1 # EU - TYPE EXAMINATION CERTIFICATE

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

3 EU - Type Examination Certificate Number: **Baseefa16ATEX0141X – Issue 1**

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: **K1 and K2 Series IS Position Monitors**

5 Manufacturer: **Topworx Incorporated**

6 Address: **3300 Fern Valley Road, Louisville, Kentucky, 40213 United States of America**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa16ATEX0141X** to apply to product 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 Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

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

EN IEC 60079-0: 2018 **EN 60079-11: 2012** **EN 60079-31: 2014**

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 product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

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

12 The marking of the product shall include the following:

Ex See Certificate Schedule

SGS Fimko Oy Customer Reference No. **2191** Project File No. **21/0357**

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13 # Schedule

14 ## Certificate Number Baseefa16ATEX0141X – Issue 1

15 Description of Product

The K1 Series IS Position Monitor comprises either a stainless steel or painted aluminium enclosure containing a number of terminal blocks, up to three volt-free switches, up to three certified proximity switches or sensors, a potentiometer or a certified transmitter in any combination plus interconnection facilities for remote mounted intrinsically safe equipment connections.

The larger K2 Series IS Position Monitor comprises either a stainless steel or painted aluminium enclosure containing a number of terminal blocks, up to four volt-free switches, up to four certified proximity switches or sensors, a potentiometer or a certified transmitter in any combination plus interconnection facilities for remote mounted intrinsically safe equipment connections.

The K1 & K2 Series IS Position Monitors may include an optional mechanical visual position indicator. External connections to the equipment are made using screw terminals via threaded entries into the enclosure. The installation of the external connections and plugging of unused entries must be carried out using appropriately certified IP6x cable glands and blanking plugs.

Gas only certified variants of the equipment (-SC Model No. prefix) are available with external connections via either Harting or Seacon Plug and Socket connectors.

The components installed within the K1 & K2 Series IS Position Monitors are defined by the Type number which is constructed as follows:

KSR-x-y-SC-IEC

Position Monitor Configuration

KS =	Position Monitor
KSR =	Position Monitor with Potentiometer
KST =	Position Monitor with Transmitter & Potentiometer

Certification

IEC =	IECEx & ATEX Dual Certified
Blank =	ATEX certified only

External Connection Configuration

SC =	Seacon or Harting Plug & Socket Connectors fitted
Blank =	Screw Terminal fitted

Position Monitor Configuration – 1 or 2 of the following component fitted

M	Volt-Free Contacts
MH	Volt-Free Contacts (100°C High Ambient Temperature)
MR	Volt-Free Contacts with Resistors
LM	Volt-Free Contacts (-50°C Low Ambient Temperature)
LMH	Volt-Free Contacts (-50°C to 100°C Ambient Temperature range)
LMR	Volt-Free Contacts with Resistors (-50°C Low Ambient Temperature)
P	Type 3 Pepperl and Fuchs Proximity Switches / Sensors
PH	Type 1 Pepperl and Fuchs Proximity Switches / Sensors
LP	Type 3 -40°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors
LP-50	Type 3 -50°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors
LPH	Type 1 -40°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors
LPH-50	Type 1 -50°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors
F	IFM Proximity Switches / Sensors
LF	-40°C Low Ambient Temperature IFM Proximity Switches / Sensors
PF	-40°C Low Ambient Temperature PR Electronics Transmitter
PL	-40°C Low Ambient Temperature PR Electronics FISCO ‘ib’ Transmitter
T	Hans Turck GmbH Proximity Switches / Sensors
LT	-40°C Low Ambient Temperature Hans Turck GmbH Proximity Switches / Sensors
ET	Endress & Hauser Transmitter
AT	ABB Automation Product GmbH Transmitter
PT	PR Electronics Transmitter
RT	Rosemount Transmitter
T4	T4 Potentiometer fitted (KSR Models only)
T6	T6 / T5 /T4 Potentiometer fitted (KSR Models only)

See Table 5 for certification details of the above Proximity Switches / Sensors and Transmitters

Tables 1 and 2 lists the certification codes and input parameters of the various configurations of the dust & gas dual certified and ATEX only certified variants of the K1 & K2 Series IS Position Monitor.

Tables 3 and 4 lists the certification codes and input parameters of the various configurations of the gas only dual certified and ATEX only certified variants of the K1 & K2 Series IS Position Monitor.

