

Technical Report No.: 64.181.21.03196.01 Rev.00

Date: 2021-07-26

Client: Report holder's name: POWER WORLD MACHINERY EQUIPMENT CO., LTD

Report holder's Address: No.24, the fourth industrial zone, HouTing Street, ShaJing Town, BaoAn District, Shenzhen China.

Contact person of applicant: Ida Lei

Manufacturer's name: POWER WORLD MACHINERY EQUIPMENT CO., LTD

Manufacturer's address: No.24, the fourth industrial zone, HouTing Street, ShaJing Town, BaoAn District, Shenzhen China.

Manufacturing place: Factory's name: POWER WORLD MACHINERY EQUIPMENT CO., LTD

Factory's address: No. 32, Luxi 2nd Road, Liaobu Town, Dongguan, China

Test subject: Product: EVI DC Inverter Heat Pump

Type: PW050-DKZLRS-A, PW060-DKZLRS-A

Trade name: **POWER WORLD**
派沃

Test specification: ☒ EN 14825:2018

☒ (EU) No 813/2013

Purpose of examination: Test according to the test specification

☒ EU 2016/2282:2016-11-30

Test result: The test results show that the presented product is in compliance with the specified requirements

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Doc No.: ITC-TTW0902.02E – Rev.7

1 Description of the test subject

1.1 Function

Manufacturer's specification for intended use:
The appliance is air to water heat pump.
Manufacturer's specification for predictive use:
According to user manual.

1.2 Consideration of the foreseeable use

- ☐ Not applicable
- ☒ Covered through the applied standard
- ☐ Covered by the following comment
- ☐ Covered by attached risk analysis

1.3 Technical Data

Model :	PW050-DKZLRS-A, PW060-DKZLRS-A
Rated Voltage (V) :	380-415, 3N~
Rated Frequency (Hz) :	50
Rated Power (W) :	3930W for PW050-DKZLRS-A, 4751W for PW060-DKZLRS-A
Rated Current (A) :	7.15A for PW050-DKZLRS-A, 8.49A for PW060-DKZLRS-A
Protection Class :	Class I
Protection Against Moisture :	IP X4
Construction :	Stationary
Supply connection :	☐ Non detachable cord ☒ Permanent connection to fixed wiring
Operation mode:	☒ Continuous operation; ☐ Intermittent operation; ☐ Short time operation;
Refrigerant/charge (g) :	R32 /2700g
Declared parameters :	☒ Average ☐ Warmer ☐ Colder
Sound power level dB(A) :	N/A
Series No :	PPAY05021072665 for PW050-DKZLRS-A, PPAY06021040893 for PW060-DKZLRS-A

2 Order

2.1 Date of Purchase Order, Customer's Reference

2021-06-21, Ida Lei

2.2 Test Sample(s)

- Reception date(s): 2021-06-22

- Location(s) of reception:

For Energy test:

GZ-Lans Experimental Technology Co., Ltd. Laboratory

Address: No.16, Juncheng Road, Huangpu district, Guangzhou, China

- Condition of test sample(s): completed and can be normal operation

2.3 Date(s) of Testing

2021-06-23 to 2021-06-30

2.4 Location(s) of Testing

Same as 2.2

2.5 Points of Non-compliance or Exceptions of the Test Procedure

N/A

3 Test Results

3.1 Positive Test Results

See Appendix I

4 Remark

N/A

4.1 The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

4.2 When the product is placed on the market, it must be accompanied with safety Instructions written in official language of the country. The instructions shall give information regarding safe operation, installation and maintenance.

5 Documentation

- Appendix I Test results
- Appendix II Marking plate
- Appendix III photo documentation
- Appendix IV Construction data form
- Appendix V Test equipment list

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6 Summary

- 1) The appliance is EVI DC Inverter Heat Pump Unit , including a whole compression type refrigerant circuit to heat water in another circuit. The appliance was for cooling and heating water function, this report only for heating capacity test.
- 2) The main power is supplied by a 5-pole supply cable not with plug which not supply by manufactory.
- 3) Water enthalpy method was adopted in this report.
- 4) Standby mode power, off mode power and thermostat-off mode power were tested according to clause 12 of standard EN 14825:2018.

