

Intelligent protection of your customer's equipment



Stop damage and downtime before it occurs

ProcessDefender protects motor driven equipment against pump run dry, dead head, cavitation, or a closed suction valve. An alert can be as simple as a visual operator alarm, a signal to a plant DCS, or a direct local shut down of the motor. Either way, ProcessDefender will react quickly enough to protect the equipment from damage and downtime.

Features & Benefits

- Motor load monitoring uses the motor as a sensor to prevent damage and downtime
- Display motor load as either HP, kW, or % of motor power
- Overload and underload protection
- Built-in Real Time Clock
- Certified to UL, cUL, and CE
- Arc Flash protection for User / Engineer
- Custom, large-format externally mounted HMI
- Single model for all voltages of 100 to 500 VAC
- Split core CT's to aid installation
- Three independent alarm relays
- Ability to latch or unlatch all alarm relays
- Ability to apply hysteresis to all unlatched alarm relays
- Event logging with time and date stamp
- Auto setting of event parameters
- Firmware updates applied by user
- Lockable program settings
- Programmable via external HMI
- Configurable via Modbus



Technical Specifications

Dimensions	Refer to Installation Sheet
Weight	Refer to Installation Sheet
Temperature - operating	-10 to 50°C (14 to 122°F)
Temperature - storage	-20 to 70°C (-4 to 158°F)
Max. Altitude	2000M (6562 feet)
Relative Humidity (non-condensing) Continuous	0-85%
Relative Humidity (non-condensing) Intermittent	0-95%
Over Voltage category (IEC664)	II
Pollution Degree (IEC664)	2
IP / NEMA Rating (Display / HMI from the front)	IP65 / Type 4 and Type 12
Supply Voltage	1 x 100-240VAC or 3 x 200-480VAC
Supply Fuses	Type F, 0.5A Slow Blow with breaking capacity ^⑩ of 35A or greater. Fuse voltage must be equal to or greater than connected supply voltage.
Frequency	50 or 60 Hz
Electronics power consumption	5w
Current Transformers (CT)	ProcessDefender Current Transformers, 10A, 20A, 50A, 100A, 150A, 200A. Up to 1000A special order.
CT Output	33 mV at Full Scale
Nominal Accuracy (10%-100% of full range)	>99%

Relay Outputs	
Breaking capacity	1250VA
Max. Switch Voltage	240 VRMS / 30VDC
Max. Current	5A
Analog Output	
Output	4-20mA
Accuracy	>99%
Resolution	0.02mA
Digital Input	
Input Voltage	24-48VDC / 24-240VAC
Input Impedance	200kΩ
Connections	
Type	Screw terminals
Wire Type	Copper, solid or stranded
Min. Cable Temperature Rating	65°C (149°F)
Wire Strip Length	6.5 to 7.0mm ((0.26 to 0.28")
Wire Gauge	0.8mm ² to 3.3mm ² (18AWG to 12AWG)
Torque	0.5 to 0.6Nm (4.42 to 5.31 lb/in.)
Approved to	CE, UL, cUL up to 500VAC

^⑩ **Fuse Breaking Capacity:** Also known as interrupting rating or short circuit rating, this is the maximum approved current which the fuse can safely break at rated voltage.

AC DRIVES | FLOW METERS | POWER MONITORS | ROTARY HEAT EXCHANGER DRIVES | SOFT STARTERS

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