



1 **EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **Baseefa08ATEX0184X**

4 Equipment or Protective System: **DigiTrace NGC-20-CL-E Heat-Tracing Temperature Control Unit**

5 Manufacturer: **Tyco Thermal Controls**

6 Address: **Research Park Haasrode – Zone 2, Romeinsestraat 14, B-3001 Leuven,
Belgium**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. GB/BAS/ExTR08.0090/00 and GB/BAS/ExTR08.0091/00

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0: 2006 EN 60079-7: 2007 EN 60079-11: 2007 EN 60079-26: 2007 EN 60079-18: 2004
EN61241-0: 2006 and EN 61241-1: 2004**

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

⊕ II 2 GD Gb Ex e mb ib IIC T5 (-40°C ≤ Ta ≤ +50°C) Db Ex tD A21 IP66 T95°C

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **5034**

Project File No. **05/0457**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa08ATEX0184X

15 Description of Equipment or Protective System

The DigiTrace NGC-20-CL-E Heat-Tracing Temperature Control Unit with Intelligent Safety Limiter, rated at 100V to 250V and up to 25A, comprises a plastic enclosure into which are encapsulated a number of printed circuit boards. Termination facilities are provided within the enclosure, above the level of the encapsulation, for the connection of power supply, external RTDs, alarm and data transmission facilities.

The encapsulated parts are divided into intrinsically safe and non-intrinsically safe printed circuit boards, with correspondingly segregated Ex ib and Exe termination facilities above the encapsulant.

Internal connections provided from the encapsulated printed circuit boards for three external resistance temperature detectors (RTDs), are made to Ex ib (RTD) terminals situated at the other side of the enclosure, and are segregated from the non-intrinsically safe terminals. Internal connections from the encapsulated printed circuit boards supply a seven segment LED display, five indicator LEDs and two internal push button switches, all mounted on a separate unencapsulated display printed circuit board behind a window in the lid of the enclosure. A common Earth Terminal is provided adjacent to the Ex ib (RTD) terminals for the termination of cable screens.

Input Parameters for the certified Ex e Terminal Block, the non-intrinsically safe RS485 data terminals and alarm relay terminals:

$$U_m = 254V$$

Output Parameters for each of the Ex ib, RTD1, RTD2 and the optional RTD3 terminals, (each RTD circuit comprising of three intrinsically safe interface circuits combined):

$$U_o = 4.6V$$

$$I_o = 81mA$$

$$P_o = 96mW$$

External connection is provided via cable entry holes, which enter the enclosure above the level of the encapsulation.

Internal and external earthing facilities are provided.

The safety temperature limiter function of the DigiTrace NGC-20-CL-E meets the requirements of IEC 61508-1:1998 and IEC 61508-2:2003, Certificate Number Baseefa08SR0134.

Variation 0.1

Omission of the safety temperature limiter function and associated circuitry to form the DigiTrace NGC-20-C-E Heat-Tracing Temperature Control Unit.

The temperature control function of the DigiTrace NGC-20-C-E has not been assessed to the requirements of IEC 61508-1:1998 and IEC 61508-2:2003,



