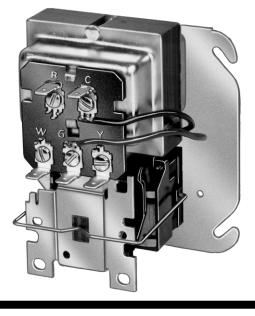
Honeywell

R8285A-G, J, K Control Centers

R8285 Control Center provides low voltage control of line voltage fan motors and auxiliary circuits in heating, cooling, or air-conditioning systems.



- 120, 208/240, and 120/208/240 Vac models available.
- R8285A has spdt switching for two-speed fan motor applications.
- R8285B has dpdt switching for *Total Comfort* application with electronic air cleaner, humidifier, and blower motor.
- R8285C has spst switching for one-speed fan motor applications.
- R8285D has dpst switching for one-speed fan motor and limit controller applications.
- R8285E has dpst switching for two-speed fan motor and limit controller applications.
- R8285F has dpst switching for one-speed fan motor and auxiliary load applications.
- R8285G has spst switching for one-speed fan motor applications.

- R8285J,K allows the addition of an R8222 or R8228 Relay without rewiring. Used when a cooling system will be added later.
- 40 or 50 VA transformer powers low voltage control systems and provides overload protection.
- Low voltage terminal board provides convenient connections for thermostat and heating and cooling equipment control circuit wiring.
- Control center mounts on standard 4 x 4 inch square junction box.
- Relay is easily replaced without disturbing wiring.
- Ground screw provided on mounting plate.

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IMPORTANT: The specifications given in this publication do not include normal manufacturing tolerences. Therefore, units may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

TRADELINE® MODELS

TRADELINE models are selected and packaged for ease of handling, ease of stocking, and maximum replacement value. TRADELINE model specifications are the same as those of standard models, except as noted. TRADELINE MODELS:

R8285A Control Center.

R8285B Control Center.

TRADELINE FEATURES AVAILABLE:

All TRADELINE models are packed with cross refence label and special installation instructions.

STANDARD MODELS:

R8285J Control Center has a receptacle and leadwires for spst and spdt relays, less R8222 or R8228 relay. Used when cooling will be added later.

R8285K Control Center has a receptacle and leadwires for dpdt and dpst relays, less R8222 or R8228 relay. Used when cooling will be added later.

TRANSFORMER RATINGS:

- Power Rating: 40 or 50 VA.
- Primary Voltage: Either 120, 208/240, or 120/208/ 240 Vac.

STANDARD MODELS

| Fan | Replacement | | ntact ting | | Input Voltage | See Wiring |
|--------|-------------|-------|---------------|--------------|----------------------|------------|
| Center | Relay | AFL | ALR | Switching | (Vac) | Diagram |
| R8285A | R8222B | 12 | 60 | Spdt | 120, | Fig. 2 |
| R8285B | R8222D | 12 | 60 | Dpdt | 208/240 | Fig. 3 |
| R8285C | R8222A | 12 | 60 | Spst | or 120/ | Fig. 4 |
| R8285D | R8222U | 12 | 60 | Dpst | 208/240 ^a | Fig. 5 |
| R8285E | R8222F | 12 | 60 | Dpst | 1 | Fig. 6 |
| R8285F | R8222C | 12 | 60 | Dpst |] [| Fig. 5 |
| R8285G | R8228A | 16/18 | 96/72 | Spst | | Fig. 4 |
| R8285J | R8222 | 12 | 60 | Spst or Spdt |] [| Fig. 7 |
| | R8228 | 16/18 | 96/72 |] | | |
| R8285K | R8222 | 12 | 60 | Dpst or Dpdt | 1 | Fig. 7 |
| | R8228 | 16/18 | 96/72 | | | |

TABLE 1-R8285 MODEL SPECIFICATIONS.

^a Specify when ordering.

Ordering Information

When purchasing replacement and modernization products from your TRADELINE[®] wholesaler or distributor, refer to the Tradeline Catalog or price sheets for complete ordering number, or specify—

- 1. Order number.
- 2. Accessories, if desired.
- 3. Order additional system components and system accessories separately.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

- 1. Your local Home and Building Control Sales Office (please check the white pages of your phone directory).
- 2. Home and Building Control Customer Satisfaction
 - Honeywell, Inc., 1885 Douglas Drive North
 - Minneapolis, Minnesota 55422-4386 (612) 951-1000

In Canada—Honeywell Limited/Honeywell Limitee, 740 Ellesmere Road, Scarborough, Ontario M1P2V9. International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany,

Secondary Voltage for 40 VA at 1.67 Amps: 24 Vac. Secondary Voltage for 50 VA at 2.08 Amps: 24 Vac. Open Circuit Secondary Voltage: 27.0 volts. Overload Protection: Inherent. Voltage Frequency: 60 Hz.

CONTACT RATINGS: Refer to Tables 2 and 3 for contact ratings of both normally open and normally closed contacts.

