 case = R6KLMxxxxxSIT







Dimensions and mounting cut-outs (mm)





Slim IN coolers 2000 W - 230 Vac



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

R5KLM20021SIT
TOP
230 Vac - 1 ph
50 / 60 Hz
1960 / 2150 W
1570 / 1640 W
1720 x 490 x 35 mm (185 internally to electrical board)
6 / 6,6 A
26 A
12 A
930 / 1070 W
1080 / 1300 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
70 dB (A)
46 kg
R134a
100%
CE

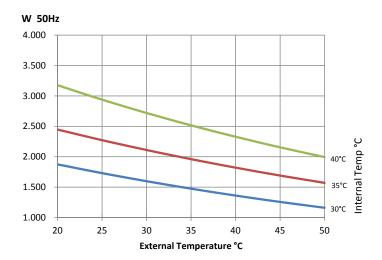
Optional:

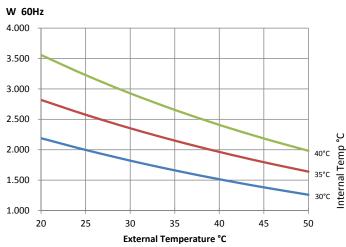
Non-standard colour = R9KLMxxxxxSIT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSIT

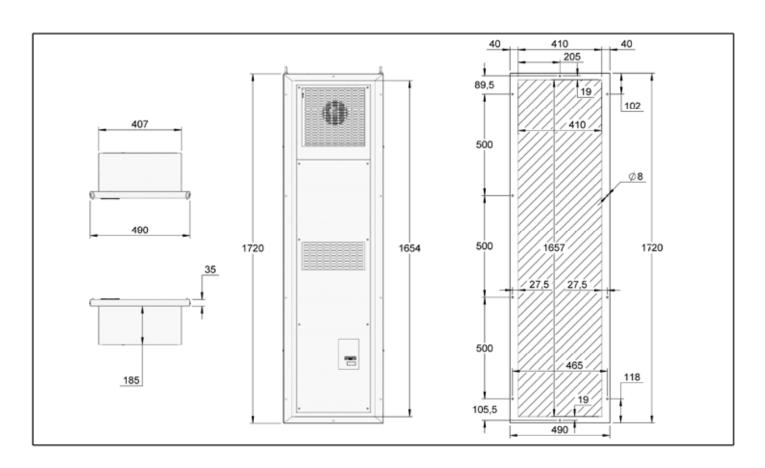
AISI 316 case = R6KLMxxxxxSIT







Dimensions and mounting cut-outs (mm)





Slim IN coolers 3000 W - 400 Vac three-phase



- Standard seal applied to cabinet-facing surface
- Inbuilt condensation sink
- Standard air filter
- Textured RAL 7035 standard colour. Other colours are available upon request
- The connection is performed by means of PLUG-IN terminal boards:
 - TOP 2 PLUG-IN power supply connectors. Alarm control by means of a terminal board. Remote ON/OFF. RS485 serial interface for remote control.
- Versions with non-standard supply voltage are available upon request.

R5KLM30043SIT
TOP
400 / 460 Vac - 3 ph
50 / 60 Hz
2800 / 3080 W
2240 / 2350 W
$1720 \times 490 \times 35 \text{ mm}$ (185 internally to electrical board)
2,6 / 2,9 A
12 A
8 A
1100 / 1270 W
1260 / 1520 W
da 30° C a 40° C
da + 20° C a + 50° C
IP 54 / IP 34
71 dB (A)
72 kg
R134a
100%
CE

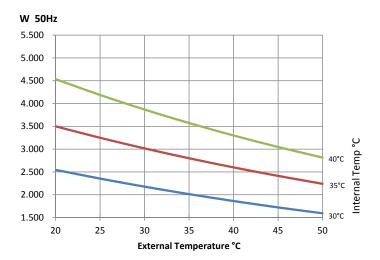
Optional:

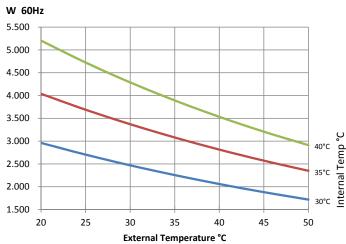
Non-standard colour = R9KLMxxxxxSIT (Required RAL code is to be specified)

AISI 304 case = RIKLMxxxxxSIT

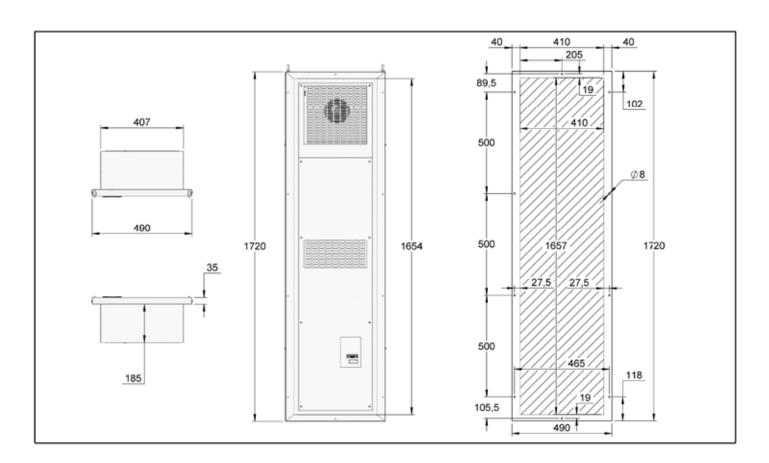
AISI 316 case = R6KLMxxxxxSIT







Dimensions and mounting cut-outs (mm)





