GE VERNOVA

869 Advanced Motor Diagnostics – A Comprehensive Diagnostics Solution for Safe Motor Operation

8 Series Mini Paper

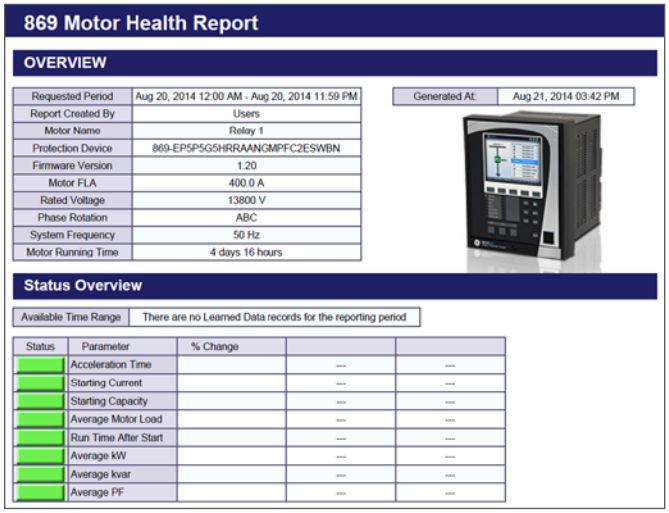
Health Report

The motor health report quickly provides a motor operation summary with information in the following seven categories.

- **Device Overview**: gives general information about the motor
- **Status Overview**: summarizes the historical learned data and gives an evaluation of the status of the motor
- **Trip Summary**: presents a summary of the events that caused motor trip
- **Operating History**: counts events associated with eren o or o era n on on
- **Starting Learned Data**: collects and displays the start learned data
- **Start Records**: presents the 60-second long detailed start data
- **Stopping/Tripping**: gives details on the events that are e a reae e o e o n an r n o e motor

The purpose of the health report is to:

- Provide visual representation and trend values of motor historical data
- Present a quick snapshot of the motor operating and diagnostic information
- Help users quickly identify process issues and maintenance requirements



869 Motor Health Report

OVERVIEW

Requested Period	Aug 20, 2014 12:00 AM - Aug 20, 2014 11:59 PM
Report Created By	Users
Motor Name	Relay 1
Protection Device	869-EP5P5G5HRRAANGMPFC2ESWBN
Firmware Version	1.20
Motor FLA	400.0 A
Rated Voltage	13800 V
Phase Rotation	ABC
System Frequency	50 Hz
Motor Running Time	4 days 16 hours

Generated At:	Aug 21, 2014 03:42 PM

Status Overview

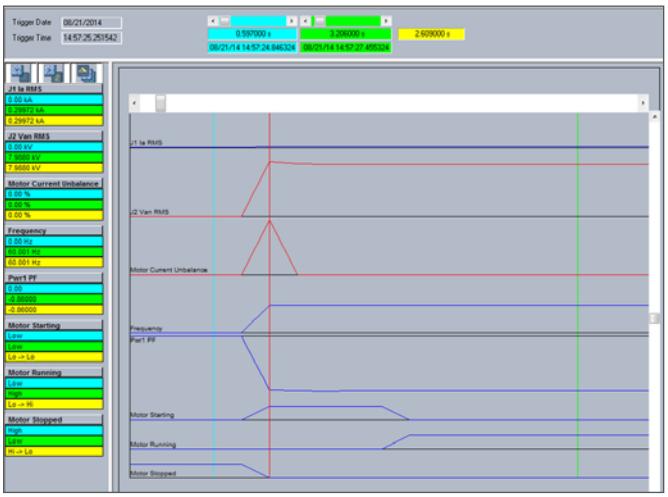
Available Time Range	There are no Learned Data records for the reporting period

Status	Parameter	% Change		
	Acceleration Time		---	---
	Starting Current		---	---
	Starting Capacity		---	---
	Average Motor Load		---	---
	Run Time After Start		---	---
	Average kW		---	---
	Average kvar		---	---
	Average PF		---	---

Start Records

A total of six start records are used to give a comprehensive view of motor starting, each of them providing 60-second data throughout the full starting cycle, where:

- 1-second pre-trigger data and 59-second post-trigger data are recorded;
- The sampling rate is one sample every 200ms
- Stored quantities include RMS values of currents and voltages, current unbalance, powers, power factor, thermal capacity used, frequency and motor status.



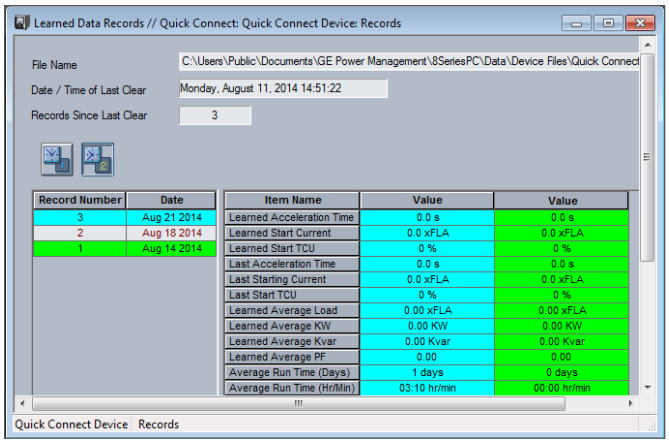
The users can examine the 60-second start data to:

- Understand the starting process
- Investigate the cause of an unsuccessful start
- na ee e o o r e r an e a e ar n of a large motor
- Coordinate the starting sequence of multiple large motors

Learned Data

Learned Data recorder stores the following quantities upon a successful motor start.

- Last learned acceleration time, starting current, starting capacity used (TCU)
- Average load, power, power factor and running hours of the last running state
- Maximum temperature of each RTD

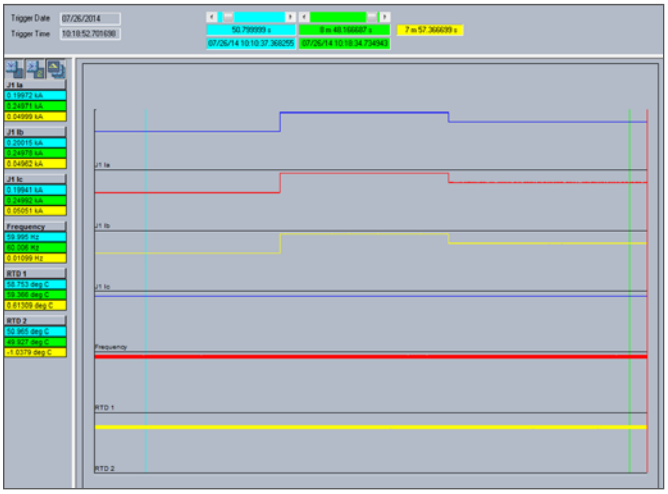


Up to 250 learned data records can be used to evaluate the changes/trends of motor starting and operating conditions over time.

Data Logger

Comprehensive data logger provides:

- Recording of 16 analog values selected from any analog value
- Seven selectable capture rates: 1 cyc, 1 sec, 30 sec, 1 min, 15 min, 30 min, 1 hr
- Data storage capacity ranging from 273 seconds to 2730 days, depending on the number of channels and rate.



a a a re e a o o era or o ena e on period monitoring, analyze the historic data over several hours or even days in detail and take corrective actions as required.

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