

VRF Chiller



Line-up outdoor

Model Type	Image	42 kW	56 kW	65 kW
Non-Modulating				
		AG042SVANH/EU	AG056SVANH/EU	AG065SVANH/EU

Combining modules allows each product to work at high capacity. You can combine up to 16 modules.

Combination guide - outdoor

Modulation guide

Total Capacity (kW)	Model	Model	Suggested # water-type controller piping
	AG042	AG056	AG070
42	1		40
56		1	40
65			50
84	2		50
112		2	65
126	1		65
130		2	80
168		3	80
168 (high efficiency)	4		80
195		3	80
210	5		80
224		4	100
252	6		100
260		4	100
280		5	100
294	7		100
305		5	100
356		6	100
356 (high efficiency)	8		100
378	9		100
390		6	100
392		7	100
420	10		100
448		8	125

Line-up indoor

Model Type	Image	19 kW	24 kW	3.0 kW	4.2 kW	6.0 kW	7.2 kW	7.8 kW	9.0 kW	10.0 kW
1-Way Cassette FCU										
4-Way Cassette FCU										
360 Cassette FCU										
Concealed FCU										
Cast FCU										

Wind-Free™ 1-Way Cassette FCU is scheduled to be available by mid-2020.

Selection guide

Cassette				Concealed Cassette			
Feature	1-Way Cassette FCU	4-Way Cassette FCU	360 Cassette FCU	Feature	Concealed FCU	Cass FCU	
Cooling capacity range (nominal)	2.6–4.15 kW	6.0–10.0 kW	6.0–10.0 kW	Cooling capacity range (nominal)	19–78 kW	19–78 kW	
Heating capacity range (nominal)	2.7–5.0 kW	7.3–10.7 kW	7.3–10.7 kW	Heating capacity range (nominal)	2.1–8.4 kW	2.1–8.4 kW	
Fan motor type	AC/BLDC	BLDC	BLDC	Fan motor type	3-step AC	3-step AC	
Drain Pump	Built-in	Built-in	Built-in	Drain Pump	Optional	Optional	
Filter	Microfibrous filter	Microfibrous filter	Microfibrous filter	Filter	Polypropylene washable	Polypropylene washable	
3-Way Valve	Optional	Optional	Optional	3-Way Valve	Built-in	Built-in	
2-pipe	●	●	●	2-pipe	●	●	
4-pipe (optional)				4-pipe (optional)	●	●	
Installation	Horizontal	Horizontal	Horizontal	Installation	Horizontal/vertical	Horizontal/vertical	

Nomenclature

Indoor units

AG	072	M	N	4	P	K	H
1	2	3	4	5	6	7	8

1	Classification	AG	Chiller/Fan Coil Unit (FCU)
2	Capacity	x1/10 kW (3 digits)	
		K	2016
3	Version	M	2017
		N	2018
4	Product Type	N	Indoor Unit
5	Product Notation	I	1-Way Cassette
		4	4-Way Cassette, 360 Cassette
6	Feature	D	Deluxe
		P	Premium
7	Voltage Rating	E	10, 220–240 V, 50 Hz
		K	10, 220–240 V, 50/60 Hz
8	Mode	H	Heat Pump

Outdoor units

AG	070	K	S	V	A	N	H
1	2	3	4	5	6	7	8

1	Classification	AG	Chiller (HVAC Chiller)
2	Capacity	x1/10 kW (3 digits)	
		K	2016
3	Version	M	2017
		N	2018
4	Product Type	S	SET HVAC Chiller
5	Product Notation	V	Inverter
6	Feature	A	Non-pump
7	Voltage Rating	N	30, 380–415 V, 50/60 Hz
8	Mode	H	Heat Pump

Indoor units (third party)

ACL	65	D	F
1	2	3	4

1	Classification	ACL	Chiller/Fan Coil Unit (FCU)
2	Capacity	x1/10 kW (3 digits)	
		D	2-Pipe FCU
3	Product Notation	Q	4-Pipe FCU
		A	Accessory
4	Product Type	F	Concealed
		G	Cased

Specifications

HVM Chiller

- Air-cooled HVM Chiller heat pump
- Option of connecting up to 16 modules for a total capacity of more than 1 MW.
- Capacity modulation between 15% and 100%.
- Each unit houses 2 Inverter Scroll compressors, all equipped with Flash Injection technology.



