

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, freestat, 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)



**THERMAL
PRODUCTS** INC.
Engineered Solutions To
Industrial Applications

PRICE & PERFORMANCE... for the LONG TERM

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 ²	5	7.5	10	15	20	25	30	40	50	60
COMPRESSOR	Quantity	1	1	1	1	2	2	2	1	1	1
	Type ³	SC	SC	SC	SC	SC	SC	SC	SC/S	S	S
CONNECTION SIZES ⁴ (inches)	To/From Process	1 ¹ / ₄	1 ¹ / ₄	1 ¹ / ₄	2	2	2 ¹ / ₂	2 ¹ / ₂	2 ¹ / ₂	3	3
FLOW REQUIREMENTS	GPM	13	22	28	36	47	60	72	101	120	138
UNIT AMPERAGE ⁵ @ 3Ø / 60 Hz ⁶ (full load)	230 volts	25	31	43	60	84	104	120	156	216	256
	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	Type	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 ⁷	450	525	545	845	885	1,040	1,100	1,200	1,300	1,400

INTERNAL WATER-COOLED CONDENSER⁸

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 ¹ / ₄	1 ¹ / ₄	1 ¹ / ₂	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 ²	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 ³	SC	SC	SC	SC	SC	SC/S	S	S	SC	S	S	S
CONNECTION SIZES ⁴ (inches)	To/From Process	2	2 ¹ / ₂	2 ¹ / 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 ⁵ @ 3Ø / 60 Hz ⁶ (full load)	230 volts	83	112	168	208	240	312	432	512	365	468	648	768
	460 volts	39	56	84	104	120	156	216	266	180	234	324	384
	575 volts	22	45	68	84	96	125	123	205	144	154	260	308
REFRIGERANT	Type	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C
DIMENSIONS (inches)	Height	57	57	57	57	57	57	70	70	85	85	85	85
	Width	48	48	48	52	52	72	90	90	73	73	73	73
	Depth	76	76	76	79	79	84	115	115	130	130	130	130
WEIGHTS (pounds)	Shipping ⁷	1,200	1,800	1,900	2,200	2,350	2,600	3,450	3,700	3,300	3,600	3,900	4,200

INTERNAL WATER-COOLED CONDENSER⁸

CONDENSER WATER	City	30	45	60	75	90	120	150	180	135	180	225	270
FLOW REQUIREMENTS	Tower	60	90	120	150	180	240	300	360	270	360	450	540
CONNECTIONS	Supply / Drain	2	3	3	3	3	3	4	4	4	6	6	6

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.

PRICE & PERFORMANCE... for the LONG TERM



since 1989