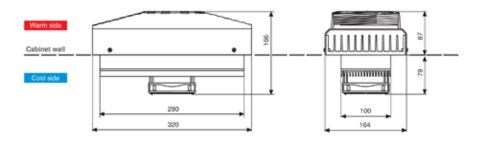
Thermoelectric coolers

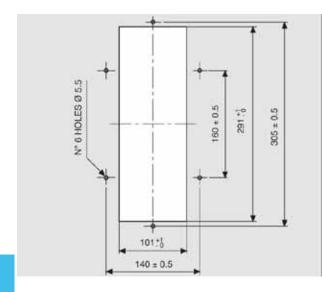


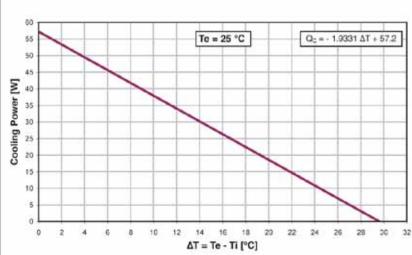
- Peltier cells series.
- Suitable for small cabinets and boxes, where standard coolers are not applicable.
- Ideal for monitoring and control components cooling.
- Absence of vibrations makes them suitable for applications, where maximum precision is required.
- Material: PC/ABS UV resistant. All the parts are self-extinguishing as per UL 94V-0.
- Standard colour: RAL 7035.
- Fan protection degree (warm side): IP55 as per EN 60529 standard.
- Mounting: by means of M5 screws (not included to the delivery set), as shown by the mounting cut-out.
- Mounting range: adjustable to any thickness.
- Electrical connection: by means of 4-pole connectors.

Cooling power	Voltage	Nominal voltage	Nominal current	Max. current	ent temperature Weigh		Max. Operating Approva	/ tpp: o taio		Weight	Code
W	V d.c.	(Range) V	A	A	°C	CE	UL	Kg	Couc		
57	24	10 ÷ 27,6	2,4	2,8	-20 + 70			4	R5KUT50		
101	24	17 ÷ 27	4,7	5,7	-20 +70			6	R5KUT100		
201	24	17 ÷ 27	9,5	11,5	-20 + 70	•		12	R5KUT200		

R5KUT50 Technical data

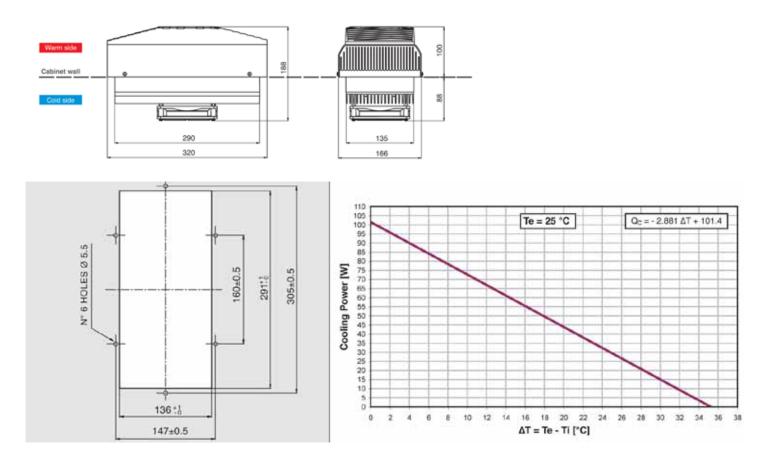




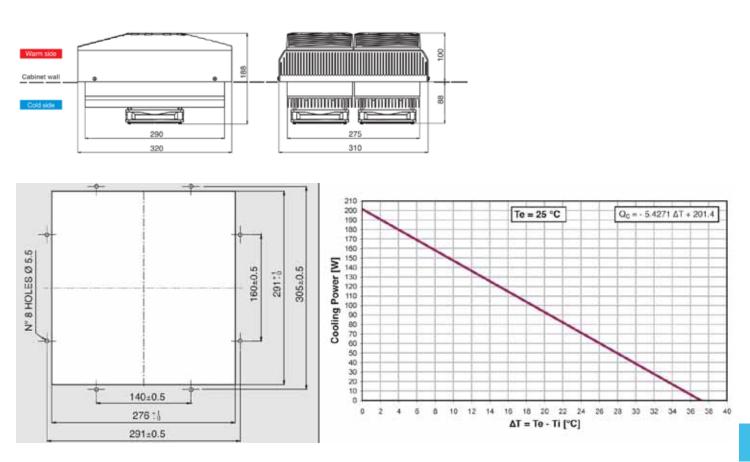




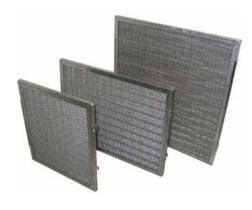
R5KUT100 Technical data



R5KUT200 Technical data







ALUMINIUM FILTER

- Purposed for harsh environments in preference to standard polyurethane filters.
- To be replaced or cleaned regularly in proportion to its obstruction.

Code	For wall mount coolers	For roof mount coolers
RAKLMFA1	300-500-800 W 230 Vac	-
RAKLMFA2	500-800 W 400 Vac	-
RAKLMFA3	1000-1500-2000 W	-
RAKLMFA4	3000-4000 W	-
RAKLMFA5	-	1000-1500-2000 W
RAKI MFA6	_	3000-4000 W



POLYURETHANE FILTER

- Spare filter for BASE and TOP coolers.
- To be replaced or cleaned regularly in proportion to its obstruction.

Code	For wall mount coolers	For roof mount coolers
RAKLMFP1	300-500-800 W 230 Vac	-
RAKLMFP2	500-800 W 400 Vac	-
RAKLMFP3	1000-1500-2000 W	-
RAKLMFP4	3000-4000 W	-
RAKLMFP5	-	1000-1500-2000 W
RAKI MEP6	-	3000-4000 W



INTERNAL ALUMINIUM AIR DEFLECTOR

- Purposed to deflect cool air downwards.
- Suitable to prevent thermal short-circuits inside electrical enclosures.
- Easy to install even to a cooler already mounted to an enclosure.
- Suitable only for wall mount coolers.

Code	For wall mount coolers
RAKLMDI1	300-500-800 W
RAKLMDI2	1000-1500-2000 W
RAKLMDI3	3000-4000 W



REINFORCED HINGES KIT

- Purposed to be used in preference to standard door hinges for CQE, DAE and CAE cabinets.
- Particularly suitable for 3000 and 4000 W coolers wall mounting.
- Pack of 4 pieces complete with fasteners.