16 Report Number

GB/BAS/ExTR08.0090/00 and GB/BAS/ExTR08.0091/00

17 Special Conditions for Safe Use

1. Cable entry devices shall be suitably certified and maintain the IP66 minimum of the enclosure. Unused cable entries must be filled with suitably certified stopping plugs.
2. Not more than one single or multiple strand wiring lead shall be connected into either side of the terminals.
3. Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1mm of the metal of the terminal throat.
4. When used in dust atmospheres any dust layers occurring shall have a maximum depth of no greater than 50mm.
5. The max permitted current of the Non IS alarm contacts is 3A.
6. The earth pillar adjacent to the RTD connectors must be used only for RTD cable screens.
7. The external RTDs must be capable of withstanding a 500V test to earth.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
Z0093-201-0i	1	0i	8 May 08	Basis cct Power Supply Primary
Z0093-201-0i	2	0i	8 May 08	Basis cct Power Supply Secondary
Z0093-201-0i	3	0i	8 May 08	Basis cct Switch
Z0093-201-0i	4	0i	8 May 08	Basis cct RTD Barriers
Z0093-201-0i	5	0i	8 May 08	Basis cct Display Barriers
Z0093-201-0i	6	0i	8 May 08	Basis cct RS485
Z0093-201-0i	7	0i	8 May 08	Basis cct Limiter Relay
Z0093-201-0i	8	0i	8 May 08	Basis cct Mechanical + Fiducial
Z0093-201-0i	9	0i	8 May 08	Basis cct Revision record
Z0093-202-0h	1	0h	8 Feb 08	Digital cct Micro
Z0093-202-0h	2	0h	8 Feb 08	Digital cct ADC
Z0093-202-0h	3	0h	8 Feb 08	Digital cct AC Sensors
Z0093-202-0h	4	0h	8 Feb 08	Digital cct RTD Sensors
Z0093-202-0h	5	0h	8 Feb 08	Digital cct Blue Tooth + Interconnections
Z0093-202-0h	6	0h	8 Feb 08	Digital cct BDM/JTAG
Z0093-202-0h	7	0h	8 Feb 08	Digital cct LIMITER analog part (RTD)
Z0093-202-0h	8	0h	8 Feb 08	Digital cct LIMITER Latch
Z0093-202-0h	9	0h	8 Feb 08	Digital cct LIMITER temperature latch signal
Z0093-202-0h	10	0h	8 Feb 08	Digital cct LIMITER setpoint
Z0093-202-0h	11	0h	8 Feb 08	Digital cct LIMITER Digital part (Microchip)
Z0093-202-0h	12	0h	8 Feb 08	Digital cct LIMITER Analog part (Comparator)
Z0093-202-0h	13	0h	8 Feb 08	Digital cct LIMITER Power Supply
Z0093-202-0h	14	0h	8 Feb 08	Digital cct Pullups Pulldowns & unused parts



Number	Sheet	Issue	Date	Description
Z0093-202-0h	15	0h	8 Feb 08	Digital cct Revision record
Z0093-301-0g	1	G	20 Mai 2008	Basis pcb Top Component Layout
Z0093-301-0g	2	G	20 Mai 2008	Basis pcb Bot Component Layout
Z0093-301-0g	3	G	20 Mai 2008	Basis pcb Top Track Layout
Z0093-301-0g	4	G	20 Mai 2008	Basis pcb Bot Track Layout
Z0093-302-0g	1	G	28 Mar 08	Digital pcb Top Component Layout
Z0093-302-0g	2	G	28 Mar 08	Digital pcb Bot AS Component Layout
Z0093-302-0g	3	G	28 Mar 08	Digital pcb L1 Top Track Layout
Z0093-302-0g	4	G	28 Mar 08	Digital pcb L2 Signal Track Layout
Z0093-302-0g	5	G	28 Mar 08	Digital pcb L3 Ground Track Layout
Z0093-302-0g	6	G	28 Mar 08	Digital pcb L4 Vcc Track Layout
Z0093-302-0g	7	G	28 Mar 08	Digital pcb L5 Signal Track Layout
Z0093-302-0g	8	G	28 Mar 08	Digital pcb L6 Bot Track Layout
Z0093-105-0g	1	G	10 Apr 2008	Metal can for relays
Z0093-121-0h	1	H	14 Apr 2008	Gland Arrangement
Z0093-124-0h	1	H	10 Apr 2008	Sectional View Righthand side
Z0093-125-0h	1	H	10 Apr 2008	Sectional View Lefthand side
Z0093-126-0f	1	F	03 Apr 2008	Mounting Thermal Fuses FT1 and FT2
Z0093-128-0g	1	G	06 Aug 2008	NGC-20-CX-E Earthing components
Z0093-133-0c	1	C	07 Mrz 2008	Warning Label
Z0093-148-0b	1	B	10 Apr 2008	Distance through potting compound
Z0093-153-0a	1	A	29 Jul 2008	NGC-20-CX-E Serial Number
Z0093-300-0g	1	G	10 Apr 2008	Terminal cover dimensional drawing
Specific CL				
Z0093-203-0h	1	0h	19 Feb 08	NGC-20-CL-E Terminal cct
Z0093-203-0h	2	0h	19 Feb 08	NGC-20-CL-E Terminal cct Revision record
Z0093-204-0h	1	0h	19 Feb 08	NGC-20-CL-E Display cct
Z0093-204-0h	2	0h	19 Feb 08	NGC-20-CL-E Display cct Revision record
Z0093-127-0d	1	D	07 Mrz 2008	NGC-20-CL-E Metal can with potted relays K1 – K4
Z0093-129-0d	1	D	10 Apr 2008	NGC-20-CL-E Coating area
Z0093-303-0g	1	G	4 Apr 2008	NGC-20-CL-E Terminal pcb Top Component Layout
Z0093-303-0g	2	G	4 Apr 2008	NGC-20-CL-E Terminal pcb L01 Top Track Layout
Z0093-303-0g	3	G	4 Apr 2008	NGC-20-CL-E Terminal pcb L02 Bot Track Layout
Z0093-303-0g	4	G	4 Apr 2008	NGC-20-CL-E Terminal pcb Top Silk screen
Z0093-304-0f	1	F	4 Apr 2008	NGC-20-CL-E Display pcb Top Component Layout
Z0093-304-0f	2	F	4 Apr 2008	NGC-20-CL-E Display pcb Bot Component Layout
Z0093-304-0f	3	F	4 Apr 2008	NGC-20-CL-E Display pcb Top Track Layout
Z0093-304-0f	4	F	4 Apr 2008	NGC-20-CL-E Display pcb Bot Track Layout
Z0093-338-0d	1	D	06 Aug 2008	NGC-20-CL-E Certification Label



