

TRI-THERMAL ATW HEAT PUMP

HEATING, COOLING
AND DOMESTIC HOT WATER





Mono 4~16kw R290



Remote monitoring



Update Online



Strong Heating



Energy Saving



Cascade Control



3-Zone Control



Environmental Protection



Easy to Maintenance



Model name		THMLd-4D/3FBp-A	THMLd-6D/3FBp-A	THMLd-8D/3FBp-A	THMLd-10D/3FBp-A	THMLd-12D/3FBp-A	THMLd-14D/3FBp-A	THMLd-16D/3FBp-A	THMLd-12S/9(6)FBp-A	THMLd-14S/9(6)FBp-A	THMLd-16S/9FBp-A		
Power supply	V/Ph/Hz	220-240/1/50			220-240/1/50				380-415/3/50				
Heating A7W35	Capacity	kW	4.20	6.20	8.00	9.50	12.10	14.50	15.00	12.10	14.50	15.00	
	Rated input	kW	0.82	1.27	1.60	2.07	2.50	3.08	3.49	2.50	3.08	3.49	
	COP		5.10	4.90	5.00	4.60	4.84	4.71	4.30	4.84	4.71	4.30	
Heating A7W45	Capacity	kW	4.30	6.20	8.00	9.50	12.05	14.25	15.00	12.05	14.25	15.00	
	Rated input	kW	1.12	1.63	2.13	2.59	2.96	3.58	4.17	2.96	3.58	4.17	
	COP		3.85	3.80	3.76	3.68	4.08	3.98	3.60	4.08	3.98	3.60	
Heating A7W55	Capacity	kW	4.40	6.00	8.00	9.50	12.00	14.00	15.00	12.00	14.00	15.00	
	Rated input	kW	1.42	2.00	2.50	3.06	3.63	4.31	5.17	3.63	4.31	5.17	
	COP		3.10	3.00	3.20	3.10	3.31	3.25	2.90	3.31	3.25	2.90	
Cooling A35W18	Capacity	kW	4.50	6.00	8.30	10.00	12.00	13.50	16.00	12.00	13.50	16.00	
	Rated input	kW	0.97	1.33	1.66	2.17	3.10	3.63	4.32	3.10	3.63	4.32	
	EER		4.65	4.50	5.00	4.60	3.88	3.72	3.70	3.88	3.72	3.70	
Cooling A35W7	Capacity	kW	4.50	6.00	7.20	8.80	11.60	12.95	14.00	11.60	12.95	14.00	
	Rated input	kW	1.61	2.18	2.18	2.84	4.33	5.02	5.38	4.33	5.02	5.38	
	EER		2.80	2.75	3.30	3.10	2.68	2.58	2.60	2.68	2.58	2.60	
SCOP ²	LWT at 35°C		4.95	4.83	5.33	4.83	4.64	4.58	4.50	4.64	4.58	4.50	
	LWT at 55°C		3.58	3.68	3.88	3.85	3.76	3.63	3.57	3.76	3.63	3.57	
Seasonal space heating energy efficiency class ²	LWT at 35°C	A+++											
	LWT at 55°C	A++			A+++			A++					
Electric heater power input	kW	3	3	3	3	3	3	3	9	9	9		
Compressor	Type	Twin rotary DC inverter											
Outdoor fan	Motor type	Brushless DC motor											
	Number of fans	1											
Throttle type	Electronic expansion valve												
Air side heat exchanger	Type	Finned tube											
Water side heat exchanger	Type	Plate type											
Refrigerant	Type	R290											
	Factory charge	kg	0.74	0.74	1.10	1.10	1.25	1.25	1.25	1.25	1.25	1.25	
Sound power Level ³	dB	57	59	60	61	64	66	69	64	66	69		
Sound pressure level ⁴	dB	44	46	48	49	51	53	56	51	53	56		
Net dimensions (W×H×D)	mm	1220×704×390				1293×860×494							
Packing dimension (W×H×D)	mm	1315×810×430				1395×996×535							
Net/Gross weight	kg	75.0/86.0	75.0/86.0	104/125	104/125	120/141	120/141	120/141	131/152	131/152	131/152		
Piping connections	/	R1"	R1"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"		
Operation range	Cooling	°C	-5~46										
	Heating	°C	-25~35										
	DHW	°C	-25~43										
Water outlet	Cooling	°C	5~20										
	Heating	°C	25~80										
	DHW	°C	20~70										

Abbreviations:

DHW: Domestic hot water

LWT: Leaving water temperature

Notes:

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02.

