



Hiseer Split DC Inverter Heat Pump

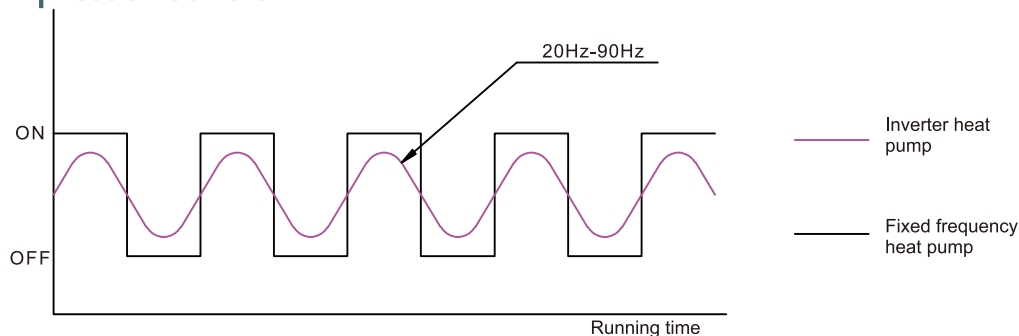
High efficiency
More comfortable
Energy saving
Environment friendly



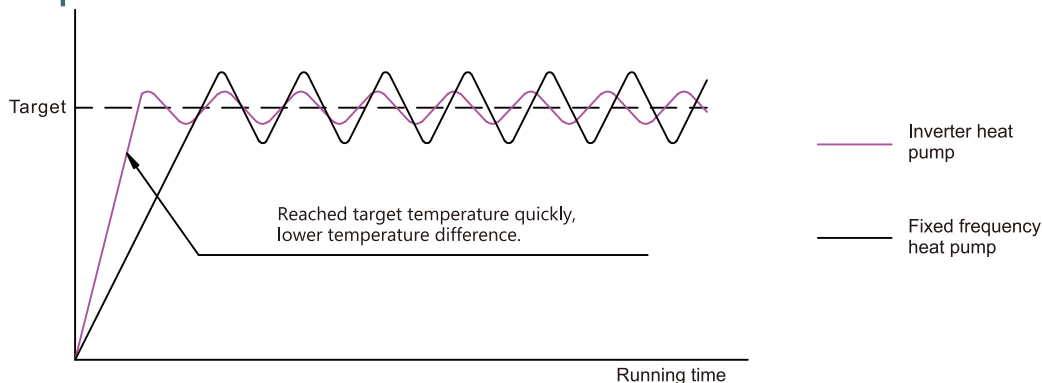
Hiseer DC inverter heat pump offers a wide heat output . It could adjust heat output automatically according to your house heating requirement . In winter , the inverter compressor and fan motor will runs on high speed to provide more heating when ambient temperature is very low ; If your house need less heating , it will drop running frequency down to 20Hz in which condition the heat pump will consume less electric power .

Heat pump is not just a heating system for new buildings , it can also be integrated into existing buildings that already have heating systems easily . Irrespective of whether you have a gas , oil boiler or solar panels , the heat pump switches on the 2nd heat generator according to demand for keeping lowest heating costs.