In addition to the input parameters specified below, all variants of the equipment can be additionally fitted with terminals for the connection of remote I.S equipment. These terminal connections have the following input parameters:

U_i = 30V

Table 1: Dual IECEx & ATEX Model Certification Code & Input Parameters

Model Number	Certification Code(s)	Input Parameters
KS-M-IEC	ε II 2GD Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-MH-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +100°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +100°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-MR-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-LM-IEC	ε II 2GD Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-LMH-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +100°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +100°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-LMR-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-P-IEC	ε II 2GD Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +57°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KS-PH-IEC	ε II 2GD Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +87°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +72°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +87°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +72°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KS-LP-IEC	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KS-LPH-IEC	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +88°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +73°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +88°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +73°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH

Model Number	Certification Code(s)	Input Parameters
KS-LP-50-IEC	ε II 2GD Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +45°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KS-LPH-50-IEC	ε II 2GD Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +88°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +73°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +88°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +73°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 70nF & L_i = 150µH
KS-F-IEC	ε II 2GD Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KS-LF-IEC	ε II 2GD Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KS-T-IEC	ε II 2GD Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KS-LT-IEC	ε II 2GD Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +70°C)	Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.20W, C_i = 150nF & L_i = 150µH
KSR-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0
KSR-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0
KSR-LM-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-50°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
KSR-LM-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +40°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
KSR-LMR-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KSR-P-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH

Model Number	Certification Code(s)	Input Parameters
KSR-P-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KSR-LP-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KSR-LP-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KSR-LP-50-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KSR-LP-50-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KSR-T-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KSR-T-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KSR-F-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KSR-F-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +55°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KSR-LF-T4-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH

Model Number	Certification Code(s)	Input Parameters
KSR-LF-T6-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-ET-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0
KST-AT-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +56°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH
KST-PT-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH
KST-RT-IEC	ε II 2GD Ex ia IIC T5 Gb (-60°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-60°C ≤ T_a ≤ +60°C) Ex tb IIIC T100°C Db (-60°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-60°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0
KST-PF-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH
KST-PL-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH
KST-ET-LM-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +55°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
KST-AT-LM-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +56°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +56°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

Model Number	Certification Code(s)	Input Parameters
KST-PT-LM-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°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
KST-RT-LM-IEC	ε II 2GD Ex ia IIC T5 Gb (-60°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-60°C ≤ T_a ≤ +60°C) Ex tb IIIC T100°C Db (-60°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-60°C ≤ T_a ≤ +60°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
KST-PF-LM-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KST-PL-LM-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KST-ET-LMR-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-AT-LMR-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-PT-LMR-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-RT-LMR-IEC	ε II 2GD Ex ia IIC T4 Gb (-60°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-60°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-PF-LMR-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-PL-LMR-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-ET-P-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +67°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +67°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +57°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH

Model Number	Certification Code(s)	Input Parameters
KST-AT-P-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +67°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +67°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +57°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-PT-P-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +67°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +67°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-RT-P-IEC	ε II 2GD Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +57°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-PF-P-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +67°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +67°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-PL-P-IEC	ε II 2GD Ex ib IIC T4 Gb (-25°C ≤ T_a ≤ +67°C) Ex ib IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +67°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-ET-PH-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +55°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KST-AT-PH-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +56°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KST-PT-PH-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KST-PF-PH-IEC	ε II 2GD Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KST-PL-PH-IEC	ε II 2GD Ex ib IIC T4 Gb (-25°C ≤ T_a ≤ +85°C) Ex ib IIC T6 Gb (-25°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-25°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH

Model Number	Certification Code(s)	Input Parameters
KST-ET-LP-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-AT-LP-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-PT-LP-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-RT-LP-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-PF-LP-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-PL-LP-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-ET-LPH-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KST-AT-LPH-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KST-PT-LPH-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH

Model Number	Certification Code(s)	Input Parameters
KST-PF-LPH-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KST-PL-LPH-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +85°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +85°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KST-AT-LP-50-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KST-RT-LP-50-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KST-AT-LPH-50-IEC	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +85°C) Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +56°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +85°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 70nF & L_i = 150µH
KST-ET-F-IEC	ε II 2GD Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +55°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-AT-F-IEC	ε II 2GD Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +56°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-PT-F-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-RT-F-IEC	ε II 2GD Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-PF-F-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH

