



**CEUS**  
E55826

## Motor Auto-Restart Relay

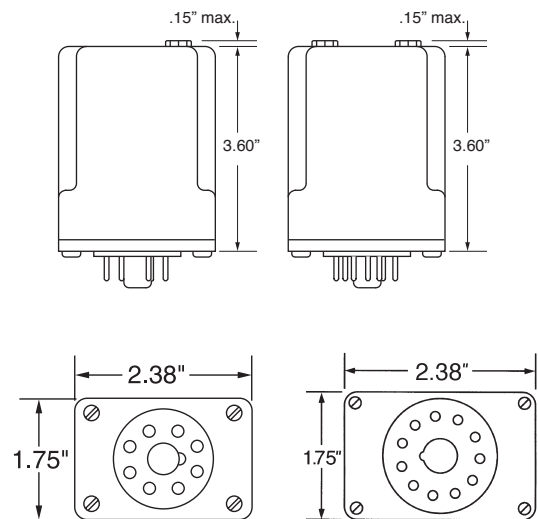
### OPERATION

The MAR series provides automatic restart to a motor by bypassing the start switch to re-energize M1 starter coil following a momentary drop or interruption of the control voltage. When control voltage drops below the under voltage trip point while the motor is running, the under voltage delay begins. If control voltage returns above the restart voltage point before the under voltage delay expires, the adjustable restart delay begins. Upon expiration of the restart delay, the internal relay energizes for the duration of the output interval providing restart. If control voltage fails for longer than the under voltage time delay or the motor was not initially running when control voltage failed, the unit will not restart the motor after restoration of power. Instead a manual restart is required. This relay distinguishes between control voltage failures and stop pushbutton operations. A stop pushbutton operation de-energizes the output relay and terminates the timing sequences preventing an automatic restart.

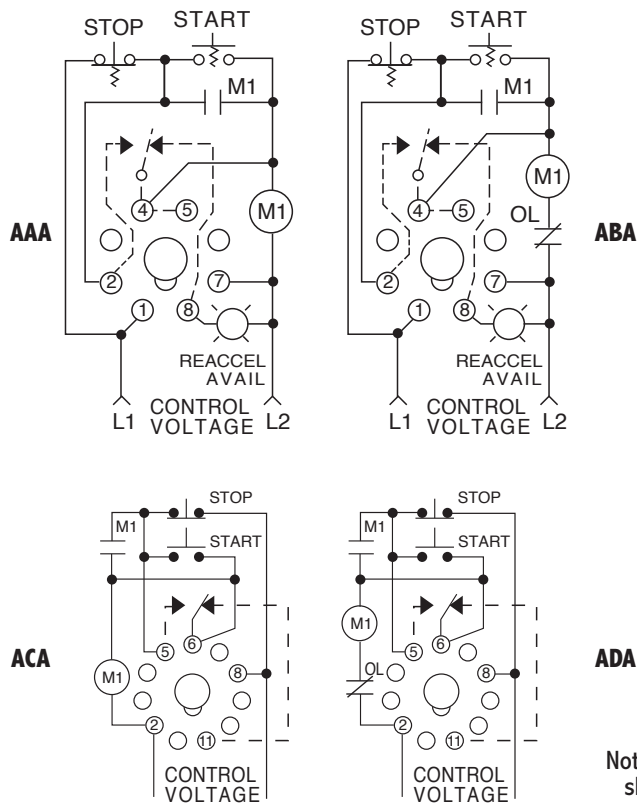
### SPECIFICATIONS

<b>CONTROL VOLTAGE</b>	120 VAC 50/60 Hz
<b>INPUT SPECIFICATIONS</b>	Under Voltage: 92 VAC Factor Preset (70-100 VAC Internal Adjust) Restart Voltage: 102 VAC Factor Preset (10 VAC $\pm$ 10% Above U.V.)
<b>OUTPUT</b>	SPDT Relay, Pilot Duty B150, 360 VA 10 Amps @ 120 VAC Resistive 30,000 Operations Electrical @ Full Load
<b>POWER REQUIRED</b>	3 VA Max
<b>TEMPERATURES</b>	Operate: 0°C to 55°C Storage: -45°C to 85°C
<b>ENCLOSURE</b>	Style Extended "A" LEXAN® Dust Cover
<b>TERMINATIONS/ FUNCTION</b>	8 Pin Plug-in (Model AAA) 8 Pin Plug-in with OL Relay L2 Disconnect Feature (Model ABA) 11 Pin Plug-in (Model ACA) 11 Pin Plug-in with OL Relay L2 Disconnect Feature (Model ADA)

### DIMENSIONS



**WIRING**



Note: Wiring must be exactly as shown for proper operation

**ORDERING INFORMATION**

MODEL NUMBER	MAR 120		Delay Range
<b>CONTROL VOLTAGE</b>			
120 VAC 50/60 HZ	120		
<b>TERMINATIONS/FUNCTION</b>			
8 Pin Plug-in	AAA		D
8 Pin Plug-in with OL Relay L2 Disconnect Feature	ABA		D
11 Pin Plug-in	ACA		A or C
11 Pin Plug-in with OL Relay L2 Disconnect Feature	ADA		B
<b>DELAY RANGE DESCRIPTIONS</b>			
A — U.V. 0.2 to 6.0 sec, Restart Delay 0.2 to 60 sec. Restart Output Interval - Continuous			
B — U.V. 0.2 to 6.0 sec, Restart Delay 0.2 to 60 sec. Restart Output Interval - 5.0 sec (fixed)			
C — U.V. 0.2 to 10.0 sec, Restart Delay 0.2 to 60 sec. Restart Output Interval - 1.0 sec (fixed)			
D — U.V. 4.0 sec (fixed), Restart Delay 2.0 to 120 sec. Restart Output Interval - 5.0 sec (fixed)			

Under voltage screwdriver adjustable ranges  $\pm 10\%$   
 Restart delay screwdriver adjustable ranges  $\pm 10\%$   
 Under voltage and restart output interval fixed ranges  $\pm 10\%$