



COSMOTEC MISSION...

is to be the premier provider of energy efficient thermal management products for industrial applications.



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Introducing Cosmotec

Cosmotec
is a global
provider of
innovative
industrial
thermal
management
products.



Cooling Technology Leader

Cosmotec is a technology leader, providing thermal management products for industrial applications. This is accomplished through the pursuit of innovative design and manufacturing practices that lead to energy efficient cooling solutions for the array of industrial industries.



Cosmotec U.S.A.

Cosmotec Industrial Cooling – North America is headquartered in Frederick, MD. As part of the STULZ global family we bring expertise in engineering, customer service, local stock and a nationwide service group that is there when you need it. Cosmotec North America is dedicated to delivering high quality products with unmatched customer service to the Industrial marketplace.



Global Presence

Cosmotec is an established company with a global presence. As a part of the STULZ Group, located in Germany, we have the ability to rely on manufacturing plants located in the US, Germany, Italy, India and China, plus the resources of sales support all over the world.

Cosmotec can be found in many of the world's largest industrial applications

Cosmotec works closely with customers of all sizes to ensure that their thermal management needs are addressed with the appropriate products.



Engineers/Consultants

- Local Account Coverage
- Extensive Product Engineering Support
- Large Product Offering
- Product Training Seminars



Original Equipment

- Industrial Automation
- Water / Wastewater
- Petrochemical
- Telecommunications
- Security / Defense



Systems Integrators

- Knowledgeable Sales Reps
- Customer Service / Product Support
- Large Stock Program



Maintenance/Repair

- After-sales Service Network
- Low Maintenance Designs
- High Quality / Reliability
- Designed / Priced for Fast ROI

Cosmotec	Air Conditioners		Heat Exchangers		
	Indoor	Outdoor	Indoor Air/Air	Outdoor Air/Air	Indoor Air/Water
Capacity (A/C)					
500W - 1000W					
1400W - 2000W					
3000W +					
Capacity (HEX)					
16 - 35 W/C 29 - 63 W/F					
50 - 80 W/C 90 - 144 W/F					
50 - 80 W/C 90 - 144 W/F					
Application/ Environment					
Indoor Industrial					
Outdoor Industrial					
Telecommunications					
Power Input					
115 VAC					
230 VAC					
460 VAC					
48 VDC					
Filter Fans					
5" - 13"	20 - 580 CFM	115,230 & 460 VAC	12 - 48 VDC	IP54 / 55 optional	RAL 7035



STULZ Mission Energy is our commitment to bring reliable and energy efficient thermal management to Industrial Electrical Applications.

This is applied across all of our product lines; air conditioning, heat exchangers and filter fans. We service both indoor and outdoor applications with the same goal in mind. With the resources of all the STULZ families we strive to be the best in our industry.



Cosmotec lists all necessary products to ease in the implementation of our products in our End User's Systems.

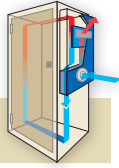
We have thoroughly designed and tested our systems to meet or exceed the UL requirements for our Air Conditioners and Heat Exchangers.

Telcordia

GR 487 covers equipment deployed into Telecommunications applications. Cosmotec's outdoor air conditioners and heat exchangers meet the required specifications set forth by Telcordia to help our customers equipment reach the needed compliance.

Why Heat Ruins Electronics

Electronics / Electrical Equipment is very expensive. Not to mention that heat kills. Put those factors together and cooling becomes critical. Whenever equipment operates 10°C / 18°F above room temperature the life of your equipment is cut in half. Today, more than ever, manufacturers are scrutinizing this particular fact. Maintaining the proper environment is key to maintaining these valuable warranties. Working with Cosmotec to help recognize the environment and define the appropriate solution can save money by extending the life of your equipment.



Closed Loop Cooling

The system needs to maintain a temperature at or below the outdoor ambient temperature

The system cannot have humidity

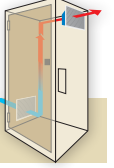
The system will generate mid to high heat loads

The system will see dirty environments

The system will see rain or washdown applications

The system can see high ambient temperatures

-VS-



Open Loop Cooling

The system can maintain a temperature above ambient temperature

The system can allow some humidity

The system will generate a lower heat load

The system will see clean air or low dust situations

The system can see some dripping water

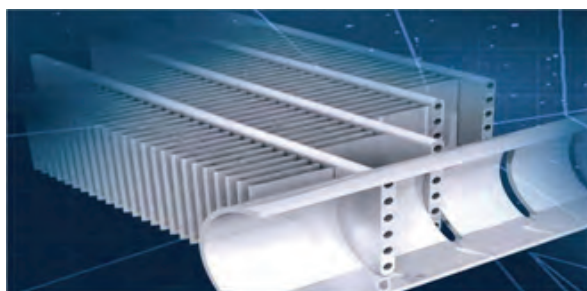
The system will likely see lower ambient temperatures

Air Conditioners (Closed Loop)	Heat Exchangers (Closed Loop)	Filter Fans (Open Loop)
Maintain temperature below ambient	Maintain temperature above ambient	Maintain temperature above ambient
System must be protected from outside elements	System must be protected from outside elements	System can be exposed to outside elements
System creates high heat loads	System creates mid to high heat loads	System creates low to mid heat loads
Used in conjunction with all UL / NEMA ratings	Used in conjunction with all UL / NEMA ratings	Associated with PS54 and IP55 applications
Used in high ambient temperature situations	Used in high / low ambient temperature situations	Used in low ambient temperature situations

	Protected Against	Definition
IP54	Dust / Splashing Water	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact / water splashing against the enclosure from any direction shall have no harmful effect.
IP55	Dust / Water Jets	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact / water projected by a nozzle (6.3mm) against enclosure from any direction shall have no harmful effects.
IP65	Dust Tight / Water Jets	No ingress of dust; complete protection against contact / Water projected by a nozzle (6.3mm) against enclosure from any direction shall have no harmful effects.

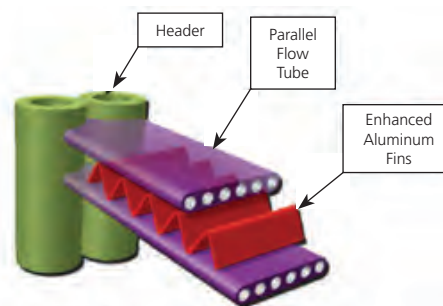
			NEMA
Type 1	Indoor	Primarily for indoor use to provide protection against incidental contact with the enclosed equipment and a degree of protection against falling dirt.	Primarily for indoor use to provide protection against access to hazardous parts and to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt).
Type 12	Indoor	Primarily constructed for indoor use to provide a degree of protection to personnel against circulating dust, falling dirt, fiber flyings and dripping of non-corrosive liquids.	Primarily constructed for indoor use to provide a degree of protection of the equipment against falling dirt, circulating dust and dripping water.
Type 3R	Outdoor	Primarily constructed for outdoor use to provide a degree of protection against falling dirt, rain, sleet, and snow; and that will be undamaged by the external formation of ice.	Primarily constructed for outdoor use to provide a degree of protection against falling rain, sleet or snow; and will be undamaged by the external formation of ice.
Type 4	Outdoor	Primarily for either indoor or outdoor use to provide a degree of protection against falling dirt, windblown dust, rain, splashing or hose directed water; and that will be undamaged by the external formation of ice.	Primarily for either indoor or outdoor use to provide a degree of protection against falling dirt, windblown dust, rain, splashing and hose directed water; and that will be undamaged by the external formation of ice.
Type 4X	Outdoor	Primarily for either indoor or outdoor use to provide a degree of protection against falling dirt, rain, sleet, snow, windblown dust, splashing water, hose-directed water, and corrosion; and that will be undamaged by the external formation of ice.	Primarily for either indoor or outdoor use to provide a degree of protection against falling dirt, windblown dust, rain, sleet, snow, splashing water, and hose directed water; that provides an additional level of protection against corrosion; and that will be undamaged by the external formation of ice.

Micro Channel Condenser Coils: The big benefit of a smaller package



- **Smaller Footprint (40% of Original Design)**
- **Lighter Weight**
- **Reduction of Refrigerant volume**
- **Reduced maintenance**
- **Elimination of Coil Oxidation**
- **Improved Performance**

It has always been said the great things come in small packages. This instance is no exception. Cosmotec has developed a condenser technology for air conditioners that allows us to save space, use less refrigerant, reduce weight, minimize coil oxidation and increase performance all at the same time. By adapting philosophies from the Automotive Industry we have developed our new Micro Channel Condensing Coil to improve the performance of our air conditioners.



Microchannel Design

SLIM IN - Indoor / Outdoor



Extra Slim Wall Air Conditioners

Design Features

- Extra slim depth for narrow aisleways
- Designed for total recessed mounting
- Self-cleaning Microchannel Condenser for filter-less operation
- Cleanable / Reusable media filter provided
- Threaded inserts for lifting eyes on all models
- Mounting hardware, gasketing and user manuals provided
- Full-size mounting template provided

Passive Condensate Management

- Constant removal of condensation from the system
- Increased unit efficiency by using a natural process

Temperature Control

- All units utilize a Digital Thermostat with display
- Adjustable set points and temperature control
- Visible alarm functions on display

Industry Standards

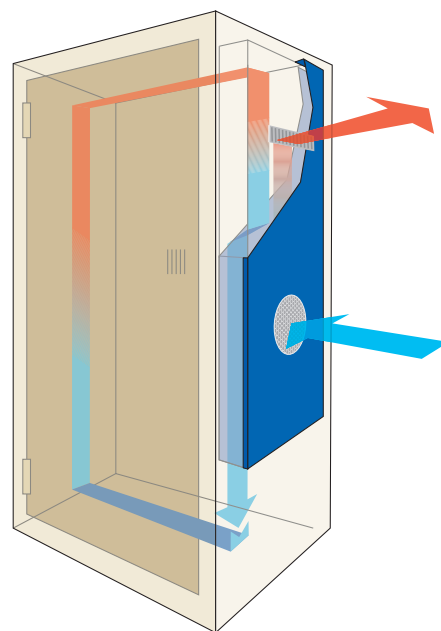
- UL Listed (File # SA12046)
- Indoor: Nema 12
- Outdoor: Nema 3R, 4 and 4X (optional)

Industries Served

- Industrial & Process Automation
- Packaging and Logistical Systems
- Energy (Solar, Wind, Water and Petrochemical)
- Telecommunications
- Water / Wastewater Systems
- Defense Systems

Product Attributes

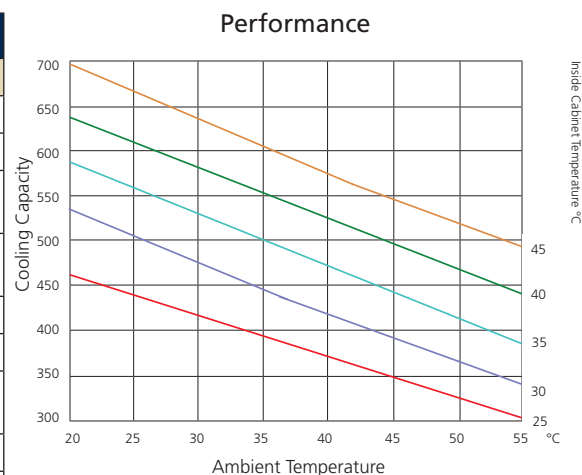
- 3 sizes of Air Conditioners; capacity range from 1,700 BTU to 10K BTU's
- Wide range of Voltage options: 115v, 230v and 460v
- Operating Temperature
 - Indoor: 20°C/68°F - 55°C/131°F
 - Outdoor: -40°C/-40°F - 55°C/131°F
- All Models Powder Coated RAL 7035; Light Gray / Semi Textured
- Earth Friendly Refrigerants Used
- All units functionally tested before shipment



Air Conditioners - Indoor

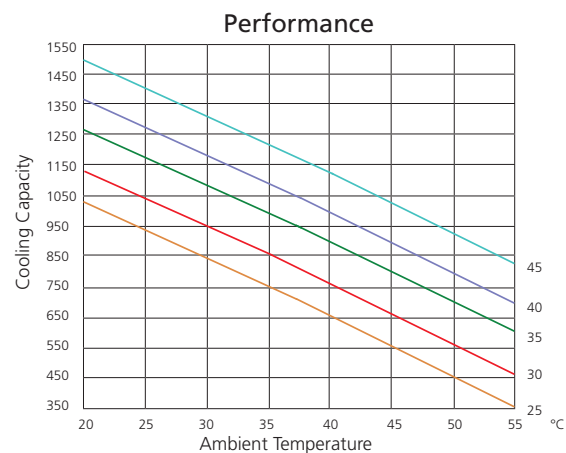
SLIM IN EVE05

		Product Part Numbers	
Specification	M.U.	EVE05U12037000	EVE05U12207000
Item Number		181055	181056
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	550 (1878)	550 (1878)
Cooling Capacity L35L50	W (BTU)	450 (1537)	800 (2732)
Height/Width/Depth	mm	957 x 375 x 212	957 x 375 x 212
Height/Width/Depth	in	37.68 x 14.76 x 8.35	37.68 x 14.76 x 8.35
Max Running Current / Starting Current	A	3.6 / 15	1.8 / 6
Power Consumption L35L50	W	380	350
Side Cabinet air flow (free blowing)	m3/h (CFM)	330 (194)	330 (194)
Side Ambient Temperature Limits	°C	+20° / +55°	+20° / +55°
Side Ambient Temperature Limits	°F	+68° / +131°	+68° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	58	58
Weight	kg (lbs)	34.5 (76.1)	34.5 (76.1)



