H'STRÖNG®
Germany Standard

Heat Pump

Energy-saving Technology Changes The World

H'STRÖNG®
Germany Standard

Authorized distributor by

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SHOWCASE
Products ↘

The fifth generation water heater

The heat pump is using the principle of Reverse Carnot Cycle. It is the latest generation water heater after Coal/oil boiler, Gas water heater, Electric water heater and Solar water heater.

Water and electricity isolation technologies

Heat pump's water heating process is transferring the heat from the refrigerant to the water, electricity is totally separated from water, avoiding the potential hazard of electric shock.

High heating efficiency

The operating cost of the heat pumps 1/4 of electric heater, 1/3 of gas heater and 1/3 of coal/oil boiler.

Space Heating/Cooling/Sanitary hot water

The heat pump is able to provide space heating or cooling to different construction building and meanwhile offering Sanitary hot water for daily use.

Economic and durable

Deron is using worldwide famous components for guaranteeing the heat pump's usage life up to 15 years.

Intelligent

Deron adopt automatic control system to operate the heat pump for space heating/cooling or sanitary hot water under different conditions. Totally labor free.

Excellent heat preservation

Deron hot water storage tank use high density polyurethane foam to wrap the #304 stainless steel tank for maintaining the water temperature equal.

Eco-friendly

Heat pump are using the environmental refrigerant, such as R410a/R407c/R134a/R417a and etc.

