

# The **All-Fiberglass** Cooling Towers



# **RTP, RTUP & RTPM MODELS**



Thermal Performance Certified by the Cooling Technology Institute

Ultra-Efficiency models with a permanent magnet motor

# **RTP, RTUP & RTPM MODELS**

## THE ULTRA EFFICIENT COOLING TOWER

RTP models are the best cooling solution in any application, as their advanced design allows them to offer the best performance.





# FEATURES OF RTP MODELS

#### **INCREASED CAPACITY**

RTP models offer increased capacity up to 5% compared to RT models and up to 15% compared to Low Sound Models.



# ULTRA LOW SOUND

Reduced noise operation, even lower than our Low Sound and Super Low Sound models without sacrificing capacity.

### **PERMANENT MAGNET MOTORS**

A key component in the RTP models is the low RPM **permanent magnet motor** specially designed for REYMSA towers. In a permanent magnet (PM) motor, the rotor is permanently magnetized, unlike traditional induction motors whose rotor must be electrically magnetized to cause rotation. The efficiencies and energy savings offered by PM motors more than offset the higher first cost when the total cost of ownership is evaluated.

### VFD

Permanent magnet (PM) motors must be operated by the VFD (Variable Frequency Drive) included in the PM motor package.

## ADVANTAGES OF THE PERMANENT MAGNET MOTOR

#### **ULTRA EFFICIENCY**

The efficiency increase of a PM motor results mainly from the lack of a need for currents to be induced in the rotor to create a magnetic field within the rotor, as needed in an induction motor. Eliminating the rotor conductor losses results in inherently higher efficiencies in PM motors.

#### LOWER OPERATING TEMPERATURE

- With less waste energy in the form of heat, PM motors operate cooler than induction motors, improving it's life expectancy and reliability.
  - Lower amperage.

#### HIGH POWER DENSITY

- Permanent Magnet Direct Drive motors provide very high torque from small motors at low speed, eliminating the need for a gear reducer.
- Standard NEMA Frame Sizes and up to 2 frame size reduction compared to induction motors.



#### In a low speed application the permanent magnet motor can be 1-2 frame sizes smaller, lower HP, lower amperage and with a smaller VFD, compared to the size and power requirement of common induction motors.



## **RTP MODELS**

- RTP models are available in one, two or four fan units.
- 138 CTI certified RTP models.
- Capacities ranging from 136 1,314 Nominal Tons<sup>1</sup> in a single unit .

RTP Model Sizes (ft)					
7 x 7	8 x 8	14 x 14	16 x 16		
7 x 8	8×10		16 x 19		
7 x 9	8 x 12		16 x 22		
7 x 14	8×16		16 x 24		
	8×19		16 x 27		
	8 x 22				
	8 x 24				
	8 x 27				



## **RTUP MODELS**

- Available in one, two or four fan units.
- RTUP models are excellent for transport in shipping containers due to their reduced height.
- 57 CTI certified RTUP models.
- Capacities ranging from 133 1,149 Nominal Tons<sup>1</sup> in a single unit .

<b>RTUP Model Sizes</b>	(ft)
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	7 x 7	8 x 8	14 x 14	16 x 16		
	7 x 8	8 x 10		16 x 19		
	7 x 9	8 x 12		16 x 22		
	7 x 14	8 x 16		16 x 24		
		8 x 19				
_		8 x 22				
		8 x 24				



## RTPM MODULAR MODELS

- Modular models are units intended to be mounted adjacent to each other, allowing the tower to grow to any size as the tower can have an unlimited number of modules to increase capacities and accommodate any heat load.
- RTPM models are available as two fan units.
- 92 CTI certified RTPM models.
- Capacities: Starting at 265 Nominal Tons<sup>1</sup>.

#### **RTPM Model Sizes (ft)**

7 x 14	8×16
	8×19
	8 x 22
	8 x 24
	8 x 27

1- A Nominal TON is defined as 3 GPM of water cooled from 95°F HWT to 85°F CWT with a 78°F WBT.

REYMSA Cooling Towers are manufactured with high grade **Fiberglass Reinforced Polyester (FRP)**, designed for heavy duty and a life expectancy of 30+ years. The components are also of the highest quality.



## **Fan Duct**

- The fan duct contains the fan blade assembly.
- The direct drive system features a permanent magnet motor.
- 5-Year warranty on the motor<sup>2</sup>.

## **Body Section**

- The body section is entirely seamless and contains a hot water distribution system, consisting of a PVC Sch. 80 pipe and 2<sup>1</sup>/<sub>2</sub>" threaded polypropylene spray nozzles and no moving parts.
- Drift eliminator and fill media are fabricated from PVC, resistant to weather exposure, chemical degradation from alkali, acids and biological attacks.

### **Basin Section**

- Basin section is a seamless piece, water-tight and leak-proof.
- Air inlet louvers are cellular type, fabricated from PVC sheets and is easily removable to provide access for cleaning.

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2 - This Limited Warranty is valid only in the United States & Canada.

# **REYMSA COOLING TOWERS, INC.**

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