Talas Measurer

Talas Measurer is a device for automatic insulation resistance monitoring of electric motors (AC and DC). Talas Measurer is installed close to the motor control center (MCC) and it is connected to one phase and ground of the electric motor’s feed circuit. Talas Measurer has Modbus protocol for automation and control system integration. Talas Measurer also has relay outputs for pre-alarm and critical alerts. In large motor series one Talas Measurer can be used for parallel monitoring of several motors. Depending on the model the measuring voltage is 50 VDC or 105 VDC. For VFD driven motors it is recommended to use 105 VDC.

Operation
Talas Measurer measures the insulation resistance by feeding direct current (DC) to one phase of a de-energized electric motor. It measures in cycles and the pause between the cycles can be adjusted. In case of low insulation resistance Talas Measurer gives a pre-warning alert and if the insulation resistance has fallen below a critical it gives a second alert. Both alerts are available from special ModBus registers and digital I/O outputs. Limits for both alerts can be adjusted from any ModBus master device or from an ordinary computer. Latest measurement results are always available via ModBus registers. When the motor is operating Talas Measurer goes into standby mode and starts the measuring 15 minutes (default setting) after the motor has switched off. It is also possible to control Talas Measurer with commands from the centralized automation system.

Where to use?
New and old electric motors with nominal voltage less than 1000V. Talas Measurer can be used with contactor (DOL), soft starter and VFD driven motors.

Technical Information:
Manufacturer: Talas Electric Oy
Model: TM50-MCC, TM105-MCC, TM50-SW, TM105-SW, TM50-TB and TM105-TB
Input voltage: 220-240 VAC
Input current: 1 A
Input frequency: 50-60Hz
IP: 20 – 54 (depending on the model)
Output voltage: 0-105 VDC
Output current: 10mA
Measuring zone: 0.2 – 20MΩ (50VDC); 0.2-60MΩ (105VDC)
Communications protocol: Modbus
Communication interface: RS-485
I/O Alerts: Pre-Alarm and critical
Country of Manufacture: Finland

Check datasheet for more information (http://talaselectric.com/talas-measurer/).