Compressor Control



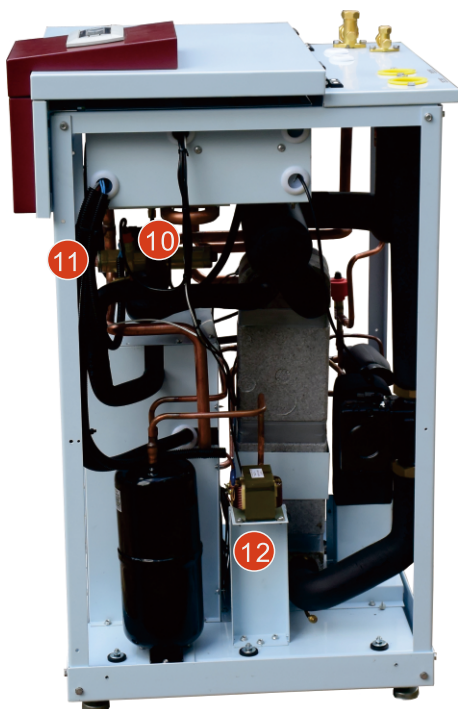
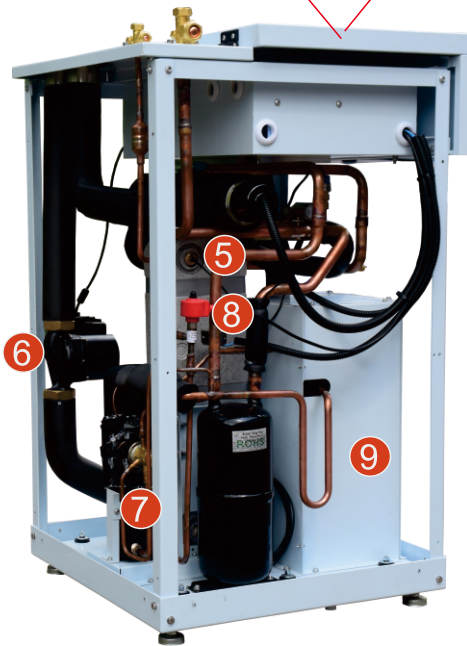
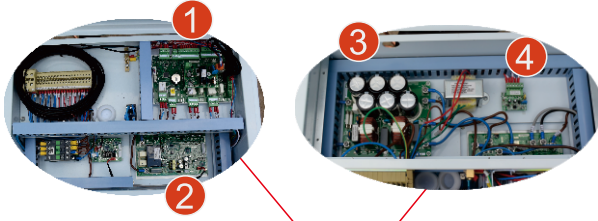
Temperature Control



Hiseer DC Inverter Heat Pump Advantages:

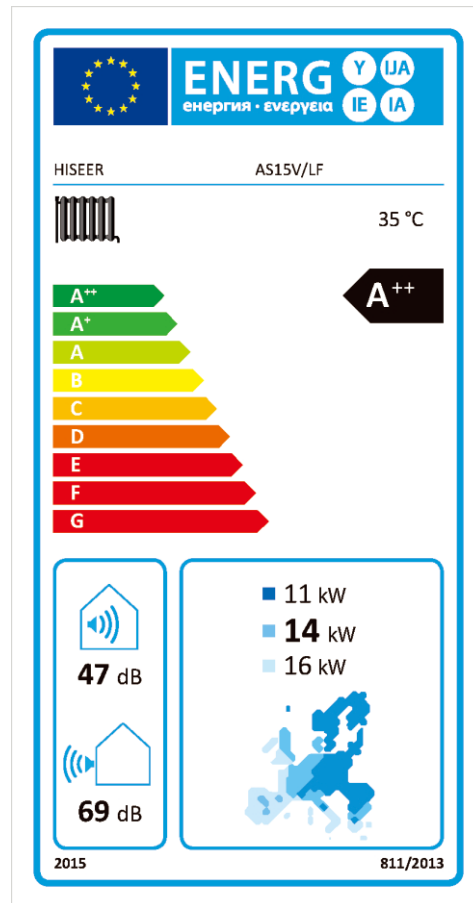
1. Save more than 30% energy than fixed frequency heat pump
2. Soft start to protect your electric network
3. Smooth temperature varies curve
4. Wide heating/cooling output range
5. Can be used in combination with heat generators such as gas ,oil or solar that existing in buildings
6. Intelligent defrosting by reverse circulation
7. Weather compensation function: heating / cooling curve
8. Heating, cooling and domestic hot water
9. SG Ready.
10. Flow feedback Grundfos circulation pump ,saving water flow switch.

■ Main Components



- 1 Carel Controller UP3B00200S3S
- 2 Sanhua Inverter
- 3 Sanhua EMC Filter Board
- 4 Circulation Pump Flow Feedback Board
- 5 GEA / SWEP Plate Heat Exchanger
- 6 Grundfos Circulation Pump
- 7 Emerson Expansion Valve (EVI)
- 8 Carel Electronic Expansion Valve
- 9 Copeland EVI Compressor
- 10 Sanhua High/Low Pressure Transducer
- 11 Saginomiya 4 Way Valve
- 12 Sanhua Harmonic Filter

