

VIKING PUMP

A Unit of IDEX Corporation

Viking® Power Load Monitors

Get More From Your Source...

Empty tanks, cavitation, and unintended line restrictions can quickly damage or destroy your pumps, costing you time, money, and possible loss of product. The installation of the Power Load Monitor can provide a simple, cost effective, state of the art way to monitor and shut down your pump when a change in motor power load is detected.

Power Load Monitors are well suited for systems using positive displacement, centrifugal, or sealless magnetic drive pumps and other types of motor driven equipment. Power Load Monitors will protect the pump and system from damage caused by dry running or cavitation as indicated by an underload condition. Or it can be set to detect overpressure situations* as indicated by an overload condition.

Viking offers two Power Load Monitors. The M10 Power Load Monitor senses either an over power or under power event, and automatically stops the motor. The M20 Power Load Monitor provides protection for both overload and underload situations plus triggering a pre-alarm and/or shut down sequence. The monitors are capable of handling both 50 and 60 hertz power, single or three phase, on loads up to 999 hp.

With a simple press of a button, the Power Load Monitors can be set to detect abnormal over-load or under-load conditions and apply protection parameters. The unit measures the normal working load, then calculates and sets an automatic shutdown point for detected power changes. Protection margins can be fine-tuned to prevent unintentional stoppage.

* The Power Load Monitor should not be used as exclusive protection in case of sudden discharge line blockage on positive displacement pumps. Other means of protection such as a pressure relief valve must be used in conjunction with the Power Load Monitor to avoid pressure spikes in the system.

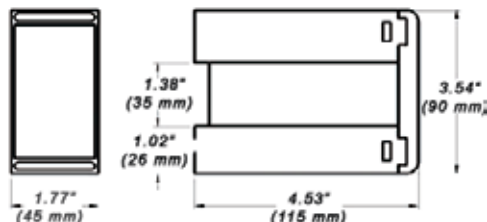
- Reduce downtime and maintenance costs
- Protect pumps and other motor driven equipment
- Lower operation costs
- Simple to set



IDEX
CORPORATION

Specifications

Dimensions



M10 & M20		M10		M20
Mounting	35mm DIN-rail 46277	Weight	5.65 oz. (175 g)	10.5 oz. (.30 kg)
Temperature Tolerance	<0.1%/°C	Supply Voltage (± 10%)	1x100-240 3x100-600	1x100-240 3x100-240 3x525-600 3x380-500
Operating Temperature	4-122 °F (-20°- +50°C)	Power Consumption	Max 3V	Max 6VA
Storage Temperature	22°-175°F (+25°C)	Startup Delay	1 - 64 seconds	1 - 999 seconds
Relay Output	5A/240 VAC resistive 1.5 A/240VAC Pilot Duty/AC12	Response Delay	0.05 - 64 seconds	0.1 - 90 seconds
Frequency	50 or 60 hz	Repeatability	± 2.5 FS, 24, @ 77°F (+25°C)	± 1 unit; @ 68°F (+20°C)
Protective Class	IP20	Current Input	Current transformers: CMT 010, 025, 050	Current transformers CMT 010, 025, 050, 100 (>100A additional transformer is needed)
Fuse	Max 10A	Hysteresis		0-50% of rated motor power
Approved To	UL, CE(up to 690V), cUL	External RESET on Term. 5	Yes	Yes
Terminal Wire Size	Use 75° Copper (CU) wire only 0.4-4.0 mm² single core (AWG12) 0.2-2.5 mm² flexible core (AWG14) Strip length 0.32" (8mm)	Protection	Programmable for either overload or underload	Four protection levels: Two for overload Two for underload
Terminal Tightening Torque	5-7 lb-in (0.56-7.9 Nm)	Analog Output of Shaft Power	N/A	Programmable 4-20 mA, 20-4 mA, 0-20 mA, 20-0 mA

VIKING PART NUMBER (Monitor only)		RATED VOLTAGE (V) AND PHASE
M10	2-E90-015-999-00	TO 600 V, Single and 3 Phase
M20	2-E90-016-999-00	100-240 V, Single and 3 Phase
M20	2-E90-017-999-00	380-500 V 3 Phase

For more information, contact your local Authorized Viking Pump Distributor or contact Viking at:

VIKING PUMP, INC.

A Unit of IDEX Corporation
406 State Street
Cedar Falls, Iowa 50613-0008 U.S.A.
Telephone: (319) 266-1741
Fax: (319) 273-8157
E-mail: info.viking@idexcorp.com
Web site: www.vikingpump.com

CANADA

Windsor, Ontario
Phone: (519) 256-5438
Fax: (519) 256-5070
www.vikingpumpcanada.com

EUROPE

Shannon, Ireland
Phone: +353 (61) 471933
Fax: +353 (61) 475046
www.vikingpump europe.co.uk

LATIN AMERICA

Mexico D.F., C.P.
Phone: +52 (55) 5255-1357
Fax: +52 (55) 5255-1356

Brazil - Sao Paulo
Phone: +55 (19) 3871-3500
Fax: +55 (19) 3871-6400

ASIA-PACIFIC GROUP

Singapore
Phone: +65-6763-6633
Fax: +65-6764-4020
www.idexfmt-asia.com

China - Shanghai
Phone: +86-21-5241-5599
Fax: +86-21-5241-8339
www.idexfmt-asia.com

China - Beijing
Phone: +86-10-6566-9090
Fax: +86-10-6567-5152
www.idexfmt-asia.com

China - Guangzhou
Phone: +86-20-3886-6156
Fax: +86-20-3886-2776
www.idexfmt-asia.com

India - Mumbai
Phone: +91-22-66780049/53
Fax: +91-9820334270
www.idexfmt-asia.com

ASIA-PACIFIC GROUP

China - Chengdu
Phone: +86-28-86767458
Fax: +86-28-86767468
www.idexfmt-asia.com

China - Suzhou
Phone: +86-512-62833000
Fax: +86-512-62833010
www.idexfmt-asia.com

Korea - Seoul
Phone: +82-19-9134-1110
Fax: +82-2-556-0788
www.idexfmt-asia.com

Australia & New Zealand
Phone: +61 0 4577 4534
Fax: +61 0 448 480 640
www.idexfmt-asia.com

MIDDLE EAST
IDEX Middle East FZE
Dubai, UAE
Phone: +971-4-299-1095/1097
Fax: +971-4-299-1069
www.idexfmt-asia.com