Model/Name	AG041KSVN/V/EU	AG081KSVN/V/EU	AG070KSVN/V/EU		
Power Supply	Φ, N, V, Hz	3Ø, 4, 380-415 V, 50/60 Hz	3Ø, 4, 380-415 V, 50/60 Hz	3Ø, 4, 380-415 V, 50/60 Hz	
Performance	Cooling / Nominal	Cooling kW	42	56	65
	Heating kW	42	56	70	
Power	Power Input / Nominal	Cooling kW	12.4	18.7	26.0
	Heating kW	11.83	17.50	24.39	
Current Input / Nominal	Cooling A	19.6	29.6	41.2	
	Heating A	18.8	27.8	38.7	
Current	MCA A	32	46	58	
	MFA A	40	60	75	
Efficiency	EER (Nominal Cooling input is not included)	W/W	3.4	3.0	2.5
	COP (Nominal Heating is no input is not included)	W/W	3.6	3.2	2.9
	EEER (Pump input is not included)	W/W	5.7	5.4	5.0
Pn	Type	-	Axial Fan	Axial Fan	Axial Fan
	No. of Fans	-	2	2	2
	Airflow Rate	m³/min	344 (182 x 2)	364 (182 x 2)	392 (196 x 2)
		l/s	6,047	6,057	6,535
Water Side Heat Exchange	External Static Pressure	Max. mmH2O	8.00	8.00	8.00
		Pa	78.5	78.5	78.5
Fan Motor	Type	-	BLDC Motor	BLDC Motor	BLDC Motor
	Output s/n	W	630 x 2	630 x 2	630 x 2
Water Side Heat Exchange	Waterflow Rate (Cooling/Heating)	l/min	Brazing Plate	Brazing Plate	Brazing Plate
	Pressure Drop Set. Nominal	kPa	120/120	100	120
	Max. Operating Pressure	MPa	1	1	1
	Connection Type	-	FLANGE	FLANGE	FLANGE
	Pipe Connection Inlet/Outlet	A, mm	40	40	50
		A, inch	1 1/2	1 1/2	2
	Quantity	-	2	2	2
Wiring Connections	Communication	M25, mm²	0.75	0.75	0.75
	Remark	F1, F2	F1, F2	F1, F2	
Refrigerant	Type	-	R410A (GWP=2,088) which is a fluorinated greenhouse gas		
	Factory Charging	kg/OD, g	18/3758	18/3758	18/3758
Serial 1	Sent Power	Cooling	18.61	65	65
		Heating	18.61	57	64
	Sent Power	18.61	80	83	85
	External Dimensions	Net Weight kg	446.0	446.0	446.0
	Net Dimensions (W x H x D) mm	1,795 x 1,695 x 765	1,795 x 1,695 x 765	1,795 x 1,695 x 765	
Operating Water Temperature Range	Cooling	°C	5.0-25.0	5.0-25.0	5.0-25.0
	Heating	°C	-10.0-25.0	-10.0-25.0	-10.0-25.0
Operating Waterflow Range	Waterflow Rate l/min	25.0-55.0	25.0-55.0	25.0-55.0	
	Minimum Water Storage in the System L	60-240	80-320	93-400	
Operating Ambient Temperature Range	Cooling	°C	-15.0-48.0	-15.0-48.0	-15.0-48.0
	Heating	°C	-25.0-43.0	-25.0-43.0	-25.0-43.0

Accessories

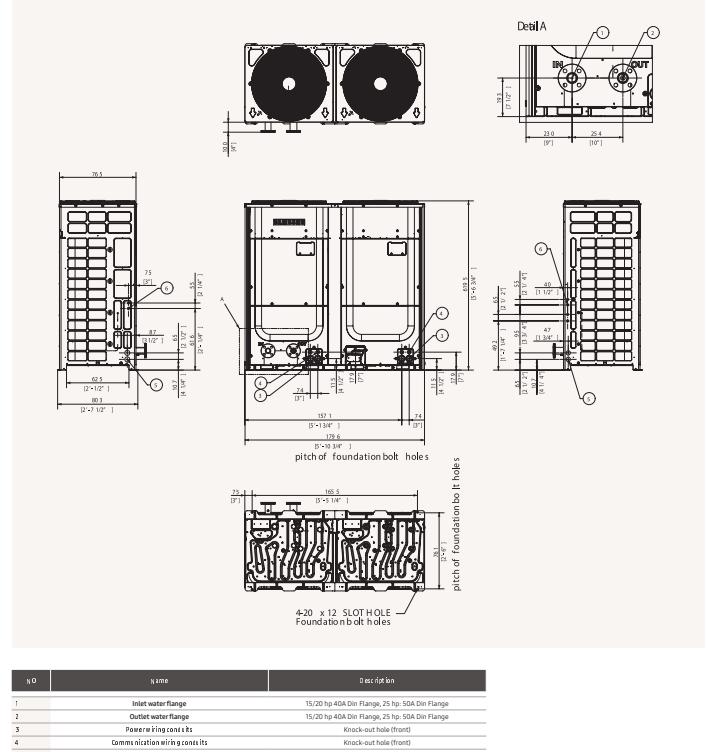


Model Controller	DHS2.3	BACnet Gateway	Touch Centralized Controller
MCH-400N	MIM-501AN	MIM-517B-N	MCH-430Dy

Dimensional drawings

HVM Chiller

AG042/056/070KSVN/V/EU



No	Name	Description
1	Inlet water flange	15/20 hp 404-Dm Flange, 25 hp 554-Dm Flange
2	Outer water flange	15/20 hp 404-Dm Flange, 25 hp 554-Dm Flange
3	Draining point(s) x 2	Knock-out hole (front)
4	Commissioning with consists	Knock-out hole (front)
5	Draining point(s) x 2	Knock-out hole (side)
6	Commissioning with consists	Knock-out hole (side)

Specifications

1-Way Cassette FCU

- One-way air supply by means of a 100 mm wide blade.
- Cooling fan controlled directly by a BLDC motor.
- Built-in condensation drain pump
- 3-Way valve kit (optional).

- Compatible with Wi-Fi Kit controller.



