

SUBMONITOR CONNECT

3Ø, 50/60 HZ, 200~600 VAC, 1~700 HP

ELECTRONIC OVERLOAD MOTOR PROTECTION

- Wide range, adjustable, class 5-30 electronic overload
- Dry pump detection protects your pump and motor from adverse conditions and allows for time-based automatic restart with well recovery mode
- Industry-leading motor protection for the following conditions: over/under power (dry-run), over/under voltage protection, voltage phase loss, voltage and current phase unbalance, locked rotor, cycle fault, ground fault
- Easy access to input and output terminals
- 32-character, backlit, NEMA 4x, wash-down rated screen mounted on front of panel allowing for safe viewing of conditions while motor is running
- Motor insulation check



REAL-TIME & DATE-STAMPED FAULT LOGGING

- Unit ships with a pre-programmed real time clock with a 10-year battery backup
- Contains separate fault, configuration change, and start logs. Independent logs allow user to see last fault even if it occurred years ago
- Fault log tracks 150 faults with date and time stamp accurate down to the second; allows users to diagnose power problems and prove them to your power provider; unit will give users a 'snapshot' of conditions at the time of fault, such as line to line voltage and current, alarms present, and I/O status; format of time stamping example: 7/7/16 10:15:24

APPLICATION-BASED SETUP

- SubMonitor Connect is an advanced, comprehensive, 3-phase motor protection relay that allows users to dial in protection and automation with extreme accuracy and parameter depth. However, SubMonitor Connect also has a streamlined Basic Setup Wizard to allow users to get up and running quickly.
- 9 simple steps to program unit
- Users select between Submersible, Surface, or Custom and SubMonitor Connect prepopulates protection parameters accordingly
- Confirm basic motor info, key protection info, time to get started.

ORDERING INFORMATION

Description	Part No.
SubMonitor Connect - Standard, 1-135A	5860015010
SubMonitor Connect - Premium, 1-135A	5860005110

OPTIONS

Description	Part No.
SubMonitor Connect Remote Display Assembly	5860015150
Door Mounting Kit	5860015160
External CTs, 120-270A	5860015170
External CTs, 200-400A	5860015180
External CTs, 400-1000A	5860015190

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SPECIFICATIONS

Starter Type		
Standard or combination (service rated, suitable for use as a service disconnect)		
NEMA Type 3R Enclosed Outdoor Rated		
User Interface		
Settings Adjustments	32 character, backlit NEMA 4X display. FE Connect Mobile App connected via Bluetooth	
Hand/Off/Auto	Door mounted 3-position switch	
Standard Control Operations		
Input	RS-485 PT100/1000	Modbus RTU slave On/Off, adjustable: 0-100 C, 212 F
Output	Fault Relay	Normally Open Relay Contact. 1Aa @ 240VAC
Operational	Overload Type	Electronic, Simulated I ² T trip curve
	Power Fail Modes	Restart in last mode (Hand/Off/Auto) Restart in off mode
	On/Off Time Delay	On/Off, adjustable: 1-60seconds
	Backspin Delay	On/Off, adjustable: 2 seconds - 60 minutes
	Fault Reset	Adjustable: manual or automatic (default differs per motor protection feature)
Starts	6/hour, 20 seconds max start time @ 400% FLA, 30 seconds max start time @ 300% FLA	
Environmental		
Ambient Operating Temp	-5 °F to 140 °F (-20 °C to 60 °C)	
Ambient Storage Temp	-5 °F to 185 °F (-20 °C to 85 °C)	
Relative Humidity	5% to 95% non-condensing	
Motor/Soft Starter Protection	Adjustment/Description	Default Setting
Overload Current Setting Range	Differs per model	Per SFA
Overload Trip Class	Adjustable: 5-30	10
Overload Service Factor	Adjustable: 1.00-2.00	1.15
Under Power (Dry Run)	On/Off/Alarm, adjustable: 1-99% of nominal	On / 65%
Over Power	On/Off/Alarm, adjustable: 101-200% of nominal	On / 125%
Under Voltage	On/Off/Alarm, adjustable: 80-99% of nominal	On / 90 %
Over Voltage	On/Off/Alarm, adjustable: 101-125% of nominal	On / 110 %
Voltage Phase Loss	Always on	On / Trips if below 60VAC
Ground Fault (UL 1053 Certified)	On/Off/Alarm, adjustable: 1-10 Amps	On / 1A
Cycle Fault	On/Off, Start Limit adjustable: 2-100	On
Warm Start Provision	On/Off, delays motor restart based on calculated motor temp	On
SMARTSTART™ Protection	Adjustment/Description	Default Setting
Current Phase Unbalance	On/Off, adjustable: 1-50%	On / 5%
Locked Rotor/Stall	On/Off, trips if current exceeds 300% max amps for 0.5s	On
Out of Calibration	On/Off, trips after 10 seconds if max amps setting is incorrect	Off
Max Time to Start	On/Off, regardless of max amps or I ² T trip curve, always trip at start if starting current is outside of an acceptable range and still decreasing after 10 seconds	



NOTE: Product range is 0.1 to 1000A. External CTs required above 135A.