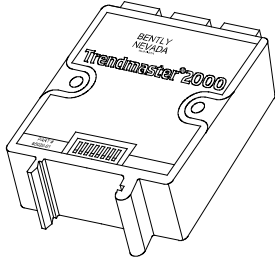


88255-01 Keyphasor* Transducer Interface Module

Bently Nevada* Asset Condition Monitoring



Description

The 88255-01 Intrinsically Safe Keyphasor Transducer Interface Module (TIM) allows input of shaft rotative speed and phase data into the Trendmaster* 2000 System. This single-channel device acts as a Proximitor* and interfaces to either our Bently Nevada 3300 XL 8 mm or 3300 5 mm proximity probe and extension cable (5 meter system).

Specifications

All specifications are within operating temperature limits, using an AISI 4140 steel target, unless otherwise noted.

Electrical

Keyphasor

(88255-01):

Used with a 3300 XL 8 mm probe or

3300 5 mm probe and extension cable (5 meter system only).

Notch or Projection:

Along length of the shaft.

Minimum Width: 9.0 mm (0.35 in).

Minimum Depth/Height: 1.25 mm (0.05 in).

Near Gap Range:

Probe should be set between 10 mils (250 μ m) and

25 mils (625 μ m) from the closer of the two surfaces being observed on the shaft.

Linear Range:

1.25 mm (50 mils).

Linear range begins at approximately 0.25 mm (10 mils) from target and is from 0.25 to 1.5 mm (10 to 60 mils).

Frequency Response:

0.1 to 600 Hz (6-36,000 cpm) when used in the TM2000 system.

Electrical Classification:

Complies with the European CE mark

Environmental Limits

Operating

Temperature:

-20°C to + 100°C (-4°F to +212°F)

Storage

Temperature:

-40°C to + 100°C (-40°F to +212°F)

Humidity:

Up to 90% relative humidity, noncondensing. Use of weather-proof housing recommended for environmental protection.

Electrostatic Discharge (ESD) Protection:

10 kV through 1 k Ω to exposed surfaces.

Vibration:

50 mm/s peak (2.0 in/s peak).

10 Hz to 1000 Hz any axis.

Mechanical

Transducer Interface Module Material:

Polycarbonate

Size

Height:

77 mm (3.0 in) typical

Width:

23 mm (0.89 in) typical

Depth:

78 mm (3.1 in) typical

Weight:

Up to 112 g (0.25 lb)

Mounting:

Variety of mounting configurations including clips for 35 mm mounting rail and two holes for #6 (M4) screws.

Compliance and Certifications

EMC

Standards:

EN 61000-6-2 Immunity for
Industrial Environments
EN 55011/CISPR 11 ISM Equipment
EN 61000-6-4 Emissions for
Industrial Environments

European Community Directives:

EMC Directive 2004/108/EC

Electrical Safety

Standards:

EN 61010-1

European Community Directives:

2006/95/EC Low Voltage

Hazardous Area Approvals

North American

Class I, Groups A, B, C, and D;
Class II, Groups E, F and G;
Class III; Enclosure type 4 when
installed per drawing number
86571; T₄ @T_a = 100°C

Note: When used with Internal Barrier I/O Module, refer to specification sheet 141495-01 for approvals information.

For further certification and approvals information please visit the following website:

www.ge-mcs.com/bently

Patent:

5,200,743

Components or procedures described in this patent apply to this product.

Ordering Information

All necessary connectors for transducer and cable (line) hook-up are included with the TIM.

