FROM 25,2 TO 180,0 kW COMBINABLES UNITS



CE
CONFORMITY

SUPER INVERTER
DC INVERTER
COMPRESSOR
AND FAN

64
UP TO 64
CONNECTABLE
UNITS

STARTUP
INCLUDED

R410A
REFRIGERANT
GAS

SIMULTANEOUS
COLD AND HEAT
MODE

High efficiency DC Inverter compressor and fan

- High efficiency DC Inverter compressor reduced power consumption by 30%
- Powerful magnets provide high torque and efficiency and achieve 70% reduction in volume.
- More compact, weight reduced by 50%.

Advanced permanent magnet DC motor improves low-frequency band performance.

Simultaneous heat and cold mode

Simultaneous heating and cooling in different zones, more energy saving by heat recovery from one space to another which saves up to 50% in costs compared with a conventional heat pump system.

New design of the subcooling heat exchanger

Innovative designed outdoor unit high efficiency heat exchanger, one time can reach up to 12°C subcooling defree, reduceds the system resistance and improves reliability.

When the outdoor temperature is 35°C, the refrigerant can be heated to 37.1°C thus achieving a high efficiency heat exchange with only 2.1°C temperature difference.

Intelligent soft start technology

Compressor soft start complete low frequency and low current start by DC Inverter compressor, and to reduce strike to electric network. When start Dc Inverter compressor, system runs in large volume and offer more heating capacity. And use the start rapidly advantage of fixed frequency compressor to quickly up to output air.

Wide operation range

The unit operates stably at extreme temperature ranging from -15°C to 48°C.

Compact design and easy installation

Compact size and light weight design minimized the installation footprint, reduces the installation floor load, and easir for transportation. For some projects the units can even be transported through the elevator or forklift, lessen access problem at the jobsite.

V+R Branch box

Easier and safer installation thanks to a branch box that simplifies piping work and the adoption of screw connection. Both left and right pipe flare connectin from outdoor unit to branch box is reserved which greatly simplifies field installation.

System with heat recovery

High efficiency

Outdoor units **V4+R**

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MODEL	OUT. UNIT (W/H/D)	MAX. CONECTABLES UNITS	MAX. TOTAL POWER
HTWMS02EN1C	630/605/225	1	28 kW
HTWMS02N1C	630/605/225	8	28 kW
HTWMS04EN1C	960/605/225	1	56 kW
HTWMS04N1C	960/605/225	16	45 kW
HTWMS06N1C	960/605/225	24	45 kW

MODELS			HTW2528 WD2RN1TC	HTW28010 WD2RN1TC	HTW33512 WD2RN1TC	HTW40014 WD2RN1TC	HTW45016 WD2RN1TC
Maximum conectables units			13	16	20	23	26
Power supply		V,P,HZ	380-415V (3 Ph~50Hz)				
PERFORMANCE							
Cooling capacity	Capacity	kW	25,2	28	33,5	40	45
		Frig/h	21672	24080	28810	34400	38700
		Btu/h	85985	95539	114306	136485	153546
	Input	W	5730	6670	8070	11300	13240
	EER	-	4,4	4,2	4,15	3,54	3,4
Heating capacity	Capacity	kW	27	31,5	37,5	45	50
		Kcal/h	23220	27090	32250	38700	43000
		Btu/h	92127	107482	127955	153546	170607
	Input	W	6000	7330	8720	11190	12790
	COP	-	4,5	4,3	4,3	4,02	3,91
FEATURES							
Air flow		m^3/h	12000	12000	13000	15000	15000
Sound level		dB(A)	57	57	58	60	60
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A	R410A
	Charge	Kg	10	10	10	10	10
	Additional charge	gr/m	57	110	110	170	170
DIMENSIONS & WEIGHT							
Net dimensions (WxHxD)		mm	1250x1615x765	1250x1615x765	1250x1615x765	1250x1615x765	1250x1615x765
Gross dimensions (WxHxD)		mm	1305x1790x820	1305x1790x820	1305x1790x820	1305x1790x820	1305x1790x820
Weight net/gross		Kg	561/600,6	561/600,6	561/600,6	666,6/708,4	666,6/708,4
CONNECTIONS							
Electrical wiring	Power supply	mm^2	4 x 10+10 (L ≤ 20m) 4 x 16+10 (L ≤ 50m)	4 x 10+10 (L ≤ 20m) 4 x 16+10 (L ≤ 50m)	4 x 10+10 (L ≤ 20m) 4 x 16+10 (L ≤ 50m)	4 x 10+10 (L ≤ 20m) 4 x 16+10 (L ≤ 50m)	4 x 10+10 (L ≤ 20m) 4 x 16+10 (L ≤ 50m)
	Communication	mm^2	3 ≥ 0,75	3 ≥ 0,75	3 ≥ 0,75	3 ≥ 0,75	3 ≥ 0,75
Refrigerant pipe	Liquid side	inch.	3/8"	1/2"	1/2""	5/8	5/8"
	Low pressure gas	inch.	7/8"	7/8"	1"	1,1/8"	1,1/8"
	High pressure gas	inch.	3/4"	3/4"	3/4"	7/8"	7/8"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"	1/4"

