# **Cooling Tower Controller**

Designed as a cost effective solution for cooling tower control, Emerson controllers are loaded with features that also make it well suited for other outdoor HVACR applications such as rooftop air handling units, air cooled chillers, condenser fans, pumps and compressors. Emerson offers the latest in microprocessor and IGBT Variable Frequency Drive (VFD) technology in a single packaged controller. With world-class quality design and manufacture, competitive pricing, and uncompromising performance, these controllers are among the most versatile and reliable cooling tower control packages available on the market today.

These drives are designed specifically

for cooling tower applications, particularly

where building management systems do not exist.

The drive's control features and environmental characteristics,

however, make it an excellent choice for a wide variety of outdoor HVACR

applications. The base model includes electronic 3-contactor bypass control for use with several Control Techniques VFDs. The latest IGBT technology reduces EMI/RFI emissions and provides a 50% reduction in dv/dt allowing for longer motor leads. IGBT also eliminates the need for costly output filters and reactors while providing reliable operation in wet or humid ambient conditions. For year-round operation in extreme outdoor environments, all cooling tower solutions drives are rated for continuous duty at 40°C ambient temperature (derating available for higher ambient temperature).

Packages are built in a NEMA 3R enclosure with thermostatically controlled space heaters, ventilation fans and an optional sun shield. Complete control is available with optional water temperature controller, basin (sump) heater contactor, fluid cooler spray pump starter, de-icing control and damper control. Models are available at 208-230V, 460V, 575V in power sizes to 200hp in VFD with disconnect configurations.





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# Options

- Basin (Sump) Heater Contactor
- Fluid Cooler Spray Pump Starter
- Basin (Sump) Temperature Controller
- Damper Control
- De-Icing Control

# Ratings

- 208V 1-50hp
- 230V 1-60hp
- 460V 1-200hp

# Simple to install

Designed for outdoor mounting, these drives offer precise control in cooling tower applications in any environment. Connect three-phase power into the package and three-phase power out to the cooling tower motor.

#### FIELD PROVEN FOR MAXIMUM RELIABILITY

Tested and proven in the harshest operating conditions by Control Technique's electrical, mechanical and software engineering groups, these powerful drives get machines up and running quickly and consistently in any environment. With dynamic performance, PLC functionality, premium functionalities and plug-in options, Emerson delivers more than the average general purpose drive, providing lower cost solutions and better productivity in motor control applications.

# **SPECIFICATIONS**

#### Environment

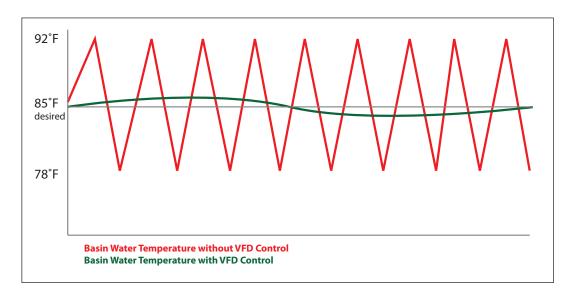
- IP20 "Open Chassis"
- NEMA 3R rating
- Ambient temperature -10 to +40 °C @ 3kHz
- Humidity 95% maximum (non-condensing)
- Electromagnetic Emissions complies with EN61800-3 (second environment) as standard. Complies with EN61000-6-3 (residential) and EN61000-6-4 (industrial) generic standards

#### Protection

- Undervoltage, Supply and DC Link overvoltage, Phase loss, Drive overload, Instantaneous overcurrent, Short circuit, Ground fault, Drive thermal, Watchdog, and
- Motor thermal.

Control Techniques drives are backed by a 2-year warranty.

\*Derating available for higher ambient temperature.



Visit our website at www.hvacr-drives.com for more product information. Call 1-800-397-3786 to find a representative in your area.