QUALIFICATION
Certificates ↘

- TUV CE certificate 1

- TUV CE certificate 2

- TUV CE certificate 3

- TUV CE certificate 4

- TUV CE certificate 5

- TUV CE certificate 6

- TUV CE certificate 7

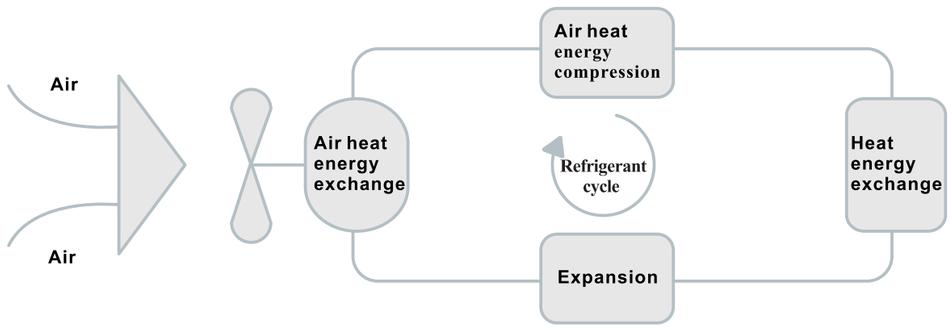
- TUV CE certificate 8

- TUV CE certificate 9

- TUV CE certificate 10

- TUV CE certificate 11

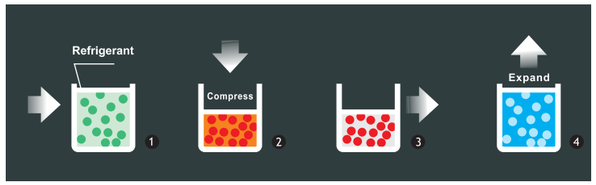
- TUV CE certificate 12

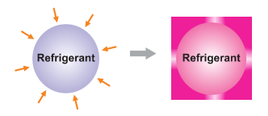


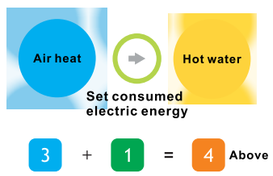
Working Principle ↘

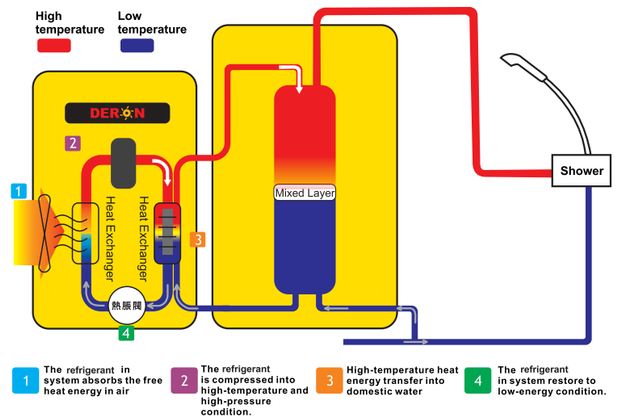
Heat pump delivers hot water by efficiently utilizing a free and abundant source of energy, that is the heat in the air, earth/underground water/river etc. Refrigerant vapor compression technology enables the heat pump to intensify this heat, which is used to produce hot water.

1. Cold refrigerant absorb heat from the air/water and become warm refrigerant.
2. Warm refrigerant be compressed as hot refrigerant.
3. Hot refrigerant transfer heat to water.
4. Hot refrigerant become cold after expanding.





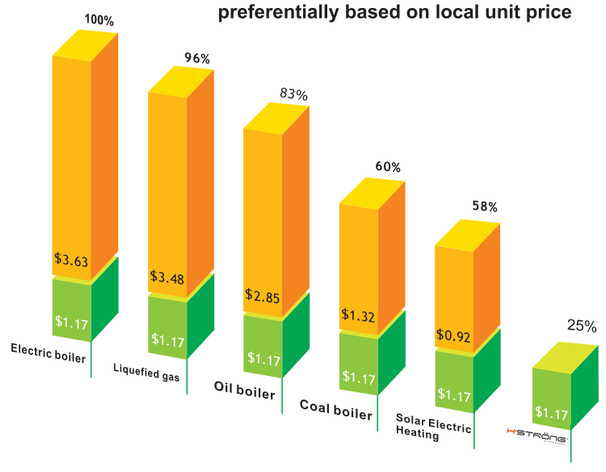




HEATING PRICE
Performance Ration ↘

Economic Value Comparison Table

- The following drawings are calculated in an electricity bill of 0.7 RMB, the actual costs shall be calculated preferentially based on local unit price



Heating Type	Calorie of Energy	Energy/Performance Ratio	Unit Price	Required Energy (Per Ton Water)	Required Cost (Per Ton Water)	All-Year Cost (10 Ton Water Per Day)	Labor Cost	Coverage	Annual Operation Cost
Coal boiler	4000Kcal/kg	40%	$0.08/kg	25.10kg	$2.32	$7513	$5128	20M³	$12641
Oil boiler	8429Kcal/l	80%	$0.6/l	6.40 l	$3.84	$14012	$5128	20M³	$19141
Liquefied gas	10800Kcal/kg	73%	$0.85/kg	5.30kg	$4.48	$16371	$2564	10M³	$18936
Solar Electric Heating	860Kcal/Kwh	85%	$0.09/Kwh	51.6 Kwh	$1.92	$7026	NO	150m²	$7026
Electric boiler	860Kcal/Kwh	90%	$0.09/Kwh	51.6 Kwh	$4.63	$13487	NO	10-15M³	$13487
H'STRÖNG	860Kcal/Kwh	400%	$0.09/Kwh	13 Kwh	$1.17	$4256	NO	3-10M³	$4256

• Inlet Temperature 15°C, Ambient Temperature 20°C, Target Temperature 55°C

High-Efficiency Heat Pump Technology

SAGInoMIYA

FLH

GRUNDFOS

EMERSON.

