

Hazardous (Classified) Location
EX

Non-Hazardous Location

Installation Notes for configuration codes XP03 and XP04

WARNING - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR APPROVED CLASSIFICATION

WARNING - DO NOT OPEN WHEN ENERGIZED

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

Approved Apparatus must be installed in accordance with these manufacturer instructions and per relevant codes, standards and regulations (i.e. IEC 60079-0, IEC 60079-1, IEC 60079-14, IEC 60079-31)

- Keep enclosure cover closed tightly and safety lock engaged when circuits are powered and an explosive atmosphere is present. Enclosures 93, 93,AD & 94 require 1/16" hexagonal wrench, enclosures 75 and 76 require a 3mm hexagonal wrench.
- T-Code is determined by maximum measured process temperature T_{process}.
- Seal all unused entries with appropriate blanking element approved for area and protection type. Sensor assemblies are supplied without blanking elements, conduit seals, or cable glands. Installer should select appropriate blanking elements, conduit seals or cable glands that are suitable for the area protection type. Follow relevant codes, standards and regulations (i.e. IEC 60079-0, IEC 60079-1, IEC 60079-14, IEC 60079-31).
- Cable glands and wiring must be rated 5°C higher than Ta.
- Enclosure must be attached to potential matching line.
- Keep all connections and covers tight when circuits are alive. Do not open/remove covers unless area is known to be safe. Covers must be screwed tight and secured; safety catch must be fastened before putting into service.
- All sensor pipe and conduit threaded connections to be made wrench tight.
- Hazardous (Classified) Locations:

CE 2813 II 2 GD Sira 18ATEX 1250X

Ex db IIC T6...T4 Gb Tamb=(See Table)

Ex tb IIIC T60°C...T110°C Db Tamb=(See Table)

IP66

IECEx SIR 18.0065X

Ex db IIC T6...T4 Gb Tamb=(See Table)

Ex tb IIIC T60°C...T110°C Db Tamb=(See Table)

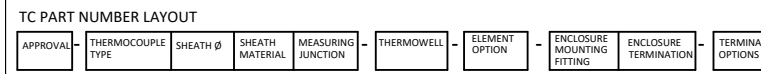
IP66

- Specific Conditions of Use:
- The XP joints are not field repairable, contact manufacturer if dimensional information is needed.
 - Field connections to XP sensors shall be appropriately certified for the location and installed in accordance with wiring method requirements of the local electrical code as applicable.
 - Heat transfer from the process must not cause the XP sensor enclosure to exceed T-code (gas) or Surface Temperature (dust) rating of the sensor assembly. Therefore, it is the end-user's responsibility to ensure that the ambient temperature around the XP sensor enclosure does not exceed the permitted ambient. Prevention measures include installing suitable insulation or an assembly with suitable length sheath or lagging.
 - When the process temperature range exceeds the service temperature range it shall be verified by on-site temperature measurements, taking the worst case conditions into account that the service temperature does not exceed the temperature range of the assembly enclosure.
 - The ranges of stopping plugs shall not be used in conjunction with any other cable entry device.
 - Reducers shall not be used for the direct inter-connection of enclosures.
 - Any unused enclosure entry must be filled with a properly certified Ex db, tb, IP66 stopping plug/blanking element.
 - For Class III (dust), enclosures 93 w/ option AD, electrostatic charging of external surfaces shall be avoided.

Enclosure	*Device	Electric Rating	Ambient Temp Range (Ta) w/o Union (w 6HN, 8HN, 6PN, 9HP or 8PN Head Mounting Fittings)	Ambient Temp Range (Ta) w/ Union (w 6XU, 8XU, 8RXU Head Mounting Fittings)
93 and 93,AD	T71-00, T71C-00, T72-00, T72C-00, T82-00 w/o display	11-30 Vdc, 25 mA	Ta: -20 TO +55/70/85°C T6/T5/T4 Gb, T65/T80/T95°C Db	Ta: -20 TO +55/60°C T6/T6 Gb, T65/T70°C Db
	Terminal Block	N/A	Ta: -20 TO +80/95°C T6/T5 Gb, T80/T95°C Db	Ta: -20 TO +60°C T6 Gb, T60°C Db
94	T71-00, T71C-00, T72-00, T72C-00, T82-00 w/o display	11-30 Vdc, 25 mA	Ta: -40 TO +55/70/85°C T6/T5/T4 Gb, T65/T80/T95°C Db	Ta: -20 TO +55/60°C T6/T6 Gb, T65/T70°C Db
	Terminal Block	N/A	Ta: -40 TO +80/95°C T6/T5 Gb, T80/T95°C Db	Ta: -20 TO +60°C T6 Gb, T60°C Db
76	T71-D10, T71C-D10, T72-D10, T72C-D10 w/ display	11-36 Vdc, 23 mA	Ta: -40 TO +65/80/85°C T6/T5/T4 Gb, T85/T100/T105°C Db	Ta: -20 TO +60°C T6 Gb, T85°C Db
	T82-D10 w/ display	11-42 Vdc, 23 mA	Ta: -40 TO +65/80/85°C T6/T5/T4 Gb, T85/T100/T105°C Db	Ta: -20 TO +60°C T6 Gb, T85°C Db
75	T142-T w/o display, T142-D w/display	11-36 Vdc, 23 mA	Ta: -40 TO +55/70/80°C T6/T5/T4 Gb, T110°C Db	Ta: -20 TO +55/60°C T6/T5 Gb, T110°C Db

