



# CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

No.: 2022312312000162

**Applicant** Heat Trace Asia Ltd  
**Address** B410, No.189 Xijunhuan Road, Minhang, Shanghai, China  
**Manufacturer** Heat Trace Limited  
**Address** Mere's Edge, Chester Road, Helsby, Frodsham, Cheshire, WA6 0DJ, United Kingdom  
**Production Factory** Heat Trace Limited  
**Production Address** Mere's Edge, Chester Road, Helsby, Frodsham, Cheshire, WA6 0DJ, United Kingdom  
**Product** Series Resistance Heating Tapes  
**Model/Type** HTS\*\*M-\*\*\*\*  
**Ex marking** Ex eb IIC T1...T6 Gb  
**Reference Standards** GB/T 3836.1-2021, GB/T 3836.3-2021

**Certification mode** Type Test + Initial Factory Inspection + Post-Certification Surveillance

The product(s) is verified and certified according to CNCA-C23-01: 2019 *China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product* and CNEX-C2301-2019 *Guideline of China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product*.

See Annex for the detailed product information (3 pages)

Initial issue date: 2022-04-26

Issued date: 2022-10-22

Valid to: 2027-04-25

The validity of this certificate is maintained through the regular supervision of the issuing authority during the validity period.

Where any discrepancy arises between the English translation and the original Chinese version, the Chinese version shall prevail.

Director:

穆大玉



Nanyang Explosion Protected Electrical  
Apparatus Research Institute Co., Ltd.



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CN 0001420





# CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

## (Annex)

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### Product information:

1. This certificate covers the following models:

- HTS\*\*M-\*\*\*\*

Nomenclature:

HTS	*	*	M	-	*	*	**
--	(1)	(2)	(3)	--	(4)	(5)	(6)

(1) Number of foils

2 = Two

3 = Three

(2) Foil material

F = Copper foil

FA = Aluminium foil

(3) Multiple Foils configuration

(4) Continuous conductive covering

C = Tinned copper braid

A = Aluminium jacket

N = Nickel plated copper braid

(5) Optional Outer jacket materials available

F = Fluoropolymer(MFA / PFA)

S = Silicone rubber

(6) Conductor cross sectional area

For copper conductor:

0.2 to 1.6: 0.2mm to 1.6mm

For aluminium conductor:

0.6 to 2.4: 0.6mm to 2.4mm

The power output is determined by the resistance of the foil; therefore, the foil thickness is altered to provide the required power output.

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The temperature class is dependent on the maximum pipe temperature, see Table 1.

Table 1

Product type	Nominal output (W/m)	Maximum permissible workpiece temperature (°C)					
		T6 (85°C)	T5 (100°C)	T4 (135°C)	T3 (200°C)	T2 (300°C)	T1 (450°C)
HTS3FM-C	10	47	66	107	181	200	200
HTS3FM-A	20		32	75	157	191	191
HTS3FM-N	30			41	132	163	163
HTS3FAM-C	40				108	133	133
HTS3FAM-A	50				76	97	97
HTS3FAM-N							
HTS3FM-CS	10	57	73	112	181	200	200
HTS3FM-AS	20	37	53	93	166	180	180
HTS3FM-NS	30		31	73	152	157	157
HTS3FAM-CS	40			51	127	127	127
HTS3FAM-AS	50			27	92	92	92
HTS3FAM-NS							
HTS3FM-CF	10	57	73	112	181	192	192
HTS3FM-AF	20	37	53	93	166	177	177
HTS3FM-NF	30		31	73	152	165	165
HTS3FAM-CF	40			51	127	127	127
HTS3FAM-AF	50			27	92	92	92
HTS3FAM-NF							

The manufacturer declared parameters for the heating foils are listed below:

Process temperature range (Maintain Temperature): see Table 1

Maximum Continuous Exposure Temperature (Power On): +200°C

Maximum Permissible Exposure Temperature (Power Off): +200°C

Maximum Withstand Temperature: +200°C

Minimum Installation Temperature: -40°C

Minimum Bend Radius: 75mm

Braid Coverage: >70%

Braid Thickness: 0.5mm

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Earth Braid Resistance: 18.2Ω/km

Cable Length: up to 2Km

Maximum Voltage: 600V AC (3 phase)

Ex marking: Ex eb IIC T1...T6 Gb

- Producers should organize production in accordance with the technical documents approved by the certification body.

2. Specific conditions of safety use:

- Ambient temperature range: -40°C to +60°C.
- The heaters shall be installed in suitable certified terminal boxes, via suitable certified terminals and cables.
- Suitable cold leads shall be selected by the end user.
- The heating tapes and splices (permitted by this certificate) shall not be exposed to UV light, or a combination of UV light and moisture in service.
- See instruction for other information.

3. Certificate related report(s):

- Type test report: CQST2112C180, CQST2112C180/01
- Factory inspection report: CN2020Q010179

4. Certificate change information:

- 1st change on October 22, 2022: Updated the standards for certification.

Issued date: 2022-10-22

Director:

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