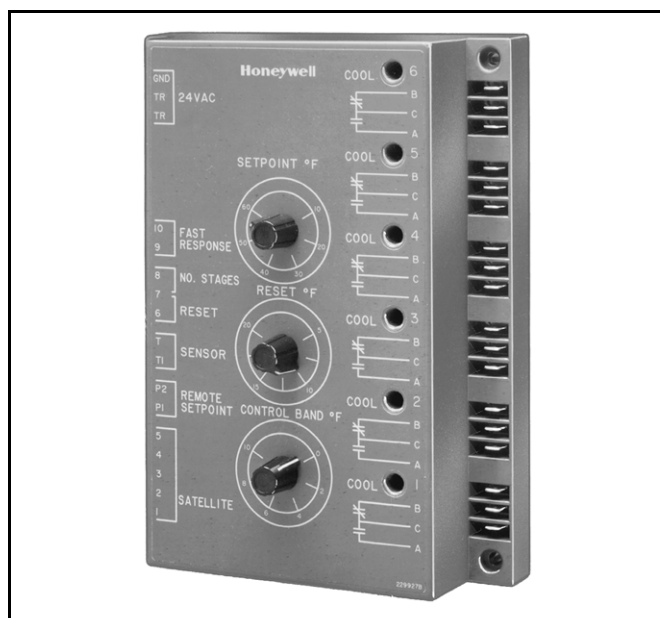


W7100G Discharge Water Temperature Control

PRODUCT DATA



FEATURES

- Up to six stages of cooling provided.
- Expandable system up to 10 cooling stages using a W7101.
- Advanced proportional plus integral microprocessor control algorithm minimizes droop.
- Soft start to minimize compressor cycling during system start up.
- Adjustable minimum on/off timing and time delay between stages of either 30 or 60 seconds.
- Adjustable setpoint from 10 to 110°F (-12 to 43°C).
- Adjustable reset differential from 5 to 20°F (3 to 11K).
- Adjustable control band from 0 to 10°F (0 to 6K).
- Reset signal from either an outdoor air or space sensor.
- C7170 sensor can be used for sensing water temperature.
- LED show which stages of cooling are energized.

APPLICATION

The microprocessor-based W7100G Discharge Water Temperature Control maintains an average discharge water temperature for reciprocating chiller applications, by staging on and off compressors or unloaders as required. The W7100 can provide up to 10 stages of cooling using a W7101 Satellite Sequencer.

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SPECIFICATIONS

W7100G Model Features:

- 6 stage cooling, controls reciprocating chillers.
- W7101 satellite expansion to 10 cooling stages.
- Adjustable setpoint.

Dimensions: See Fig. 1.

Electrical Ratings:

Input Voltage and Frequency (terminals TR-TR):

At 60 Hz: 20 to 30 Vac.

At 50 Hz: 20 to 26.4 Vac.

Power Consumption:

Device: 12 VA at 24 Vac and 50 to 60 Hz.

On/Off Stages (Cool 1 through 6): See Table 1.

Table 1. Power Consumption On/Off Stages (Cool 1-6).

Contact	Voltage (Vac)	Inrush (VA)	Running (VA)
N.O.	24	240	60
N.C.	24	75	30
N.O.	120/240	750	75
N.O.	120/240	240	40

Switching: Spdt relays.

Wiring Terminals: 1/4 in. quick-connect.

Sensor Input Signal (See Fig. 2):

Positive temperature coefficient: 4.8 ohms/°F (2.6 ohms/°C).

Resistance: 3484 ohms at 77°F (25°C).

Number of Stages Input:

Resistor value (across terminals 7 and 6) to determine number of ON/OFF stages. (See Table 2).

Temperature Ratings:

Ambient: -40°F to +150°F (-40°C to +66°C).

Shipping: -30°F to +150°F (-34°C to +66°C).

Humidity Rating: 5 to 90 percent RH noncondensing.

Mounting: Four mounting holes in base. Use No. 6 screws (not provided).

Approvals:

Underwriter's Laboratories Inc. Component Recognized.

Additional System Components:

C7170A1010 Discharge Water Sensor: senses discharge water temperature, provides input to W7100G sensor terminals T and T1.

Transformer (required): Provides 24 Vac power for all components of the W7100G control system. (Size transformer to match system load.)

Accessories:

T7047C1025 Remote Temperature Sensor: Discharge water temperature reset from controlled space.

S96381037 Reset Setpoint Potentiometer: Use one or more T7047C1025 with S963B1037.

C7031G1016 Outdoor Air Sensor: Reset of discharge water from outdoor air temperature.

C7170A1010 Discharge Water Temperature Sensor: Senses discharge water temperature for input to W7100G.

W7101A1003 Satellite Sequencer: Adds up to 4 ON/OFF stages of cooling to W7100 switching capability.

121371A Copper Immersion Well: Required for C7170A Immersion Sensor.

121371E Stainless Steel Immersion Well Required for C7170A Immersion Sensor.

107406 Heat Conduction Compound: Required for minimum thermal lag.

AT72D1683 System Transformer: 40 VA, 120 Vac.

AT87A1106 System Transformer: 50 VA, 120/208/240 Vac.

AT88A1005 System Transformer: 75 VA, 120 Vac.

AT88A1021 System Transformer: 75 VA, 208/240 Vac.

4074EDJ Resistor Kit and Test Plug: Used in controller checkout.

4074EFV Resistor Kit for W7100G System Configuration: Used to select number of stages controlled.

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.

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 (check white pages of your phone directory).
2. Home and Building Control Customer Relations
Honeywell, 1885 Douglas Drive North
Minneapolis, Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9.

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