

CE
Conformity

ECO
Energy efficiency saver

MODE
Various operating modes

Increased protection

Wired controller

Low sound pressure level

Cold and heat mode

T Wide
Wide operation range

°C -20~43
Configurable temperature range

Modo desinfección

R410A
Refrigerant gas

COP 4,62
Coefficient of performance

EER 3,45
Energy efficiency ratio

Design with separate hydraulic mode

The Eco Thermal Split has the external unit and the hydraulic module that is installed inside, avoiding losses of the set temperature.

Renewable energy use

The unit makes use of renewable electrical energy to capture the heat of the air, which means obtaining 4 kW of heat for only 1 kW of electrical energy, making the unit 400% more effective.

Multiple functions, ecological solution TOTAL

- All-in-one solution: Heating, cooling, sanitary hot water, floor heating.
- Can be sombined with floor heating, fancoil units, radiators and domestic water tank. It can also be connected to solar collectors, gas furnace, boiler and other heat sources.
- Wide operation range: From -20°C to 43°C
- The simple to operate, sophisticated controller is designed to maximize the use of renewable energy for even greater running cost savings.

Wired controller

Incorporate wired controller.

Increased protection

Increase of protections in the area of the fan to avoid possible damages caused mainly by children and carelessness. Safety protection for motor and compressor raised to P2 level.

Full DC Inverter technology

It has the Twin Rotary Inverter compressor that provides high energy efficiency.

Intelligent defrosting

It performs defrosting intelligently when necessary, thus improving heating efficiency and to realize power saving.

ECO

The heat pump uses R410A refrigerant which reduces carbon emissions.

MODELS OUT. UNIT			HTW-AV8WD2N1	HTW-AV10WD2N1	HTW-AV12WD2N1	HTW-AV16WD2N1	HTW-AV16WD2RN1
Power supply		V,P,HZ	220-240V (1 Ph ~ 50Hz)				380-415 (3 Ph ~ 50Hz)
PERFORMANCE							
Heating [1]	Capacity	kW	8,00	10,00	12,10	15,50	15,50
	Rated input	kW	1,73	2,17	2,74	3,82	3,79
	COP	-	4,62	4,61	4,42	4,06	4,09
Cooling[1]	Capacity	kW	7,34	10,12	11,85	16,05	15,48
	Rated input	kW	2,13	2,93	3,48	5,03	4,87
	EER	-	3,45	3,45	3,41	3,19	3,18
Heating [2]	Capacity	kW	8,00	10,00	11,80	14,00	14,00
	Rated input	kW	1,78	2,07	2,65	3,62	3,68
	COP	-	4,49	4,83	4,45	3,87	3,80
Cooling [2]	Capacity	kW	6,44	9,39	11,02	12,85	12,91
	Rated input	kW	2,24	3,26	4,17	5,39	5,52
	EER	-	2,88	2,88	2,64	2,38	2,34
Seasonal space heating energy eff. class	Water outlet 35°C		A++	A++	A++	A++	A++
	Water outlet 55°C		A+	A+	A+	A+	A+
Ambient temperature range	Cooling	°C	-5~46				
	Heating	°C	-20~35				
	DHW	°C	-20~43				
FEATURES							
Compressor	Type		Twin-rotary inverter				
Outdoor fan	Type		Brushless DC motor				
	Air flow	m^3/h	5120	6500	6500	6500	6500
Air/Water side heat exchanger			Fin-coil				
Refrigerant	Type	-	R410A				
	Charged	kg	2,8	3,9	3,9	3,9	4,2
Throttle type		-	Electric expansion valve				
Sound pressure level	Cooling	dB(A)	64	65	66	71	71
	Heating	dB(A)	64	65	66	71	71
DIMENSIONS & WEIGHT							
Net dimensions (WxHxD)		mm	1074x964x396	900x1327x320	900x1327x320	900x1327x320	900x1327x320
Gross dimensions (WxHxD)		mm	1120x1015x435	1016x1377x435	1016x1377x435	1016x1377x435	1016x1377x435
Net/Gross weight		Kg	73,8/85	109/121	109/121	109/121	109/121
CONNECTIONS							
Liquid	Type	mm	Flaring				
	Dia. (OD)		Ø9,5				
Gas	Type	mm	Flaring				
	Dia. (OD)	m	Ø15,9				
Piping lenght	Min.	m	2				
	Max.	m	30	50	50	50	50
Installation height difference	outdoor unit upside	m	20	30	30	30	30
	outdoor unit downside	m	15	25	25	25	25
EAN CODE			**8435483800502**	**8435483800656**	**8435483800519**	**8435483800526**	**8435483800533**