Energy Labels



Product Fiche

Type	Inverter Split Air Source Heat Pump	
Model	AS15V/LF	
Temperature application	35°C	
Seasonal space heating energy efficiency class, average climate	A ⁺⁺	
Rated heat output , average climate	[KW]	14
Seasonal space heating energy efficiency η_s , average climate	151%	
Annual energy consumption , average climate*	[KWh]	7525
Sound power level LWA, indoor unit	[dB(A)]	47
Sound power level LWA, outdoor unit	[dB(A)]	69
SCOP, average climate	3.86	
Refrigerant type	R410A	
Global Warming Potential (GWP)	2088	
Heating Capacity at standard rating conditions**	[KW]	15.73
Power input at standard rating conditions**	[KW]	3.64
Dimension indoor unit (H X W X D)	[mm]	1040X640X600
Dimension outdoor unit (H X W X D)	[mm]	1476X1040X500
Weight , indoor unit	[kg]	138
Weight , outdoor unit	[kg]	80
Power source	230V/1ph/50Hz	

* The annual energy consumption kWh per year, based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

** The standard rating conditions: brine inlet temp. 0°C, heating flow temp. 35°C, compressor speed 70Hz.

Technical Data



Model Number	AS12V/LF			AS15V/LF			
Heating performance	Min.	Nominal	Max.	Min.	Nominal	Max.	
Heat output/Power consumption/COP at A7/W35°C	kW	4.53/1.02/4.44	12.6/2.73/4.61	15.65/3.64/4.30	4.63/1.04/4.45	15.73/3.64/4.32	18.1/4.62/3.90
Heat output/Power consumption/COP at A2/W35°C	kW	3.96/1.09/3.63	10.26/2.77/3.7	12.78/3.53/3.62	3.93/1.09/3.60	12.86/3.52/3.65	16.04/4.62/3.47
Heat output/Power consumption/COP at A-7/W35°C	kW	2.64/1.13/2.34	7.86/2.69/2.92	9.76/3.48/2.80	2.74/1.13/2.43	9.85/3.45/2.85	12.44/4.51/2.76
Heat output/Power consumption/COP at A-10/W35°C	kW	2.64/1.17/2.25	7.22/2.73/2.64	8.81/3.51/2.51	2.68/1.19/2.24	8.93/3.53/2.53	11.05/4.68/2.36
Heat output/Power consumption/COP at A-15/W35°C	kW	2.69/1.65/1.63	6.39/2.75/2.32	7.69/3.52/2.18	2.80/1.67/1.68	7.81/3.51/2.22	10.38/4.54/2.29
Heat output/Power consumption/COP at A7/W45°C	kW	4.32/1.32/3.27	11.81/3.24/3.65	14.37/4.20/3.42	4.36/1.34/3.27	14.58/4.23/3.45	17.68/5.28/3.35
Heat output/Power consumption/COP at A2/W45°C	kW	3.66/1.33/2.75	10.36/3.45/3.0	12.65/4.31/2.94	3.66/1.33/2.75	12.78/4.30/2.97	15.29/5.56/2.75
Heat output/Power consumption/COP at A-7/W45°C	kW	4.0/1.86/2.15	7.93/3.35/2.36	9.61/4.30/2.23	4.04/1.87/2.16	9.73/4.16/2.34	12.19/5.49/2.22
Heat output/Power consumption/COP at A-10/W45°C	kW	3.55/1.83/1.94	7.52/3.34/2.25	8.84/4.17/2.12	3.61/1.87/1.93	8.90/4.10/2.17	11.34/5.37/2.11
Heat output/Power consumption/COP at A-15/W45°C	kW	3.76/2.37/1.59	6.79/3.55/1.91	8.29/4.38/1.89	3.84/2.37/1.62	8.36/4.35/1.92	10.43/5.73/1.82
Heat output/Power consumption/COP at A7/W55°C	kW	4.01/1.71/2.34	11.26/4.11/2.74	13.75/5.12/2.68	4.09/1.70/2.41	13.93/5.16/2.70	17.01/6.72/2.53
Cool output/Power consumption/EER at A35/W7°C	kW	4.53/1.52/2.98	11.62/3.55/3.27	14.07/4.61/3.05	4.58/1.53/2.99	14.13/4.54/3.11	17.36/6.01/2.89
Nominal running current at A7/W35	A	12.1			15.7		
Max operating current	A	24.6			30.5		
Power Supply		230V/50Hz			230V/50Hz		
Compressor		Copeland EVI scroll			Copeland EVI scroll		
Condenser		Braze plate heat exchanger			Braze plate heat exchanger		
Nominal flow heating medium	m ³ /h	2.10			2.38		
Internal pressure drop at nominal flow	kPa	17			23		
Nominal air flow	m ³ /h	5000			6000		
Nominal fan output	W	210			230		
Max outlet heating medium temperature	°C	55			55		
Refrigerant R410A filling weight	kg	3.4			3.6		
Outdoor unit dimension (HXWxD)	mm	1476X1040X500			1476X1040X500		
Indoor unit dimension (HXWxD)	mm	1040X600X640			1040X600X640		
Pipe connector		G1-1/2"			G1-1/2"		
Net Weight (indoor/outdoor)	kg	136/80			138/80		
Operating ambient temp. range	°C	Heating -25~35			Heating -25~35		
		DHW -20~43			DHW -20~43		
		Cooling 10~45			Cooling 10~45		
Sound power level L _{WA} (indoor / outdoor)	dB(A)	46/67			47/69		

