

1. Specifications

When using water as evaporation side fluid (SW6-10: OFF Water setting)

Model		ERCV-M900YA	
Capacity change mode		Capacity priority	Efficiency priority
Power source		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity *1		kW	90.00
		kcal/h	77,400
		BTU/h	307,080
	Power input	kW	17.47
	EER		5.15
	IPLV *5		8.18
	Evaporation side water flow rate	m ³ /h	15.5
Cooling capacity (EN14511) *2	Condensation side water flow rate	m ³ /h	17.9
		kW	89.83
		kcal/h	77,254
		BTU/h	306,500
	Power input	kW	17.80
	EER		5.05
	SEER		7.66
Heating capacity *3	nsc	%	303.4
	Evaporation side water flow rate	m ³ /h	15.5
	Condensation side water flow rate	m ³ /h	17.9
		kW	90.00
		kcal/h	77,400
		BTU/h	307,080
	Power input	kW	19.07
Heating capacity (EN14511) *4	COP		4.72
	Condensation side water flow rate	m ³ /h	15.5
	Evaporation side water flow rate	m ³ /h	21.5
		kW	90.12
		kcal/h	77,503
		BTU/h	307,489
	Power input	kW	19.53
Current input	COP		4.61
	SCOP Low/Medium *11		7.10/4.86
	nsh Low/Medium	%	281.0/191.0
	Condensation side water flow rate	m ³ /h	15.5
	Evaporation side water flow rate	m ³ /h	21.5
	Cooling current 380-400-415V *1	A	29 - 27 - 26
	Heating current 380-400-415V *3	A	31 - 30 - 29
Water pressure drop *1	Maximum current	A	60
Temperature range (Cooling) *7	Evaporation side	kPa	10
	Condensation side	kPa	7
Temperature range (Heating) *8*9	Evaporation side water outlet	°C	4~30
		°F	39~86
	Condensation side water inlet	°C	9~50
		°F	48~122
Circulating water volume range	Condensation side water outlet	°C	20~60 *6
		°F	68~140
	Evaporation side water inlet	°C	9~35
		°F	48~95
Sound pressure level (measured in anechoic room) at 1m *1 *11	Evaporation side	m ³ /h	7.7~25.8
	Condensation side	m ³ /h	4.5~30.0 *10
Sound power level (measured in anechoic room) *1		dB (A)	53
		dB (A)	72
Diameter of water pipe (Evaporation side)	Inlet	mm (in)	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint
Diameter of water pipe (Condensation side)	Inlet	mm (in)	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint
External finish		Polyester powder coating steel plate	
External dimension H × W × D		mm	918 × 780 × 1350
Net weight		kg (lbs)	430 (948)
Design pressure	R32	MPa	4.15
	Water	MPa	1.0
Heat exchanger	Evaporation side		Stainless steel plate and copper brazing
	Condensation side		Stainless steel plate and copper brazing
Compressor	Type		Inverter scroll hermetic compressor
	Maker		MITSUBISHI ELECTRIC CORPORATION
	Starting method		Inverter
	Quantity		2
	Motor output	kW	8.3 × 2
	Lubricant		MEL46EH
Protection	High pressure protection		High pressure Switch at 4.15MPa (601psi)
	Inverter circuit		Over-heat protection, Over current protection
	Compressor		Over-heat protection
Refrigerant	Type × charge		R32 × 5.2(kg) × 2
	Control		LEV

1. Specifications

Notes:

- *1 Under normal cooling conditions at evaporation side water inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is not included in cooling capacity and power input.
- *2 Under normal cooling conditions at evaporation side water inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is included in cooling capacity and power input based on EN14511.
- *3 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side water inlet temp 10°C (50°F) outlet temp 7°C (44.6°F). Pump input is not included in heating capacity and power input.
- *4 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side water inlet temp 10°C (50°F) outlet temp 7°C (44.6°F). Pump input is included in heating capacity and power input based on EN14511.
- *5 IPLV is calculated in accordance with AHRI 551-591.
- *6 When using in condensation side water outlet is more than 55°C (131°F), please adjust the condensation inlet water temperature to 50°C (122°F) or less.
- *7 Please refer to 7-6 Operation temperature range.
- *8 Please refer to 7-6 Operation temperature range.
- *9 Please refer to 7-6 Operation temperature range.
- *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
- *10 Set the minimum water flow rate on the condensation side water to 8.0m³/h when the evaporation side water inlet temperature during operation is 15°C (59°F) or higher.
- *11 This value is not certified by Eurovent.

