# RT Series Regenerative Turbine Refrigerant Cooling Pumps

**RT Series Regenerative Turbine Cooling Pumps** are precision-engineered for pumping liquid refrigerant through a cooling system loop, directly to blade servers and chips, ensuring heat removal. Delivering high efficiency, extended life, and quiet operation – this hermetically sealed regenerative turbine pump is designed with high-pressure and low flow rates in mind, making it ideal for high-density data center racks.



## **RT Series Regenerative Cooling Pumps Benefits**

- High-pressure pump with low energy intake
  - 600 PSI operating pressure
  - 2,500 PSI construction pressure
- Power Supply 3 Phase, 400/460V AC, 50/60 Hz
- Cooling capabilities
- Flow Rate 0-36 GMP
- Quality material selection to ensure longevity and no leaching
- Compact footprint to minimize space claim
- Precise operating controls
- Low decibel operation

## The RT Series Advantage

- Tailor-made for high-density cooling and immersion applications
- Designed for HPC cooling
- Reduced footprint maximizing available rack space
- Life expectancy optimized for 80,000 hours
- Increased durability via optimized flow path and minimized wetted material wear
- Low energy consumption and power draw
- Precision motor controls that optimize cooling performance
- Low maintenance design w/ easy service
- accessibility

#### The RT Series Applications



High Density CDUs



Immersion Cooling







# **RT Series Regenerative Cooling Pump Specifications**

### **PERFORMANCE**

RT Series					
Input Voltage	400 VAC 50 Hz	460 VAC 60 Hz	380 VAC 60 Hz		
Power	5HP (3.7kW)	5HP (3.7kW)	COMING IN 2025		
Variable Speed (RPM)	3000	3450			
Flow Rate Range (GPM)	0-30	0-36			
Pressure Range (PSI)	0-150	0-150			
Inlet*	2 ¼" – 12 Rotalock	2 ¼" - 12 Rotalock			
Discharge*	1 ¾" - 12 Rotalock	1 ¾" - 12 Rotalock			
Reliability	10 Year Life				
Max Temperature (°C)	60				

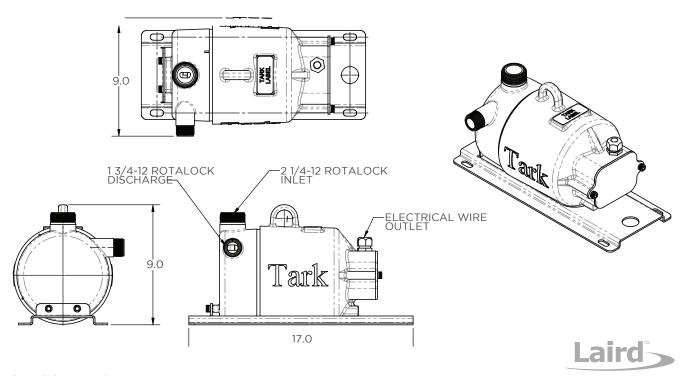
<sup>\*</sup>Customization available upon request

# **WETTED MATERIAL**

SHAFT	HOUSING	BEARINGS	IMPELLER	CASING
ASTM A108 4140	304SS	Hybrid Ceramic	Brass	Brass

## MATERIAL COMPATIBILITY

R134a / R515B / R471A / R1234ze (E) / R1234yf



**THERMAL SYSTEMS**