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch TÜV SÜD Group

Tested by: William Liang, Project Handler

printed name, function & signature

Approved by: Tony Xie, Designated Reviewer

printed name, function & signature



Appendix I Test results

Table 1.	Heating mode(Low temperature application):						P
Model	PW050-DKZLRS-A						
Product type	Air to Water	Heating season	☒ Average	☐ Warmer	☐ Colder		
1. Test conditions:							
Condition	Part Load Ratio in %				Outdoor heat exchanger	Indoor heat exchanger	
	Formula	A	W		Inlet dry (wet) bulb temperature °C	Inlet/outlet water temperatures (°C)	
A	$(-7-16)/(T_{designh}-16)$	88	N/A	N/A	-7(-8)	a / 34	
B	$(+2-16)/(T_{designh}-16)$	54	N/A	N/A	2(1)	a / 30	
C	$(+7-16)/(T_{designh}-16)$	35	N/A	N/A	7(6)	a / 27	
D	$(+12-16)/(T_{designh}-16)$	15	N/A	N/A	12(11)	a / 24	
E	$(TOL-16)/(T_{designh}-16)$				TOL	a / 35.3	
F	$(T_{bivalent}-16)/(T_{designh}-16)$				Tbiv	a / 34	
G	$(-15-16)/(T_{designh}-16)$	N/A	N/A	N/A	-15	N/A	
Remark: a) With the water flow rate as determined at the standard rating conditions given in EN14511-2 at 30/35 conditions.							
2.Tested data/correction data(Average):							
General test conditions/ Part-Load	Unit	A(-7)/W34 (88%)	A2/W30 (54%)	A7/W27 (35%)	A12/W24 (15%)	A(-10)/W35.3 (100%)	A(-7)/W34 (88%)
	--	A	B	C	D	E	F
Data collection period	hh: min:sec	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00
The heat pump defrosts	--	No	No	No	No	No	No
Complete Cycles	--	0	0	0	0	0	0
Barometric pressure	kPa	101.02	101.02	101.02	101.02	101.02	101.02
Voltage	V	397.4	397.4	392.2	398.4	389.9	397.4
Current input of the unit	A	6.33	3.62	2.97	2.59	8.66	6.33
Power input of the unit	kW	3.941	1.890	1.526	1.301	5.357	3.941
Test conditions indoor unit							
Inlet Water temperature, DB	°C	25.09	28.04	25.00	21.70	31.52	25.09
Outlet Water temperature, DB	°C	34.04	30.01	27.02	23.98	35.34*	34.04

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Appendix I Test results

Test conditions outdoor unit							
Air inlet temperature, DB	°C	-6.97	2.06	7.06	12.01	-9.97	-6.97
Air inlet temperature, WB	°C	-7.98	0.98	5.99	10.99	-10.98	-7.98
Summary of the results							
Total heating capacity	kW	14.549	8.785	8.741	9.928	16.539	14.549
Effective power input	kW	4.101	2.050	1.686	1.461	5.517	4.101
Coefficient of performance (COP)	--	3.55	4.29	5.18	6.79	3.00	3.55
Compressor frequency	Hz	81	35	30	30	85	81
Water flow	m³/h	3.70	3.70	3.70	3.70	3.70	3.70
Remark: * In part condition, outlet temperature data is recorded by a full average complete cycle's data.							
3.Calculation/conclusion for SCOP(Average):							
Tdesignh(°C)	-10		Tbiv(°C)		-7		
Pdesignh(kW)	16.447		TOL(°C)		-10		
Test result A, B, C, D, E, F conditions:							
Condition	Part load	Measured capacity	COP at measured capacity	Cdh	CR	COP at part load	
E	16.447	16.539	3.00	0.00	0.99	3.00	
F	14.549	14.549	3.55	0.00	1.00	3.55	
A	14.549	14.549	3.55	0.00	1.00	3.55	
B	8.856	8.785	4.29	0.00	1.00	4.29	
C	5.693	8.741	5.18	0.99	0.65	5.16	
D	2.530	9.928	6.79	0.99	0.25	6.60	
CR: part load divided by capacity;							

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Appendix I Test results

Electric power consumptions	Unit	Value
Thermostat-off mode [P_{TO}]	kW	0.005
Standby mode [P_{SB}]	kW	0.005
Crankcase heater [P_{CK}]	kW	0.050
Off mode [P_{OFF}]	kW	0.005

Conclusions:	Unit	Value
SCOP _{on} :	kWh/kWh	4.46
SCOP:	kWh/kWh	4.46
Q_H :	kWh/year	33979
Q_{HE} :	kWh/year	7622
$\eta_{s,h}$	%	175.3
Seasonal space heating energy efficiency classes: (According (EU) No 811/2013 Table 2)	--	A+++

