



Technical Report

Technical Report No.: 64.181.26.00409.01 Rev.00

Date: 2026-05-15

Client: Name: Guangdong New Energy Technology Co., Ltd

Address: NO.125, Chuangyou Road, Xintang Town, Zengcheng, 511340
Guangzhou, Guangdong, PEOPLE'S REPUBLIC OF CHINA

Contact person: Yao Chuang

Manufacturer: Name: Guangdong New Energy Technology Co., Ltd

Address: NO.125, Chuangyou Road, Xintang Town, Zengcheng, 511340
Guangzhou, Guangdong, PEOPLE'S REPUBLIC OF CHINA

Factory: Name: Guangdong New Energy Technology Co., Ltd

Address: NO.125, Chuangyou Road, Xintang Town, Zengcheng, 511340
Guangzhou, Guangdong, PEOPLE'S REPUBLIC OF CHINA

Test object: Product: HEAT PUMP WATER TANK

Model: NE-F185+65WBHMIC6-SA,
NE-F250+80WBHMIC6-SA,
NE-F300+110WBHMIC6-SA

Trade mark: --

Test specification: ☒ EN 12897:2016+A1:2020

Purpose of examination: • Testing and evaluation (☐ visual / ☐ partial) according to the test specification

Test result: The test results show that the presented product is in compliance with the above listed test specifications.

Test report form No.: TR_GHH_GZH_24.06E_EN12897 Rev.:00:2023-12

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1 Description of the test object

1.1 Function

Manufacturer's specification for intended use:

The appliance is HOT WATER STORAGE TANKS.

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 :	NE-F185+65WBHMIC6-SA, NE-F250+80WBHMIC6-SA, NE-F300+110WBHMIC6-SA
Rated Voltage (V) :	220V~
Rated Frequency (Hz) :	50
Rated Power (W) :	see the nameplate
Rated Current (A) :	see the nameplate
Auxiliary heater Power (W) :	2000
Protection Class :	Class I
Protection Against Moisture :	IP X1
Construction :	Stationary
Supply connection :	☐ Non detachable cord ☒ Permanent connection to fixed wiring
Operation mode:	☒ Continuous operation; ☐ Intermittent operation; ☐ Short time operation;
Refrigerant/charge (g) :	N/A
Sound power level dB(A) :	N/A
Net weight (kg):	see the nameplate
Rated capacity (L):	see the nameplate
Dimension(mm):	see the nameplate
standing loss (W)	see the Appendix I Test results
Series No :	21220226040101401800020001 for NE-F185+65WBHMIC6-SA, 21220225091600702500050005 for NE-F250+80WBHMIC6-SA, 21220226040101503000080001 for NE-F300+110WBHMIC6-SA

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2 Order

2.1 Date of Purchase Order, Customer's Reference

2026-03-03 Guangdong New Energy Technology Co., Ltd

2.2 Test Sample(s)

• Reception date(s): 2026-04-17

• Location(s) of reception:

Guangdong New Energy Technology Co., Ltd

Address: NO.125, Chuangyou Road, Xintang Town, Zengcheng, 511340 Guangzhou, Guangdong, PEOPLE'S REPUBLIC OF CHINA

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

2.3 Date(s) of Testing

2026-04-17 to 2026-05-06

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

☒ Decision rule according to ILAC-G8:09/2019 clause 4.2.1 Binary statement for simple acceptance rule or IEC Guide 115:2023, clause 4.3 Simple acceptance was applied.

☐ Decision rule according to customer's requirements was applied. It is:

☐ Decision rule according to ILAC-G8:09/2019 clause 4.2.2 Binary statement with guard band - guard band length = 95 % extended measurement uncertainty, was applied.

