

VRF Outdoor Units ARV7 Series 8 - 144HP



360 Degrees Protection

The VRF system is equipped with comprehensive sensor-based protections, including safeguards for high and low pressure, compression ratio, fan motor, inverter module, compressor overload, and phase sequence ensuring system reliability and prevent damage from various operational conditions.



50 to 200% Combination Ratio

Compared to traditional VRF with combination ratio of 50-130%, the ARV7 can be extended to 50-200%, and the wider combination ratio allows for more flexible system configuration. This can be applied to long-term part-load operation scenarios, allowing for further reduction in installation costs.



7 Level Power Limit

The ARV7 has energy-saving features, including power limiting from 40% to 100%, while optimizing output according to ambient temperature changes.



12-Level Silent Mode

The system controls compressor and fan motor frequencies, maintaining noise levels as low as 43dB(A). It offers six silent levels for both day and night operation and stores the highest ambient temperature. After 7 hours, it switches to nighttime silent mode. Users can activate this feature through parameter C12.



Refrigerant PCB Cooling

The PCB is cooled by refrigerant, It has a higher heat dissipation efficiency compared to air cooling. Even in the high temperature of 55 degrees in summer, it can still operate at optimum capacity.



Auto Commissioning

This feature simplifies system calibration, saves time for technicians, minimizes errors, and optimizes performance for energy efficiency and comfort in conditioned spaces.



Tenant Billing Solution

Our VRF tenant billing solution simplifies billing processes for multi-tenant environments, providing accurate and efficient tracking of individual energy usage.



Remote Monitoring

Our web-based monitoring software offers real-time insights and remote management capabilities, providing a user-friendly interface for seamless monitoring and control of various processes.

VRF Outdoor Units

ARV 7 Series

Specifications

Factory Model			ARV-H250/SRIMV	ARV-H280/SRIMV	ARV-H330/SRIMV	ARV-H400/SRIMV	ARV-H450/SRIMV
Power Supply		V~,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
Cooling	Capacity	kW	25.2	28	33.5	40	45
	Input	kW	5.31	6.11	8.48	9.90	11.82
	Current	A	8.49	9.77	13.56	15.83	18.90
	EER	W/W	4.75	4.58	3.95	4.04	3.81
Heating	Capacity	kW	25.2	28.0	33.5	40.0	45.0
	Input	kW	4.60	5.23	6.38	8.25	9.78
	Current	A	7.36	8.36	10.20	13.19	15.64
	COP	W/W	5.48	5.35	5.25	4.85	4.60
Max. Input Consumption		kW	11	11.7	13.20	18.50	19.20
Max. Current		A	18	18.7	21.10	29.50	30.60
Circuit breaker		A	32	32	40	50	50
DC Inv.Compressor	Quantity		1	1	1	1	1
	Brand		Hitachi	Hitachi	Hitachi	Hitachi	Hitachi
	RPM	rps	15~140	15~140	15~140	10~130	10~130
	Input	W	8700	8700	8700	8130	8130
	Operating Frequency	Hz	45~420	45~420	45~420	30~390	30~390
Outdoor Fan Motor	Type		DC Inv	DC Inv	DC Inv	DC Inv	DC Inv
	Brand		Panasonic	Panasonic	Panasonic	Panasonic	Panasonic
	Output Power x Fan quantity	W	750	750	750	450×2	450×2
	Speed	r/min	825	825	825	1005	1005
Outdoor Coil	Number Of Row		2	2	3	2	2
	Fin Material		Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.
	Tube Outside Dia.	mm	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved
Air Flow Volume		CFM	7059	7059	7059	8235	8235
		m ³ /h	12000	12000	12000	14000	14000
Noise Level		dB(A)	43-58	43-58	43-58	43-61	43-61
Dimension (W×D×H)	Net	mm	990×765×1635	990×765×1635	990×765×1635	1340×765×1635	1340×765×1635
	Packing	mm	1030×825×1865	1030×825×1865	1030×825×1865	1395×815×1865	1395×815×1865
Weight	Net	kg	215	215	230	265	265
	Gross	kg	225	225	240	280	280
Refrigerant type/Quantity	Type		R410a	R410a	R410a	R410a	R410a
	Charged Volume	kg	10	10	14	14	14
Refrigerant Piping	Liquid Side	mm	φ12.7	φ12.7	φ12.7	φ15.88	φ15.88
	Gas Side	mm	φ22.2	φ22.2	φ22.2	φ28.6	φ28.6
	Max. Length	m	1000	1000	1000	1000	1000
	Max. Height	m	110/130	110/130	110/130	110/130	110/130
Ambient Temp (Cooling/Heating)		°C	-15~-55/-30~24	-15~-55/-30~24	-15~-55/-30~24	-15~-55/-30~24	-15~-55/-30~24
Wiring specification	Power wiring (ODU)	mm ²	5X4	5X6	5X6	5X6	5X6
	A.B signal wiring (ODU)	mm ²	2X0.75	2X0.75	2X0.75	2X0.75	2X0.75
	A.B signal wiring (IDU)	mm ²	2X0.75	2X0.75	2X0.75	2X0.75	2X0.75

