



Continuous Temperature Control

Mokon's water-based Full Range temperature control system offers a combination heating and chilling system all in one package. A Mokon water system, combined with an Iceman chiller, integrates the benefits and features of both products into one compact, self-supporting unit.

The Full Range system is ideal for applications requiring multi-zone control, processes requiring both heating and chilling and/or a wide variety of temperatures, or where water supplies are not accessible. It is available in multiple sizes, configurations, and a variety of cooling, heating and pumping capacities.

The overall design provides for long-life, durability and accurate continuous process control. Traditional Mokon quality and craftsmanship can be found throughout, such as nonferrous construction and the incorporation of highly accurate microprocessor-based controls. All these features and more in a compact design with Mokon reliability built in!



Designed to Perform. Built to Last.

Full Range

Process Heating and Chilling System
-20°F to 380°F (-29°C to 193°C)

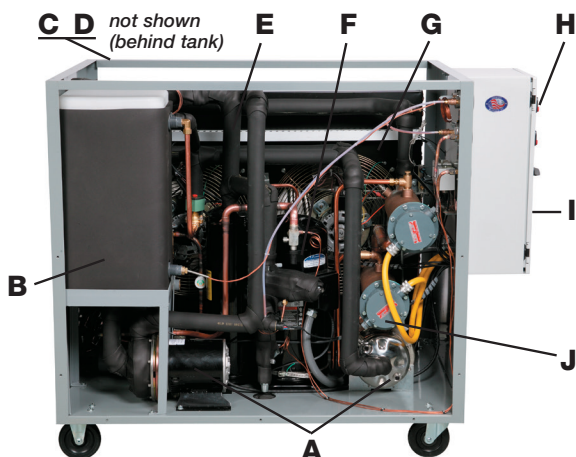
Features:

- Heating capacities up to 96 kW
- Pumping capacities up to 120 GPM
- Up to 60 Ton chilling capacities
- UL 508A labeled electrical sub-panel
- Meets NFPA 79 electrical safety standards

Applications:

- Jacketed vessels and reactors
- Multi-zone processes
- Installations where supply water or drains are not accessible
- Laboratory, sanitary and chemical process applications

Continuous Temperature Control -20°F to 380°F (-29°C to 193°C)



Features

Full Range systems offer many features to provide accurate temperature control while heating and/or chilling your process.

- A** Stainless steel centrifugal pumps — supply and process
- B** Heavy-duty insulated plastic tank
- C** Highly efficient brazed plate evaporator
- D** Hot gas bypass circuit
- E** Insulated nonferrous plumbing and components
- F** Hermetically and semi-hermetically sealed compressors
- G** Air-cooled condenser (shown) or water-cooled condenser
- H** Microprocessor-based controller with digital readout
- I** NEMA 1 rated electrical enclosure with safety disconnect switch
- J** Heater canister with stainless steel diverter

Specifications

Capacity ⁴		Compressor (Hp)	Process Pump (Hp)	Max Flow Rate	Minimum Pressure	Process Connection	Condenser Connection (FNPT) Water-Cooled only	Tank Size (Gallons)	Air-Cooled Dimensions ² L x W x H	Shipping Weight ² (Approx. lbs.)
Air-Cooled (BTU/hr) ¹	Water-Cooled (BTU/hr) ¹									
5,330	5,620	1/2"	Select a standard pump to meet Process conditions or specify performance needs.				1/2"	10	38" x 25" x 62"	450
15,800	16,700	1"								1/2"
20,700	21,800	1 1/2"	Hp	GPM	PSI	Process Connection (FNPT)	1/2"	20	50" x 28" x 63"	575
24,800	25,700	2"	1/2	15	15	1"	1/2"	20	50" x 28" x 63"	600
34,100	35,300	3"	3/4	25	26	1"	1/2"	20	50" x 28" x 63"	610
56,100	58,100	5"					1"	20	58" x 37" x 69"	715
89,200	92,000	7 1/2"	1	30	32	1-1/2"	1-1/2"	20	58" x 37" x 69"	990
117,900	121,400	10"	1-1/2	40	32	1-1/2"	1-1/2"	20	58" x 37" x 69"	1,010
169,800	175,300	15"	2	50	32	1-1/2"	1-1/2"	68	80" x 52" x 65"	1,850
226,800	234,800	20"	3	60	34	1-1/2"	1-1/2"	68	80" x 52" x 65"	2,050
271,000	280,000	25"					2"	100	142" x 50" x 80"	3,900
350,000	362,000	30"	5	80	38	1-1/2"	2"	100	142" x 50" x 80"	4,150
441,000	455,000	20/20"	7-1/2	100	40	2"	2"	100	200" x 52" x 85"	5,300
542,000	560,000	25/25"	7-1/2	120	35	2"	3"	150	200" x 52" x 85"	5,700
692,000 ³	715,000	30/30"					3"	150	200" x 52" x 52"	5,295

Full Range chart is based on 1 single zone, up to 24 kW heater with open circuit and fluid temperature range 20°F to 200°F (-7°C to 93°C).

¹ Air-Cooled based on 50°F chilled water at 2.4 GPM/Ton and 90°F ambient air. Water-Cooled based on 50°F chilled water at 3 GPM/Ton and 85°F condensing water.

² Water-Cooled condenser design may alter the dimensions and weights shown.

* Standard compressor on 0.5-1.5 Ton is reciprocating type. These models are not available in the scroll compressor.

** Standard scroll compressor type, 2-60 Ton.

^A Capacities shown need to be de-rated for heating system motor Hp used.

³ 60 Ton Air-Cooled system is a dual circuit portable chiller with remote air-cooled condenser.

Full Range designs are available in a variety of voltages, capacities, and process fluid temperatures ranging from -20°F to 380°F (-29°C to 193°C).

Oil Full Range designs are available in a variety of voltages, capacities, and process fluid temperatures ranging from 50°F to 650°F (10°C to 343°C).

Heating only and cooling only designs are also available.

Controls

A microprocessor-based controller provides dual LCD indication of your process fluid setpoint and actual temperature to ensure process control accuracy. Control options include serial communications, SPI protocol, brand name control or host interface capabilities.

Options

Mokon offers a variety of options and accessories to meet specific customer needs including auto fill, low water level (reservoir) indication, safety alarms, and more. Please contact Mokon for more information.

Product Testing & Warranty

All Mokon Full Range systems are qualified for service by rigid, simulated field tests, and are factory calibrated. Mokon offers a one-year warranty as standard.

For more information on Mokon's Full Range process heating and chilling system or other products, call our sales department today.

Technical data shown is subject to change without notice. The company will endeavor to supply the equipment as illustrated but reserves the right to make dimensional and other design changes as required.



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