NOTES:
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HTW HIGH TECHNOLOGY WORLD
GIA GROUP

Outdoor units **V4+R**

FROM 25,2 TO 180,0 kW COMBINABLES UNITS

MODELS			HTW53218 WD2RN1TC	HTW56020 WD2RN1TC	HTW61522 WD2RN1TC	HTW68024 WD2RN1TC
Unit compositions			2528 WD2RN1TC + 28010 WD2RN1TC	28010 WD2RN1TC + 28010 WD2RN1TC	28010 WD2RN1TC + 33512 WD2RN1TC	28010 WD2RN1TC + 40014 WD2RN1TC
Maximum conectables units			29	33	36	39
Power supply		V,P,HZ	380-415V (3 Ph~50Hz)			
PERFORMANCE						
Cooling capacity	Capacity	kW	53,2	56	61,5	68
		Frig/h	45752	48160	52890	58480
		Btu/h	181525	191079	209846	232025
	Input	W	12400	13340	14740	17970
	EER	-	4,29	4,2	4,17	3,78
Heating capacity	Capacity	kW	58,5	63	69	76,5
		Kcal/h	50310	54180	59340	65790
		Btu/h	199610	214964	235437	261028
	Input	W	13330	14660	16050	18520
	COP	-	4,39	4,3	4,3	4,13
FEATURES						
Sound level		dB(A)	61	61	62	63
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A
	Charge	Kg	20	20	20	20
	Additional charge	gr/m	170	170	170	170
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)		mm	1250x1615x765 x2	1250x1615x765 x2	1250x1615x765 x2	1250x1615x765 x2
Gross dimensions (WxHxD)		mm	1305x1790x820 x2	1305x1790x820 x2	1305x1790x820 x2	1305x1790x820 x2
Weight net/gross		Kg	561 x2/600,6 x2	561 x2/600,6 x2	561 x2/600,6 x2	561+666,6/600,6+708,4
CONNECTIONS						
Refrigerant pipe	Liquid side	inch.	5/8"	5/8"	5/8"	5/8"
	Low pressure gas	inch.	1,1/4"	1,1/4"	1,1/4"	1,3/8"
	High pressure gas	inch.	1,1/8"	1,1/8"	1,1/8"	1,1/8"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"

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Outdoor units **V4+R**

FROM 25,2 TO 180,0 kW COMBINABLES UNITS

MODELS			HTW73026 WD2RN1TC	HTW80028 WD2RN1TC	HTW85030 WD2RN1TC	HTW90032 WD2RN1TC
Unit compositions			28010 WD2RN1TC + 45016 WD2RN1TC	40014 WD2RN1TC + 40014 WD2RN1TC	40014 WD2RN1TC + 45016 WD2RN1TC	45016 WD2RN1TC + 45016 WD2RN1TC
Maximum conectables units			43	46	50	53
Power supply		V,P,HZ	380-415V (3 Ph~50Hz)			
PERFORMANCE						
Cooling capacity	Capacity	kW	73	80	85	90
		Frig/h	62780	68800	73100	77400
		Btu/h	249086	272971	290032	307092
	Input	W	19900	22600	24540	26480
	EER	-	3,67	3,54	3,46	3,4
Heating capacity	Capacity	kW	81,5	90	95	100
		Kcal/h	70090	77400	81700	86000
		Btu/h	278089	307092	324153	341214
	Input	W	20100	22400	23980	25580
	COP	-	4,05	4,02	3,96	3,91
FEATURES						
Sound level		dB(A)	63	64	64	64
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A
	Charge	Kg	20	20	20	20
	Additional charge	gr/m	170	170	170	170
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)		mm	1250x1615x765 x2	1250x1615x765 x2	1250x1615x765 x2	1250x1615x765 x2
Gross dimensions (WxHxD)		mm	1305x1790x820 x2	1305x1790x820 x2	1305x1790x820 x2	1305x1790x820 x2
Weight net/gross		Kg	561+666,6 / 600,6+708,4	666,6 x2 / 708,4 x2	666,6 x2 / 708,4 x2	666,6 x2 / 708,4 x2
CONNECTIONS						
Refrigerant pipe	Liquid side	inch.	3/4"	3/4"	3/4"	3/4"
	Low pressure gas	inch.	1,3/8"	1,3/8"	1,3/8"	1,3/8"
	High pressure gas	inch.	1,1/8"	1,1/8"	1,1/8"	1,1/8"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"

