



Designed to Perform. Built to Last.

HTF FULL RANGE

Process Heating and Cooling System
Up to 650°F (343°C)



Mokon's heat transfer fluid (oil) based Full Range temperature control system maximizes performance with temperatures up to 650°F (343°C). The Full Range system offers a combination heating and cooling system all in one package. A Mokon oil system, combined with an Iceman chiller, integrates the benefits and features of both products into one compact, self-support unit.

Model	Horsepower, Flow Rate & Pressure	Heating Capacity (kW)	Reservoir Volume (Gallons)	Cooling Heat Exchanger	Chiller Compressor (Hp)	Air-Cooled Condenser (BTU/Hr) @ 50°F (10°C)	Water-Cooled Condenser ¹ (BTU/Hr) @ 50°F (10°C)	Total Amps ² @ 460/3/60	Approximate Dimensions (L x W x H)	Shipping Weight (Approx. lbs.)
321	2 Hp, 20 GPM up to 100 PSI	12	38	7.0 sq. ft.	3	34,100	35,300	28.1	71" x 43" x 52"	1,070
		18	38	7.0 sq. ft.	5	56,100	58,100	39.7	81" x 43" x 52"	1,225
		24	38	7.0 sq. ft.	7 1/2	96,872	100,236	57.2	81" x 43" x 52"	1,528
		30	38	7.0 sq. ft.	10	112,354	116,516	68.4	81" x 43" x 64"	1,692
		36	38	7.0 sq. ft.	10	112,354	116,516	76.0	81" x 43" x 64"	1,720
		48	38	7.0 sq. ft.	15	165,122	170,972	107.0	121" x 82" x 65"	2,652

1. Based on 85°F (29°C) condensing water at 3 GPM/Ton

2. To calculate FLA for other voltages, multiply the above amperages by: 2.21 for 208 volt; 2.00 for 230 volt; and 0.80 for 575 volt

Note: Process connections are 1"

Product Testing and Warranty

All Mokon temperature control systems are qualified for service by rigid, simulated field tests, and are 100% factory calibrated and run tested. Mokon offers a 1 year warranty on system and 5 years on standard microprocessor controller.

Controls

A non-proprietary microprocessor-based controller provides dual LCD indication of your process fluid setpoint and actual temperature to ensure process control accuracy. A variety of options and accessories to meet specific customer needs are available.



Standard Features

- Single, dual or triple zone heating configurations
- Air or water-cooled condensing chiller
- Scroll compressor for most models
- TEFC (IP54 Rating) motors that meets/exceeds NEMA Premium Efficiency levels
- Heavy-duty chiller insulated plastic reservoir
- Positive displacement process loop pump and centrifugal chiller loop pump
- Energy efficient insulated heater manifold with steel heating elements
- Cool oil reservoir design, utilizing a continuous flow heat exchanger for increased cooling efficiency which eliminates thermal shock
- Cooling heat exchanger Recirculating pump
- Process fluid high temperature and Low-pressure shut-off switches
- Automatic air purge
- Suction and discharge pressure gauges
- Y type strainer on process return
- 1/8 DIN non-proprietary microprocessor-based controller for the chilled water loop and the heat transfer fluid process loop
- Redundant heater contactor
- NEMA/Type 1 main electrical enclosure
- Main power safety door disconnect switch
- Heavy-duty ball bearing casters for portability
- Powder-coated carbon steel cabinet
- cULus 508A labeled electrical subpanel

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.

Common Options and Accessories

- Alarms - audible and visual
- Automatic fill for chiller reservoir
- Blown fuse indication
- Controller options - remote setpoint and re-transmission, communication ports
- Emergency "crash" cooling control
- Emergency stop
- Heat exchanger flow control
- Heat Remover designs
- Heat switch
- High temperature rated hoses
- Increased cooling and heating capacities
- Low fluid level shut off
- Magnetic drive pumps
- NEMA/Type 4, 4X, 7, and 12
- Nitrogen purge
- Other voltages, phases, frequencies
- Overhead piping kit
- Phase monitor
- Process fluid purge via air connection or switch
- Process fluid cool down/automatic shut off via time delay relay
- Remote start/stop and control panels
- Solid state contactors/relays and SCR
- Stainless steel cabinets, fluid circuits and components
- Strainers
- Tank low level indication and system shutdown
- Thermocouple with selector switch
- Thermometers
- Timers
- UL, CSA, CE and EAC certifications
- Valved process bypass via metering globe



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