Appendix I Test results

Table 2.	Heating mode(Medium temperature application):						P	
Model	PW050-DKZLRS-A							
Product type	Air to Water	Heating season	☒	Average	☐	Warmer	☐	Colder
1. Test conditions:								
Condition	Part Load Ratio in %				Outdoor heat exchanger	Indoor heat exchanger		
	Formula	A	W	C	Inlet dry (wet) bulb temperature °C	Inlet/outlet water temperatures (°C)		
A	$(-7-16)/(T_{designh}-16)$	88	N/A	N/A	-7(-8)	a / 52		
B	$(+2-16)/(T_{designh}-16)$	54	N/A	N/A	2(1)	a / 42		
C	$(+7-16)/(T_{designh}-16)$	35	N/A	N/A	7(6)	a / 36		
D	$(+12-16)/(T_{designh}-16)$	15	N/A	N/A	12(11)	a / 30		
E	$(TOL-16)/(T_{designh}-16)$				TOL	a / 55.3		
F	$(T_{bivalent}-16)/(T_{designh}-16)$				Tbiv	a / 52		
G	$(-15-16)/(T_{designh}-16)$	N/A	N/A	N/A	-15	N/A		
Remark: a) With the water flow rate as determined at the standard rating conditions given in EN14511-2 at 47/55 conditions.								
2.Tested data/correction data(Average):								
General test conditions/ Part-Load	Unit	A(-7)/W52 (88%)	A2/W42 (54%)	A7/W36 (35%)	A12/W30 (15%)	A(-10)/W55.3 (100%)	A(-7)/W52 (88%)	
	--	A	B	C	D	E	F	
Data collection period	hh: min:sec	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00	
The heat pump defrosts	--	No	No	No	No	No	No	
Complete Cycles	--	0	0	0	0	0	0	
Barometric pressure	kPa	101.02	101.02	101.02	101.02	101.02	101.02	
Voltage	V	397.7	398.2	397.8	398.0	397.0	397.7	
Current input of the unit	A	10.05	4.65	2.87	2.46	10.05	10.05	
Power input of the unit	kW	6.389	2.561	1.492	1.251	6.347	6.389	
Test conditions indoor unit								
Inlet Water temperature, DB	°C	46.19	38.41	33.44	26.84	49.71	46.19	
Outlet Water temperature, DB	°C	52.06	41.99	35.97	29.92	55.08	52.06	

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Appendix I Test results

Test conditions outdoor unit							
Air inlet temperature, DB	°C	-6.99	2.07	7.03	11.99	-10.02	-6.99
Air inlet temperature, WB	°C	-8.00	0.98	5.98	10.98	-11.02	-8.00
Summary of the results							
Total heating capacity	kW	15.077	9.215	6.538	7.953	13.813	15.077
Effective power input	kW	6.472	2.644	1.575	1.334	6.430	6.472
Coefficient of performance (COP)	--	2.33	3.49	4.15	5.96	2.15	2.33
Compressor frequency	Hz	79	35	25	25	85	79
Water flow	m³/h	2.20	2.20	2.20	2.20	2.20	2.20
Remark: * In part condition, outlet temperature data is recorded by a full average complete cycle's data.							
3.Calculation/conclusion for SCOP(Average):							
Tdesignh(°C)	-10		Tbiv(°C)		-7		
Pdesignh(kW)	17.043		TOL(°C)		-10		
Test result A, B, C, D, E, F conditions:							
Condition	Part load	Measured capacity	COP at measured capacity	Cdh	CR	COP at part load	
E	17.043	13.813	2.15	0.00	1.00	2.15	
F	15.077	15.077	2.33	0.00	1.00	2.33	
A	15.077	15.077	2.33	0.00	1.00	2.33	
B	9.177	9.215	3.49	0.00	1.00	3.49	
C	5.900	6.538	4.15	0.99	0.90	4.15	
D	2.622	7.953	5.96	0.99	0.33	5.85	
CR: part load divided by capacity;							

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Appendix I Test results

Electric power consumptions	Unit	Value
Thermostat-off mode [P_{TO}]	kW	0.005
Standby mode [P_{SB}]	kW	0.005
Crankcase heater [P_{CK}]	kW	0.050
Off mode [P_{OFF}]	kW	0.005