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Outdoor units **V4+R**

FROM 25,2 TO 180,0 kW COMBINABLES UNITS

MODELS			HTW96034 WD2RN1TC	HTW101036 WD2RN1TC	HTW106538 WD2RN1TC	HTW113040 WD2RN1TC
Unit compositions			28010 WD2RN1TC + 28010 WD2RN1TC + 40014 WD2RN1TC	28010 WD2RN1TC + 28010 WD2RN1TC + 45016 WD2RN1TC	28010 WD2RN1TC + 33512 WD2RN1TC + 45016 WD2RN1TC	28010 WD2RN1TC + 40014 WD2RN1TC + 45016 WD2RN1TC
Maximum conectables units			56	59	63	64
Power supply		V,P,HZ	380-415V (3 Ph~50Hz)			
PERFORMANCE						
Cooling capacity	Capacity	kW	96	101	106,5	108
		Frig/h	82560	86860	91590	92880
		Btu/h	327565	344626	363393	368511
	Input	W	12400	13340	14740	17970
	EER	-	4,29	4,2	4,17	3,78
Heating capacity	Capacity	kW	108	113	119	121,5
		Kcal/h	92880	97180	102340	104490
		Btu/h	368511	385572	406044	414575
	Input	W	13330	14660	16050	18520
	COP	-	4,39	4,3	4,3	4,13
FEATURES						
Sound level		dB(A)	65	65	65	66
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A
	Charge	Kg	30	30	30	30
	Additional charge	gr/m	260	260	260	260
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)		mm	1250x1615x765 x3	1250x1615x765 x3	1250x1615x765 x3	1250x1615x765 x3
Gross dimensions (WxHxD)		mm	1305x1790x820 x3	1305x1790x820 x3	1305x1790x820 x3	1305x1790x820 x3
Weight net/gross		Kg	561 x2 + 666,6/ 600,6 x2 + 708,4	561 x2 + 666,6/ 600,6 x2 + 708,4	561 x2 + 666,6/ 600,6 x2 + 708,4	561 + 666,6 x2/ 600,6 + 708,4 x2
CONNECTIONS						
Refrigerant pipe	Liquid side	inch.	3/4"	3/4"	3/4"	3/4"
	Low pressure gas	inch.	1,5/8"	1,5/8"	1,5/8"	1,5/8"
	High pressure gas	inch.	1,3/8"	1,3/8"	1,3/8"	1,3/8"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"

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Outdoor units **V4+R**

FROM 25,2 TO 180,0 kW COMBINABLES UNITS

MODELS			HTW120042 WD2RN1TC	HTW125044 WD2RN1TC	HTW130046 WD2RN1TC	HTW135048 WD2RN1TC
Unit compositions			40014 WD2RN1TC + 40014 WD2RN1TC + 40014 WD2RN1TC	40014 WD2RN1TC + 40014 WD2RN1TC + 45016 WD2RN1TC	40014 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC	45016 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC
Maximum conectables units			64	64	64	64
Power supply		V,P,HZ	380-415V (3 Fases~50Hz)			
PERFORMANCE						
Cooling capacity	Capacity	kW	120	125	130	135
		Frig/h	103200	107500	111800	116100
		Btu/h	406457	426517	443578	460639
	Input	W	19900	22600	24540	26480
	EER	-	3,67	3,54	3,46	3,4
Heating capacity	Capacity	kW	135	140	145	150
		Kcal/h	116100	120400	124700	129000
		Btu/h	460639	477699	494760	511821
	Input	W	20100	22400	23980	25580
	COP	-	4,05	4,02	3,96	3,91
FEATURES						
Sound level		dB(A)	67	67	67	67
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A
	Charge	Kg	30	30	30	30
	Additional charge	gr/m	260	260	260	260
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)		mm	1250x1615x765 x3	1250x1615x765 x3	1250x1615x765 x3	1250x1615x765 x3
Gross dimensions (WxHxD)		mm	1305x1790x820 x3	1305x1790x820 x3	1305x1790x820 x3	1305x1790x820 x3
Weight net/gross		Kg	666,6 x3 / 708,4 x3	666,6 x3 / 708,4 x3	666,6 x3 / 708,4 x3	666,6 x3 / 708,4 x3
CONNECTIONS						
Refrigerant pipe	Liquid side	inch.	3/4"	3/4"	3/4"	3/4"
	Low pressure gas	inch.	1,5/8"	1,5/8"	1,5/8"	1,5/8"
	High pressure gas	inch.	1,3/8"	1,3/8"	1,3/8"	1,3/8"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"

