



ENGINEERING INFORMATION

BULLETIN 810



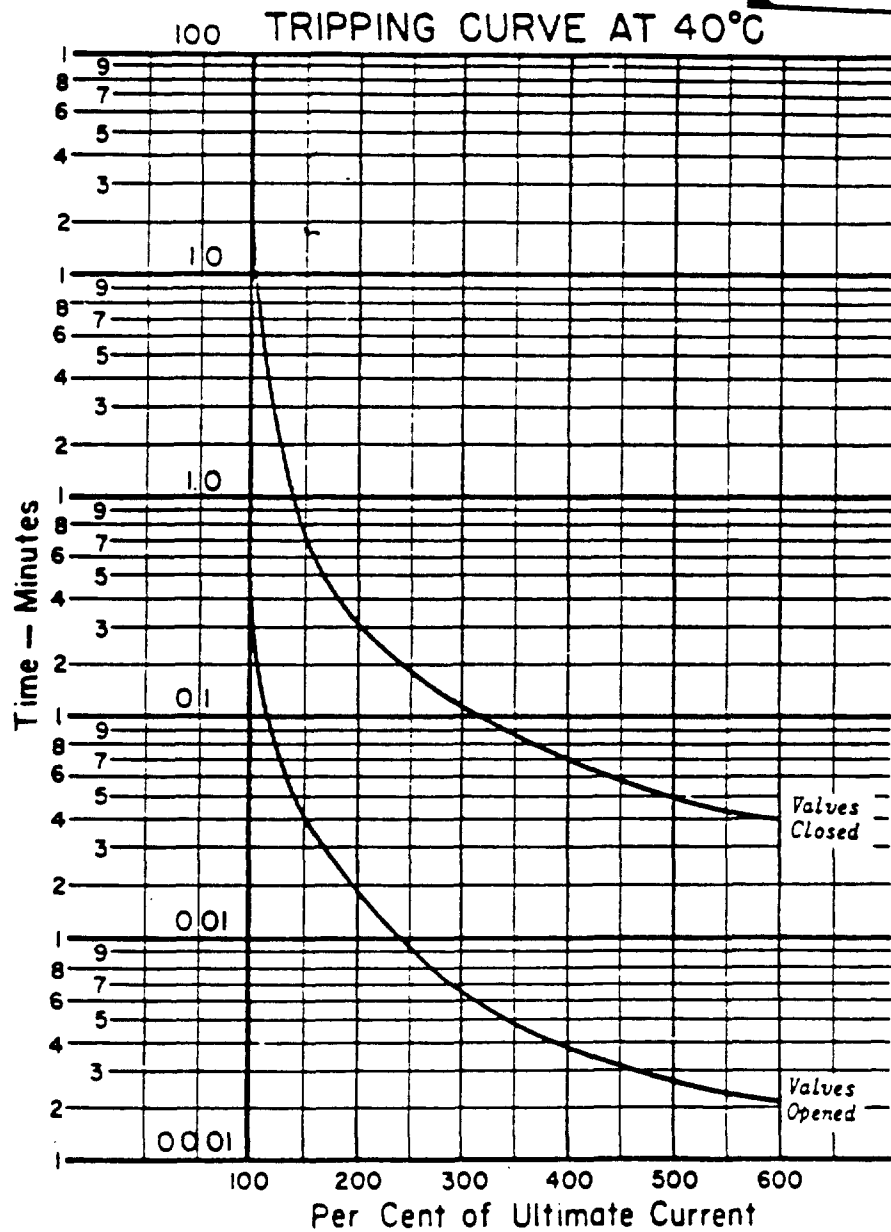
Bulletin 810 Magnetic Overload Relay

TIME DELAY TYPE

Type A Dashpot Fluid
(BLUE)

PLAINTIFF'S EXHIBIT

ASI-722



MADE BY
[Signature]
APPROVED
[Signature]
SUPERSEDES
D.E. WALTERS

August
1949

MILWAUKEE

ALLEN-BRADLEY CO.

WISCONSIN

K-810-01A

21390

Bulletin 810-Magnetic Overload Relay

Oil Level Check

The dashpot should be checked periodically for a clean and sufficient supply of oil in order to assure the correct tripping time.

Remove the dashpot from the relay and pull the plunger up just enough to loosen the cover; then drop the plunger assembly back into the dashpot and check the oil level, it should just cover the three projections on the piston surface.

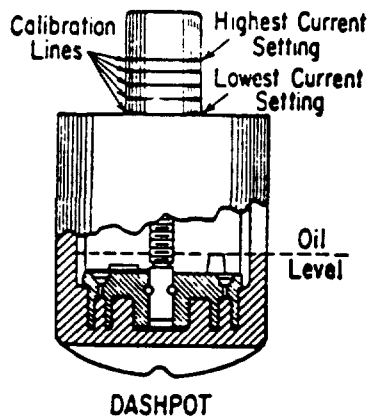
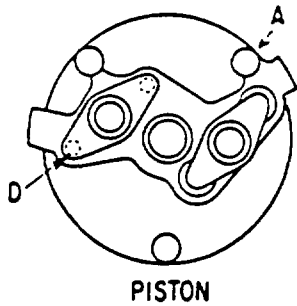
Adjustment

See the relay nameplate for core adjustment. If a faster tripping time is required the valve WITHOUT THE STEEL BALLS may be opened slightly.