☐ Decision rule (based on ILAC-G8:09/2019 clause 4.2.3 Non-binary statement with guard band, guard band length = 95 % extended measurement uncertainty) for an upper specification limit (A lower limit or specification with an up-per and a lower limit is treated similarly.):

• Compliance with the requirement: If a specification limit is not breached by a measurement result plus the expanded uncertainty with a 95% coverage probability, then compliance with the specification will be stated (e. g. Pass).

• Non-compliance with the requirement: If a specification limit is exceeded by the measurement result minus the expanded uncertainty with a 95% coverage probability, then non-compliance with the specification will be stated (e. g. Fail).

• Inconclusive result: If a measurement result plus/minus the expanded uncertainty with a 95 % coverage probability overlaps the limit it will be stated that it is not possible to state compliance or non-compliance.

☐ There are no statements to conformity or no results with measurand stated in this report, no decision rule has been applied.

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.

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5 Documentation

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

6 Test History

- 1) The appliance is HOT WATER TANK, for indoor household use only.
- 2) The main power is supplied by a 3-pole supply cord connecting to fixed wiring.
- 3) For test purposes, the storage water tank is fitted with an electrical heater at the lowest possible point, the test carried out on Lower heater.
- 4) The thermostatic control device supplied by manufacturer, the thermostat cut-out temperature setting 65°C.
- 5) This report only for Standing loss test only specified by client.
- 6) The test voltage, frequency, and electric heater power are according to the manufacturer's requirements.
- 7) This report only tested the "DHW TANK" part of the appliance.

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

Tested by: Yongxin Huang, Project Handler

printed name, function & signature

Approved by: Plum Li, Designated Reviewer

printed name, function & signature

Yongxin Huang


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Appendix I Test results

Table 1	Measurement of standing heat loss for factory insulated storage water heaters		
Model	NE-F185+65WBHMIC6-SA		
Measured quantity	Unit	Data	Description
--	litres	181.2	Actual volume
θ_{a1}	°C	19.95	Measured ambient temperature at a given position 1
θ_{a2}	°C	19.99	Measured ambient temperature at a given position 2
θ_{a3}	°C	20.11	Measured ambient temperature at a given position 3
θ_w	°C	65.50	Target temperature of stored water for heat loss testing
θ_d	°C	45.48	Overall average differential
--	h	74.40	Measurement period
--	kWh	4.45	Power was consumed
Q_c^{**}	kWh/24h	1.43	Corrected 24h heat loss
Q_{st}^{**}	kWh/24h	1.42	Declared standing heat loss
Standing loss S^*	W	59	Heat Loss in W
Energy efficiency classes	--	B	According (EU) No.812/2013 ANNEX II Table 2
Remark: The standing loss requirement according to (EU) No.814/2013 ANNEX II clause 2.1. * rounded to the nearest whole number ** rounded to two decimal places			

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Appendix I Test results

Table 2	Measurement of standing heat loss for factory insulated storage water heaters		
Model	NE-F250+80WBHMIC6-SA		
Measured quantity	Unit	Data	Description
--	litres	247.4	Actual volume
θ_{a1}	°C	20.00	Measured ambient temperature at a given position 1
θ_{a2}	°C	20.00	Measured ambient temperature at a given position 2
θ_{a3}	°C	20.20	Measured ambient temperature at a given position 3
θ_w	°C	65.40	Target temperature of stored water for heat loss testing
θ_d	°C	45.33	Overall average differential
--	h	73.54	Measurement period
--	kWh	5.19	Power was consumed
Q_c^{**}	kWh/24h	1.69	Corrected 24h heat loss
Q_{st}^{**}	kWh/24h	1.68	Declared standing heat loss
Standing loss S^*	W	70	Heat Loss in W
Energy efficiency classes	--	C	According (EU) No.812/2013 ANNEX II Table 2
Remark: The standing loss requirement according to (EU) No.814/2013 ANNEX II clause 2.1. * rounded to the nearest whole number ** rounded to two decimal places			

