



# TECHNICAL INFORMATION

**TITLE: MPU-16A SET-UP/DISPLAY SHEET**

**MOTOR:**

Size: \_\_\_\_\_ hp  
 Voltage: \_\_\_\_\_ V  
 Service Factor: \_\_\_\_\_  
 Full-Load Current: \_\_\_\_\_ A  
 Locked-Rotor Current: \_\_\_\_\_ A  
 Design: \_\_\_\_\_  
 Insulation Class: \_\_\_\_\_  
 Thermistor or RTD: \_\_\_\_\_

**Application:**

**System:** Resistance grounded with  
 \_\_\_\_\_ A neutral-grounding resistor  
 or solidly grounded.

MODE	1st LEVEL	2nd LEVEL (press Enter)
MODE 0 I <sup>2</sup> t Limit (s @ 600%)		
MODE 1 Overcurrent (%)		
MODE 2 Undercurrent (%)		
MODE 3 Current Unbalance (%)		
MODE 4 Temperature (°C)		
MODE 5 Earth Fault (%)		
MODE 6 Full-Load Current (A)		
MODE 7 Service Factor (%)		
MODE 8 Program		
MODE F CT-Primary Ratings (A)		
MODE 9 Ammeter (A)		
MODE A Peak Current (A)		
MODE b Current Unbalance (%)		
MODE C Temperature (°C)		
MODE d Earth Leakage (A)		
MODE E Percent I <sup>2</sup> t		

**PHASE-CT SELECTION**

Select CT-PRIMARY RATING between 1.07 & 2.22 x motor FLA.  
 FLA range is 0.45 to 0.93\* x PHASE-CT-PRIMARY RATING.

\* FLA range is 0.45 to 0.75 x PHASE-CT-PRIMARY RATING if short-circuit trip is enabled.

**GROUND-FAULT-CT SELECTION**

See [T.I. 11.1 Ground-Fault-CT Selection Flowchart](#).

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2003-Nov-28	2	JG	<a href="http://www.startco.ca/library/techinfo/section4/4.5.pdf">http://www.startco.ca/library/techinfo/section4/4.5.pdf</a>	1 of 4



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## MODE 8 — OPTIONS

MODE      VALUE

Default Value ..... 8000

This indicates:

- Phase Sequence ..... AbC
- Phase Reverse ..... DISABLED
- Earth-Fault-Trip Time ..... INST
- Hot-Motor Comp ..... OFF
- Short-Circuit Trip ..... OFF
- Alarm Latch ..... OFF
- Autoreset (Mode 0) .... OFF

VALUE DIGIT 2	PHASE SEQUENCE 0=AbC 1=bAC	PHASE REVERSE 0=DISABLE 1=ENABLE	EARTH-FAULT-TRIP TIME		VALUE DIGIT 3	HOT-MOTOR COMP 0=OFF 1=ON	SHORT-CIRCUIT TRIP 0=OFF 1=ON	ALARM LATCH 0=OFF 1=ON	AUTORESET (MODE 0) 0=OFF 1=ON
0	0	0	0	0	0	0	0	0	0
1	0	0	0	1	1	0	0	0	1
2	0	0	0	1	2	0	0	1	0
3	0	0	0	1	3	0	0	1	1
4	0	0	0	1	4	0	1	0	0
5	0	0	1	0	5	0	1	0	1
6	0	0	1	1	6	0	1	1	0
7	0	0	1	1	7	0	1	1	1
8	1	0	0	0	8	1	0	0	0
9	1	0	0	0	9	1	0	0	1
A	1	0	0	1	A	1	0	1	0
b	1	0	0	1	b	1	0	1	1
c	1	0	0	1	c	1	1	0	0
d	1	0	0	1	d	1	1	0	1
e	1	0	0	1	e	1	1	1	0
F	1	0	1	0	F	1	1	1	1

↑ F C C A T I M D

Not available on units configured for PTC sensor.

