

SUBMITTAL DATA SHEET

Coolerado M30 Air Conditioner



JOB NAME:			LOCATION:		
PURCHASER:			ORDER NO:		
ENGINEER:					
SUBMITTED TO:		FOR:	REF:	APPROVAL:	CONSTRUCTION:
SUBMITTED BY:			DATE:		
UNIT DESIGNATION:			SCHEDULE NO:	MODEL NO:	

Cooling Performance

Outdoor Design Temperature . . . _____ °F DB/WB
 Elevation Above Sea Level _____ FT
 Intake Air External Static Pressure _____ IWG
 Intake Air Flow _____ CFM
 Conditioned Air Ext. Static Pressure . . . _____ IWG
 Total Conditioned Air @ Full Speed . . . _____ CFM
 Conditioned Air Temperature (+/- 2) . . . _____ °F DB
 Conditioned Air Added Humidity NONE °F DP
 Working Air External Static Pressure . . _____ IWG
 Working Air Flow _____ CFM

Electrical Data

Power Input Requirement _____ W
 Power Supply . . _____ HZ _____ Phase _____ V
 Total Unit Ampacity _____ AMPS
 Max. Overcurrent Device . . _Fuse _Breaker _____ AMPS

Total Unit Weight

Dry (shipping) Weight 240 LBS
 Operating Weight 270 LBS

Water

Source _Municipal _Well _____ Other
 Water Quality _____ Total Alkalinity
 Drain . . _Sanitary _Storm _Landscape _____ Other
 Wtr Cntrl Assmby Location . . _Mech Rm _____ Other

Configuration

_____ Indoor _____ Outdoor
 Working Air Connections . . . _____ L Side _____ R Side _____ Top
 Conditioned Air Connection (end only) . _____ Size
 Multiple Units . . _____ Quantity _____ Configuration

Factory Options

- 200-280V, 50-60Hz, 450W max., 2.3Amp, EC Motor
- Variable Speed Thermostat (low voltage, 4 conductors)
- 120V Motor, 60Hz, 1,250W, 10.5Amp, Single Speed
- Insulated Product Air Plenum
- Working Air Louver(s) - Cut Into Side Panel(s) 1 . . 2
- Outdoor Air Intake Rain Hood

Other Options (contact distributor)

- Single Speed Thermostat
- Working Air Balancing Damper
- Pressure Relief Damper (flat to 45°) (fully open at 0.2 IWG)
- Barometric Damper (45° to vertical) (fully open at 0.2 IWG)
- Intake Air Roof Ventilator Hood (24" diameter)
- Working Air Roof Ventilator Hood (18" diameter)
- Roof Hood Extension Kit
- Flat Roof Curb
- Spare Air Filters
- Freeze Sensor and Automatic Drain Kit
- Water Overflow Catch Pan
- Un-dissolved Solids Filtration (5 micron, 9" cartridge filter)

Standard Features

- 5 year limited warranty.
- EER 40+ (Energy Efficiency Ratio)
- Cooling capacity increases as ambient temperature increases.
- Easy maintenance, simple winterization.
- Low water use – water control assembly with pressure gauge included.
- New, patented thermodynamic cycle.
- 304 stainless steel frame, with an ABS plastic drain pan.
- Electro-galvanized and powder coated steel housing.
- All electrical and water connections on front, fan side.
- Zero side clearance – modular, multiple unit configurations.
- Easy to connect power/control wiring.
- Integrated control module for reliable, economical operation.
- Patented, high technology, polypropylene heat and mass exchanger.
- Biocide integrated into poly mass exchange fibers.
- Removable panels - greater durability, ease of access.
- No chemical refrigerants or ozone depleting chemicals.
- No humidity added or removed.
- Fresh, outside air for better indoor air quality (IAQ).
- Filtered air with reduced dust, pollens and allergens.
- Uses standard size 1" or 2" thick air filters.
- Tapered intake air plenum for fan efficiency and even air distribution.
- Starting collar molded into fan intake venturi for easy duct connection.
- Product air plenum provided – accommodates most any size, shape, duct.
- Compact, easy to install, small footprint cabinet.
- Unit breaks down into 3 sections.
- High efficient, electronically commutated motor (ECM).
- Optional auto-variable speed thermostat available.
- Top 100 products of 2004 as selected by R&D 100.
- GreenSpec® Listed as 2006 Top 10 Green Building Product.