Model	AG024MNDE/EU	AG033MNDE/EU	AG042MNDE/EU
Power Supply	Φ V, Hz	10,220-240 V, 50 Hz	10,220-240 V, 50 Hz
Note	-	HP	HP
Performance Capacity / Nominal	Cooling kW	2.60	3.00
	Heating kW	2.90	3.35
Power Power Input (Nominal)	Cooling W	47	50
	Heating W	47	50
Current Input (Nominal)	Cooling A	0.34	0.36
	Heating A	0.34	0.36
Heat Exchanger	Type	-	Fan & tube
Fan	Type	-	Crossflow fan
	Number of Fans	1	1
Airflow Rate	H/M/L m³/min	6.8/5.4/4.9	7.6/6.4/4.9
Fan Motor	Type	-	AC
	Output i.n.	W	12 x1
Water	Waterflow Rate	Cooling l/min	75
	Waterflow Rate	Heating l/min	8.4
	Pressure Drop	Cooling kPa	23.0
	Pressure Drop	Heating kPa	28.0
Piping Connections	Upflow Pipe (In)	Type	PF MALE
	a, mm (inch)		20A (3/4)
	Upflow Pipe (Out)	Type	PF MALE
	a, mm (inch)		PF MALE
	Heat Insulation	-	Both inlet/outlet pipes
	Drain Pipe	a, mm	Both inlet/outlet pipes
Sound	Sound Pressure L (A) (dB)	10/10/28	V920 (OD 26, ID 20)
	Sound Power L (A) (dB)	49	VP25 (OD 32, ID 26)
Dimensions	Net Weight kg	10.5	10.5
	Net Dimensions (W x H x D) mm	970 x 135 x 410	970 x 135 x 410
Casing	Material	-	Plastic
Panel	Panel Model	-	PCINUSMAN
Accessories	Drain Pump Type	-	Built-in
	Max. Lifting Height / Displacement mm/m²/cc/mm	750/400	750/400
3-Way Valve Kit (optional)	-	ACL-A40V3	ACL-A40V3
	Filter	-	Microfibrous filter

Accessories



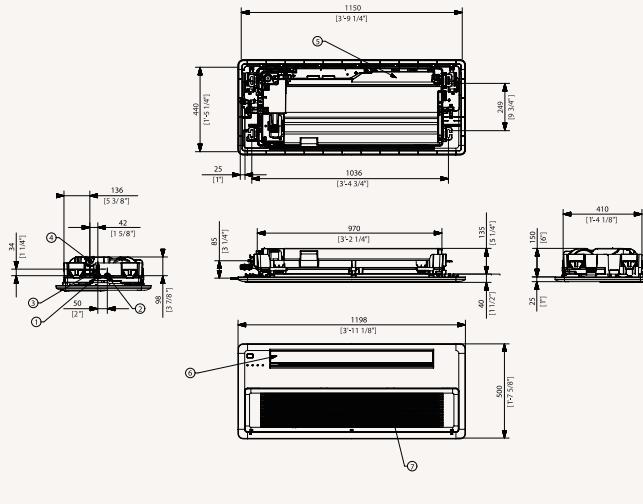
Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C. Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. Specifications may be subject to change without prior notice.

Select wire size based on the MCA value.

Dimensional drawings

1-Way Cassette FCU

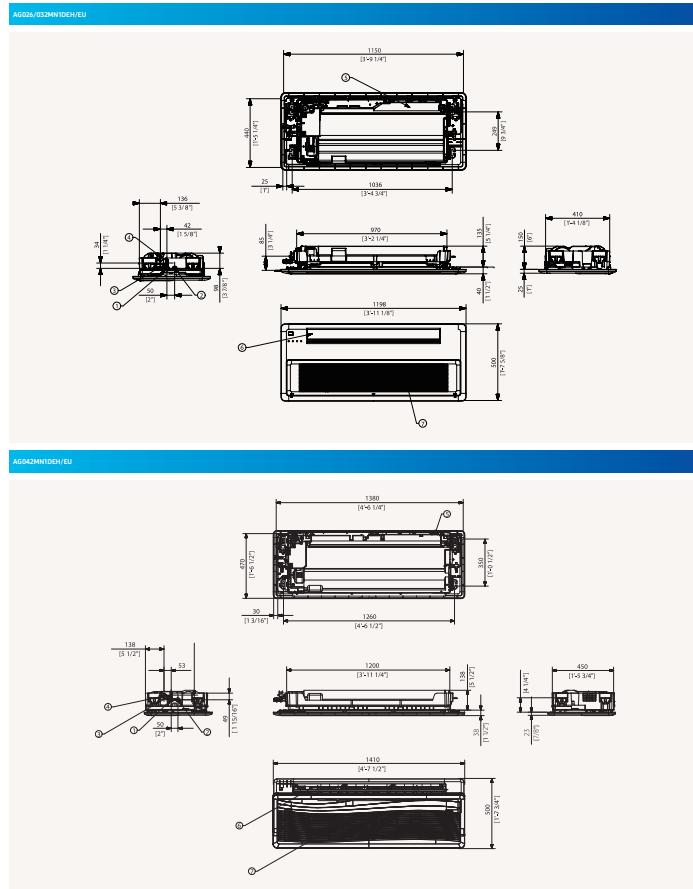
AG024MNDE/EU



No	Name	Description
1	Water pipe connection	PF Male 3/4 (20A)
2	Water flow direction	PF Male 3/4 (20A)
3	Air intake port	
4	Drain hole	VP20 (OD 26, ID 20)
5	Power supply/Communication wiring ports	
6	Air discharge port	
7	Air suction port	

Dimensional drawings

1-Way Cassette FCU



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Specifications

4-Way Cassette FCU

- Four way air supply via independently adjustable blades.
- Built-in direct drive fan by a BLDC motor.
- Built-in condensation drain pump.
- 3-Way valve kit (optional).