Code	For wall mount coolers
RAKLMCR	3000-4000 W





FRAME FOR SEMI-INBUILT WALL MOUNT COOLERS

- Reduces the protrusion of coolers from cabinets.
- IP54 protection degree assured by an injected seal and a correct installation.
- To be mounted to a cabinet by means of screws.
- Suitable for wall mount coolers in standard versions.

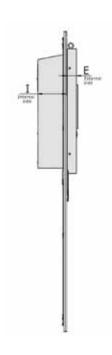
Code	For wall mount coolers
RAKLMCSI1	300 W
RAKLMCSI2	500-800 W 230 Vac
RAKLMCSI3	500 W 400 Vac
RAKLMCSI4	800 W 400 Vac
RAKLMCSI5	1000-1500-2000 W 230 Vac
RAKLMCSI6	3000-4000 W
RAKLMCSI7	1000-1500-2000 W bi-three-phase



INBUILT COOLERS

- Maximum reduction of the protrusion of coolers from cabinets.
- IP54 protection degree assured by an injected seal and a correct installation.
- To be mounted to a cabinet by means of screws.
- Internal and external sizes differ depending on the cooler model.









CUSTOMIZABLE FILTER GRID

- Standard filter grids are customizable both in terms of colour and logo.
- It is provided with the innovating click&go fixing system simplifying service activi-
- It is possible to order a customizable grid in order to replace a standard grid.
- The following details are to be specified at the order:
 - RAL code and/or company logo (subject to feasibility evaluation by DKC);
 installation of the grid to a cooler, if required.

Code	For wall mount coolers	For roof mount coolers
RAKLMGFP1	300-500-800 W 230 Vac	-
RAKLMGFP2	500-800 W 400 Vac	-
RAKLMGFP3	1000-1500-2000 W	-
RAKLMGFP4	3000-4000 W	-
RAKLMGFP5	-	1000-1500-2000 W
RAKLMGFP6	-	3000-4000 W



DKC SERVICE

In order to guarantee a prompt assistance and a constant support over time, DKC has created a service network in Italy and many parts of the world. This assures the users of RAMKLIMA coolers that in case of necessity they will get an immediate assistance.

Furthermore, please, feel free to contact DKC technicians for any problem by phone: +39.06.552960222 or by e-mail: ramklima@dkceurope.eu.





DKC SOFTWARE AND REMOTE CONTROL INTERFACE

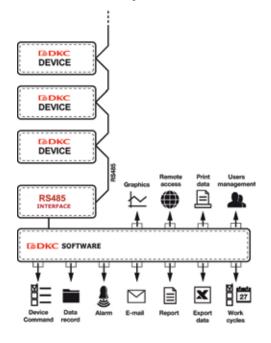
Code: RAKLMSWR

- Allows monitoring up to 32 coolers with a sole serial interface (RS485 MODBUS for network control).
- Suitable to visualize and print reports, manage alarms, modify settings, monitor, control and optimize the whole system.
- It is complete with the necessary interface equipment, 230 V AC power supply and RS232 serial cable for PC connection.

System requirements

- Windows XP SP3, Windows Vista or Windows 7 operating system.
- RAM 2GB (recommended: 4GB).
- 10GB of available space on hard disk.
- Minimum resolution 1024x768 (recommended: 1280x1024 32 bit).
- Integrated RS232 serial port.
- 1 USB port for a license key.
- · Processor 2GHz or higher.

Connection layout



Interface dimensions





Ventilation

New filter-fans and the relative filters by DKC of "R5KV" series represent the best solution for installation time saving currently available on the market.

Innovative elastic clips allow mounting with no screws and no necessity to open the filter cover.

In fact it is sufficient to push the filter into a cut-out (especially sized) in order to be able to proceed with mounting without any further operation, reducing therefore to minimum the installation time.

A further advantage is represented by a rapid filter media substitution (with no tools) by virtue of sliding guides used to open the unit, reducing in this manner maintenance costs to minimum.

The new "R5KV" series is completely compatible and interchangeable with the previous "RAV" series.

The whole "R5KV" line is wall-installable with a mounting range of 1 to $2.5\ mm$.

The IP protection degree have been improved with the help of the following 2 measures:

- A seal of polyurethane foam is settled inside a groove on the rear side of the filter-fans, designed so that it may not surmount the installation surface.
- The internal frame of the filter base is provided with longitudinal ribbing, which allow an easy water drain in case of its seepage to the upper filter part.

The material used for "R5KV" series is polycarbonate/ABS aimed to render the products more solid and resistant to colour fading and flexion.

The product range includes filter-fans with the capacity of 12 to 520 m3/h both in standard and EMC version purposed for protection against electromagnetic interferences.

Roof exhaust units and ventilation covers complete DKC range of products for ventilation dedicated to natural and forced convection cooling.

New-entry of the catalogue, Peltier cell thermoelectric units represent an ideal solution for small enclosures conditioning, where standard conditioners are not applicable.

In comparison to traditional conditioners thermoelectric units have no compressor, therefore they are not subject to vibrations and suitable for applications, where the maximum precision is required.

The principle of operation is based on Peltier effect, allowing to absorb the heat from one side (cool side) and transmit it to the environment from the other side (warm side).

Besides that they are environmentally safe, since they do not contain substances noxious for ozone, do not require maintenance, have a long lifespan and are very easy to install.

Numerous completing accessories, such as thermostats, humidistats and anti-condensation heaters, allow maintaining always an appropriate temperature inside electrical enclosures.

All products marked NEW are available upon request.











