

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		
SCOP²	LWT at 35℃		4.95	4.83	5.33	4.83	4.64	4.58	4.50	4.64	4.58	4.50		
	LWT at 55℃		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 class²	LWT at 35℃		A+++											
	LWT at 55℃		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 Level³	dB		57	59	60	61	64	66	69	64	66	69		
Sound pressure level⁴	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	℃	- 5~46											
	Heating	℃	- 25~ 35											
	DHW	℃	- 25~ 43											
Water outlet	Cooling	℃	5~ 20											
	Heating	℃	25~ 80											
	DHW	℃	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.

TCL

Mono 4~16kw R32



Heating&Cooling



Hot water



High Efficiency



Energy Saving



Low Noise



Cascade Control



3-Zone Control



Disinfect Mode



Easy Installation



24h 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	
SCOP²	LWT at 35℃		4.75	4.82	4.90	4.87	4.70	4.58	4.56	4.70	4.58	4.56	
	LWT at 55℃		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 class²	LWT at 35℃		A+++										
	LWT at 55℃		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 Level³	dB		56	58	60	61	64	66	68	64	66	68	
Sound pressure level⁴	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	℃	- 5 ~ 43										
	Heating	℃	- 25 ~ 35										
	DHW	℃	- 25 ~ 43										
Water outlet	Cooling	℃	5 ~ 20										
	Heating	℃	25 ~ 65										
	DHW	℃	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	Φ9.52
	Gas Dia.	mm	Φ15.9	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	2
	Max. pipe length	m	30	30	30	30	30	30	30	30	30	30
Installation height	Outdoor unit above	m	20	20	20	20	20	20	20	20	20	20
	Outdoor unit below	m	20	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		R1"					
	Safety valve set pressure		0.3					
	Drainage pipe connection		DN25					
	Expansion tank	Volume	8					
		Max. water pressure	0.3					
		Pre-pressure	0.1					
	Heat exchanger		Plate type					
	water pump head		9					
Refrigerant circuit	Liquid Dia.		Φ6.35					
	Gas Dia.		Φ15.9					
	Excessive operating refrigerant pressure		4.3	4.3	4.3	4.3	4.3	4.3
Operating temperature	Ambient temperature		+5 ~ +35					
	Water pressure		0.1 ~ 0.3					

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℃.