- Compatible with Wi-Fi Kit controller.
- Motion Detect Sensor (optional).



Model	Φ, V, Hz	A G060M N4 DK/EU	A G072M N4 DK/EU	A G090M N4 DK/EU	A G105M N4 DK/EU
Power Supply	-	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz
Performance	Capacity / Nominal	Cooling kW Heating kW	6.0 7.3	7.2 8.5	9.0 10.0
Power	Power Input (Nominal)	Cooling W Heating W	50 50	73 73	82 82
	Current Input (Nominal)	Cooling A Heating A	0.37 0.37	0.50 0.58	0.58 0.79
Fan	Type	-	Fan & tube	Fan & tube	Fan & tube
	Type	-	Turbo Fan	Turbo Fan	Turbo Fan
	No. of Fans	-	1	1	1
Airflow Rate	H.M/L	m³/min	18,916.5/13.6	21,118.2/17.6	23,521.5/19.4
Pan Motor	Type	-	BLDC	BLDC	BLDC
	Output i.n	W	65 x1	65 x1	65 x1
Water	Waterflow Rate	Cooling l/min	175	20.8	26.0
	Waterflow Rate	Heating l/min	213	24.5	28.9
	Pressure Drop	Cooling kPa	27.0	36.0	46.8
	Pressure Drop	Heating kPa	37.3	48.6	56.3
Piping Connection	Up/Up Pipe (IN)	Type	PF MALE	PF MALE	PF MALE
	a, mm (inch)	20A (1/4)	20A (1/4)	20A (1/4)	20A (1/4)
	Up/Up Pipe (OUT)	Type	PF MALE	PF MALE	PF MALE
	a, mm (inch)	20A (1/4)	20A (1/4)	20A (1/4)	20A (1/4)
	Heat Exchangers	-	Both inlet/outlet pipes	Both inlet/outlet pipes	Both inlet/outlet pipes
	Drainage	a, mm	V/P25 (OD 32, ID 25)	V/P25 (OD 32, ID 25)	V/P25 (OD 32, ID 25)
Sensor	Sensor Pressure	l/H/M/L	370/30	403/35	403/35
	Sensor Power	Cooling	54	60	60
Dimensions	Net Weight	kg	15.5	15.5	18.0
	Net Dimensions (W x H x D)	mm	840 x 204 x 840	840 x 204 x 840	840 x 246 x 940
Panel	Panel Model	-	PCANUSKAN PCANUSKEN	PCANUSKAN PCANUSKEN	PCANUSKAN PCANUSKEN
Additional Accessories	Drain Pump	Type	Built-in	Built-in	Built-in
	Max. Lift for height / displacement	mm/m²/c mm	750/400	750/400	750/400
	3-Way Valve Kit (optional)	ACI-A60V3	ACI-A60V3	ACI-A60V3	ACI-A60V3
	Filter	-	Microfibrous filter	Microfibrous filter	Microfibrous filter

Accessories

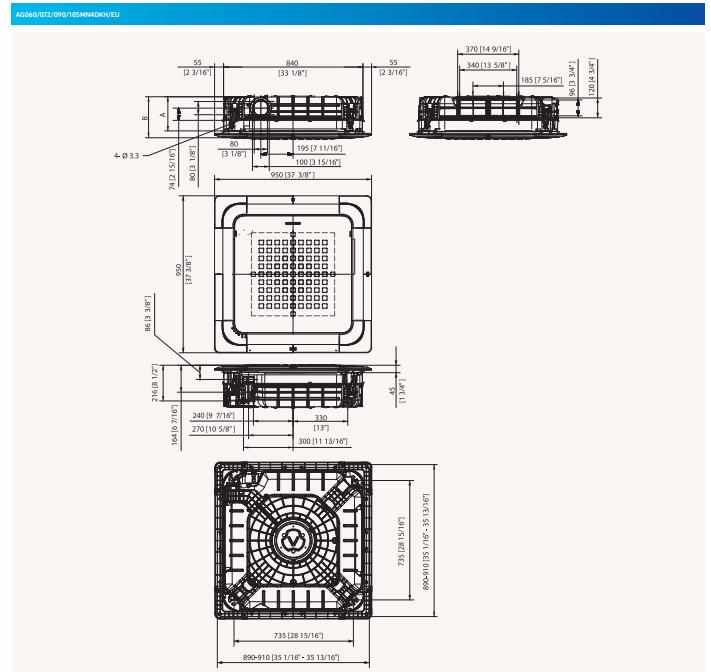


Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C. Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. Specifications may be subject to change without prior notice.

Select wire size based on the MCA value.