Quick installation



Innovative fixing clips



Flush seal



Safety





Sliding grid removal



UV resistance



Improved water resistance

Conformity and Approvals



CE

Protection degree

- IP54 as per EN 60529 standard
- NEMA12 as per UL50 The protection degree is guaranteed by a twocomponent polyurethane foam



Guidelines for cooling system selection

In order to select an appropriate cooling method for an electrical assembly, it is important to take into consideration the following basic principles:

- 1. if **a low heat rate is to be dissipated** and T ambient < T internal to the enclosure, it is sufficient to use only the grids with or without a filter in order to obtain an appropriate cooling system. In this manner the ambient air (cooler) enters inside the electrical enclosure by virtue of the "Natural Convection". This system is undoubtedly the most inexpensive, but turns out to be quite limited with respect to modern electrical components;
- 2. if **a greater heat rate is to be dissipated** (in comparison to a solution with "Natural Convection") and T ambient < T internal to the enclosure, it is necessary to use a classic ventilation system based on fans and filters in order to obtain a suitable cooling system. The ambient air (cooler) enters inside the electrical enclosure by virtue of the "Forced Convection". This system represents an ideal and most widely used solution for modern electronic and electrical applications. The prerogative for use of this type of solution is a non-hazardous type of environment.
- 3. If **a high heat rate is to be dissipated** and T ambient > T internal to the enclosure, it is necessary to use a closed cooling circuit. This system represents an ideal solution, when it is required to avoid damaging internal components of an electrical assembly by water, dust and chemical agents, as well as by too high temperatures.

DKC conditioners represent an ideal solution in order to satisfy all electronic and electrical applications, where it is necessary to cool an electric board and keep it dissociated from the external environment.

Operating principle of "R5KV" series fan-filters

DKC fans may be used whenever the ambient temperature (external to the enclosure) is lower than the temperature inside an electrical assembly.

Being composed by a ventilating unit and a grid with a filter for air-out, they filter the air entering the lower enclosure part dissipating the heat and homogenizing the temperature inside the enclosure.

The incoming air generates an overpressure, which facilitates its output from a grid located in the upper part of the enclosure.

The greater is the distance between these two points the better is the system performance.

It is a good practice, anyway, to perform a regular maintenance of the filter.

DKC fans maintain the enclosures protection degree and are perfectly integrated from the aesthetical point of view having RAL 7035 colour.

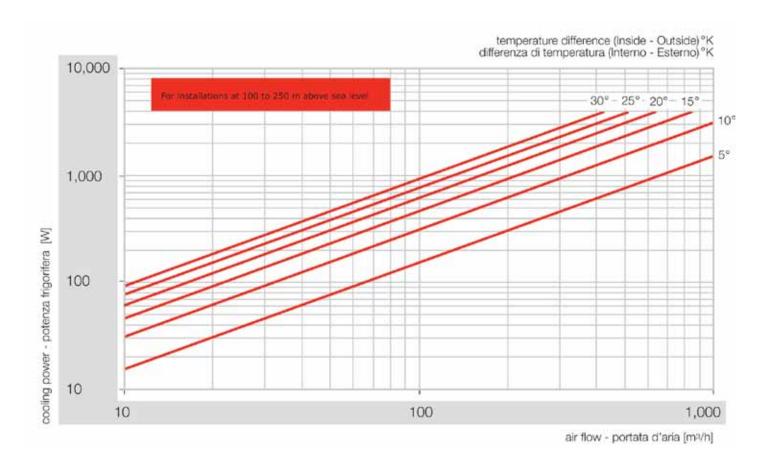
It is also advisable to install a thermostat able to control and activate the ventilation system only when the internal temperature exceeds the required one.

This kind of measure would help to increase the lifespan of your filtering system.





Product selection diagram



An adequate choice of a fan is fundamental for a correct enclosure ventilation.

In order to make a choice it is important to determine a suitable air flow value.

To calculate it, 2 values need to be defined:

- Delivered cooling (W)
- Difference between the maximum allowable temperature inside the enclosure and the maximum expectable ambient temperature external to the enclosure.

Having defined these two values it is necessary to crisscross the horizontal line relative to the delivered cooling with the diagonal one referred to the temperature difference. A vertical line generated by the cross point determines the required air flow.

At this stage it is sufficient to choose a suitable fan.

Making the calculation it is necessary to take into consideration that a part of the heat is dissipated by the enclosure walls, and it is recommended to oversize the airflow value given by the graph by 20% in order to be able to face potential situations when the filter is obstructed.



R5KV08 Fan-filter



Material: PC/ABS UV resistant

• Standard colour: RAL 7035. Other colours available upon request.

Protection degree: IP54 as per EN 60529 standard

• Mounting: by means of elastic clips or 4 self-tapping screws

Mounting range: thickness from 1 to 2 mm.
 Storing temperature: from -40°C to +70°C

Lifespan L10 a 20°C: 50.000 hMotor protection: impedance

• Earthing connection: by M4 screws on the fan case

• Electrical connection: by means of an UL3266 ABG22 cable

• Application class: class I

• Filtering media: thermo-linked progressive structure synthetic fibre

Filtering class: G3 as per EN 779.
 Separation grade: 85% - DIN 24185
 Dust retention capacity: 600 g/m²

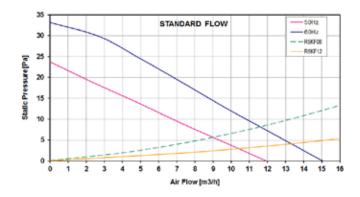
• Notes: filter media washable up to 10 times approximately

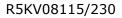
Weight: 0,391 kg

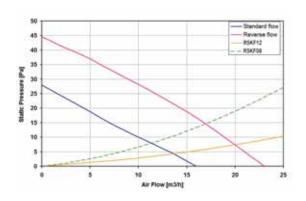
Standard version										
Voltage,	Frequency,	uency, Absorption		Air flow, Pressure,	Pressure,	, Noise,	Operating	Approvals		Fan-filter
Vac	Hz	A	w	m³/h	Pa	dB (A)	temperature °C	CE	c FL us	code
115	50/60	0,113/0,092	9,0/7,0	12/15	23/33	31/33	-10 + 55	•	•	R5KV08115
230	50/60	0,062/0,050	10/8,0	12/15	23/33	31/33	-10 + 55		•	R5KV08230

