

CENTRAL CHILLING MODULE

MW SERIES

- 20°F to 80°F Process Fluid Temperature Range
- From 5 to 180 Tons Capacity
- Provides Capacity to Existing or New Central Water Systems
- Using Non-Ozone Depleting Refrigerants
- Microprocessor Control
- Internal Water-Cooled Condenser
- Designed for Indoor Installation
- Galvanized Steel Frame

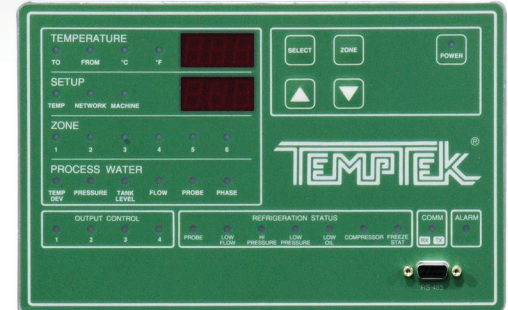
The MW Series central chiller provides precision temperature control from an economically affordable and reliable unit. Perfect for applications such as plastic injection molding, blow molding, extrusion and other industrial applications. A pump tank station is required to distribute the chilled water to the application use-points.

The MW Series chiller module is designed for indoor installation and requires a condensing water source. Chilling modules are offered in single, dual and triple zone configurations.



Typical MW chilling module

Multizone Instrument Control



REFRIGERANT CIRCUITS (per zone):

- Discus reciprocal, Scroll or Screw compressors
- Compressor suction service valve
- Compressor discharge service valve
- Brazed plate evaporator or shell and tube evaporator
- Internal water-cooled condenser
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Hot gas by-pass capacity control or compressor unloading
- Liquid receiver
- 410A refrigerant
- Oil separator (units with scroll and reciprocating compressors)

LIMIT DEVICES (per zone):

- High refrigerant pressure
- Low refrigerant pressure
- Evaporator flow

PRESSURE GAUGES (per zone):

- Refrigerant high pressure gauge
- Refrigerant low pressure gauge
- Coolant pressure gauge

ELECTRICAL:

- Fused transformer
- Nema rated electrical cabinet
- Power entry terminal block
- Fused compressor motor starter (dual and triple zone models)

CHILLER CONTROL INSTRUMENT:

- Microprocessor, multizone controller
- Intelligent zone boards
- Large temperature display
- °F or °C display
- Large setup display
- Refrigerant circuit indicators
- Water circuit indicators
- SPI communications interface
- Selectable lead/lag mode
- Audible and visual alarm

WARRANTY & SERVICE

- 1 year on parts & labor
- Nationwide network of service contractors

OPTIONS:

- Compressor CCPR valve
- Compressor hour meter
- Remote display kit
- Color touch screen PLC
- Extended compressor warranty
- UL listed electrical panel



Specifications

| MODEL ¹ MW- | | 5-C | 7.5-C | 10-C | 15-C | 20-C | 25-C | 30-C | 40-C | 50-C | 60-C |
|--|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| REFRIGERANT CIRCUITS | Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CAPACITY ² @ 50°F LWT | Tons | 4.9 | 7.6 | 9.8 | 14.5 | 18.5 | 23.1 | 30.0 | 36.7 | 46.8 | 60.7 |
| | kW | 17.2 | 25.3 | 34.4 | 50.9 | 65.0 | 81.0 | 103.3 | 135.1 | 164.3 | 209.6 |
| COMPRESSOR | Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | HP | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
| | Type ³ | SC | SC | SC | SC | SC | SC | SC | SC | SC | SC |
| EVAPORATOR | Type | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate |
| REFRIGERANT | Type | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A |
| FLOW REQUIREMENTS | GPM | 1¼ | 1¼ | 1¼ | 2 | 2 | 2½ | 2½ | 2½ | 3 | 3 |
| FULL LOAD AMPERAGE ⁵ @ 3ø / 60 Hz ⁶ | 230 volts | 12 | 18 | 24 | 36 | 48 | 60 | 72 | 96 | 120 | 144 |
| | 460 volts | 7.5 | 11.3 | 15.0 | 22.5 | 30.0 | 37.5 | 45.0 | 60.0 | 75.0 | 90.0 |
| | 575 volts | 15 | 11.5 | 30.0 | 24.0 | 60.0 | 75.0 | 90.0 | 120.0 | 150.0 | 180.0 |
| CONNECTION SIZES ⁴ (inches) | To/From Process | 1 | 1¼ | 1¼ | 1½ | 2 | 2 | 2 | 3 | 3 | 3 |
| DIMENSIONS (inches) | Height | 21.4 | 31.0 | 40.0 | 60.0 | 76.0 | 100.0 | 100.0 | 142.0 | 138.0 | 216.0 |
| | Width | 9.6 | 16.0 | 20.0 | 30.0 | 38.0 | 50.0 | 50.0 | 71.0 | 69.0 | 108.0 |
| | Depth | 7.7 | 13.0 | 16.0 | 24.3 | 31.0 | 40.0 | 40.0 | 56.9 | 56.0 | 87.0 |
| WEIGHT (pounds) | Shipping ⁷ | 52 | 52 | 52 | 52 | 52 | 57 | 57 | 57 | 57 | 57 |