Specifications

Factory Model			ARV-H500/SR1MV	ARV-H560/SR1MV	ARV-H610/SR1MV	ARV-H680/SR1MV	ARV-H730/SR1MV
Power Supply		V~,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
Cooling	Capacity	kW	50.4	56	61.5	68.0	73.0
	Input	kW	12.63	15.34	18.90	18.52	20.7
	Current	A	20.20	24.53	30.23	28.14	31.45
	EER	W/W	3.99	3.65	3.25	3.67	3.53
Heating	Capacity	kW	50.4	56.0	61.5	75.0	81.5
	Input	kW	11.69	13.83	15.44	18.90	20.69
	Current	A	18.70	22.12	24.69	28.72	31.44
	COP	W/W	4.31	4.05	3.98	3.97	3.94
Max. Input Consumption		kW	26.10	26.60	27.40	31.10	31.50
Max. Current		A	38.50	39.30	40.60	49.80	50.40
Circuit breaker		A	63	63	63	63	63
DC Inv.Compressor	Quantity		2	2	2	2	2
	Brand		Hitachi	Hitachi	Hitachi	Hitachi	Hitachi
	RPM	rps	15~140	15~140	15~140	15~140	15~140
	Input	W	8700	8700	8700	8700	8700
	Operating Frequency	Hz	45~420	45~420	45~420	45~420	45~420
Outdoor Fan Motor	Type		DC Inv	DC Inv	DC Inv	DC Inv	DC Inv
	Brand		Panasonic	Panasonic	Panasonic	SHANGQI	SHANGQI
	Output Power x Fan quantity	W	450×2	450×2	450×2	1000×2	1000×2
	Speed	r/min	1005	1005	1005	930	930
Outdoor Coil	Number Of Row		3	3	3	2	2
	Fin Material		Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.
	Tube Outside Dia.	mm	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved
Air Flow Volume		CFM	9412	9412	9412	17059	17059
		m ³ /h	16000	16000	16000	29000	29000
Noise Level		dB(A)	43-63	43-63	43-63	43-62	43-62
Dimension (W×D×H)	Net	mm	1340×765×1635	1340×765×1635	1340×765×1635	1850×825×1760	1850×825×1760
	Packing	mm	1395×815×1865	1395×815×1865	1395×815×1865	1925×930×1930	1925×930×1930
Weight	Net	kg	330	330	330	388	388
	Gross	kg	345	345	345	411	411
Refrigerant type/Quantity	Type		R410a	R410a	R410a	R410a	R410a
	Charged Volume	kg	16	16	16	19	19
Refrigerant Piping	Liquid Side	mm	φ15.88	φ15.88	φ15.88	φ19.05	φ19.05
	Gas Side	mm	φ28.6	φ28.6	φ28.6	φ35.0	φ35.0
	Max. Length	m	1000	1000	1000	1000	1000
	Max. Height	m	110/130	110/130	110/130	110/130	110/130
Ambient Temp (Cooling/Heating)		°C	-15~55/-30~24	-15~55/-30~24	-15~55/-30~24	-15~55/-30~24	-15~55/-30~24
Wiring specification	Power wiring (ODU)	mm ²	5X10	5X10	5X16	5X16	5X16
	A.B signal wiring (ODU)	mm ²	2X0.75	2X0.75	2X0.75	2X0.75	2X0.75
	A.B signal wiring (IDU)	mm ²	2X0.75	2X0.75	2X0.75	2X0.75	2X0.75