Enclosure	Conduit Entries	Thread Size
93, 93,AD	1	3/4"-14 NPT
94	1	3/4"-14 NPT
76	1	3/4"-14 NPT
75	2	1/2"-14 NPT

*For assemblies with transmitter terminations refer to the appropriate transmitter instruction manual for additional instructions



APPROVAL	DESCRIPTION
HL06	ATEX / IECEx - Ex db, Ex tb

RTD ELEMENT OPTIONS

1st and 2nd characters
R1 (Grade B)
R3 (Class AA)
R5 (1/5 IEC Class B)
RA (Class A)
RB (Class B)
RC (Class C)
RD (Class D)

3rd character

T (thin film)
F (wire wound)

4th character

1 (single element)
2 (dual element)

5th and 6th character

10 (10 Ω Cu)
12 (120 Ω Ni)
25 (200 Ω Pt)
55 (500 Ω Pt)
85 (100 Ω Pt)
92 (100 Ω Pt)
95 (1000 Ω Pt)

EXAMPLE RTD PART NUMBER:
HL06-R1T185H484-RW4G2007T6C8S-FP-8XU594,M5,T82-00-41-85-00-A-U-S(-40-180)C

TC ELEMENT OPTIONS

Thermocouple Type	Code	Description
E, EE, EEE	Single (E), Double (EE), Triple (EEE) Thermocouple	
J, JJ, JJJ	Single (J), Double (JJ), Triple (JJJ) Thermocouple	
K, KK, KKK	Single (K), Double (KK), Triple (KKK) Thermocouple	
T, TT, TTT	Single (T), Double (TT), Triple (TTT) Thermocouple	
N, NN, NNN	Single (N), Double (NN), Triple (NNN) Thermocouple	

Sheath Diameter and material (first digits are diameter, ending digits are material)

2 8	1/8" Sheath Diameter, Material 8 = stainless steel (see list of other material codes)
3 8	3/16" Sheath Diameter, Material 8 = stainless steel (see list of other material codes)
(236) 8	6 mm Sheath Diameter, Material 8 = stainless steel, (see list of other material codes)
4 8	1/4" Sheath Diameter, Material: 8 = stainless steel, (see list of other material codes)
5 8	5/16" Sheath Diameter, Material 8 = stainless steel, (see list of other material codes)
6 8	3/8" Sheath Diameter, Material 8 = stainless steel, (see list of other material codes)

Other Material Code Options: 3 = Alloy 600, 4 = 310 SS, 5 = 446 SS, 6 = 316 SS, 32 = 316L SS, 29 = Alloy C-276, 41=HR160

Above with "Z" at end - does not affect Safety or Certification (suffix at end of p/n: is Z + 3 or 4 digits)

2521 = Shin-Etsu sensor potting

2187 = flat tip

2371 = 20 Gauge sensor lead-wire

Measuring Junction

u	Unrounded
UM	Unrounded, Special Limits Thermocouple

Thermowell Part Number

Part number per catalog or contact factory for details

Element Options

FP	Spring loaded element w/ flame path
FE	Fixed element

TRANSMITTER CALIBRATION CUSTOMER / ORDER SPECIFIC

EXAMPLE TC PART NUMBER:
HL06-K48UM-HF440R151029FC8-FP-8HN93,T82-00-TI-K-00-A

TITLE:
Installation Instruction ATEX / IECEx db, tb HL06, XP03 & XP04 Assembly, T71, T72, T82, T142

This document is PROPRIETARY to Pyromation

PART NUMBER:
H093702

REVISION DATE:
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SCALE:
N/A

pyromation beyond measure

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