The above data is tested by EN14511. A7/W35°C means air temp. 7°C, outlet water temp. 35°C

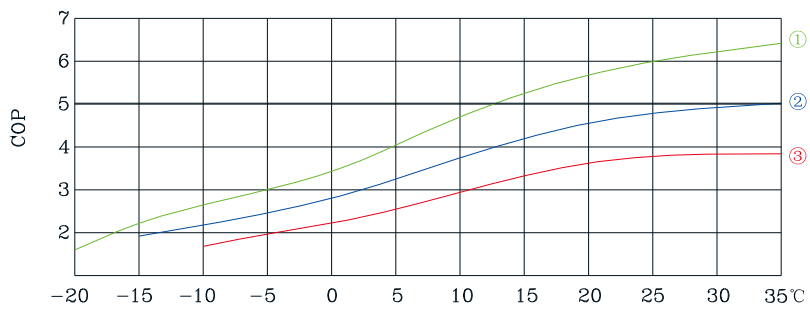
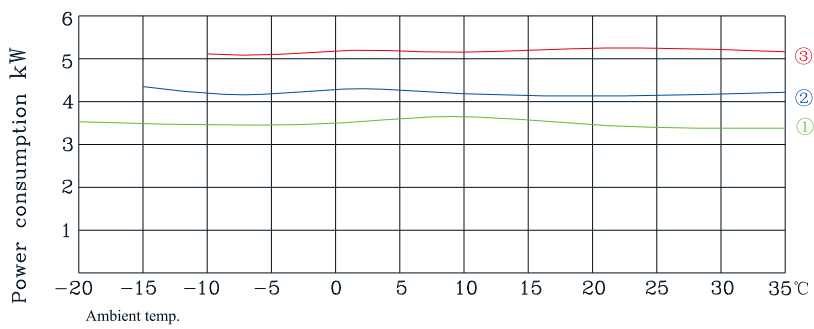
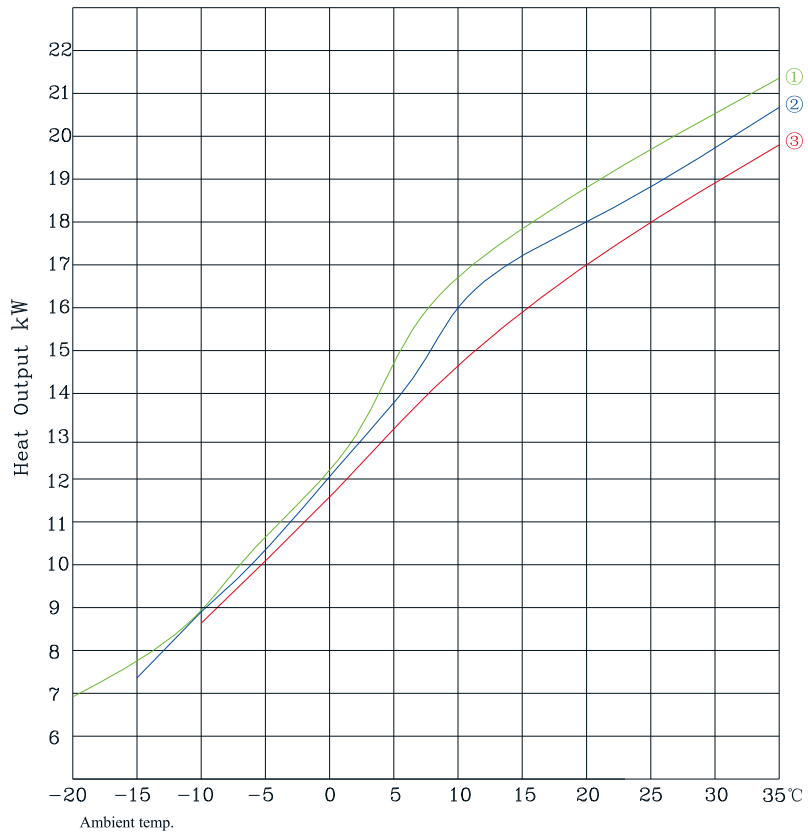
The Sound power level is tested by EN12102

