

### dual channel vibration monitoring equipment

#### OPERATION

The T1-NC/2 equipment is designed to monitor relative vibrations of rotating parts working under continuous or particularly heavy duty conditions. This allows correct scheduling of maintenance in order to avoid serious damage to the machinery. System T1-NC/2 can control two measuring points thus optimizing space requirements, installation methods and costs of an instrumentation for protecting any machine mounted on 2 bearings. The equipment is interfaced with 2 proximity transducers type T-NC8/API for measuring relative vibrations.

#### TYPICAL APPLICATIONS

Monitoring of vibrations on machines mounted on sleeve bearings. The system can be used with 2 transducers T-NC8/API on each bearing in accordance with API 670 standard. The version in case IP65 allows field installation of the equipment, while the version with control card holder can be mounted on a DIN rail and installed in an electrical cabinet.



#### MAIN FEATURES

The T1-NC/2 system consists of a dual channel processing module with card holder or else inserted in an aluminium case with protection class IP65, and two 2 proximity transducers type T-NC8/API installed on the bearings of the machine to be monitored.

Many settings can be made by the customer during installation or when placing the order so as to have a flexible system, easy to use for the widely different applications.

For definition of the threshold alarms, consult CEMB technical booklet N° 24 "Machinery monitoring and supervisory instrumentation" which makes reference to the very latest ISO, VDI and API international standards.

#### TECHNICAL FEATURES

##### Composition

- one processing module fitted with special card holder or else in spray-and dust-proof die-cast aluminium case
- two measuring transducers of no contact type

##### Standard transducers

- T-NC8/API

##### Power supply

- 110/220 VAC - 50/60 Hz 7.5 VA

##### External connections

- Through terminal board mounted on the card holder or else inside the case (max conductor section 2.5 mm<sup>2</sup>)

##### Analogue outputs

- nr. 2 analogue current or voltage outputs for channel A and channel B

##### Digital outputs

- nr. 2 SPDT contacts for 1st alarm level regarding channel A and channel B
- nr. 2 SPDT contacts for 2nd alarm level regarding channel A and channel B
- nr. 1 SPDT contact for self-diagnostic common to channel A and channel B

##### Operating temperature range

- from -10° C to +65° C

# INTEGRATED EQUIPMENT

## Contact characteristics

- max voltage 300 vdc, 250 VAC
- max current 5A

## Settings which can be made by the customer

- power supply 110 VAC and 220 VAC
- time delay for alarms (1s or 10s)

## Settings which can be made when placing the order

- type of output signals
- range of measurement
- alarm 1 relays (channel A and B) normally energized or de energized
- alarm 2 relays (channel A and B) normally energized or de-energized
- or voting alarm 1 relays for channels A and B
- or voting alarm 2 relays for channels A and B

## ORDERING DATA

T1-NC/2 /  /  /  /  /  /  /  /

### A: Version

0	with card holder
1	in case IP65

### D: Alarm 1 relay

0	normally de-energized
1	normally energized

### B: Output signals

0	4 to 20 mA
1	0 to 10 V
2	0 to 20 mA
3	special to be defined

### E: Alarm 2 relay

0	normally de-energized
1	normally energized

### C: Range of measurement

0	0 to 100 $\mu$ m
1	0 to 200 $\mu$ m
2	0 to 500 $\mu$ m
3	special to be defined

### F: Alarm 1 relay

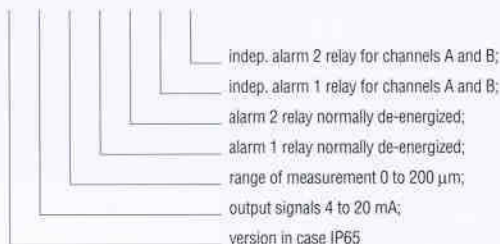
0	independent for channels A and B
1	or voting for channels A and B

### G: Alarm 2 relay

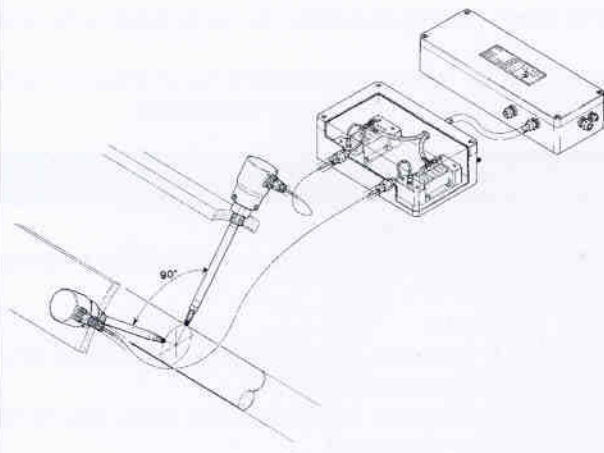
0	independent for channels A and B
1	or voting for channels A and B

## Example of an order:

T1-NC/2 / 1 / 0 / 1 / 0 / 0 / 0 / 0

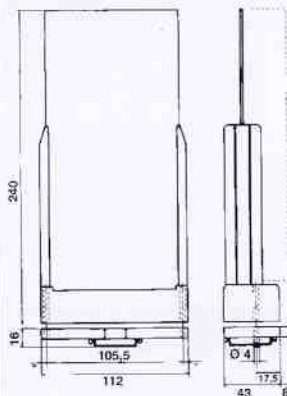


## Typical application



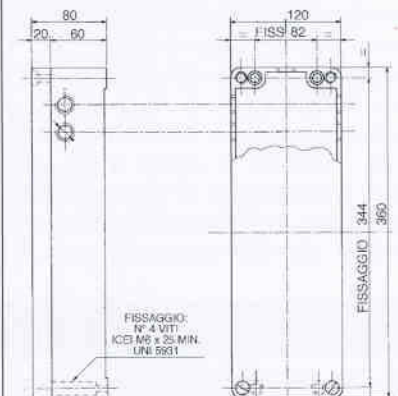
Version T1-NC/2/1

## Card overall dimensions



T1-NC/2/0

## Case IP 65 overall dimensions



T1-NC/2/1

## Terminal board