Conclusions:	Unit	Value
SCOP _{on} :	kWh/kWh	3.51
SCOP:	kWh/kWh	3.51
Q_H :	kWh/year	35211
Q_{HE} :	kWh/year	10032
$\eta_{s,h}$	%	137.4
Seasonal space heating energy efficiency classes: (According (EU) No 811/2013 Table 1)	--	A++

Appendix I Test results

Table 3.	Heating mode(Low temperature application):					P	
Model	PW060-DKZLRS-A						
Product type	Air to Water	Heating season	☒ Average	☐ Warmer	☐ Colder		
1. Test conditions:							
Condition	Part Load Ratio in %				Outdoor heat exchanger	Indoor heat exchanger	
	Formula	A	W		Inlet dry (wet) bulb temperature °C	Inlet/outlet water temperatures (°C)	
A	$(-7-16)/(T_{designh}-16)$	88	N/A	N/A	-7(-8)	a / 34	
B	$(+2-16)/(T_{designh}-16)$	54	N/A	N/A	2(1)	a / 30	
C	$(+7-16)/(T_{designh}-16)$	35	N/A	N/A	7(6)	a / 27	
D	$(+12-16)/(T_{designh}-16)$	15	N/A	N/A	12(11)	a / 24	
E	$(TOL-16)/(T_{designh}-16)$				TOL	a / 35.3	
F	$(T_{bivalent}-16)/(T_{designh}-16)$				Tbiv	a / 34	
G	$(-15-16)/(T_{designh}-16)$	N/A	N/A	N/A	-15	N/A	
Remark: a) With the water flow rate as determined at the standard rating conditions given in EN14511-2 at 30/35 conditions.							
2.Tested data/correction data(Average):							
General test conditions/ Part-Load	Unit	A(-7)/W34 (88%)	A2/W30 (54%)	A7/W27 (35%)	A12/W24 (15%)	A(-10)/W35.3 (100%)	A(-7)/W34 (88%)
	--	A	B	C	D	E	F
Data collection period	hh: min:sec	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00
The heat pump defrosts	--	No	No	No	No	No	No
Complete Cycles	--	0	0	0	0	0	0
Barometric pressure	kPa	101.02	101.02	101.02	101.02	101.02	101.02
Voltage	V	397.7	398.3	398.5	398.5	397.5	397.7
Current input of the unit	A	9.35	3.98	3.07	2.77	8.99	9.35
Power input of the unit	kW	4.322	2.096	1.574	1.395	5.562	4.322
Test conditions indoor unit							
Inlet Water temperature, DB	°C	30.40	27.85	25.04	21.62	31.69	30.40
Outlet Water temperature, DB	°C	34.03	30.00	27.01	23.96	35.34	34.03

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Appendix I Test results

Test conditions outdoor unit							
Air inlet temperature, DB	°C	-6.97	2.09	7.06	12.01	-9.99	-6.97
Air inlet temperature, WB	°C	-7.98	1.00	5.99	10.99	-11.00	-7.98
Summary of the results							
Total heating capacity	kW	15.687	9.580	8.815	10.449	16.217	15.687
Effective power input	kW	4.462	2.236	1.714	1.534	5.702	4.462
Coefficient of performance (COP)	--	3.52	4.29	5.14	6.81	2.84	3.52
Compressor frequency	Hz	90	35	30	30	88	90
Water flow	m³/h	3.80	3.80	3.80	3.80	3.80	3.80
Remark: * In part condition, outlet temperature data is recorded by a full average complete cycle's data.							
3.Calculation/conclusion for SCOP(Average):							
Tdesignh(°C)	-10		Tbiv(°C)		-7		
Pdesignh(kW)	17.733		TOL(°C)		-10		
Test result A, B, C, D, E, F conditions:							
Condition	Part load	Measured capacity	COP at measured capacity	Cdh	CR	COP at part load	
E	17.733	16.217	2.84	0.00	1.00	2.84	
F	15.687	15.687	3.52	0.00	1.00	3.52	
A	15.687	15.687	3.52	0.00	1.00	3.52	
B	9.549	9.580	4.29	0.00	1.00	4.29	
C	6.139	8.815	5.14	0.99	0.70	5.12	
D	2.728	10.449	6.81	0.99	0.26	6.62	
CR: part load divided by capacity;							

