# **CENTRAL CHILLERS**

MW SERIES

WATER-COOLED

- 5 to 180 Tons Capacity
- Microprocessor Control
- Multiple Refrigerant Zones
- Water-Cooled Condenser
- Galvanized Steel Frame
- Nema 12 Electrical Cabinet
- Non Ozone Depleting Refrigerants

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. Product features include:

## **TEMPERATURE RANGE**

• 20° - 65°F

## **REFRIGERANT ZONES**

- · Hermetic scroll or rotary screw compressors
- · Liquid line solenoid valve
- · Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Brazed plate or shell & tube evaporator
- Hot gas by-pass or unloading capacity control systems
- Water-cooled condenser with regulator valve and single connection with manifold and isolation valves and removable heads
- R410A or R407C refrigerant

## **PRESSURE GAUGES:**

- · Refrigerant high pressure
- · Refrigerant low pressure
- · Coolant pressure

## LIMIT DEVICES:

- Refrigerant circuit:
  - high pressure limit
  - low pressure limit
  - · evaporator flow limit
- · Instrument control circuit fuse

## **ELECTRICAL:**

- · Nema rated electrical cabinet
- · Fused pump motor starters
- · Fused compressor motor starters
- · Fused transformer
- · Power entry terminal block

## **WARRANTY:**

• 1 year covering parts and labor



## CHILLER CONTROL INSTRUMENT:

- Microprocessor based multizone controller
- Intelligent zone boards
- Each compressor staged individually
- Large temperature display in °F or °C for *to process* and *from process*
- · Large setup display
- Refrigerant circuit indicators per zone: probe, low flow, high pressure, low pressure, compressor, freezestat, capacity
- Water circuit indicators: temperature deviation, low pressure, probe, phase
- SPI communications interface
- Selectable lead/lag mode
- · Audible and visual alarm (optional)
- · Audible and visual alarm (optional)