Rated Speed Performance Curve

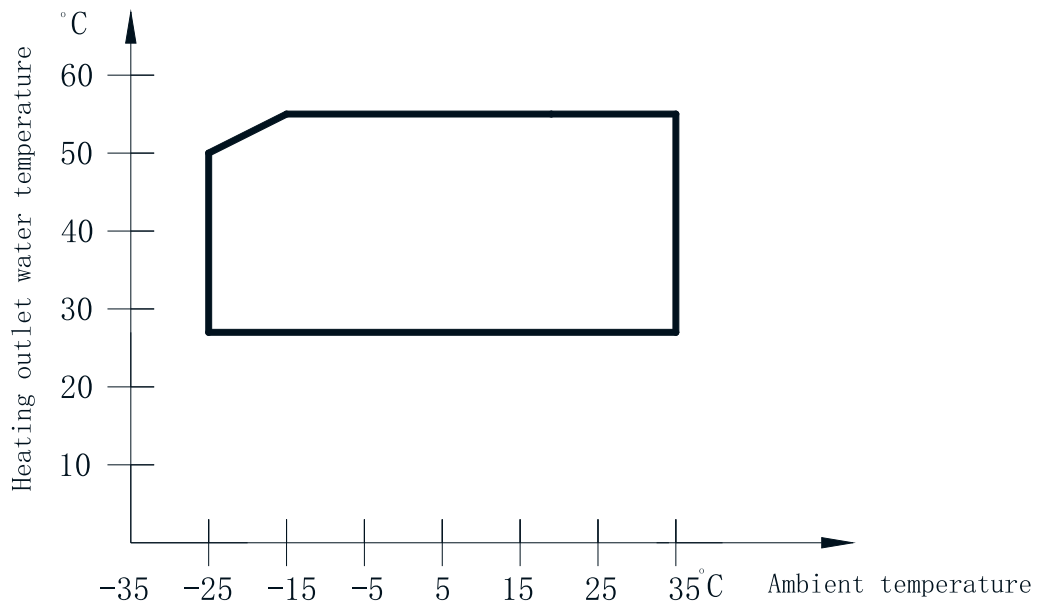
Heating performance curve

Model: AS15V/LF

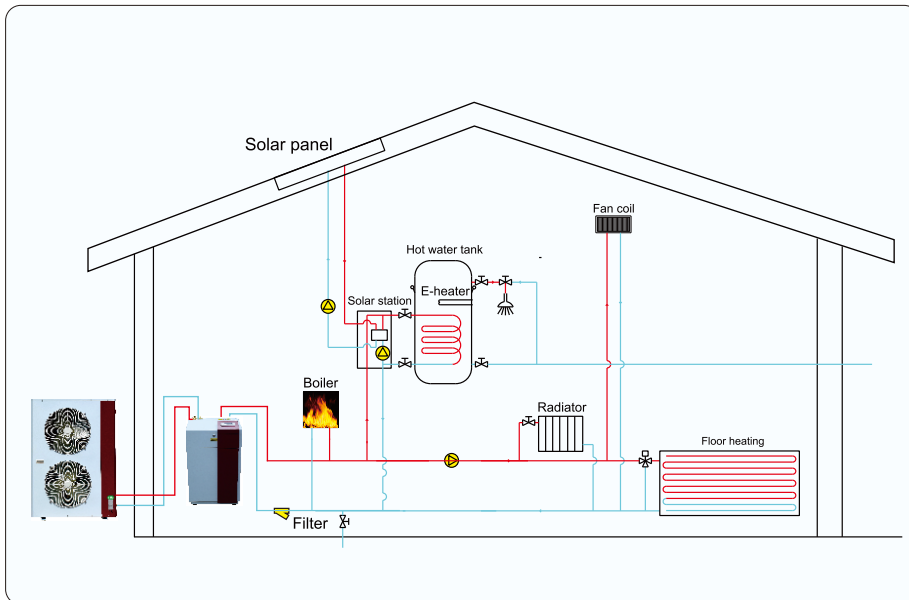
- 1=Flow temperature 35°C Full load
- 2=Flow temperature 45°C Full load
- 3=Flow temperature 55°C Full load