Standard version								WHAT TO HE WAS A SHEW
Voltage,	Absor	ption	Air flow,	Pressure,	Noise,	Operating temperature	Approvals	Fan-filter code
Vdc	A	w	m³/h	Pa	dB (A)	°C CE CALUS	ran meer code	
24	0,085	2,0	16	28	30	-10 + 55		R5KV0824



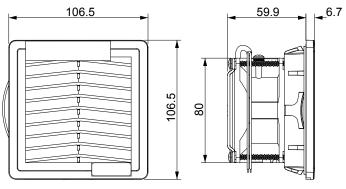


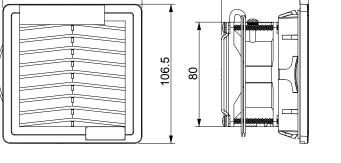




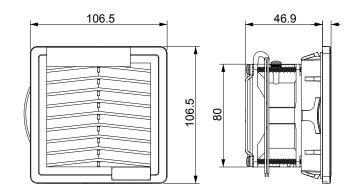
R5KV0824

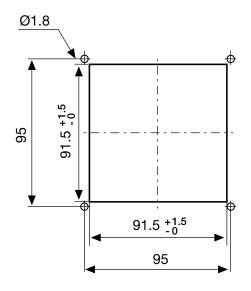
Dimensions (mm)





R5KV08115/230 R5KV0824







R5KV12 Fan-filter



Material: PC/ABS UV resistant

• Standard colour: RAL 7035. Other colours available upon request.

• Protection degree: IP54 as per EN 60529 standard

• Mounting: by means of elastic clips or 4 self-tapping screws

Mounting range: thickness from 1 to 2,1 mm.

• Storing temperature: from -45°C to +75°C

Lifespan L10 a 25°C: 57.000 hMotor protection: impedance

• Earthing connection: by M4 screws on the fan case

• Electrical connection: by means of a two-pole L-N terminal block

• Application class: class I

• Filtering media: thermo-linked progressive structure synthetic fibre

Filtering class: G3 as per EN 779
 Separation grade: 85% - DIN 24185
 Dust retention capacity: 600 g/m²

Notes: filter media washable up to 10 times approximately

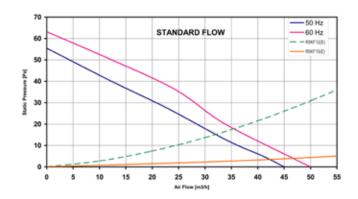
Weight: 0,8 kg

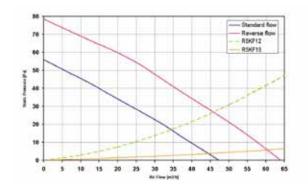
	Standard version													
Voltage,	Frequency,	Absorp	otion	Air flow, Pressure,		Noise,	Operating temperature	Approvals		Fan-filter code				
Vac	Hz	Hz A W		m³/h	Pa	dB (A)	°C	CE	c PA us	ran-inter code				
115	50/60	0,20/0,18	16/15	45/50	55/62	46,0/49,0	-10 + 55	•	•	R5KV12115				
230	50/60	0,11/0,10	18/17	45/50	55/62	48,0/54,0	-10 + 55			R5KV12230				

	EMC version												
Voltage,	Frequency,			Absorp	rption Air flow,		Pressure,	Noise,	Operating temperature	Appr	ovals	Fan-filter code	
Vac	Hz	A	w	m³/h	Pa	dB (A)	°C	CE	c FL us	ran-inter code			
230	50/60	0,11/0,10	18/17	45/50	55/62	48,0/54,0	-10 + 55			R5KV12230E			

	Standard version												
Voltage,	Absor	ption	Air flow,	Pressure,	Noise,	Operating temperature	Appr	ovals	Fan-filter code				
Vdc	A	w	m³/h	Pa	dB (A)	°C	CE	c FL us	run meer coue				
24	0,31 7,4		0,31 7,4 47 56 42,5		-10 + 55	•		R5KV1224					



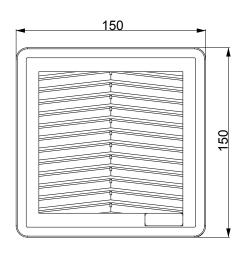


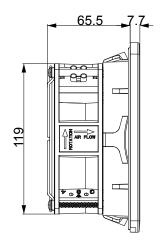


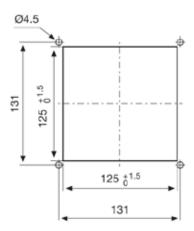
R5KV12115/230

R5KV1224

Dimensions (mm)









R5KV15 Fan-filter



Material: PC/ABS UV resistant

• Standard colour: RAL 7035. Other colours available upon request.

• Protection degree: IP54 as per EN 60529 standard

Mounting: by means of elastic clips or 4 self-tapping screws

Mounting range: thickness from 1,5 to 3 mm.

• Storing temperature: from -45°C to +75°C

• Lifespan L10 a 25°C: 80.000 h

Motor protection: thermal

Earthing connection: con morsettiera polo PE

• Electrical connection: by means of a three-pole L-N-PE terminal

• Application class: class I

• Filtering media: thermo-linked progressive structure synthetic fibre

• Filtering class: G3 as per EN 779

• Separation grade: 85% - DIN 24185

• Dust retention capacity: 600 g/m²

• Notes: filter media washable up to 10 times approximately

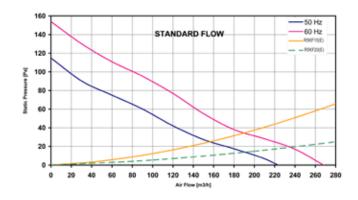
• Weight: 1,5 kg

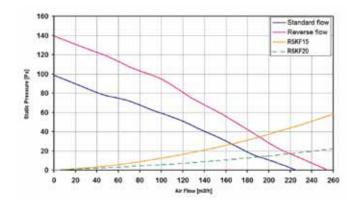
	Standard version														
Voltage,	Frequency,	Absorp	otion	Air flow,	Pressure,	Noise,	Operating	Арр	rovals	Fan-filter code					
Vac	Hz	A	A W	m³/h Pa	dB (A)	°C	CE	c FL us	ran-inter code						
115	50/60	0,28/0,27	31/31	230/270	115/155	50,0/55,0	-10 + 55	•		R5KV15115					
230	60	0,160	36	230/270	115/155	50,0/55,0	-10 + 55	•		R5KV15230					
230	50/60	0,233/0,224	36/36	200/220	90/90	50,0/55,0	-10 + 55			R5KVL15230					

