

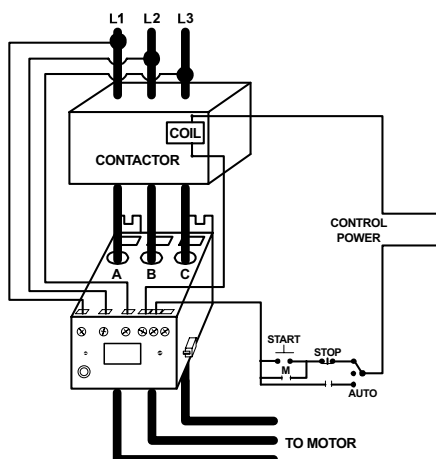
777-ACCUPOWER

3-Phase Current & Voltage Monitor

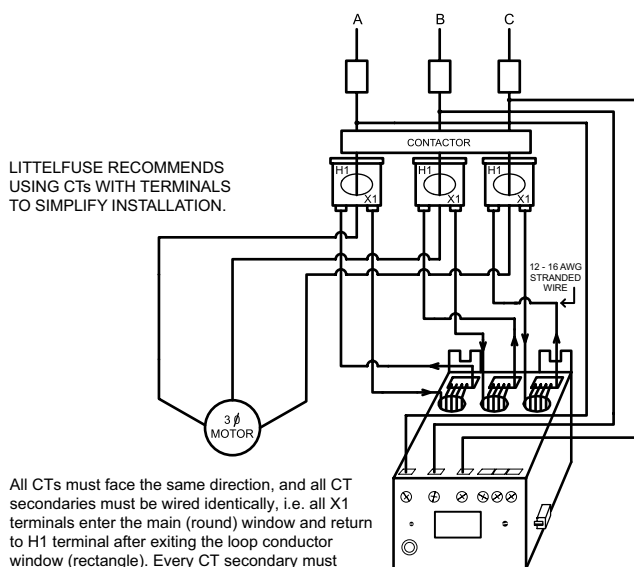


Wiring Diagram

TYPICAL WIRING DIAGRAM FOR MODEL 777-ACCUPOWER



CURRENT TRANSFORMER WIRING DIAGRAM OR MODEL 777-ACCUPOWER



All CTs must face the same direction, and all CT secondaries must be wired identically, i.e. all X1 terminals enter the main (round) window and return to H1 terminal after exiting the loop conductor window (rectangle). Every CT secondary must make 5 passes through the corresponding main conductor window.

Description

The 777-AccuPower is a fully-programmable 3-phase motor and pump protection relay. It allows motor hp rating, full load amps, efficiency and power factor to be entered and will accurately calculate motor output power. This is most useful with mag-drive pumps or process applications where the process power is desired over the utility power. Voltage, current and power measurements can be displayed as well as fault information and setpoints. The built-in display simplifies troubleshooting and allows the user to easily and precisely configure setpoints. The 777-AccuPower can be used with the optional COM 4-20 output module to give an analog signal proportional to output shaft power, the RS485MS-2W (for limited Modbus capabilities, and for use with the RM1000/RM2000) remote displays listed in the 777 accessories section.

Features & Benefits

FEATURES	BENEFITS
Motor output power measurement	Allows use of process power over utility power
3 programmable restart delay timers	Program separate restart delay time for rapid cycle protection, motor cool down, and dry-well recovery
Built-in Display	Visual indication for programming, viewing real-time voltage or current, and last fault code
Remote display compatibility	Increases safety through remote display of run-hour meter, last four fault codes, without the need to open the cabinet. Aids with arc flash safety regulations
Network communications capability	Limited Modbus capabilities using RS485MS-2W communication module

Accessories

RS485MS-2W Communication Module
(for limited Modbus capabilities) Required to enable the Modbus communications function on Model 77X-type products.

COM 4-20 Output Communication Module
This module allows communication to a PLC with an analog input and no Modbus input.

RM1000 Remote Monitor
The RM1000/777 motor management system combines unsurpassed electronic motor protection and critical, user-friendly, motor monitoring for up to 16 devices.

RM2000 Remote Monitor
The RM2000/777 motor management system combines unsurpassed electronic motor protection and critical, user-friendly, motor monitoring with event storage and real-time clock for date and time stamp.

777-ACCUPOWER

Specifications

Input Characteristics

Line Voltage	200-480VAC
Frequency	50/60Hz
Motor Full Load Amp Range	2-800A (external CTs required over 90A)
Functional Characteristics	
TC- Overcurrent Trip Class	5, 10, 15, 20, 30 (J prefix enables jam protection feature)

Output Characteristics

Output Contact Rating (SPDT - Form C)	
Pilot duty	480VA @ 240VAC
General Purpose	10A @ 240VAC

General Characteristics

Ambient Temperature Range	
Operating	-40° to 70°C (-40° to 158°F)
Storage	-40° to 80°C (-40° to 176°F)
Accuracy	
Measured Horsepower/ Kilowatt	
Typical	±3%**
Voltage	±1%
Current	±3%(<100 amps direct)
GF Current	±15%
Timing	5% ±1 second
Repeatability	
Voltage	±0.5% of nominal voltage
Current	±1% (<100 amps direct)
Maximum Input Power	10 W
Pollution Degree	3
Class of Protection	IP20, NEMA 1 (finger safe)
Relative Humidity	10-95%, non-condensing per IEC 68-2-3
Terminal Torque	7 in.-lbs.

Standards Passed

Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity (RFI), Conducted	IEC 61000-4-6, Level 3 10V/m
Radio Frequency Immunity (RFI), Radiated	IEC 61000-4-3, Level 3 10V/m
Fast Transient Burst	IEC 61000-4-4, Level 3, 3.5 kV input power
Short Circuit Rating	100kA
Surge IEC	61000-4-5 Level 3, 2kV line-to-line; Level 4, 4kV line-to-ground
ANSI/IEEE	C62.41 Surge and Ring Wave Compliance to a level of 6kV line-to-line
Hi-Potential Test	Meets UL508 (2 x rated V + 1000V for 1 min.)
Vibration	IEC 68-2-6, 10-55Hz, 1mm peak-to-peak, 2 hrs, 3 axis
Shock	IEC 68-2-27, 30g, 3 axis, 11ms duration, half-sine pulse
Safety Marks	
UL	UL508, UL1053
CE	IEC 60947-1, IEC 60947-5-1
CSA	C22.2
Max. Conductor Size through 777	0.65" with insulation
Dimensions	H 77.47 mm (3.05"); W 97.79 mm (3.85"); D 128.27 mm (5.05")
Weight	1.3 lbs. (20.8 oz., 589.67 g)
Mounting Method	Surface mount (4 - #8 screws) or DIN rail mount

**On a well balanced system within recommended current range.