MITSUBISHI ELECTRIC

e-series Modular Chiller Range

Cooling Only or Heat Pump (150/180kW)

e-series

The R32 e-series chiller range allows for up to 6 individual units to be connected together to provide a system capacity from 150kW to 1,080kW.

Using this modular approach reduces space requirements and simplifies lifting and installation. The e-series chiller is available as a cooling only or heat pump version.

Key Features & Benefits:

- Highly efficient inverter scroll compressors
- Modular to maximise space saving
- Micro-channel aluminum heat exchange coil (cooling only)

R32

EACV-M1500/1800YCL-N

Cooling Only

R32

MODEL			EACV-M1500YCL-N	EACV-M1800YCL-N
POWER SOURCE			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
COOLING CAPACITY *1		kW	150.00	180.00
	Power Input	kW	44.73	57.02
	EER		3.35	3.16
	IPLV *4		6.42	6.31
	Water Flow Rate	m^3/h	25.8	31.0
COOLING CAPACITY (EN14511) *2		kW	149.18	178.80
	Power Input	kW	45.55	58.22
	EER		3.28	3.07
	Eurovent Efficiency Class		A	B
	SEER		5.52	5.36
	Performance ($\eta_{s,c}$)	%	217.8	211.4
	SEPR (HT)		7.11	6.36
	Water Flow Rate	m^3/h	25.8	31.0
CURRENT INPUT	Cooling Current 380-400-415V *1	A	76 - 72 - 69	96 - 91 - 88
	Maximum Current	A	120	120
WATER PRESSURE DROP *1		kPa	55	78
TEMP RANGE	Cooling	°C	Outlet water 4~30 *5	Outlet water 4~30 *5
	Outdoor	°C	-15~52 *5	-15~52 *5
CIRCULATING WATER VOLUME RANGE		m^3/h	12.9~43.0	12.9~43.0
SOUND PRESSURE LEVEL (Measured in anechoic room) at 1m *1		dB (A)	65	67
SOUND POWER LEVEL (Measured in anechoic room) *1		dB (A)	83	85
DIAMETER OF WATER PIPE (Standard piping)	Inlet	mm (in)	65A (2 1/2B) housing type joint	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint	65A (2 1/2B) housing type joint
DIAMETER OF WATER PIPE (Inside header piping)	Inlet	mm (in)	150A (6B) housing type joint	150A (6B) housing type joint
	Outlet	mm (in)	150A (6B) housing type joint	150A (6B) housing type joint
EXTERNAL FINISH			Polyester powder coating steel plate	Polyester powder coating steel plate
EXTERNAL DIMENSION	H x W x D	mm	2350 × 3400 × 1080	2350 × 3400 × 1080
NET WEIGHT	Standard Piping	kg (lbs)	1039 (2291)	1039 (2291)
	Inside Header Piping	kg (lbs)	1067 (2352)	1067 (2352)
DESIGN PRESSURE	R32	MPa	4.15	4.15
	Water	MPa	1.0	1.0
HEAT EXCHANGER	Water Side		Stainless steel plate and copper brazing	Stainless steel plate and copper brazing
	Air Side		Salt-resistant corrugated fin & aluminium micro channel	Salt-resistant corrugated fin & aluminium micro channel
COMPRESSOR	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting Method		Inverter	Inverter
	Quantity		4	4
	Motor Output	kW	11.5 x 4	11.5 x 4
	Lubricant		MEL46EH	MEL46EH
FAN	Air Flow Rate	m^3/min	270 x 4	270 x 4
		L/s	4500 x 4	4500 x 4
		cfm	9534 x 4	9534 x 4
	Type, Quantity		Propeller fan x 4	Propeller fan x 4
	Starting Method		Inverter	Inverter
	Motor Output	kW	0.92 x 4	0.92 x 4
	External Static Pressure	Pa	20	20
PROTECTION	High Pressure Protection		High pres.Sensor & High pres.Switch at 4.15MPa (601psi)	High pres.Sensor & High pres.Switch at 4.15MPa (601psi)
	Inverter Circuit		Over-heat protection, Over current protection	Over-heat protection, Over current protection
	Compressor		Over-heat protection	Over-heat protection
REFRIGERANT	Type x Charge		R32 x 4.7 (kg) x 4 *3	R32 x 4.7 (kg) x 4 *3
	Control		LEV	LEV