SLIM IN EVE10

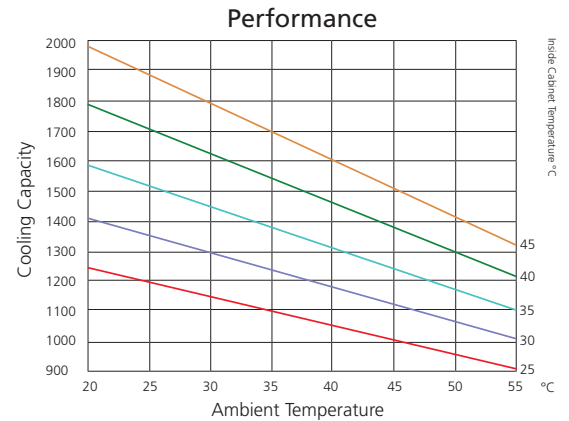
		Product Part Numbers	
Specification	M.U.	EVE10U12037000	EVE10U12207000
Item Number		181057	181058
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	1150 (3927)	1150 (3927)
Cooling Capacity L35L50	W (BTU)	800 (2732)	800 (2732)
Height/Width/Depth	mm	957 x 375 x 212	957 x 375 x 212
Height/Width/Depth	in	37.68 x 14.76 x 8.35	37.68 x 14.76 x 8.35
Max Running Current / Starting Current	A	5.9 / 29.5	3.7 / 12.5
Power Consumption L35L50	W	750	750
Side Cabinet air flow (free blowing)	m3/h (CFM)	330 (194)	330 (194)
Side Ambient Temperature Limits	°C	+20° / +55°	+20° / +55°
Side Ambient Temperature Limits	°F	+68° / +131°	+68° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	58	58
Weight	kg (lbs)	34 (75)	34 (75)



Air Conditioners - Indoor

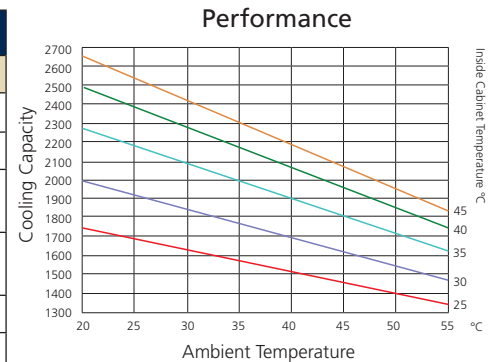
SLIM IN EVE14

		Product Part Numbers	
Specification	M.U.	EVE14U12037000	EVE14U12207000
Item Number		181059	181060
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	1500 (5123)	1500 (5123)
Cooling Capacity L35L50	W (BTU)	1250 (4269)	1250 (4269)
Height/Width/Depth	mm	1665 x 454 x 197	1665 x 454 x 197
Height/Width/Depth	in	65.55 x 17.87 x 7.76	65.55 x 17.87 x 7.76
Max Running Current / Starting Current	A	9.5 / 44	3.8 / 20.5
Power Consumption L35L50	W	910	880
Side Cabinet air flow (free blowing)	m3/h (CFM)	575 (338)	575 (338)
Side Ambient Temperature Limits	°C	+20° / +55°	+20° / +55°
Side Ambient Temperature Limits	°F	+68° / +131°	+68° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	57	57
Weight	kg (lbs)	50.5 (111.3)	50.5 (111.3)



SLIM IN EVE20

		Product Part Numbers		
Specification	M.U.	EVE20U12037000	EVE20U12207000	EVE20U12627000
Item Number		181061	181062	181063
Power Supply	V-Ph-Hz	115-1-60	230-1-60	400/460-3-50/60
Cooling Capacity L35L35	W (BTU)	2200 (7513)	2200 (7513)	2000/2200 (6830/7513)
Cooling Capacity L35L50	W (BTU)	1800 (6147)	1800 (6147)	1650/1800 (5635/6147)
Height/Width/Depth	mm	1665 x 454 x 197	1665 x 454 x 197	1665 x 454 x 197
Height/Width/Depth	in	65.55 x 17.87 x 7.76	65.55 x 17.87 x 7.76	65.55 x 17.87 x 7.76
Max Running Current / Starting Current	A	13.5 / 57.5	6.8 / 24	3.6 (3.8) / 16
Power Consumption L35L50	W	1480	1570	1200 / 1420
Side Cabinet air flow (free blowing)	m3/h (CFM)	860 (506)	860 (506)	860 (506)
Side Ambient Temperature Limits	°C	+20° / +55°	+20° / +55°	+20° / +55°
Side Ambient Temperature Limits	°F	+68° / +131°	+68° / +131°	+68° / +131°
Protection Level	Type	12	12	12
Noise Level	dB(A)	65	65	65
Weight	kg (lbs)	54.5 (120.2)	54.5 (120.2)	82 (180.8)



Air Conditioners - Indoor

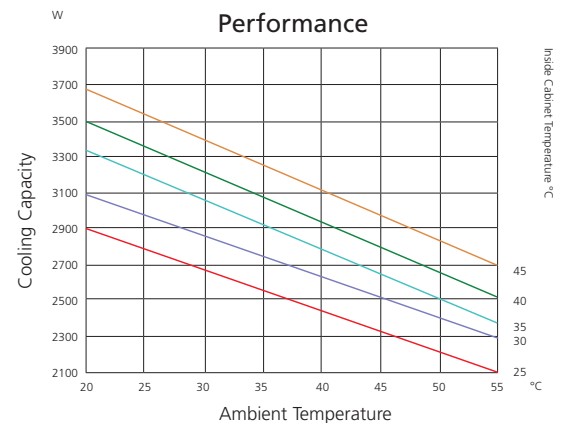
SLIM IN EVE30

		Product Part Numbers	
Specification	M.U.	EVE30U12207000	EVE30U12627000
Item Number		181064	181065
Power Supply	V-Ph-Hz	230-1-60	460-3-60
Cooling Capacity L35L35	W (BTU)	3200 (10929)	3200 (10929)
Cooling Capacity L35L50	W (BTU)	2500 (8538)	2500 (8538)
Height/Width/Depth	mm	1665 x 496 x 237	1665 x 496 x 237
Height/Width/Depth	in	65.55 x 19.53 x 9.33	65.55 x 19.53 x 9.33
Max Running Current / Starting Current	A	10.4 / 40	4.2 / 15
Power Consumption L35L50	W	1900	1650
Side Cabinet air flow (free blowing)	m3/h (CFM)	860 (506)	860 (506)
Side Ambient Temperature Limits	°C	+20° / +55°	+20° / +55°
Side Ambient Temperature Limits	°F	+68° / +131°	+68° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	65	65
Weight	kg (lbs)	65.5 (144.4)	65.5 (144.4)

Optional

Stainless Steel Option for A/C's (OCAVISL)

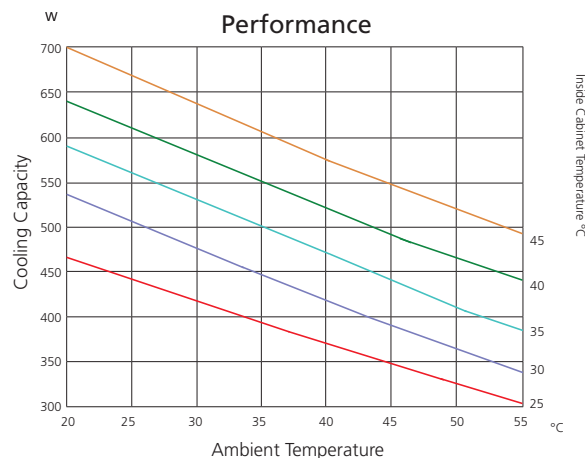
Special Color Option for A/C's (OCAVNS03)



Air Conditioners - Outdoor

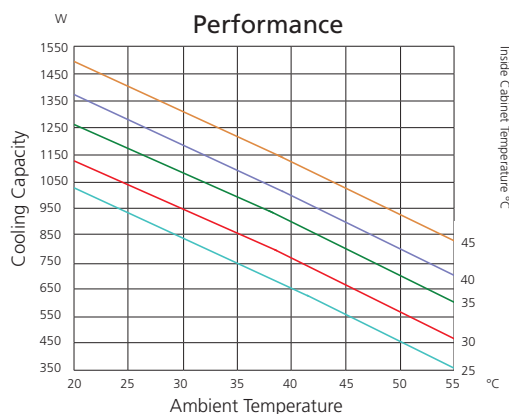
SLIM IN EVO05

		Product Part Numbers	
Specification	M.U.	EVO05U12037000	EVO05U12207000
Item Number		181066	181067
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	550 (1878)	550 (1878)
Cooling Capacity L35L50	W (BTU)	450 (1537)	450 (1537)
Height/Width/Depth	mm	957 x 375 x 230	957 x 375 x 230
Height/Width/Depth	in	37.68 x 14.76 x 9.05	37.68 x 14.76 x 9.05
Max Running Current / Starting Current	A	3.6 / 15	1.8 / 6
Power Consumption L35L50	W	380	350
Side Cabinet air flow (free blowing)	m3/h (CFM)	330 (194)	330 (194)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°
Side Ambient Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)
Noise Level	dB(A)	58	58
Weight	kg (lbs)	34.5 (76.1)	34.5 (76.1)



SLIM IN EVO10

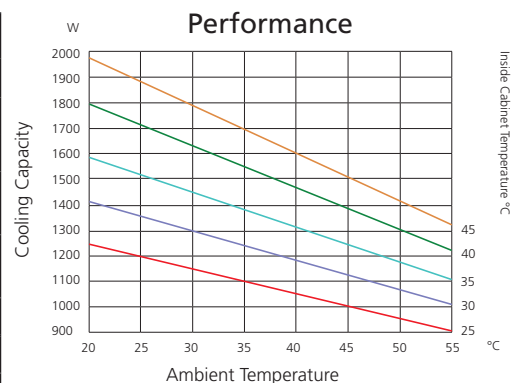
		Product Part Numbers	
Specification	M.U.	EVO10U12037000	EVO10U12207000
Item Number		181068	181069
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	1150 (3927)	1150 (3927)
Cooling Capacity L35L50	W (BTU)	800 (2732)	800 (2732)
Height/Width/Depth	mm	957 x 375 x 230	957 x 375 x 230
Height/Width/Depth	in	37.68 x 14.76 x 9.05	37.68 x 14.76 x 9.05
Max Running Current / Starting Current	A	5.9 / 30	3.7 / 13
Power Consumption L35L50	W	750	750
Side Cabinet air flow (free blowing)	m3/h (CFM)	330 (194)	330 (194)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°
Side Ambient Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)
Noise Level	dB(A)	58	58
Weight	kg (lbs)	34 (75)	34 (75)



Air Conditioners - Outdoor

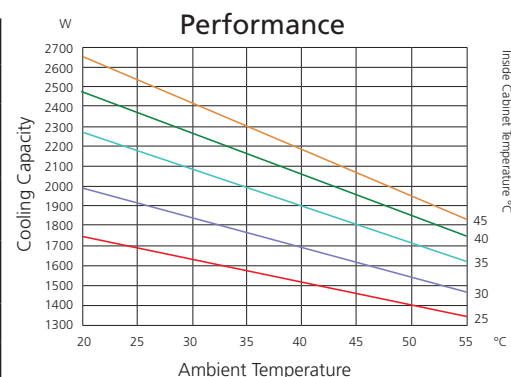
SLIM IN EVO14

		Product Part Numbers	
Specification	M.U.	EVO14U12037000	EVO14U12207000
Item Number		181070	181071
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	1500 (5123)	1500 (5123)
Cooling Capacity L35L50	W (BTU)	1200 (4098)	1200 (4098)
Height/Width/Depth	mm	1665 x 454 x 203	1665 x 454 x 203
Height/Width/Depth	in	65.55 x 17.87 x 7.99	65.55 x 17.87 x 7.99
Max Running Current / Starting Current	A	9.5 / 44.5	3.8 / 21
Power Consumption L35L50	W	910	880
Side Cabinet air flow (free blowing)	m3/h (CFM)	575 (338)	575 (338)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°
Side Ambient Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)
Noise Level	dB(A)	57	57
Weight	kg (lbs)	50.5 (111.3)	50.5 (111.3)



SLIM IN EVO20

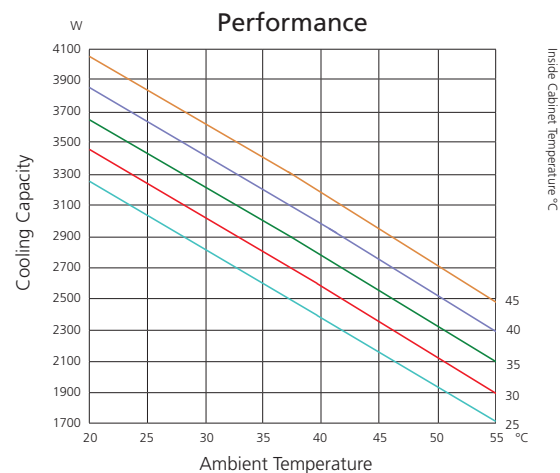
		Product Part Numbers	
Specification	M.U.	EVO20U12037000	EVO20U12207000
Item Number		181072	181073
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity L35L35	W (BTU)	2200 (7513)	2200 (7513)
Cooling Capacity L35L50	W (BTU)	1800 (6147)	1800 (6147)
Height/Width/Depth	mm	1665 x 454 x 203	1665 x 454 x 203
Height/Width/Depth	in	65.55 x 17.87 x 7.99	65.55 x 17.87 x 7.99
Max Running Current / Starting Current	A	13.5 / 59.5	6.8 / 25.5
Power Consumption L35L50	W	1480	1570
Side Cabinet air flow (free blowing)	m3/h (CFM)	860 (506)	860 (506)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°
Side Ambient Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)
Noise Level	dB(A)	65	65
Weight	kg (lbs)	54.5 (120.2)	54.5 (120.2)



