

## KL3032X1-BA1

Thermocouple / mV Input  
CHARM

## Hazardous Atmosphere



II 3 G

Nemko II 3G Ex nA [nL] IIC Gc

II 3 G Ex [ic] nA IIC Gc

FM12ATEX0089U

IECEX FMG 12.0036U

## Power Specifications

CHARM Bus power rating +6.3 VDC at 32 mA

Field circuit rating +24 VDC at 10 mA

## Environmental Specifications

Ambient Temperature -40 to 70° C

Shock 10g ½ Sinewave for 11 msec

Vibration 1mm Peak to Peak from 2 to 13.2Hz; 0.7g from 13.2 to 150Hz

Airborne Contaminants ISA-S71.04 –1985 Airborne Contaminants Class G3

Relative Humidity 5 to 95% Non-Condensing IP 20 Rating

Terminal block key position 2A

**Note:** Refer to the product label for serial number and location and date of manufacture.

**Warning:** This product has specific instructions for installation, removal and operation in hazardous areas. Refer to document 12P5403 "*DeltaV™ Electronic Marshalling Digital Automation System (CHARM I/O Subsystem) Zone 2 Installation Instructions*". Other installation instructions are available in the "*DeltaV™ S-series and CHARMS Hardware Installation*" manual.

## Removal and Insertion

CHARMS can be inserted or removed under power only when the maximum power supplied to the CHARM I/O card (KL2101X1-BA1) has an open circuit voltage (Voc) of 26.4 VDC. DeltaV bulk power supplies (KJ1502X1) meet this voltage requirement when installed according to the installation instructions.

An I/O loop assessment must be completed on all energy-limited nodes.

A keying system ensures compatibility between a CHARM and the CHARM terminal block when the CHARM is installed on the terminal block. The terminal block keys are automatically set the first time the CHARM is installed on the terminal block. To install another CHARM type on a terminal block, reset the keys by removing the terminal block and releasing the keys from the locked position.

## Maintenance and Adjustment

This unit contains no user serviceable parts and should not be disassembled for any reason. Calibration is not required.

## Other Safety Approvals



CL. 1 Div. 2  
GP. A,B,C,D  
HAZ. LOC.  
TEMP. Rating T4

