The PEPI® Model J family of thermal controls has proven its reliability in over 40 years of use in virtually every type of product with electronic circuits. The J Series family includes safety agency tested solutions for virtually every application with electronic circuitry.





Crimp Terminals Q

Calibration Dimple

Nomex Insulation Separates Case From Circuit

Bimetal Element

Die Stamp Designates Thermostatic Metal Type

The Model J Series thermal controls are normally in the closed position allowing electricity to flow through the circuit. When the circuit load exceeds a preset temperature, the top side of the bimetal blade shortens forcing the blade to snap open, opening the circuit. When the circuit cools, the bimetal returns to its normal position closing the circuit and allowing electricity to once again flow.

Feature	Benefit
Fold-over case has low profile	Fits neatly in low clearance spaces.
Conductive bimetal construction	Maximizes current sensitivity under short circuit conditions.
Multiple devices share common design	Helps control production costs. Allows you to standardize circuit and housing designs across multiple product lines.
Wide differential between opening and closing temperatures	Improves versatility allowing more precise relationship to application needs.
Snap action	Quick make / quick break switching action opens circuit upon reaching calibrated temperature.
Tested on VAC and VDC circuits	Widens application flexibility.
Over-sized fine silver contacts	Maximizes reliability.
Preset calibration temperatures	Maximizes accuracy. Calibration cannot be reset in field.



Side View



Metric dimensions are in MM (shown in green)

Customization Options	Effect
Change bimetallic elements	Increase or decrease sensitivity to current.
Add lead wires	Speed production at your facility. Choose wire and insulation material best suited to your application.
Select calibration temperature	Match application needs.
Add sleeves to case	Protect device from environmental concerns or severe ambient temperatures that might influence operation.

UL Recognitions (Visit www.pepiusa.info/ul-recognitions for full details)

File: E37151 - Temperature Indicating and Regulating Equipment

- Temperature Limiting or Limiting and Regulating Equipment
- Temperature Regulating Applications
- Direct Current Contact Ratings
- Thermal Protector For Use in Electric Heating Pads
- Thermal Protector For Use In Fluorescent Lamp Ballasts
- Thermal Protector For Use In Incandescent Lamps
- Thermal Protector For Use In Radio and TV Transformers

File: E42562 Motor Protective Devices, Inherent Overheating

CSA Certifications (Visit www.pepiusa.info/csa-certifications for full details)

Class: 4823 02 Appliance Controls Class: 4823 03 Motor Protectors

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We come through when the heat is on[®]



MODEL J(A)

Specially designed for 120 and 240 VAC heated applications, including appliances. Available with either a wide or narrow differential between opening and closing temperatures for tighter temperature control.





METRIC DIMENSIONS ARE IN MM (SHOWN IN GREEN)

Contact Ratings

5 amps / 120 VAC resistive

4 amps / 240 VAC resistive

Calibration Temperature Range

Nominal Calibration Temperatures 50°C - 160°C

Reset Temperature

Typically 2°-10°C, 5°-15°C or 10°-20°C below opening temperature

MODEL JS SERIES

This self-hold version adds an extra layer of safety by using an internal heat source to hold circuit open until power is removed and circuit cools. The thermostat then resets allowing continued operation.

Contact Ratings

Underwriters Laboratories (CUL Rated)

- 1. Temperature Indicating & Regulating Equipment • 15 amps / 120 VAC resistive - 6000 Cycles
- 2. Component Motor Protective Devices • 15 amps / 120 VAC
 - 10 amps / 240 VAC (Suggested Ratings)

International Electrotechnical Commission (IEC)

- 1. Automatic Electrical Controls for Household & Similar Use
- 2. Thermal Motor Protectors
- 3. Temperature Sensing Controls
 - 13 amps / 250 VAC resistive
 - 4 amps / 250 VAC inductive

VDE

- 1. Thermal Motor Protector
- 2. Temperature Sensing Control
 - 13 amps / 250 VAC resistive
 - 5 amps / 250 VAC inductive

Calibration Temperature Range

Nominal Calibration Temperatures 60°C - 160°C

Reset temperature

Maximum 80°C below opening temperature unless specified lower



Metric dimensions are in MM (shown in green)



MODEL JC

Part of our Valstat Series[™] high-economy family of thermal controls. Inventoried in two bimetallic resistance values. Available with same end (JCA) or opposite end termination (JCB)

The gasket zinc plated steel case is suitable for many varnish impregnation processes.







Contact Ratings

22 amps / 115 VAC inductive

8 amps / 250 VAC inductive

20 amps / 16 VDC inductive

10.55

Calibration Temperature Range

Nominal Calibration Temperatures 60°C - 150°C

Reset Temperature

Typically 45°-105°C below opening temperature

VDE Certified

MODEL JSC

Self-Hold Thermostat is part of the Valstat[™] Series. Internal heat source holds circuit open until circuit cools allowing device to reset and resume normal operation. This extremely economical device is available with your choice of two resistance values of the bimetal element.



Top View Model JSCB



Metric dimensions are in MM (shown in green)

Contact Ratings

Suitable for use in 120/240 VAC inductive load applications up to 1 HP

Calibration Temperature Range

Nominal Calibration Temperatures

50°C - 160°C

Reset Temperature

Maximum 80°C below opening temperature unless otherwise specified

PEPI® J SERIES FAMILY OF THERMAL CONTROLS: REAL WORLD PERFORMANCE

J SERIES DERATING CURVES



These are only representative curves based on controlled laboratory testing. Results may vary in actual applications.

JC Ultimate Trip Current vs Protector Ambient Temperature



JC Average First Cycle Tripping Time vs. Current at 25°C Ambient



These are only representative curves based on controlled laboratory testing. Results may vary in actual applications.

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PEPI® J SERIES FAMILY OF THERMAL CONTROLS: REAL WORLD PERFORMANCE



These are only representative curves based on controlled laboratory testing. Results may vary in actual applications.

Portage Electric Products, Inc. (PEPI) The Thermal Control Specialists

This sheet contains basic technical and operating characteristic data for our Model J Series Thermal Controls.

Should you have any questions regarding the use of this device in your application, please feel free to contact us for additional technical information or assistance.

Since 1963 PEPI has been world-wide supplier of bimetallic thermostats and thermal protectors. Today, we produce almost every type of creep-action and snap-action device used in a wide range of OEM applications

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