Copeland®

World-famous Heat Pump

H'STRÖNG **adopted world famous components:**

- ***A.*** *Copeland , Daikin, Sanyo, Mitsubishi and Panasonic compressor.*
- ***B.*** *R417a, R410a, R407c, R404a and R134a environmental refrigerant.*
- ***C.*** *Emerson expansion valve.*
- ***D.*** *Saginomiya 4-way valve.*
- ***E.*** *FLH fan.*
- ***F.*** *Grundfos or Wilo hot water circulation pump.*
- ***G.*** *Deron self-made high efficieny tube-in-tube heat Exchanger.*
- ***H.*** *Deron self-designed multi-function digital control panel.*

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Air to water
Heat Pump ↘

- Daikin or Copeland compressor
- Emerson expansion valve, Saginomiya 4-way valve
- Axial type fan motor with Nylon fan blades, low power consumption, low running noise, long usage life
- Deron made tube in tube heat exchanger, low fouling and easy for maintenance
- Coated steel or SUS 304# stainless steel cabinet with good workmanship

◎ DE-27W/C
◎ DE-36WC
◎ DE-46W/C

◎ DE-27W/D
◎ DE-36W/D
◎ DE-46W/D
◎ DE-52W/D

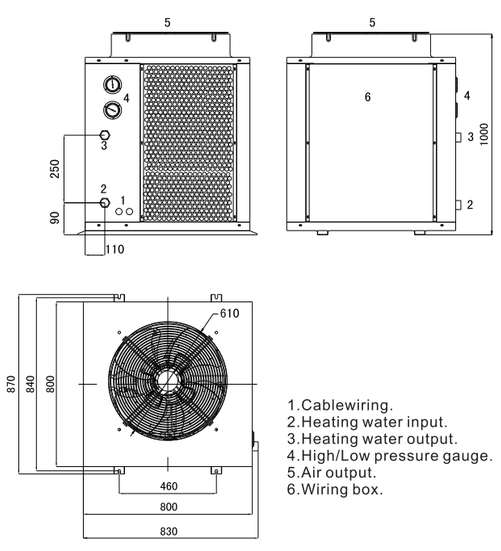
◎ DE-75W/D
◎ DE-92W/D
◎ DE-105W/D

◎ DE-180W/D
◎ DE-225W/D
◎ DE-270W/D

Model		DE-36W/C DE-36W/D	DE-46W/C DE-46W/D	DE-52W/D	DE-75W/D	DE-92W/D	DE-105W/D	DE-150W/D	DE-180W/D	DE-270W/D
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
1)Heating capacity	kW	15	19	21	30	38	42	57	74.5	110
	BTU	51180	64828	71652	102360	129656	143304	194484	254194	375320
Rated power input	kW	3.75	4.75	5.3	7.5	9.5	10.5	14.5	18.5	27
2)Heating capacity	kW	12	15	16.5	24	30.5	33	46	60	92
	BTU	40944	51180	56298	81888	104066	112596	156952	204720	313904
Rated power input	kW	3.2	4	4.3	6.4	8.2	8.6	12.5	16	25
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Fan	Qty	1	1	1	1	1	1	3	2	2
Required hot water flow rate	m^3/h	3.2	4	5	6	8	9.6	12	16	24
Water connection		G1"	G1"	G1"	G1-1/4"	G1-1/4"	G1-1/4"	G2"	G2"	G2-1/2"
Noise	dB(A)	≤58	≤58	≤58	≤60	≤60	≤60	≤62	≤64	≤65
Max. current	A	10	13	15	21	25	28.5	37.5	49	73.5
Max. water temp.	℃	60	60	60	60	60	60	60	60	60
Operation temp. range	℃	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45
Net weight	kg	120	140	165	260	270	295	495	622	893
Net size	mm	755×595×1490 800×800×1000	755×595×1490 870×830×970	800×800×1125	1200×920×1225	1200×920×1225	1200×970×1425	2080×1300×1680	2200×1135×2150	2200×1300×2150

