MECO

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Service Manual

Electric Water Coolers

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Installation Instructions

1) To facilitate proper air circulation, the cooler should not be installed in any enclosed or confined space.

2) Prior to installation, remove back cover of cooler and visually inspect for transit damage. Temporarily connect cooler to electric supply and switch on the thermostat. Check that fan is operating and not jammed.

3) For installation, connect the water inlet and wastewater drain connections. Do not use excessive force on the brass inlet and drain connectors of the cooler, as this tends to damage it.

4) Connect 3-pin 15-ampere plug to the cooler's main power cable with the green or yellow wire connected to the earthing terminal of the plug.

5) Always use a proper circuit breaker to avoid compressor burnout.

Automatic voltage stabilizer should be used in low voltage areas.

Specifications

Cabinet

Made of heavy gauge vinyl-coated and stainless steel sheets, in various pleasing colours. Drain pot made of hard plastic, or stainless steel. Back panel easily removable for cleaning and servicing. Top cover of plastic (except model 100P). Base of plastic / stainless.

Refrigeration System

Fitted with world renowned, high starting torque, high temperature compressors. Condenser and fan are slightly oversized to ensure efficient working in high temperatures. Copper cooling coil metal bonded to outside of water tank. Whole system hermetically sealed with R-22 (or R-12) as refrigerant.

Water System

All copper / brass water system. Water tank made of heavy gauge copper sheet tinned from inside. Tank safety tested at 10 kg/cm^2 (142 p.s.i.) with recommended maximum working pressure of 5 kg/cm^2 (71 p.s.i.). Fitted with high quality chrome plated brass taps.

Insulation

Moisture proof and highly effective polyurethane or polystyrene insulation.

Thermostat

High quality water temperature control thermostat, adjustable from 9°C to 15°C (48°F to 60ºF).

Pilot Light

Twin pilot lights to indicate power supply and compressor operation.

Voltage Rating

All models operate on 220/240 Volts, 50/60 cycles single phase A.C. supply.

Water Filtration

A ceramic cartridge type water filter is also available as an option.

Water Filter

MECO Water Purifying Systems are available as an option.

Periodic Cleaning and Maintenance

1) Prior to installation, remove back cover of cooler and visually inspect for transit damage. Temporarily connect cooler to electric supply and switch on the thermostat. Check that fan is operating and not jammed.

2) Please switch off the electric power to the cooler before performing any cleaning or maintenance

3) If the wastewater drain is blocked during use, remove the drain try and clean drain pot. Then remove blockage by flushing water under pressure through the drain hole.

4) After removing back cover, dust out the condenser by blowing air under pressure. This cleaning should be performed at least once a year or more frequently if loss in cooling occurs.

5) While back cover is removed, check that green or yellow earth wire is secured tightly to cooler base.

6) For transportation of cooler and during periods when the cooler is not in use, empty the water from tank by first removing the back cover and then opening the drain plug. In case there is no drain plug (if the tank is made of stainless steel), apply air under pressure to the inlet and open taps to drain water.

7) Keep the cabinet of the cooler dry to prevent damage due to rust. Wipe off any water spills as soon as possible to protect the base. For added safety, the cooler can be placed on wooden base.

Capacity Chart (Water Inlet / Outlet Difference 8.6 °C)

Model	Type	Compressor Rating	Nominal Capacity at Water Outlet 18 °C	Room Temp. 32.2 °C Inlet Water 26.6 °C	Room Temp. 37.7 °C Inlet Water 26.6 °C	Room Temp. 32.2 °C Inlet Water 32.2 °C	Room Temp. 37.7 °C Inlet Water 32.2 °C
ME-10P	Pressure	2000 BTU/hr (0.3 HP)	15 USG/hr	50 Litres/hr	40 Litres/hr	30 Litres/hr	27 Litres/hr
ME-20P	Pressure	3000 BTU/hr (0.4 HP)	23 USG/hr	76 Litres/hr	68 Litres/hr	46 Litres/hr	41 Litres/hr
ME-30P/30F	Pressure & Fountain	4000 BTU/hr (0.5 HP)	31 USG/hr	89 Litres/hr	80 Litres/hr	54 Litres/hr	49 Litres/hr
ME-40P/40F	Pressure & Fountain	4800 BTU/hr (0.6 HP)	40 USG/hr	104 Litres/hr	94 Litres/hr	61 Litres/hr	55 Litres/hr
ME-50P	Pressure	7400 BTU/hr (0.8 HP)	50 USG/hr	160 Litres/hr	125 Litres/hr	90 Litres/hr	70 Litres/hr
ME-60P	Pressure	15000 BTU/hr (1.8 HP)	103 USG/hr	350 Litres/hr	315 Litres/hr	212 Litres/hr	191 Litres/hr
ME-60STG	Storage	15000 BTU/hr (1.8 HP)	103 USG/hr	365 Litres/hr	330 Litres/hr	218 Litres/hr	195 Litres/hr
ME-100P	Pressure	20000 BTU/hr (2.3 HP)	155 USG/hr	449 Litres/hr	404 Litres/hr	272 Litres/hr	245 Litres/hr

Number of Persons Served*

Location	ME-10P	ME-20P	ME-30P ME-30F	ME-40P ME-40F	ME-50P	ME-60P ME-60STG	ME-100P
Offices, Stores, Light demand areas.	15 to 20	28 to 47	34 to 63	42 to 72	60 to 80	126 to 212	185 to 309
Light Industry / Hospitals	12 to 17	21 to 35	26 to 47	32 to 53	50 to 65	95 to 155	135 to 230
Heavy Industry / Schools	7 to 12	17 to 28	21 to 38	25 to 43	38 to 50	76 to 127	111 to 185
Hot Industry or Sudden demand areas	5 to 10	14 to 23	17 to 31	21 to 36	30 to 40	63 to 106	92 to 154

*Based on company research data, for 8-hour shifts.

Dimensions and Weight

Model	Type	Width	Depth	Height	Net Weight	Gross Weight	Packed Size
ME-10P	Pressure	38 cm (15.5”)	34 cm (13.5”)	108 cm (42.5”)	32 kg	33 kg	41x38x109 cm
ME-20P	Pressure	46 cm (18”)	38 cm (15”)	108 cm (42.5”)	37 kg	38 kg	48x42x109 cm
ME-30P	Pressure	46 cm (18”)	38 cm (15”)	116 cm (45.5”)	39 kg	40 kg	48x42x117 cm
ME-40P	Pressure	46 cm (18”)	38 cm (15”)	123 cm (48.5”)	43 kg	44 kg	48x42x125 cm
ME-30F/40F	Fountain	46 cm (18”)	38 cm (15”)	108 cm (42.5”)	39 kg	40 kg	48x42x125 cm
ME-50P	Pressure	61 cm (24”)	48 cm (19”)	116 cm (45.5”)	48 kg	50 kg	63x61x117 cm
ME-60P	Pressure	61 cm (24”)	48 cm (19”)	123 cm (48.5”)	67 kg	70 kg	63x61x125 cm
ME-60STG	Storage	61 cm (24”)	48 cm (19”)	123 cm (48.5”)	75 kg	78 kg	63x61x125 cm
ME-100P	Pressure	76 cm (30”)	56 cm (22”)	128 cm (50”)	120 kg	125 kg	78x77x127 cm

Dimensions and Weight