Number	Sheet	Issue	Date	Description
20755-C	1-17	C	18 - 07 - 08	NGC-20-CL-E Parts List
Variation 0.1				
Z0093-207-0a	1	0a	19 Feb 08	NGC-20-C-E Terminal cct
Z0093-207-0a	2	0a	19 Feb 08	NGC-20-C-E Terminal cct Revision record
Z0093-208-0a	1	0a	19 Feb 08	NGC-20-C-E Display cct
Z0093-208-0a	2	0a	19 Feb 08	NGC-20-C-E Display cct Revision record
Z0093-147-0a	1	A	31 Mrz 2008	NGC-20-C-E Metal can with potted relays K1 - K3
Z0093-150-0a	1	A	09 Apr 2008	NGC-20-C-E Coating area
Z0093-305-0a	1	A	10 Apr 2008	NGC-20-C-E Display pcb Top Component Layout
Z0093-305-0a	2	A	10 Apr 2008	NGC-20-C-E Display pcb Bot Component Layout
Z0093-305-0a	3	A	10 Apr 2008	NGC-20-C-E Display pcb Top Track Layout
Z0093-305-0a	4	A	10 Apr 2008	NGC-20-C-E Display pcb Bot Track Layout
Z0093-306-0a	1	A	10 Apr 2008	NGC-20-C-E Terminal pcb Top Component Layout
Z0093-306-0a	2	A	10 Apr 2008	NGC-20-C-E Terminal pcb L01 Top Track Layout
Z0093-306-0a	3	A	10 Apr 2008	NGC-20-C-E Terminal pcb L02 Bot Track Layout
Z0093-306-0a	4	A	10 Apr 2008	NGC-20-C-E Terminal pcb Top Silk screen
Z0093-339-0b	1	B	06 Aug 2008	NGC-20-C-E Certification Label
22513-B	1-15	B	18 - 07 - 08	NGC-20-C-E Parts List

The above drawings are common to, and held on, IECEx BAS 08.0047X.