1. Specifications

When using brine as evaporation side fluid (SW6-10: ON Brine setting)

Model		ERCV-M900YA	
Power source		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity *1*5	kW	90.00	
		77,400	
		307,080	
	Power input	kW	
		17.47	
		EER	
Cooling capacity (EN14511) *2*5	m ³ /h	17.2	
		17.9	
		89.73	
	kcal/h	77,168	
		306,159	
		BTU/h	
Heating capacity *3*5	kW	17.91	
		EER	
		5.01	
	SEER	7.65	
		ηsc	
		303.0	
Heating capacity (EN14511) *4*5	m ³ /h	17.2	
		17.9	
		80.10	
	kcal/h	68,886	
		273,301	
		BTU/h	
Current input *5	kW	22.59	
		COP	
		3.62	
	Condensation side water flow rate	m ³ /h	
		13.8	
		Evaporation side brine flow rate	
Brine/Water pressure drop *1*5	m ³ /h	19.1	
		Cooling current 380-400-415V *1	
		A	
	kPa	29 - 27 - 26	
		Heating current 380-400-415V *3	
		A	
Temperature range (Cooling) *5*7	A	60	
		Evaporation side brine	
		kPa	
	°C	7	
		°F	
		-10~30	
Temperature range (Heating) *5*8	°C	14~86	
		°F	
		48~122	
	°C	9~50	
		°F	
		20~60 *6	
Circulating brine/water volume range	°C	68~140	
		°F	
		-7~35	
	m ³ /h	19~95	
		Evaporation side brine	
		m ³ /h	
Sound pressure level (measured in anechoic room) *1	m ³ /h	7.7~28.7	
		Condensation side water	
		m ³ /h	
	dB (A)	4.5~30.0 *9	
		53	
		72	
Diameter of water pipe (Evaporation side)	mm (in)	65A (2 1/2B) housing type joint	
		65A (2 1/2B) housing type joint	
		65A (2 1/2B) housing type joint	
	mm (in)	65A (2 1/2B) housing type joint	
		65A (2 1/2B) housing type joint	
		65A (2 1/2B) housing type joint	
External finish	mm	Polyester powder coating steel plate	
		918 × 780 × 1350	
		430 (948)	
	kg (lbs)	4.15	
		1.0	
		MPa	
Heat exchanger	MPa	Stainless steel plate and copper brazing	
		Stainless steel plate and copper brazing	
		Inverter scroll hermetic compressor	
	Type	MITSUBISHI ELECTRIC CORPORATION	
		Inverter	
		2	
Compressor	kW	8.3 × 2	
		MEL46EH	
		High pressure protection	
	High pressure protection	High pressure Switch at 4.15MPa (601psi)	
		Over-heat protection, Over current protection	
		Over-heat protection	
Refrigerant	Type × charge	R32 × 5.2(kg) × 2	
		LEV	
		Control	

Notes:

- *1 Under normal cooling conditions at evaporation side brine inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is not included in cooling capacity and power input.
- *2 Under normal cooling conditions at evaporation side brine inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is included in cooling capacity and power input based on EN14511.
- *3 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side brine inlet temp 0°C (32°F) outlet temp -3°C (26.6°F). Pump input is not included in heating capacity and power input.
- *4 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side brine inlet temp 0°C (32°F) outlet temp -3°C (26.6°F). Pump input is included in heating capacity and power input based on EN14511.
- *5 When using brine (ethylene glycol 35wt%) as evaporation side fluid.
- *6 When using in condensation side water outlet is more than 55°C (131°F), please adjust the condensation inlet water temperature to 50°C (122°F) or less.
- *7 Please refer to 7-6 Operation temperature range.
- *8 Please refer to 7-6 Operation temperature range.
- *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.
- *9 Set the minimum water flow rate on the condensation side water to 8.0m³/h when the evaporation side brine inlet temperature during operation is 15°C (59°F) or higher.
- *10 This value is not certified by Eurovent.