Dimensional drawings

4-Way Cassette FCU



Pos.	Name	Description
Model:	A G060M N4 DK/EU	AG060MN4DK/EU
	A G072M N4 DK/EU	AG072MN4DK/EU
	204 (8 1/16)	246 (9 1/16)
A	253 (15 1/16)	295 (11 5/8)
A	405	289
Pipe connection	PF 3/4 Male	
Drainpipe connection	V/P25 (OD 32, ID 25)	

Specifications

360 Cassette FCU

- 360 degree air supply
- Built-in condensation drain pump
- Blower fans: Booster fans can be individually controlled, allowing for completely horizontal flow discharge. Coanda effect is created even without ceiling.
- 3-Way valve kit (optional).



Model	A 016 MN 4PK/EU	A 027 MN 4PK/EU	A 039 MN 4PK/EU	A 051 MN 4PK/EU	
Power Supply	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz	
Motor	-	HP	HP	HP	
Performance Capacity / Nominal	Cooling kW	6.0	7.2	9.0	10.0
	Heating kW	7.3	8.5	10.0	10.7
Power Power Host / Nominal	Cooling W	58	58	77	100
	Heating W	58	58	77	100
Current Input / Nominal	Cooling A	0.50	0.50	0.62	0.79
	Heating A	0.50	0.50	0.62	0.79
Heat Exchanger	Type -	Fins & tube	Fins & tube	Fins & tube	Fins & tube
Fan	Type -	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
Airflow Rate	H / M / L m³/min	210 / 175 / 15.0	25.5 / 22.0 / 19.8	29.5 / 24.0 / 19.8	31.5 / 22.5 / 19.8
Filter	Dust Filter	BLD	BLD	BLD	BLD
Water	Outflow n. W	1	1	1	1
	Waterflow Rate Cooling l/min	115	20.8	26.0	28.9
	Waterflow Rate Heating l/min	213	24.5	28.9	30.9
	Pressure Drop Cooling kPa	270	26.0	38.5	47.4
	Pressure Drop Heating kPa	376	35.6	47.4	53.2
Piping Connection	Upstream Pipe (IN)	Type PF MALE	PF MALE	PF MALE	PF MALE
	a, mm (inch)	20A (3/4)	20A (3/4)	20A (3/4)	20A (3/4)
	Upstream Pipe (OUT)	Type PF MALE	PF MALE	PF MALE	PF MALE
	a, mm (inch)	20A (3/4)	20A (3/4)	20A (3/4)	20A (3/4)
	Heat Insulation	-	Both inlet/outlet pipe	Both inlet/outlet pipe	Both inlet/outlet pipe
Drain Pipe	Type	Both inlet/outlet pipe	Both inlet/outlet pipe	Both inlet/outlet pipe	Both inlet/outlet pipe
Sound	Sound Pressure dB(A) / L	40/37/32	39/35/33	43/38/33	45/39/33
	Sound Power Cooling dB(A)	57	58	60	62
Dimensions	Net Weight kg	21.0	25.0	25.0	25.0
	Net Dimensions (W x H x D) mm	947 x 281 x 947	947 x 365 x 947	947 x 365 x 947	947 x 565 x 947
Casing	Material	-	-	-	-
Panel	Panel Model	PCANUNMAN	PCANUNMAN	PCANUNMAN	PCANUNMAN
Additonal Accessories	Drain Pump Type	-	Built-in	Built-in	Built-in
	Max. Lift Height / Displacement mm / cc / min	750 / 400	750 / 400	750 / 400	750 / 400
	3-Way Valve Kit (option)	ACL-A60VS	ACL-A60VS	ACL-A60VS	ACL-A60VS
Filter	-	Microfibrous filter	Microfibrous filter	Microfibrous filter	Microfibrous filter

Accessories



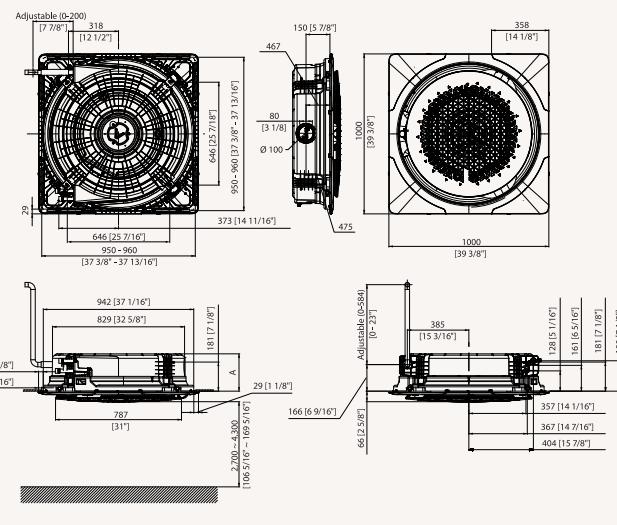
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Select pipe size based on the MCA value.