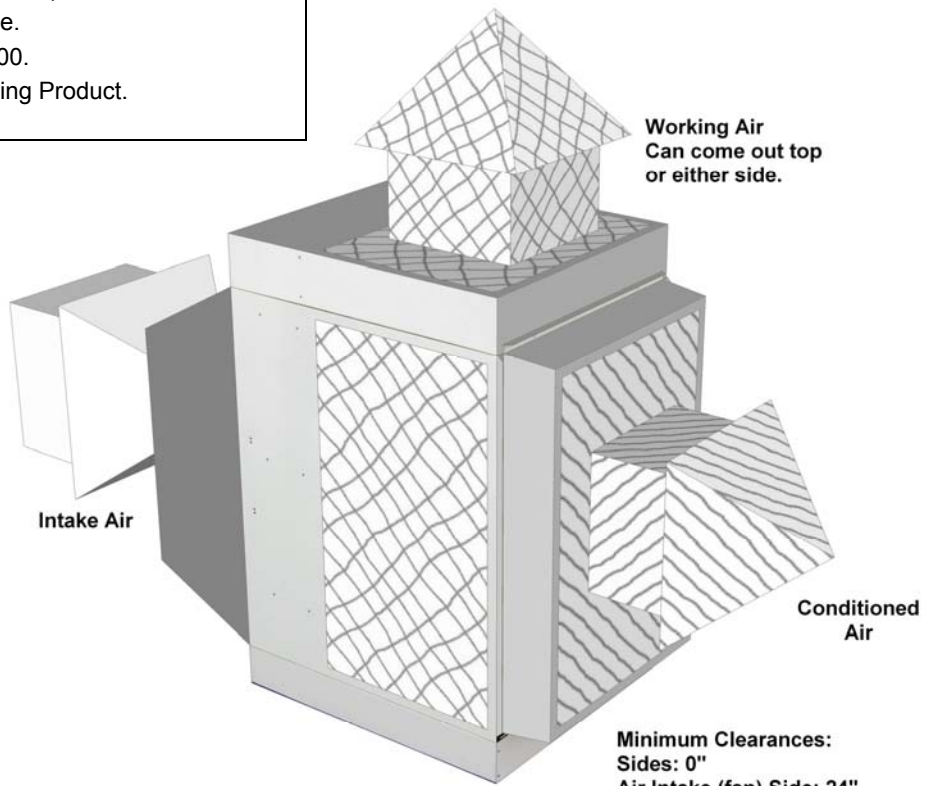
Coolerado M30 Fan and Performance Table

External Static Pressure (Inches H2O)	Product Air Flow (CFM)	Product Air Wet Bulb Approach	Product Approx. Wet Bulb Plus T	Working Air Flow (CFM)
0.0	900	93%	3	710
0.1	850	94%	2	680
0.2	800	95%	2	640
0.3	750	96%	1	610
0.4	710	98%	1	580
0.5	660	100%	0	540
0.6	610	103%	-1	510
0.7	560	107%	-2	470
0.8	510	110%	-3	430
0.9	460	113%	-4	390
1.0	420	117%	-5	360

Example: Design 98 DB / 62 WB, 0.2" ext. static, $98 - 62 = 36$, $36 * 0.95 = 34.2$, $98 - 34.2 = 63.8$ °F
 Product Air Temperature ~ Design WB +2 = 64 °F

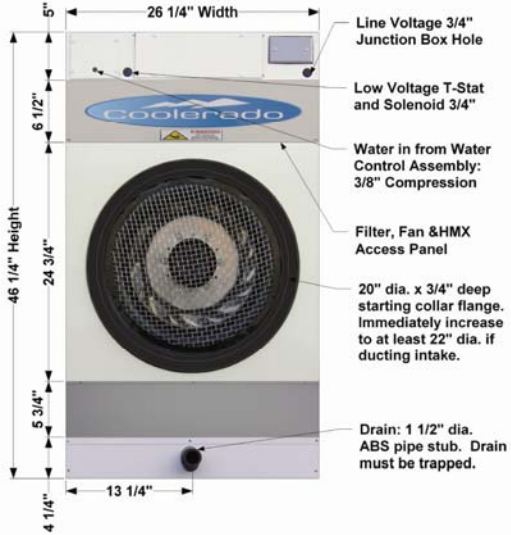


Auto-Variable Speed Thermostat
 Surface Mounted – 3.5" W x 5" H x 1 1/4" D
 Requires 4 Low Voltage Conductors