Chiller Control Instrument



## **SPECIFICATIONS**

MODEL MW-1		5	7.5	10	15	20	25	30	40	50	60		
REFRIGERANT CIRCUITS	Quantity	1	1	1	1	1	1	1	1	1	1		
CAPACITY @ 50°F LWT	Tons <sup>2</sup>	5	7.5	10	15	20	25	30	40	50	60		
COMPRESSOR	Quantity	1	1	1	1	2	2	2	1	1	1		
	Type <sup>3</sup>	SC	SC	SC	SC	SC	SC	SC	SC/S	S	S		
CONNECTION SIZES <sup>4</sup> (inches)		1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	2	2	21/2	21/2	21/2	3	3		
FLOW REQUIREMENTS	GPM	13	22	28	36	47	60	72	101	120	138		
UNIT AMPERAGE <sup>5</sup>	230 volts	25	31	43	60	84	104	120	156	216	256		
@ 3ø / 60 Hz <sup>6</sup> (full load)	460 volts	12.5	16	22	30	42	52	60	78	108	128		
	575 volts	10	13	17	24	34	42	48	63	87	103		
REFRIGERANT	Туре	R410A	R410A	R410A	R410A	R410A	R407C	R407C	R407C	R407C	R407C		
DIMENSIONS (inches)	Height	52	52	52	52	52	57	57	57	57	57		
	Width	24	24	24	24	24	29	29	36	36	36		
	Depth	62	62	62	70	70	70	70	84	84	84		
WEIGHTS (pounds)	Shipping <sup>7</sup>	450	525	545	845	885	1,040	1,100	1,200	1,300	1,400		
INTERNAL WATER-COOLE	D CONDENSER <sup>8</sup>												
CONDENSER WATER	City	8	12	15	23	30	38	45	60	75	90		
FLOW REQUIREMENTS	Tower	15	23	30	45	60	75	90	120	150	180		
CONNECTIONS	Supply / Drain	1	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	2	2	2	3	3	3		
MODEL MW-1		20	30	40	50	60	80	100	120	90	120	150	180
REFRIGERANT CIRCUITS	Quantity	2	2	2	2	2	2	2	2	3	3	3	3
CAPACITY @ 50°F LWT	Tons <sup>2</sup>	20	30	40	50	60	80	100	120	90	120	150	180
COMPRESSOR	Quantity	2	2	4	4	4	4	2	2	6	3	3	3
	Type <sup>3</sup>	SC	SC	SC	SC	SC	SC/S	S	S	SC	S	S	S
CONNECTION SIZES <sup>4</sup> (inches)		2	21/2	21/2	3	3	4	4	4	4	4	6	6
FLOW REQUIREMENTS	GPM	72	85	96	120	144	192	240	277	216	288	359	415
UNIT AMPERAGE <sup>5</sup>													
	230 volts	83	112	168	208	240	312	432	512	365	468	648	768
@ 3ø / 60 Hz <sup>6</sup> (full load)	460 volts	39	56	168 84	208 104	240 120	312 156	432 216	266	365 180	468 234	324	384
@ 3ø / 60 Hz <sup>6</sup> (full load)	460 volts 575 volts	39 22	56 45	168 84 68	208 104 84	240 120 96	312 156 125	432 216 123	266 205	180 144	468 234 154	324 260	384 308
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT	460 volts	39 22 R407C	56 45 R407C	168 84 68 R407C	208 104 84 R407C	240 120 96 R407C	312 156 125 R407C	432 216 123 R407C	266 205 R407C	180 144 R407C	468 234 154 R407C	324 260 R407C	384 308 R407C
@ 3ø / 60 Hz <sup>6</sup> (full load)	460 volts 575 volts Type Height	39 22 R407C 57	56 45 R407C 57	168 84 68 R407C 57	208 104 84 R407C 57	240 120 96 R407C 57	312 156 125 R407C 57	432 216 123 R407C 70	266 205 R407C 70	180 144 R407C 85	468 234 154 R407C 85	324 260 R407C 85	384 308 R407C 85
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT	460 volts 575 volts Type Height Width	39 22 R407C 57 48	56 45 R407C 57 48	168 84 68 R407C 57 48	208 104 84 R407C 57 52	240 120 96 R407C 57 52	312 156 125 R407C 57 72	432 216 123 R407C 70 90	266 205 R407C 70 90	180 144 R407C 85 73	468 234 154 R407C 85 73	324 260 R407C 85 73	384 308 R407C 85 73
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT  DIMENSIONS (inches)	460 volts 575 volts Type Height Width Depth	39 22 R407C 57 48 76	56 45 R407C 57 48 76	168 84 68 R407C 57 48 76	208 104 84 R407C 57 52 79	240 120 96 R407C 57 52 79	312 156 125 R407C 57 72 84	432 216 123 R407C 70 90 115	266 205 R407C 70 90 115	180 144 R407C 85 73 130	468 234 154 R407C 85 73 130	324 260 R407C 85 73 130	384 308 R407C 85 73 130
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT	460 volts 575 volts Type Height Width	39 22 R407C 57 48	56 45 R407C 57 48	168 84 68 R407C 57 48	208 104 84 R407C 57 52	240 120 96 R407C 57 52	312 156 125 R407C 57 72	432 216 123 R407C 70 90	266 205 R407C 70 90	180 144 R407C 85 73	468 234 154 R407C 85 73	324 260 R407C 85 73	384 308 R407C 85 73
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT  DIMENSIONS (inches)  WEIGHTS (pounds)	460 volts 575 volts Type Height Width Depth Shipping <sup>7</sup>	39 22 R407C 57 48 76	56 45 R407C 57 48 76	168 84 68 R407C 57 48 76	208 104 84 R407C 57 52 79	240 120 96 R407C 57 52 79	312 156 125 R407C 57 72 84	432 216 123 R407C 70 90 115	266 205 R407C 70 90 115	180 144 R407C 85 73 130	468 234 154 R407C 85 73 130	324 260 R407C 85 73 130	384 308 R407C 85 73 130
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT DIMENSIONS (inches)  WEIGHTS (pounds)  INTERNAL WATER-COOLE	460 volts 575 volts Type Height Width Depth Shipping <sup>7</sup>	39 22 R407C 57 48 76 1,200	56 45 R407C 57 48 76 1,800	168 84 68 R407C 57 48 76 1,900	208 104 84 R407C 57 52 79 2,200	240 120 96 R407C 57 52 79 2,350	312 156 125 R407C 57 72 84 2,600	432 216 123 R407C 70 90 115 3,450	266 205 R407C 70 90 115 3,700	180 144 R407C 85 73 130 3,300	468 234 154 R407C 85 73 130 3,600	324 260 R407C 85 73 130 3,900	384 308 R407C 85 73 130 4,200
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT DIMENSIONS (inches)  WEIGHTS (pounds)  INTERNAL WATER-COOLE CONDENSER WATER	460 volts 575 volts Type Height Width Depth Shipping <sup>7</sup> D CONDENSER <sup>8</sup> City	39 22 R407C 57 48 76 1,200	56 45 R407C 57 48 76 1,800	168 84 68 R407C 57 48 76 1,900	208 104 84 R407C 57 52 79 2,200	240 120 96 R407C 57 52 79 2,350	312 156 125 R407C 57 72 84 2,600	432 216 123 R407C 70 90 115 3,450	266 205 R407C 70 90 115 3,700	180 144 R407C 85 73 130 3,300	468 234 154 R407C 85 73 130 3,600	324 260 R407C 85 73 130 3,900	384 308 R407C 85 73 130 4,200
@ 3ø / 60 Hz <sup>6</sup> (full load)  REFRIGERANT DIMENSIONS (inches)  WEIGHTS (pounds)  INTERNAL WATER-COOLE	460 volts 575 volts Type Height Width Depth Shipping <sup>7</sup>	39 22 R407C 57 48 76 1,200	56 45 R407C 57 48 76 1,800	168 84 68 R407C 57 48 76 1,900	208 104 84 R407C 57 52 79 2,200	240 120 96 R407C 57 52 79 2,350	312 156 125 R407C 57 72 84 2,600	432 216 123 R407C 70 90 115 3,450	266 205 R407C 70 90 115 3,700	180 144 R407C 85 73 130 3,300	468 234 154 R407C 85 73 130 3,600	324 260 R407C 85 73 130 3,900	384 308 R407C 85 73 130 4,200

#### Notes

- 1. 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.
- 2. 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.
- 3. S = screw compressor. SC = hermetic scroll. D = discus compressor.
- 4. Process connections may vary based on unique pump flow requirements of your process. Confirm you connection size requirement with your Advantage sales representative.
- 5. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
- 6. Consult factory for 50hz operation.
- 7. Approximate unit weight crated for shipment.
- 8. 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.