Dimensional drawings

360 Cassette FCU

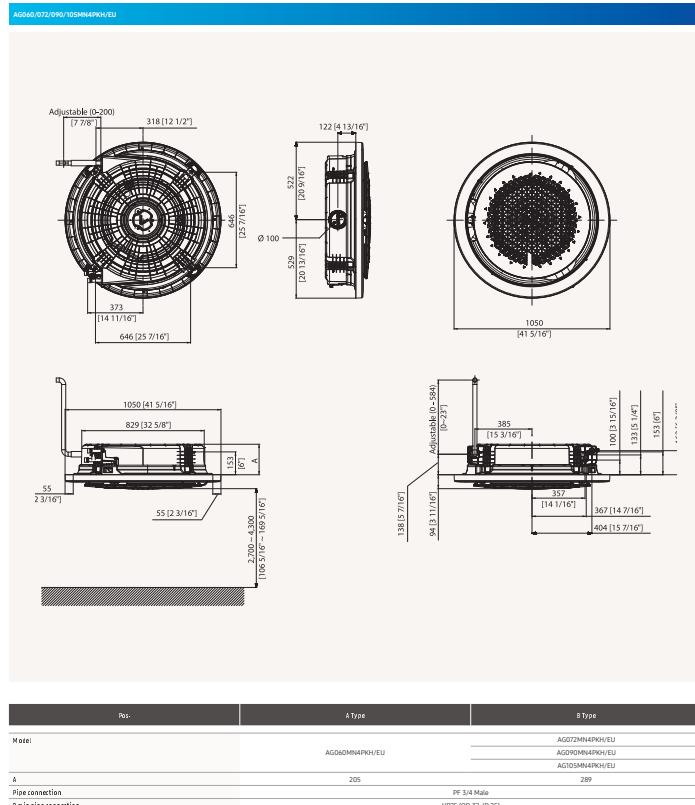
AG060/072/090/105MN4PKH/EU



Pos.	A Type	B Type
Model		AG027MN4PKH/EU AG039MN4PKH/EU AG051MN4PKH/EU
A	231 [9 5/16"]	317 [12 1/2"]
Pipe connection	PF 3/4" Male	
Drainage connection	V925 (OD 32, ID 25)	

Dimensional drawings

360 Cassette FCU



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Specifications

Concealed FCU

- Plug & play solution in combination with HVM Chiller.
- Optional vertical or horizontal installation.
- 3-Way valve kit included as standard.



Model	AC-L-80 F	AC-L-10 F	AC-L-310 F			
Power Supply	Φ V, Hz	1φ, 220-240 V, 50/60 Hz	1φ, 220-240 V, 50/60 Hz	1φ, 220-240 V, 50/60 Hz		
Nets	-	HP	HP	HP		
Performance	Capacity Nominal	Cooling (kW/M&L) Heating (kW/M&L)	19/17.66/1.34 215/183/1.50	2.8/12.34/1.75 2.9/12.35/1.73	4.24/15.20/2.47 4.24/15.24/2.47	
Power	Power Input Nominal	Cooling (kW/M&L) Heating (kW/M&L)	W W	53/36/24 53/36/24	56/43/29 56/43/29	90/50/40 90/50/40
	Current Input Nominal	Cooling Heating	A A	0.26 0.26	0.28 0.28	0.45 0.45
Heat Exchanger	Type	-	Fan & tube	Fan & tube	Fan & tube	
Fan	Type	-	Double suction centrifugal fan	Double suction centrifugal fan	Double suction centrifugal fan	
	Number of Fans	-	2	2	2	
	Airflow Rate	N/M&H	m³/min	57/45/3.5	75/57/4.0	117/83/6.0
Fan Motor	Type	-	3-step AC	3-step AC	3-step AC	
	Orbit Speed	W	53/36/24	56/43/29	90/50/40	
Water	Waterflow Rate	Cooling Heating	l/min l/min	5.6 4.2	8.4 8.4	12.4 12.4
	Pressure Drop	Cooling Heating	kPa kPa	17 20	24 24	35 35
Piping Connection	Exterior Pipe In	Type	Female	Female	Female	
	Dimension	a, mm (inch)	1/2	1/2	1/2	
	Exterior Pipe Out	Type	Female	Female	Female	
	Dimension	a, mm (inch)	1/2	1/2	1/2	
	Heat Insulation	-	-	-	-	
	Drain Pipe	a, mm	-	-	-	
Sight	Sight Pressure	lH/M&U	EB/Al	42/56/32	40/54/28	45/55/27
	Sight Power	lH/M&U	EB/Al	50/44/40	48/42/36	53/43/35
Dimensions	Net Weight	kg	18.0	23.0	27.0	
	Net Dimensions (W x H x D) (mm)	mm	725 x 224 x 535	935 x 224 x 535	1145 x 224 x 535	
Cooling	Dual Motor	-	-	-	-	-
Filter	Drain Pump	Type	optional	AC-L-ADP	AC-L-ADP	AC-L-ADP
Accessories	Drain Pump	Type	optional	AC-L-ADP	AC-L-ADP	AC-L-ADP
	Min. Lifting Height/Displacement	mm/ cc/min	750/133	750/133	750/133	750/133
	Heating Coil	4-pipe	optional	AC-L-A018HC	AC-L-A025HC	AC-L-A035HC
	3-Way Valve	4-pipe	optional	AC-L-A018V3	AC-L-A025V3	AC-L-A035V3
	Auxiliary	Vertical	optional	AC-L-ADV	AC-L-ADV	AC-L-ADV
	Drain Pan	Horizontal	optional	AC-L-ADH	AC-L-ADH	AC-L-ADH
	Filter		Polypropylene washable	Polypropylene washable	Polypropylene washable	Polypropylene washable