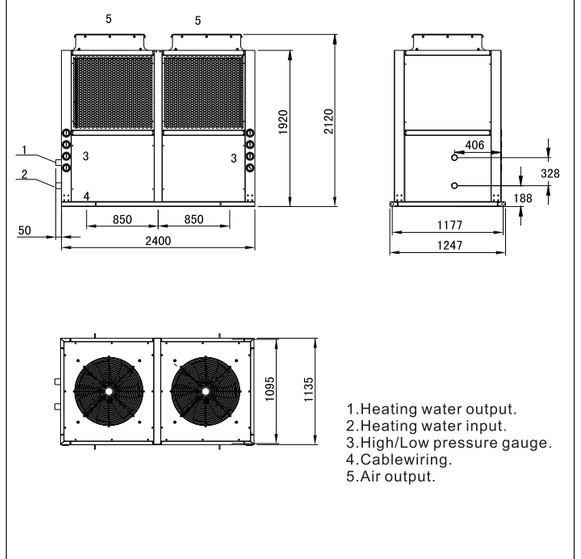
1)Heating by Ambient temp.(DB/WB): 20℃ /15℃ amd Water temp.(in/out): 15℃/55℃;
2)Heating by Ambient temp.(DB/WB): 7℃ /6℃ and Water temp.(in/out): 30℃/35℃;
Above information just for your reference, Please subject to the nameplate on the unit
Refrigerant is optional

DE-46W/D



1.Cablewiring.
2.Heating water input.
3.Heating water output.
4.High/Low pressure gauge.
5.Air output.
6.Wiring box.

DE-180W/D

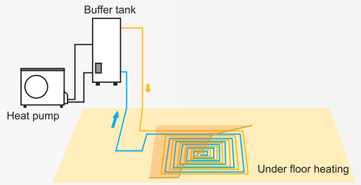


1.Heating water output.
2.Heating water input.
3.High/Low pressure gauge.
4.Cablewiring.
5.Air output.

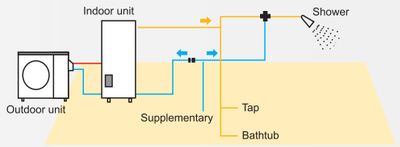
With water pump inside
Heat Pump ↘

- Panasonic/Daikin/Copeland compressor
- Grundfos or Wilo circulation pump
- Emerson expansion valve, Saginomiya 4-way valve
- Directly connected to the water tank, easy for installing

Single heating system



Domestic Hot Water(DHW) Solution



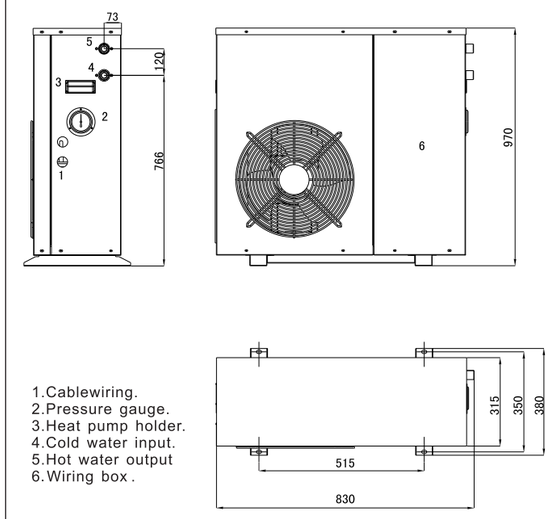
Model		DE-9WB	DE-13WB	DE-18WB	DE-27WB	DE-36WB	DE-46WB	DE-52WB
Power supply	V/Ph/Hz	220/1/50	220/1/50	220/1/50	220/1/50	380/3/50	380/3/50	380/3/50
1)Heating capacity	kW	3.4	4.8	7	10.8	13.8	17.5	20
	BTU	11601	16378	23884	36850	47086	59710	68240
Rated power input	kW	0.85	1.2	1.8	2.7	3.6	4.6	5.2
2)Heating capacity	kW	2.7	4	5.6	8.8	11	14.1	16.5
	BTU	9212	13648	19107	30026	37532	48109	56298
Rated power input(kw)	kW	0.75	1.1	1.6	2.5	3	3.9	4.7
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Compressor	Type	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll
Fan	Qty	1	1	1	1	1	2	2
Required hot water flow rate	m^3/h	1.2	1.2	1.6	2	3	4	4
Water connection		G3/4"	G3/4"	G3/4"	G1"	G1"	G1"	G1"
Noise	dB(A)	≤48	≤48	≤48	≤48	≤50	≤52	≤52
Max. current	A	7	9.5	13	25	7.5	10	13
Max. water temp.	℃	60	60	60	60	60	60	60
Operation temp. range	℃	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45
Net weight	kg	52	58	67	84	95	110	110
Net size(L/W/H)	mm	835×285×820	835×285×820	835×285×870	835×315×985	1195×390×920	1345×350×1260	1345×350×1260