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Appendix I Test results

Electric power consumptions	Unit	Value
Thermostat-off mode [P_{TO}]	kW	0.005
Standby mode [P_{SB}]	kW	0.005
Crankcase heater [P_{CK}]	kW	0.050
Off mode [P_{OFF}]	kW	0.005

Conclusions:	Unit	Value
SCOP _{on} :	kWh/kWh	4.47
SCOP:	kWh/kWh	4.46
Q_H :	kWh/year	36637
Q_{HE} :	kWh/year	8214
$\eta_{s,h}$	%	175.4
Seasonal space heating energy efficiency classes: (According (EU) No 811/2013 Table 2)	--	A+++

Appendix I Test results

Table 4.	Heating mode(Medium temperature application):						P	
Model	PW060-DKZLRS-A							
Product type	Air to Water	Heating season	☒	Average	☐	Warmer	☐	Colder
1. Test conditions:								
Condition	Part Load Ratio in %				Outdoor heat exchanger	Indoor heat exchanger		
	Formula	A	W	C	Inlet dry (wet) bulb temperature °C	Inlet/outlet water temperatures (°C)		
A	$(-7-16)/(T_{designh}-16)$	88	N/A	N/A	-7(-8)	a / 52		
B	$(+2-16)/(T_{designh}-16)$	54	N/A	N/A	2(1)	a / 42		
C	$(+7-16)/(T_{designh}-16)$	35	N/A	N/A	7(6)	a / 36		
D	$(+12-16)/(T_{designh}-16)$	15	N/A	N/A	12(11)	a / 30		
E	$(TOL-16)/(T_{designh}-16)$				TOL	a / 55.3		
F	$(T_{bivalent}-16)/(T_{designh}-16)$				Tbiv	a / 52		
G	$(-15-16)/(T_{designh}-16)$	N/A	N/A	N/A	-15	N/A		
Remark: a) With the water flow rate as determined at the standard rating conditions given in EN14511-2 at 47/55 conditions.								
2.Tested data/correction data(Average):								
General test conditions/ Part-Load	Unit	A(-7)/W52 (88%)	A2/W42 (54%)	A7/W36 (35%)	A12/W30 (15%)	A(-10)/W55.3 (100%)	A(-7)/W52 (88%)	
	--	A	B	C	D	E	F	
Data collection period	hh: min:sec	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00	2:00:00	
The heat pump defrosts	--	No	No	No	No	No	No	
Complete Cycles	--	0	0	0	0	0	0	
Barometric pressure	kPa	99.85	99.85	99.85	99.80	99.75	99.85	
Voltage	V	397.7	398.1	398.0	398.1	396.9	397.7	
Current input of the unit	A	11.40	4.98	3.00	2.52	10.58	11.40	
Power input of the unit	kW	7.252	2.753	1.560	1.283	6.679	7.252	
Test conditions indoor unit								
Inlet Water temperature, DB	°C	46.09	38.35	33.42	26.92	49.81	46.09	
Outlet Water temperature, DB	°C	52.15	42.00	35.93	29.92	55.10	52.15	

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Appendix I Test results

Test conditions outdoor unit							
Air inlet temperature, DB	°C	-6.99	2.06	7.03	11.99	-10.02	-6.99
Air inlet temperature, WB	°C	-7.99	0.99	5.98	10.98	-11.02	-7.99
Summary of the results							
Total heating capacity	kW	16.328	9.856	6.793	8.102	14.216	16.328
Effective power input	kW	7.386	2.887	1.694	1.417	6.813	7.386
Coefficient of performance (COP)	--	2.21	3.41	4.01	5.72	2.09	2.21
Compressor frequency	Hz	85	36	25	25	80	85
Water flow	m³/h	2.30	2.30	2.30	2.30	2.30	2.30
Remark: * In part condition, outlet temperature data is recorded by a full average complete cycle's data.							
3.Calculation/conclusion for SCOP(Average):							
Tdesignh(°C)	-10		Tbiv(°C)		-7		
Pdesignh(kW)	18.458		TOL(°C)		-10		
Test result A, B, C, D, E, F conditions:							
Condition	Part load	Measured capacity	COP at measured capacity	Cdh	CR	COP at part load	
E	18.458	14.216	2.09	0.00	1.00	2.09	
F	16.328	16.328	2.21	0.00	1.00	2.21	
A	16.328	16.328	2.21	0.00	1.00	2.21	
B	9.939	9.856	3.41	0.00	1.00	3.41	
C	6.389	6.793	4.01	0.00	0.94	4.01	
D	2.840	8.102	5.72	0.99	0.35	5.61	
CR: part load divided by capacity;							