Model	AC-L-10 F	AC-L-40 F				
Power Supply	1φ, 220-240 V, 50/60 Hz	1φ, 220-240 V, 50/60 Hz				
Nets	HP	HP				
Performance	19/17.66/1.32 215/183/1.52	2.8/12.34/1.75 2.9/12.35/1.73				
	8.37/6.53/4.39	4.24/15.20/2.47 4.24/15.24/2.47				
	182/177/86	244/169/109				
	182/177/86	244/169/109				
	0.90	1.20				
	0.90	1.20				
Heat Exchanger	Fan & tube	Fan & tube				
Fan	Double suction centrifugal fan	Double suction centrifugal fan				
	2	2				
Fan Motor	Type	Double suction centrifugal fan				
	-	3-step AC				
	53/36/24	56/43/29				
	90/50/40	90/50/40				
Water	Waterflow Rate	Cooling Heating	l/min l/min	5.6 4.2	8.4 8.4	12.4 12.4
	Pressure Drop	Cooling Heating	kPa kPa	17 20	24 24	35 35
Piping Connection	Exterior Pipe In	Type	Female	Female	Female	
	Dimension	a, mm (inch)	1/2	1/2	1/2	
	Exterior Pipe Out	Type	Female	Female	Female	
	Dimension	a, mm (inch)	1/2	1/2	1/2	
	Heat Insulation	-	-	-	-	
	Drain Pipe	a, mm	-	-	-	
Sight	Sight Pressure	lH/M&U	EB/Al	42/56/32	40/54/28	45/55/27
	Sight Power	lH/M&U	EB/Al	50/44/40	48/42/36	53/43/35
Dimensions	Net Weight	kg	18.0	23.0	27.0	
	Net Dimensions (W x H x D) (mm)	mm	725 x 224 x 535	935 x 224 x 535	1145 x 224 x 535	
Cooling	Dual Motor	-	-	-	-	-
Filter	Drain Pump	Type	optional	AC-L-ADP	AC-L-ADP	AC-L-ADP
Accessories	Drain Pump	Type	optional	AC-L-ADP	AC-L-ADP	AC-L-ADP
	Min. Lifting Height/Displacement	mm/ cc/min	750/133	750/133	750/133	750/133
	Heating Coil	4-pipe	optional	AC-L-A018HC	AC-L-A025HC	AC-L-A035HC
	3-Way Valve	4-pipe	optional	AC-L-A018V3	AC-L-A025V3	AC-L-A035V3
	Auxiliary	Vertical	optional	AC-L-ADV	AC-L-ADV	AC-L-ADV
	Drain Pan	Horizontal	optional	AC-L-ADH	AC-L-ADH	AC-L-ADH
	Filter		Polypropylene washable	Polypropylene washable	Polypropylene washable	Polypropylene washable

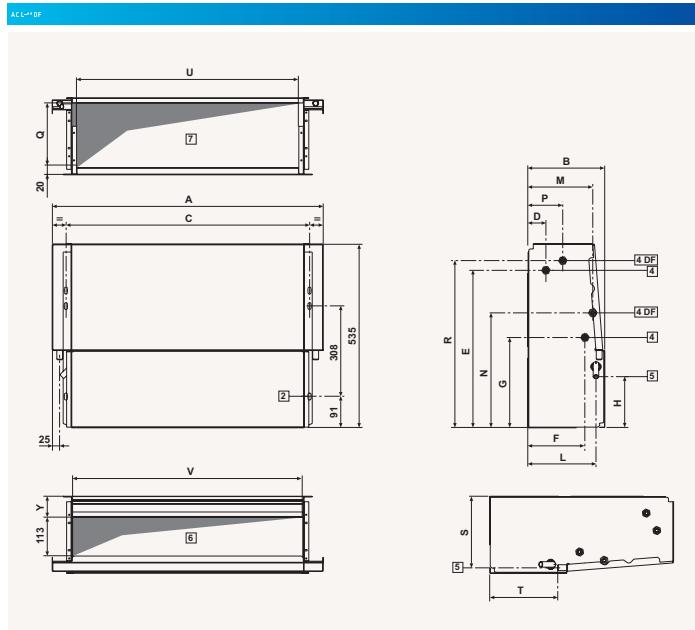
Accessories



Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C. Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. Specifications may be subject to change without prior notice. Select wire size based on the MCA value.

Dimensional drawings

Concealed FCU



No	Name	Description
1	Water pipe connection out	PF Male 3/4 (ZOA)
2	Water pipe connection in	PF Male 3/4 (ZOA)
3	Air return valve	
4	Drain hose	VP25 (ID 32, ID 25)
5	Powersupply/communications wiring connects	
6	Air discharge port	
7	Air suction port	

Model	A	B	C	H	L	S	T	Y
ACU-10H	194	224	498	149	198	208	198	61
ACU-210H	794	224	708	149	198	208	198	61
ACU-510H	1094	224	918	149	198	208	198	61
ACU-1214	249	1128	1128	155	220	234	208	67
ACU-465H	1214	249	1128	155	220	234	208	67



Specifications

Cased FCU

- Plug & play solution in combination with HVM Chiller.
- Optional vertical or horizontal installation.
- 3-Way valve kit included as standard.