Air Conditioners - Outdoor

SLIM IN EVO30

Product Part Numbers		
Specification	M.U.	EVO30U12207000
Item Number		181074
Power Supply	V-Ph-Hz	230-1-60
Cooling Capacity L35L35	W (BTU)	3200 (10929)
Cooling Capacity L35L50	W (BTU)	2500 (8538)
Height/Width/Depth	mm	1665 x 496 x 243
Height/Width/Depth	in	65.55 x 19.53 x 9.56
Max Running Current / Starting Current	A	10.4 / 42
Power Consumption L35L50	W	1900
Side Cabinet air flow (free blowing)	m3/h (CFM)	860 (506)
Side Ambient Temperature Limits	°C	- 40° / + 55°
Side Ambient Temperature Limits	°F	- 40° / + 131°
Protection Level	Type	4 (4X*)
Noise Level	dB(A)	65
Weight	kg (lbs)	67 (147.7)

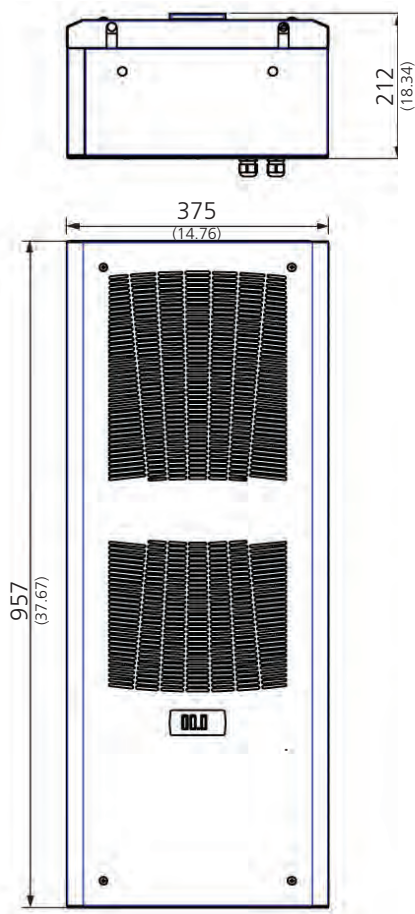


* Optional

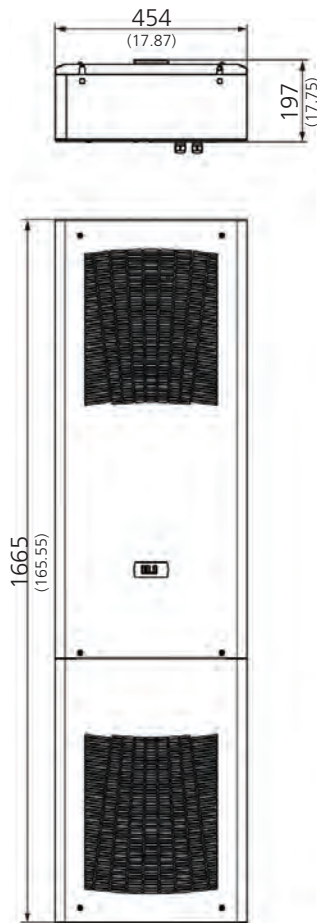
Stainless Steel Option for A/C's (OCAVISL)
Special Color Option for A/C's (OCAVNS03)

Air Conditioners - Drawings

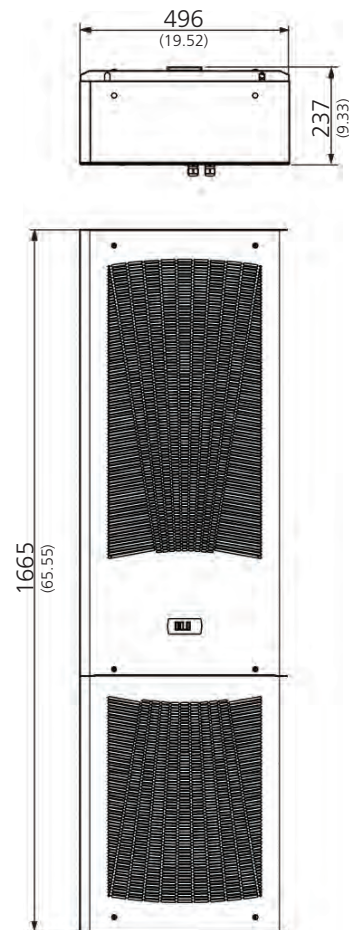
SLIM IN EVE05/EVE10



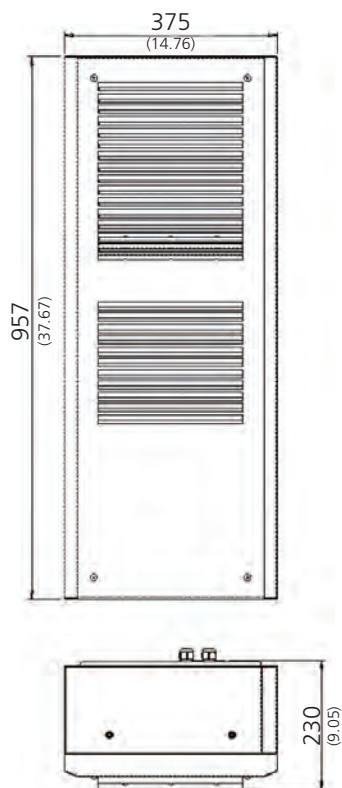
SLIM IN EVE14 / EVE20



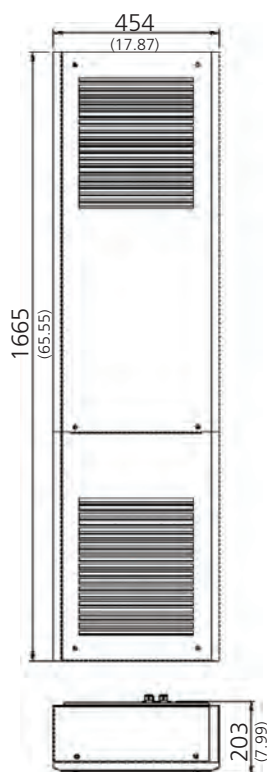
SLIM IN EVE30



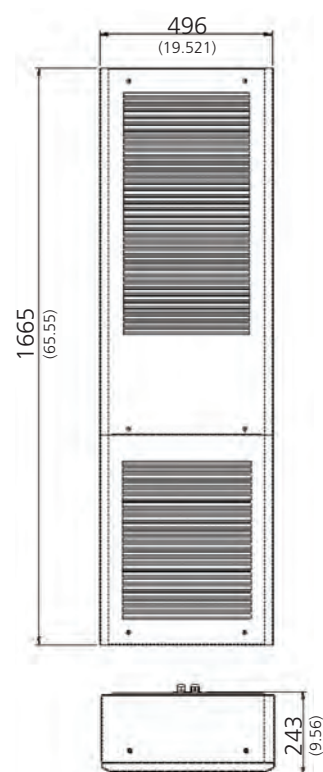
SLIM IN EVO05/EVO10



SLIM IN EVO14/EVO20



SLIM IN EVO30



Heat Exchangers - Air to Air

Indoor Air to Air



Indoor Air to Air Heat Exchangers

Design Features

- Large capacity range
- Patented compact, counterflow aluminum core
- High efficiency, low pressure drop design
- Internal / external mounting capabilities
- Filterless design
- Rugged mild-steel construction for Industrial Applications
- UL listed units for design simplicity
- Threaded inserts for lifting eyes on all models
- Mounting hardware, gasketing and user manuals provided
- Full-size mounting template provided

Industry Standards

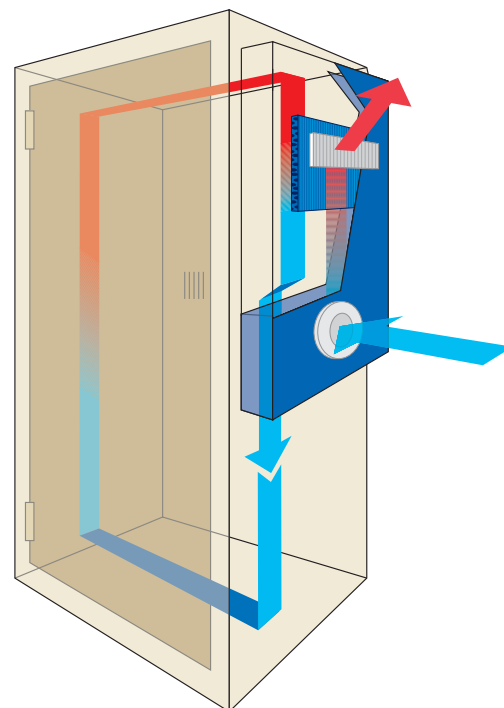
- UL Listed (File # E194435)
 - Indoor: Nema 12

Industries Served

- Industrial & Process Automation
- Packaging and Logistical Systems
- Energy (Solar, Wind, Water and Petrochemical)
- Telecommunications
- Water / Wastewater Systems
- Defense Systems

Product Attributes

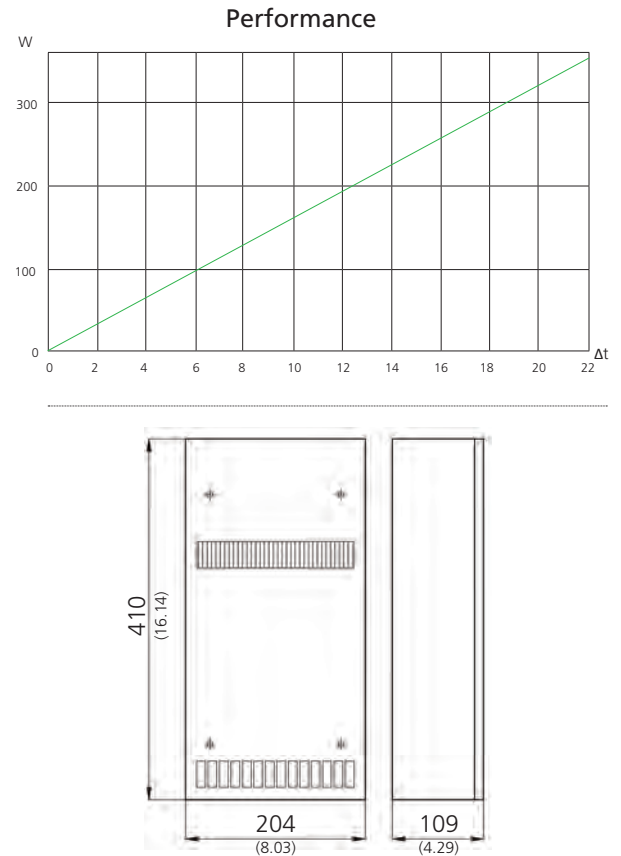
- 4 sizes of Heat Exchangers
- Large capacity range: 30 - 160 W/C ; 54 - 288 W/F
- Wide range of Voltage options: 115VAC, 230VAC
- Operating Temperature: 5°C / 23°F - 55°C / 131°F
- All Models Powder Coated RAL 7035; Light Gray / Semi Textured
- All units functionally tested before shipment



Heat Exchangers - Air to Air

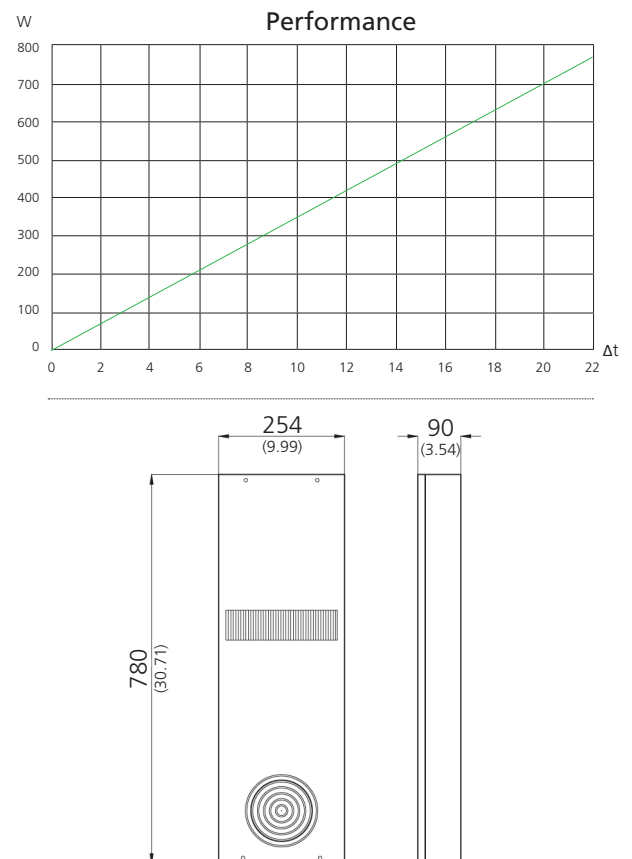
Heat Exchangers XVA16

		Product Part Numbers
Specification	M.U.	XVA16U1303
Item Number		181086
Power Supply	V-Ph-Hz	115-1-60
Specific Heat Transmission	W/°C	16
Specific Heat Transmission	W/°F	29
Height/Width/Depth	mm	410 x 204 x 109
Height/Width/Depth	in	16.14 x 8.03 x 4.29
Absorbed Current	A	0.6
Power Consumption	W	40
Side Cabinet air flow (free blowing)	m3/h (CFM)	100 (58.9)
Side Ambient Temperature Limits	°C	- 5° / +55°
Side Ambient Temperature Limits	°F	23° / +131°
Protection Level	Type	12
Noise Level	dB(A)	58
Weight	kg (lbs)	4.6 (10.1)