Notes:

*1 Under normal cooling conditions at outdoor temp 35°CDB/24°CWB (95°FDB/75.2°FWB) outlet water temp 7°C (44.6°F) inlet water temp 12°C (53.6°F). Pump input is not included in cooling capacity and power input.

*2 Under normal cooling conditions at outdoor temp 35°CDB/24°CWB (95°FDB/75.2°FWB) outlet water temp 7°C (44.6°F) inlet water temp 12°C (53.6°F). Pump input is included in cooling capacity and power input based on EN14511.

*3 Amount of factory-charged refrigerant is 3 (kg) × 4. Please add the refrigerant at the field.

*4 IPLV is calculated in accordance with AHRI 550-590.

*Please don't use the steel material for the water piping.

*Please always make water circulate, or pull the circulation water out completely when not in use.

*Please do not use groundwater or well water in direct.

*The water circuit must be closed circuit.

*Due to continuous improvement, the above specifications may be subject to change without notice.

*This model doesn't equip with a pump.

*5 Please refer to 2-1-6. Operation temperature range.

EAHV-M1500/1800YCL-N

Heat Pump

R32

MODEL			EAHV-M1500YCL-N	EAHV-M1800YCL-N
POWER SOURCE			3-phase 4-wire 380-400-415V 50/60Hz	3-phase 4-wire 380-400-415V 50/60Hz
COOLING CAPACITY *1		kW	150.00	180.00
	Power Input	kW	44.73	57.02
	EER		3.35	3.16
	IPLV *6		6.42	6.31
	Water Flow Rate	m^3/h	25.8	31.0
COOLING CAPACITY (EN14511) *2		kW	149.18	178.80
	Power Input	kW	45.55	58.22
	EER		3.28	3.07
	Eurovent Efficiency Class		A	B
	SEER		5.52	5.36
	Performance ($\eta_{s,c}$)	%	217.8	211.4
	Water Flow Rate	m^3/h	25.8	31.0
HEATING CAPACITY *3		kW	150.00	180.00
		kcal/h	129,000	154,800
		BTU/h	511,800	614,160
	Power Input	kW	42.61	53.09
	COP		3.52	3.39
	Water Flow Rate	m^3/h	25.8	31.0
HEATING CAPACITY (EN14511) *4		kW	150.82	181.20
		kcal/h	129,705	155,832
		BTU/h	514,598	618,254
	Power Input	kW	43.43	54.29
	COP		3.47	3.34
	SCOP Low/Medium		3.31/2.88	3.31/2.88
	Water Flow Rate	m^3/h	25.8	31.0
CURRENT INPUT	Cooling Current 380-400-415V *1	A	76 - 72 - 69	96 - 91 - 88
	Heating Current 380-400-415V *3	A	72 - 68 - 66	90 - 85 - 82
	Maximum Current	A	120	120
WATER PRESSURE DROP *1		kPa	55	78
TEMP RANGE	Cooling	°C	Outlet water 4~30 *7	Outlet water 4~30 *7
	Heating	°C	Outlet water 25~55 *7	Outlet water 25~55 *7
	Outdoor (Cooling)	°C	-15~52 *7	-15~52 *7
	Outdoor (Heating)	°C	-20~43 *7	-20~43 *7
CIRCULATING WATER VOLUME RANGE		m^3/h	12.9~43.0	12.9~43.0
SOUND PRESSURE LEVEL (Measured in anechoic room) at 1m *1		dB (A)	65	67
SOUND POWER LEVEL (Measured in anechoic room) *1		dB (A)	83	85
DIAMETER OF WATER PIPE (Standard piping)	Inlet	mm (in)	65A (2 1/2B) housing type joint	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint	65A (2 1/2B) housing type joint
DIAMETER OF WATER PIPE (Inside header piping)	Inlet	mm (in)	150A (6B) housing type joint	150A (6B) housing type joint
	Outlet	mm (in)	150A (6B) housing type joint	150A (6B) housing type joint
EXTERNAL FINISH			Polyester powder coating steel plate	Polyester powder coating steel plate
EXTERNAL DIMENSION	H x W x D	mm	2350 x 3400 x 1080	2350 x 3400 x 1080
NET WEIGHT	Standard Piping	kg (lbs)	1280 (2822)	1280 (2822)
	Inside Header Piping	kg (lbs)	1307 (2881)	1307 (2881)
DESIGN PRESSURE	R32	MPa	4.15	4.15
	Water	MPa	1.0	1.0
HEAT EXCHANGER	Water Side		Stainless steel plate and copper brazing	Stainless steel plate and copper brazing
	Air Side		Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
COMPRESSOR	Type		Inverter scroll hermetic compressor	Inverter scroll hermetic compressor
	Starting Method		Inverter	Inverter
	Quantity		4	4
	Motor Output	kW	11.5 x 4	11.5 x 4
	Lubricant		MEL46EH	MEL46EH
FAN	Air Flow Rate	m^3/min	270 x 4	270 x 4
		L/s	4500 x 4	4500 x 4
		cfm	9534 x 4	9534 x 4
	Type, Quantity		Propeller fan x 4	Propeller fan x 4
	Starting Method		Inverter	Inverter
	Motor Output	kW	0.92 x 4	0.92 x 4
	External Static Pressure	Pa	20	20
PROTECTION	High Pressure Protection		High pres.Sensor & High pres.Switch at 4.15MPa (601psi)	High pres.Sensor & High pres.Switch at 4.15MPa (601psi)
	Inverter Circuit		Over-heat protection, Over current protection	Over-heat protection, Over current protection
	Compressor		Over-heat protection	Over-heat protection
REFRIGERANT	Type x Charge		R32 x 11.5 (kg) x 4 *5	R32 x 11.5 (kg) x 4 *5
	Control		LEV	LEV