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Appendix I Test results

Table 3	Measurement of standing heat loss for factory insulated storage water heaters		
Model	NE-F300+110WBHMIC6-SA		
Measured quantity	Unit	Data	Description
--	litres	298.8	Actual volume
θ_{a1}	°C	20.39	Measured ambient temperature at a given position 1
θ_{a2}	°C	20.01	Measured ambient temperature at a given position 2
θ_{a3}	°C	20.20	Measured ambient temperature at a given position 3
θ_w	°C	65.50	Target temperature of stored water for heat loss testing
θ_d	°C	45.30	Overall average differential
--	h	73.52	Measurement period
--	kWh	5.42	Power was consumed
Q_c **	kWh/24h	1.77	Corrected 24h heat loss
Q_{st} **	kWh/24h	1.76	Declared standing heat loss
Standing loss S^*	W	73	Heat Loss in W
Energy efficiency classes	--	C	According (EU) No.812/2013 ANNEX II Table 2
Remark: The standing loss requirement according to (EU) No.814/2013 ANNEX II clause 2.1. * rounded to the nearest whole number ** rounded to two decimal places			

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Appendix II Marking plate

Nameplate

Model: NE-F185+65WBHMIC6-SA

DHW TANK	
MODEL	NE-F185+65WBHMIC6-SA
RATED VOLUME (L)	185
MAX. WORKING PRESSURE OF WATER (MPa)	0.8
MAX. SAFETY TEMP. ON THE WATER SIDE (°C)	95
COIL AREA OF DHW PIPE (m ²)	1.98
COIL DIAMETER OF DHW (mm)	Ø28
MAX. WORKING PRESSURE OF DHW COIL (MPa)	0.3
MAX. SAFE TEMP. OF DHW COIL (°C)	110
PRESSURE DROP OF DHW COIL (MPa)	0.04
DHW PIPE CONNECTIONS (inch)	G3/4"
DIMENSION OF THE DRAINAGE SOCKET (inch)	G3/4"
DIMENSION OF THE TEMP. SENSOR (inch)	M12
ELECTRIC HEATER RATED POWER (kw)	2
ELECTRIC HEATER VOLTAGE (V)	220
MAX. RUNNING CURRENT (A)	9.1
BUFFER TANK	
RATED VOLUME (L)	65
MAX. WORKING PRESSURE OF WATER (MPa)	0.3
MAX. SAFETY TEMP. ON THE WATER SIDE (°C)	95
BUFFER TANK PIPE CONNECTIONS (inch)	G5/4"
DIMENSION OF THE DRAINAGE SOCKET (inch)	G3/4"
DIMENSION OF THE TEMP. SENSOR (inch)	M12
DHW/BUFFER TANK	
NET DIMENSIONS (mm)	Ø560×1895
NET WEIGHT (kg)	55



Bar code

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Appendix II Marking plate

Nameplate

Model: NE-F250+80WBHMIC6-SA

HEAT PUMP WATER TANK	
DHW TANK	
MODEL	NE-F250+80WBHMIC6-SA
RATED VOLUME (L)	250
MAX. WORKING PRESSURE OF WATER (MPa)	0.8
MAX. SAFETY TEMP. ON THE WATER SIDE (°C)	95
COIL AREA OF DHW PIPE (m²)	3.18
COIL DIAMETER OF DHW (mm)	Ø32
MAX. WORKING PRESSURE OF DHW COIL (MPa)	0.3
MAX. SAFE TEMP. OF DHW COIL (°C)	110
PRESSURE DROP OF DHW COIL (MPa)	0.05
DHW PIPE CONNECTIONS (inch)	G3/4"
DIMENSION OF THE DRAINAGE SOCKET (inch)	G3/4"
DIMENSION OF THE TEMP. SENSOR (inch)	M12
ELECTRIC HEATER RATED POWER (kW)	2
ELECTRIC HEATER VOLTAGE (V)	220
MAX. RUNNING CURRENT (A)	9.1
BUFFER TANK	
RATED VOLUME (L)	81.5
MAX. WORKING PRESSURE OF WATER (MPa)	0.3
MAX. SAFETY TEMP. ON THE WATER SIDE (°C)	95
BUFFER TANK PIPE CONNECTIONS (inch)	G5/4"
DIMENSION OF THE DRAINAGE SOCKET (inch)	G3/4"
DIMENSION OF THE TEMP. SENSOR (inch)	M12
DHW/BUFFER TANK	
NET DIMENSIONS (mm)	Ø650×1895
NET WEIGHT (kg)	85
	
