

INTEGRATED  
EQUIPMENT

# TD-2



## Monitoring and Protection System



The TD-2 dual-channel monitoring system is designed for control, continuous monitoring and protection of any rotating machine. TD-2 can read any type of standard vibration sensor. It supports all the CEMB sensors and also can be configured for each range of sensor of any manufacturer.

- TD-2 interfaces with a supervision system either through 4-20 mA outputs or with connectivity MODBUS TCP-IP
- TD-2 is designed to be connected to an ETHERNET network with others TD-2 or by the TDSP multi-channel system and to export the data for remote vibration analysis and machine status

### Functions

- **VIBRATIONS + KEY PHASOR**
- **AXIAL DISPLACEMENT**
- **ROTATION SPEED:**
  - Zero Speed
  - Overspeed
  - Reverse rotation
- **ECCENTRICITY**
- **BALANCING 1/2 PLANES**
  - Extra software needed

### Technical Specifications

- **Power supply:**
  - 24 VDC - 400 mA max
- **Installation:**
  - DIN rail or or IP65 die-cast aluminum case
- **Dimensions:**
  - 247mm x 105.3mm x 58.5mm
- **Weight:** 800 g
- **Ambient conditions:**
  - Temperature:** -20°C ÷ +70°C
  - Humidity:** 95% non-condensing

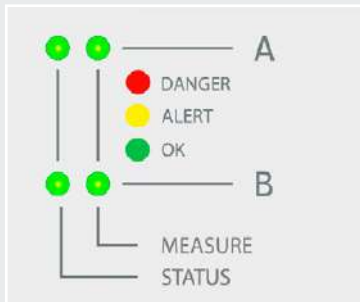
**NEW**



# CEMB

BALANCING MACHINES

## LED INDICATORS FOR STATUS OF CHANNELS



- Threshold and alarms
- Diagnostics

## PORTABLE INSTRUMENTS



N130



N600

Input signals replicated on the BNCs for vibration analysis using portable systems made by CEMB or third party manufacturers

## ETHERNET PORT FOR EXTERNAL COMMUNICATIONS

- System Configurations
- Data Export & Analysis
- Balancing



TCP/IP  
MODBUS



LED

BNC

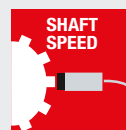
ETHERNET



Ch.A

Ch.B

CHA - CHB



FUNCTIONS

VIBRATION PHASE

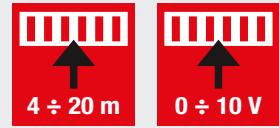
SHAFT POSITION

SHAFT SPEED  
OVER SPEED  
ZERO SPEED

ECCENTRICITY

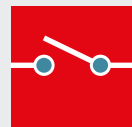


### 2X ANALOGUE OUTPUT



4-20mA configurable  
or  
0-10V configurable

### 2X BINARY INPUT



- Trip multiplier
- Trip bypass

### 6X RELAY



- Configurable relay
- NO/NC
  - With/Without memory
  - Setting time
  - Triggering condition AND/OR

### KEY-PHASOR



Proximator or photocell

### KEY-PHASOR

#### TYPE OF SENSOR

VELOCITY TRANSDUCERS  
VELOCIMETER  
ACCELEROMETER

PROXIMITORS

PROXIMITORS

PROXIMITORS  
HALL SENSOR

PROXIMITORS

#### SENSOR MODEL

T1-40  
TV-22 TV-32  
TA-18/S  
Third party sensors

T-NC/8 API  
Third party sensors

T-NC/8 API  
T-NC/16/20/30  
Third party sensors

T-NC/8 API  
T6-H T6-R  
Third party sensors

T-NC/8 API  
T-NC/16/20/30  
Third party sensors



# TECHNICAL DATA

## ORDER INFORMATION:

TD-2 /   /   /

### A: FUNCTIONS

A1	Vibrations + Phase (with Key-Phasor)
A2	Displacement and Expansion
A4	Eccentricity
A5	Zero speed / Reverse Rotation / Overspeed

### B: SENSOR TYPE

B1	Electrodynamic velocimeter	Only for A1
B2	IEPE accelerometer or velomitor	Only for A1
B3	Proximity (non contact) sensor	For all functions
B4	Electromagnetic sensor	Only for A5
B5	Hall effect sensor	Only for A5
B7	General 0-10V	Only for A2
B8	Digital sensor NPN	Only for A5
B9	Digital sensor PNP	Only for A5