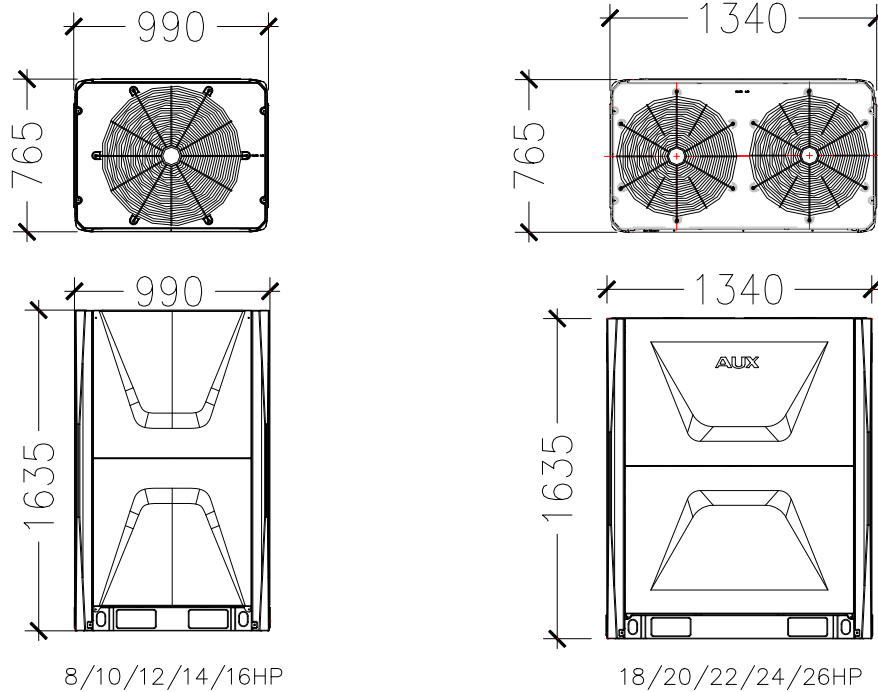
Specifications

Factory Model			ARV-H785/SR1MV	ARV-H850/SR1MV	ARV-H900/SR1MV	ARV-H950/SR1MV	ARV-H1010SR1MV
Power Supply		V~,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
Cooling	Capacity	kW	78.5	85.0	90.0	95.2	101.0
	Input	kW	23.55	26.48	29.42	31.64	33.92
	Current	A	35.78	40.23	44.70	48.07	51.54
	EER	W/W	3.33	3.21	3.06	3.01	2.98
Heating	Capacity	kW	87.5	95.0	100.0	106.0	112.0
	Input	kW	23.90	27.05	29.32	31.65	33.84
	Current	A	36.31	41.10	44.55	48.09	51.42
	COP	W/W	3.66	3.51	3.41	3.35	3.31
Max. Input Consumption		kW	31.90	35.35	35.65	38.70	39.00
Max. Current		A	51.00	56.50	57.00	63.50	64.00
Circuit breaker		A	63	80	80	80	80
DC Inv.Compressor	Quantity		2	2	2	2	2
	Brand		Hitachi	Hitachi	Hitachi	Hitachi	Hitachi
	RPM	rps	15~140	10~130/15~140	10~130/15~140	10~130	10~130
	Input	W	8700	8130/8700	8130/8700	8130	8130
	Operating Frequency	Hz	45~420	30~390/45~420	30~390/45~420	30~390	30~390
Outdoor Fan Motor	Type		DC Inv	DC Inv	DC Inv	DC Inv	DC Inv
	Brand		SHANGQI	SHANGQI	SHANGQI	SHANGQI	SHANGQI
	Output Power x Fan quantity	W	1000×2	1000×2	1000×2	1000×2	1000×2
	Speed	r/min	930	930	930	930	930
Outdoor Coil	Number Of Row		2	3	3	3	3
	Fin Material		Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.	Hydrophilic alu.
	Tube Outside Dia.	mm	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved	φ7, Inner grooved
Air Flow Volume	CFM		17059	17647	17647	17647	17647
	m ³ /h		29000	30000	30000	30000	30000
Noise Level		dB(A)	43-63	43-64	43-64	43-66	43-66
Dimension (W×D×H)	Net	mm	1850×825×1760	1850×825×1760	1850×825×1760	1850×825×1760	1850×825×1760
	Packing	mm	1925×930×1930	1925×930×1930	1925×930×1930	1925×930×1930	1925×930×1930
Weight	Net	kg	388	422	422	430	430
	Gross	kg	411	445	445	453	453
Refrigerant type/Quantity	Type		R410a	R410a	R410a	R410a	R410a
	Charged Volume	kg	19	20	20	21	21
Refrigerant Piping	Liquid Side	mm	φ22.2	φ22.2	φ22.2	φ22.2	φ22.2
	Gas Side	mm	φ35.0	φ35.0	φ35.0	φ35.0	φ35.0
	Max. Length	m	1000	1000	1000	1000	1000
	Max. Height	m	110/130	110/130	110/130	110/130	110/130
Ambient Temp (Cooling/Heating)		°C	-15~55/-30~24	-15~55/-30~24	-15~55/-30~24	-15~55/-30~24	-15~55/-30~24
Wiring specification	Power wiring (ODU)	mm ²	5X16	5X25	5X25	5X25	5X25
	A.B signal wiring (ODU)	mm ²	2X0.75	2X0.75	2X0.75	2X0.75	2X0.75
	A.B signal wiring (IDU)	mm ²	2X0.75	2X0.75	2X0.75	2X0.75	2X0.75

Dimensions

— 25K, 28K, 33K, 40K, 45K, 50K, 56K, 61K, 68K, 73K

AUX-ARV-25/O, AUX-ARV-28/O, AUX-ARV-33/O, AUX-ARV-40/O, AUX-ARV-45/O, AUX-ARV-50/O, AUX-ARV-56/O, AUX-ARV-61/O, AUX-ARV-68/O, AUX-ARV-73/O



— 78.5K, 85K, 90K, 95K, 10.1K

AUX-ARV-78/O, AUX-ARV-85/O, AUX-ARV-90/O, AUX-ARV-95/O, AUX-ARV-101/O