2. Seasonal space heating energy efficiency class tests in average climate conditions.

3. Sound power test condition: EN12102-1.

4. Sound pressure level is the maximum value tested under the two conditions of A7W35 and A35W18.

Mono 4~16kw R32



Heating&Cooling



Hot water



High Efficiency



Energy Saving



Low Noise



Cascade Control



3-Zone Control



Disinfect Mode



Easy Installation



Timely Water Supply



Model name		THMLd-4D/3HBp-A	THMLd-6D/3HBp-A	THMLd-8D/3HBp-A	THMLd-10D/3HBp-A	THMLd-12D/3HBp-A	THMLd-14D/3HBp-A	THMLd-16D/3HBp-A	THMLd-12S/6(9)HBp-A	THMLd-14S/6(9)HBp-A	THMLd-16S/6(9)HBp-A	
Power supply	V/Ph/Hz	220-240/1/50			220-240/1/50				380-415/3/50			
Heating A7W35	Capacity	kW	4.10	6.10	8.00	9.50	12.10	14.50	16.00	12.10	14.50	16.00
	Rated input	kW	0.81	1.21	1.60	1.98	2.42	3.05	3.54	2.42	3.05	3.54
	COP		5.06	5.04	5.00	4.80	5.00	4.75	4.52	5.00	4.75	4.52
Heating A7W45	Capacity	kW	4.30	6.30	8.00	9.50	12.05	14.25	16.00	12.05	14.25	16.00
	Rated input	kW	1.15	1.71	2.11	2.60	3.14	3.83	4.42	3.14	3.83	4.42
	COP		3.74	3.68	3.80	3.65	3.84	3.73	3.62	3.84	3.73	3.62
Heating A7W55	Capacity	kW	4.40	6.10	7.40	9.00	12.00	14.00	16.00	12.00	14.00	16.00
	Rated input	kW	1.51	2.05	2.38	3.00	3.85	4.65	5.49	3.85	4.65	5.49
	COP		2.91	2.98	3.11	3.00	3.12	3.01	2.91	3.12	3.01	2.91
Cooling A35W18	Capacity	kW	4.50	6.55	8.00	9.50	12.00	13.50	15.00	12.00	13.50	15.00
	Rated input	kW	0.83	1.35	1.67	2.07	3.00	3.60	4.39	3.00	3.60	4.39
	EER		5.42	4.85	4.80	4.60	4.00	3.75	3.42	4.00	3.75	3.42
Cooling A35W7	Capacity	kW	4.60	6.95	7.00	8.00	11.60	12.95	14.30	11.60	12.95	14.30
	Rated input	kW	1.35	2.34	2.14	2.53	4.20	4.98	5.70	4.20	4.98	5.70
	EER		3.41	2.97	3.27	3.16	2.76	2.60	2.51	2.76	2.60	2.51
SCOP ²	LWT at 35°C		4.75	4.82	4.90	4.87	4.70	4.58	4.56	4.70	4.58	4.56
	LWT at 55°C		3.27	3.48	3.44	3.41	3.48	3.35	3.44	3.48	3.35	3.44
Seasonal space heating energy efficiency class ²	LWT at 35°C	A+++										
	LWT at 55°C	A++										
Electric heater power input	kW	3	3	3	3	3	3	3	6(9)	6(9)	6(9)	
Compressor	Type	Twin rotary DC inverter										
Outdoor fan	Motor type	Brushless DC motor										
	Number of fans	1										
Throttle type		Electronic expansion valve										
Air side heat exchanger	Type	Finned tube										
Water side heat exchanger	Type	Plate type										
Refrigerant	Type	R32										
	Factory charge	kg	1.25	1.25	1.50	1.50	1.74	1.74	1.74	1.74	1.74	1.74
Sound power Level ³	dB	56	58	60	61	64	66	68	64	66	68	
Sound pressure level ⁴	dB	44	45	47	50	53	54	55	53	54	55	
Net dimensions (W×H×D)	mm	1220×704×383			1293×860×495							
Packing dimension (W×H×D)	mm	1322×840×424			1395×996×535							
Net/Gross weight	kg	74.0/97.0	74.0/97.0	95.0/116.0	95.0/116.0	112.0/133.0	112.0/133.0	112.0/133.0	124.0/145.0	124.0/145.0	124.0/145.0	
Piping connections	/	R1"	R1"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	R5/4"	
Operation range	Cooling	°C	-5 ~ 43									
	Heating	°C	-25 ~ 35									
	DHW	°C	-25 ~ 43									
Water outlet	Cooling	°C	5 ~ 20									
	Heating	°C	25 ~ 65									
	DHW	°C	20 ~ 60									

