



## European Union Declaration of Conformity

(in accordance with ISO/IEC 17050-1 and ISO/IEC 17050-2)

This is to certify that the product listed below, which was designed and manufactured by:

### Watlow Electric Manufacturing Company

1241 Bundy Blvd.  
Winona, MN 55987 USA

meets the essential safety requirement of the European Union, when properly installed, maintained and operated in the application for which it was designed. In addition, this is to certify that this product has also been designed and manufactured to ensure compliance with all applicable directives.

A Technical Documentation File is also available for review by competent authorities and will be maintained for a period of ten years after the date on which the product was last manufactured. In addition to this Technical File, one can find design, safety, installation, maintenance, and application related information about this product in the documentation that was shipped with product or on [www.watlow.com](http://www.watlow.com).

This declaration of conformity is issued under the sole responsibility of the manufacturer for the product listed below.

- Product Name:** **Series EZ-ZONE® ST Tower**
- Watlow Part Number:** ST, followed by K, B, P, E, H, D, J or C, followed by A, L or B, followed by A, B or F, followed by L, H, 1, 2 or 3, followed by any letter or number, followed by A – H, J – N, P, R, S or T, followed by A, B, C, D, E or F followed by any three numbers or letters.
- Product Description:** Temperature control, Installation Category II, Pollution degree 2, IP20.
- Rated Supply:** Control 100 to 240 V~ ac **or** 24 to 28 V~ ac or dc (ac = 50/60 Hz)  
Load 24 to 240 V~ ac **or** 48 to 600 V~ ac zero cross, or  
Load 100 to 240 V~ ac **or** 260 to 600 V~ ac phase angle<sup>1</sup>.
- Rated Power:** Control 12 VA, Control with Contactor 50 VA, Control with external contactor 140 VA.  
Load Current 25, 40 or 75A depending upon SSR and heatsink used. (see derating curve<sup>6</sup>)

We, as the manufacturer, hereby declare that the products described above are in conformity with the applicable requirements in accordance with the following European Directives:

- Applicable Directives:** **2014/35/EU** (Low Voltage “Safety” Directive)  
**2014/30/EU** (Electromagnetic Compatibility “EMC” Directive)  
**2011/65/EU** as amended by **EU 2015/863** (RoHS Directives)  
**2012/19/EU** (WEEE Directive)

The object of the declarations described above is in conformity with the relevant Union harmonization legislation:

**Applicable Standards:**

- Safety:** **EN 61010-1:2010<sup>2</sup>** +A1:2019 Safety Requirements of electrical equipment for measurement, control and laboratory use. Part 1: General requirements
- EMC:** **EN 61326-1:2013** Electrical equipment for measurement, control and laboratory use – EMC Requirements, Industrial Immunity

Any questions relating to this declaration or the conformity of the product(s) covered by this declaration should be directed, in writing, to either the European or Company Authorized Representative noted on this declaration.

**EMC (Cont'd):** EN 55011:2016/A1:2017/A11:2020 Emissions Industrial, Scientific, Medical equipment, Group 1 RF not intentionally generated, Class A<sup>3</sup> Emissions).  
IEC 61000-4-2:2008 Electrostatic discharge immunity  
IEC 61000-4-3:2007 +A1/2008, A2/2010 Radiated, radio-frequency electromagnetic field immunity  
10V/M 80–1000 MHz, 3 V/M 1.4–2.7 GHz  
IEC 61000-4-4:2012 Electrical fast-transient / burst immunity  
IEC 61000-4-5:2014 +A1/2017 Surge immunity  
IEC 61000-4-6:2013 + Corrigendum 2015 Immunity to conducted disturbances induced by radio-frequency fields  
IEC 61000-4-8:2009 Magnetic field immunity 30 A/M  
IEC 61000-4-11:2020 Voltage dips, short interruptions and voltage variations immunity  
EN 61000-3-2:2014 Limits for harmonic current emissions for equipment ≤ 16 Amps per phase  
EN 61000-3-3<sup>4</sup>:2013 Voltage fluctuations and flicker ≤ 16 Amps per phase