### C: OUTPUT TYPE

C1	4-20 mA
C2	0-10 V

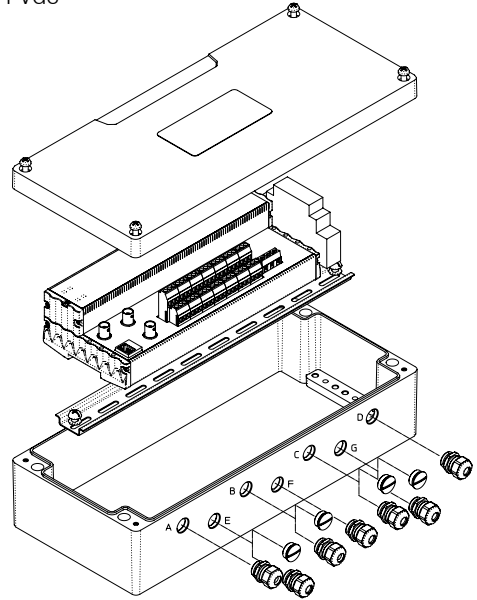
## OPTIONAL:

Junction Box IP65 (die-cast aluminum painted)  
Dimensions: 360mm x 160mm x 95mm

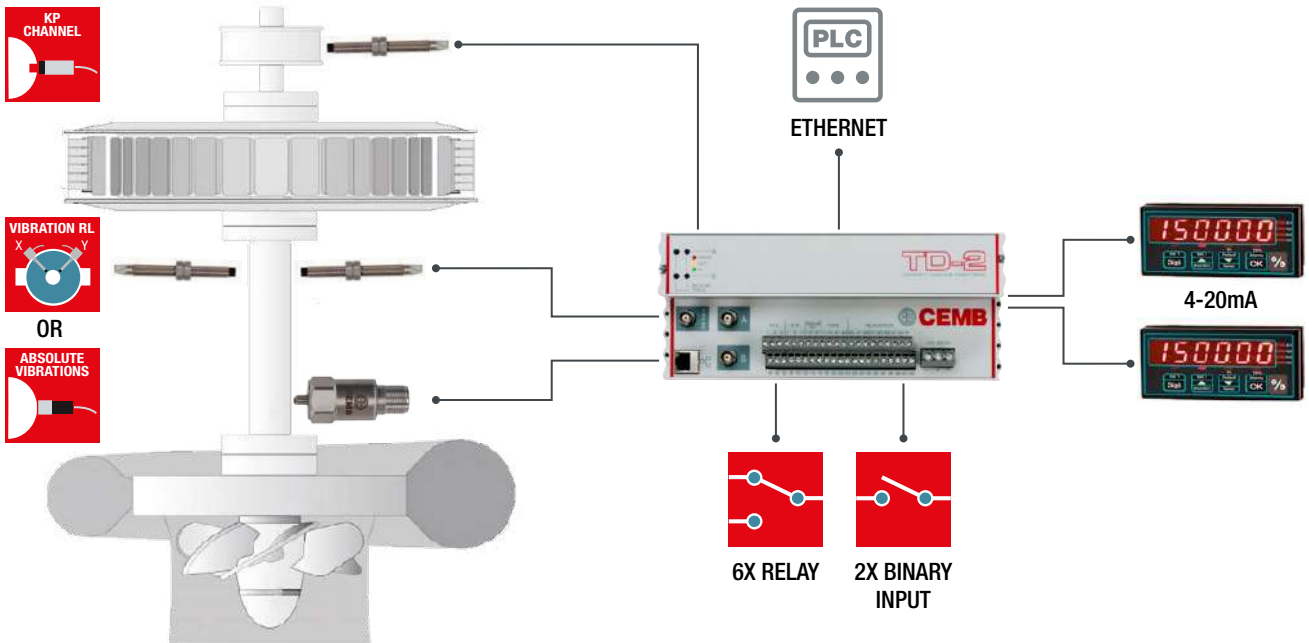
A  
TD-E /

### A: POWER SUPPLY

0	110/230 VAC - 50-60 Hz
1	24 Vdc



## APPLICATION SAMPLE: vibrations and phase (TD-2/A1)



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