

SUBMITTAL DATA SHEET – CW3

Job Name:
Order No.:
Project Manager:
Submitted To:
Date:
Special Instructions:

Location:
Contractor:
Engineer:
Submitted By:
Asset ID:

MODEL	QUANTITY
<input checked="" type="checkbox"/> CW3	
COOLING APPLICATION	
Standalone	Pre-Cooling
	Supplementary
DESIGN CONDITIONS	
<u>Outdoor Ambient Conditions:</u>	
Dry Bulb	°F
Wet Bulb	°F
Elevation Above Sea Level	ft
<u>Fan Duty Point:</u>	
Supply Air Volume	cfm
External Static Pressure	in.wg
<u>Performance:</u>	
Supply Air Temperature	°F
Cooling Capacity	BTU/hr
OPTIONAL ACCESSORIES	
	QUANTITY
MaglQtouch Wired Wall Controller.	
MaglQtouch Wired Wall Controller with Humidity Setpoint ¹	
MaglQtouch Wireless RF Wall Controller.	
MaglQtouch BMS Industrial Controller M1.	
MaglQtouch BMS Industrial Controller MS1.	
MaglQtouch External Air Sensor.	
MaglQtouch Internal Air Sensor.	
MaglQtouch Link Module.	
MERV13 Air Filters	
Roofstand 0-10°	

STANDARD FEATURES
<input checked="" type="checkbox"/> Two-Stage Indirect and Direct Evaporative Cooling.
<input checked="" type="checkbox"/> Patented high technology Micro-Core® Indirect Cores.
<input checked="" type="checkbox"/> Fresh, outside air for better indoor air quality (IAQ).
<input checked="" type="checkbox"/> No refrigerants or ozone depleting chemicals.
<input checked="" type="checkbox"/> Quiet and vibration free operation.
<input checked="" type="checkbox"/> Filtered air with reduced dust, pollens and allergens.
<input checked="" type="checkbox"/> High EER (Energy Efficiency Ratio).
<input checked="" type="checkbox"/> Down discharge for conditioned air.
<input checked="" type="checkbox"/> Up discharge for exhaust air.
<input checked="" type="checkbox"/> Low maintenance, simple winterization
<input checked="" type="checkbox"/> Integrated water management system.
<input checked="" type="checkbox"/> Chlorinator water treatment system.
<input checked="" type="checkbox"/> Removable panels for easy maintenance access.
<input checked="" type="checkbox"/> Easy to connect power/control wiring.
<input checked="" type="checkbox"/> 65ft control cable.
<input checked="" type="checkbox"/> 2x fans with high efficiency inverter motors.
<input checked="" type="checkbox"/> Compact footprint.
<input checked="" type="checkbox"/> High grade, UV stabilized polymer cabinet.
<input checked="" type="checkbox"/> 1-year limited warranty.
<input checked="" type="checkbox"/> ETL Classified to UL 507.

¹Use of the Humidity Setpoint feature requires the use of an Internal Air Sensor.

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GENERAL

Climate Wizard coolers are characterized by the supply of 100% fresh, cool, outside air, with greatly reduced energy consumption relative to an equivalent refrigerated system performing the same duty.

The cooler comprises of a supply air fan, an exhaust air fan, a combined indirect/direct heat exchanger pack, integrated water reservoir, pumps, and water management system.

CABINET

The cabinet consists of a reservoir, four side panels and a lid constructed of injection molded UV stabilized reinforced polypropylene.

Components are effectively treated to ensure corrosion resistance and mechanical fasteners are zinc coated, stainless steel or aluminum.

Connection interface surfaces are provided for the outlet supply air ductwork to be fitted using established industry practices.

The cooler is fitted with two semi-circular, polypropylene blades, hinged and counterbalanced, to open automatically when the supply fan is activated, and to close when the supply fan is switched off. The weather seal prevents the escape of room air through the ductwork.

FAN & MOTOR

The supply fan is a statically and dynamically balanced multi-blade, aerofoil shaped axial assembly. The exhaust fan is a multi-blade, centrifugal type with backward curved blades.

Both fans are constructed from glass reinforced polypropylene and are mounted to their electric motor shaft by means of an axial co-molded hub.

The electric motors are high efficiency, inverter driven and responsive to pulse width modulation to implement speed control that delivers optimum efficiency at lower speed operation.

HEAT EXCHANGE CORE

The cooler uses a series of Seeley International's patented Micro-Core® heat exchangers. The Micro-Core® is characterized by its compact and efficient design which incorporates both an indirect cooling stage and an additional ChillCel® fabricated honeycomb, direct cooling pad.

ELECTRICAL CABINET AND CONTROLS

The electrical control box is pre-wired within the cooler.