Model Number	Certification Code(s)	Input Parameters
KST-PL-F-IEC	ε II 2GD Ex ib IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ib IIC T6 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-ET-LF-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-AT-LF-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-PT-LF-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-RT-LF-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-PF-LF-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-PL-LF-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-ET-T-IEC	ε II 2GD Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +55°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-AT-T-IEC	ε II 2GD Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +56°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-PT-T-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-RT-T-IEC	ε II 2GD Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T100°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH

Model Number	Certification Code(s)	Input Parameters
KST-PF-T-IEC	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-PL-T-IEC	ε II 2GD Ex ib IIC T4 Gb (-20°C ≤ T_a ≤ +70°C) Ex ib IIC T6 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-ET-LT-IEC	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-AT-LT-IEC	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-PT-LT-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-RT-LT-IEC	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-PF-LT-IEC	ε II 2GD Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-PL-LT-IEC	ε II 2GD Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +70°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH

Table 2: ATEX Only Model Certification Code & Input Parameters

Model Number	Certification Code(s)	Input Parameters
KS-M	ε II 2GD Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-MH	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +100°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +100°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-MR	ε II 2GD Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-20°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0

Model Number	Certification Code(s)	Input Parameters
KS-LM	ε II 2GD Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-LMH	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +100°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +70°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +100°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +70°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-LMR	ε II 2GD Ex ia IIC T4 Gb (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T135°C Db (-50°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-P	ε II 2GD Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +57°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +42°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KS-PH	ε II 2GD Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +87°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +72°C) Ex tb IIIC T100°C Db (-25°C ≤ T_a ≤ +87°C) Ex tb IIIC T85°C Db (-25°C ≤ T_a ≤ +72°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KS-LP	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KS-LPH	ε II 2GD Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +88°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +73°C) Ex tb IIIC T100°C Db (-40°C ≤ T_a ≤ +88°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +73°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KS-LP-50	ε II 2GD Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +45°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KS-LPH-50	ε II 2GD Ex ia IIC T5 Gb (-50°C ≤ T_a ≤ +88°C) Ex ia IIC T6 Gb (-50°C ≤ T_a ≤ +73°C) Ex tb IIIC T100°C Db (-50°C ≤ T_a ≤ +88°C) Ex tb IIIC T85°C Db (-50°C ≤ T_a ≤ +73°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 70nF & L_i = 150µH
KS-F	ε II 2GD Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KS-LF	ε II 2GD Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KS-T	ε II 2GD Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-20°C ≤ T_a ≤ +70°C)	Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KS-LT	ε II 2GD Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +70°C) Ex tb IIIC T85°C Db (-40°C ≤ T_a ≤ +70°C)	Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.20W, C_i = 150nF & L_i = 150µH

Table 3: Dual IECEx & ATEX '–SC' Model Certification Code & Input Parameters

Model Number	Certification Code(s)	Input Parameters
KS-M-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-MR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-LM-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-LMR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-P-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KS-PH-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KS-LP-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KS-LPH-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KS-LP-50-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KS-LPH-50-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 70nF & L_i = 150µH
KS-F-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KS-LF-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KS-T-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KS-LT-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.20W, C_i = 150nF & L_i = 150µH
KSR-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0
KSR-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0
KSR-LM-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°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
KSR-LM-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°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
KSR-LMR-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KSR-P-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH

Model Number	Certification Code(s)	Input Parameters
KSR-P-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KSR-LP-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KSR-LP-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KSR-LP-50-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KSR-LP-50-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KSR-T-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KSR-T-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KSR-F-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KSR-F-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +55°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KSR-LF-T4-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Potentiometer: U_i = 28V, P_i = 0.84W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KSR-LF-T6-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +40°C)	Potentiometer: U_i = 28V, P_i = 0.19W, C_i = 0 & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-ET-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0
KST-AT-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH
KST-PT-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH
KST-RT-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0
KST-PF-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH

Model Number	Certification Code(s)	Input Parameters
KST-PL-SC-IEC	ε II 2G Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH
KST-ET-LM-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°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
KST-AT-LM-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°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
KST-PT-LM-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°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
KST-RT-LM-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°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
KST-PF-LM-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KST-PL-LM-SC-IEC	ε II 2G Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KST-ET-LMR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-AT-LMR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-PT-LMR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-RT-LMR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-PF-LMR-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-PL-LMR-SC-IEC	ε II 2G Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KST-ET-P-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH

Model Number	Certification Code(s)	Input Parameters
KST-AT-P-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-PT-P-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-RT-P-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-PF-P-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-PL-P-SC-IEC	ε II 2G Ex ib IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ib IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KST-ET-LP-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-AT-LP-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-PT-LP-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-25°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-RT-LP-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-PF-LP-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-PL-LP-SC-IEC	ε II 2G Ex ib IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH
KST-AT-LP-50-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KST-RT-LP-50-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KST-ET-F-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH

Model Number	Certification Code(s)	Input Parameters
KST-AT-F-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-PT-F-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-RT-F-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-PF-F-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-PL-F-SC-IEC	ε II 2G Ex ib IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KST-ET-LF-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-AT-LF-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-PT-LF-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-RT-LF-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-PF-LF-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-PL-LF-SC-IEC	ε II 2G Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KST-ET-T-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-AT-T-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-PT-T-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH

Model Number	Certification Code(s)	Input Parameters
KST-RT-T-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-PF-T-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-PL-T-SC-IEC	ε II 2G Ex ib IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KST-ET-LT-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +55°C)	Transmitter: U_i = 24V, I_i = 100mA, P_i = 0.75W, C_i = 5nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-AT-LT-SC-IEC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +56°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 0.8W, C_i = 5nF & L_i = 0.5mH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-PT-LT-SC-IEC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 1nF & L_i = 10µH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-RT-LT-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 130mA, P_i = 1.0W, C_i = 3.6nF & L_i = 0 Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-PF-LT-SC-IEC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 30V, I_i = 120mA, P_i = 0.84W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH
KST-PL-LT-SC-IEC	ε II 2G Ex ib IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Transmitter: U_i = 17.5V, I_i = 380mA, P_i = 5.32W, C_i = 2nF & L_i = 1µH Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.2W, C_i = 150nF & L_i = 150µH

Table 4: ATEX Only '–SC' Model Certification Code & Input Parameters

Model Number	Certification Code(s)	Input Parameters
KS-M-SC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-MR-SC	ε II 2G Ex ia IIC T4 Gb (-20°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-LM-SC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Volt-Free Contacts: U_i = 28V, I_i = 120mA, P_i = 1.3W, C_i = 0 & L_i = 0
KS-LMR-SC	ε II 2G Ex ia IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)	Volt-Free Contacts & Resistors: U_i = 28V, I_i = 120mA, P_i = 1.2W, C_i = 0 & L_i = 0
KS-P-SC	ε II 2G Ex ia IIC T5 Gb (-25°C ≤ T_a ≤ +57°C) Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +42°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 100nF & L_i = 550µH
KS-PH-SC	ε II 2G Ex ia IIC T6 Gb (-25°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 100nF & L_i = 550µH
KS-LP-SC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 120nF & L_i = 200µH

Model Number	Certification Code(s)	Input Parameters
KS-LPH-SC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 120nF & L_i = 200µH
KS-LP-50-SC	ε II 2G Ex ia IIC T5 Gb (-40°C ≤ T_a ≤ +60°C) Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +45°C)	Each Sensor: U_i = 16V, I_i = 52mA, P_i = 0.169W, C_i = 70nF & L_i = 150µH
KS-LPH-50-SC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 16V, I_i = 25mA, P_i = 0.034W, C_i = 70nF & L_i = 150µH
KS-F-SC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 145nF & L_i = 340µH
KS-LF-SC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 15V, I_i = 50mA, P_i = 0.12W, C_i = 150nF & L_i = 150µH
KS-T-SC	ε II 2G Ex ia IIC T6 Gb (-20°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 20V, I_i = 60mA, P_i = 0.08W, C_i = 250nF & L_i = 350µH
KS-LT-SC	ε II 2G Ex ia IIC T6 Gb (-40°C ≤ T_a ≤ +60°C)	Each Sensor: U_i = 20V, I_i = 20mA, P_i = 0.20W, C_i = 150nF & L_i = 150µH

