MPU-32 MOTOR PROTECTION UNIT GUIDEFORM SPECIFICATION

Motor protection shall be provided by MPU-32 microprocessor-based relay with the following specifications.

Protective functions shall include password protected set points for the following:

- Thermal overload (I^2t)
- NEMA or K-factor model
- Overcurrent – primary and auxiliary
- Jam
- Earth fault
- Unbalance (I)
- Starts per hour
- Phase reverse (I)
- Phase loss (I)
- Undercurrent
- RTD temperature
- PTC overtemperature

Metering and logged data (100 events) shall be accessible locally and through serial communications and shall include:

- Line currents
- Current unbalance
- Positive-sequence current
- Negative-sequence current
- Zero-sequence current (calculated or measured)
- Earth-leakage current (measured)
- Used thermal capacity
- Thermal Trend
- RTD Temperatures
- Thermal capacity used to start
- Trip counters
- Logged event type
- Date and time of event
- Running hours

The Inputs and Outputs of the system shall include:

- Three ac-current inputs
- Earth-leakage-CT input
- Programmable digital input
- 24 Vdc source for digital input
- 4 – 20-mA analog output
- Temperature-sensor input, 100-Ω-Platinum RTD or PTC
- Three programmable output relays
- TIA-232 communications
- Optional TIA-485 communications
- PC interface software

- Operator interface
  - 4 line x 20 character backlit LCD display
  - Keypad for programming and display selection
  - 4 LED's; 1 user programmable
- Up to three remote RTD modules
  - 8 inputs per module
  - Individually selectable RTD types
  - Solid-state multiplexing
  - Modules are hazardous location certified

IEEE Device Numbers

37, 38, 46, 48, 49, 50, 50G, 51, 51G, 74, 86