The cooler is compatible with the MagIQtouch® range of controls and is supplied with 65ft control cable.

WATER MANAGEMENT SYSTEM

The water supply connection is via a flexible connector which is terminated with a 1/2" male nipple.

Water is held in an internal reservoir which forms an integral part of the polymer cabinet to provide integrity to the structure and to ensure durability and corrosion resistance.

Heat exchanger core saturation is achieved through internally mounted pumps delivering water to a specially designed non-clog water distribution system guaranteeing continuous uniform flow.

The pumps are manufactured from engineering plastics, with stainless steel shafts and fully encapsulated synchronous motors with thermal overload protection. They are provided with an easily cleanable strainer within the reservoir section.

An electronic water management system controls the maximum salinity level and chlorination of the reservoir water through continuous monitoring and replenishment.

The reservoir is drained by an electric drain valve which responds to the water management control system. The design of the reservoir ensures that no water remains after draining.

AIR FILTERS

Intake air is filtered through aluminum framed, washable, pleated filters, protected by the intake louver forming the sides of the cabinet to minimize intrusion of rain.

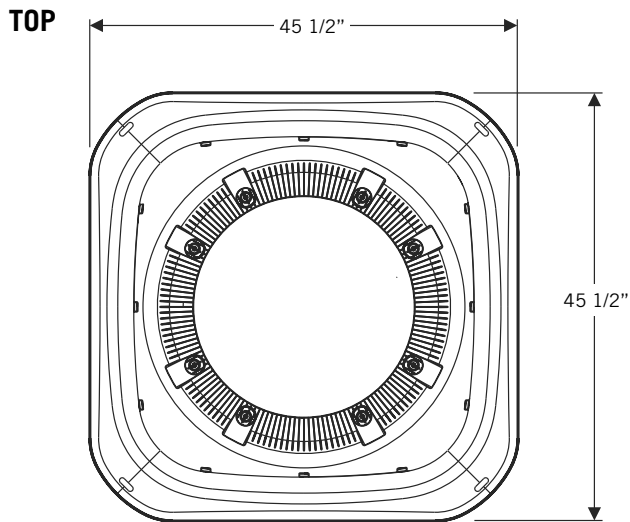
INSTALLATION

The cooler is supplied on a pallet with support blocks that are designed to allow the cooler to be readily craned into position onto its supporting supply ductwork.

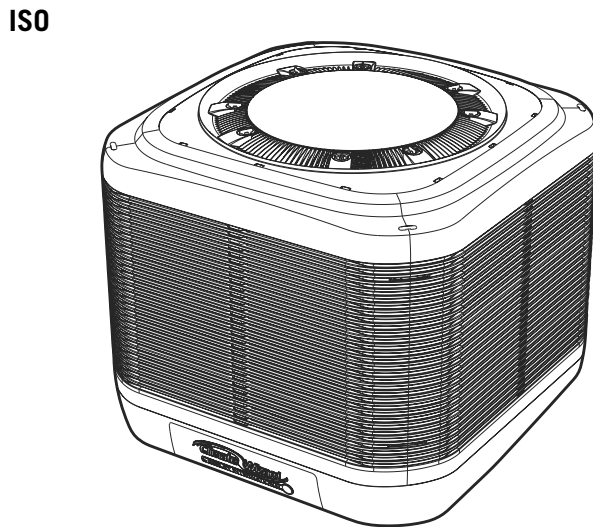
Alternatively, the cooler may be stripped of its major sub-assemblies to allow them to be handled onto the roof in more manageable pieces.