Notes: *1 Under normal cooling conditions at outdoor temp 35°CDB/24°CWB (95°FDB / 75.2°FWB) outlet water temp 7°C (44.6°F) inlet water temp 12°C (53.6°F). Pump input is not included in cooling capacity and power input.
*2 Under normal cooling conditions at outdoor temp 35°CDB/24°CWB (95°FDB/75.2°FWB) outlet water temp 7°C (44.6°F) inlet water temp 12°C (53.6°F). Pump input is included in cooling capacity and power input based on EN14511.
*3 Under normal heating conditions at outdoor temp 7°CDB/6°CWB (44.6°FDB/42.8°FWB) outlet water temp 45°C (113°F) inlet water temp 40°C (104°F). Pump input is not included in heating capacity and power input.
*4 Under normal heating conditions at outdoor temp 7°CDB/6°CWB (44.6°FDB/42.8°FWB) outlet water temp 45°C (113°F) inlet water temp 40°C (104°F). Pump input is included in heating capacity and power input based on EN14511.
*5 Amount of factory-charged refrigerant is 3 (kg) × 4. Please add the refrigerant at the field.
*6 IPLV is calculated in accordance with AHRI 550-590.
*Please don't use the steel material for the water piping.
*Please always make water circulate, or pull the circulation water out completely when not in use.
*Please do not use groundwater or well water in direct.
*The water circuit must be closed circuit.
*Due to continuous improvement, the above specifications may be subject to change without notice.
*This model doesn't equip with a pump.
*7 Please refer to 2-1-6. Operation temperature range.

MITSUBISHI ELECTRIC
Changes for the Better

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Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

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Green Gateway greengateway.mitsubishielectric.co.uk