



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: **Baseefa03ATEX0338 – Issue 8**

4 Equipment or Protective System: **007 K4-20 Position Transmitter**

5 Manufacturer: **K. Controls Ltd**

6 Address: **2 Crown Way, Crown Business Centre, Horton Road, West Drayton,
Middlesex UB7 8HZ**

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's. GB/BAS/ExTR12.0127/00

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

EN 60079-0: 2009 EN 60079-11: 2007 EN 60079-31: 2009

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 Ex ia IIC / IIB T4 Gb
Ex tb IIIC T135°C Db IP6x (see schedule for code variations)**

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

Baseefa Customer Reference No. **0600**

Project File No. **10/0921**

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.

R S SINCLAIR

**DIRECTOR
On behalf of
Baseefa**

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.



13

Schedule

14

Certificate Number Baseefa03ATEX0338 – Issue 8

15 Description of Equipment or Protective System

The 007 K4-20 Position Transmitter consist an aluminium or stainless steel enclosure containing a terminal block, up to two volt free switches or up to four certified proximity sensors in any combination, a potentiometer and an optional Position Transmitter. When fitted with the optional position transmitter, the equipment can also be fitted with one of two Wireless HART adapters permitting wireless communication with the transmitter. All variants of the equipment can be fitted with an optional visual indicator.

External electrical connections are made via four tapped holes. The installation of the external connections and plugging of the unused entry must be carried out using appropriate IP6X cable glands and blanking plugs.

The 007 K4-20 Position Transmitter is available in the following ATEX only and dual certified IECEx & ATEX configurations. The following tables defines the models available and their associated certification codes and input parameters.

ATEX Only Model Range

ET020D

Optional Visual Indicator Size

020D = Optional Visual Indicator with $\leq 20\text{mm}^2$ Surface Area
100D = Optional Visual Indicator with $\leq 100\text{mm}^2$ Surface Area

Transmitter Configuration

T = Position Transmitter only
 TM = Position Transmitter and up to two Volt-Free Contacts
 TP = Position Transmitter and up to two Proximity Sensors
 TA = Position Transmitter and up to four Proximity Sensors NCB2-V3-N0 in the 2:1 mode (AC function)
 R = Potentiometer only
 RM = Potentiometer and up to two Volt-Free Contacts
 RP = Potentiometer and up to two Proximity Sensors
 RA = Potentiometer and up to four Proximity Sensors NCB2-V3-N0 in the 2:1 mode (AC function)
 TL = Low Temperature Position Transmitter only
 TLM = Low Temperature Position Transmitter and up to two Volt-Free Contacts
 TLP = Low Temperature Position Transmitter and up to two Proximity Sensors

See Table 2 for certification details of the above Position Transmitters & Proximity Sensors



Table 1: Certification Code & Input Parameters

Model Number	Certification Code(s)	Input Parameters
T020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH
T100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH
TM020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH VF Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
TM100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH VF Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
TP020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
TP100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
TA020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 200nF & L _i = 200μH
TA100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 200nF & L _i = 200μH
R020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0
R100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0
RM020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 VF Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
RM100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 VF Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
RP020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
RP100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
RA020D	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 200nF & L _i = 200μH
RA100D	Ex ia IIB T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 200nF & L _i = 200μH