	EMC version												
Voltage, Frequency, Absorption Air flow, Pressure, Noise, temperature										Fan-filter code			
Vac	Hz	Α	w	m³/h	Pa	dB (A)	°C	CE	c PA us	ran-inter code			
230	60	0,160	36	230/270	115/155	50,0/55,0	-10 + 55	•		R5KV15230E			

	Standard version													
Voltage,	Absor	ption	Air flow,	Pressure,	Noise,	Operating temperature	Appr	ovals	Fan-filter code					
Vdc	A	w	m³/h	Pa	dB (A)	°C	CE	c SV us	ran meer code					
24	0,71	17	225	99	58	-10 + 55	•		R5KV1524					



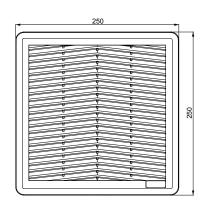


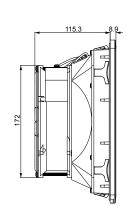


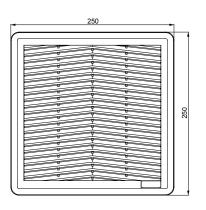
R5KV15115/230

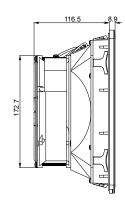
R5KV1524

Dimensions (mm)

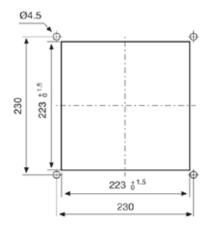








R5KV15115/230 R5KV1524





R5KV20 Fan-filter



Material: PC/ABS UV resistant

• Standard colour: RAL 7035. Other colours available upon request.

• Protection degree: IP54 as per EN 60529 standard

Mounting: by means of elastic clips or 4 self-tapping screws

Mounting range: thickness from 1,5 to 2,5 mm.

• Storing temperature: from -30°C to +75°C

• Lifespan L10 a 25°C: 65.000 h

Motor protection: thermal

• Earthing connection: by means of a PE pole terminal

• Electrical connection: by means of a three-pole L-N-PE terminal

• Application class: class I

• Filtering media: thermo-linked progressive structure synthetic fibre

• Filtering class: G3 as per EN 779

• Separation grade: 85% - DIN 24185

• Dust retention capacity: 600 g/m²

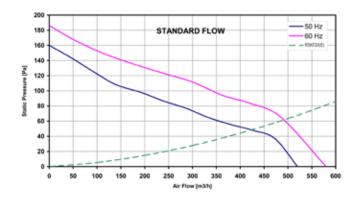
Notes: filter media washable up to 10 times approximately

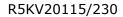
• Weight: 3,1 kg

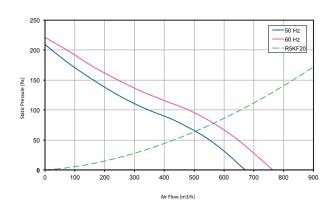
	Standard version														
Voltage,					Pressure,	Noise,	Operating	Appr	ovals	Fan-filter code					
Vac	Hz	A	w	m³/h	Pa	dB (A)	°C	CE	c FL us	ran-inter code					
115	50/60	0,53/0,65	60/74	520/580	160/185	66,0/69,2	-10 + 70			R5KV20115					
230	50/60	0,318/0,381	73/87	520/580	160/185	65,3/68,1	-10 + 70			R5KV20230					
115	50/60	0,63/0,73	74/83	520/580	160/190	66,0/69,2	-10 + 55		-	R5KV20115U					
230	50/60	0,31/0,35	70/85	520/580	160/190	65,3/68,1	-10 + 55			R5KV20230U					
115	50/60	1,5/1,8	165/215	670/760	210/220	74,7/78,9	-10 + 55	•	•	R5KVG20115U					
230	50/60	0,67/0,85	155/195	670/760	210/220	66/69,2	-10 + 55		•	R5KVG20230U					

EMC version												
Voltage,	Frequency,	Absor	ption	Air flow,	Noise,	Operating temperature	Appr	ovals	Fan-filter code			
Vac	Hz	A	w	m³/h	Pa	dB (A)	°C	CE	c FL us			
230	50/60	0,318/0,381	73/87	520/580	160/185	65,3/68,1	-10 + 70			R5KV20230E		



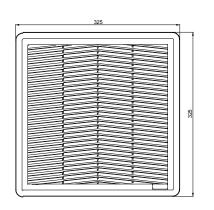


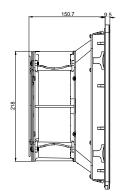


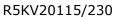


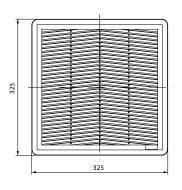
R5KVG20115/230

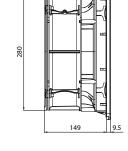
Dimensions (mm)



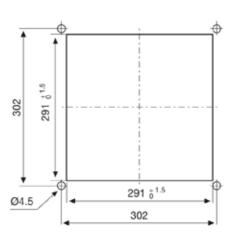








R5KVG20115/230





R5KF Ventilation grid with filter



Material: PC/ABS UV resistant

Standard colour: RAL 7035. Other colours available upon request.