Abbreviations:

DHW: Domestic hot water

LWT: Leaving water temperature

Notes:

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02.

2. Seasonal space heating energy efficiency class tests in average climate conditions.

3. Sound power test condition: EN12102-1.

4. Sound pressure level is the maximum value tested under the two conditions of A7W35 and A35W18.

Split 4~16kw R32



Model name		THF-4D/ HBpO-A	THF-6D/ HBpO-A	THF-8D/ HBpO-B	THF-10D/ HBpO-B	THF-12D/ HBpO-A	THF-14D/ HBpO-A	THF-16D/ HBpO-A	THF-12S/ HBpO-A	THF-14S/ HBpO-A	THF-16S/ HBpO-A	
Power supply		V/Ph/Hz		220- 240/1/50		220- 240/1/50		220- 240/1/50		380- 415/3/50		
Heating A7W35	Capacity	kW	4.10	6.10	8.00	9.50	12.10	14.50	16.00	12.10	14.50	16.00
	Rated input	kW	0.81	1.21	1.60	1.98	2.42	3.05	3.54	2.42	3.05	3.54
	COP		5.06	5.04	5.00	4.80	5.00	4.75	4.52	5.00	4.75	4.52
Heating A7W45	Capacity	kW	4.30	6.30	8.00	9.50	12.05	14.25	16.00	12.05	14.25	16.00
	Rated input	kW	1.15	1.71	2.11	2.60	3.14	3.83	4.42	3.14	3.83	4.42
	COP		3.74	3.68	3.80	3.65	3.84	3.73	3.62	3.84	3.73	3.62
Heating A7W55	Capacity	kW	4.40	6.10	7.40	9.00	12.00	14.00	16.00	12.00	14.00	16.00
	Rated input	kW	1.51	2.05	2.38	3.00	3.85	4.65	5.49	3.85	4.65	5.49
	COP		2.91	2.98	3.11	3.00	3.12	3.01	2.91	3.12	3.01	2.91
Cooling A35W18	Capacity	kW	4.50	6.55	8.00	9.50	12.00	13.50	15.00	12.00	13.50	15.00
	Rated input	kW	0.83	1.35	1.67	2.07	3.00	3.60	4.39	3.00	3.60	4.39
	EER		5.42	4.85	4.80	4.60	4.00	3.75	3.42	4.00	3.75	3.42
Cooling A35W7	Capacity	kW	4.60	6.95	7.00	8.00	11.60	12.95	14.30	11.60	12.95	14.30
	Rated input	kW	1.35	2.34	2.14	2.53	4.20	4.98	5.70	4.20	4.98	5.70
	EER		3.41	2.97	3.27	3.16	2.76	2.60	2.51	2.76	2.60	2.51
SCOP ²	LWT at 35°C		4.75	4.82	4.90	4.87	4.70	4.58	4.56	4.70	4.58	4.56
	LWT at 55°C		3.27	3.48	3.44	3.41	3.48	3.35	3.44	3.48	3.35	3.44
Seasonal space heating energy efficiency class ²	LWT at 35°C	A+++										
	LWT at 55°C	A++										
Compressor	Type	Twin rotary DC inverter										
Outdoor fan	Motor type	Brushless DC motor										
	Number of fans	1										
Throttle type		Electronic expansion valve										
Air side heat exchanger	Type	Finned tube										
Refrigerant	Type	R32										
	Factory charge	kg	1.30	1.30	1.65	1.65	1.84	1.84	1.84	1.84	1.84	1.84
Sound power level ³	dB	56	58	60	61	64	66	68	64	66	68	
Sound pressure level ⁴	dB	44	45	47	50	53	54	55	53	54	55	
Net dimensions (W × H × D)	mm	845 × 700 × 375				1010x860x494						
Packed dimensions (W × H × D)	mm	960 × 732 × 400				1135x970 × 530						
Net/Gross weight	kg	40.0/43.0	40.0/43.0	62.0/75.0	62.0/75.0	78.0/90.5	78.0/90.5	78.0/90.5	90.0/102.5	90.0/102.5	90.0/102.5	
Piping connections	Type	Flare	Flare	Flare	Flare	Flare	Flare	Flare	Flare	Flare	Flare	
	Liquid Dia.	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
	Gas Dia.	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
	Min. pipelength	m	2	2	2	2	2	2	2	2	2	
	Max. pipe length	m	30	30	30	30	30	30	30	30	30	
Installation height	Outdoor unit above	m	20	20	20	20	20	20	20	20	20	
	Outdoor unit below	m	20	20	20	20	20	20	20	20	20	
Operating range	Cooling	°C	- 5 ~ 43									
	Heating	°C	- 25 ~ 35									
	DHW	°C	- 25 ~ 43									

