

Cooling Tower Integrated Chiller System

Engineered for efficiency, compactness, and reliability, this system redefines centralized cooling. By integrating the chiller and cooling tower into a single, space-saving unit, it removes the need for complex external setups while ensuring stable and efficient thermal performance.

At the heart of the design is *purposeful integration*. Conventional systems often face higher losses, bulky installations, and operational complexity. This solution overcomes those challenges through:

Energy Efficient Performance

Direct heat rejection via the integrated cooling tower lowers condensing temperatures, enhancing system COP and reducing power consumption.

Factory balanced refrigeration cycle, with sight glass and display to monitor performance in real time.

Built to Last

Constructed with GI sheet and stainless steel, the unit is designed for superior durability, corrosion resistance, and long operational life—even in demanding outdoor conditions.

Its compact, vertically integrated design minimizes footprint, making it ideal for urban, industrial, and retrofit installations.

Simplified Deployment

Delivered as a factory-assembled, pre-engineered unit, it significantly reduces installation time, piping complexity, and commissioning effort. Scalable design allows multiple units to be seamlessly combined for higher capacities.

Easily integrates with power backup systems to ensure uninterrupted cooling during power outages.

Designed for Serviceability, Customisation and Repairability

Modular access panels, standardized components, and a rugged build enable easy maintenance and reliable long-term operation.

Advanced PLC-based controls offer best-in-class performance with flexibility for application-specific customization.

A compact, scalable, and efficient cooling solution—engineered to deliver performance where it matters most.

Specification

| | | | | | | | |
|-------------------------------|--|-------------|------|-------------|-----|-----|-----|
| Model | CTC-10 | | | | | | |
| Power rating | 2.2kW, 230 V, 50 Hz, 1P (Single Phase) | | | | | | |
| Dimension (l x w x h) | 650 x 650 x 795 mm (approx.) | | | | | | |
| Dry weight | ~70 kg | | | | | | |
| Wet weight | ~270 kg | | | | | | |
| Application | AC, Chiller, Solar Cold Room | | | | | | |
| Compressor | CR30 | | | | | | |
| Compressor Type | Reciprocating, Connecting Rod Type | | | | | | |
| Refrigerant | R-407C | | | | | | |
| Rated Supply | 230 V, 50 Hz, 1P (Single Phase) | | | | | | |
| Power | 1.75 kW | | | | | | |
| Others | Over heat protector | | | | | | |
| Condenser | | | | | | | |
| Type | Water Cooled | | | | | | |
| Water consumption | Max: 15L per hour | | | | | | |
| Chiller Output | | | | | | | |
| Temperature | -15° C to +5° C | | | | | | |
| Flow Rate | Head (m) | 6 | 9 | 10 | 12 | 14 | 15 |
| | Flow (LPH) | 1300 | 1100 | 1080 | 800 | 648 | 600 |
| Pump Power rating | 0.18 kW | | | | | | |
| Thermal Energy Storage | Optional | | | | | | |
| Size | 200 l insulated drum | | | | | | |
| Energy Capacity | ~150 kg of ice | | | | | | |
| | Control Temp | -5 to 10° C | | 10 to 60° C | | | |
| | Backup Time @ 1 Tr | 24 hr | | 3 hr | | | |

