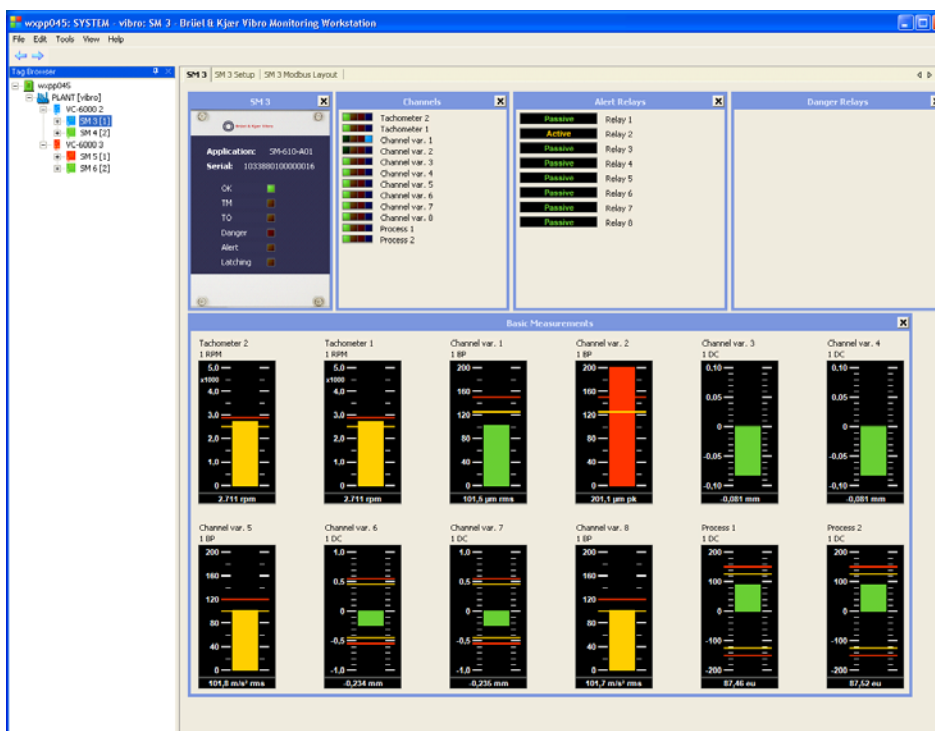




Product Specification

Compass 6000 Safety Monitoring Workstation Type 7126 Configuration and Data Display Software

The **Type 7126** is the basic software used to configure the communications and monitoring modules of the **VIBROCONTROL 6000 safety monitoring system (VC-6000®)**. The software can be used as a control room user-interface to display measurement data and acknowledge alarms from any number of VC-6000® monitoring systems. During machine commissioning, all measurements can be stored at regular intervals in a file for baseline documentation.



Applications

Monitoring configuration

7126 software is used to configure the parameters of the monitoring tasks of the VC-6000® safety monitoring system.

Measurement overview

7126 provides an overview of all the machines, their alarm status and measurements. The software provides measurement displays for a given monitoring configuration.

Commissioning and Baseline documentation of machines

An accurate record of the condition of new and overhauled machines can be

easily made. Vibration and process data from the VC-6000® can automatically be saved at user-defined intervals to a spreadsheet compatible format. This therefore enables basic diagnosis and analysis.

Software Functionality



Fig. 2 Monitoring configuration dialogue (VC-6000 rack level)

The 7126 software is based on Brüel & Kjær Vibro's **Compass 6000** software, which is the primary platform used for condition monitoring purposes. The 7126 is a stand-alone software specially adapted to the VC-6000[®] safety monitoring system. Configuration information and data can be saved to a file. Data and alarm information from the VC-6000[®] is automatically and continuously accessed and displayed by the 7126 via a LAN interface. The software communicates with the VC-6000[®] via an OPC interface, and can thus be installed on a computer in a Local Area Network remote from the VC-6000[®] monitors.

Monitoring Configuration

The 7126 software is used to configure the communication interface modules, monitoring modules and measurement points and the outputs.

