

Features

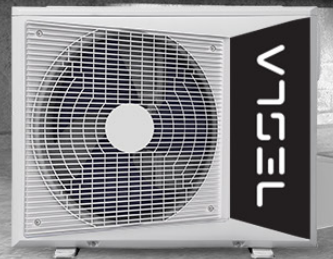
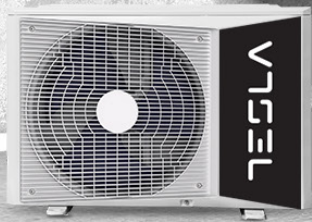
Multi Applications In One System, Eco Friendly, High Efficiency, Wide Operation Range, Capture Energy From Ambient Air, Hydronic Module Components, Variable Accessory Connection, High Performance At Low Ambient Temperature

5kW/8kW

10kW/12kW

14kW/16kW

8kW/12kW/16kW
Hydronic Module





R32 Heat Pump Air to Water

Outdoor Unit			TGTP-5HMDA1	TGTP-8HMDA1	TGTP-10HMDA1	TGTP-12HMDA1	TGTP-14HMDB3	TGTP-16HMDB3		
Hydronic Modul			TGHM-8HMDA1	TGHM-8HMDA1	TGHM-12HMDA1	TGHM-12HMDA1	TGHM-16HMDB3	TGHM-16HMDB3		
Performance data	Power supply		V/Ph/Hz	220~240/1/50	220~240/1/50	220~240/1/50	220~240/1/50	380~415/3/50	380~415/3/50	
	Rated Heating*1	Capacity / Power input / COP	kW/COP	5 / 1,13 / 4,4	8 / 1,95 / 4,1	10 / 2,22 / 4,5	12 / 2,9 / 4,14	14 / 3,26 / 4,29	16 / 3,75 / 4,27	
	Rated Cooling*2	Capacity / Power input / EER	kW/EER	4,5 / 1,66 / 2,7	6,5 / 2,32 / 2,8	8,5 / 3,04 / 2,8	10 / 3,7 / 2,7	13,8 / 4,9 / 2,82	15,2 / 5,4 / 2,81	
	Heating*3	Capacity / Power input / COP	kW/COP	5 / 1,56 / 3,2	8 / 2,5 / 3,2	10 / 2,94 / 3,4	12 / 3,53 / 3,4	14 / 4,12 / 3,4	16 / 4,71 / 3,4	
	Cooling*4	Capacity / Power input / EER	kW/EER	4,2 / 1,1 / 3,8	6,5 / 1,7 / 3,8	8,5 / 1,77 / 4,8	10 / 2,08 / 4,8	13,8 / 2,88 / 4,8	15,2 / 3,17 / 4,8	
	Seasonal space heating energy eff. Class (average climate general)	water outlet @ 35°C		A++	A++	A++	A++	A++	A++	
		water outlet @ 55°C		A++	A++	A++	A++	A++	A++	
	Max. power input		kW	2,86	4,2	5	5	5,5	6,4	
	Max. current input		A	13	19	22	22	10,5	12,1	
Sound power level		dB(A)	64	66	68	68	70	70		
Physical data	Dimension (W×H×D)		mm	935×702×382	935×702×382	1032×810×445	1032×810×445	1014×1430×450	1014×1430×450	
	Packing (W×H×D)		mm	975×770×435	975×770×435	1075×875×495	1075×875×495	1095×1545×485	1095×1545×485	
	Net/gross weight		kg	47/51	55/58	64.5/68.5	67.5/70.5	124/138	124/138	
	Compressor	Brand			Mitsubishi	GMCC	GMCC	GMCC	GMCC	GMCC
		Type			Rotary DC Inverter	Rotary DC Inverter	Rotary DC Inverter	Rotary DC Inverter	Rotary DC Inverter	Rotary DC Inverter
		Model			SVB140FVCMC	EKTF235D22UMT	EKTF310D43UMT	EKTF310D43UMT	EKTF400D64UMU	EKTQ420D1UMU
		Poles			6	6	6	6	6	6
		Speed		rps	10~130	12~120	12~120	12~120	12~120	12~120
	Outdoor fan	Oil			FW68S/350mL	POE/670mL	POE/1000mL	POE/1000mL	POE/1000mL	POE/1400mL
Number of fans			1	1	1	1	2	2		
Air flow		m3/h	3200	3200	4000	4000	6100	6100		
Hydronic Modul	Power supply		V/Ph/Hz	220~240/1/50	220~240/1/50	220~240/1/50	220~240/1/50	220~240/1/50	220~240/1/50	
	Leaving water temperature	Space heating	°C	25~60	25~60	25~60	25~60	25~60	25~60	
		Space cooling	°C	5~25	5~25	5~25	5~25	5~25	5~25	
		Domestic hot water	°C	40~60	40~60	40~60	40~60	40~60	40~60	
	Max. power input		kW	3,6	3,6	3,6	3,6	3,6	3,6	
	Max. current input		A	17	17	17	17	17	17	
	Sound power level		dB(A)	45	45	45	45	45	45	
	Dimension (W×H×D)		mm	490*910*340	490*910*340	490*910*340	490*910*340	490*910*340	490*910*340	
Packing (W×H×D)		mm	620*1105*425	620*1105*425	620*1105*425	620*1105*425	620*1105*425	620*1105*425		
Net/gross weight		kg	47/55	47/55	48/56	48/56	48/56	48/56		
Hydronic Modul	Water circuit	Piping connection Dia.	Outlet / Inlet	mm	DN32 / DN32	DN32 / DN32	DN32 / DN32	DN32 / DN32	DN32 / DN32	
		Safety valve		kPa	600	600	600	600	600	
	Drainage pipe Dia.		mm	DN20	DN20	DN20	DN20	DN20	DN20	
	Expansion tank	Volume		L	2	2	2	2	2	
		Max. water pressure		kPa	800	800	800	800	800	800
		Pre pressure		kPa	150	150	150	150	150	150
	Water side heat exchanger	Type			Plate type	Plate type	Plate type	Plate type	Plate type	Plate type
Volume		L	0,658	0,658	1,22	1,22	1,22	1,22		