Heat Exchangers XVA35

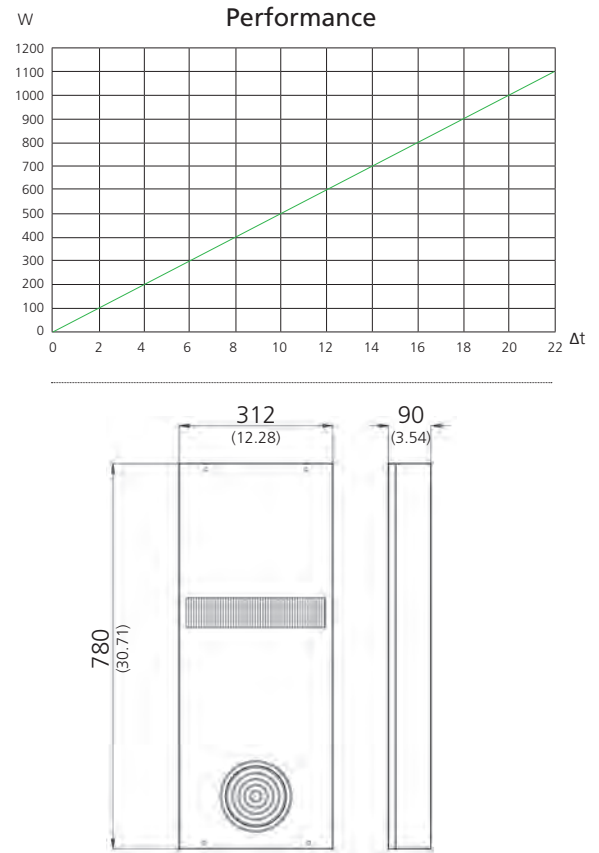
		Product Part Numbers	
Specification	M.U.	XVA35U1303	XVA35U1320
Item Number		181088	181087
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Specific Heat Transmission	W/°C	35	35
Specific Heat Transmission	W/°F	63	63
Height/Width/Depth	mm	780 x 254 x 90	780 x 254 x 90
Height/Width/Depth	in	30.71 x 9.99 x 3.54	30.71 x 9.99 x 3.54
Absorbed Current	A	1.1	0.8
Power Consumption	W	180	150
Side Cabinet air flow (free blowing)	m3/h (CFM)	575 (338.4)	575 (338.4)
Side Ambient Temperature Limits	°C	- 5° / +55°	- 5° / +55°
Side Ambient Temperature Limits	°F	23° / +131°	23° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	76	76
Weight	kg (lbs)	7.5 (16.5)	7.5 (16.5)



Heat Exchangers - Air to Air

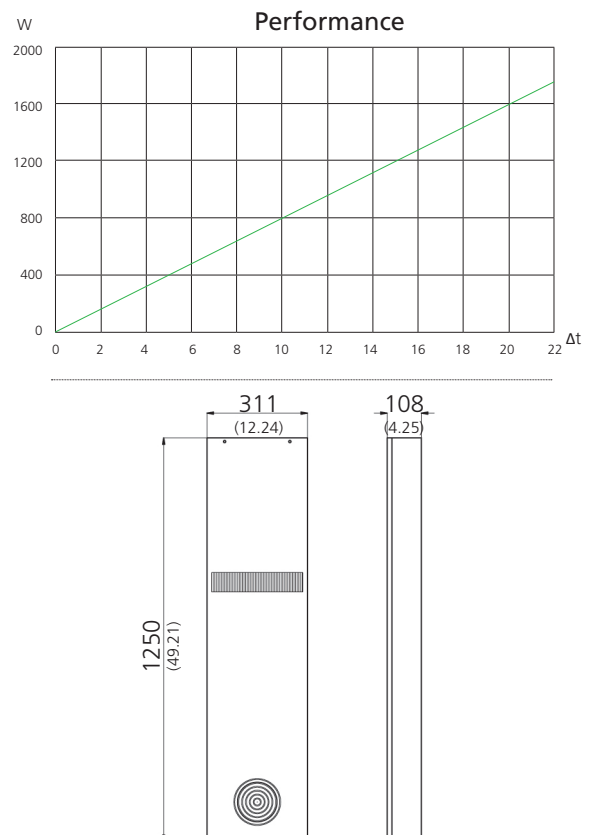
Heat Exchangers XVA50

		Product Part Numbers	
Specification	M.U.	XVA50U1303	XVA50U1320
Item Number		181090	181089
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Specific Heat Transmission	W/°C	50	50
Specific Heat Transmission	W/°F	89	89
Height/Width/Depth	mm	780 x 312 x 90	780 x 312 x 90
Height/Width/Depth	in	30.71 x 12.28 x 3.54	30.71 x 12.28 x 3.54
Absorbed Current	A	1.4	0.8
Power Consumption	W	180	150
Side Cabinet air flow (free blowing)	m3/h (CFM)	575 (338.4)	575 (338.4)
Side Ambient Temperature Limits	°C	- 5° / +55°	- 5° / +55°
Side Ambient Temperature Limits	°F	23° / +131°	23° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	76	76
Weight	kg (lbs)	9.5 (21)	9.5 (21)



Heat Exchangers XVA80

		Product Part Numbers	
Specification	M.U.	XVA80U1303	XVA80U1320
Item Number		181092	181091
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Specific Heat Transmission	W/°C	80	80
Specific Heat Transmission	W/°F	143	143
Height/Width/Depth	mm	1250 x 311 x 108	1250 x 311 x 108
Height/Width/Depth	in	49.21 x 12.24 x 4.25	49.21 x 12.24 x 4.25
Absorbed Current	A	2.3	1.3
Power Consumption	W	230	180
Side Cabinet air flow (free blowing)	m3/h (CFM)	860 (506.2)	860 (506.2)
Side Ambient Temperature Limits	°C	- 5° / +55°	- 5° / +55°
Side Ambient Temperature Limits	°F	23° / +131°	23° / +131°
Protection Level	Type	12	12
Noise Level	dB(A)	76	76
Weight	kg (lbs)	20 (44.1)	20 (44.1)



Optional

HEX Stainless Steel Size 1 (OCAXI01, OCAXI02, OCAXI03)

HEX Special Color Size 1 (OCAXNS01, OCAXNS03, OCAXNS06)

HEX A2W Stainless Steel Size 1 (OCAXI04, OCAXI05, OCAXI06, OCAXI07)

Heat Exchangers - Air to Air

XVH - Outdoor Air to Air



Outdoor Air to Air Heat Exchangers

Design Features

- Large capacity range
- Patented compact, counterflow aluminum core
- High efficiency, low pressure drop design
- Internal / external mounting capabilities
- Filterless design
- Rugged mild-steel construction for Industrial Applications
- UL listed units for design simplicity
- Threaded inserts for lifting eyes on all models
- Mounting hardware, gasketing and user manuals provided
- Full-size mounting template provided

Industry Standards

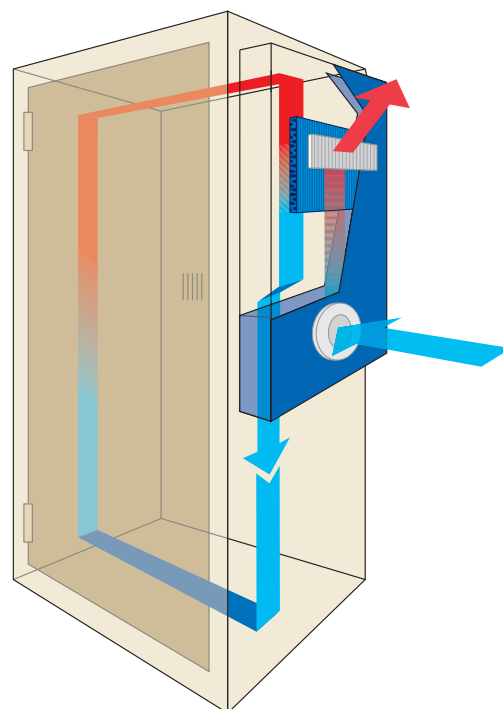
- UL Listed (File # E194435)
 - Outdoor: Nema 3R, 4 and 4X (optional)

Industries Served

- Industrial & Process Automation
- Packaging and Logistical Systems
- Energy (Solar, Wind, Water and Petrochemical)
- Telecommunications
- Water / Wastewater Systems
- Defense Systems

Product Attributes

- 4 sizes of Heat Exchangers
- Large capacity range: 30 – 160 W/C; 54 – 288 W/F
- Wide range of Voltage options: 115VAC, 230VAC and 48VDC
- Operating Temperature: -40°C / -40°F – 55°C / 131°F
- All Models Powder Coated RAL 7035; Light Gray / Semi Textured
- All units functionally tested before shipment

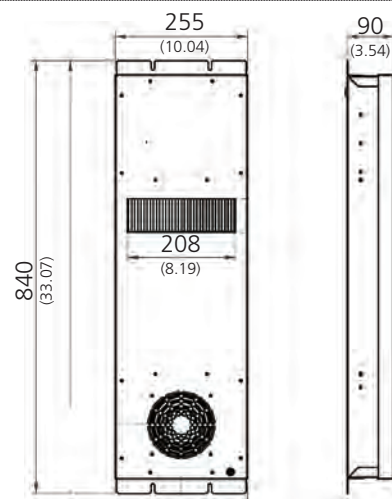
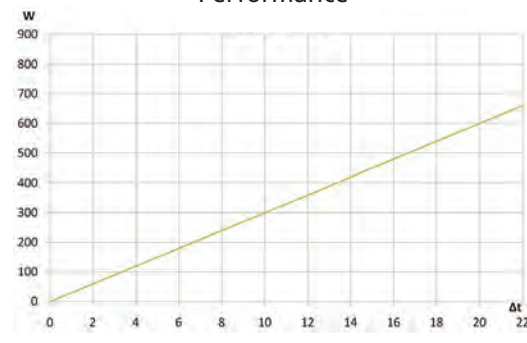


Heat Exchangers - Air to Air

Heat Exchangers XVH30

		Product Part Numbers
Specification	M.U.	XVH30U13121000
Item Number		181093
Power Supply	V-Ph-Hz	48VDC
Specific Heat Transmission	W/°C	30
Specific Heat Transmission	W/°F	54
Height/Width/Depth	mm	840 x 255 x 90
Height/Width/Depth	in	33.07 x 10.04 x 3.54
Absorbed Current	A	2.4
Power Consumption	W	176
Side Cabinet air flow (free blowing)	m3/h (CFM)	400 (235)
Side Ambient Temperature Limits	°C	- 40° / + 55°
Side Cabinet Temperature Limits	°F	- 40° / + 131°
Protection Level	Type	4 (4X*)
Noise Level	dB(A)	65
Weight	kg (lbs)	15 (33)

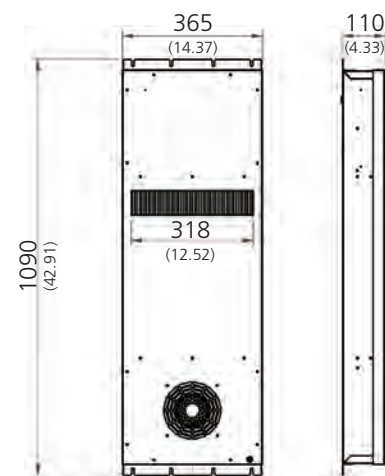
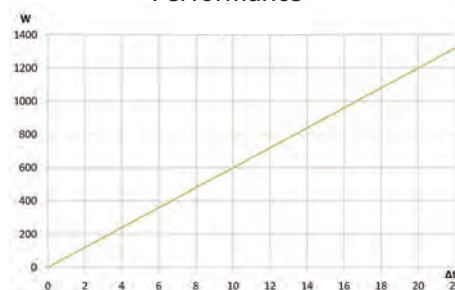
Performance



Heat Exchangers XVH60

		Product Part Numbers		
Specification	M.U.	XVH60U13031000	XVH60U13201000	XVH60U13121000
Item Number		181094	181095	181096
Power Supply	V-Ph-Hz	115-1-60	230-1-60	48VDC
Specific Heat Transmission	W/°C	60	60	60
Specific Heat Transmission	W/°F	108	108	108
Height/Width/Depth	mm	1090 x 365 x 110	1090 x 365 x 110	1090 x 365 x 110
Height/Width/Depth	in	42.91 x 14.37 x 4.33	42.91 x 14.37 x 3.54	42.91 x 14.37 x 3.54
Absorbed Current	A	1	1	4.8
Power Consumption	W	265	225	205
Side Cabinet air flow (free blowing)	m3/h (CFM)	860 (506)	650 (383)	530 (312)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°	- 40° / + 55°
Side Cabinet Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)	4 (4X*)
Noise Level	dB(A)	68	68	68
Weight	kg (lbs)	16 (35.3)	16 (35.3)	16 (35.3)

Performance

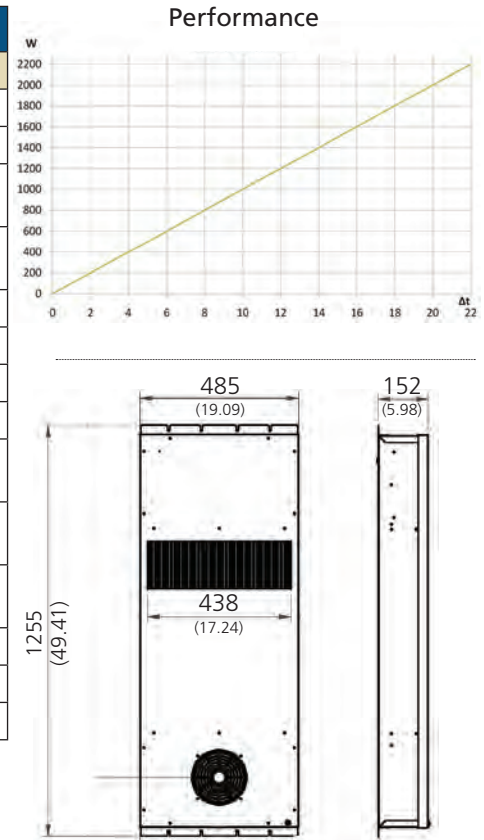


*Stainless Steel models available upon request

Heat Exchangers - Air to Air

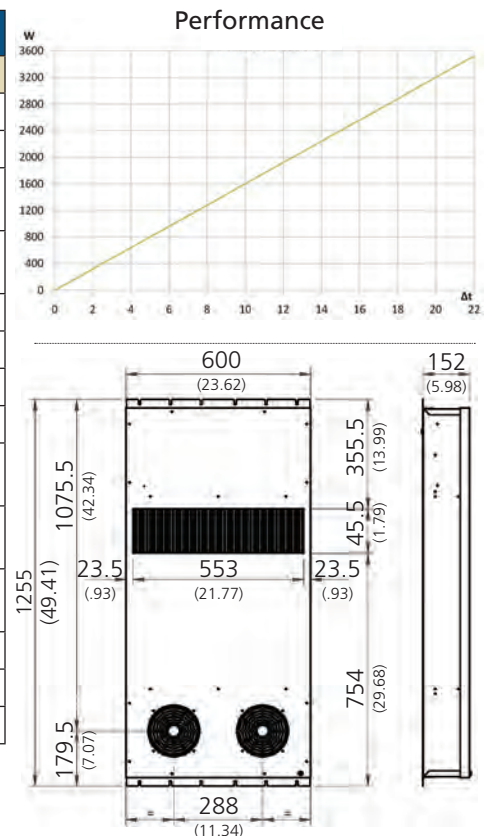
Heat Exchangers XVHAO

		Product Part Numbers		
Specification	M.U.	XVHA0U13031000	XVHA0U13201000	XVHA0U13121000
Item Number		181097	181098	181099
Power Supply	V-Ph-Hz	115-1-60	230-1-60	48VDC
Specific Heat Transmission	W/°C	100	100	100
Specific Heat Transmission	W/°F	180	180	180
Height/Width/Depth	mm	1255 x 485 x 152	1255 x 485 x 152	1255 x 485 x 152
Height/Width/Depth	in	49.41 x 19.09 x 5.98	49.41 x 19.09 x 5.98	49.41 x 19.09 x 5.98
Absorbed Current	A	2.28	2.3	4.8
Power Consumption	W	390	675	205
Side Cabinet air flow (free blowing)	m3/h (CFM)	1015 (597)	1000 (588)	900 (530)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°	- 40° / + 55°
Side Cabinet Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)	4 (4X*)
Noise Level	dB(A)	68	68	68
Weight	kg (lbs)	28 (61.7)	28 (61.7)	28 (61.7)



