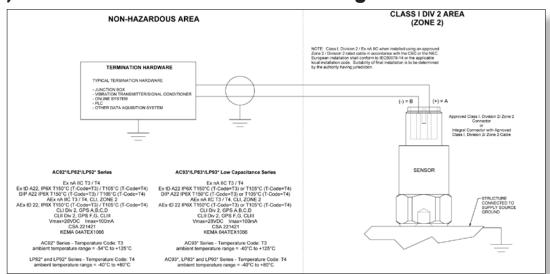
### Class I, Division 2/Zone 2

**Control Drawing & Overview** 

For LP822, LP922 Series

# Class I, Division 2/Zone 2 Control Drawing



### **Overview & Requirements**

An area in which the fire or explosion hazard exists infrequently and for short periods, is the designation given to a Class I, Division 2/ Zone 2 location. One suitable protection technique for a sensor in a Class I, Division 2/Zone 2 location is "Non-arcing/Non-sparking" for use without a barrier.

The following are a few guidelines to be used when installing CTC sensors in a Class I Division 2 / Zone 2 location:

- AC92X, LP82X & LP92X sensors must utilize approved Class I Division 2/Zone 2 cable (such as CB190).
- AC92X, LP82X & LP92X sensors must utilize approved Class I Division 2/Zone 2 connectors (such as the D2Q).
- Approved connector <u>must be mechanically locked or safety wired</u> on the sensor end of the cable.
- Cable conductors must be wired directly to the termination point.
- Cable shield to be grounded at termination hardware.
- Sensor must be stud mounted.
- Suitability of final installation is to be determined by the authority having local jurisdiction.

# **Required Accessories**

#### D<sub>2</sub>Q

Class I. Division 2/Zone 2. 2 Socket MIL connector with backshell and safety tie-off points



#### CB922-1A

1 Inch NPT Adapter with 2 Socket MIL Connector and 24 Inches (.61 Meters) of Class I, Division 2 Rated Cable with Flying Leads



**CB190** 

Class I, Division 2/Zone 2, twisted, shielded pair, blue thermoplastic elastomer (TPE) jacketed, 2 conductor cable

**CB206** 

Class I. Division 2/Zone 2, twisted, shielded pair. red Teflon® with Stainless Steel Armor Cover, 2 conductor cable



Cable Assemblies: CB190-D2Q-XXX-Z\* Class I, Division 2/Zone 2, TPE jacketed cable, 2 socket MIL connector with backshell

\* XXX = cable length

# **Regulatory Approvals & Requirements**

#### **Regulatory Approvals**

US & Canada:



Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G; Class III Temperature Code T4; ambient temperature range -40°C to +80°C Canada: Ex nA IIC T4; DIP A22 IP6X T105°C (T-Code = T4) USA: AEx nA IIC T4; Class I, Zone 2; AEx tD 22, IP6X T105°C (T-Code =T4)

ATEX:



Ex nA IIC T3/T4 - Ex tD A22 IP6X T150°C/T105°C Temperature Code T4; ambient temperature range -40°C to +80°C

- Energy limiting barrier not required with Class I, Division 2/Zone 2 sensors
- Must be used in combination with Class I, Division 2/Zone 2 approved cable (such as CB190) and connector (such as D2Q).
- Please refer to "Class I, Division 2/Zone 2 Series Control Drawing" (above); in accordance with CEC or the NEC
- Case of sensor must be grounded. Please refer to "Class I, Division 2/Zone 2 Series Control Drawing" (above)
- Suitability of final installation is to be determined by the authority having local jurisdiction