Bar code	

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Appendix II Marking plate

Nameplate

Model: NE-F300+110WBHMIC6-SA

DHW TANK	
MODEL	NE-F300+110WBHMIC6-SA
RATED VOLUME (L)	300
MAX. WORKING PRESSURE OF WATER (MPa)	0.8
MAX. SAFETY TEMP. ON THE WATER SIDE (°C)	95
COIL AREA OF DHW PIPE (m ²)	3.18
COIL DIAMETER OF DHW (mm)	Ø32
MAX. WORKING PRESSURE OF DHW COIL (MPa)	0.3
MAX. SAFE TEMP. OF DHW COIL (°C)	110
PRESSURE DROP OF DHW COIL (MPa)	0.05
DHW PIPE CONNECTIONS (inch)	G3/4"
DIMENSION OF THE DRAINAGE SOCKET (inch)	G3/4"
DIMENSION OF THE TEMP. SENSOR (inch)	M12
ELECTRIC HEATER RATED POWER (kW)	2
ELECTRIC HEATER VOLTAGE (V)	220
MAX. RUNNING CURRENT (A)	9.1
BUFFER TANK	
RATED VOLUME (L)	110.52
MAX. WORKING PRESSURE OF WATER (MPa)	0.3
MAX. SAFETY TEMP. ON THE WATER SIDE (°C)	95
BUFFER TANK PIPE CONNECTIONS (inch)	G5/4"
DIMENSION OF THE DRAINAGE SOCKET (inch)	G3/4"
DIMENSION OF THE TEMP. SENSOR (inch)	M12
DHW/BUFFER TANK	
NET DIMENSIONS (mm)	Ø700×1895
NET WEIGHT (kg)	95



Bar code

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Appendix III photo documentaiton

Details of:	Overall view for NE-F185+65WBHMIC6-SA
View:	
☐ General	
☒ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	Overall view for NE-F185+65WBHMIC6-SA
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☒ Left	
☐ Top	
☐ Bottom	

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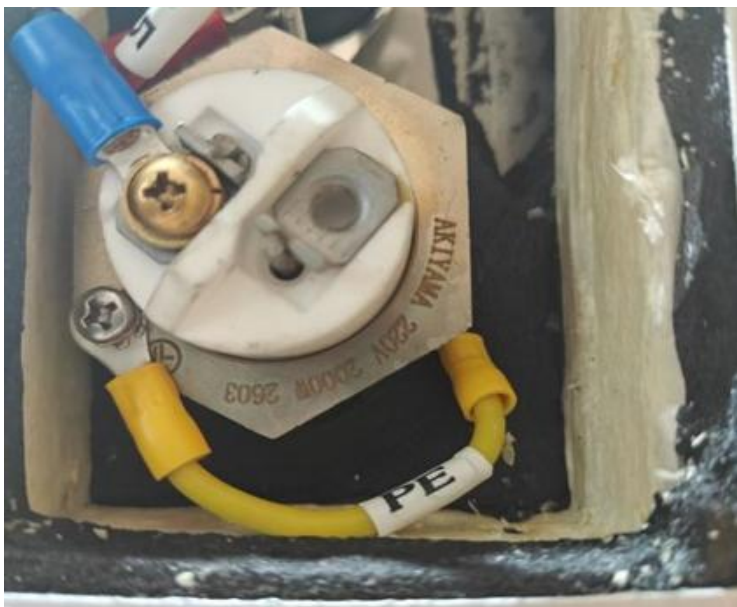
Appendix III photo documentaiton