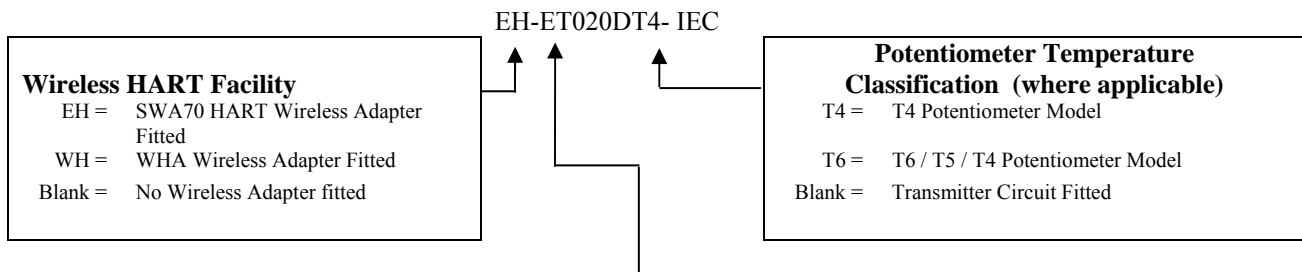
Model Number	Certification Code(s)	Input Parameters
TL020D	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH
TLM020D	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH VF Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
TLP020D	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 28V, I _i = 120mA, P _i = 0.84W, C _i = 2nF & L _i = 10μH Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.169W, C _i = 30nF & L _i = 100μH

Table 2: Proximity Sensors and Transmitters Certification Details

Model Code	Proximity Switches/Sensors or Transmitter	IECEX Certificate No(s).
*P***D	Type 3 Pepperl + Fuchs Proximity Sensors	PTB 00 ATEX 2032X
	Hans Turck GmbH Proximity Sensors	KEMA 03 ATEX 1090X
T***D	PR Electronics Position Transmitters	KEMA 02 ATEX 1318 KEMA 03 ATEX 1535 KEMA 03 ATEX 1537 KEMA 06 ATEX 0062
TLP020D	-40°C Low Ambient Temperature Type 3 Pepperl + Fuchs Proximity Sensors	PTB 00 ATEX 2049X



Dual ATEX / IECEx Certified Model Range



Transmitter Configuration

ET = Endress & Hauser Position Transmitter only
AT = ABB Automation Product GmbH Position Transmitter only
ST = Status Instruments Position Transmitter only
PT = PR Electronics Position Transmitter only
RT = Rosemount Position Transmitter only
RO = Potentiometer only
RM = Potentiometer & Volt-free Contacts
RP = Potentiometer with Pepperl & Fuchs Proximity Sensors
RT = Potentiometer with Hans Turck Proximity Sensors
RF = Potentiometer with IFM Proximity Sensors
RLF = Potentiometer with IFM Low Temperature Proximity Sensors
ETM = Endress & Hauser Position Transmitter and Volt-free Contacts
ATM = ABB Automation Product GmbH Position Transmitter and Volt-free Contacts
STM = Status Instruments Position Transmitter and Volt-free Contacts
PTM = PR Electronics Position Transmitter and Volt-free Contacts
RTM = Rosemount Position Transmitter and Volt-free Contacts
ETP = Endress & Hauser Position Transmitter with Pepperl & Fuchs Proximity Sensors
ATP = ABB Automation Product GmbH Position Transmitter with Pepperl & Fuchs Proximity Sensors
STP = Status Instruments Position Transmitter with Pepperl & Fuchs Proximity Sensors
PTP = PR Electronics Position Transmitter with Pepperl & Fuchs Proximity Sensors
RTP = Rosemount Position Transmitter with Pepperl & Fuchs Proximity Sensors
ETT = Endress & Hauser Position Transmitter with Hans Turck Proximity Sensors
ATT = ABB Automation Product GmbH Position Transmitter with Hans Turck Proximity Sensors
STT = Status Instruments Position Transmitter with Hans Turck Proximity Sensors
PTT = PR Electronics Position Transmitter with Hans Turck Proximity Sensors
RTT = Rosemount Position Transmitter with Hans Turck Proximity Sensors
ETF = Endress & Hauser Position Transmitter with IFM Proximity Sensors
ATF = ABB Automation Product GmbH Position Transmitter with IFM Proximity Sensors
STF = Status Instruments Position Transmitter with IFM Proximity Sensors
PTF = PR Electronics Position Transmitter with IFM Proximity Sensors
RTF = Rosemount Position Transmitter with IFM Proximity Sensors
ETLF = Endress & Hauser Position Transmitter with IFM Low Temperature Proximity Sensors
ATLF = ABB Automation Product GmbH Position Transmitter with IFM Low Temperature Proximity Sensors
STLF = Status Instruments Position Transmitter with IFM Low Temperature Proximity Sensors
PTLF = PR Electronics Position Transmitter with IFM Low Temperature Proximity Sensors
RTLF = Rosemount Position Transmitter with IFM Low Temperature Proximity Sensors