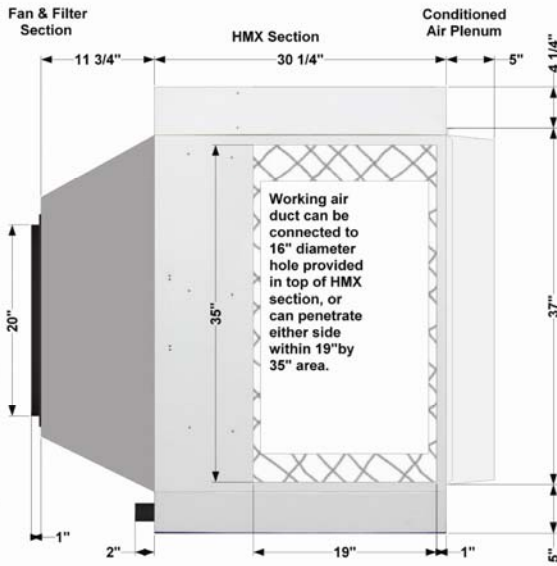


Minimum Clearances:
 Sides: 0"
 Air Intake (fan) Side: 24"
 Conditioned Air Plenum Side: 12"
 Top: 0"

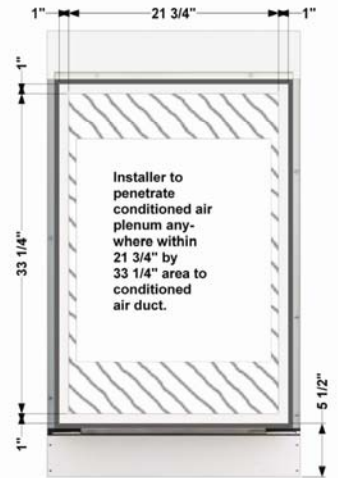
Coolerado M30



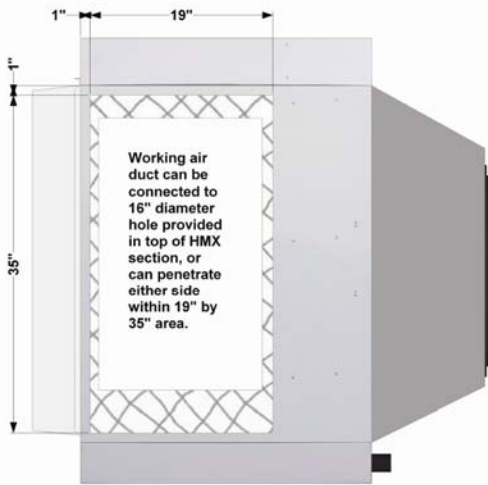
Fan Side View



Right Side View

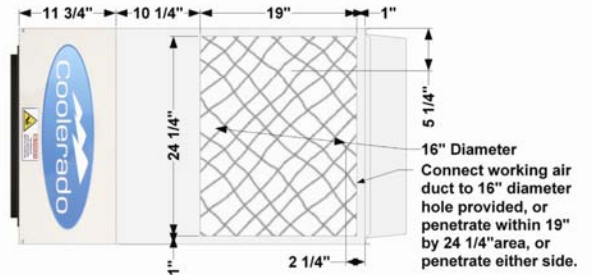


Conditioned Air Plenum

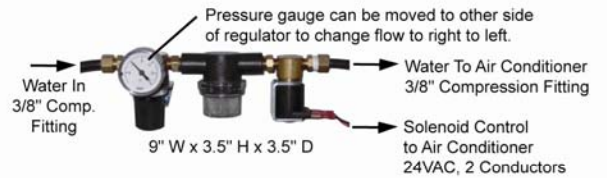


Left Side View

Note: Working air is saturated and water will collect in duct connected to working air section. Slope duct to drain back into air conditioner, or to appropriate outside location. Avoid low spots in working air ducts.



Top View



Water Control Assembly

Mount in mechanical room to prevent freeze damage.



Single M30 unit



2 M30 units

