

27mm

OVERLOAD RELAY
Quick Setup Guide

A Frame

1. Required Overload Adjustment - (FLA)

- A. Open cover (see Figure 1).
- B. Turn the FLA dial to the Motor's full-load ampere rating (FLA).
- C. **1.0 Service Factor Motor Adjustment** (default is ≥ 1.15 SF)
Rotate the FLA dial counterclockwise $\approx 15^\circ$ or one minor division.
This adjustment will reduce the trip current 7%.

Lift cover here to expose FLA dial and label

2. Factory Settings

- A. Trip Class: **10** (To change to Class 20 or 30, see Step 3)
- B. Motor Service Factor: ≥ 1.15
- C. Ambient Compensated (-40°C to $+65^\circ\text{C}$)
- D. 50/60 Hz, 1 or 3 phase.
- E. Phase Loss and Current Unbalance Protection **ON**
(To turn off, see Step 3)
- F. Manual Reset (see Figure 1)
To Reset: Push and hold **RESET** Button 1 second when the LED is rapidly flashing (.....).

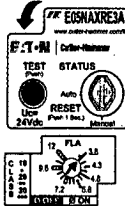


Figure 1

OPTIONAL SETTINGS AND ADDITIONAL INFORMATION
DISCONNECT ALL AC POWER BEFORE WORKING ON THIS PRODUCT

3. To change Trip Class (factory setting is Class 10) and / or to change Phase Loss / Unbalance Protection to ON or OFF (factory setting is On).

Tools Required: Screw driver for the FLA Dial and a tool to push the Test Button.

- A. Open the cover (see Figure 1).
- B. Apply 24V DC control power only.
When applying 24V - the LED will flash rapidly followed by the Trip Class Code: Class 10 (.....)

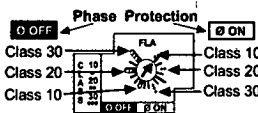


Figure 2

- Note: The LED must be off to change the Class Setting. If the LED is On see Step 5, if flashing see Step 6.
- C. a) Rotate the FLA dial clockwise \approx until it stops.
b) Push and Hold the **TEST** Button down with the other tool. When the LED first flashes, rotate the FLA dial fully CCW \approx without stopping and before the LED flashes 4 times. The dial should now be positioned as in Figure 2.
Continue holding the Test Button down. If it was released repeat starting at 3.C.a).
c) Within 3 seconds, the LED will start flashing the Class 10 Code (.....)
d) Rotate to the **Desired Trip Class and Protection**. Refer to Figure 2 for the positions.
Note: As the dial is rotated to the various class settings the LED flash rate changes. The Class 20 LED rate is (.....). The Class 30 LED rate is (.....)
e) Release the **TEST** Button - The LED will flash rapidly, followed by the New Trip Class Code. See **LED STATUS** below for the various Class Setting flash sequences.
Note: If the LED did not flash as indicated or continues to flash, the Class Setting was not changed.
Reasons: During the CCW rotation the Test Button was released or the rotation was stopped.
Solution: Push the **RESET** Button until the LED stops flashing and then repeat all of Step 3.C.

4. Reset (Manual, Remote, Automatic)

Note: The overload relay can not be reset after a trip until the LED is flashing rapidly (.....)

- A. **Manual Reset** - Push and Hold the **RESET** Button 1 second.
- B. **Remote Reset** - Control Terminal Block connection 1 must have 24V DC applied for 1 second to reset.
- C. **Automatic Reset** - The relay resets automatically. To set in auto reset, open the cover and rotate the **RESET** Button 90° to Auto.



Caution: Automatic Reset is not intended for two-wire control devices.
Attention: Ce dispositif de réenclenchement automatique ne convient pas aux commandes à deux conducteurs.

5. The LED is On Steady (The Thermal Memory is $>100\%$)

- A. Wait 2.5-14 minutes, when the LED flashes rapidly push the **RESET** Button 1 sec
- B. If the Control Power is cycled Off and On and the LED stays On, to eliminate the 2.5-14 minute wait for the next time it is cycled, energize the contactor after it is reset or re-set the Trip Class.

6. The LED Flashes Continuously (Ready for reset or the TM is between 70-100%)

- A. Push the **RESET** Button 1 second to reset. If it continues to flash the Thermal Memory is between 70-100%. The TM continues to decrease while the Control Power is on. When the TM decreases below 70% the LED stops flashing.

OVERLOAD STATUS		LED STATUS	NOTES
24 V DC Control Power Initialized		Class 10: Class 20: Class 30:	• Phase Protection ON • Rapid Flash followed by Trip Class code
		Class 10: Class 20: Class 30:	• Phase Protection OFF • Rapid Flash followed by Trip Class code
TEST BUTTON	Pushed < 4 seconds	Flashes while pushed	• Alarm - On while pushed
	Pushed > 4 seconds	Flashes until reset	• Alarm - On until reset. Overload trips
Thermal Memory (TM)		Flash Sequence	The (TM) simulates the motor temperature based on motor current and on/off time. When the (TM) reaches 100%, the overload will trip.
TM < 70%		Off 1 Flash 2 Flashes 3 Flashes Continuous	
70% - 80%		
80% - 90%		
90% - 95%		
95% - 100%		
OVERLOAD TRIP	TM > 100%	On steady during motor cooling, then rapid flash for reset cooling 2.5 - 14 minutes	
	Phase Loss / Unbalance	Flashes for 10 seconds, then rapid flash for reset	
Ready for Reset		Rapid Flash	To reset, push and hold RESET Button 1 second