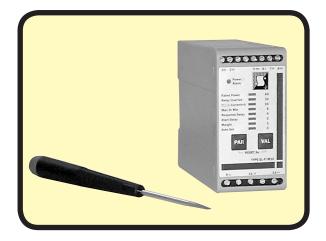
## MODEL P-10 | PUMP PROTECTOR

2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

BULLETIN A-313 MAY 2011



## DIGITAL MOTOR LOAD MONITOR shuts down pump in the event of:

- DRY RUN
- CAVITATION
- DAMAGED IMPELLER
- CLOSED INLET VALVE
- CLOSED OUTLET VALVE
- BLOCKAGES

The P-10 digital motor load monitor uses a unique and patented method of measuring the torque of a pump's drive motor. By monitoring the "normal" load level any deviation from this range changes the state of the internal relay activating a red LED alarm light. The output relay will shut down the pump, activate additional alarm and / or communicate with other equipment in the process.

Designed for use in conjunction with a motor starter, the P-10 protector will monitor motor underload OR overload. In pumping applications, conditions such as dry run, cavitation, damaged impeller, closed valves or blockages will create an "abnormal" underload condition, which the P-10 will detect and subsequently shut down the pump and provide communication to users and / or processes.

TECHNICAL DATA		
Dimensions	1.77" W x 3.54" H x 4.53" D (45 mm x 90 mm x 115 mm)	
Weight	5.25 oz. (0.15 kg)	
Supply voltage	1 x 100-240 (± 10%)	
	3 x 100-600 (± 10%)	
	3 x 600-690 (± 10%)	
Frequency	50 or 60 Hz	
Current input	Current transformers only; CTM 010, 025 or 050 (Max. 50 A motor)	
Start-up delay	1 - 64 s	
Response delay	0.05 - 64 s	
Relay output	5 A 240 VAC Resistive, 1.5 A 240 VAC Pilot duty / AC 12	
Fuse	Maximum 10 A	
Terminal wire size	Use 75°C copper (CU) wire only.	
	0.2 - 4.0 mm <sup>2</sup> single core (AWG12)	
	0.2 - 2.5 mm <sup>2</sup> flexible core (AWG14), stripped length 8 mm (0.32")	
Terminal tightening torque	5 - 7 inlbs. (0.56 - 0.79 Nm)	
Repeatability	±2.5% FS, 24 H, @ +77 °F (+25 °C)	
Temperature tolerance	<0.1% / °C	
External RESET on term. 5	24 - 48 VDC or 24 - 240 VAC, 50 / 60 Hz	
Operating temperature	4°F — 122°F (-20°C — +50°C)	
Storage temperature	22°F — 176°F (-30°C — +80°C)	
Protection class	IP 20	
Approved by	UL and cUL up to 600 V, CE	

AMP RANGE	MODEL NO.	PRICE CODE NO.
.4 - 10	P-10-10	99-1170
10.1 - 25	P-10-25	99-1171
26 - 50	P-10-50	99-1172

Each P-10 pump protector comes complete with monitor, current transformer and complete installation instruction manual.

To order, use Price Code No.