

CR324 block overload relays for panel mounting

600 V AC/250 V DC, three-pole

135 Maximum amperes continuous

Application

The panel-mount block overload relay provides overload protection for motors having full-load currents up to 135 amperes. The relays are furnished complete for use on control panels. When an overload condition occurs in any of the three legs in which heaters are inserted, it will cause the relay to trip, opening a normally closed contact, and, as an option, closing a normally open contact.

Standard and ambient compensated forms with various contact arrangements are available. A normally open circuit may be connected to a signal light, an alarm bell, or input circuit of a programmable controller, e.g., to provide indication of an overload relay trip.

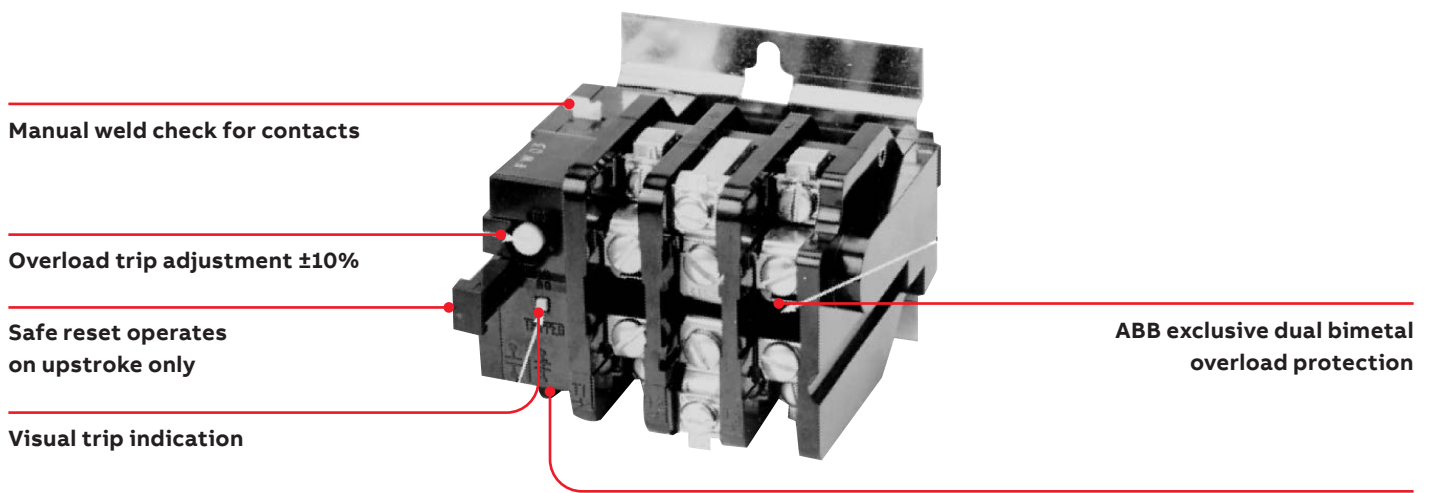
Features

- Flexibility of operation; trip rating can be easily changed by replacing the front-accessible heaters.
- Dual bimetal current monitoring; additional bimetal strip “anticipates” the rate of temperature rise in the motor winding; effectively reduces trip time in locked rotor conditions. It prevents dangerous temperature overshoot in the motor windings.

Product number selection instructions

1. Order required relay by complete product number as shown in table.

Example: An open block-type relay with one normally closed contact is to be mounted in a control panel. Three-leg overload protection is needed and the full-load current of the motor being controlled is 40.5 amperes. Order: CR324D310A and three CR123C400B heaters. Heaters are selected from tables on page 1-134.



Typical 300-line overload relay with heater shown in center pole only

Reference publications

Instructions

Instructions

15QC912058M0201

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Current rating (amps)	NEMA size	Contact configuration	Manual reset		Automatic reset	
			Standard panel-mount	Ambient compensated panel-mount	Standard panel-mount	Ambient compensated panel-mount
			Product number CR324	Product number CR324	Product number CR324	Product number CR324
27	1	1NC	C310A	C610A	C310A1 ¹	C610A1 ¹
27	1	1NO-1NC	C360A	C660A	-	-
45	2	1NC	D310A	D610A	D310A1 ¹	D610A1 ¹
45	2	1NO-1NC	D360A	D660A	-	-
90	3	1NC	E310A	E610A	E310A1 ¹	E610A1 ¹
90	3	1NO-1NC	E360A	E660A	-	-
135	4	1NC	F310A	F610A	F310A1 ¹	F610A1 ¹
135	4	1NO-1NC	F360A	F660A	-	-

¹For NO/NC (SPDT) contact forms, contact nearest ABB Representative.

Contact ratings

Continuous rating amperes	Make amperes	Recommended maximum interrupting capacity, amperes					
		DC circuits			AC circuits		
AC or DC		125 V	250 V	115 V	230 V	460 V	575 V
10	30	0.35	0.17	3	1.5	0.75	0.6

Accessories

External reset kit

Enclosure type	NEMA size	Reset distance (in.) behind panel	Product number
NEMA Type 1	00-5	1 - 6	CR124X100C
NEMA Type 12			
NEMA Type 4/4X	00-5	1 - 6	CR124X100D

For single or block overload relays and 200-, 300- and 400-line starters.