1)Heating by Ambient temp.(DB/WB):20℃ /15℃ and Water temp.(in /out): 15℃/55℃;

2)Heating by Ambient temp.(DB/WB):7℃ /6℃ and Water temp.(in /out): 30℃/35℃;

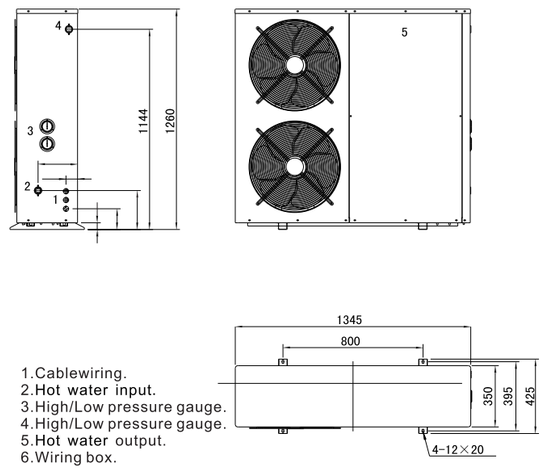
Above information just for your reference, Please subject to the nameplate on the unit
Refrigerant is optional

DE-27WB



1.Cablewiring.
2.Pressure gauge.
3.Heat pump holder.
4.Cold water input.
5.Hot water output
6.Wiring box .

DE-46WB



1.Cablewiring.
2.Hot water input.
3.High/Low pressure gauge.
4.High/Low pressure gauge.
5.Hot water output.
6.Wiring box.

High temperature
Heat Pump ↘

- Max. Heating water output temperature reach 80℃
- Copeland scroll compressor with R134a refrigerant
- Danfoss thermal expansion valve
- High effective dry filters build in, avoiding moisture and impurity

Model		DE-27W/DG	DE-46W/DG	DE-92W/DG	DE-180W/DG
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50
Heating capacity	kW	8.5	14	26	54
	BTU	29002	47768	88712	184248
Rated power input	kW	2.7	4.6	9.2	18
Water feed speed	L/h	112	185	370	741
Refrigerant		R134A	R134A	R134A	R134A
Compressor	Type	Scroll	Scroll	Scroll	Scroll
Fan	Qty	1	1	1	2
Required water flow rate	m^3/h	2.2	4	8	16
Water connection		G1"	G1"	G1-1/4"	G2"
Max. current	A	7.5	13	25	49
Noise	dB (A)	≤60	≤64	≤65	≤68
Level again electric shock		I	I	I	I
Water proof		IPX4	IPX4	IPX4	IPX4
Max. water temp.	℃	80	80	80	80
Operation temp. range	℃	-10-45	-10-45	-10-45	-10-45
Net weight	kg	130	270	320	680
Net size(L/W/H)	mm	690×690×800	800×800×1125	1200×970×1425	2200×1135×2150

