

# MECASON<sup>®</sup> MODULAR UNITS



Designed to monitor those machines requiring an instantaneous reaction to any evolution, the modular electronics units assure uninterrupted monitoring for each measurement point.

These modules are also the most economic solution in those cases where only one or two measurement points are needed. With its 4-20 mA analog output offers a means by which the user can adapt the process parameters according to machine behavior.

To facilitate their installation together with other industrial electric components, the modular units feature industry standard housings for DIN rail snap-on installation.

# **SOME APPLICATIONS**

Monitoring for bearings, gearboxes, piston compressor flap valves, detection of the presence of liquid in refrigeration compressors, detection of fluid passage in pipes, confirmation of valve closure, etc. The modular units should be used there where the input scanning dead times of the CBN 30 are too long to ensure an effective monitoring.

Two modular unit versions are available RBV with relay outputs, and TBV with 4-20mA analog output:

# **RBV Module**

This modular units features two relays outputs. The first outputs signals a defective measurement or the passage of the first high level alarm (warning) and is wired in positive security. The second output signals the passage of the second high alarm level (emergency) and is often used to shut down automatically that machine. All alarm levels are user adjustable.

The limits are sets in relation to an initial level adjusted by the user at the beginning of monitoring, witch forms the base of the measurement and is associated with a «good» machine operation.

# **TBV Module**

This modular unit functions as a converter/transmitter with a 4-20 mA analog output proportional to the measured noise level. This module is especially well adapted for use together with a PLC. The generation of the alarms and the storage of the measured values being managed by the PLC.

An initial gain adjustment defines the «good» machine operation noise level. Any variation of this initial level is transmitted proportionally and in real time via the 4-20mA output.

According to the demands of the application at hand, the sensors are available with protection rating IP 65 or watertight up to a depth of 50m. For applications in explosive zones, a sensor version certified EEX IIC is T5 is also available.

This certification implies the use of a Zener barrier for each sensor, which must be installed between the sensor and the electronics unit and outside of the explosive zone.

### **TECHNICAL SPECIFICATIONS**

# **ABW POWER SUPPLY MODULE:**

Maximum power

- Maximum number of modules served

- Plug-on screw terminal connections

- Supply voltage : - standard

- upon demand

- Electrical protection

- Housing polyamide 6.6 and polycarbonate, snap-on mouting for DIN rails

- Dimensions(mm)

- Mass

8 VA 8 2.5 mm<sup>2</sup> 230 V 50 Hz 127, 48, 24 V 50 Hz fuse 5 x 20 with varistor

110x76x90 mm 500g approx

# **RBV MODULES:**

- Power supply

- Alarm output delay

- Analog test output

- Plug-on screw terminal connections

- Operating temperature

- Housing polyamide 6.6, snap-on mounting for DIN rails

- Dimensions

- Mass

- Relay outputs: - maximum switching voltage

- maximum switching current

- maximum swtiching power

12 V DC regulated

1s approx

0 - 1000 mV via plugs banana Ø2

2,5 mm<sup>2</sup> -10 to +50°C

70 x 25 x 90 mm 100g approx 125 V

1 A

60 VA (AC), 50 W (DC)

# **TBV MODULES:**

- Power supply

- Maximum resistance at output

- Analog test output

- Plug-on screw terminal connections

- Operating temperature

- Housing polyamide 6.6, snap-on mounting for DIN rails

- Dimensions

- Masse

12V DC regulated 4-20 mA, 400 Ohms

0 - 1000 mV via plugs banana Ø2

2,5 mm<sup>2</sup> -10 to +50°C

70 x 25 x 90 mm 100g approx

# **SENSORS:**

- Pass band (sensor and electronics)

- Operating temperature

- Protection rating

- Installation hardware

- Masse excluding cable

- Wire connections per co-axial

- Sensor shaft stainless steel

100 à 12000 Hz -20 to +60°C

IP 65, (upon demand water tight to 50 m)

washer and screws CHC 5

50 g approx

0,22 mm<sup>2</sup>, insulation plastified PVC

316 L, shrink tube

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