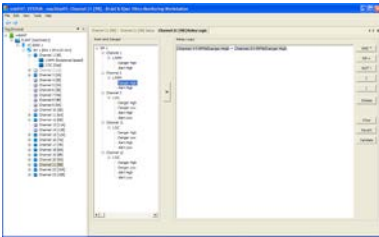


Fig. 3 Relay logic configuration dialogue

Relay Logic Configuration

Some VC-6000[®] module configurations allow the relays to be configured using user-defined relay logic statements with AND, OR, NOT and (). The simple software setup provides enormous flexibility. It is possible to use the logic setup to configure any number of measurements for such modules to control a single relay. The relays can be set up of these SM-610 Monitoring Modules to any voting logic standards, e.g. 2-out-of-3. By setting up the relay logic in the software rather than directly in the hardware, machine commissioning can be performed faster, and there is no re-wiring necessary when changing the relay logic.

Communications Configuration

The VC-6000[®] can communicate measurement data directly to a distributed control system (DCS) using the following protocols:

- OPC (Ole for Process Control)
- Modbus RTU

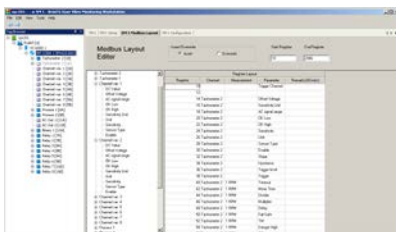


Fig. 4 Modbus communications configuration dialogue

With OPC and Modbus RTU, both measurement values and alarm data are available to the DCS. Often Modbus is chosen as the fastest and most reliable data link to the DCS Operator's workstation SCADA system. Relays can also be reset via Modbus (the VC-6000[®] system configuration and alarm acknowledgement has to be performed via LAN from the 7126 PC server).

The VC-6000[®] Communication Interface Modules (CI-6xx) can be configured using the 7126 software:

- **LAN**
- **Serial:** RS-232, RS-485

Tag Browser

The 7126 software can be used in a control room to overview the entire monitoring status of the machines.

The tag browser allows you to navigate through all the machines and measurement points within the entire plant. The measurement and alarm status of several VC-6000® racks can easily be seen in an overview display. The colour of the icons in the Tag browser indicates the alarm status, disabled tags, etc. at a glance. By right clicking on the tag browser icons it is possible to acknowledge alarms.

Data Logging

All scalar data monitored by the VIBROCONTROL 6000® – both steady state and transient - can be saved to a spreadsheet format (*.csv). The logging interval and period is user defined. The file can then be plotted in a spreadsheet such as Microsoft Excel® to document the baseline condition of the machine during machine commissioning. This data-logging feature can of course also be used for documenting the machine quality in terms of vibration measurements after a maintenance operation.

Specifications for 7126

PC Operating system*:

Windows® 7 SP 1 (64 Bit), Windows® 8.1 (64 Bit)

*for more details please see BUM0090 installation manual

PC Hardware:

CPU - 1GHz or higher. Intel Pentium 4 or similar

RAM – Minimum 100MB free RAM

LAN (Ethernet) – 10Mbit minimum

Graphics card – 1024 x 768 pixels or better

Setup:

- Measurements for VC-6000 modules – These include:
 - Relative shaft vibration according to DIN ISO 7919
 - Shaft position / shaft displacement
 - Axial displacement
 - Absolute casing vibration according to DIN ISO 10816
 - Rolling-element bearing condition
 - Temperature and process variables
 - Casing expansion
 - Eccentricity
 - Narrowband tracking filter
 - Speed
 - Over-speed
 - Rod-drop
 - Vector and rotor-dynamic values
 - Binary signals (on-off)
 - General vibration measurements with variable filters
- Communication parameters – Modbus RTU (slave), OPC
- Relay Logic – AND, OR, NOT and () operators
- Data Logging
 - Measurement interval: 1 to 60 seconds
 - Logging period: 1 minute to 5 hours
 - File format: Comma separated values (.csv)

Brüel & Kjær Vibro reserves the right to change specifications without notice

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