

### 1 Specifications

Model			MHS-SVC70-RN7TL-B	MHS-SVC60-RN7TL-B	MHS-SVC50-RN7TL-B
Power supply		V/Ph/Hz	380-415V/3Ph/50Hz		
Cooling (A35W7)	Capacity	kW	65	60	50
	Input	kW	23.21	20.00	15.15
	EER			2.80	3.00
Cooling (A35W18)	Capacity	kW	70	60	50
	Input	kW	16.865	13.33	10.415
	EER			4.15	4.5
Heating (A7W35)	Capacity	kW	70	60	50
	Input	kW	17.5	13.95	10.635
	COP			4	4.3
Heating (A7W45)	Capacity	kW	70	60	50
	Input	kW	20.895	17.045	13.155
	COP			3.35	3.52
Heating (A7W55)	Capacity	kW	70	60	50
	Input	kW	23.725	19.605	15.15
	COP			2.95	3.06
Heating (A7W65)	Capacity	kW	70	60	50
	Input	kW	27.45	22.22	17.855
	COP			2.55	2.70
Heating (A2W35)	Capacity	kW	60	51	43
	Input	kW	19.045	14.655	11.375
	COP			3.15	3.48
Heating (A2W45)	Capacity	kW	59.5	50	40.5
	Input	kW	21.4	16.665	12.85
	COP			2.78	3.00
Heating (A2W55)	Capacity	kW	58.5	49.5	40
	Input	kW	23.875	18.675	14.545
	COP			2.45	2.65
Heating (A-7W35)	Capacity	kW	56.5	49	39.5
	Input	kW	22.42	17.25	13.165
	COP			2.52	2.84
Heating (A-7W45)	Capacity	kW	54.8	47.5	39
	Input	kW	23.22	18.7	14.77
	COP			2.36	2.54
Heating (A-7W55)	Capacity	kW	51.9	43.8	35.5
	Input	kW	23.59	18.795	14.85
	COP			2.20	2.33
TOCA (Total over-current Amps.)		A	70	70	70
MOP (Maximum overcurrent protector)		A	80	80	80
MCA (Minimum Circuit Amps)		A	64	62	60
MFA (Maximum fuse amps)		A	80	80	80
Compressor	Type		Scroll Type		

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	Poles		4 Poles		
	Speed range	rps	14 ~ 130rps		
	Capacity (60rps)	KW	18.44		
	Input (60rps)	KW	5.590		
	Max. heating frequency	Hz	14 ~ 130Hz		
	Max. cooling frequency	Hz	14 ~ 130Hz		
	RLA	A	15.45		
Fan	Motor type		Dc brushless motor		
	Number of fans		2		
	Air flow	m3/h	28670		
	Rated Motor input	KW	0.92		
	FLA(Full Load Amps)	A	4		
Air side heat exchanger	Number of rows		3		
	Number of circuits		19		
Refrigerant	Type (GWP)		R290 (3)		
	Charged volume	kg	2.8*2		
Throttle type			EEV		
sound power Level	Heating A7W35	dB(A)	86.4	84.4	80
	Heating max	dB(A)	86.7	/	/
	heating silence mode 1	dB(A)	75.9	/	/
	heating silence mode 2	dB(A)	72.6	/	/
	Cooling A35W7	dB(A)	84.8	82.7	80.1
	Cooling max	dB(A)	84.4	/	/
	Cooling silence mode1	dB(A)	75.1	/	/
	Cooling silence mode3	dB(A)	72	/	/
sound pressure Level (1m, 2m)	Heating A7W35	dB(A)	69.5	67.6	63.4
	Heating max	dB(A)	70.2	/	/
	heating silence mode 1	dB(A)	59.3	/	/
	heating silence mode 2	dB(A)	55.4	/	/
	Cooling A35W7	dB(A)	67.3	65.2	62.6
	Cooling max	dB(A)	67.5	/	/
	Cooling silence mode1	dB(A)	56.7	/	/
	Cooling silence mode2	dB(A)	53.8	/	/
Unit dimension (W×H×D)		mm	960*2000*1880		
Packing dimension (W×H×D)		mm	1030*2085*2050		
Net weight		kg	560		
Gross weight		kg	585		
Connection dimension	Water side	mm	DN50		
Connection method	Water side		hoop connection		
Outdoor air temperature range	Cooling	°C	-15-48 °C		
	Heating	°C	-25-43 °C		
	DHW	°C	-25-43 °C		
Water side heat exchanger	Type		plate heat exchanger		
Safety valve		MPa	0.6		
Flow switch		m <sup>3</sup> /h	1.2		

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Water flow range		m <sup>3</sup> /h	1.8-14.4	1.8-12.4	1.8-10.3
Water outlet temperature setting range	Cooling	°C	5~25(-5~25) <sup>1</sup>		
	Heating	°C	25~70(25~85) <sup>2</sup>		
	DHW (tank)	°C	20~70(20~80) <sup>2</sup>		
Nominal return water temperature range	Cooling mode	°C	0~30		
	heating mode (DHW)	°C	20~80 (15-75)		

Note:

- If the unit is operating in a the temperature range with Low temp mode, The antifreeze system must be used instead of the water system, and the antifreeze (especially the glycol solution) must meet the following two requirements at the same time:
  - Volume concentration  $\geq 30\%$ ;
  - The freezing point temperature of antifreeze < the coldest temperature at the using site - 5.5°C; The dial code S1-2 needs to be set to ON. The frequency conversion water pump needs to be matched, and the minimum water flow of the water pump should be able to be as low as 1.8 m<sup>3</sup>/h.
- If the unit is operating in the temperature range with High temp mode, the dial code S1-2 needs to be set to ON. The frequency conversion water pump needs to be matched, and the minimum water flow of the water pump should be able to be as low as 1.8 m<sup>3</sup>/h.

\*It is recommended to customize the centralized drainage module if operating under ambient temperature -15 °C