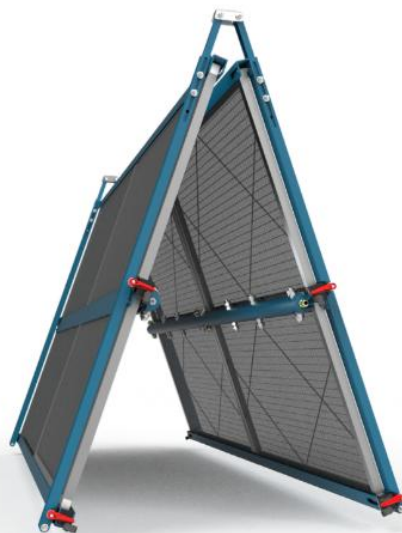


CORE™ is a complete precooling system that installs directly in front of the condenser coils of v-coil style air-cooled chillers.

A-Frame Assembly



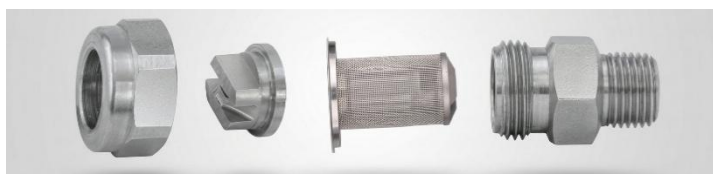
Base Assembly

- Aluminum construction with clear or color powder coating
- Adjustable leg and track assemblies for flexible installation
- Custom brackets for different mounting locations and unit types
- Assembled with corrosion-resistant hardware
- Frames treated with anti-microbial spray
- Integrated drain/end-cap with 3/8" push-to-connect fitting

Media Cartridge Assembly

- Cartridge slides or pops out using integrated leaf springs
- Media is easily removable using gate assembly built into cartridge
- Non-woven polyester with water-based latex binder, 1/2" thick
- Pressure drop less than 0.12" W.C. (wet)

Sprayer Manifold Assembly



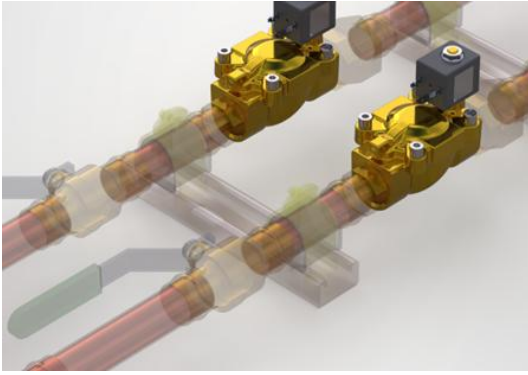
Retainer Spray Tip Check Valve / Strainer Body



Sprayer Manifold

Nozzle flow 0.06 GPM @ 60 psi (0.04 or 0.08 GPM options)	Spray angles 80°, 95°, 110°, and other options	Sprayer Material 303 SS or Brass
Manifold Powder Coated Aluminum, (8) 1/4" FNPT for Sprayers, 3/8" FNPT at Ends	Check valves Removable strainer/check valve to maintain manifold pressure	Fittings 3/8 Quick Disconnect Inlet on one end and other end has 3/8 Plug (reversible)

Solenoid Valve (NC)



Assembly

Brass body, NC solenoid valve with DIN Connector, Soft Close

Temp rating

Outdoor rated, up to 140°F

Max pressure

150 psi

Cable

18 AWG, 3-conductor, 10 A max — multiple lengths

Electrical

11 W, 24 VAC, NEMA 4X

Connectors

IP65, DIN with Flying Leads or Wafer Connector for daisy Chaining together

Plumbing

FNPT inlet / outlet connections (3/4"-2" Sizes Available)

Ancillary Equipment

Plumbing

- 1/2" MNPT × 3/8" male push-on fitting to adapt hose to field-provided water manifold
- 3/8" hose and brass quick disconnects supplied for connection to frames
- Magnetic straps supplied for holding tubing and cables in place

Electrical

- 16g, 3 Conductor, 600 V outdoor-rated electrical cord provided for wiring Controllers