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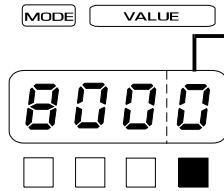
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TITLE: MPU-16A SET-UP/DISPLAY SHEET

## MODE 8 — OPTIONS (2nd Level Without Communications Interface)

Default Value . . . . . 8000

This indicates:  
 Trip Relay . . . . . Fail Safe  
 Alarm Relay . . . . . Fail Safe  
 Analog-Output Parameter . . . Current



DEFAULT

	VALUE DIGIT 3	RELAY OPERATING MODE		ANALOG-OUTPUT PARAMETER			FULL SCALE
		TRIP RELAY	ALARM RELAY	0=FAIL SAFE	1=NON FAIL SAFE	(MODE 9)	1.25 x FLA
				00=CURRENT	01=i <sup>2</sup> t	(MODE E)	100%
				10=TEMPERATURE	11=EARTH LEAKAGE	(MODE C)	200°C
						(MODE d)	100%
0	0	0	0	0	0	0	1
1	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0
3	0	0	0	1	0	0	1
4	0	1	1	0	0	0	0
5	0	1	1	1	0	0	1
6	0	1	1	1	1	0	0
7	0	1	1	1	1	1	1
8	1	0	0	0	0	0	0
9	1	0	0	0	0	1	1
A	1	0	1	1	0	0	0
b	1	0	1	1	0	1	1
C	1	1	1	0	0	0	0
d	1	1	1	0	0	1	1
E	1	1	1	1	1	0	0
F	1	1	1	1	1	1	1

NOTE:  
 Not applicable to units with RS-485 communications interface. See MPU-16A RS-485 Communications Interface Manuals.

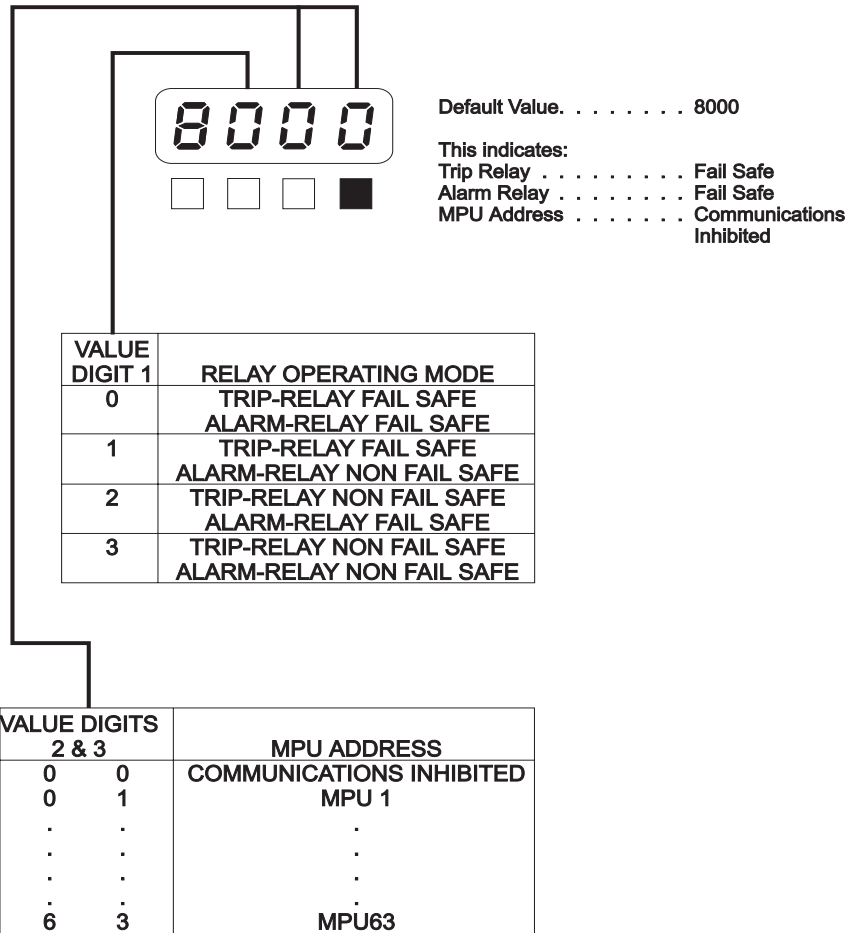
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## MODE 8 — OPTIONS (2nd Level With Communications Interface)



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