



Motor Director™ Motor Protection System

- **Monitoring Only or Full Protection** - Can be used for monitoring only or monitoring with protection isolating the motor from the source in the event of an electrical issue
- **Built In SENSERT** - Customizable mobile alerts and data recording
- **SCADA Ready** - RS485 Modbus for external communications
- **Machine Learning AI** - Learns motors' running parameters over time and uses this data for predictive/preventative maintenance recommendations (coming soon)
- **Secure** - Hardened against physical and cyber threats
- **Optional Temperature and Vibration Sensors** - Wireless Temperature and Vibration Sensors to monitor motor bearings
- **Optional Thermographic Sensor** - Wireless IR Thermal Sensor for monitoring stator temperature

ORDERING INFORMATION

Motor Director™ - Across the Line Model Part Matrix

Consult Factory for custom models with VFD communication.

MODEL NUMBER	MPS1	A	H
VOLTAGE			
208-240 VAC	240		
440-480 VAC	480		
VOLTAGE TYPE			
VAC		A	
SENSERT COMMUNICATION TYPE			
Cellular		C	
WiFi		W	
INTERFACE			
10.1 Inch HMI			H

Three (3) current transformers (CTs) are required for each Motor Director™ Across the Line system. CT size will be based on motor full load current draw. Please refer to the chart to the right to select the proper CT.

Consult Factory for ordering information.

Condition-Based Monitoring Accessories

Vibration Sensors	TBD
Temperature Sensors	TBD

OPERATION

Maximize motor performance and efficiency with our comprehensive UL-508A Motor Director™ Motor Protection System. Gain instant access to vital motor data from any location, 24/7, allowing for real-time decision-making. Customize alerts to notify you via push notification, text, or email about any irregularities, ensuring you're always a step ahead. This powerful system not only prevents potential issues but also ensures continuous, efficient operation, providing you with complete peace of mind regarding the health of your motors.

PROTECTS AGAINST

- Over Voltage
- Under Voltage
- Phase Loss
- Phase Sequence
- Voltage Unbalance
- Frequency Shift
- Over Current (Overload)
- Under Current
- Current Unbalance
- Power Factor
- Locked Rotor

MONITORS

- Voltage
- Current
- Frequency
- Power
- Reactive Power
- Power Factor
- Energy Consumption
- Optional Bearing Temperature
- Optional Bearing Vibration
- Optional Thermographic Monitoring

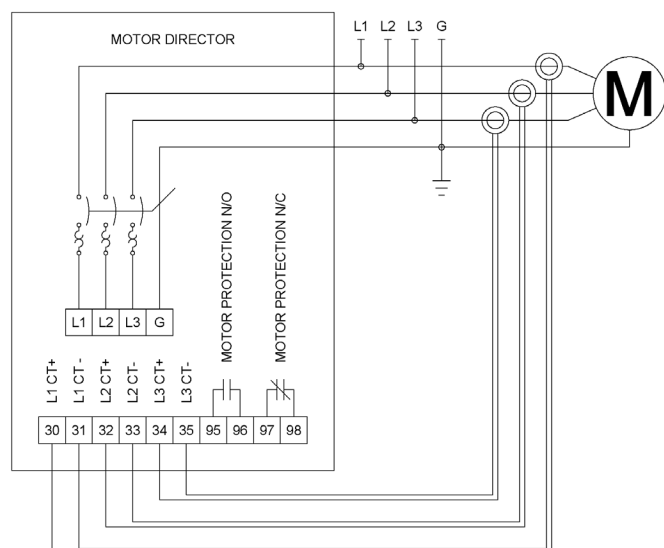
Suggested External CTs (According To Nominal Current)

NOMINAL CURRENT RANGE		CT
MIN	MAX	RATIO / 5
13	17	50
15	20	60
19	25	75
25	33	100
31	42	125
38	50	150
50	67	200
63	83	250
75	100	300
100	133	400
125	167	500
150	200	600
190	250	750
200	260	800
250	330	1000
300	400	1200
375	500	1500
500	660	2000

SPECIFICATIONS

	MPS1-240-XXX	MPS1-480-XXX
MEASUREMENT PARAMETERS		
NOMINAL VOLTAGE	208, 220, 240 VAC	208, 220, 240 VAC
OPERATIONAL VOLTAGE	145 - 312 VAC	264-672 VAC
CT SECONDARY CURRENT	0-5A AC	
MAXIMUM CT PRIMARY CURRENT	660A AC	
NOMINAL FREQUENCY	50, 60Hz	
OPERATIONAL FREQUENCY	45.0 - 70.0Hz	
POWER FACTOR	0.00 - 1.00	
REACTIVE POWER	0.0 - 999.9kVA	
REAL POWER	0.0 - 999.9kW	
ENERGY	0 - 999999kW/H	
MOTOR RUN TIME	0 - 999999H	
CONTACT RATINGS	B 300 Pilot Duty 1A at 240 VAC, 0.5A at 480 VAC	
UNDER VOLTAGE	165 - 225 VAC	350 - 460 VAC
OVER VOLTAGE	215 - 270 VAC	460 - 580 VAC
VOLT. HYSTERESIS THRESHOLD	6 VAC	12 VAC
VOLTAGE UNBALANCE	2 - 10%	
PHASE LOSS	In Volt Unbal >33%, Out Volt Unbal <28%	
FREQUENCY SHIFT	2 - 10%	
PHASE REVERSAL	A-B-C, Reversed Phase C-B-A	
PHASE REVERSAL TRIP DELAY	< 1S	
VOLTAGE FAILURE TRIP DELAY	1 - 30S	
START UP/RESTART DELAY	0 - 600S	
START MODE	Auto, Manual	
MINIMUM TIME BETWEEN STARTS	50x Thermal Class	

TYPICAL INSTALLATIONS



WIRING