| INTERNAL WATER-COOLED CONDENSER ³ | | | | | | | | | | | |
|--|------------------------------|----|-----|-----|-----|-----|-------|-------|-------|-------|-------|
| | Required Flow : City (gpm) | 24 | 24 | 24 | 24 | 24 | 29 | 29 | 36 | 36 | 36 |
| | Required Flow : Tower (gpm) | 62 | 62 | 62 | 70 | 70 | 70 | 70 | 84 | 84 | 84 |
| (inches) | Connections : Supply / Drain | 45 | 525 | 545 | 845 | 885 | 1,040 | 1,100 | 1,200 | 1,300 | 1,400 |

| MODEL ¹ MW- | | 20-CC | 30-CC | 40-CC | 50-CC | 60-CC | 80-CC | 100-CC | 120-CC | 90-CCC | 120-CCC | 150-CCC | 180-CCC |
|--|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| REFRIGERANT CIRCUITS | Quantity | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| CAPACITY ² @ 50°F LWT | Tons | 19.6 | 29.0 | 37.0 | 46.2 | 60.0 | 80.0 | 93.7 | 119.5 | 90.0 | 119/5 | 150.0 | 180.0 |
| | kW | 68.8 | 101.8 | 129.8 | 162.1 | 210.5 | | 328.7 | 419.3 | | 419.3 | | |
| COMPRESSOR | Quantity | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 3 | 3 | 6 | 6 |
| | HP | 10 | 15 | 20 | 25 | 30 | 20 | 25 | 30 | 30 | 40 | 25 | 30 |
| | Type ³ | SC | SC | SC | SC | SC | SC | SC | SC | SC | SC | SC | SC |
| EVAPORATOR | Type | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate | Brazed Plate |
| REFRIGERANT | Type | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A | R-410A |
| FLOW REQUIREMENTS | GPM | 2 | 2½ | 2½ | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 6 |
| FULL LOAD AMPERAGE ⁵ @ 3ø / 60 Hz ⁶ | 230 volts | 48 | 72 | 96 | 120 | 144 | 192 | 240 | 288 | 216 | 288 | 360 | 432 |
| | 460 volts | 30.0 | 45.0 | 60.0 | 75.0 | 90.0 | 120.0 | 150.0 | 180.0 | 135.0 | 180.0 | 225.0 | 270.0 |
| | 575 volts | 60.0 | 90.0 | 120.0 | 150.0 | 180.0 | 240.0 | 300.0 | 360.0 | 270.0 | 360.0 | 450.0 | 540.0 |
| CONNECTION SIZES ⁴ (inches) | To/From Process | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 6 | 6 | 6 |
| DIMENSIONS (inches) | Height | 77.0 | 110.0 | 152.0 | 200.0 | 218.0 | 284.0 | 276.0 | 432.0 | 328.0 | 426.0 | 414.0 | 648.0 |
| | Width | 38.0 | 55.0 | 76.0 | 100.0 | 109.0 | 142.0 | 138.0 | 216.0 | 164.0 | 213.0 | 206.0 | 324.0 |
| | Depth | 31.0 | 44.0 | 61.0 | 80.0 | 88.0 | 114.0 | 111.0 | 173.0 | 131.0 | 171.0 | 166.0 | 266.0 |
| WEIGHT (pounds) | Shipping ⁷ | 57 | 57 | 57 | 57 | 57 | 75 | 70 | 70 | 85 | 85 | 85 | 85 |

| INTERNAL WATER-COOLED CONDENSER ³ | | | | | | | | | | | | | |
|--|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Required Flow : City (gpm) | 48 | 48 | 48 | 52 | 52 | 50 | 90 | 90 | 73 | 73 | 73 | 73 |
| | Required Flow : Tower (gpm) | 76 | 76 | 76 | 79 | 79 | 135 | 115 | 115 | 130 | 130 | 130 | 130 |
| (inches) | Connections : Supply / Drain | 1,200 | 1,800 | 1,900 | 2,200 | 2,230 | 2,600 | 3,450 | 3,700 | 3,300 | 3,300 | 3,900 | 4,200 |

Notes

- Since product innovation and improvement is our constant goal, all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.
- Tons or Kilowatts capacity at 12,000 Btu/hr/ton @ 50°F LWT, 95°F ambient and 115°F condensing. Capacity multipliers are 50°F - 1.00; 40°F - .80; 30°F - .60; 20°F - .40. The minimum recommended operating temperature when no glycol is used is 48°F.
- S = screw compressor. SC = hermetic scroll. D = disc compressor.
- Process connections may vary based on unique pump flow requirements of your process. Confirm you connection size requirement with your Advantage sales representative.
- Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
- Consult factory for 50hz operation.
- Approximate unit weight crated for shipment.
- City water requirements based on 60°F water supply at 20 PSI differential with a clean condenser. Tower water requirements based on 85°F water supply at 20 PSI differential with a clean condenser.

For More Information ... call SWHC 214-340-7500

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