1. Specifications

When using water as evaporation side fluid (SW6-10: OFF Water setting)

Model		ERCV-M900YA × 2	
Capacity change mode		Capacity priority	Efficiency priority
Power source		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity *1		kW	180.00
		kcal/h	154,800
		BTU/h	614,160
	Power input	kW	33.07
	EER		5.44
	IPLV *5		8.61
	Evaporation side water flow rate	m ³ /h	31.0
Cooling capacity (EN14511) *2		m ³ /h	35.9
		kW	178.71
		kcal/h	153,691
		BTU/h	609,759
	Power input	kW	35.54
	EER		5.03
	Evaporation side water flow rate	m ³ /h	31.0
Heating capacity *3		m ³ /h	35.9
		kW	180.00
		kcal/h	154,800
		BTU/h	614,160
	Power input	kW	37.22
	COP		4.84
	Condensation side water flow rate	m ³ /h	31.0
Heating capacity (EN14511) *4		m ³ /h	42.7
		kW	180.87
		kcal/h	155,548
		BTU/h	617,128
	Power input	kW	40.90
	COP		4.42
	Condensation side water flow rate	m ³ /h	31.0
Current input		m ³ /h	42.7
	Cooling current 380-400-415V *1	A	54 - 51 - 49
	Heating current 380-400-415V *3	A	61 - 58 - 56
Water pressure drop *1		A	120
	Evaporation side	kPa	85
	Condensation side	kPa	66
Temperature range (Cooling) *6			25 - 24 - 23
	Evaporation side water outlet	°C	4~30
		°F	39~86
	Condensation side water inlet	°C	9~50
Temperature range (Heating) *7		°F	48~122
	Condensation side water outlet	°C	20~55
		°F	68~131
	Evaporation side water inlet	°C	9~35
Circulating water volume range		°F	48~95
	Evaporation side	m ³ /h	15.4~50.0
	Condensation side	m ³ /h	9.0~50.0 *8
Sound pressure level (measured in anechoic room) at 1m *1 *9		dB (A)	56
Sound power level (measured in anechoic room) *1		dB (A)	75
Diameter of water pipe (Evaporation side)	Inlet	mm (in)	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint
Diameter of water pipe (Condensation side)	Inlet	mm (in)	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint
External finish		Polyester powder coating steel plate	
External dimension H × W × D		mm	1836 × 780 × 1350
Net weight		kg (lbs)	863 (1903)
Design pressure	R32	MPa	4.15
	Water	MPa	1.0
Heat exchanger	Evaporation side	Stainless steel plate and copper brazing	
	Condensation side	Stainless steel plate and copper brazing	
Compressor	Type	Inverter scroll hermetic compressor	
	Maker	MITSUBISHI ELECTRIC CORPORATION	
	Starting method	Inverter	
	Quantity	4	
	Motor output	kW	8.3 × 4
	Lubricant	MEL46EH	
Protection	High pressure protection	High pressure Switch at 4.15MPa (601psi)	
	Inverter circuit	Over-heat protection, Over current protection	
	Compressor	Over-heat protection	
Refrigerant	Type × charge	R32 × 5.2(kg) × 4	
	Control	LEV	

Notes:

- *1 Under normal cooling conditions at evaporation side water inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is not included in cooling capacity and power input.
- *2 Under normal cooling conditions at evaporation side water inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is included in cooling capacity and power input based on EN14511.
- *3 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side water inlet temp 10°C (50°F) outlet temp 7°C (44.6°F). Pump input is not included in heating capacity and power input.
- *4 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side water inlet temp 10°C (50°F) outlet temp 7°C (44.6°F). Pump input is included in heating capacity and power input based on EN14511.
- *5 IPLV is calculated in accordance with AHRI 551-591.
- *6 Please refer to 7-6 Operation temperature range.
- *7 Please refer to 7-6 Operation temperature range.
- *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
- *8 Set the minimum water flow rate on the condensation side water to 16.0m³/h when the evaporation side water inlet temperature during operation is 15°C (59°F) or higher.
- *9 This value is not certified by Eurovent.