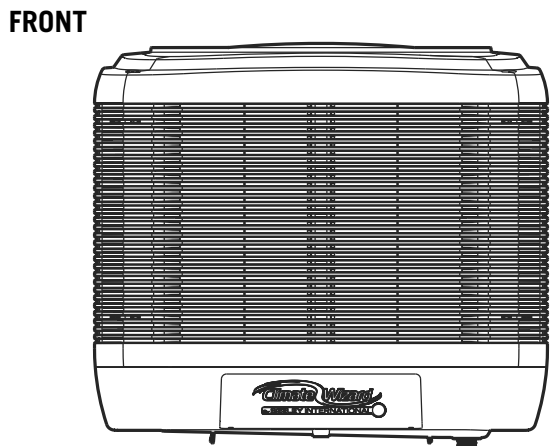
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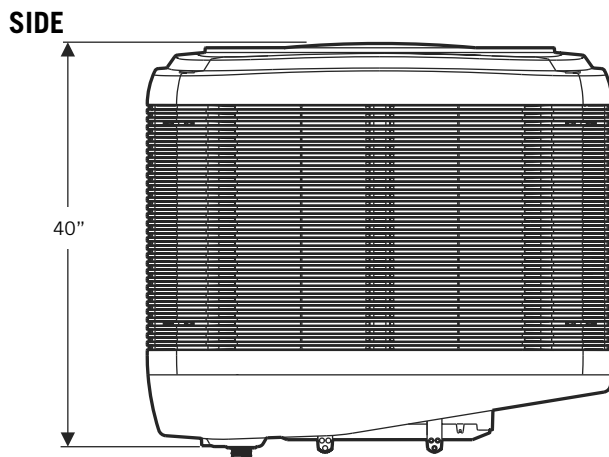
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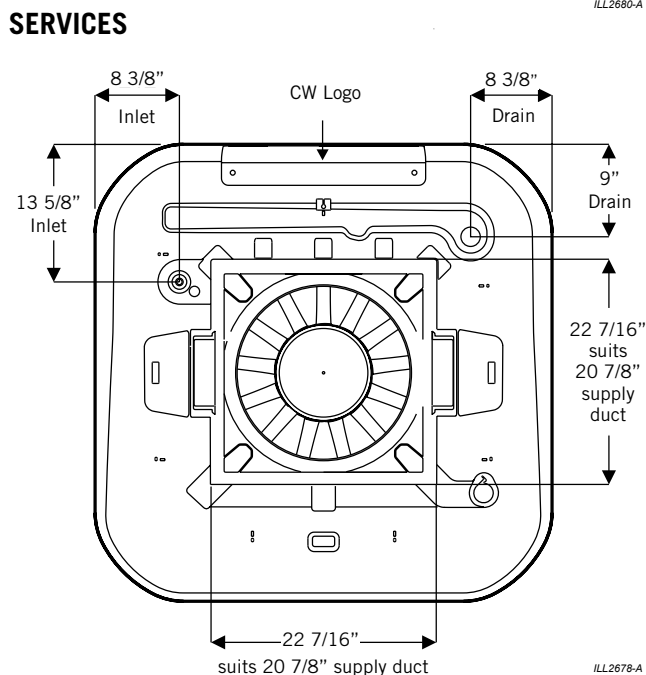
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ILL2679-A



ILL2678-A



ILL2676-A

NOTE: Installers must allow adequate access to and around the cooler for Maintenance. Provision must be made for access to power, control, water supplies and drains. It is important that the cooler is level in all directions. Refer to the Installation Manual for full details.

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MODEL:		CW3		
SERVICES	Electrical	Voltage	200-240 V / 1~ / 60Hz	
		Current	8A FLA / 15 MOPD	
		Input Power	1.75 kW	
	Water	Supply	2.6 GPM MINIMUM 5.3 GPM RECOMMENDED @ 15 PSI - 115 PSI	
		Max Temperature	105 °F	
		Inlet	1/2" Male	
		Drain	3/4" Push-On	
	Duct Connections	Drain Flow Rate	4 GPM	
		Supply Air	Bottom Discharge 20-7/8" x 20-7/8"	
	Exhaust Air	Top Discharge		
ENVIRONMENT	Maximum Inlet Air Temperature		122 °F	
AIR SYSTEMS	Supply Air Fan/ Motor	Fan	15-3/4" Axial	
		Motor	750 W	
		Control	Variable Speed, ECM, PWM Control	
		Max Speed	2400 rpm	
	Exhaust Air Fan/ Motor	Fan	15" Centrifugal Backward Curved	
		Motor	950 W	
		Control	Variable Speed, ECM, PWM Control	
		Max Speed	1100 rpm	
Air Filters	Inlet	MERV 8 Washable 14" x 25" x 1" - Qty. 8		
HEAT EXCHANGERS	Indirect Evaporative		8 Micro-Core®	
	Direct Evaporative		8 Chillcel® Pads	
WATER SYSTEMS	Tank (Reservoir) Capacity		7.9 Gal	
	Inlet Valve		12 VDC Solenoid Valve	
	Indirect Heat Exchanger Pump		3.4 GPM @ 60" Head 200-240V 60Hz Input Power 32W	
	Direct Heat Exchangers Pump		3.4 GPM @ 60" Head 200-240V 60Hz Input Power 32W	
	Salinity Management		Conductivity Probe	
	Chlorinator		12 VDC	
	Drain Valve		12 VDC Vertical	
DIMENSIONS	Shipping		46-1/4" Long x 46-1/4" Wide x 41-1/4" High	
	Operating inc. Accessories		45-1/2" Long x 45-1/2" Wide x 40" High	
WEIGHT	Shipping		385 lb	
	Operating inc. Water/Accessories		465 lb	
STANDARDS COMPLIANCE	ETL Classified to UL 507			