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa08ATEX0184X/1**

4 Equipment or Protective System: **DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units**

5 Manufacturer: **Tyco Thermal Controls**

6 Address: **Research Park Haasrode – Zone 2, Romeinsestraat 14, B-3001 Leuven, Belgium**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa08ATEX0184X** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.



Baseefa Customer Reference No. **5034**

Project File No. **09/0464**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

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DIRECTOR
On behalf of
Baseefa



13 **Schedule**

14 **Certificate Number Baseefa08ATEX0184X/1**

15 **Description of the variation to the Equipment or Protective System**

Variation 1.1

To allow the following alternative ratings:

Temperature class T5	
Ambient temperature (°C)	Maximum switching current (A)
-40 to +50	25
-40 to +54	20
-40 to +56	16
Temperature class T4	
Ambient temperature (°C)	Maximum switching current (A)
-40 to +56	25

16 **Report Number**

GB/BAS/ExTR09.0207/00

17 **Special Conditions for Safe Use**

None additional to those listed previously

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Issue	Date	Description
20093-338-0	E	3-9-2009	certification label

This drawing is common to and held with IECEx BAS08.0047X



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Schedule

14

Certificate Number Baseefa08ATEX0184X/2

15

Description of the variation to the Equipment or Protective System

Variation 2.1

To note alternative switch ratings and temperature classification at various maximum ambient temperatures to label.

Variation 2.2

Minor changes to components.

Variation 2.3

Modification of PCB layout and clarification of safety related components.

16

Report Number

GB/BAS/ExTR10.0095/00

17

Special Conditions for Safe Use

None additional to those listed previously

18

Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19

Drawings and Documents

Number	Sheet	Issue	Date	Description
Z0093-338-0f	1	F	23 Dec 09	NGC-20-CL-E Certification Label
Z0093-339-0c	1	C	23 Dec 09	NGC-20-C-E Certification Label
20755-E	1-16 inc	E	27.10.09	NGC-20-CL-E Parts List
22513-D	1-14 inc.	D	27.10.09	NGC-20-C-E Parts List
Z0093-302-0h	1-8 inc.	H	29 Jun 09	Digital PCB Track Layout
Z0093-201-0k	1-10 inc.	OK	16 Jan 09	Basic Circuits and Safety Components
Z0093-153-0b	1	B	07.12.09	NGC-20-CX-E Label

These drawing are common to and held with IECEX BAS08.0047X



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa08ATEX0184X/2**

4 Equipment or Protective System: **DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units**

5 Manufacturer: **Tyco Thermal Controls**

6 Address: **Research Park Haasrode – Zone 2, Romeinsestraat 14, B-3001 Leuven, Belgium**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa08ATEX0184X** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **5034**

Project File No. **10/0211**

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A handwritten signature in blue ink, appearing to read "R S Sinclair".

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On behalf of
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1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

- 3** Supplementary EC - Type Examination Certificate Number: **Baseefa08ATEX0184X/3**
- 4** Equipment or Protective System: **DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units**
- 5** Manufacturer: **Tyco Thermal Controls**
- 6** Address: **Research Park Haasrode – Zone 2, Romeinsestraat 14, B-3001 Leuven, Belgium**
- 7** This supplementary certificate extends EC – Type Examination Certificate No. Baseefa08ATEX0184X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **5034**

Project File No. **12/0015**

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A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa08ATEX0184X/3

15 Description of the variation to the Equipment or Protective System

Variation 3.1

To permit the option of the local connection of 100 Ohm, 20%, 0.25W insulated resistors, replacing any of the RTD inputs, on the DigiTrace NGC-20-CL-E or NGC-20-C-E Heat-Tracing Temperature Control Units.

16 Report Number

GB/BAS/EXTR12.0006/00

17 Specific Conditions of Use

1. All of the Special Conditions for Safe Use on the original Certificate continue to apply when this option is installed and special attention is drawn to Conditions 2, 3 and 7 for the installation of the resistor within the terminal enclosure.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
K20120118-00DRAFT	1	1	01.Feb.12	Insulated resistor replacement for PT100, RTD.