See Table 4 for certification details of the above Proximity Switches / Sensors, Transmitters & Wireless HART Adapters



Table 1: Certification Code & Input Parameters – Models with no Wireless HART Adapter fitted

Model Number	Certification Code(s)	Input Parameters
ET020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +55°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +55°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 24V, I _i = 100mA, P _i = 0.75W, C _i = 5nF & L _i = 0
AT020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +56°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +56°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 0.8W, C _i = 5nF & L _i = 0.5mH
ST020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 100mA, P _i = 0.75W, C _i = 0 & L _i = 0
PT020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 120mA, P _i = 0.84W, C _i = 1nF & L _i = 10μH
RT020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +60°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 1.0W, C _i = 3.6nF & L _i = 0
ETM020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +55°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +55°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 24V, I _i = 100mA, P _i = 0.75W, C _i = 5nF & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
ATM020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +56°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +56°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 0.8W, C _i = 5nF & L _i = 0.5mH Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
STM020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 100mA, P _i = 0.75W, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
PTM020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 120mA, P _i = 0.84W, C _i = 1nF & L _i = 10μH Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
RTM020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +60°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 1.0W, C _i = 3.6nF & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
R020DT4-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0



Model Number	Certification Code(s)	Input Parameters
R020DT6-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +40°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +55°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +55°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.19W, C _i = 0 & L _i = 0
RM020DT4-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
RM020DT6-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +40°C) Or Ex ia IIC T5 Gb (-40°C ≤ T _a ≤ +55°C) Ex tb IIIC T100°C Db IP6x (-40°C ≤ T _a ≤ +55°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.19W, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
RP020DT4-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
RP020DT6-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +40°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +55°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +55°C) Or Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.19W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
RT020DT4-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
RT020DT6-IEC	Ex ia IIC T6 Gb (-25°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-25°C ≤ T _a ≤ +40°C) Or Ex ia IIC T5 Gb (-25°C ≤ T _a ≤ +55°C) Ex tb IIIC T100°C Db IP6x (-25°C ≤ T _a ≤ +55°C) Or Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.19W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
RF020DT4-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH



Model Number	Certification Code(s)	Input Parameters
RF020DT6-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +40°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +55°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +55°C) Or Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.19W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
RLF020DT4-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.84W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
RLF020DT6-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Potentiometer: U _i = 28V, P _i = 0.19W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
ETP020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +45°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +45°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +60°C) Or Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 24V, I _i = 100mA, P _i = 0.75W, C _i = 5nF & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
ATP020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +45°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +45°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +60°C) Or Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 0.8W, C _i = 5nF & L _i = 0.5mH Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
STP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 100mA, P _i = 0.75W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
PTP020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 120mA, P _i = 0.84W, C _i = 1nF & L _i = 10μH Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
RTP020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +45°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +45°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 1.0W, C _i = 3.6nF & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
ETT020D-IEC	Ex ia IIC T6 Gb (-25°C ≤ T _a ≤ +55°C) Ex tb IIIC T85°C Db IP6x (-25°C ≤ T _a ≤ +55°C) Or Ex ia IIC T5 Gb (-25°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 24V, I _i = 100mA, P _i = 0.75W, C _i = 5nF & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH



Model Number	Certification Code(s)	Input Parameters
ATT020D-IEC	Ex ia IIC T6 Gb (-25°C ≤ T _a ≤ +56°C) Ex tb IIIC T85°C Db IP6x (-25°C ≤ T _a ≤ +56°C) Or Ex ia IIC T5 Gb (-25°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 0.8W, C _i = 5nF & L _i = 0.5mH Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
STT020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 100mA, P _i = 0.75W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
PTT020D-IEC	Ex ia IIC T6 Gb (-25°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-25°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 120mA, P _i = 0.84W, C _i = 1nF & L _i = 10μH Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
RTT020D-IEC	Ex ia IIC T6 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T85°C Db IP6x (-25°C ≤ T _a ≤ +60°C) Or Ex ia IIC T5 Gb (-25°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-25°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 1.0W, C _i = 3.6nF & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
ETF020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +55°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +55°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 24V, I _i = 100mA, P _i = 0.75W, C _i = 5nF & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
ATF020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +56°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +56°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 0.8W, C _i = 5nF & L _i = 0.5mH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
STF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 100mA, P _i = 0.75W, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
PTF020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 120mA, P _i = 0.84W, C _i = 1nF & L _i = 10μH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
RTF020D-IEC	Ex ia IIC T6 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T85°C Db IP6x (-20°C ≤ T _a ≤ +60°C) Or Ex ia IIC T5 Gb (-20°C ≤ T _a ≤ +70°C) Ex tb IIIC T100°C Db IP6x (-20°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 1.0W, C _i = 3.6nF & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
ETLF020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +55°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +55°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 24V, I _i = 100mA, P _i = 0.75W, C _i = 5nF & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
ATLF020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +56°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +56°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 0.8W, C _i = 5nF & L _i = 0.5mH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH



Model Number	Certification Code(s)	Input Parameters
PTLF020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +40°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +40°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 120mA, P _i = 0.84W, C _i = 1nF & L _i = 10μH Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
RTL020D-IEC	Ex ia IIC T6 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T85°C Db IP6x (-40°C ≤ T _a ≤ +60°C) Or Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +70°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +70°C)	Transmitter: U _i = 30V, I _i = 130mA, P _i = 1.0W, C _i = 3.6nF & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH

Table 2: Certification Code & Input Parameters – ‘EH’ Models with SWA70 HART Wireless Adapter fitted

Model Number	Certification Code(s)	Input Parameters
EH-AT020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
EH-ST020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
EH-PT020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
EH-RT020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
EH-ATM020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
EH-STM020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
EH-PTM020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
EH-RTM020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
EH-ATP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH



Model Number	Certification Code(s)	Input Parameters
EH-STP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
EH-PTP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
EH-RTP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
EH-ATT020D-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
EH-STT020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
EH-PTT020D-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
EH-RTT020D-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
EH-ATF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
EH-STF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
EH-PTF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH



Model Number	Certification Code(s)	Input Parameters
EH-RTF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
EH-ATLF020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
EH-PTLF020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
EH-RTLF020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH

Table 3: Certification Code & Input Parameters – ‘WH’ Models with WHA HART Wireless Adapter fitted

Model Number	Certification Code(s)	Input Parameters
WH-AT020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
WH-ST020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
WH-PT020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
WH-RT020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0
WH-ATM020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
WH-STM020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
WH-PTM020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0



Model Number	Certification Code(s)	Input Parameters
WH-RTM020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Volt Free Contacts: U _i = 28V, I _i = 120mA, P _i = 1.3W, C _i = 0 & L _i = 0
WH-ATP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
WH-STP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
WH-PTP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
WH-RTP020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 16V, I _i = 52mA, P _i = 0.16W, C _i = 100nF & L _i = 250μH
WH-ATT020D-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
WH-STT020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
WH-PTT020D-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
WH-RTT020D-IEC	Ex ia IIC T4 Gb (-25°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-25°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 20V, I _i = 60mA, P _i = 0.13W, C _i = 250nF & L _i = 350μH
WH-ATF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH



Model Number	Certification Code(s)	Input Parameters
WH-STF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
WH-PTF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
WH-RTF020D-IEC	Ex ia IIC T4 Gb (-20°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-20°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 80nF & L _i = 110μH
WH-ATLF020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
WH-PTLF020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH
WH-RTLF020D-IEC	Ex ia IIC T4 Gb (-40°C ≤ T _a ≤ +60°C) Ex tb IIIC T135°C Db IP6x (-40°C ≤ T _a ≤ +60°C)	Transmitter (Ext. Supply via Wireless Adapter Terminals 4 w.r.t. 3): U _i = 30V, C _i = 0 & L _i = 0 Proximity Sensors: U _i = 15V, I _i = 50mA, P _i = 0.12W, C _i = 150nF & L _i = 150μH

Table 4: Proximity Switches / Sensors, Transmitters and Wireless HART Adapter Certification Details

Model Code	Proximity Switches/Sensors, Transmitter or Wireless HART Adapter	ATEX Certificate No(s).
_P020D-IEC	Type 3 Pepperl + Fuchs Proximity Switches / Sensors	PTB 99 ATEX 2219X PTB 00 ATEX 2032X
_F020D-IEC	IFM Proximity Switches / Sensors	PTB 01 ATEX 2191
_LF020D-IEC	-40°C Low Ambient Temperature IFM Proximity Switches / Sensors	BVS 08 ATEX E 026
_T020D-IEC	Hans Turck GmbH Proximity Switches / Sensors	KEMA 02 ATEX 1090X
_ET020D-IEC	Endress & Hauser Transmitter	PTB 01 ATEX 2013 PTB 04 ATEX 2053 PTB 07 ATEX 2056
_AT020D-IEC	ABB Automation Product GmbH Transmitter	PTB 05 ATEX 2017X
_ST020D-IEC	Status Instruments Transmitter	TRAC09ATEX11232X
_PT020D-IEC	PR Electronics Transmitter	KEMA 03 ATEX 1537
_RT020D-IEC	Rosemount Transmitter	Baseefa03ATEX0030X Baseefa08ATEX0030X
EH_****020D-IEC	Endress & Hauser SWA70 HART Wireless Adapter	BVS 09 ATEX E134
WH_****020D-IEC	Pepperl + Fuchs WHA Wireless Adapter	BVS 11 ATEX E081



16 Report Number

None.

17 Special Conditions for Safe Use

None.

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

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
C08129	1 of 5	7	10.05.12	Intrinsically Safe ATEX Certified 007 K4-20 Position Transmitter
C08129	2 of 5	10	14.05.12	Intrinsically Safe ATEX Certified 007 K4-20 Position Transmitter
C11134	1 of 10	1	16.10.10	Exi IECEX / ATEX Certified 007 K4-20 Position Transmitter
C11134	2 of 10	5	31.08.11	Exi IECEX / ATEX Certified 007 K4-20 Position Transmitter
C11134	3 of 10	1	16.10.10	Exi IECEX / ATEX Certified 007 K4-20 Position Transmitter
C11134	4 of 10	5	16.03.12	IECEX / ATEX Certified 007 K4-20 Certification Label
C11134	5 of 10	6	16.03.12	IECEX / ATEX Certified 007 K4-20 Certification Label
C11134	6 of 10	1	16.10.10	Exi IECEX / ATEX Certified 007 K4-20 Termination Label
C11134	7 of 10	6	16.03.12	IECEX / ATEX Certified 007 K4-20 with Optional Wireless Adapters
C11134	8 of 10	1	16.10.10	Exi IECEX / ATEX Certified 007 K4-20 with Optional Connectors
C11134	9 of 10	3	31.10.11	IECEX / ATEX Certified 007 K4-20 Certification Label
C11134	10 of 10	3	06.02.12	IECEX / ATEX Certified 007 K4-20 Certification Label

With exception of Drawing No. C08129 Sheets 1 & 2, the above drawings are associated and held with IECEX Certificate No. IECEX BAS 11.0136.