Heat Exchangers XVHA5

		Product Part Numbers		
Specification	M.U.	XVHA5U13031000	XVHA5U13201000	XVHA5U13121000
Item Number		181100	181101	181102
Power Supply	V-Ph-Hz	115-1-60	230-1-60	48VDC
Specific Heat Transmission	W/°C	160	160	160
Specific Heat Transmission	W/°F	288	288	288
Height/Width/Depth	mm	1255 x 600 x 152	1255 x 600 x 152	1255 x 600 x 152
Height/Width/Depth	in	49.41 x 23.62 x 5.98	49.41 x 23.62 x 5.98	49.41 x 23.62 x 5.98
Absorbed Current	A	4.6	4.6	9.6
Power Consumption	W	1410	1350	410
Side Cabinet air flow (free blowing)	m3/h (CFM)	1350 (795)	1800 (1059)	2030 (1195)
Side Ambient Temperature Limits	°C	- 40° / + 55°	- 40° / + 55°	- 40° / + 55°
Side Cabinet Temperature Limits	°F	- 40° / + 131°	- 40° / + 131°	- 40° / + 131°
Protection Level	Type	4 (4X*)	4 (4X*)	4 (4X*)
Noise Level	dB(A)	68	68	68
Weight	kg (lbs)	41 (90.4)	41 (90.4)	41 (90.4)



* Optional

HEX Stainless Steel Size 1 (OCAXI01, OCAXI02, OCAXI03)

HEX Special Color Size 1 (OCAXNS01, OCAXNS03, OCAXNS06)

HEX A2W Stainless Steel Size 1 (OCAXI04, OCAXI05, OCAXI06, OCAXI07)

Heat Exchangers - Air to Water

EXW - Air to Water



Indoor Air to Water Heat Exchangers

Design Features

- Patented construction / air flow feature to prevent water penetration
- Filterless design promotes ease of maintenance
- Blower design promotes efficient air movement over coils
- Mounts externally to enclosure
- Mounting hardware, gasketing and user manuals provided
- Full-size mounting template provided

Heat Exchanger Core

- Copper tube / Aluminum fin design
- Design promotes optimal performance in heat transfer

Temperature Control

- Mechanical Thermostat / Water Valve designed system
- Thermostat uses water valve to optimize temperature range
- Water valve increases efficiency in performance of the water pump

Industry Standards

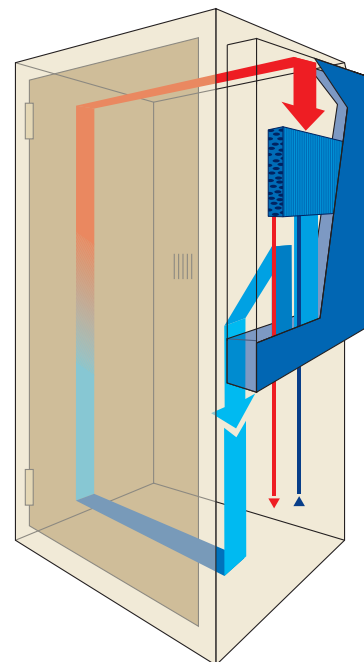
- UL Listed (File # E194435)
- Indoor: Nema 12
- IP 55 Rated

Industries Served

- Industrial & Process Automation
- Packaging and Logistical Systems
- Industrial Tool Systems

Product Attributes

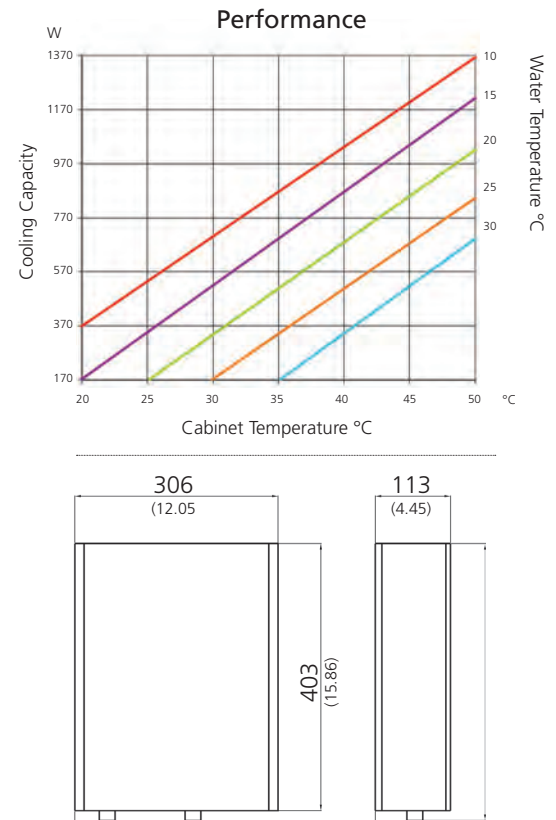
- 5 sizes of Heat Exchangers
- Capacity range at DT25 from 870 Watts to 12.5K Watts
- Voltage Range Options: 115v and 230v
- Operating Temperature: 10°C / 50°F - 50°C / 122°F
- All Models Powder Coated RAL 7035; Light Gray / Semi Textured
- All units functionally tested before shipment



Heat Exchangers - Air to Water

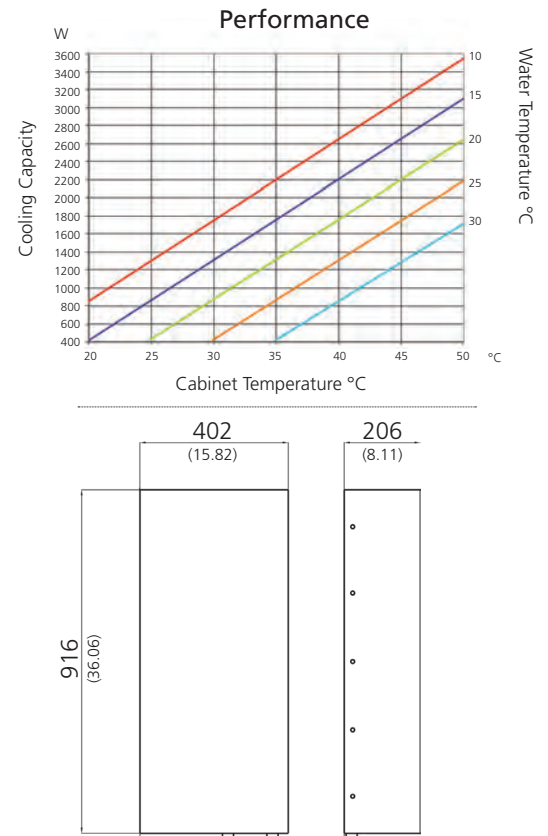
Heat Exchangers EXW06

		Product Part Numbers	
Specification	M.U.	EXW06U12220040	EXW06U12200040
Item Number		181104	181103
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity (°T = 25°C)	W (BTU)	870 (2968)	870 (2968)
Height/Width/Depth	mm	403 x 306 x 113	403 x 306 x 113
Height/Width/Depth	in	15.86 x 12.05 x 4.45	15.86 x 12.05 x 4.45
Absorbed Fan Current	A	0.5	0.5
Absorbed Fan Power	W	24	24
Fan Air Flow	m ³ /h (CFM)	330 (194)	330 (194)
Water Flow	l/h	150	150
Max Water Pressure	kPa	500	500
Water Pressure Drop	kPa	2	2
Side Ambient Temperature Limits	°C	10° / +50°	10° / +50°
Side Ambient Temperature Limits	°F	50° / +122°	50° / +122°
Water Connection Diameter	in	3/8	3/8
Protection Level	Type	12	12
Noise Level	dB(A)	58	58
Weight	kg (lbs)	7 (15.4)	7 (15.4)



Heat Exchangers EXW15

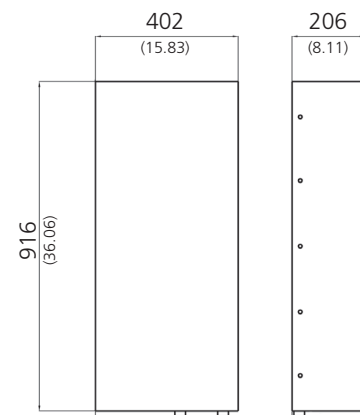
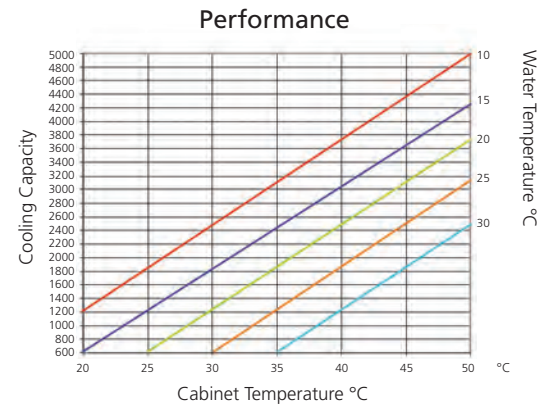
		Product Part Numbers	
Specification	M.U.	EXW15U12220040	EXW15U12200040
Item Number		181106	181105
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity (°T = 25°C)	W (BTU)	2200 (7506)	2200 (7506)
Height/Width/Depth	mm	916 x 402 x 206	916 x 402 x 206
Height/Width/Depth	in	36.06 x 15.82 x 8.11	36.06 x 15.82 x 8.11
Absorbed Fan Current	A	0.8	0.8
Absorbed Fan Power	W	90	58 / 75
Fan Air Flow	m ³ /h (CFM)	575 (338)	575 (338)
Water Flow	l/h	150	150
Max Water Pressure	kPa	1000	1000
Water Pressure Drop	kPa	30	30
Side Ambient Temperature Limits	°C	10° / +50°	10° / +50°
Side Ambient Temperature Limits	°F	50° / +122°	50° / +122°
Water Connection Diameter	in	1/2 NPT	1/2 NPT
Protection Level	Type	12	12
Noise Level	dB(A)	58	58
Weight	kg (lbs)	21 (46.3)	21 (46.3)



Heat Exchangers - Air to Water

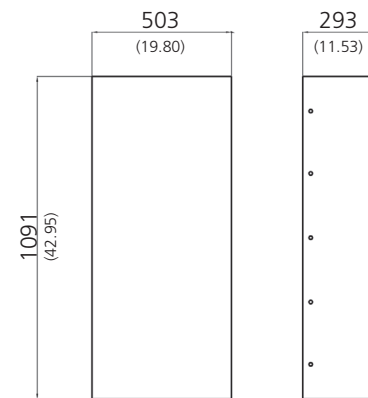
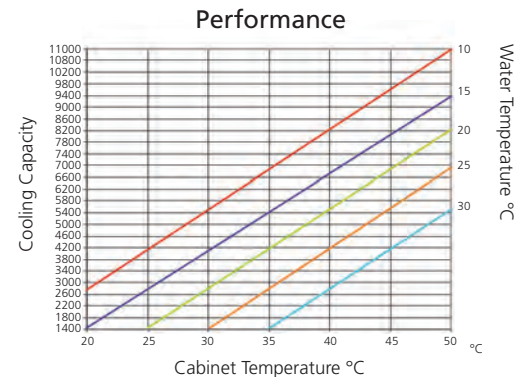
Heat Exchangers EXW25

		Product Part Numbers	
Specification	M.U.	EXW25U12220040	EXW25U12200040
Item Number		181108	181107
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity (°T = 25°C)	W (BTU)	3100 (10587)	3100 (10587)
Height/Width/Depth	mm	916 x 402 x 206	916 x 402 x 206
Height/Width/Depth	in	36.06 x 15.83 x 8.11	36.06 x 15.83 x 8.11
Absorbed Fan Current	A	1	1
Absorbed Fan Power	W	115	85 / 90
Fan Air Flow	m3/h (CFM)	860 (506)	860 (506)
Water Flow	l/h	500	500
Max Water Pressure	kPa	1000	1000
Water Pressure Drop	kPa	63	63
Side Ambient Temperature Limits	°C	10° / +50°	10° / +50°
Side Ambient Temperature Limits	°F	50° / +122°	50° / +122°
Water Connection Diameter	in	1/2 NPT	1/2 NPT
Protection Level	Type	12	12
Noise Level	dB(A)	58	58
Weight	kg (lbs)	22 (48.5)	22 (48.5)