Performance Monitoring Controller

Controller System Overview

Assembly / Accessories	CMM Master Controller	CMC Client Controller
Wireless Backhaul	Private Cellular Network	N/A
Wireless Mesh Communication	900 MHz	900 MHz
Analog Inputs	15 (0–10 VDC)	8 (0–10 VDC)
Digital / Pulse Inputs	2 (5 VDC)	2 (5 VDC)
Digital Outputs	(4) 5 VDC, (2) 24 VAC	(4) 5 VDC, (2) 24 VAC
Ethernet Port	1	N/A
Outdoor Enclosure	NEMA 4 Rated	NEMA 4 Rated
Condenser Air Temp Sensor (1 per channel, 25 ft. cable)	2	2
Liquid Line Temp Sensor (1 per channel, 25 ft. cable)	2	2
Compressor/Condenser Current Transducer (25 ft. cable)	2	2
RH / Temp Weather Station (25 ft. cable)	1	N/A
System Water Pressure Sensor (25 ft. cable)	1	N/A



Software & connectivity

- 2-channel performance monitoring controller
- Remote and/or onsite configuration
- 24/7 cloud data storage with sensor data logging & analysis
- Controller rate for outdoor temperatures up to 150°F
- Customer portal for access to system energy savings & performance
- Optional: automated self-diagnostics & alerting

External Fastening

- Controllers attach to unit with licensed NdFeB magnets
- Each magnet has 52 lbs. of pull strength and zinc-plated housing

Sensors

Weather station Unaspirated solar radiation shield — double-louvered high-impact thermoplastic Ratiometric -22°F to 257°F / 0–100% RH	Temperature accuracy ±2°F, solid-state, stainless steel probe — pre-assembled for quick deployment
Condenser Air/Liquid Temp sensors Pre-assembled for quick deployment with stainless steel probe — one per channel with 25 ft. cable	Current transducers Split-core, 0–250 A, ±2% full scale (50/60 Hz) — snap-clamp around measured load conductor
Water pressure sensor 0–200 psig ratiometric, calibrated and temp-compensated -40°F to 257°F — 1/8" MNPT — pre-assembled with quick-connect harness	Sensor mounting All sensors attach to unit with NdFeB magnets (52 lb. pull) or optional mast mount

Controller Power Supply

Transformer 100 VA multi-voltage foot-mount (115 V, 208–230 V, 460 V versions available)	Fuse holder 2P fuse holder rated 30 A / 600 VAC — Class CC time-delay fuses included
Wiring 600 V rated connection wiring included with hardware accessories	Mounting Attaches to unit via licensed NdFeB magnets — 52 lb. pull strength, zinc-plated housing

Water Distribution System



Pump

- VFD drive turns on and ramps up as needed to provide constant discharge pressure
- Loss-of-suction and other built-in motor and pump protection
- All wetted components: stainless steel or lead-free brass
- Double check assembly provided with most systems
- NEMA 4 rated version available
- N+1 design available where required

Water treatment Ion-exchange water softener — designed to provide 1 gpg or less hardness. Mechanically operated, no electrical connection needed. Alternative: slow-dissolving polyphosphate cartridge for scale and iron control (more frequent media cleaning required).		Filtration 5-micron filtration — housings selected for specific pressure and flow requirements (plastic or stainless steel)
Storage Vented Storage Tanks Available in Various Sizes for Emergency Storage and Peak Flow Storage where required.	Bladder Tanks Durable epoxy-coated steel pressurized tanks for flow dampening. ASME Options Available.	Measurement Fluid-filled gauges to measure pressure drop across filter and other points of interest
Skidded Treatment System Available on Per Unit or pair of units, or larger group of units. Outdoor Enclosure, Pre-plumbed and Wired.		

Typical Contractor-Furnished Scope

Mechanical Sheet metal and silicone sealant for frame air bypass prevention	Plumbing Main water distribution plumbing (fittings, full-port ball valves, etc.) — drain lines for softener and system drain-down — water manifold along top of units with 1/2" FNPT fittings — drain manifold for frame drains	Electrical Miscellaneous electrical connectors (wire nuts, ring terminals, etc.) — cable ties, electrical tape, etc.	
Estimated useful life 15 years	Standard warranty 1-year parts only	Extended warranty Up to 5 years with PM program	Document EC0052 Rev. M