Model	ACL-80G	ACL-10G	ACL-15G			
Power Supply	AC, V, Hz	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz	10, 220-240 V, 50/60 Hz		
Net weight	-	HP	HP	HP		
Performance	Capacity Nominal	Cooling (kW/M&A) Heating (kW/M&A)	19/17.66/1.34 2.8/2.34/1.75	4.24/3.20/2.47		
Power	Power Input Nominal	Cooling (kW/M&A) Heating (kW/M&A)	W W	53/36/24 53/36/24	56/43/29 56/43/29	90/50/40 90/50/40
	Current Input Nominal	Cooling Heating	A A	0.26 0.26	0.28 0.28	0.45 0.45
Heat Exchanger	Type	-	Fin & tube	Fin & tube	Fin & tube	Fin & tube
Fan	Type	-	Double suction centrifugal fan			
	Number of Fans	-	2	2	2	2
Fan Motor	Type	-	5-step AC	5-step AC	5-step AC	5-step AC
	Orbital Rate	W	53/36/24	56/43/29	90/50/40	90/50/40
Water	Waterflow Rate	Cooling Heating	l/min l/min	5.6 4.2	5.6 8.4	12.4 12.4
	Pressure Drop	Cooling Heating	kPa kPa	17 20	24 24	35 35
Piping Connection	Exh Pipe (In)	Type	Female	Female	Female	Female
	Dimension	a, mm (inch)	1/2	1/2	1/2	1/2
	Liquid Pipe (Out)	Type	Female	Female	Female	Female
	Dimension	a, mm (inch)	1/2	1/2	1/2	1/2
	Heat Insulation	-	-	-	-	-
	Drain Pipe	a, mm	-	-	-	-
Sight	Sight Pressure	lH/M/U	EBAI	42/36/32	40/34/28	45/35/27
	Sight Power	lH/M/U	EBAI	50/44/40	48/42/36	53/43/35
Dimensions	Net weight	kg	22.0	29.0	35.0	35.0
	Net Dimensions (W x H x D) (mm)	mm	774x554x226	984x554x226	1,044x554x226	1,044x554x226
Cooling	Ducted Model	-	-	-	-	-
Filter	Ducted Model	-	-	-	-	-
Additional Accessories	Drain Pump	Type	optional	ACL-ADP	ACL-ADP	ACL-ADP
	Max. lifting Height/Displacement	mm / (cm/m)	750/133	750/133	750/133	750/133
	Heating Coil	4-9bar	optional	ACL-A018HC	ACL-A020HC	ACL-A035HC
	3-Way Valve	4-9bar	optional	ACL-A018V3	ACL-A018V3	ACL-A055V3
	Auxiliary Drain Pan	Vertical	optional	ACL-ADV	ACL-ADV	ACL-ADV
	Auxiliary Drain Pan	Horizontal	optional	ACL-ADH	ACL-ADH	ACL-ADH
	Filter	-	Polypropylene washable	Polypropylene washable	Polypropylene washable	Polypropylene washable

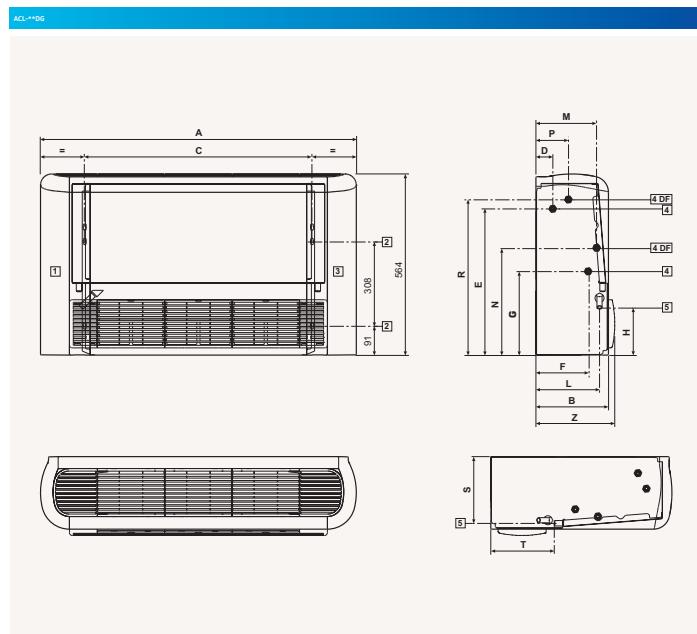
Accessories



Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C. Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions. Specifications may be subject to change without prior notice. Select wire size based on the MCA value.

Dimensional drawings

Cased FCU



No	Name	Description
1	Waterflow connection out	PF Male 3/4 (D04)
2	Waterflow connection in	PF Male 3/4 (D04)
3	Air vent valve	
4	Drain hose	VP25 (ID 32, ID 25)
5	Powersupply/communications wiring contacts	
6	Air discharge port	
7	Air suction port	

Model	A	B	C	H	L	S	T	Z
ACU-07G	774	226	498	149	198	208	198	246
ACU-10G	934	226	708	149	198	208	198	246
ACU-15G	1194	226	918	149	198	208	198	246
ACU-18G	1404	251	1128	155	220	234	208	271
ACU-20G	1404	251	1128	155	220	234	208	271

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