• Protection degree: IP54 as per EN 60529 standard

• Mounting: by means of elastic clips or 4 self-tapping screws

 Mounting range: thickness from 1 to 2 mm for R5KF08, from 1 to 2.1 mm for R5KF12, from 1.5 to 3 mm for R5KF15, from 1.5 to 2.5 mm for R5KF20.

• Storing temperature: from -45°C to +75°C

• Filtering media: thermo-linked progressive structure synthetic fibre

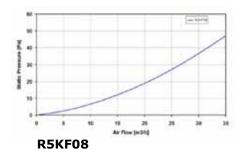
Filtering class: G3 as per EN 779
 Separation grade: 85% - DIN 24185
 Dust retention capacity: 600 g/m²

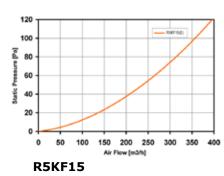
· Notes: filter media washable up to 10 times approximately

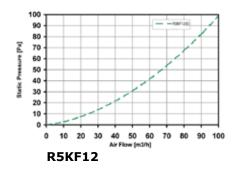
	Standard version														
A															
mm	mm	mm	mm	mm	mm	mm	Kg	CE	c FL us	Code					
106,5	91,5	16,5	6,7	95	92	1,8	0,07		•	R5KF08					
150	125	21,5	7,7	131	126	4,5	0,18			R5KF12					
250	223	24,9	8,9	230	223	4,5	0,42			R5KF15					
325	291	24,5	9,5	302	391	4,5	0,60	-		R5KF20					

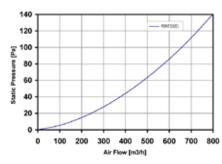
EMC version													
Α	A B C D E F G Weight Approvals												
mm	mm	mm	mm	mm	mm	mm	Kg	CE	c FL us	Code			
150	125	21,5	7,7	131	126	4,5	0,18			R5KF12E			
250	223	24,9	8,9	230	223	4,5	0,42			R5KF15E			
325	291	24,5	9,5	302	391	4,5	0,60			R5KF20E			

Air flow







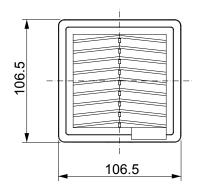


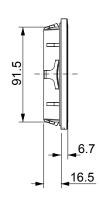
R5KF20



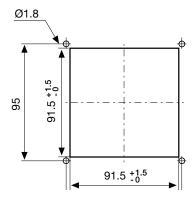
Dimensions (mm)

R5KF08

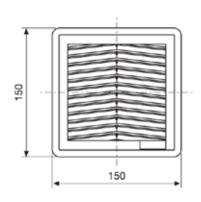


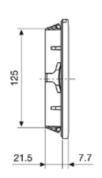


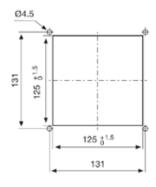
Drilling pattern (mm)



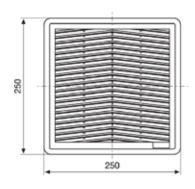
R5KF12

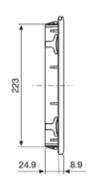


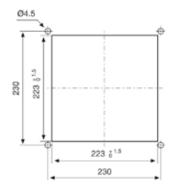




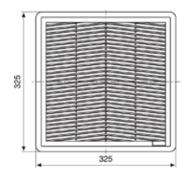
R5KF15

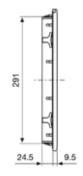


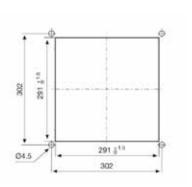




R5KF20









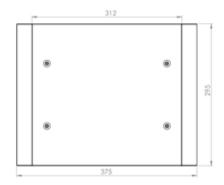
IP 33 Roof exhaust unit

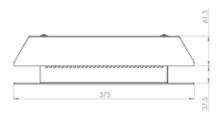


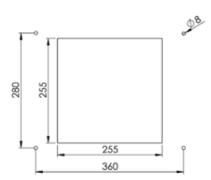
- Material: cover and ventilation grid of 10/10 thick sheet steel, base of 20/10 thick sheet steel.
- Standard colour: RAL 7035. Other colours available upon request.
- Protection degree: IP33 as per EN 60529 standard.
- Mounting: by means of 4 screws M6x12 mm.
- Mounting range: whatever.
- Storing temperature: from -20°C to +60°C.
- Motor protection: thermal.
- Electrical connection: by means of a pre-assembled cable 3G 0,75 mm2.
- Weight: 6.15 kg.

Voltage,	Frequency,	Absorption		Air flow,	Noise,	Operating	Appr	ovals	Code
Vac	Hz	A	w	m³/h	dB (A)	°C	CE	c 91 2 us	Code
115	50/60	0,24/0,32	55/71	480	59,0/61,0	-20 + 50	-		RATEV115
230	50/60	0,28/0,34	62/76	480	59,0/61,0	-20 + 50			RATEV230

Dimensions (mm)









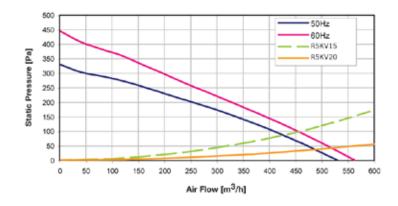
IP 54 Roof exhaust unit



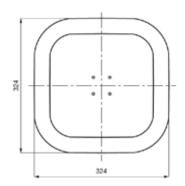
- Material: PC/ABS UV resistant and aluminium.
- Standard colour: RAL 7035. Other colours available upon request.
- Protection degree: IP54 as per EN 60529 standard.
- Mounting: by means of 8 screws 4x16 mm for thermoplastic material.
- Mounting range: whatever.
- Storing temperature: from -20°C to +60°C.
- Lifespan L10 at 25°C 80% RH: 75.000 h at 50 Hz, 80.000 at 60 Hz for R5KTEV115; 59.000 h at 50 Hz, 73.000 at 60 Hz for R5KTEV230.
- Motor protection: thermal.
- Electrical connection: by means of a three-pole L-N-PE terminal.
- Earthing connection: by means of a PE pole terminal.
- Application class: class I.
- Weight: 2.1 kg.