Coil Removal

1. Remove the dashpot.
2. Remove the nameplate, insulator, and four flat head screws from the terminal block. This applies to the steel mounted relay only.
3. Loosen the set screw in the side of the relay frame and pull the core out.
4. Remove and replace the coil.

Instructions For BULLETIN 810 OVERLOAD RELAYS



1. When the relays are first installed, clean off all dirt and examine them carefully to see that they have not been damaged in transit.
2. Remove the dashpot by swinging spring clamp forward. The dashpot will come off as a unit.
3. Remove the dashpot cover by pulling on core. Three or four light taps with the piston should be sufficient.
4. Fill the dashpot with silicone fluid, using that furnished with the relays. This should be done with the dashpot removed from the relay and the cover off, but with the piston and core in place. The surface of the fluid should be level with the tops of the three round projections on top of the piston "A". The fluid must be free from dirt or grit, and the dashpot and piston absolutely clean.
5. To adjust the current setting remove the dashpot. The lines on the core correspond with the ampere scale on the name plate. Screw the core until the line which corresponds to the desired ampere rating, as shown on the name plate, is flush with the edge of the dashpot.
6. To adjust time limit remove piston from dashpot. Piston has two diamond-shaped valves. The one without the steel balls is intended for the time limit adjustment. *Caution:—Do not move valve over opening containing the steel balls.*

To make relay act faster increase opening of valve "D"; which is without the steel balls. To retard the action decrease opening. The relays when shipped are set for maximum time limit which usually is the best condition.
7. **IMPORTANT:—**To protect motor against overloads the relays should be set at not higher than 120 per cent of normal full load current.

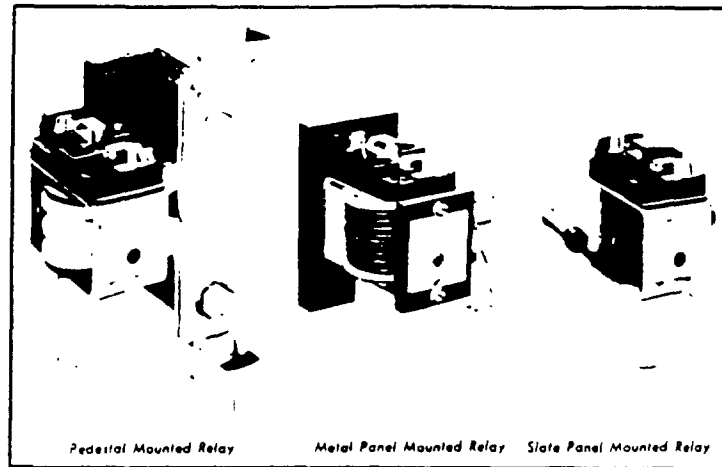
MILWAUKEE ALLEN-BRADLEY CO. WISCONSIN

FORM 810-018

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Renewal Parts Bulletin 810 Magnetic Overload Relay



CONTACT BLOCK	
Z-11011 (NO Hand Reset)	\$7.50*
Z-11012 (NC Hand Reset)	7.50*
Z-11013 (NO Automatic Reset)	8.00
Z-11014 (NC Automatic Reset)	8.00
Z-15227 (NC Automatic Reset with Blowout Magnet)	16.00
NO—Normally Open	
NC—Normally Closed	
MOUNTING SCREW	M 12 \$0.05 (2 Required)
WASHER	M 2830 \$4.05 (2 Required)
INSULATOR	F 17058 \$0.10

TERMINAL HOLD DOWN SCREW M 2251 \$0.05 (4 Required)	TERMINAL BLOCK F 12375 \$1.05	OVERLOAD COIL (Order By Part No Indicated on Terminal)	FRAME A 14904 \$2.50 (For Slate Panel Mtg Uses Borehole Insulator) A 33535 \$2.50 (For Slate Panel and Pedestal Mtg)
NAME PLATE F 12468 \$0.05	INSULATOR F 12468 \$0.05	COIL WASHER F 3826 \$0.10 (2 Required (2) F 3947 Washers are used for 2700 Volt Applications)	SET SCREW M 5816 \$0.05 (Allen Head)
TERMINAL BLOCK MOUNTING ASS. * X-206148 \$4.25 (2 Required)	SLATE PANEL MOUNTING BRACKETS (Specify Screw Length) Z 1705 \$0.00 Z 3126 \$0.30 (2 Required)	PEDESTAL ASS. X 206752 \$4.00	PLUNGER ASS. X 14274 \$1.00
		DASHPOT CLAMP B 6465 \$0.05	PISTON & DASHPOT ASS. X 34276 \$4.00 * X-214102 4.00
			CORE X 18664 \$0.90
			COVER M 951 \$0.10
			DASHPOT
			SILICONE FLUID X 115937 \$0.00 (Single Dashpot Supply)

Ordering Information

Discount Schedule E

Your order cannot be entered unless the following information is given: Part number, description of part and series number of relay. Prices are F.O.B. Milwaukee and subject to change without notice. Our minimum charge on any order will be \$5.00 net. **Discount Schedule E.**

*Added or changed since previous issue.

May 1, 1958 Supersedes PL 810-700 Dated July 16, 1937

Parts List 810-700