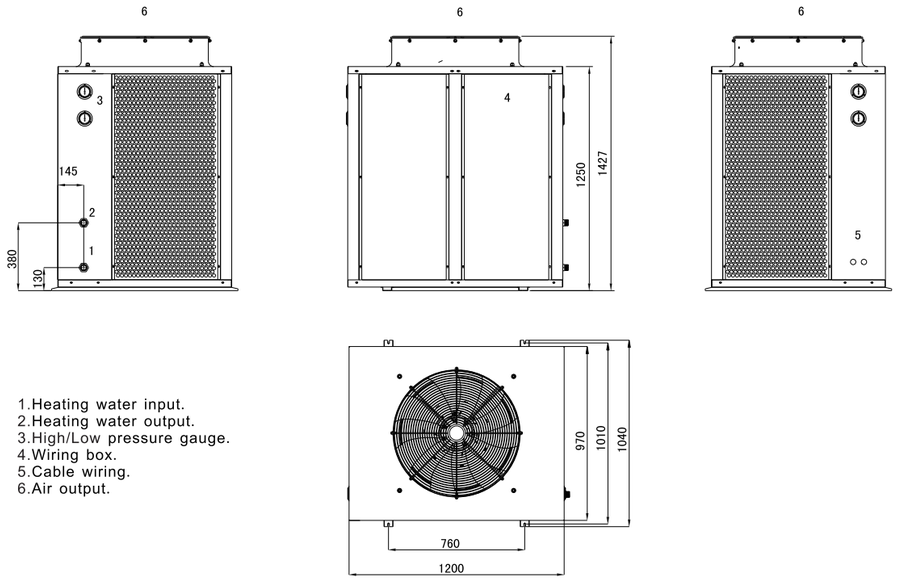
Heating by Ambient temp.(DB/WB): 20℃ /15℃ and Water temp.(in /out): 15℃/80℃;
Above information just for your reference, Please subject to the nameplate on the unit

◎ DE-27W/DG
◎ DE-46W/DG

◎ DE-92W/DG

◎ DE-180W/DG

DE-92W/DG



1.Heating water input.
2.Heating water output.
3.High/Low pressure gauge.
4.Wiring box.
5.Cable wiring.
6.Air output.

Heat Pump Dryer

- This heat pump dryer is mainly for industrial use, such as tobacco, fruit, tea leaf, sea food, wood, cloth, painting,etc.
- This device comprises indoor units and outdoor units, consice outlook, saving the place
- Max.outlet air temperature is up to 75℃, and it is adjustable
- Copeland scroll compressor, Emerson expansion valve, etc.

Energy-saving, Economical, Environment-friendly

Light touch control panel, with auto mode, manual mode , time funtion, easy for use

Multi-protection for savety, including over high pressure protection, over low pressure protection, phase protection,etc.