1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

- 3** Supplementary EC - Type Examination Certificate Number: **Baseefa08ATEX0184X/4**
- 4** Equipment or Protective System: **DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units**
- 5** Manufacturer: **Pentair Thermal Management Belgium NV
(formerly Tyco Thermal Controls)**
- 6** Address: **Research Park Haasrode - Zone 2, Romeinsestraat 14,
B-3001 Leuven, Belgium**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa08ATEX0184X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 Item 9 of the original Certificate is replaced by “Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN60079-0:2012 EN60079-7: 2007 EN60079-11:2012 EN60079-18: 2009 EN60079-31: 2009

except in respect of those requirements listed at item 18 of the Schedule.”

9 The marking of the equipment has changed from the original Certificate and shall include the following:

**⊕ II 2GD Ex e mb ib IIC T * Gb (-40°C ≤Ta ≤+ * °C) *See Certificate Schedule
Ex tb IIIC T * °C Db IP66 (-40°C ≤Ta ≤+ * °C) *See Certificate Schedule**

This certificate shall be held with the original certificate.

Baseefa Customer Reference No. **5034**

Project File No. **13/0423**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.baseefa.com/terms-and-conditions.asp>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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R S SINCLAIR

GENERAL MANAGER

On behalf of SGS Baseefa Limited

13

Schedule

14

Certificate Number Baseefa08ATEX0184X/4

15 Description of the variation to the Equipment or Protective System

Variation 4.1

To permit minor changes to the digital printed circuit board track layout and the inclusion of an alternative Bluetooth chip. These changes do not affect the original assessment.

Variation 4.2

External circuits Output Parameters, Combined outputs for each RTD circuit.

Circuit	Designation	Combined Output		Capacitance	Inductance	L/R Ratio
RTD1	(RTDD-1,2&3)	4V6, 63R, 0.075A, 0.09W	IIC	99µF,	6.5mH,	279µH/Ohm
			IIB	1000µF,	26.3mH,	1024 µH/Ohm
	(RTDD-5)	Return	IIA	1000µF	54.3mH	2155 µH/Ohm
RTD2	(RTDD-7,9&11)	4V6, 63R, 0.075A, 0.09W	IIC	99µF,	6.5mH,	279µH/Ohm
			IIB	1000µF,	26.3mH,	1024 µH/Ohm
	(RTDD-5)	Return	IIA	1000µF	54.3mH	2155 µH/Ohm
RTD3	(RTDD-13,15&17)	4V6, 57R, 0.081A, 0.096W	IIC	100µF,	5.65mH,	259µH/Ohm
			IIB	1000µF,	22.8mH,	958 µH/Ohm
	(RTDD-18)	Return	IIA	1000µF	46.9mH	2020 µH/Ohm

For installations where dust is the expected hazard then the Group IIB parameters must be used.

Variation 4.3

To confirm that the DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units comply with the requirements of EN60079-0:2012, EN60079-7: 2007, EN60079-11:2012, EN60079-18: 2009, and EN60079-31: 2009.

Depending upon the Maximum switching current for the relays the DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units are coded :-

Ex e mb ib IIC T * Gb (-40°C ≤Ta ≤+ * °C) *See Table.

Ex tb IIIC T * °C Db IP66 (-40°C ≤Ta ≤+ * °C) *See Table.

Temperature Class T5 Gb / T95°C Db	
Ambient temperature (°C)	Maximum switching current (A)
-40 to +50	25
-40 to +54	20
-40 to +56	16
Temperature class T4 Gb / T130°C Db	
Ambient temperature (°C)	Maximum switching current (A)
-40 to +56	25

