



# R8229A,B Switching Relay and R8246A Contactor

## INSTALLATION INSTRUCTIONS

### APPLICATION

The R8229A,B Switching Relay and R8246A Contactor provide switching for resistance electric heating loads. The relay and contactor have dpst switching and 24 Vac coils with constant 0.23 amp current draw. Combination rated contacts allow a fan motor and 1 or 2 heating elements to be controlled by the same pole.

These relays and contactors may be used in new or replacement applications. Make certain that coil voltages are correct, that contact ratings are not exceeded, and there are sufficient terminals for system connections. See Table 1 and 2.

Female quick-connects should be selected with care. The use of a premium grade quick-connect, such as the AMP Faston "250" series, or equivalent is recommended.

### INSTALLATION

#### CAUTION

1. Installer must be a trained, experienced service technician.
2. Always disconnect the power supply ahead of any relay or contactor to prevent electrical shock and equipment damage.
3. Always conduct a thorough checkout when installation is complete.

Mount the relay or contactor on a flat solid surface. Locate as close as possible to the equipment being controlled. They may be mounted in any position except with base up. Fasten with two screws through the base or a shear formed panel tab and single screw as shown in Fig. 1.

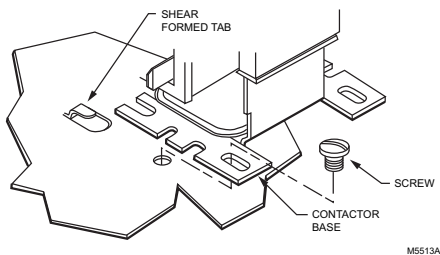


Fig. 1. Typical relay or contactor mounting in shear formed panel with 1 screw.

Table 1. Contact Ratings: R8229A,B Ratings Per Pole.

Voltage	Load Pole(s) <sup>a</sup>						Resistive Only Amps	Pilot Duty Pole <sup>a</sup> (B models only)
	Combined Inductive and Resistive			Inductive Only				
	Total Amps	AFL	ALR	AFL	ALR			
120, 208, 240, 277	26.0	6.4	18.0	7.0	35.0	25.0	3 VA min, 125 VA max at 24 Vac.	
480	13.6	3.2	9.0	3.5	17.5	12.5		
600	10.4	2.56	7.2	2.8	14.0	10.0		

<sup>a</sup>R8229B pole positions: terminals 1-3, load poles; terminals 4-6, pilot duty poles.



**Table 2. Contact Ratings: R8246A Ratings Per Pole.**

Voltage	First Pole	Second Pole <sup>a</sup>				
	Resistive Only Amperes	Combined Inductive and Resistive <sup>a</sup>			Inductive Only	
		Total Amperes <sup>b</sup>	AFL	ALR	AFL	ALR
120, 208, 240, 277	48.0	48.0	7.0	42.0	12.0	72.0
480	24.0	24.0	3.5	21.0	6.0	36.0
600	19.2	18.5	2.8	16.8	4.8	28.8

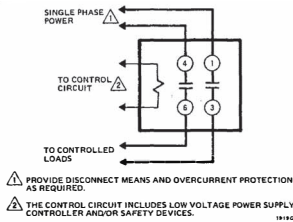
<sup>a</sup>A combined resistive and inductive load can be connected to either pole of the relay and contactor. Do not connect inductive loads to both poles.

<sup>b</sup>The total connected second pole load (inductive and resistive loads combined) cannot exceed the value given in the table for TOTAL AMPERES. FOR EXAMPLE: With a 5 amp motor load, up to 43.0 amp resistive can be controlled by the same pole of a R8246A contactor at 240 Vac.

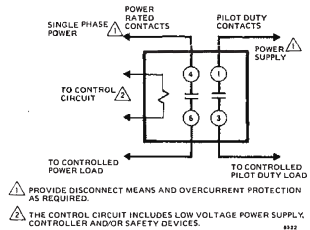
### Wiring

All wiring must comply with local codes and ordinances. Crimp female quick-connects to the system wires and attach to the male quick-connect terminals. See Figs. 2, 3, and 4. The relay has molded terminal numbers and circuit diagram for easy identification when wiring. The contactor has terminal numbers stamped on the top.

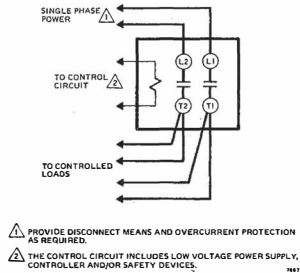
The R8229A,B and R8246A are Underwriters Laboratories Inc. and Canadian Standards Association approved for use with both line voltage and pilot duty (low voltage) limits. The use of one pilot duty limit generally permits the use of fewer components at a lower overall cost.



**Fig. 2. Typical hookup for R8229A Switching Relay.**



**Fig. 3. Typical hookup for R8229B Switching Relay with pilot duty contacts.**



**Fig. 4. Typical hookup for R8246A Contactor.**

### CHECKOUT

Always conduct a thorough checkout when installation is complete. Restore the power supply, and actuate the thermostat or controller. Observe at least one complete cycle, to make certain that the relay or contactor is operating properly. If safety controls are used, make sure they break the control circuit properly.



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