Details of:	Overall view for NE-F185+65WBHMIC6-SA
View:	
☐ General	
☐ Front	
☐ Rear	
☒ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	Overall view for NE-F185+65WBHMIC6-SA
View:	
☐ General	
☐ Front	
☒ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Appendix III photo documentaiton

Details of:	electric heater for NE-F185+65WBHMIC6-SA
View:	
☐ General ☐ Front ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom	

Details of:	Overall view for NE-F250+80WBHMIC6-SA
View:	
☐ General ☒ Front ☐ Rear ☐ Right ☐ Left ☐ Top ☐ Bottom	

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Appendix III photo documentaiton

Details of:	Overall view for NE-F250+80WBHMIC6-SA
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☒ Left	
☐ Top	
☐ Bottom	

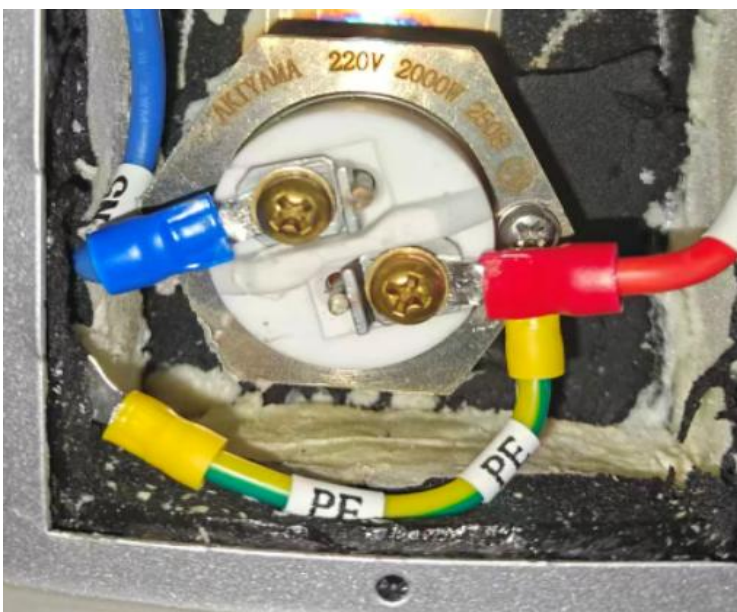
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View:	
☐ General	
☐ Front	
☐ Rear	
☒ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Appendix III photo documentaiton

Details of:	Overall view for NE-F250+80WBHMIC6-SA
View:	
☐ General	
☐ Front	
☒ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	electric heater for NE-F250+80WBHMIC6-SA
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Appendix III photo documentaiton

Details of:	Overall view for NE-F300+110WBHMIC6-SA
View:	
☐ General	
☒ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	Overall view for NE-F300+110WBHMIC6-SA
View:	
☐ General	
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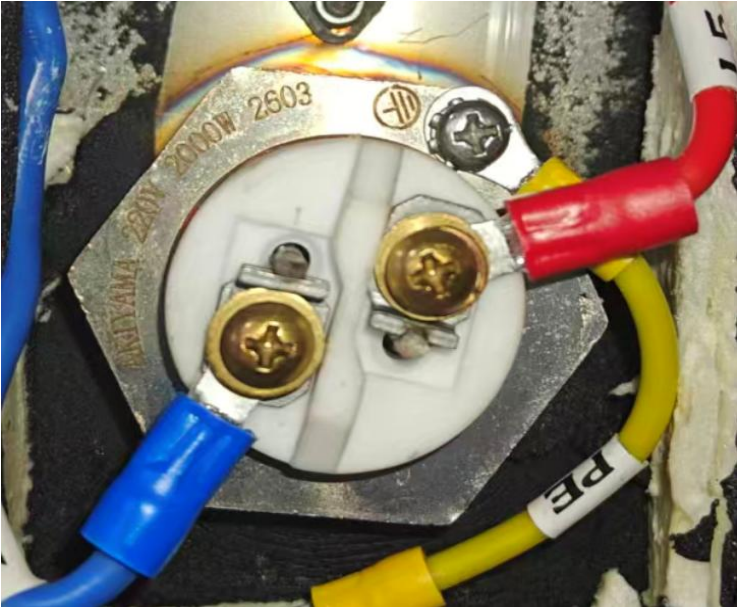
Appendix III photo documentaiton