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Outdoor units **V4+R**

FROM 25,2 TO 180,0 kW COMBINABLES UNITS

MODELS			HTW143250 WD2RN1TC	HTW146052 WD2RN1TC	HTW151554 WD2RN1TC	HTW158056 WD2RN1TC
Unit compositions			2528 WD2RN1TC + 28010 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC	28010 WD2RN1TC + 28010 WD2RN1TC + 45016 WD2RN1TC + 5016 WD2RN1TC	28010 WD2RN1TC + 33512 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC	28010 WD2RN1TC + 40014 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC
Maximum conectables units			64	64	64	64
Power supply		V,P,HZ	380-415V (3 Ph~50Hz)			
PERFORMANCE						
Cooling capacity	Capacity	kW	143,2	146	151,5	158
		Frig/h	123152	125560	130290	135880
		Btu/h	488618	498172	516939	539118
	Input	W	38880	39820	41220	44450
	EER	-	3,68	3,67	3,68	3,55
Heating capacity	Capacity	kW	158,5	163	169	176,5
		Kcal/h	135880	140180	145340	151360
		Btu/h	540824	556179	576651	602243
	Input	W	38910	40240	41630	44100
	COP	-	4,07	4,05	4,06	4
FEATURES						
Sound level		dB(A)	68	68	68	68
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A
	Charge	Kg	40	40	40	40
	Additional charge	gr/m	360	360	360	360
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)		mm	1250x1615x765 x4	1250x765x1615 x4	1250x765x1615 x4	1250x765x1615 x4
Gross dimensions (WxHxD)		mm	1305x1790x820 x4	1305x1790x820 x4	1305x1790x820 x4	1305x1790x820 x4
Weight net/gross		Kg	561 x2 + 666,6 x2 / 600,6 x2 + 708,4 x2	561 x2 + 666,6 x2 / 600,6 x2 + 708,4 x2	561 x2 + 666,6 x2 / 600,6 x2 + 708,4 x2	561 + 666,6 x3 / 600,6 + 708,4 x3
CONNECTIONS						
Refrigerant pipe	Liquid side	inch.	7/8"	7/8"	7/8"	7/8"
	Low pressure gas	inch.	1,3/4"	1,3/4"	1,3/4"	1,3/4"
	High pressure gas	inch.	1,1/2"	1,1/2"	1,1/2"	1,1/2"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"

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Outdoor units **V4+R**

FROM 25,2 TO 180,0 kW COMBINABLES UNITS

MODELS			HTW165058 WD2RN1TC	HTW170060 WD2RN1TC	HTW175062 WD2RN1TC	HTW180064 WD2RN1TC
Unit compositions			40014 WD2RN1TC + 40014 WD2RN1TC + 40014 WD2RN1TC + 45016 WD2RN1TC	40014 WD2RN1TC + 40014 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC	40014 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC	45016 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC + 45016 WD2RN1TC
Maximum conectables units			64	64	64	64
Power supply		V,P,HZ	380-415V (3 Ph~50Hz)			
PERFORMANCE						
Cooling capacity	Capacity	kW	163	168,5	175	180
		Frig/h	140180	144480	150500	154800
		Btu/h	556179	574945	597124	614185
	Input	W	47140	49080	51020	52960
	EER	-	3,5	3,46	3,43	3,4
Heating capacity	Capacity	kW	185	190	195	200
		Kcal/h	159100	163400	167700	172000
		Btu/h	631246	648306	665367	682428
	Input	W	46360	47960	49560	51160
	COP	-	3,99	3,96	3,93	3,91
FEATURES						
Sound level		dB(A)	69	69	69	69
Max. design pressure		Mpa	4,4/2,6	4,4/2,6	4,4/2,6	4,4/2,6
Refrigerant	Type	-	R410A	R410A	R410A	R410A
	Charge	Kg	40	40	40	40
	Additional charge	gr/m	360	360	360	360
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)		mm	1250x765x1615 x4	1250x765x1615 x4	1250x765x1615 x4	1250x765x1615 x4
Gross dimensions (WxHxD)		mm	1305x1790x820 x4	1305x1790x820 x4	1305x1790x820 x4	1305x1790x820 x4
Weight net/gross		Kg	666,6 x4/708,4 x4	666,6 x4/708,4 x4	666,6 x4/708,4 x4	666,6 x4/708,4 x4
CONNECTIONS						
Refrigerant pipe	Liquid side	inch.	7/8"	7/8"	7/8"	7/8"
	Low pressure gas	inch.	1,3/4"	1,3/4"	1,3/4"	1,3/4"
	High pressure gas	inch.	1,1/2"	1,1/2"	1,1/2"	1,1/2"
	Oil balance	inch.	1/4"	1/4"	1/4"	1/4"

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