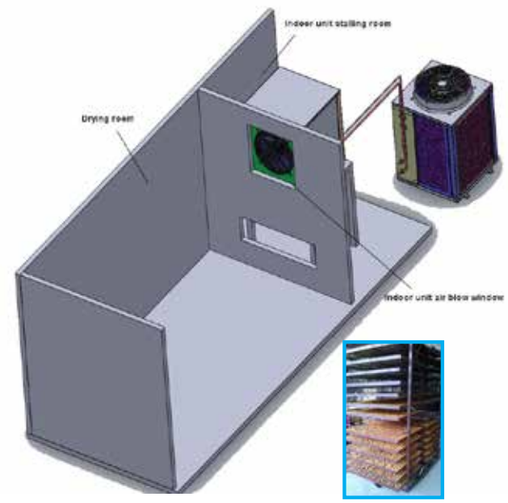
◎ DE-46W/DKW

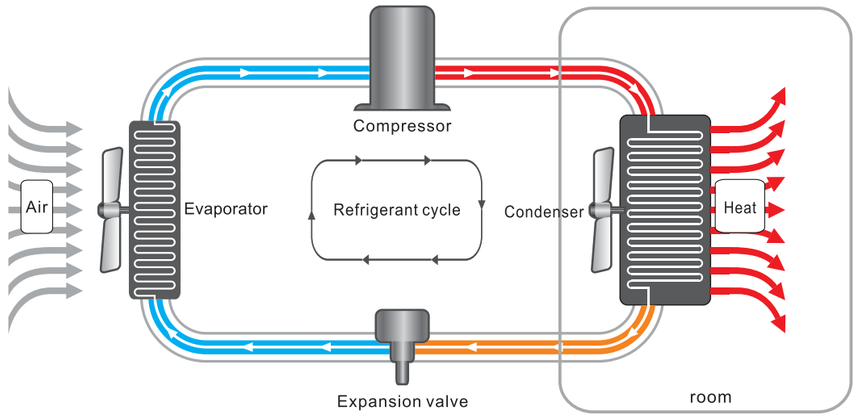
◎ DE-92W/DKW

Model		DE-46W/DKW	DE-92W/DKW	DE-180W/DKW
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50
Heating capacity	kW	14	28	56
	BTU	47768	95536	191072
Power input	kW	6.5	11.8	25.5
Air volume	m^3/h	8000	15000	30000
Refrigerant		R134A	R134A	R134A
Compressor	Type	Scroll	Scroll	Scroll
Max. current	A	21.5	42	82
Noise	dB (A)	≤64	≤65	≤68
Level again electric shock		I	I	I
Water proof		IPX4	IPX4	IPX4
Max. air outlet temp.	℃	75	75	75
Operation ambient temp. range	℃	-10-45	-10-45	-10-45
Indoor unit	quantity	1	2	4
	Net weight	100	2×100	4×100
	Net size(L/W/H)	800×820×755	800×820×755	800×820×755
Outdoor unit	quantity	1	1	1
	Net weight	175	320	720
	Net size(L/W/H)	800×800×1150	1200×920×1455	2400×1130×2150

Ambient temp.(DB/WB): 20℃ /15℃ and Air temp.(in /out): 15℃/75℃;

Above information just for your reference, Please subject to the nameplate on the unit





Heat pump dryer working principle

Heat pump dryer is a new type of drying device that transferring air energy into the system for heating through Reverse Carnot Principle. The refrigerant will run cycling among the evaporator, compressor, condenser and expansion valve.

Swimming Pool
Heat Pump ↘

- Daikin or Copeland scroll compressor
- Emerson expansion valve, Saginomiya 4-way valve
- Titanium heat exchanger, effectively corrosion proof and durable
- Strict noise control with compressor jacket and anti-vibration pad

◎ DE-27W/DY
◎ DE-46W/DY
◎ DE-52W/DY

◎ DE-75W/DY
◎ DE-92W/DY
◎ DE-105W/DY

◎ DE-150W/DY
◎ DE-180W/DY

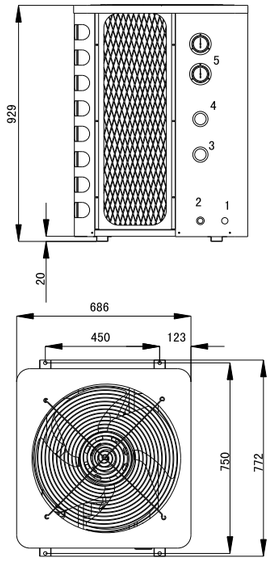
Model		DE-27W/DY	DE-46W/CY DE-46W/DY	DE-52W/CY DE-52W/DY	DE-75W/DY	DE-92W/DY	DE-105W/DY	DE-150W/DY	DE-180W/DY
Power supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Heating capacity	kW	11.5	18	20	30	39	46.5	55	76
	BTU	39238	61416	68240	102360	133068	158658	187660	259312
Power input by heating	kW	2.4	3.8	4.4	6.2	8	9.6	11.4	15.8
Cooling capacity	kW	7.8	13.5	14	22	26	29.8	40	55
	BTU	26614	46062	47768	75064	88712	101678	136480	187660
Power input by cooling	kW	2.9	4.8	5.1	7.6	9.8	10.5	15	20
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Required hot water flow rate	m^3/h	4.5	7.5	9	12	15	15	25	30
Water connection diameter	mm	50	50	50	63	63	63	75	75
Noise	dB(A)	≤56	≤52	≤58	≤60	≤60	≤60	≤62	≤64
Max. current	A	7.5	13	15	21	25	30	40	50
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Fan	Qty	1	2	2	1	1	1	3	2
Rated outlet water temp.	℃	28	28	28	28	28	28	28	28
Max. water temp.	℃	45	45	45	45	45	45	45	45
Operation temp. range	℃	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45	-10-45
Net weight	kg	90	110	110	250	250	290	465	622
Net size(L/W/H)	mm	690×690×800	1345×425×1260 800×800×1125	1345×350×1260 800×800×1125	1200×920×1225	1200×920×1225	1200×970×1425	2080×1300×1680	2200×1315×2150