Workable Envelope

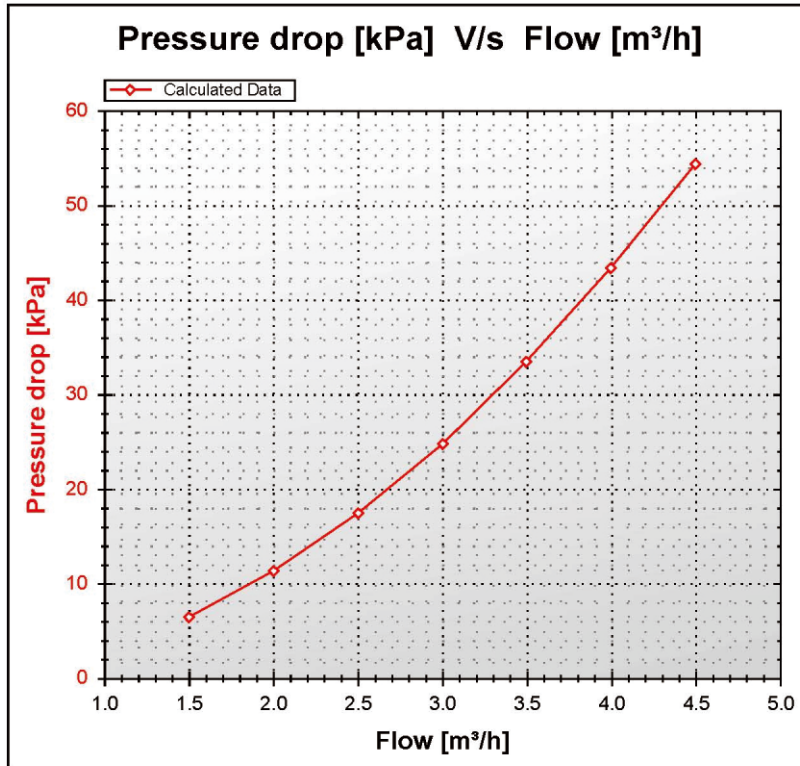


Typical application

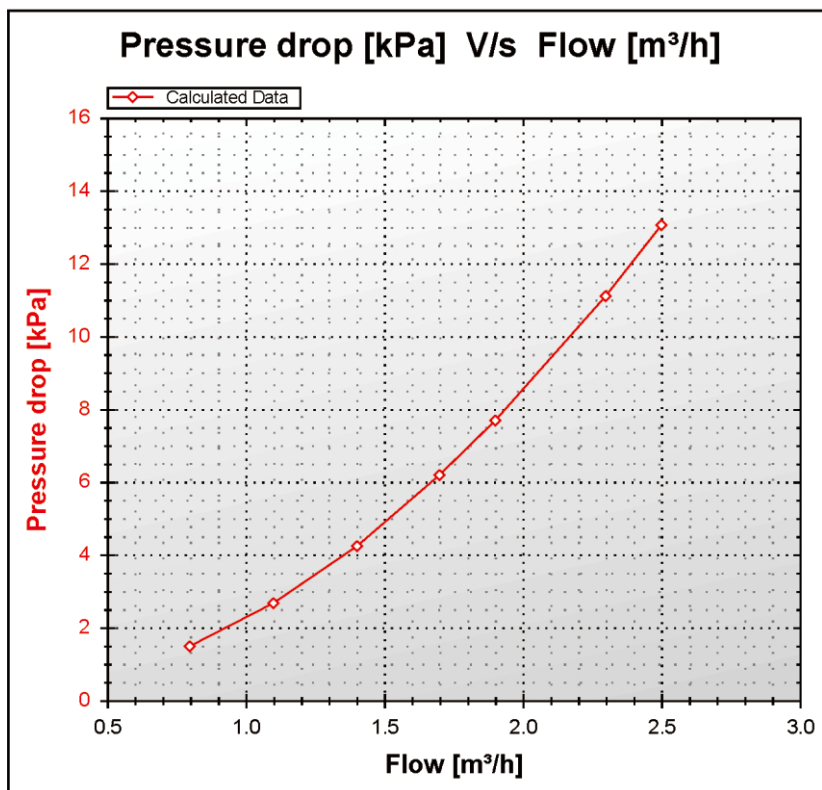


■ Plate Exchanger Pressure Drop Curve