Heat Exchangers EXW50

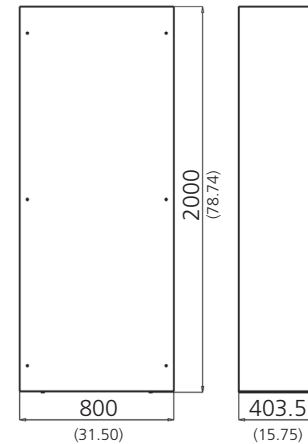
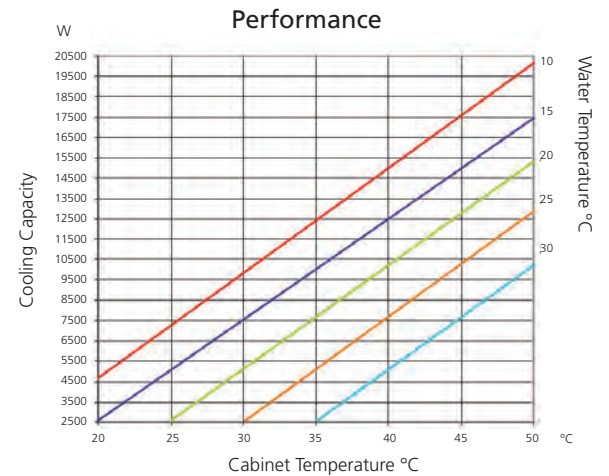
		Product Part Numbers	
Specification	M.U.	EXW50U12220040	EXW50U12200040
Item Number		181110	181109
Power Supply	V-Ph-Hz	115-1-60	230-1-60
Cooling Capacity (°T = 25°C)	W (BTU)	6700 (22882)	6700 (22882)
Height/Width/Depth	mm	1091 x 503 x 293	1091 x 503 x 293
Height/Width/Depth	in	42.95 x 19.80 x 11.53	42.95 x 19.80 x 11.53
Absorbed Fan Current	A	2	1.3
Absorbed Fan Power	W	155	210 / 285
Fan Air Flow	m3/h (CFM)	1450 (853)	1450 (853)
Water Flow	l/h	860	860
Max Water Pressure	kPa	1000	1000
Water Pressure Drop	kPa	40	40
Side Ambient Temperature Limits	°C	10° / +50°	10° / +50°
Side Ambient Temperature Limits	°F	50° / +122°	50° / +122°
Water Connection Diameter	in	1/2 NPT	1/2 NPT
Protection Level	Type	12	12
Noise Level	dB(A)	58	58
Weight	kg (lbs)	39 (86)	39 (86)



Heat Exchangers - Air to Water

Heat Exchangers EXWA0

		Product Part Numbers
Specification	M.U.	EXWA0U12200040A
Item Number		181111
Power Supply	V-Ph-Hz	230-1-60
Cooling Capacity (°T = 25°C)	W (BTU)	12500 (42690)
Height/Width/Depth	mm	2000 x 800 x 403.5
Height/Width/Depth	in	78.74 x 31.50 x 15.75
Absorbed Fan Current	A	2.15
Absorbed Fan Power	W	420 / 570
Fan Air Flow	m ³ /h (CFM)	2900 (1707)
Water Flow	l/h	1440
Max Water Pressure	kPa	1000
Water Pressure Drop	kPa	90
Side Ambient Temperature Limits	°C	10° / +50°
Side Ambient Temperature Limits	°F	50° / +122°
Water Connection Diameter	in	3/4 NPT
Protection Level	Type	12
Noise Level	dB(A)	60
Weight	kg (lbs)	90 (198.4)



Optional

HEX Stainless Steel Size 1 (OCAXI01, OCAXI02, OCAXI03)

HEX Special Color Size 1 (OCAXNS01, OCAXNS03, OCAXNS06)

HEX A2W Stainless Steel Size 1 (OCAXI04, OCAXI05, OCAXI06, OCAXI07)

Filter Fans - KRYOS²



Filter Fans - KRYOS²

Design Features

- Wide range of sizes
- Wide range of voltage options
- Snap in mounting that does not require hardware
- Simple adjustment for air flow reversal; push/pull
- Retention clips designed to accept wide range of enclosures
- Designed for easy filter replacement
- Spring loaded terminal blocks for reliable electrical connection
- Gasketing and user manuals provided
- Full-size mounting template provided
- Designed and manufactured for high reliability

Industry Standards

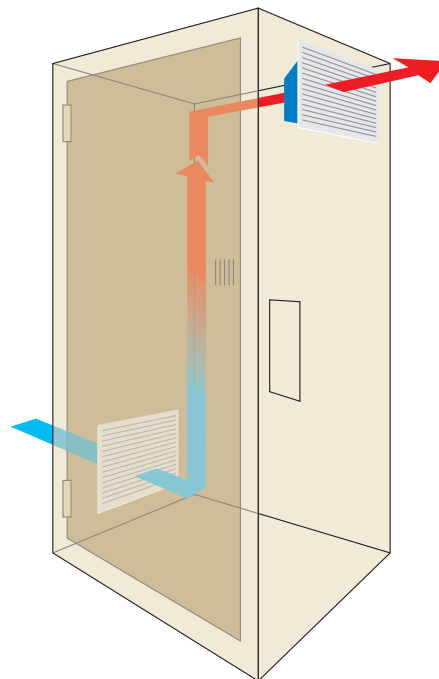
- UL Recognized / File # E194444
- IP 54 Rated
- IP 55 Capable with Optional Filter
- Type 12

Industries Served

- Industrial & Process Automation
- Packaging and Logistical Systems
- Energy (Solar, Wind, Water and Petrochemical)
- Telecommunications
- Defense Systems

Product Attributes

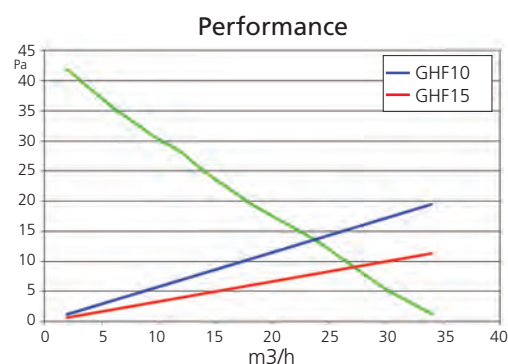
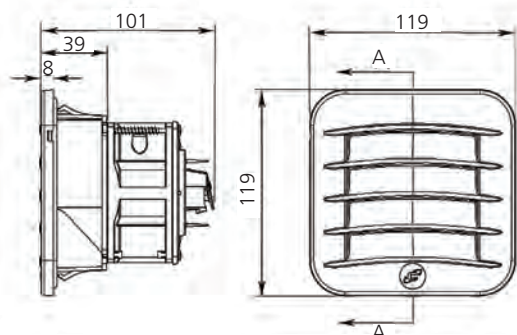
- 5 different size footprints for flexibility
- CFM Range of 21 CFM - 584 CFM
- Wide range of Voltage options: 12VDC - 48VDC; 115VAC - 460VAC
- Operating Temperature: 10°C / 14°F - 60°C / 140°F
- All Models UV Resistant ABS Blend; RAL 7035
- MTBF of 40,000 hours
- All units functionally tested before shipment



Ventilation - KRYOS²

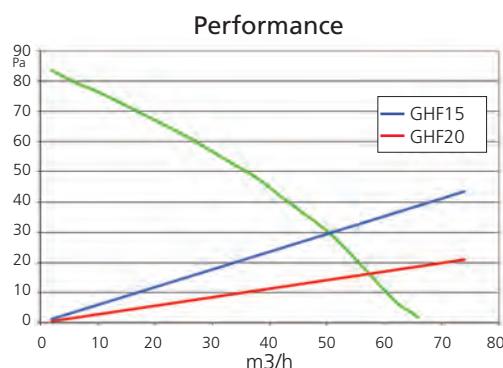
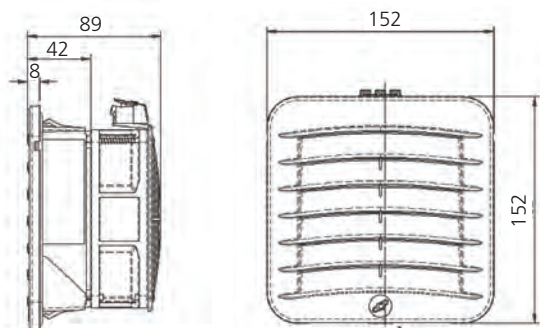
KRYOS² Filter Fans GHV10

		Product Part Numbers				
Specification	M.U.	GHV1000220	GHV10000203	GHV1000210	GHV1000211	GHV1000212
Item Number		181112	181113	181114	181115	181116
Power Supply	V-Ph-Hz	230-1-50/60	115-1-50/60	12VDC	24VDC	48VDC
Height/Width/Depth	mm	119 x 119 x 101	119 x 119 x 101	119 x 119 x 101	119 x 119 x 101	119 x 119 x 101
Height/Width/Depth	in	4.69 x 4.69 x 3.98	4.69 x 4.69 x 3.98	4.69 x 4.69 x 3.98	4.69 x 4.69 x 3.98	4.69 x 4.69 x 3.98
Power Absorbed / Current Absorbed	W/A	13 / 0.07	13 / 0.13	6.24 / 0.52	9.6 / 0.26	14.4 / 0.3
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54	54
Noise Level	dB(A)	35	35	55	55	55
Air Flow GHV10	m3/h (CFM)	35 (20.6)	35 (20.6)	35 (20.6)	35 (20.6)	35 (20.6)
Air Flow GHV10 + GHF10	m3/h (CFM)	24 (14.1)	24 (14.1)	24 (14.1)	70 (41.2)	70 (41.2)



KRYOS² Filter Fans GHV15

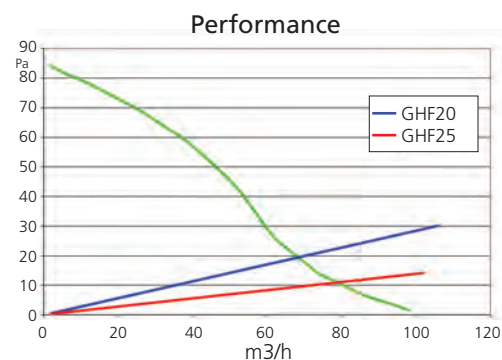
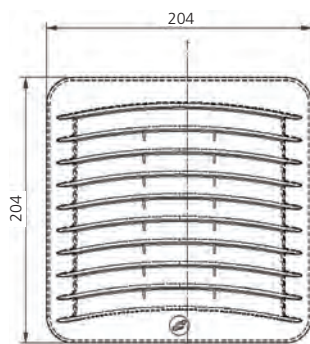
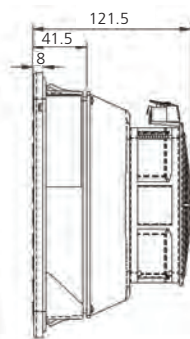
		Product Part Numbers				
Specification	M.U.	GHV1500220	GHV1500203	GHV1500210	GHV1500211	GHV1500212
Item Number		181117	181118	181119	181120	181121
Power Supply	V-Ph-Hz	230-1-50/60	115-1-50/60	12VDC	24VDC	48VDC
Height/Width/Depth	mm	152 x 152 x 89	152 x 152 x 89	152 x 152 x 89	152 x 152 x 89	152 x 152 x 89
Height/Width/Depth	in	5.98 x 5.98 x 3.5	5.98 x 5.98 x 3.5	5.98 x 5.98 x 3.5	5.98 x 5.98 x 3.5	5.98 x 5.98 x 3.5
Power Absorbed / Current Absorbed	W/A	22 / 0.14	22 / 0.26	6 / 0.5	7.2 / 0.43	9.6 / 0.26
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54	54
Noise Level	dB(A)	49	49	49	49	49
Air Flow GHV15	m3/h (CFM)	67 (39.4)	67 (39.4)	67 (39.4)	67 (39.4)	67 (39.4)
Air Flow GHV15 + GHF15	m3/h (CFM)	50 (29.4)	50 (29.4)	50 (29.4)	50 (29.4)	50 (29.4)



Ventilation - KRYOS²

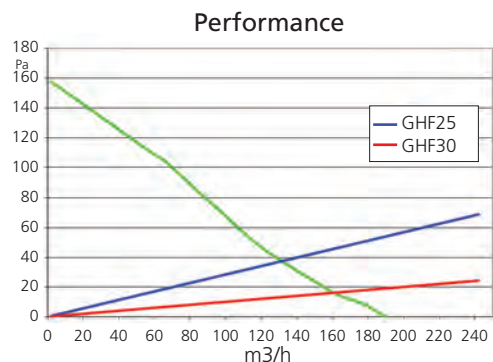
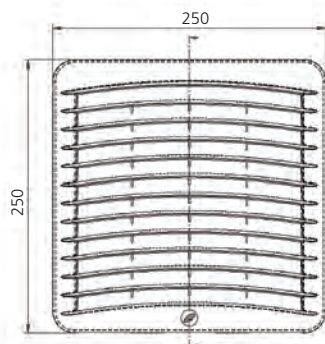
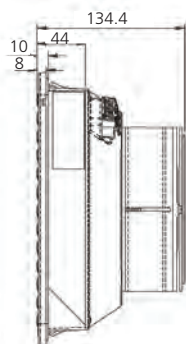
KRYOS² Filter Fans GHV20