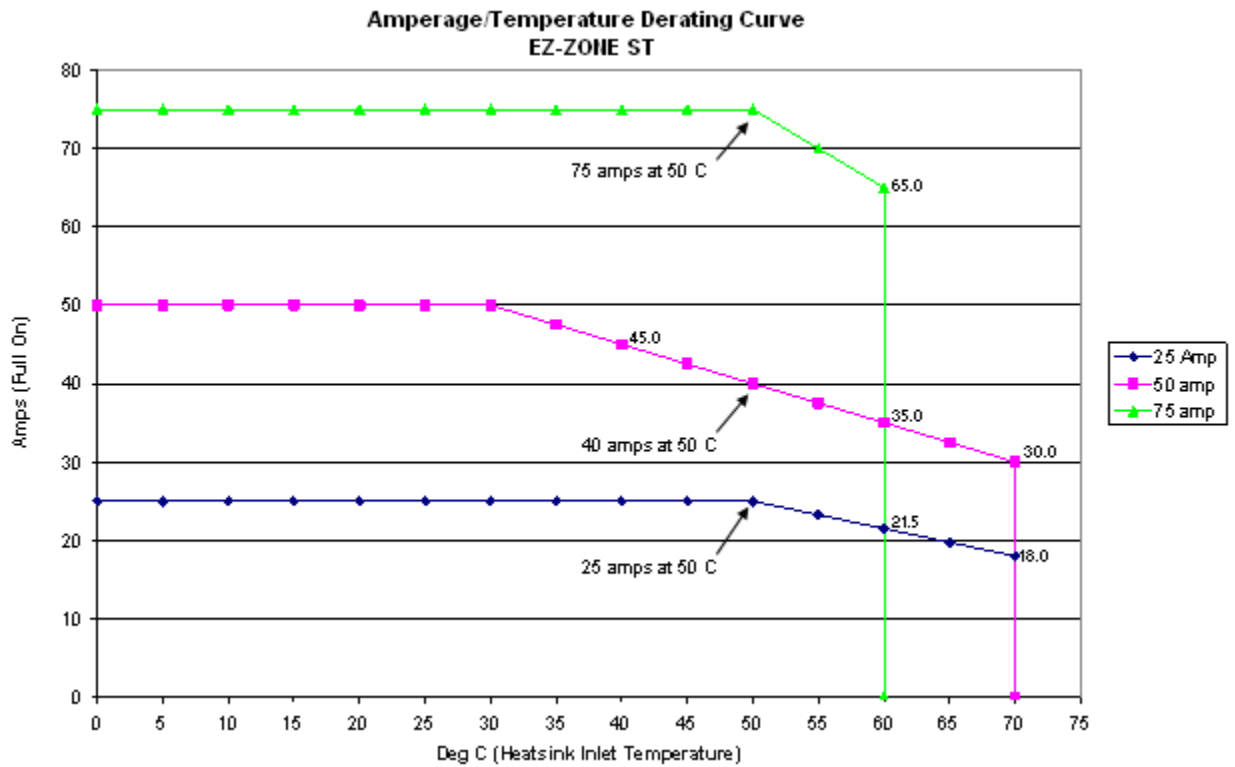
**WEEE:** Electronic Equipment Assembly, Consult sales office or factory for information on proper recycling methods. Case plastics are Polycarbonate. Connectors Nylon.

**Environmental:** EN IEC 63000<sup>5</sup>:2018- Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances (RoHS) 10 of 10 with exemptions below. PFOA and DecaBDE free.

**Industry Standard:** SEMI F47-0812E Specification for semiconductor sag immunity Figure R1-1

Notes:

- 1) For Phase Angle control models, additional filtering to what is shown in note 3 below will be needed to pass conducted emissions. Power factor correction may also be needed on load circuit to pass 61000-3-2 Harmonic emissions. Consult factory for more details.
- 2) Compliance with 3rd Edition requirements with use of external surge suppressor installed on 230 Vac~ control power line. Recommend minimum 1000 V peak to maximum 2000 V peak, 70 joules or better part be used.
- 3) CAUTION: This equipment not intended for use in residential or commercial environments and may not provide adequate protection to radio reception in such environments without additional filtering. Load conducted emissions pass Class A when tested with Watlow 14-0019 or Crydom P/N 1F25 or Watlow 14-0020 or Crydom 3F20 tuned tank filters. Control emissions pass without need of additional filtering.
- 4) To comply with flicker requirements on load circuit, cycle times may need to be increased to up to 175 seconds if load ≤ 16 Amps, or the maximum source impedance will need to be determined. Controller power complies with 61000-3-3.
- 5) RoHS compliance of some components used within product is via the following exemptions
  - 6 c) Copper alloy containing up to 4 % lead by weight (terminals and fan on 75A model.)
  - 7 a) Lead in high melting point solders internal to components (SSR's and some diodes).
  - 7 c) -i Lead in glass in ceramic internal to components (resistors and some diodes)
  - 8 b) Cadmium used in relay contacts (contactor models)



6) Derating Curve

**European Authorized Representative:**

Mr. Martin Wallinger  
 Watlow Plasmatech GmbH  
 Brennhoflehen-Kellau 156  
 5431, Kuehl, Austria

**Implementation Date:**

January 27<sup>th</sup>, 2023

**Place of Issue:**

Winona, MN USA

**Company Authorized Representative:**

Jeff Harrington

Director of Operations  
 Watlow Electric Manufacturing Company  
 1241 Bundy Blvd.  
 Winona, MN 55987 USA



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