## R4222A-H,J-N,P-W,Y; R8222A-H, J-N,P-W,Y,Z; R4228A,B,C,D; R8228A,B,C,D <br> SWITCHING RELAYS

INSTALLATION INSTRUCTIONS

## APPLICATION

The R4222 and R8222 are general purpose relays for use in refrigeration and air conditioning equipment, vending machines, and other applications requiring general purpose switching. R4228 and R8228 are heavyduty relays with the same application.

A variety of switching configurations are available. Refer to Tables 1 and 2. Contacts are available for Powerpile (millivoltage), pilot duty, and power pole applications. R4222 and R4228 models have line voltage; R8222 and R8228 models have low voltage coils.

## INSTALLATION

## . CAUTION

1 Installer must be a trained, experienced service technician.
2 Disconnect power supply before beginning installation.
3 Always conduct a thorough checkout when installation is complete.

## LOCATION

Mount the relay on a flat, solid surface as close as possible to the equipment being controlled. The relay may be mounted in any position except with the terminals pointed down. Secure in place with two screws through holes or slots in the mounting base. See Fig. 1 for mounting dimensions.


Fig. 1. Dimensions in inches (millimeters in brackets).

Table 1. Switching configurations for R4222 and R8222

| Contact configurations (coil de-energized) ${ }^{\text {a }}$ | R4222, R8222 suffix letters |  |
| :---: | :---: | :---: |
|  | Power pole rated | Pilot duty rated |
| Spst, normally open | A | K |
| Spdt | B | L |
| Dpst, normally open ${ }^{\text {b }}$ | C | M |
| Dpdt ${ }^{\text {c }}$ | D | N |
| Spst, normally closed | E | P |
| Dpst, one normally open and one normally closed | F | Q |
| Dpst, normally closed | G | R |
| Spdt and spst, normally open ${ }^{\text {d,e }}$ | H | S |
| Spdt and spst, normally closed | J | T |
| Dpst, normally dosed (one power and one pilot duty) ${ }^{f}$ | Z* |  |

*Models with silver colored power terminals and brass colored pilot duty terminals.

Table 2. Switching configurations for R4228 and R8228

| Contact configurations (coil <br> de-energized) | R4228, R8228 suffix <br> letters |
| :--- | :---: |
|  | Power pole only |
| Spdt (double quick-connects) | A |
| Spst, normally open | B |
| Dpst, normally open | C |

${ }^{\text {a }}$ Refer to Fig. 2 for terminal location and identification.
${ }^{\mathrm{b}} \mathrm{R} 4222 \mathrm{U}, \mathrm{R} 8222 \mathrm{U}$ available with one pilot duty pole and one power pole.
${ }^{\text {C }} \mathrm{R} 4222 \mathrm{~V}$, R8222V available with one power pole and one pilot duty rating.
${ }^{\mathrm{d}}$ W model available with spdt power pole and spst pilot duty pole.
${ }^{e}$ Y model available with spdt pilot duty pole and spst power pole.
${ }^{\mathrm{f}} \mathrm{Z}$ model available with spst power pole and spst pilot duty pole.


R4222F,Q/R8222F,Q
DPST, ONE NORMALLY OPEN
AND ONE NORMALLY CLOSED
(EXCEPT FOR R4222Q1097 WHICH
HAS REVERSE TERMINAL
IDENTIFICATION
1-2 IS N.C. 4-5 IS N.O.)


R4222G,R/R8222G,R DPST, NORMALLY CLOSED


R8222Z
DPST, NORMALLY CLOSED -


R4228A/R8228A
SPST, NORMALLY OPEN
(DOUBLE QUICK CONNECT)


R4222H,S,W/R8222H,S,W SPDT AND SPST, NORMALLY OPEN


R4222J,T/R8222J,T SPDT AND SPST, NORMALLY CLOSED


R4222Y/R8222Y
SPDT AND SPST, NORMALLY OPEN

Fig. 2. R8222/R422, R8228/R4228 circuit and terminal identification.

## WIRING

Disconnect power supply before making wiring connections to prevent possible electric shock and equipment damage.

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 of the relay. The relay has molded terminal numbers and a circuit diagram for easy identification when wiring. Fig. 2 shows the terminal location and circuits of all models.

Do not exceed contact and coil ratings when wiring into the system.

## Contact ratings

R4222 and R8222 contacts are available for pilot duty, power pole, or millivoltage applications. R4228 and R8228 contacts have power pole ratings only. See Tables 3 and 4.

Table 3. Power poles for R4222 and R8222 (per pole, amperes)

| R4222, R8222 | 120 Vac | 208/240 Vac, 277 Vac | 480 Vac |
| :--- | :---: | :---: | :---: |
| Full load $^{\text {a }}$ | 12 | 6 | 3 |
| Locked rotor $^{\text {2 }}$ | 60 | 36 | 18 |
| Resistive $^{\text {b }}$ | 15 | 15 | 10 |

${ }^{\text {a }}$ Also rated $1 / 2 \mathrm{hp}$ at 120, 240, and 480 Vac.
${ }^{\mathrm{b}} 0.75$ power factor load.
Table 4. Contact ratings for R4228, R8228

| R4228A,B and R8228A,B | 120 Vac | $\mathbf{2 4 0}$ Vac | 277 Vac | 480 Vac |
| :---: | :---: | :---: | :---: | :---: |
| Full load | 16 | 12 |  | 5 |
| Locked rotor | 96 | 72 |  | 30 |
| Horsepower | 1 | 2 |  | $1-1 / 2$ |
| Resistive |  |  | 25 | 15 |
| R4228C,D and R8228C,D |  |  |  |  |
| Resistive only |  |  | 25 | 10 |

Pilot duty poles for R4222 and R8222 only
Minimum: 3 VA at 24, 120, 240, and 480 Vac.
Maximum: 25 VA at $24 \mathrm{Vac} ; 125 \mathrm{VA}$ at 120, 240, and 480 Vac.
Resistive: 3 amps at 480 Vac ( 0.75 power factor).

Millivoltage: Available upon request with standard millivoltage ratings. Contact your local Honeywell representative for additional information.

## Coil Ratings

All coils meet Underwriters Laboratories Inc. requirements for Class B coils. If coil voltages other than those listed in Table 5 are desired, contact your local Honeywell representative for additional information.

Table 5. Coil ratings for R4222, R4228, R8222, and R8228

|  | $\mathbf{2 4 ~ \mathrm { Vac } ^ { \mathbf { a } }}$ | $\mathbf{1 2 0 , 2 0 8 / 2 4 0 , 2 7 7 , \mathbf { 4 8 0 }}$ <br> $\mathrm{Vac}^{\mathrm{a}}$ |
| :--- | :---: | :---: |
| Inrush VA (maximum) | 20 | 20 |
| Sealed VA <br> (maximum) | 9.5 | 10 |
| Current draw | 0.4 | - |

Pickup voltage: 75 percent of rated call voltage.
a Coils are rated for $50 / 60 \mathrm{~Hz}$. Data is at 60 Hz .

## ACCESSORIES

1. 135959 receptacle only.
2. 135887 bail only.

## CHECKOUT

Operate the relay and controlled equipment to make sure that the relay pulls in when the coil is energized and that the controlled equipment operates as intended.

## Automation and Control Solutions

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