Current drawings also associated with this certificate:

Number	Sheet	Issue	Date	Description
C08129	3 of 5	4	20.07.04	Intrinsically Safe ATEX Certified 007 K4-20 Position Transmitter
C08129	4 of 5	6	04.05.10	Certification Label
C08129	5 of 5	2	12.08.09	Typical Termination Diagram for Intrinsically Safe Equipment
C09009	4 of 5	3	14.05.10	Certification Label
C09364	1 of 1	1	16.11.05	Intrinsically Safe ATEX Certified Product with Optional Connector(s)



20 Certificate History

Certificate No.	Date	Comments
Baseefa03ATEX0338	4 July 2003	The release of the prime certificate. The associated test and assessment is documented in Certification Report No. 03(C)0067/3.
Baseefa03ATEX0338/1	4 May 2004	To permit C_i for the transmitter to be changed to $C_i = 1nF$ with a consequent minor change to the certification label.
Baseefa03ATEX0338/2	8 October 2004	<p>i) To permit the addition of proximity sensor type NCB2-V3-N0, Pepperl + Fuchs certificate number PTB00ATEX2032X.</p> <p>ii) The provision to use sensor type NCB2-V3-N0 in the 2:1 mode (AC function) thus forming the 007 K4-20 Position Transmitter types TA020D, TA100D, RA020D and RA100D.</p> <p>iii) The certificate for the type 5335B Transmitter Module was changed from DENKO99ATEX126965 to KEMA03ATEX1537X. The terminal parameters remained un-affected and did not affect the original intrinsic safety assessment.</p> <p>iv) The apparatus description was revised to clarify the options available.</p> <p>v) The certification label details were extended to include the option for a potentiometer to be fitted in place of the existing transmitter.</p> <p>vi) To permit minor electrical changes not affecting the original intrinsic safety assessment.</p> <p>The associated test and assessment is documented in Certification Report No. 04(C)0585.</p>
Baseefa03ATEX0338/3	21 November 2005	To permit minor mechanical changes not affecting the original intrinsic safety assessment.
Baseefa03ATEX0338/4	9 July 2007	To permit minor mechanical changes not affecting the existing certification.
Baseefa03ATEX0338/5	13 January 2009	<p>i) To permit the introduction of an alternative 5330B 2-wire Transmitter, Certificate Number KEMA02ATEX1318 in ant of the existing 007 K4-20 Position Transmitters and for the equivalent capacitance for the transmitter to be increased to $C_i = 2nF$ in each case.</p> <p>ii) To permit the introduction of three low temperature 007 K4-20 Position Transmitter Types TL020D, TLM020D and TLP020D.</p> <p>The associated test and assessment is documented in Certification Report No. 08(C)0909.</p>
Baseefa03ATEX0338/6	9 November 2009	<p>To permit the omission of some previously certified equipment and to confirm that the models of the 007 K4-20 Position Transmitters meet the requirements of EN 60079-0: 2006, EN 60079-11: 2007, EN 61241-0: 2006 and EN 61241-1: 2004. The marking of the apparatus has been revised in accordance with the requirements introduced by IEC 60079-0: 2007.</p> <p>The associated test and assessment is documented in Certification Report No. 09(C)0576/3.</p>



Certificate No.	Date	Comments
Baseefa03ATEX0338 Issue 7	19 May 2010	This issue of the certificate permits minor label and drawing changes not affecting the original assessment.
Baseefa03ATEX0338 Issue 8	24 May 2012	<p>i) To permit the addition of a new range of models to the 007 K4-20 Position Transmitter range. New models include variants of the equipment incorporating new Proximity Switches/Sensors, Transmitters and Wireless HART Adapters permitting wireless communication from the transmitters fitted in the equipment. The certificate schedule has been revised to list the new range of models and their associated certification markings and input parameters.</p> <p>ii) To confirm all models of the equipment covered by the certificate have been reviewed against the requirements of EN 60079-0: 2009, EN 60079-11: 2007 and EN 60079-31: 2009 in respect of the differences from EN 60079-0: 2006, EN 61241-0: 2006 and EN 61241-1: 2004 and none of the differences affect the equipment.</p>
For drawings applicable to each issue, see original of that issue.		