AS12V/LF

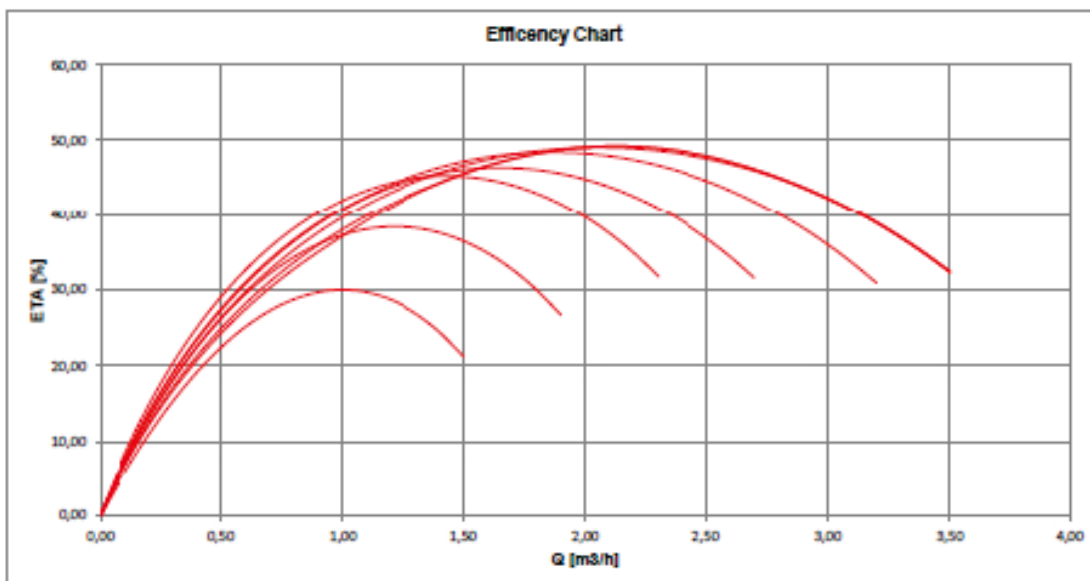
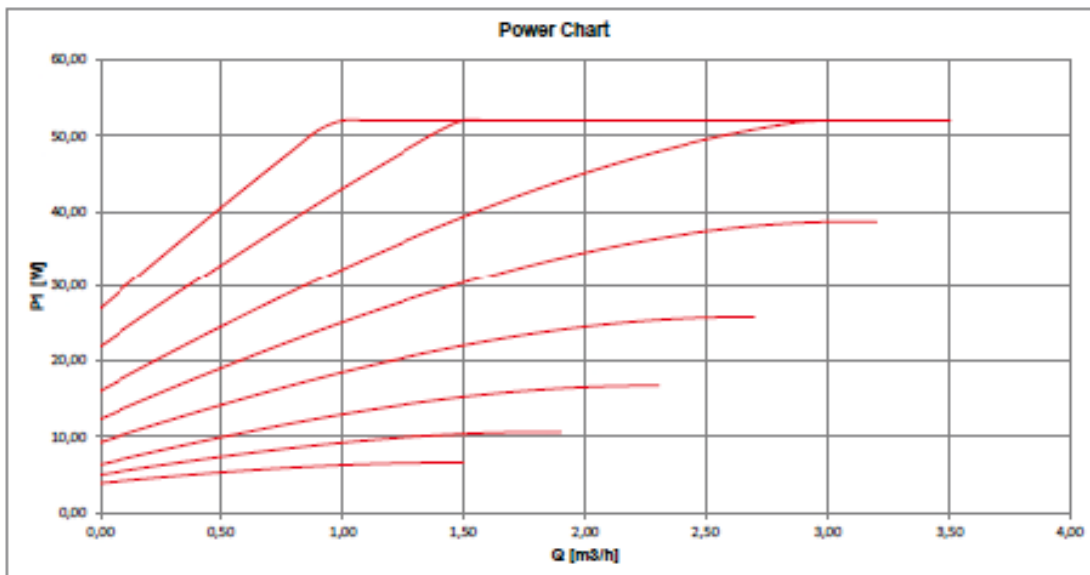
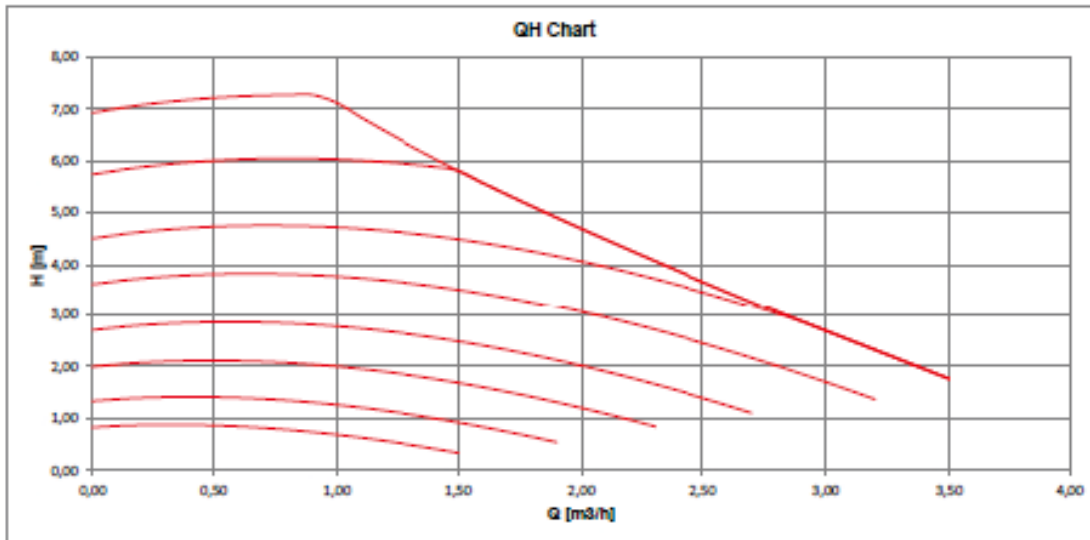