Heating byAmbient temp.(DB/WB):20℃ /15℃ and Water temp.(in /out): 15℃/28℃;

Cooling by Ambient temp.(DB/WB):35℃ /24℃ and Water temp.in 28℃;

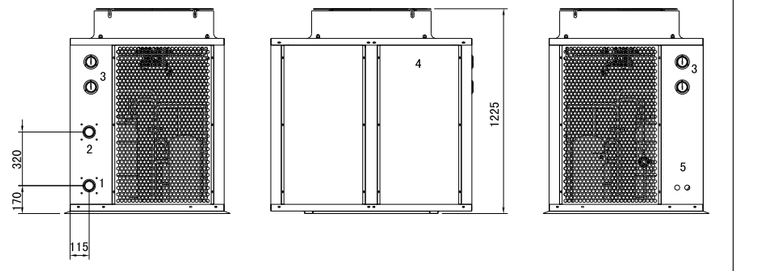
Above information just for your reference, Please subject to the nameplate on the unit
Refrigerant is optional

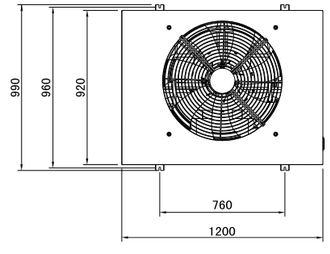
DE-46W/DY



1.Cable wiring.
2.Drainage piping
3.Heating water input.
4.Heating water output.
5.High/Low pressure gauge.

DE-92W/DY





1.Heating water input.
2.Heating water output.
3.Pressure gauge.
4.Wiring blox.
5.Cable wiring.

Residential Series

All in one heat pump

Highly efficient
direct heat transfer for outstanding efficiency
intelligent Hotlogic®
innovative de-icing function for cold climates
recognisedexcellence
most highly awarded environmental water heater

CAPACITY (LITERS)	200VT	300VT
Peoples	5-6	7-8

Size figures are based on environmental averages which can effect the performance of solar and heat pump heaters. Adult icon can represent dishwasher or washing machine An adult icon does not represent a spa bath. Based on connection to continuous tariff.

Model	HP – 200VT	HP – 300VT
Heating capacity (kW)	3.000 kw	3.000 kw
Tank volume	200 Liters	300 Liters
Power input	880 w	880 w
Running supply	4.1A	4.1A
Power supply	220V/50Hz	220V/50Hz
Ambient temp	-7~43 °C	-7~43 °C
Compressor type	Rotary	Rotary
Rated outlet water temp	55°C	55°C
Max outlet water temp	60°C	60°C
Air volume	450m3/h	450m3/h
Air pressure	750 kpa	750 kpa
Duct diameter (mm)	Ø150 mm	Ø150 mm
Sound presusse	49 dB (A)	49 dB (A)
Water inlet size/outlet size	3/4 inch	3/4 inch
Net dimensions (mm)	Ø540x1840	Ø640x1840
Package dimensions	705x705x1800	705x705x2000
Net weight (empty)	85 kg	92 kg

Not suitable for installation in alpine areas or areas above 1000m
sealed system. 1 year parts and labour on remainder
1 20°C / 60%RH.
2 ECV not supplied with the water heater.
3 Comparison will vary depending upon your location,
configuration of system installed, type of water heater being
replaced, hot water consumption and fuel tariff. Maximum
financial savings can be achieved only when the tariff for the
electric water heater replaced was 24 hour continuous. CO2
emissions for fuel types is based on AGO published information.

GWA Smarter Solutions

Values are subject to change without notice and are correct at time of printing. STCs calculations are based on continuous tariff.