Notes:

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811:2013; (EU) No 813:2013; OJ 2014/C 207/02:2014.
2. Seasonal space heating energy efficiency class tested in average climate conditions.
3. Test standard: EN12102- 1.
4. Sound pressure level is the maximum value tested under the two conditions of A7W35 and A35W18.

Split 4~16kw R32



Model name			SMKLD-6D/3HBp- A	SMKLD-10D/3HBp- B	SMKLD-10S/6HBp- B	SMKLD-10S/9HBp- B	SMKLD-16D/3HBp- A	SMKLD-16S/6(9)HBp- A	
Function			Heating and cooling						
Water outler	Cooling	℃	5 to 20						
	Heating	℃	25 to 65						
	DHW	℃	20 to 60						
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	220-240/1/50	380-415/3/50	
Electric heater power input		kW	3	3	6	9	3	6	
Sound power level ¹		dB	38	42	42	42	44	44	
Sound pressure level(1m) ²		dB	28	30	30	30	32	32	
Net dimensions (W×H×D)		mm	420×790×270						
Packed dimensions (W×H×D)		mm	530*1035*355						
Net/gross weight		kg	41.0/47.0	41.0/47.0	42.0/48.0	42.0/48.0	42.0/48.0	43.0/49.0	
Water circuit	Piping connections		inch						
	Safety valve set pressure		Mpa						
	Drainage pipe connection		mm						
	Expansion tank	Volume	L	8					
		Max. water pressure	MPa	0.3					
		Pre-pressure	Mpa	0.1					
	Heat exchanger		Type	Plate type					
water pump head		m	9						
Refrigerant circuit	Liquid Dia.		mm						
	Gas Dia.		mm						
	Excessive operating refrigerant pressure		MPa	4.3	4.3	4.3	4.3	4.3	4.3
Operating temperature	Ambient temperature		℃						
	Water pressure		MPa						

Notes:

1. Test standard: EN12102- 1.
2. Sound pressure level is the maximum value tested under the two conditions of Note3 and Note4 for different combination between outdoor unit and hydronic box..
3. Outdoor air temperature 7℃ DB, 85% R.H.; EWT 30℃, LWT 35℃.
4. Outdoor air temperature 35℃ DB; EWT 23℃, LWT 18℃.