88255-01

Intrinsically safe Keyphasor
TIM

Accessories

126709-04

Manual

Details and Dimensions

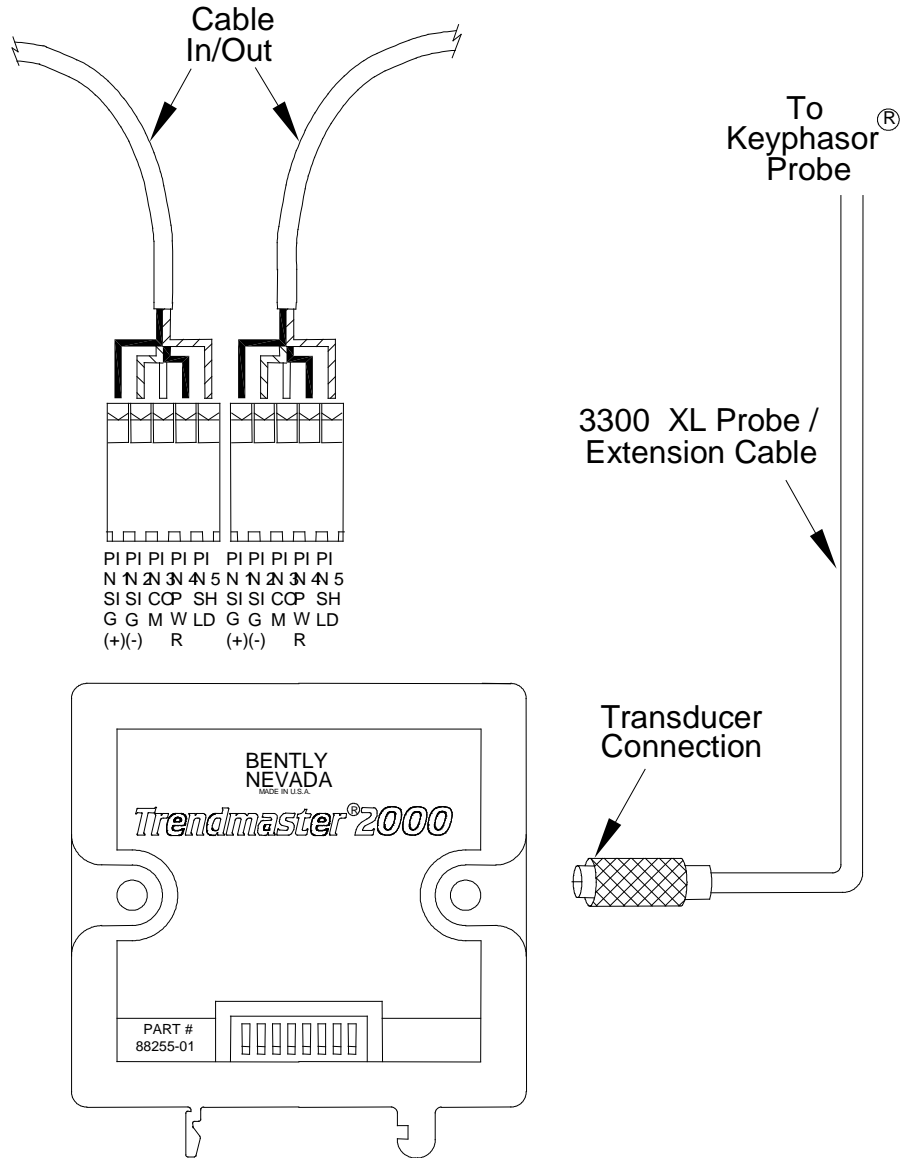


Figure 1: TIM connection details

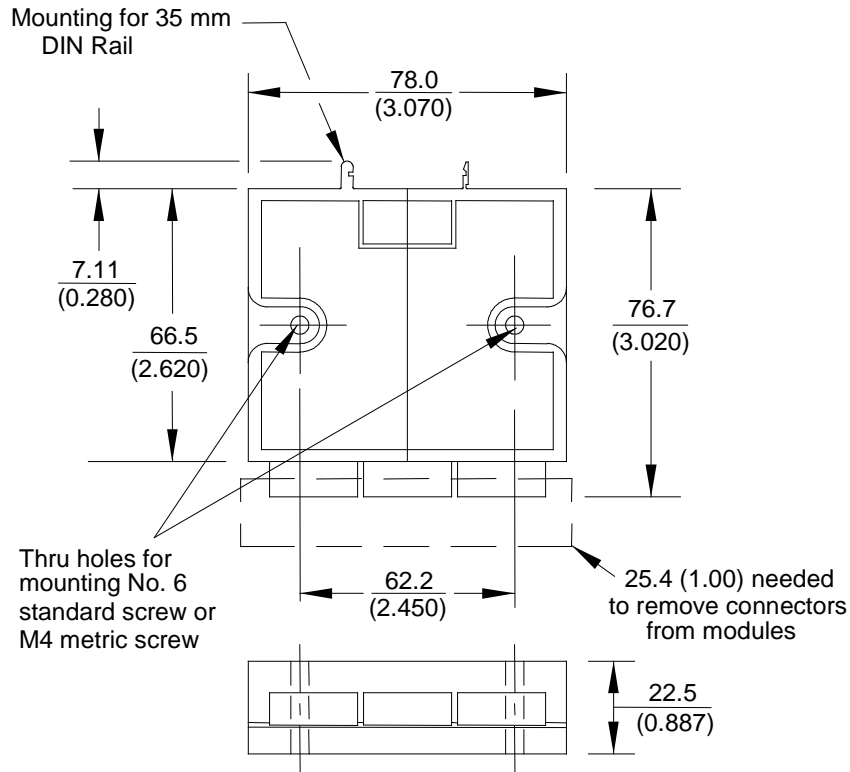


Figure 2: TIM dimensions
 Dimensions are in millimeters (inches)

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Specifications and Ordering Information
 Part Number 141565-01
 Rev. D (10/11)