1. Specifications

When using brine as evaporation side fluid (SW6-10: ON Brine setting)

Model		ERCV-M900YA × 2	
Power source		3-phase 4-wire 380-400-415V 50/60Hz	
Cooling capacity *1*5		kW	180.00
		kcal/h	154,800
		BTU/h	614,160
	Power input	kW	33.07
	EER		5.44
	Evaporation side brine flow rate	m ³ /h	34.5
Cooling capacity (EN14511) *2*5	Condensation side water flow rate	m ³ /h	35.9
		kW	177.72
		kcal/h	152,839
		BTU/h	606,381
	Power input	kW	36.53
	EER		4.87
Heating capacity *3*5	Evaporation side brine flow rate	m ³ /h	34.5
	Condensation side water flow rate	m ³ /h	35.9
		kW	160.00
		kcal/h	137,600
		BTU/h	545,920
	Power input	kW	43.39
Heating capacity (EN14511) *4*5	COP		3.69
	Condensation side water flow rate	m ³ /h	27.5
	Evaporation side brine flow rate	m ³ /h	38.4
		kW	160.69
		kcal/h	138,193
		BTU/h	548,274
Current input *5	Power input	kW	47.29
	COP		3.40
	Condensation side water flow rate	m ³ /h	27.5
	Evaporation side brine flow rate	m ³ /h	38.4
	Cooling current 380-400-415V *1	A	54 - 51 - 49
	Heating current 380-400-415V *3	A	71 - 67 - 65
Brine/Water pressure drop *1*5	Maximum current	A	120
	Evaporation side brine	kPa	149
	Condensation side water	kPa	66
Temperature range (Cooling) *5*6	Evaporation side brine outlet	°C	-10~30
		°F	14~86
	Condensation side water inlet	°C	9~50
		°F	48~122
Temperature range (Heating) *5*7	Condensation side water outlet	°C	20~55
		°F	68~131
	Evaporation side brine inlet	°C	-7~35
		°F	19~95
Circulating brine/water volume range	Evaporation side brine	m ³ /h	15.4~50.0
	Condensation side water	m ³ /h	9.0~50.0 *8
Sound pressure level (measured in anechoic room) at 1m *1 *9		dB (A)	56
Sound power level (measured in anechoic room) *1		dB (A)	75
Diameter of water pipe (Evaporation side)	Inlet	mm (in)	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint
Diameter of water pipe (Condensation side)	Inlet	mm (in)	65A (2 1/2B) housing type joint
	Outlet	mm (in)	65A (2 1/2B) housing type joint
External finish		Polyester powder coating steel plate	
External dimension H × W × D		mm	1836 × 780 × 1350
Net weight		kg (lbs)	863 (1903)
Design pressure	R32	MPa	4.15
	Water	MPa	1.0
Heat exchanger	Evaporation side	Stainless steel plate and copper brazing	
	Condensation side	Stainless steel plate and copper brazing	
Compressor	Type	Inverter scroll hermetic compressor	
	Maker	MITSUBISHI ELECTRIC CORPORATION	
	Starting method	Inverter	
	Quantity	4	
	Motor output	kW	8.3 × 4
	Lubricant	MEL46EH	
Protection	High pressure protection	High pressure Switch at 4.15MPa (601psi)	
	Inverter circuit	Over-heat protection, Over current protection	
	Compressor	Over-heat protection	
Refrigerant	Type × charge	R32 × 5.2(kg) × 4	
	Control	LEV	

Notes:

- *1 Under normal cooling conditions at evaporation side brine inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is not included in cooling capacity and power input.
- *2 Under normal cooling conditions at evaporation side brine inlet temp 12°C (53.6°F) outlet temp 7°C (44.6°F) condensation side water inlet temp 30°C (86°F) outlet temp 35°C (95°F). Pump input is included in cooling capacity and power input based on EN14511.
- *3 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side brine inlet temp 0°C (32°F) outlet temp -3°C (26.6°F). Pump input is not included in heating capacity and power input.
- *4 Under normal heating conditions at condensation side water inlet temp 40°C (104°F) outlet temp 45°C (113°F) evaporation side brine inlet temp 0°C (32°F) outlet temp -3°C (26.6°F). Pump input is included in heating capacity and power input based on EN14511.
- *5 When using brine (ethylene glycol 35wt%) as evaporation side fluid.
- *6 Please refer to 7-6 Operation temperature range.
- *7 Please refer to 7-6 Operation temperature range.
- *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.
- *8 Set the minimum water flow rate on the condensation side water to 16.0m³/h when the evaporation side brine inlet temperature during operation is 15°C (59°F) or higher.
- *9 This value is not certified by Eurovent.