16 Report Number

GB/BAS/ExTR13.0254/00

17 Specific Conditions of Use

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
Z0093-202-0i	1	0i	14 Dec 2012	Digital cct Micro
Z0093-202-0i	2	0i	14 Dec 2012	Digital cct ADC
Z0093-202-0i	3	0i	14 Dec 2012	Digital cct AC Sensors
Z0093-202-0i	4	0i	14 Dec 2012	Digital cct RTD Sensors
Z0093-202-0i	5	0i	14 Dec 2012	Digital cct Blue Tooth + Interconnections
Z0093-202-0i	6	0i	14 Dec 2012	Digital cct BDM/JTAG
Z0093-202-0i	7	0i	14 Dec 2012	Digital cct LIMITER analog part (RTD)
Z0093-202-0i	8	0i	14 Dec 2012	Digital cct LIMITER Latch
Z0093-202-0i	9	0i	14 Dec 2012	Digital cct LIMITER temperature latch signal
Z0093-202-0i	10	0i	14 Dec 2012	Digital cct LIMITER setpoint
Z0093-202-0i	11	0i	14 Dec 2012	Digital cct LIMITER Digital part (Microchip)
Z0093-202-0i	12	0i	14 Dec 2012	Digital cct LIMITER Analog part (Comparator)
Z0093-202-0i	13	0i	14 Dec 2012	Digital cct LIMITER Power Supply
Z0093-202-0i	14	0i	14 Dec 2012	Digital cct Pullups Pulldowns & unused parts
Z0093-202-0i	15	0i	14 Dec 2012	Digital cct Revision record 1
Z0093-202-0i	16	0i	14 Dec 2012	Digital cct Revision record 2
Z0093-302-0i	1	i	2013-01-11	Digital pcb Top Component Layout
Z0093-302-0i	2	i	2013-01-11	Digital pcb Bot AS Component Layout
Z0093-302-0i	3	i	2013-01-11	Digital pcb L1 Top Track Layout
Z0093-302-0i	4	i	2013-01-11	Digital pcb L2 Signal Track Layout
Z0093-302-0i	5	i	2013-01-11	Digital pcb L3 Ground Track Layout
Z0093-302-0i	6	i	2013-01-11	Digital pcb L4 Vcc Track Layout
Z0093-302-0i	7	i	2013-01-11	Digital pcb L5 Signal Track Layout
Z0093-302-0i	8	i	2013-01-11	Digital pcb L6 Bot Track Layout
Z0093-338-0g	1	G	17 June 2013	NGC-20-CL-E Certification Label
20755-K	1-17	K	10.09.13	NGC-20-CL-E Parts List
Z0093-339-0d	1	D	17 June 2013	NGC-20-C-E Certification Label
22513-J	1-15	J	10.09.13	NGC-20-C-E Parts List

All drawings are common to and are held with IECEx BAS 08.0047X

1 SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 Supplementary EU - Type Examination Certificate Number: Baseefa08ATEX0184X/5

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016

4 Product: DigiTrace NGC-20-CL-E & NGC-20-C-E Heat-Tracing Temperature Control Units

5 Manufacturer: nVent Thermal Belgium NV

6 Address: Research Park Haasrode - Zone 2, Romeinse straat 14, B-3001 Leuven, Belgium

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa08ATEX0184X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

SGS Baseefa Customer Reference No. 5034

Project File No. 17/0864

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R S SINCLAIR
TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

M POWNEY
Certification
Manager

13

Schedule

14

Certificate Number Baseefa08ATEX0184X/5

15 **Description of the variation to the Product**

Variation 5.1

To confirm the certificate is now held in the name of nVent Thermal Belgium NV.

Variation 5.2

To update the product marking labels to show the name of nVent Thermal Belgium NV.

16 **Report Number**

SGS Baseefa certification report GB/BAS/ExTR18.0125/00.

17 **Specific Conditions of Use**

None additional to those listed previously.

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
Z0093-338-0_h*	1	h	25.10.18	NGC-20-CL-E Certification Label
Z0093-339-0_e**	1	e	25.10.18	NGC-20-C-E Certification Label

* This drawing is common to Baseefa08SR0134, Baseefa08ATEX0184X and IECEx BAS 08.0047X and is held with the latter.

** This drawing is common to Baseefa08ATEX0184X and IECEx BAS 08.0047X and are held with the latter.