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Appendix I Test results

Electric power consumptions	Unit	Value
Thermostat-off mode [P_{TO}]	kW	0.005
Standby mode [P_{SB}]	kW	0.005
Crankcase heater [P_{CK}]	kW	0.050
Off mode [P_{OFF}]	kW	0.005

Conclusions:	Unit	Value
SCOP _{on} :	kWh/kWh	3.39
SCOP:	kWh/kWh	3.38
Q_H :	kWh/year	38134
Q_{HE} :	kWh/year	11269
$\eta_{s,h}$	%	132.4
Seasonal space heating energy efficiency classes: (According (EU) No 811/2013 Table 1)	--	A++

Appendix II Marking plate

Nameplate	
Model: PW050-DKZLRS-A	
EVI DC Inverter Heat Pump	
Model	PW050-DKZLRS-A
Power supply	380~415V, 3N~, 50 Hz
Heating Capacity Range	5.9~18.2 kW
Heating input Range	1.20~4.11 kW
Cooling capacity Range	3.81~11.53 kW
Cooling input power	1.11~4.05 kW
Heating capacity Range(DWH)	4.80~14.72 kW
Heating input Range(DWH)	1.17~4.60 kW
Rated Current	7.15 A
Rated Power Input	3.93 kW
Refrigerant	R32/2700 g
Max operating pressure (High side)	4.3 MPa
Max operating pressure (Low side)	2.5 MPa
Maximum allowable pressure	4.4 MPa
Climate type	Low Temperature
Operating range	-30~43°C
Water Flow	3.1m³/h
Diameter of pipe	DN25
IP Grade	IPX4
Electric shock rating	I
Noise	57 dB(A)
Body size(W×D×H)	1050×480×1330 mm
Net weight/Gross weight	170/180 kg
Production date and code	See unit barcode
POWER WORLD MACHINERY EQUIPMENT CO., LTD	
No 24, The fourth industrial zone, Houting Street, Shajing Town, Baoan District, ShenZhen China	
Remark:	
Heating working condition: Inlet water temperature 30°C, Outlet water temperature 35°C Dry bulb temperature 7°C, Wet bulb temperature 6°C.	
Cooling working condition: Inlet water temperature 12°C, Outlet water temperature 7°C Dry bulb temperature 35°C, Wet bulb temperature 24°C.	
DHW working condition: Inlet water temperature 15°C, Outlet water temperature 55°C Dry bulb temperature 7°C, Wet bulb temperature 6°C.	
  	
Remark: -	

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Appendix II Marking plate

Nameplate	
Model: PW060-DKZLRS-A	
EVI DC Inverter Heat Pump	
Model	PW060-DKZLRS-A
Power supply	380~415V, 3N~, 50 Hz
Heating capacity Range	7.5~23.0 kW
Heating input range	1.53~5.23 kW
Cooling capacity range	4.73~14.6 kW
Cooling input power	1.39~5.14 kW
Heating capacity range(DWH)	6.1~18.5 kW
Heating input range(DWH)	1.53~5.97 kW
Rated Current Input	8.49 A
Rated Power Input	4.751 kW
Refrigerant	R32/2700 g
Noise	58 dB(A)
Climate type	Low Temperature
Operating range	-30~43°C
Water flow	3.8m³/h
Diameter of pipe	DN25
Moisture resistance	IPX4
Max operating pressure (High side)	4.3 MPa
Max operating pressure (Low side)	2.5 MPa
Maximum allowable pressure	4.4 MPa
Electric shock rating	I
Body size(W×D×H)	1050×480×1330 mm
Net weight/Gross weight	180/190 kg
Production date and code	See unit barcode
POWER WORLD MACHINERY EQUIPMENT CO., LTD No 24, The fourth industrial zone, Houting Street, Shajing Town, Baoan District, ShenZhen China	
Remark: Heating working condition: Inlet water temperature 30°C, Outlet water temperature 35°C Dry bulb temperature 7°C, Wet bulb temperature 6°C Cooling working condition: Inlet water temperature 12°C, Outlet water temperature 7°C Dry bulb temperature 35°C, Wet bulb temperature 24°C DHW working condition: Inlet water temperature 15°C, Outlet water temperature 55°C Dry bulb temperature 7°C, Wet bulb temperature 6°C.	
  	
