

IT COOLING

CLOSE CONTROL AIR CONDITIONERS

ACCURATE LEGACY

DIRECT EXPANSION



**HIGH PRECISION
AIR CONDITIONERS,
FROM 3 TO 155 kW**

4 Versions available

- ▶ Single / Double circuit
- ▶ Dual Fluid
- ▶ Full inverter
- ▶ Free cooling



ACCURATE LEGACY

HIGH PRECISION AIR CONDITIONERS, FROM 3 TO 155 kW



INVERTER



FREE COOLING



WATER COOLED

i-AV FC DW Water Cooled Free Cooling Air Conditioners with inverter technology

i-AV FC DW-OVER			012 M1 S	018 M1 S	022 M1 S	030 M1 S	042 M2 D	047 M1 S	068 M2 D	094 M2 D
Frame			E1	E2	E3	E4L	E5L	E5L	E7L	E8L
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
PERFORMANCE										
DIRECT EXPANSION										
Total cooling capacity gross	(1)	kW	9,73	19,2	23,9	32,6	46,2	50,9	72,3	99,5
Sensible cooling capacity gross	(1)	kW	9,72	17,8	22,3	31,2	45,1	48,0	69,8	92,6
Total power input (Comp.+fans)	(1)	kW	1,77	4,24	5,32	6,77	10,6	11,7	15,7	22,3
EER (Indoor unit)	(1)	kW/kW	5,50	4,53	4,49	4,82	4,36	4,35	4,61	4,46
SHR	(2)		1,00	0,93	0,93	0,96	0,98	0,94	0,97	0,93
FREECOOING										
FC total capacity	(3)	kW	10,0	15,9	20,2	29,7	46,6	47,8	71,2	90,9
FC sensible capacity	(3)	kW	10,0	15,9	20,2	29,7	46,6	47,8	71,2	90,9
SHR	(2)		1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
PLATE CAPACITOR										
Capacitors nr,		N°	1	1	1	1	1	1	1	1
Condenser fluid flow	(1)	l/s	0,54	1,10	1,38	1,85	2,63	2,90	4,12	5,68
Pressure drop	(1)	kPa	21,0	30,9	29,4	17,2	18,0	40,5	22,2	26,4
REFRIGERANT CIRCUIT										
Compressors nr,		N°	1	1	1	1	2	1	3	2
No, Circuits		N°	1	1	1	1	2	1	1	2
Refrigerant charge		kg	3,20	3,80	4,60	6,80	9,40	9,90	13,8	20,2
FANS										
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity		N°	1	1	1	1	1	1	2	2
Air flow	(4)	m³/h	2700	4100	5100	7500	12000	12000	17500	22000
NOISE LEVEL										
Sound Power		dB(A)	57	63	61	67	76	76	72	78
Sound Pressure	(5)	dB(A)	41	47	45	50	59	59	54	60
SIZE AND WEIGHT										
A	(4)	mm	650	785	1085	1630	1955	1955	2499	2899
B	(4)	mm	675	675	775	930	930	930	930	930
H	(4)	mm	1925	1925	1925	1980	1980	1980	1980	1980
Weight	(4)	kg	250	293	358	523	674	632	805	979
COUPLING UNIT EXTERNAL										
Standard dry cooler linked										
Voltage		V/ph/Hz								
Quantity		N°								

Notes:

1 Indoor conditions (in) 26°C - R.H. 40%; Water temperature (in/out) 30°C/35°C; ESP= 20Pa.

2 SHR = Sensible cooling capacity gross / Total cooling capacity gross.

3 Indoor air (in) 26°C - R.H. 40%; Water (in) 10°C and water flow of DX mode; ESP = 20Pa.

4 Unit in standard configuration/execution, without optional accessories.

5 Average sound pressure level, at a distance of 1m, for units in a free field on a reflecting surface. The average sound pressure level is calculated based on the sound power level measured in accordance with ISO 3744.

The units highlighted in this publication contain HFC R410A [GWP₁₀₀ 2088] fluorinated greenhouse gases.

i-AV FC DW-UNDER			012 M1 S	018 M1 S	022 M1 S	030 M1 S	042 M2 D	047 M1 S	068 M2 D	094 M2 D	120 M4 D	150 M4 D
Frame			E1	E2	E3	E4L	E5L	E5L	E7L	E8L	E9L	E9L
Power supply	V/ph/Hz		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
PERFORMANCE												
DIRECT EXPANSION												
Total cooling capacity gross	(1)	kW	9,73	19,2	23,9	32,6	46,2	50,9	72,3	99,5	117	141
Sensible cooling capacity gross	(1)	kW	9,72	17,8	22,3	31,2	45,1	48,0	69,8	92,6	114	133
Total power input (Comp.+fans)	(1)	kW	1,77	4,24	5,32	6,77	10,6	11,7	15,7	22,3	27,2	32,8
EER (Indoor unit)	(1)	kW/kW	5,50	4,53	4,49	4,82	4,36	4,35	4,61	4,46	4,30	4,30
SHR	(2)		1,00	0,93	0,93	0,96	0,98	0,94	0,97	0,93	0,97	0,94
FREECOOING												
FC total capacity	(3)	kW	10,0	15,9	20,2	29,7	47,2	47,8	71,2	90,9	120	124
FC sensible capacity	(3)	kW	10,0	15,9	20,2	29,7	47,2	47,8	71,2	90,9	120	124
SHR	(2)		1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
PLATE CAPACITOR												
Capacitors nr,		N°	1	1	1	1	1	1	1	1	1	1
Condenser fluid flow	(1)	l/s	0,54	1,10	1,38	1,85	2,63	2,90	4,12	5,68	6,64	8,09
Pressure drop	(1)	kPa	20,8	30,9	29,4	17,2	18,0	40,5	22,2	26,4	29,6	42,9
REFRIGERANT CIRCUIT												
Compressors nr,		N°	1	1	1	1	2	1	2	2	4	4
No. Circuits		N°	1	1	1	1	2	1	2	2	2	2
Refrigerant charge		kg	3,20	3,80	4,60	6,80	9,40	9,90	13,8	20,2	21,6	21,6
FANS												
Fans type			EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN	EC FAN
Quantity		N°	1	1	1	1	1	1	2	2	2	2
Air flow	(4)	m³/h	2700	4100	5100	7500	12000	12000	17500	22000	32000	32000
NOISE LEVEL												
Sound Power		dB(A)	57	64	62	68	74	77	72	78	80	80
Sound Pressure	(5)	dB(A)	41	48	46	51	57	60	54	60	62	62
SIZE AND WEIGHT												
A	(4)	mm	650	785	1085	1630	1955	1955	2499	2899	3299	3299
B	(4)	mm	675	675	775	930	930	930	930	930	930	930
H	(4)	mm	1925	1925	1925	1980	1980	1980	1980	1980	1980	1980
Weight	(4)	kg	260	313	378	533	684	642	859	1049	1225	1250
COUPLING UNIT EXTERNAL												
Standard dry cooler linked												
Voltage		V/ph/Hz										
Quantity		N°										

Notes:

1 Indoor conditions (in) 26°C - R.H. 40%; Water temperature (in/out) 30°C/35°C; ESP= 20Pa.

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for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.



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