NOTES:

Nominal capacity is based on the following conditions:

1. Evaporator air in 7 °C °C85% H. R. Condenser water in/out 30/35 °C
2. Evaporator air in 7 °C °C85% de H. R. Condenser water in/out 40/45 °C
3. Condenser air in 35 °C. Evaporator water in/out 23/18 °C
4. Condenser air in 35 °C. Evaporator water in/out 12/7 °C
5. At 1 m in open field fan side (sound pressure)
6. The above data test reference standard EN14511:2013; EN14825:2013; EN50564:2011; EN12102:2011; (UE)N°:811:2013; (UE)N°:813:2013; OJ 2014/C 207/02:2014

MODELS IND. UNIT				HTW-SMK80CD30GN1	HTW-SMK160CD30GN1-B	HTW-SMK160CSD45GN1-B
Power supply			V,P,HZ	220-240V (1 Ph ~ 50Hz)		380-415 (3 Ph ~ 50Hz)
PERFORMANCE						
Leaving water temperature range	Space heating	Low	°C	25~35, default 35		
		High	°C	35~60, default 45		
	Space cooling	Low	°C	7~25, default 7		
		High	°C	18~25, default 18		
	ACS		°C	40~60, default 45		
Ambient temperature range	Capacity		kW	3,0	3,0	3,0
	Steps			2	2	2
DIMENSIONS & WEIGHT						
Net dimensions (WxHxD)			mm	400x865x427	400x865x427	400x865x427
Gross dimensions (WxHxD)			mm	495x1040x495	495x1040x495	495x1040x495
Net/Gross weight			kg	43/51	54/62	54/62
CONNECTIONS						
Water circuit	Piping connections Dia.		mm	DN25	DN25	DN25
	Safety valve		kPa	300	300	300
	Total water volume		L	4,7	5,0	5,0
	Drainage pipe Dia.		mm	Ø16	Ø16	Ø16
	Expansion tank	Volume	L	3	3	3
		Max. water pressure	kPa	800	800	800
		Pre pressure	kPa	150	150	150
	Water side heat exchanger	Type		Plate		
		Volume	L	0,7	1,0	1,0
	Water pump head		m.c.a.	6	7,5	7,5
Refrigerant circuit	Liquid		mm	Ø9,5	Ø9,5	Ø9,5
	Gas		mm	Ø15,9	Ø15,9	Ø15,9
EAN CODE				**8435483800663**	**8435483800670**	**8435483800687**

NOTES:

Rated capacity based on the following conditions:

1. **Condition 1:** Heating mode air inlet at 7 °C and water outlet at 35 °C with ΔT at 5 °C, Cooling mode air inlet at 35 °C and water outlet at 18 °C with ΔT at 5 °C.
2. **Condition 2:** Heating mode air inlet at 7 °C and water outlet at 45 °C with ΔT at 5 °C, Cooling mode air inlet at 35 °C and water outlet at 7 °C with ΔT at 5 °C.
3. The sound level is a test at 1m in front of the fan in open field, in heating mode with air entrance at 7 °C and water outlet at 35 °C with ΔT at 5 °C.
4. The above data test reference standard EN14511

Set	Hydronic module		Outdoor unit
HTW-V8WD2K	 HTW-SMK80CD30GN1	+	 HTW-AV8WD2N1
HTW-V10WD2K	 HTW-SMK160CD30GN1-B	+	 HTW-AV10WD2N1
HTW-V12WD2K	HTW-SMK160CD30GN1-B	+	HTW-AV12WD2N1
HTW-V16WD2K	HTW-SMK160CD30GN1-B	+	HTW-AV16WD2N1
HTW-V16WD2RK	 HTW-SMK160CSD45GN1-B	+	 HTW-AV16WD2RN1