		Product Part Numbers				
Specification	M.U.	GHV2000220	GHV2000203	GHV2000210	GHV2000211	GHV2000212
Item Number		181122	181123	181124	181125	181126
Power Supply	V-Ph-Hz	230-1-50/60	115-1-50/60	12VDC	24VDC	48VDC
Height/Width/Depth	mm	204 x 204 x 121.5	204 x 204 x 121.5	204 x 204 x 121.5	204 x 204 x 121.5	204 x 204 x 121.5
Height/Width/Depth	in	8.03 x 8.03 x 4.78	8.03 x 8.03 x 4.78	8.03 x 8.03 x 4.78	8.03 x 8.03 x 4.78	8.03 x 8.03 x 4.78
Power Absorbed / Current Absorbed	W/A	22 / 0.14	22 / 0.26	6 / 0.5	7.2 / 0.43	9.6 / 0.26
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54	54
Noise Level	dB(A)	49	49	49	49	49
Air Flow GHV20	m ³ /h (CFM)	108 (63.6)	108 (63.6)	108 (63.6)	108 (63.6)	108 (63.6)
Air Flow GHV20 + GHF20	m ³ /h (CFM)	75 (44.1)	75 (44.1)	75 (44.1)	75 (44.1)	75 (44.1)



KRYOS² Filter Fans GHV25

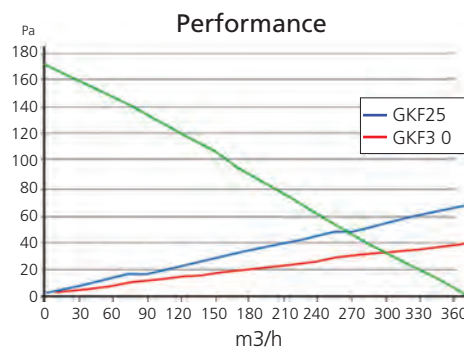
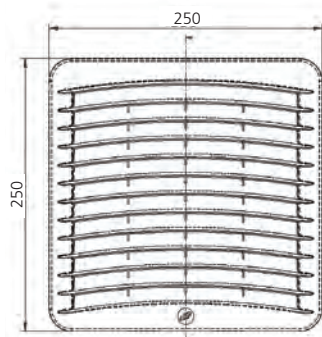
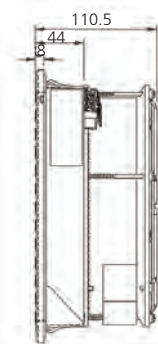
		Product Part Numbers				
Specification	M.U.	GHV2500220	GHV2500203	GHV2500210	GHV2500211	GHV2500212
Item Number		181127	181128	181129	181130	181131
Power Supply	V-Ph-Hz	230-1-50/60	115-1-50/60	12VDC	24VDC	48VDC
Height/Width/Depth	mm	250 x 250 x 134.4	250 x 250 x 134.4	250 x 250 x 134.4	250 x 250 x 134.4	250 x 250 x 134.4
Height/Width/Depth	in	9.84 x 9.84 x 5.29	9.84 x 9.84 x 5.29	9.84 x 9.84 x 5.29	9.84 x 9.84 x 5.29	9.84 x 9.84 x 5.29
Power Absorbed / Current Absorbed	W/A	35 / 0.29	35 / 0.43	42 / 3.5	43 / 1.8	36 / 0.75
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54	54
Noise Level	dB(A)	54	54	54	54	54
Air Flow GHV25	m ³ /h (CFM)	190 (111.8)	190 (111.8)	190 (111.8)	190 (111.8)	190 (111.8)
Air Flow GHV25 + GHF25	m ³ /h (CFM)	130 (76.5)	130 (76.5)	130 (76.5)	130 (76.5)	130 (76.5)



Ventilation - KRYOS²

KRYOS² Filter Fans GHV2501

		Product Part Numbers	
Specification	M.U.	GHV2501220	GHV2501203
Item Number		181132	181133
Power Supply	V-Ph-Hz	230-1-50/60	115-1-50/60
Height/Width/Depth	mm	250 x 250 x 110.5	250 x 250 x 110.5
Height/Width/Depth	in	9.84 x 9.84 x 4.35	9.84 x 9.84 x 4.35
Power Absorbed / Current Absorbed	W/A	50 / 0.26	50 / 0.46
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54
Noise Level	dB(A)	54	54
Air Flow GHV25	m3/h (CFM)	370 (217.8)	370 (217.8)
Air Flow GHV25 + GHF25	m3/h (CFM)	270 (158.9)	270 (158.9)



KRYOS² Filter Fans GHV30

		Product Part Numbers			
Specification	M.U.	GHV3000220	GHV3000203	GHV30A1220	GHV30P1220
Item Number		181134	181135	181136	181138
Power Supply	V-Ph-Hz	230-1-50/60	115-1-50/60	230-1-50/60	230-1-50/60
Height/Width/Depth	mm	318 x 318 x 153.5	318 x 318 x 153.5	318 x 318 x 163	318 x 318 x 163
Height/Width/Depth	in	12.52 x 12.52 x 6.04	12.52 x 12.52 x 6.04	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42
Power Absorbed / Current Absorbed	W/A	50 / 0.26	50 / 0.46	90 / 0.34	90 / 0.34
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54
Noise Level	dB(A)	62	62	68	68
Air Flow GHV30	m3/h (CFM)	500 (294.3)	500 (294.3)	615 (362)	615 (362)
Air Flow GHV30 + GHF30	m3/h (CFM)	380 (223.7)	380 (223.7)	500 (294.2)	500 (294.2)

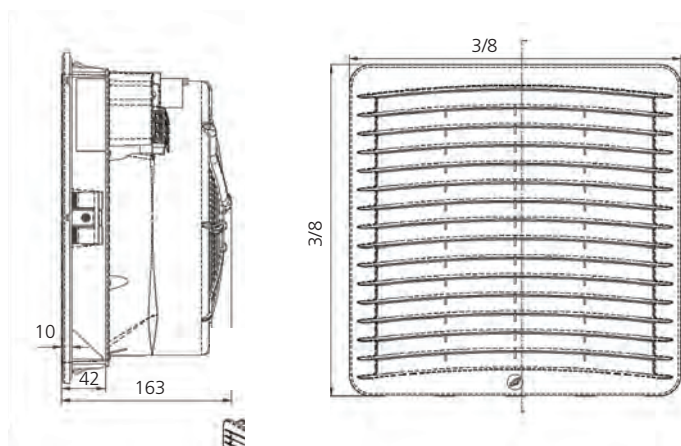
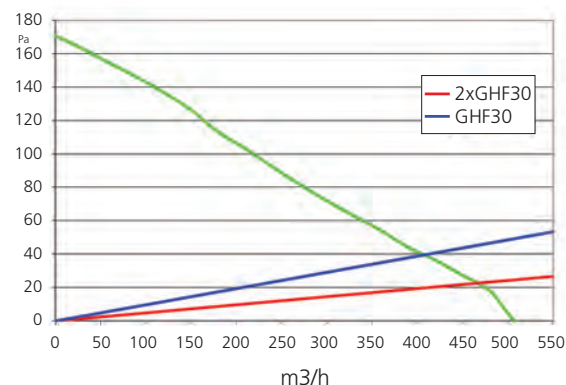
Ventilation - KRYOS²

KRYOS² Filter Fans GHV30 (continued)

		Product Part Numbers			
Specification	M.U.	GHV30A1203	GHV30P1203	GHV30A2220	GHV30P2220
Item Number		181138	181139	181140	181141
Power Supply	V-Ph-Hz	115-1-50/60	115-1-50/60	230-1-50/60	230-1-50/60
Height/Width/Depth	mm	318 x 318 x 163	318 x 318 x 163	318 x 318 x 163	318 x 318 x 163
Height/Width/Depth	in	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42
Power Absorbed / Current Absorbed	W/A	85 / 0.68	85 / 0.68	175 / 0.5	175 / 0.5
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54
Noise Level	dB(A)	68	68	71	71
Air Flow GHV30	m ³ /h (CFM)	615 (362)	615 (362)	990 (582.7)	990 (582.7)
Air Flow GHV30 + GHF30	m ³ /h (CFM)	500 (294.2)	500 (294.2)	575 (338.4)	575 (338.4)

		Product Part Numbers			
Specification	M.U.	GHV30A2203	GHV30P2203	GHV30A2262	GHV30P2262
Item Number		181142	181143	181144	181145
Power Supply	V-Ph-Hz	115-1-50/60	115-1-50/60	400/460-3-50/60	400/460-3-50/60
Height/Width/Depth	mm	318 x 318 x 163	318 x 318 x 163	318 x 318 x 163	318 x 318 x 163
Height/Width/Depth	in	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42	12.52 x 12.52 x 6.42
Power Absorbed / Current Absorbed	W/A	165 / 1.37	155 / 1.37	160 / 0.23	155 / 0.21
Side Ambient Temperature Limits	°C	- 10° / +60°	- 10° / +60°	- 10° / +60°	- 10° / +60°
Side Ambient Temperature Limits	°F	14° / +140°	14° / +140°	14° / +140°	14° / +140°
Side Cabinet Protection Degree	IP	54	54	54	54
Noise Level	dB(A)	71	71	72	72
Air Flow GHV30	m ³ /h (CFM)	990 (582.7)	990 (582.7)	990 (582.7)	990 (582.7)
Air Flow GHV30 + GHF30	m ³ /h (CFM)	575 (338.4)	575 (338.4)	575 (338.4)	575 (338.4)

Performance



Ventilation - KRYOS²

KRYOS² Filter Fans GHF/Grills

		Product Part Numbers				
Specification	M.U.	GHF10	GHF15	GHF20	GHF25	GHF30
Item Number		181146	181147	181148	181149	181150
Height/Width/Depth	mm	119 x 119 x 48	152 x 152 x 50	204 x 204 x 42	250 x 250 x 55	318 x 318 x 42
Height/Width/Depth	in	4.69 x 4.69 x 1.89	5.98 x 5.98 x 1.97	8.03 x 8.03 x 1.65	9.84 x 9.84 x 2.17	12.52 x 12.52 x 1.65
Side Cabinet Protection Degree	IP	54	54	54	54	54

KRYOS² Replacement Filters

		Filter Fans / Grill Sizing				
Specification		GHV10 / GHF10	GHV10 / GHF15	GHV20 / GHF20	GHV25 / GHF25	GHV30 / GHF30
IP54 (PU=10)	Part Number (Item Number)	AVAFAGH10 (181188)	AVAFAGH15 (181189)	AVAFAGH20 (181190)	AVAFAGH25 (181191)	AVAFAGH30 (181192)
IP55 (PU=2)	Part Number (Item Number)		AVAFSGH15 (181194)	AVAFSGH20 (181195)	AVAFSGH25 (181196)	AVAFSGH30 (181197)

Ventilation / Top Mount



TB - Top Mount

Common Features

- Exhaust Fan top mounting
- 4 sizes
- Air Flow 575-2365 m³/h
- Protection degree IP44 (IP54 special protection)
- Radial Fans with high external static pressure
- Available without fans for applications
- Used with GHF Grills

Industry Standards

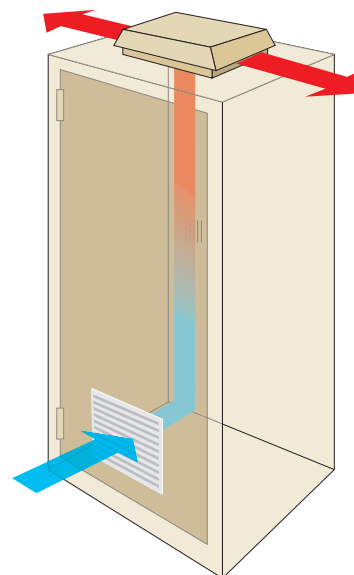
- IP 54 Rated
- Type 12

Industries Served

- Industrial & Process Automation
- Packaging Systems

Product Attributes

- 4 different size footprints for flexibility
- CFM Range of 206 CFM - 1098 CFM
- Wide range of Voltage options: 115VAC 230VAC
- Operating Temperature: -20°C / -4°F - 55°C / 131°F
- All Models UV Resistant ABS Blend; RAL 7035
- All units functionally tested before shipment



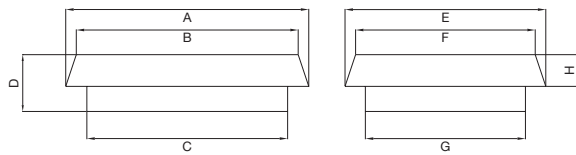
TB

		Product Part Numbers			
Specification	M.U.	TB190HF	TB190HF220	TB190HF222	TB220HF220
Item Number		181152	181153	181154	181155
Power Supply	V-Ph-Hz		230-1-50/60	115-1-50/60	230-1-50/60
Height/Width/Depth	mm	108 x 460 x 380	108 x 460 x 380	108 x 460 x 380	108 x 460 x 380
Height/Width/Depth	in	4.25 x 18.11 x 14.96	4.25 x 18.11 x 14.96	4.25 x 18.11 x 14.96	4.25 x 18.11 x 14.96
Power Absorbed / Current Absorbed	W/A		75 / 0.34	80 / 0.8	85 / 0.4
Side Ambient Temperature Limits	°C		- 20° / +55°	- 20° / +55°	- 20° / +55°
Side Ambient Temperature Limits	°F		-4° / +131°	-4° / +131°	-4° / +131°
Side Cabinet Protection Degree	IP	54	54	54	54
Noise Level	dB(A)		80	80	80
Air Flow	m3/h (CFM)		350 (206)	350 (206)	610 (359)
Weight	kg (lbs)	3.5 (7.7)	6.3 (13.89)	6.3 (13.89)	8.5 (18.74)