Remark: -	

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Appendix III photo documentaiton

Details of:	Overall view for PW050-DKZLRS-A
View: ☐ General ☐ Front ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom	

Details of:	Compressor for PW050-DKZLRS-A
View: ☐ General ☐ Front ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom	

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Appendix III photo documentaiton

Details of:	Fan Motor for PW050-DKZLRS-A
View:	

Details of:	Main Control Board for PW050-DKZLRS-A
View:	

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Appendix III photo documentaiton

Details of:	Overall view for PW060-DKZLRS-A
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	Compressor for PW060-DKZLRS-A
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Doc

Appendix III photo documentaiton

Details of:	Fan Motor for PW060-DKZLRS-A
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	Main Control Board for PW060-DKZLRS-A
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Appendix IV Construction data form

Model: PW050-DKZLRS-A		
Part		Technical data
1. Compressor		
	Manufacture:	Panasonic Wanbao Appliances Compressor (Guangzhou) Co., Ltd.
	Type:	9VD420ZAA2J
	Rated capacity:	4930W; R32
	Serial-number:	N/A
2. Condenser		
	Manufacture:	Foshan H,N,E Energy-saving Equipment Co.,Ltd
	Type:	ZE-0390301KQ-QT
	Heat exchanger:	Tube in Shell heat exchanger
	Dimension (mm):	230(L)mmX1090(H)mmX169(D)mm
3. Evaporator		
	Manufacture:	Guangzhou AOTAI Refrigeration Equipment co., LTD
	Type:	ZC-060201216-02
	Heat exchanger:	Finned-coil heat exchanger
	Dimension (mm):	760(L)mmX1300(H)mmX285(D)mm
4. Fan motor		
	Manufacture:	Jiangmen LT Motor Co., Ltd
	Type:	RD150HA
	Fan type:	3 blade
5. Main control board		
	Manufacture:	Guangdong Chico Electronic Inc.
	Type:	PW58183
	Specification:	400V~; 3N; 50Hz

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Appendix IV Construction data form

Model: <u>PW060-DKZLRS-A</u>		
Part		Technical data
1. Compressor		
	Manufacture:	Panasonic Wanbao Appliances Compressor
	Type:	9VD420ZAA2J
	Rated capacity:	4930W; R32
	Serial-number:	N/A
2. Condenser		
	Manufacture:	Foshan H,N,E Energy-saving Equipment Co.,Ltd
	Type:	ZE-0390301KQ-QT
	Heat exchanger:	Tube in Shell heat exchanger
	Dimension (mm):	230(L)mmX1090(H)mmX169(D)mm
3. Evaporator		
	Manufacture:	Guangzhou AOTAI Refrigeration Equipment
	Type:	ZC-060201216-01
	Heat exchanger:	Finned-coil heat exchanger
	Dimension (mm):	760(L)mmX1300(H)mmX285(D)mm
4. Fan motor		
	Manufacture:	Jiangmen LT Motor Co., Ltd
	Type:	RD150HA
	Fan type:	3 blade
5. Main control board		
	Manufacture:	Guangdong Chico Electronic Inc.
	Type:	PW58184
	Specification:	400V~; 3N; 50Hz

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Appendix V Equipment List

No.	Type	Manufacture	Model	Equipment ID	Calibration Due Date
1	R&A performance measuring system	GEI	20kW	-	2021-08-02
2	Temperature and humidity meter	VAISALA	HMD42	H5110021	2021-08-02
3	Platinum resistance	YINUO	Pt100	7430F	2022-05-20
4	Platinum resistance	YINUO	Pt100	7434F	2022-05-20
5	Flowmeter	YOKOGAWA	AXF015G	S5M201965	2022-05-20
6	Flowmeter	YOKOGAWA	AXF040G	S5M805005	2022-05-20
7	Pressure transmitter	MICRO	MPM489	240502	2021-08-03
8	Pressure transmitter	MICRO	MPM489	240503	2021-08-03
9	Water pressure difference transmitter	MICRO	MDM3051	291459	2021-08-03
10	AC source Supply	YANGHONG	YF-3600	-	2022-01-01
11	Water pressure difference transmitter	MICRO	MDM3051	291459	2021-08-03
12	AC source Supply	YANGHONG	YF-3600	-	2022-01-01
13	Temperature and humidity meter	H5110021	HMD42	VAISALA	2021-08-03

-- End of Report --