Voltage,	Frequency,	Absorp	Absorption		Pressure,	Noise,	Operating temperature	Appr	ovals	Code
Vac	Hz	A	w	m³/h	Pa	dB (A)	°C	CE	UL	Coue
115	50/60	0,62/0,64	66/74	420/460	340/455	67,9/71,0	-10 + 60			R5KTEV115
230	50/60	0,309/0,360	70/83	420/460	340/455	67,9/71,0	-10 + 60	•		R5KTEV230

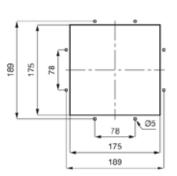
Air flow



Dimensions (mm)









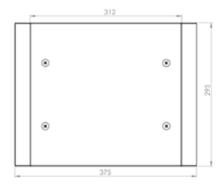
IP 33 Ventilation cover



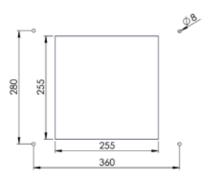
Code: RAVE08

- Material: cover and ventilation grid of 10/10 thick sheet steel, base of 20/10 thick sheet steel.
- Standard colour: RAL 7035. Other colours available upon request.
- Protection degree: IP33 as per EN 60529 standard.
- Mounting: by means of 4 screws M6x12 mm.
- Mounting range: whatever.
- Storing temperature: from -20°C to +60°C.
- Weight: 4.4 kg.

Dimensions (mm)









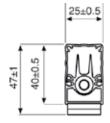
Anti-condensation heaters

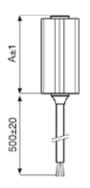


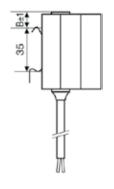
- The heaters constituted by an auto-regulating PTC resister and a case of black anodized aluminium guarantee a constant operating safety preventing the formation of condensate inside electrical enclosures.
- Two versions are available:
 - with a connection cable (up to 30 W)
 - with a connection terminal (from 45 to 150 W)
- Prepared for mounting to a 35 mm guide as per EN 50022.
- Nominal frequency 50-60 Hz.
- IP50 protection degree as per EN 60529 for 15W and 30W, and IP20 as per EN 60529 for 45W and 150W.

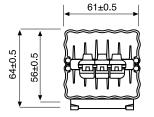
Heating power	Absorbed current	Nominal voltage	Protection class	Code	Dimensions	
					A, mm	B, mm
15 W	65 mA	110-250 Vc.a.	II	RASRA015	72	20
30 W	130 mA	110-250 Vc.a.	II	RASRA030	102	35
45 W	200 mA	110-250 Vc.a.	I	RASRA045	117	34
80 W	390 mA	110-250 Vc.a.	I	RASRA080	167	58
150 W	770 mA	110-250 Vc.a.	I	RASRA150	167	58

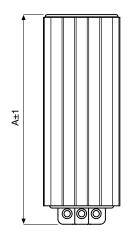
Dimensions (mm)

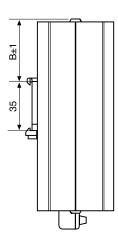












RASRA015/RASRA030

RASRA045/RASRA080/RASRA150



Thermostat

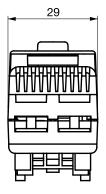


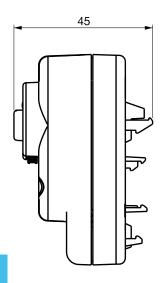
- Allow to monitor the temperature constantly when certain values must not be exceeded.
- Advisable for all applications, at which a cooling (NO blue knob) and/or heating (NC red knob) system is used.
- It is possible to define an operating temperature range in order to prevent potential alterations by inexperienced personnel.
- External case of auto-extinguishing plastic material as per UL94V-0.
- Protection degree: IP20 as per EN 60529.
- Thermostats are easy to fix by means of the accessory provided within the delivery set.

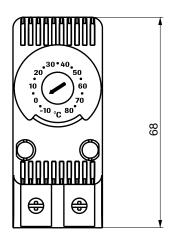
Nominal current	Voltage nominale	Contact rating	Contact type	Regulation range	Accuracy	Code
10 A (6*)	110-250 Vc.a 50/60 Hz	15 A	NO	-10°C ~ +80°C	±3° K	RATMS01
10 A (6*)	110-250 Vc.a 50/60 Hz	15 A	NC	-10°C ~ +80°C	±3° K	RATMS02

^{* ()} inductive load with ϕ =0,6

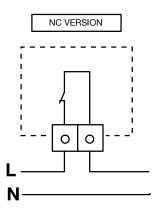
Dimensions (mm)

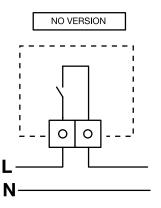






Connection layouts







Humidistat

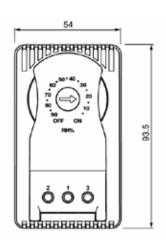


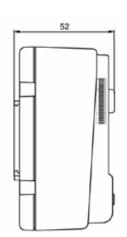
Code: RATMS10

- Allows to control constantly the humidity inside electrical enclosures activating the anti-condensate heaters or fans, when the set air humidity value is exceeded.
- PC/ABS External case.
- Protection degree: IP20 as per EN 60529.
- To be click-mounted to a 35 mm guide, as per EN 50022.
- Electrical connection with terminals by means of screws.

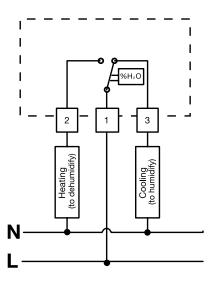
Nominal current	Nominal voltage	Switch d	ifference	Degulation vange	Accuracy
		Medium	Max	Regulation range	
10-5 A	120-240 Vc.a 50/60 Hz	5 (%U.R.)	10 (%U.R.)	10~90 (%U.R.)	±5 (%U.R.)

Dimensions (mm)





Connection layouts









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