AS15V/LF



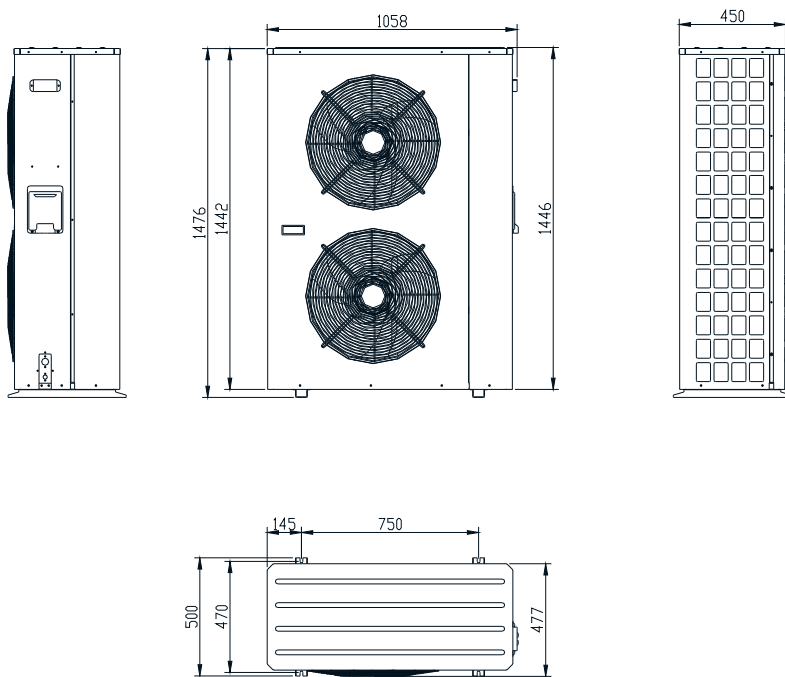
Internal Pump Grundfos UPM3K 25-75 Curve

Title Test data UPM3 PWM 7.0m 130
Product no.



■ Hiser Split DC Inverter Air Source Heat Pump Dimension :

AS12V/LF AS15V/LF outdoor unit



AS12V/LF AS15V/LF indoor unit