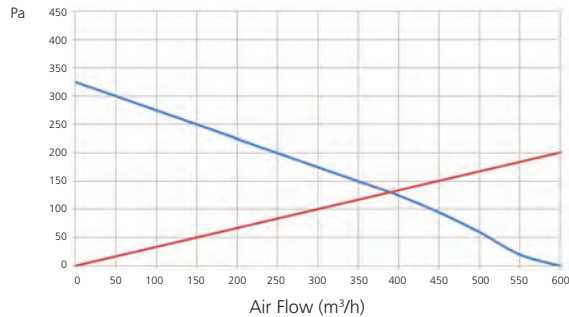
Ventilation / Top Mount

		Product Part Numbers			
Specification	M.U.	TB250HF	TB250HF220	TB350HF	TB350HF220
Item Number		181156	181157	181158	181159
Power Supply	V-Ph-Hz		230-1-50/60		230-1-50/60
Height/Width/Depth	mm	160 x 540 x 400	160 x 540 x 400	300 x 600 x 550	300 x 600 x 550
Height/Width/Depth	in	6.3 x 21.26 x 15.75	6.3 x 21.26 x 15.75	11.81 x 23.62 x 21.65	11.81 x 23.62 x 21.65
Power Absorbed / Current Absorbed	W/A		215 / 0.95		170 / 1.1
Side Ambient Temperature Limits	°C		- 20° / +55°		- 20° / +55°
Side Ambient Temperature Limits	°F		-4° / +131°		-4° / +131°
Side Cabinet Protection Degree	IP	54	54	54	54
Noise Level	dB(A)		82	82	82
Air Flow	m3/h (CFM)		1100 (647)	1865 (1098)	1865 (1098)
Weight	kg (lbs)	9 (19.84)	13 (28.66)	21 (46.3)	21 (46.3)

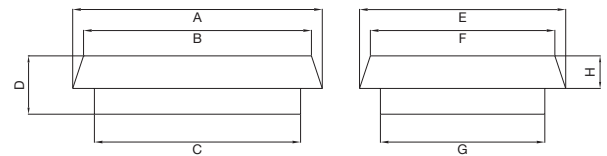
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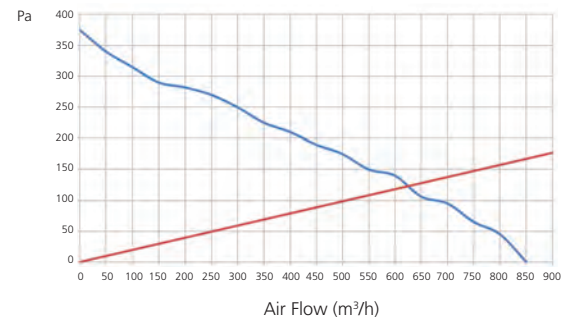
	A	B	C	D	E	F	G	H
TB190002xx	460	420	380	108	380	340	300	60



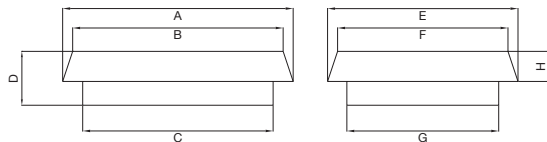
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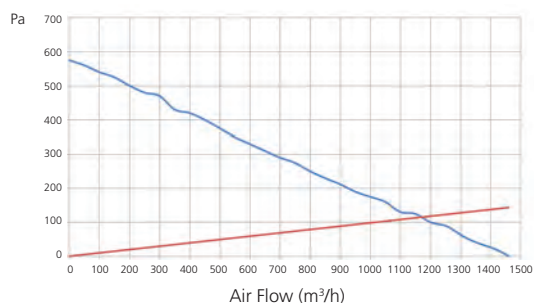
	A	B	C	D	E	F	G	H
TB190002xx	460	420	380	108	380	340	300	60
TB220002xx	460	420	380	108	380	340	300	60



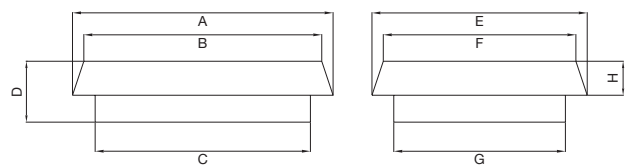
TB250



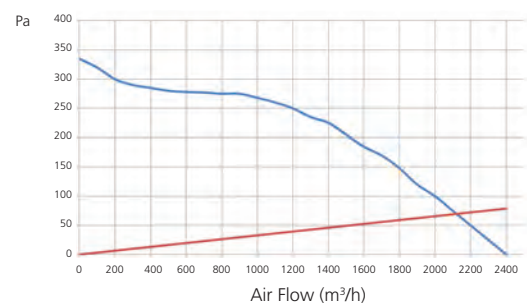
	A	B	C	D	E	F	G	H
TB190002xx	460	420	380	108	380	340	300	60
TB220002xx	460	420	380	108	380	340	300	60
TB250002xx	540	500	440	160	400	360	320	100
TB350002xx	600	540	480	300	550	490	470	190



TB350



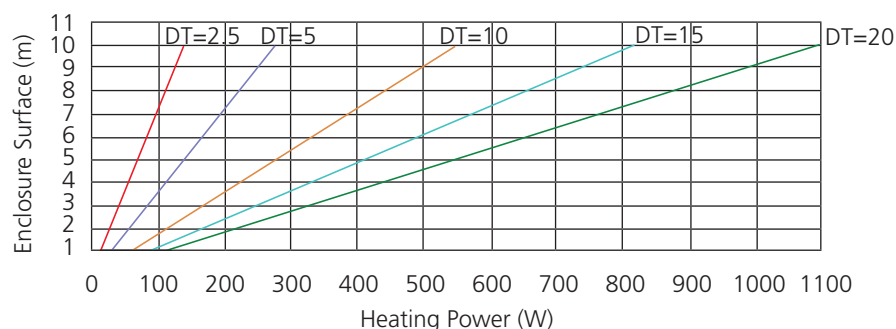
	A	B	C	D	E	F	G	H
TB350002xx	600	540	480	300	550	490	470	190



EH

		Product Part Numbers				
Specification	M.U.	EH020	EH030	EH050	FH100	FH150
Item Number		181080	181160	181161	181162	181163
Power Supply	V-Ph-Hz	110 - 230	110 - 230	110 - 230	110 - 230	110 - 230
Height/Width/Depth	mm	95 x 42 x 42	95 x 42 x 42	147 x 42 x 42	147 x 82 x 51	147 x 82 x 51
Height/Width/Depth	in	3.74 x 1.65 x 1.65	3.74 x 1.65 x 1.65	5.79 x 1.65 x 1.65	5.79 x 3.23 x 2.01	5.79 x 3.23 x 2.01
Heating Capacity	W	20	30	50	100	150
Connection Cable	mm2	2 x 0.5	2 x 0.5	2 x 0.5	-	
Cable Length	mm (in)	600	600	600	-	
Block Terminal	mm2	-	-	-	2.5	2.5
Weight	kg (lbs)	0.18 (0.40)	0.25 (0.55)	0.33 (0.73)	0.6 (1.32)	0.8 (1.76)

Diagram of Heating Power



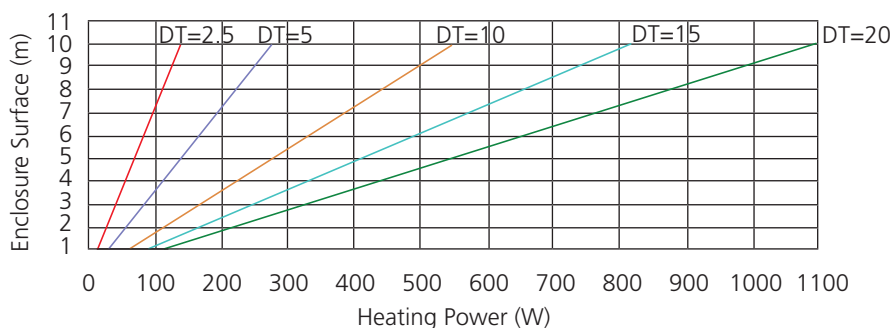
Example

- 1: Enclosure surface - 2,5m²
- 2: Temperature difference - 10C°
- 3: Heat load - 137,5W
- 4: Chosen model - TH150/FH150

TH

		Product Part Numbers			
Specification	M.U.	TH150	TH300	TH450	TH600
Item Number		181166	181167	181168	181169
Power Supply	V-Ph-Hz	230 - 1 - 50/60	230 - 1 - 50/60	230 - 1 - 50/60	230 - 1 - 50/60
Height/Width/Depth	mm	170 x 42 x 51	148 x 82 x 91	148 x 82 x 91	148 x 82 x 91
Height/Width/Depth	in	2.8 x 1.38 x 1.85	2.8 x 1.38 x 1.85	2.56 x 1.97 x 2.40	
Heating Capacity	W	150	300	450	600
Connection Cable	mm2	2 x 0.5	2 x 0.5	2 x 0.5	2 x 0.5
Block Terminal	mm2	2.5	2.5	2.5	2.5
Weight	kg (lbs)	0.35 (0.77)	1 (2.20)	1 (2.20)	1.8 (3.97)

Diagram of Heating Power



Example

- 1: Enclosure surface - 2,5m²
- 2: Temperature difference - 10C°
- 3: Heat load - 137,5W
- 4: Chosen model - TH150/FH150

TMC / TMF / TEM

		Product Part Numbers		
Specification	M.U.	TMC	TMF	TEM
Item Number		181170	181171	181165
Power Supply	V-Ph-Hz	110 - 230	110 - 230	24 - 230
Height/Width/Depth	mm	71 x 35 x 47	71 x 35 x 47	65 x 50 x 61
Height/Width/Depth	in	2.8 x 1.38 x 1.85	2.8 x 1.38 x 1.85	2.56 x 1.97 x 2.40
Accuracy	°C	+/- 3	+/- 3	+/- 1
Thermal Gradient	°C	1	1	1
On/Off Differential Temperatures	K	-3	-3	0.5
Contacts	#	2	2	3
Contact Position		NC	NO	NC/NO
Protection Degree	IP	20	20	20
Electric Connections	# / size	2 / 2.5mm	2 / 2.5mm	4 / 2.5mm
Fixation System		DIN 35/15	DIN 35/15	DIN 35/15

TMC-TMF



TEM



Common Features

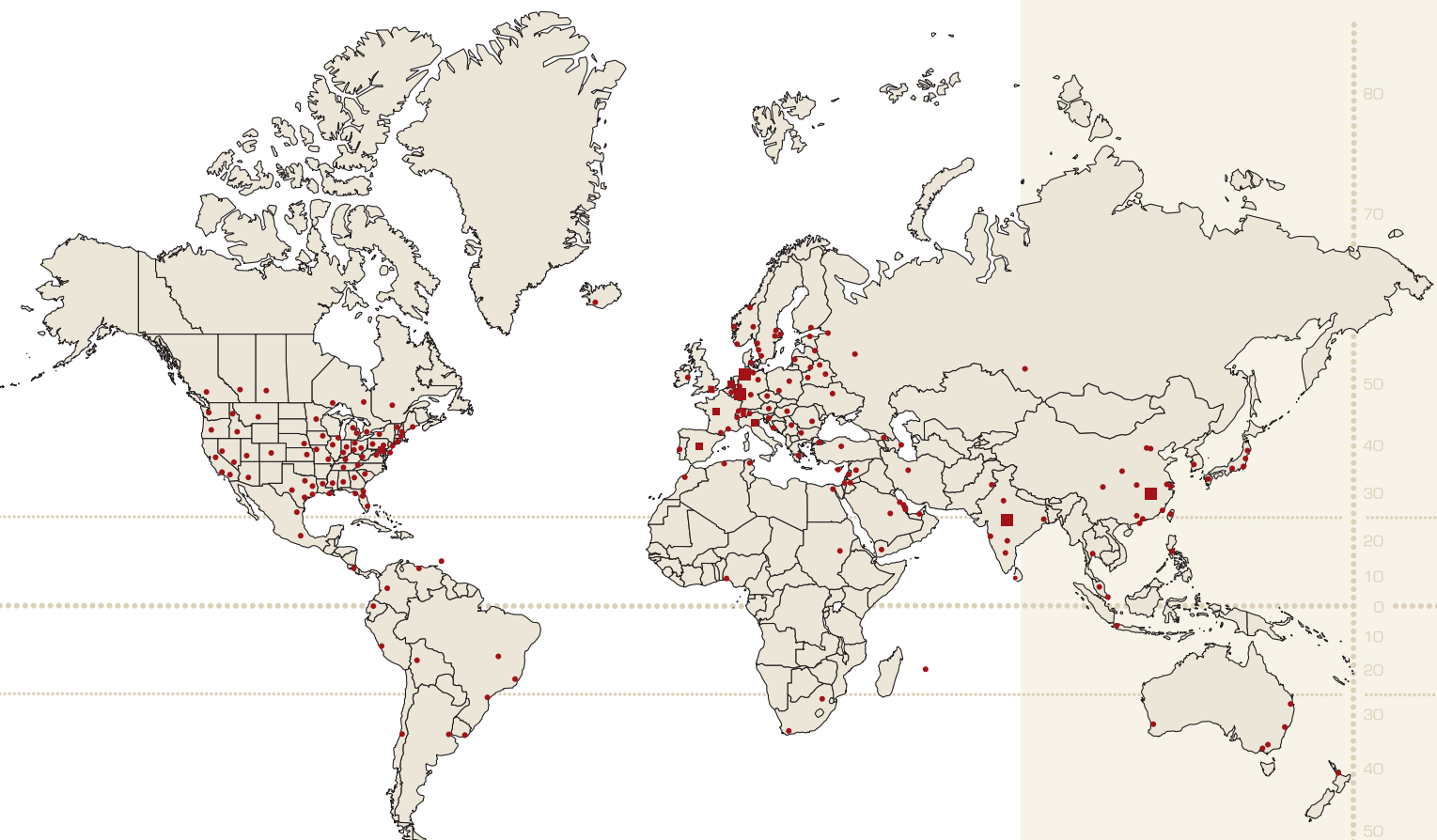
These devices CE marked are used as cabinet Temperature control, connected to filter fans or heaters and for alarm signals. DIN bar installation.

Model TMF, with blue regulation knob, has a normally open contact; used for high Temperature alarm or as low Temperature alarm.

Model TMC, with red regulation knob, has a normally closed contact.

Model TEM needs supply voltage and it has exchange contacts with low hysteresis.

STULZ Global Presence



Production Facilities: U.S.A. • Italy • Germany • China • India



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