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Hydronic Modul				TGHM-8HMDA1	TGHM-8HMDA1	TGHM-12HMDA1	TGHM-12HMDA1	TGHM-16HMDB3	TGHM-16HMDB3	
Hydronic Modul	Water circuit	Water pump	Brand		wilo	wilo	wilo	wilo	wilo	wilo
			Model		Para 25/9	Para 25/9	Para 25/9	Para 25/9	Para 25/9	Para 25/9
			Pump head	m	9	9	9	9	9	9
	Refrigerant circuit	Liquid side Dia.		mm	Ø9.52	Ø9.52	Ø9.52	Ø9.52	Ø9.52	Ø9.52
		Gas side Dia.		mm	Ø15.88	Ø15.88	Ø15.88	Ø15.88	Ø15.88	Ø15.88
	Back-up E-heater	Power supply		V/Ph/Hz	230V/1Ph/50Hz	230V/1Ph/50Hz	230V/1Ph/50Hz	230V/1Ph/50Hz	230V/1Ph/50Hz	230V/1Ph/50Hz
Capacity / Max. power input		kW	3kW	3kW	3kW	3kW	3kW	3kW		
Max. current input		A	13.6A	13.6A	13.6A	13.6A	13.6A	13.6A		
Piping connections	Liquid pipe	Type			Flaring	Flaring	Flaring	Flaring	Flaring	Flaring
		Dia. (OD)		mm	Ø9.52	Ø9.52	Ø9.52	Ø9.52	Ø9.52	Ø9.52
	Gas pipe	Type			Flaring	Flaring	Flaring	Flaring	Flaring	Flaring
		Dia. (OD)		mm	Ø15.88	Ø15.88	Ø15.88	Ø15.88	Ø15.88	Ø15.88
	Max. piping length / Max. height difference			m	20 / 10	20 / 10	20 / 10	50 / 20	50 / 20	50 / 20
	Refrigerant	Type / Quantity / Throttle type		kg	R32 / 1,1 / EXV	R32 / 1,4 / EXV	R32 / 3 / EXV	R32 / 3,1 / EXV	R32 / 3,6 / EXV	R32 / 3,8 / EXV
		Additional charge		g	(Total pipe length - 5) m *30g/m					
	Ambient temperature range	Cooling		°C	-5~46°C					
		Heating		°C	-28~43°C					
		Sanitary hot water		°C	-28~43°C					
Water temperature range	Cooling		°C	5~25°C						
	Heating		°C	25~60°C						
	Sanitary hot water		°C	40~60°C						

- * 1. The rated heating conditions: water flow 0.172m³/(h·kW), ambient temperature 7°C DB, water inlet/outlet temperature 30/35°C.
- 2. The rated cooling conditions: water flow 0.172m³/(h·kW), ambient temperature 35°C DB, water inlet/outlet temperature 12/7°C.
- 3. Heating condition: water flow 0.172m³/(h·kW), ambient temperature 7°C, water inlet/outlet temperature 40/45°C.
- 4. Cooling condition: water flow 0.172m³/(h·kW), ambient temperature 35°C, water inlet/outlet temperature 23/18°C.