Table 5: Proximity Switches / Sensors and Transmitters Certification Details

Model Code	Proximity Switches/Sensors & Transmitter	ATEX Certificate No(s).
P	Type 3 Pepperl and Fuchs Proximity Switches / Sensors	PTB 99 ATEX 2219X PTB 00 ATEX 2032X PTB 00 ATEX 2048X PTB 00 ATEX 2049X
PH	Type 1 Pepperl and Fuchs Proximity Switches / Sensors	PTB 99 ATEX 2219X PTB 00 ATEX 2032X PTB 00 ATEX 2048X PTB 00 ATEX 2049X
LP	Type 3 -40°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors	PTB 00 ATEX 2049X
LP-50	Type 3 -50°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors	PTB 00 ATEX 2049X
LPH	Type 1 -40°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors	PTB 00 ATEX 2049X
LPH-50	Type 1 -50°C Low Ambient Temperature Pepperl and Fuchs Proximity Switches / Sensors	PTB 00 ATEX 2049X
F	IFM Proximity Switches / Sensors	PTB 01 ATEX 2191
LF	-40°C Low Ambient Temperature IFM Proximity Switches / Sensors	BVS 08 ATEX E 026
PF	-40°C Low Ambient Temperature PR Electronics Transmitter	KEMA 02 ATEX 1318
PL	-40°C Low Ambient Temperature PR Electronics FISCO ‘ib’ Transmitter	KEMA 02 ATEX 1318
T	Hans Turck GmbH Proximity Switches / Sensors	KEMA 02 ATEX 1090X
LT	-40°C Low Ambient Temperature Hans Turck GmbH Proximity Switches / Sensors	KEMA 02 ATEX 1090X
ET	Endress & Hauser Transmitters	PTB 07 ATEX 2056 PTB 04 ATEX 2053 PTB 01 ATEX 2013
AT	ABB Automation Product GmbH Transmitters	PTB 05 ATEX 2017X
PT	PR Electronics Transmitters	KEMA 03ATEX1535 KEMA 03ATEX1537
RT	Rosemount Transmitters	Baseefa03ATEX0030X Baseefa08ATEX0030X

16 Report Number

See Certificate History

17 Specific Conditions of Use

1. The cable glands used as entries to the enclosure must be suitably certified cable glands to the requirements of EN IEC 60079-0: 2018, including Annex A, with a minimum IP rating of IP6X in order to comply with the requirements of EN 60079-31: 2014.

2. Any unused entries must be fitted with a suitably certified blanking plug certified to the requirements of EN IEC 60079-0: 2018 with a minimum IP rating of IP6X in order to comply with the requirements of EN 60079-31: 2014.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
CERT-ES-9206-1	1 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Sensors
CERT-ES-9206-1*	2 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KS
CERT-ES-9206-1*	3 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KSR
CERT-ES-9206-1*	4 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KST
CERT-ES-9206-1*	5 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KST (P+F)
CERT-ES-9206-1*	6 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KST (IFM)
CERT-ES-9206-1*	7 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KST (TURCK)
CERT-ES-9206-1*	8 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KS (SEACON)
CERT-ES-9206-1*	9 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KSR – SC
CERT-ES-9206-1*	10 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KST – SC
CERT-ES-9206-1*	11 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KSR (P+F) – SC
CERT-ES-9206-1*	12 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KSR (IFM) – SC
CERT-ES-9206-1*	13 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Certification Label Type KSR (TURCK) – SC
CERT-ES-9206-1	14 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Enclosure Detail with SEACON Conn.
CERT-ES-9206-1	15 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Termination Label with

Number	Sheet	Issue	Date	Description
				SEACON Conn.
CERT-ES-9206-1	16 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Enclosure Detail – K2
CERT-ES-9206-1	17 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Switchbox Internals – Position Monitor
CERT-ES-9206-1	18 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Terminal Label – Position Monitor
CERT-ES-9206-1	19 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Switchbox Internals – Transmitter
CERT-ES-9206-1	20 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Termination Label – Transmitter
CERT-ES-9206-1	21 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Product with Optional Connector(s)
CERT-ES-9206-1	22 of 22	AC	2023-10-06	K1/K2 Switchbox – Ex ia Enclosure Detail – K1

The above drawings are held with IECEx BAS 16.0109X.

*These drawings are also common to BAS21UKEX0674X.

No current drawings remained unaffected by this issue.

20 Certificate History

Certificate No.	Date	Comments
Baseefa16ATEX0141	21 December 2016	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0: 2012 + A11: 2013, EN 60079-11: 2012 and EN 60079-31: 2014 is documented in Test Report No. GB/BAS/ExTR16.0262/00 and held with Project No. 16/0390.
Baseefa16ATEX0141X Issue 1	10 November 2023	This issue of the certificate confirms the current design meets the requirements of EN IEC 60079-0: 2018 including the revision of the equipment marking in accordance with these standards. The variation also introduces conditions of safe use. The test and assessment is documented in Test Report No. GB/SGS/ExTR23.0106/00 and held with Project No. 21/0357.
For drawings applicable to each issue, see original of that issue.		