Details of:	Overall view for NE-F300+110WBHMIC6-SA
View:	
☐ General	
☐ Front	
☐ Rear	
☒ Right	
☐ Left	
☐ Top	
☐ Bottom	

Details of:	Overall view for NE-F300+110WBHMIC6-SA
View:	
☐ General	
☐ Front	
☒ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Appendix III photo documentaiton

Details of:	electric heater for NE-F300+110WBHMIC6-SA
View:	
☐ General	
☐ Front	
☐ Rear	
☐ Right	
☐ Left	
☐ Top	
☐ Bottom	

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Appendix IV Construction data form

Model:	NE-F185+65WBHMIC6-SA	
Part		Technical data
1. Heater		
	Manufacture:	XIAMEN GREATHEAT ELECTRIC HEATING TECHNOLOGY CO., LTD
	Specification:	2kW; 220V~; 50Hz
2. Tank liner		
	Manufacture:	Guangdong New Energy Technology Co., Ltd
	Specification:	Φ470×940mm
3.Rod thermostat		
	Manufacture:	Anxinjie Electrical Appliance Factory In Dongsheng Town, Zhongshan City
	Specification:	Tmin 0°C; Tmax 93°C

Model:	NE-F250+80WBHMIC6-SA	
Part		Technical data
1. Heater		
	Manufacture:	XIAMEN GREATHEAT ELECTRIC HEATING TECHNOLOGY CO., LTD
	Specification:	2kW; 220V~; 50Hz
2. Tank liner		
	Manufacture:	Guangdong New Energy Technology Co., Ltd
	Specification:	Φ550×980mm
3.Rod thermostat		
	Manufacture:	Anxinjie Electrical Appliance Factory In Dongsheng Town, Zhongshan City
	Specification:	Tmin 0°C; Tmax 93°C

Model:	NE-F300+110WBHMIC6-SA	
Part		Technical data
1. Heater		
	Manufacture:	XIAMEN GREATHEAT ELECTRIC HEATING TECHNOLOGY CO., LTD
	Specification:	2kW; 220V~; 50Hz
2. Tank liner		
	Manufacture:	Guangdong New Energy Technology Co., Ltd
	Specification:	Φ600×960mm
3.Rod thermostat		
	Manufacture:	Anxinjie Electrical Appliance Factory In Dongsheng Town, Zhongshan City
	Specification:	Tmin 0°C; Tmax 93°C

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Appendix V Equipment List

No.	Type	Manufacture	Model	Equipment ID	Calibration Due Date
1	Electronic scale	Yongkang City - East weighing instrument Co., LTD	TCS-500	190725302	2027-01-21
2	Platinum thermistor	B+B	Pt100	—	2026-08-04
3	Thermoelectric couple	OMEGA	T-type	—	2026-08-04
4	Ac digital power meter	QINGZHI	8967B	8919050002	2026-08-04
5	Pressure transmitter	Danfoss	(0~60) bar	—	2026-08-04
6	Variable frequency regulated power supply	JINGJIU	JJ98SS603DRP-60KVA	103159	2027-05-16
7	Electromagnetic flowmeter	YOKOGAWA	AXF025G	S5M402367	2026-08-04
8	Current transformer	QINGZHI	—	—	2026-08-04

-- End of Report --