TABLE 2-R8285A-F CONTACT RATINGS.

| Voltage | 120 Vac | 208/240 Vac |
|--------------------|---------|-------------|
| Full Load (amp) | 12 | 6 |
| Locked Rotor (amp) | 60 | 35 |

TABLE 3-R8285G CONTACT RATINGS.

| Voltage | 120 Vac | 208/240 Vac |
|--------------------|---------|-------------|
| Full Load (amp) | 16/18 | 18 |
| Locked Rotor (amp) | 96/72 | 72 |

RELAY COIL RATINGS:

Inrush: 20 VA maximum.

Sealed: 9 VA.

Wattage: 5 watts.

Pickup Voltage: Must pick up below 18 volts. (R8285A1022 must pick up below 176 volts.) PILOT DUTY RATINGS FOR R8285D PILOT DUTY

POLE:

Minimum: 3 VA at 24, 120, 240, and 480 Vac.

- Maximum: 25 VA at 24 Vac, 125 VA at 120, 240, and 480 Vac.
- Resistive: 3 amps at 277 Vac (0.75 power factor).
- Powerpile[®] (Millivoltage): The normally open pilot duty contacts are rated for Powerpile (Millivoltage) applications: 0.25 amp at 0.25 to 12 Vdc.
- TRANSFORMER PRIMARY LEADWIRE COLOR CODE:

Black and White: 120V.

Black-Common: 208/240V.

Red: 208V.

Orange: 240V.

- LEADWIRE COLOR CODES: Refer to Table 4 for leadwire color codes.
- LEADWIRES: 11 inch color-coded leadwires.
- RELAY COIL LEADWIRE COLOR CODE: Black lead connected to C terminal and blue lead connected to G terminal.

POWER CONSUMPTION: 11.0 watts maximum.

CONTACTS: Silver cadmium oxide.

- MOUNTING: Mounts on standard 4 inch square junction box.
- DIMENSIONS: Refer to Fig. 1 for installation dimensions.
- UNDERWRITERS LABORATORIES INC. LISTED: File No. E113671

CANADIAN STANDARDS ASSOCIATION COMPO-NENT RECOGNIZED:

R8285A-G: File No. LR85839

R8222 (all models): File No. LR35066.

| Model | Switching | Pole | Leadwire Color |
|-------------|------------|-----------------------------|---|
| R8285A | Spdt | _ | Black—Common Red—N.O. Contact Brown—N.C. Contact |
| R8285B | Dpdt | Pole 1 | Black—Common Red—N.O. Contact Brown—N.C. Contact |
| | | Pole 2 | Violet—Common Red/Yellow—N.O. Contact Yellow—N.C. Contact |
| R8285C | Spst | _ | N.O. Contact—Black leadwires |
| R8285D Dpst | 285D Dpst | Pole 1 (power pole) | N.O. Contact—Black leadwires |
| | | Pole 2 (pilot duty pole) | N.O. Contact—Red leadwires |
| R8285E | Dpst | Pole 1 Pole 2 | N.O. Contact—Black leadwires N.C. Contact—Red leadwires |
| R8285F | Dpst | Pole 1 Pole 2 | N.O. Contact—Black leadwires N.O. Contact—Red leadwires |
| R8285G | Spst | _ | N.O. Contact—Black leadwires |
| R8285J | Spst, Spdt | Refer to Fig. 7 | |
| R8285K | Dpst, Dpdt | | |

TABLE 4—LEADWIRE COLOR CODES.

R8285A-G, J,K SPECIFICATIONS

| EXTERNAL LOAD: R8285 will operate the following typical Honeywell relay and/or contactor loads with up to 300 feet of No. 18 gauge wire (150 ft. run). The | R8285 CROSS REFERENCE: R8285A replaces: White | | | | | |
|--|---|----------------------------|--------|---------------------|-------|--|
| maximum load for each application is: | | RBM | Rodge | | MARS | |
| Two R8222 Switching Relays. |) - | 90-113 | 8A94-2 | 2 | 24013 | |
| Two R8242 Contactors. | R8239A,C | | | | | |
| One R8222 Switching Relay and one R8242 Con- | R8227A,B | | | | | |
| tactor. | R856B | | | | | |
| One R8242 Contactor and one R8093 Thermal | R8102 | | | | | |
| Delay Relay. | | | | | | |
| One R8210, R8212, or R8214 Contactor and one | R8285B replaces: | | | | | |
| R8222 Relay. | Honeywell | Honeywe | ll | Hone | ywell | |
| One R8210, R8212, or R8214 Contactor and one | Fan Centers | Transfor | mers | Relay | 'S | |
| R8093 Thermal Delay Relay. | R8285A,B,C,E,F | AT72D | | R8222 | 2 | |
| ACCESSORIES: The R8285A-G function can be | R8239A,B,C,E,F | AT40 | | R8225 | 5 | |
| achieved by adding the appropriate R8222 or R8228 | R8226A,B,C | AT30A | | | | |
| Relay into an R8285J,K. Order the appropriate relay | R8227A,B,C | AT20 | | | | |
| using Table 1 and Figs. 2 through 6. | R856B | AT12 | | | | |
| | R8102 | | | | | |
| | | White Ro 8A94-51 | odgers | MAR 24010 | ~ | |

Fig. 1—R8285 installation dimensions in in. [mm].