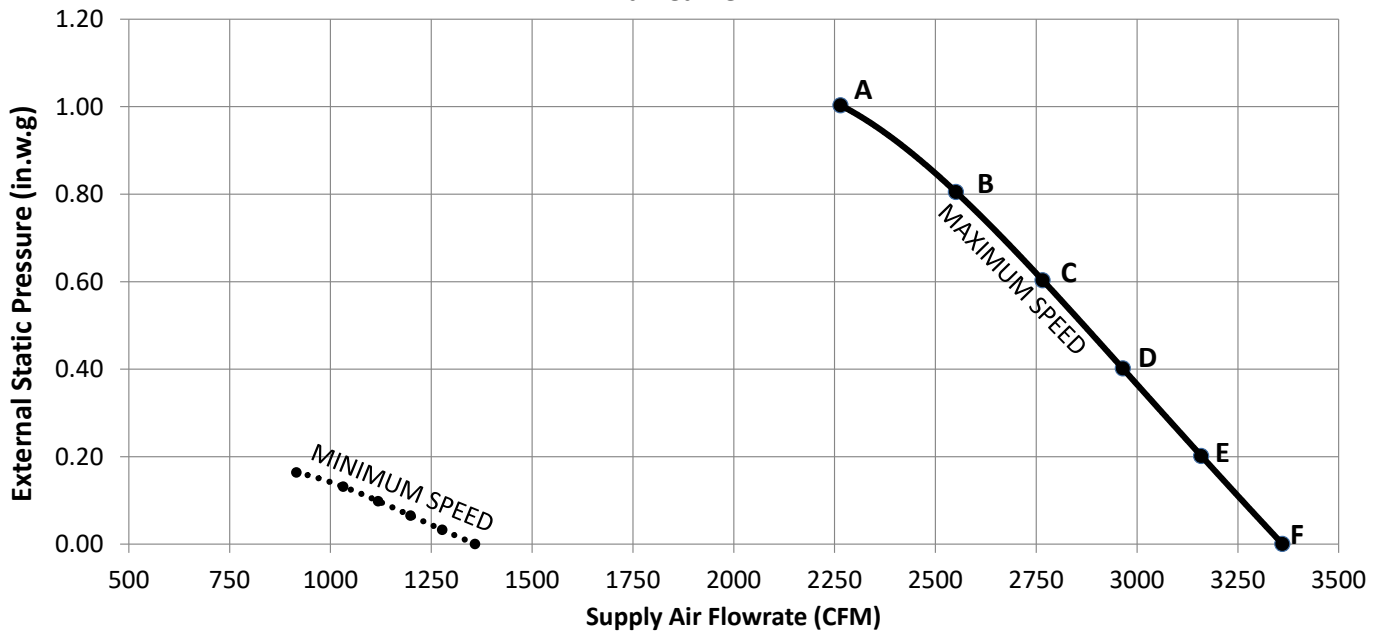
		Maximum Speed Sound Power Level (dB re 1 pW)							
		Octave Band Centre Frequency							
FREQUENCY (Hz)		125	250	500	1k	2k	4k	8k	Total
CW3	Radiated	62	69	77	76	71	64	54	81

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MAXIMUM FAN SPEED PERFORMANCE SUMMARY*						
	A	B	C	D	E	F
EXTERNAL STATIC PRESSURE (IN W.G.)	1.00	0.80	0.60	0.40	0.20	0
SUPPLY AIR FLOWRATE (CFM)	2260	2560	2750	2980	3160	3360
EXHAUST AIR FLOWRATE (CFM)	1330	1300	1270	1240	1220	1190
IEC LEAVING AIR TEMPERATURE (°F)	73	74	75	75	76	77
IDEC LEAVING AIR TEMPERATURE (°F)	66	66	67	67	67	68
STANDALONE COOLING CAPACITY (BTU/HR)	38,200	41,300	43,300	46,300	47,300	47,000
INPUT POWER (W)	1750	1745	1725	1695	1660	1620
STANDALONE EER	22	24	25	27	28	29
WATER CONSUMPTION (GPH)	12	13	13	14	15	15

* Supply Air Temperatures, Cooling Capacities, EER and Water Consumption tested to ASHRAE 143 with design condition of: 100 °F dry-bulb, 70 °F wet-bulb and 81 °F room exit temperature.

Fan Curve



MAGIQTOUCH CONTROLS

CW3 is compatible with a wide range of MagIQtouch® control solutions, including Wall Controllers, Building Management System (BMS) Controllers and Sensor Accessories.

Contact your local Sales office for compatible kits and installation literature.

