

1 **PRODUCT CONFORMITY CERTIFICATE - Apparatus**

2 Certificate No. Sira Ex 02Y3068

3 This Certificate is issued for the electrical apparatus:
Powerheat PHT Constant Power Heating Cable

4 Manufactured by:

Heat Trace Limited
Tracer House
Cromwell Road
Bredbury
Stockport
SK6 2RF
UK

5 This electrical apparatus and any acceptable variation thereto is specified in the schedule to this Certificate and the documents therein referred to.

6 Sira Certification Service being accredited by the United Kingdom Accreditation Service (UKAS) through the NACB scheme certifies that the apparatus has been found to comply with the following Standards:

IEC 60079-0:2000
IEC 60079-7:2001
IEC 62086-1:2001

The assessment and test results are recorded in Sira Test Report R53A8908A.

7 The apparatus marking shall include the code:

Ex e II T (see schedule)

8 The manufacturer of the electrical apparatus referred to in this Certificate has the responsibility to ensure that the apparatus conforms to the specification laid down in the Schedule to this Certificate and has satisfied the routine verifications and tests referred to therein.

The use of this apparatus will normally be the subject of National Legislation and/or Installation Codes.



M D Shearman
Certification Manager

Dated 7 March 2003
File No. 53A8908
C. Index: 06

This certificate and its schedules may only be reproduced in its entirety and without change

SCHEDULE

PRODUCT CONFORMITY CERTIFICATE Sira Ex 02Y3068

Dated

7 March 2003

APPARATUS

The Powerheat PHT Heating Cables are constant power trace heating cables that are used to protect against freezing or maintain temperatures. The cables are rated at up to 70 W/m on a supply voltage up to 277 V. They comprise two insulated parallel bus wires, around which is extruded a layer of insulation. A resistance wire is spiralled over the core, which is notched at intervals so that the resistance wire connects to the bus wires underneath. A further layer of mica and glass tape insulation is extruded over the top of the resistance wire. The insulation is covered with a nickel plated copper braid and an additional anti-corrosive covering manufactured from fluoropolymer may be extruded over the braid.

The heating cables are cut to length to form a unit that is terminated at each end with a seal kit. The equipment is designed to be connected to a supply by means of suitable certified cable entries and junction boxes in accordance with the manufacturer's installation instructions. The maximum surface temperature is dependent on the maximum permissible workpiece temperature as shown in the following tables:

Table A			Maximum Permissible Workpiece Temperature					
Maximum surface temperature:			T6	T5	T4	T3	T2	T1
Product type	Nominal output (W/m)	output						
PHT... N	10		44	61	102	180	275	275
	30		-	-	24	116	246	246
	50		-	-	-	48	200	200
	70		-	-	-	-	144	144
PHT...NF	10		40	60	105	186	275	275
	30		-	-	22	132	255	255
	50		-	-	-	63	215	215
	70		-	-	-	-	168	168

Table B			Maximum Permissible Workpiece Temperature					
Maximum surface temperature:			T6	T5	T4	T3	T2	T1
Product type	Nominal output (W/m)	output						
PHT... N	10		50	66	108	186	275	275
	30		-	-	42	133	258	258
	50		-	-	-	75	220	220
	70		-	-	-	29	178	178
PHT...NF	10		48	68	113	190	275	275
	30		-	-	43	150	265	265
	50		-	-	-	95	231	231
	70		-	-	-	33	196	196

Table A: Stabilised design system or Protective System

Table B: Protective system with Heat Trace 'Powermatch' power controller

This certificate and its schedules may only be reproduced in its entirety and without change

SCHEDULE

PRODUCT CONFORMITY CERTIFICATE Sira Ex 02Y3068

Dated

7 March 2003

DESCRIPTIVE DOCUMENTS

Number	Sheet	Rev	Date	Description
HC2900/s	1 of 1	0	14 Oct 02	PHT specification
BES2-PL	1 of 1	A	06 Mar 00	BES2 – End seal reference list
BES3-PL	1 of 1	B	06 Feb 01	BES3 – End seal reference list
BPS2-PL	1 of 1	B	06 Feb 01	BPS2 – Silicone boot power seal reference list
HES2-PL	1 of 1	A	06 Mar 00	HES2 – Shrink sleeve end seal reference list
HPS2-PL	1 of 1	A	06 Mar 00	HPS2 – Shrink sleeve power seal reference list

CONDITIONS OF CERTIFICATION

- The use of the Sira Certification Service Mark is subject to the Regulations applicable to the holders of Sira certificates.
- This certificate relates only to the apparatus specified herein as executed in the samples supplied for evaluation.
- In affixing the Sira certificate number to the apparatus the manufacturer attests on its own responsibility that the apparatus conforms to the documents listed herein.
If the marked apparatus is found not to comply Sira Certification Service should be notified immediately at its office at Rake Lane, Eccleston, Chester, CH4 9JN, England.
- The apparatus and that part of the manufacturer's quality management system controlling the production of the apparatus covered by this certificate shall be subject to periodic surveillance by Sira in accordance with the Regulations applicable to the holders of SCS certificates.
- An electric strength test of $\sqrt{2} \times E + 1000$ V rms shall be applied between the conductors and the outer braid or jacket as appropriate for 60 seconds as required by clause 5.1.2 of IEC 62086-1:2001.
- An electric strength test of the polymeric sheath (overjacket) used for corrosion resistance shall be carried out in accordance with the requirements of IEC 62806-1:2001 clause 5.2.1.
- The manufacturer shall verify the output rating for each cable manufactured in accordance with IEC 62086-1-2001 clause 5.2.2.

SPECIAL CONDITIONS FOR SAFE USE

None

This certificate and its schedules may only be reproduced in its entirety and without change