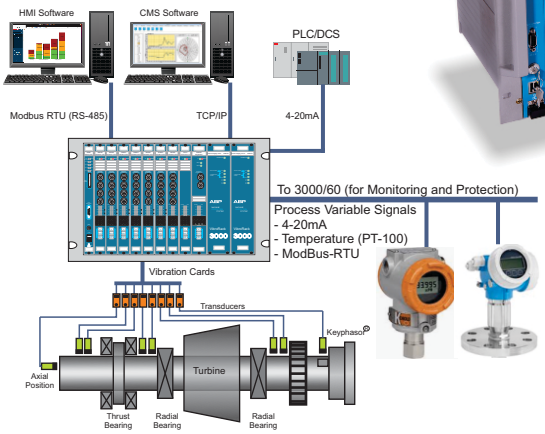
VibroRack3000

Large Sized Machinery Protection System

Feature

- 19’ Rack Mount with 12 slot
- Input: 4 to 36 channels
- Digital Output: 8 Relay(4 Alerts, 4 Danger) per card , 1 Sensor Error
- Analog Output: Four 4-20mA per card
- Trip Multiply / Malfunction /Reset Factory
- Condition Monitoring (CM) Support
- 3 Redundant ModBus-RTU
- Redundant Power Supply
- SIL2 (IEC-61508) Approved
- Power Input: 110/220VAC



Applications

- Radial Vibration
- Seismic Vibration
- Case Expansion
- Relative Shaft Vibration
- Process Value
- Shaft Trust/Axial Position
- Temperature
- Rotor Speed
- Rod Drop

Technical data

VibroRack3000

Analogue Inputs	-IEPE/voltage mode accelerometer -Proximity probe -Velocity Sensors -KeyPhasor®/ Tachometer -RTD Sensor -4-20mA Signal -Any type of voltage or current output transducers
Input Channel	4 up to 32 vibration channels, 2 up to 4 keyphasor channels and 4 up to 32 multifunction channels (4-20mA or RTD)
Input Connector	ScrewTerminal
Signal Conditioner	Amplifier/integrator to obtain velocity or displacement response by integration
Frequency Response	Acceleration and Velocity and Displacement: 2 to 10,000 Hz (In Factory Defined) Thrust / Position :DC
Over Voltage	2.5 V Pk-Pk
Input Voltage	110/220 VAC/DC
Analog Outputs	Four 4-20mA outputs per card
Logical Outputs	8 (4 Alerts, 4 Danger) per card , 1 malfunction
Measurement Units	m/s2, mm/s, µm, C,F, RPM
Power Consumption	400 Watt

Physical

Housing	Aluminum Alloy
Weight	3.2 Kg
Dimension	445*277*259
Mounting	19” Rackmount

Environmental

Protection	IP 55
Operating Temperature	-20°C, +60°C
Humidity	95% max without condensation

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Relay Specification	Form C, SPDT, 1 Amp 110 VAC, Latching or Non-Latching Selectable Normally Energized or Normally De-Energized (User Defined) Bypass Relay or Active Relay Selectable
Alarm Time Delay	1 to 60 Seconds (User Defined)
Accuracy	1% Full Scale
Reset Function	Push Button /Terminal for Remote Reset if Latching Alarms Selected
Trip Multiply Function	Terminal for None , variable 10 to 90% Alarm Trip multiply
Alarm Indication	OK=Green LED, Alert=Yellow LED, Danger=Red LED
Dynamic Range	75dB
Local Indicators	Up to 20 parameters and adjusting configuration With 7Segment Front of Cards
Phase Linearity	(0.1 Hz to 10 kHz) ±1 deg
Buffered Outputs	2 type Buffered Outputs :With sensor offset/without DC
Detection Mode	RMS, True Peak, True Pk-Pk
Resolution	12 bit
Sample Rate	Up to 4 KHz synchronous sampling
Communication with HMI	3 redundant Serial port RS-485 Modbus RTU Protocol
HMI Software	Any standard HMI Software Like Wincc
Communication with CMS	Ethernet (10/100 base T) ABPVIBRO Protocol
CMS Software	Vibro-CMS

Certificate

Electromagnetic Compatibility
EMC (IEC61000-6-2,IEC61000-6-4)
Safety (IEC61010)
SIL2 (IEC61508)
Environmental Certificate (IEC 60068-2-1, IEC 60068-2-2)