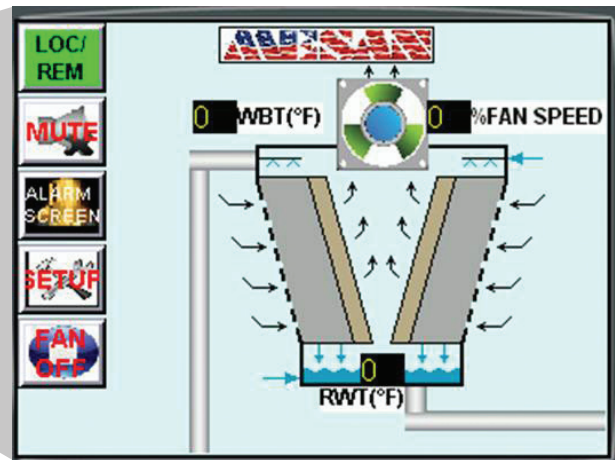




# The Latest Green Innovation from MESAN

## ***TowerMizer™, the green way to manage your cooling tower operation that pays for itself!***

A 100 HP motor running at 50% speed only uses 15 HP. Most cooling towers run in average at 50% of nominal capacity for 80% of the time, so why use old-fashion starter panels that are a hole in your pocket? Switch to MESAN's TowerMizer with its "optimizer" proprietary control logic to reduce energy usage, and protect your investment.



### STANDARD Features:

- User friendly color touchscreen (eliminates old-fashion push buttons)
- NEMA-3R, fan-cooled cabinet
- UL508A listed – industrial control panel
- No fuses – circuit breaker overload protection
- Breaker protected 24VDC power supply
- Built-in logic control with (16) inputs and (12) relay outputs
- (4) analog inputs (0-10VDC or 4-20ma., 12 bit)
- Low basin water level input (optional sensor)
- NEMA-4, 6" color touch screen (indoor or outdoor configurable)
- Alarm history with dry contact and system status
- Configurable in variable or fixed speed operation

### Specifications:

- **Input voltage ranges:**
  - 208/230/480 VAC single
  - 3 phase (60 Hz) or 220/380/415 VAC (50 Hz)
- **Horsepower range:** 3-600HP
- **Efficiency:** >95%
- **Environment:**
  - UL NEMA-3R or optional NEMA 12 or NEMA 4(x)
  - Humidity up to 90% non-condensing
  - VFD ambient temperature up to 50 degrees C
- **Protections:** High voltage, ground fault, low voltage, phase loss, high temp, motor overload, motor stall, fan vibration, communication error, speed command loss, sensor fail, hardware failure, VFD overheat
- **Monitors:** Leaving water temp, ambient temperature, VFD status, fan speed in %, motor amps, KW, total run time, external faults, sensor loss, VFD fault
- **Control:** VFD on/off, fan auto and manual speed, external trip, skip frequency

## Maximum Energy Savings with a Fully Customizable Controller

The TowerMizer™ is the first tower controller with a user-friendly color touchscreen interface with full graphics. The stand-alone version is ideal for retrofits and its multiple communication protocols facilitate integration to BMS systems.



### STANDARD Protective Features:

- System operational exerciser
- Temperature control with self-tuning PID (standard)
- Vibration monitor with harmonic resonance inhibitor
- Dynamic braking (10% duty cycle)
- Broken fan belt detection
- Adjustable electronic overload protection
- Low water basin level protection
- Multiple protocol communication with readable:
  - Leaving water temperature
  - Fan speed (%),
  - Motor current draw
  - KW consumption
  - Run time
  - Drive status
- Multiple Protocol Communication with writable:
  - Fan on/off
  - HAND/OFF/AUTO
  - Temperature set point
  - Manual speed and VFD trip reset
  - Two analog outputs on VFD: 0-10VDC or 4-20ma (read/write)

### Optional Features:

- Variable frequency drive bypass through door
- Door interlocked main circuit breaker
- 5% input line reactor
- Output noise filter
- Incoming/lightning/surge protection
- Controller space heater with thermostat
- Two or three (maintenance) contactor bypass
- NEMA 4X stainless steel enclosure with cooling
- Intelligent fan de-icing
- Basin heater contactor (power relay by others)
- Spray pump starter (for closed-circuit towers)
- Additional protocols available
- Door mounted H-O-A switch with manual speed potentiometer
- High current relay outputs (12 maximum)
- Dynamic braking with external resistor bank (up to 100% duty cycle)
- Wet-bulb temperature sensor with "Optimizer" proprietary logic
- Master/slave capability for multi-cell applications in a single enclosure



**Contact Us Today!**

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