

PURA- THERM

HIGH-PERFORMING
EQUIPMENT DESIGNED
FOR CLEANROOM,
SANITARY AND CRITICAL
ENVIRONMENTS.



PURA-THERM SYSTEMS FOR CRITICAL PROCESSES

Mokon's Pura-Therm line features high-performing equipment designed for critical environments in the medical, pharmaceutical and food manufacturing industries. Our portable chillers, combination heating and chilling systems and circulating water temperature control systems are built with durable stainless steel cabinetry. These high-quality products meet ISO Cleanroom Standard and associated controlled environments, assuring you trusted, reliable temperature control solutions. Mokon can customize any system to fit your specific requirements.



TRUSTED STANDARD FEATURES

- Temperatures up to 250°F (121°C)
- 304 SS cabinets
- NEMA 4X panels
- Heating: stainless steel wetted parts
- Cooling: non-ferrous materials
- Wash down designs
- Suitable for ISO 14644 Cleanroom Standard and associated controlled environments
- UL 508A labeled panel
- Disconnect switch
- Microprocessor controls
- Remote set point, retransmission controllers and communication capabilities
- Open loop (direct injection) single circuit
- Incoloy sheath heaters
- Stainless steel pump with silicon carbide pump seals
- TEFC motors
- Liquid-filled pressure gauges
- Non-marring casters

PURA-THERM WATER SYSTEM

Mokon's Pura-Therm circulating water temperature control system features advanced heating technology with temperatures up to 250°F (121°C). The high-performance design offers higher heat transfer rates with unmatched control efficiency and accuracy. Built with non-ferrous and stainless steel materials, the Pura-Therm water system manages excellent corrosion resistance and leak-free operation in a compact, easy to move unit.



Pump	Flow Rate and Pressure	Heating Capacity			Process Connection	Supply/Drain Connection	Aproximate Dimensions (L x W x H)
		9 kW	18 kW	24 kW			
		Total Amps Based on 460 Volt, 3 Phase					
3/4 hp	25 GPM @ 25 PSI	13	24		1" NPT	1" NPT	30" x 16" x 25"
				32			34" x 17" x 27.5"
1-1/2 hp	40 GPM @ 32 PSI	14	25		1-1/2" NPT	1" NPT	30" x 16" x 25"
				33			34" x 17" x 27.5"
3 hp	60 GPM @ 34 PSI	16	27	35	1-1/2" NPT	1" NPT	34" x 17" x 27.5"
5 hp	80 GPM @ 38 PSI	18	29	37	1-1/2" NPT	1" NPT	34" x 17" x 27.5"

PURA-THERM PORTABLE CHILLER SYSTEM

Mokon's Pura-Therm portable chillers feature a scroll compressor that provides superior efficiency, unwavering reliability and quiet operation with a fluid temperature range of 20°F to 65°F (-7°C to 18°C). Mokon's portable chillers are available in air-cooled or water-cooled condensing, featuring high-quality components for increased life and decreased maintenance, giving you the durable equipment you need for all your cooling solutions.



Capacity		Nominal Cooling Capacity (Tons)	Horsepower		Min/Max Flow Rate (GPM)	Nominal Pressure (PSI)	Connections		Tank Size (Gallons)	Approximate Dimensions (L x W x H)
Air-Cooled (BTU/hr) ¹	Water-Cooled (BTU/hr) ¹		Compressor (Hp)	Pump (Hp)			Process (FNPT)	Condenser (FNPT) Water-Cooled Only		
5,330	5,620	0.5*	1/2	3/4	1.2/10	Up to 32	1"	1/2"	10	38" x 25" x 38"
15,800	16,700	1*	1	3/4	2.4/15	Up to 32	1"	1/2"	10	38" x 25" x 38"
20,700	21,800	1.5*	1 1/2	3/4	3.6/15	Up to 31	1"	1/2"	15	50" x 28" x 39"
24,800	25,700	2	2	3/4	4.8/20	Up to 30	1"	1/2"	15	50" x 28" x 39"
34,100	35,300	3	3	3/4	7.2/25	Up to 30	1"	1/2"	15	50" x 28" x 39"
56,100	58,100	5	5	1	12/30	Up to 37	1-1/2"	1"	20	58" x 37" x 45"
89,200	92,000	7.5	7 1/2	1	18/30	Up to 34	1-1/2"	1-1/2"	20	58" x 37" x 45"
117,900	121,400	10	10	1 1/2	24/35	Up to 37	1-1/2"	1-1/2"	20	58" x 37" x 45"

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 2.4 GPM/Ton and 85°F condensing water at 3 GPM/Ton.

* Standard compressor on 0.5-1.5 Ton is reciprocating type.

PURA-THERM HEATING AND CHILLING SYSTEM

Mokon's water based Pura-Therm temperature control system offers a combination of heating and chilling in one superior package. A Mokon water system combined with a chiller integrates the benefits and features of both products into one compact, self-supporting unit. The Pura-Therm heating and chilling systems are available with a temperature range of 20°F to 250°F (-7°C to 121°C).



Capacity ^A		Compressor (Hp)	Process Pump (Hp)	Max Flow Rate	Minimum Pressure	Process Connection	Condenser Connection (FNPT) Water-Cooled Only	Tank Size (Gallons)	Approximate Dimensions (L x W x H)
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"
15,800	16,700	1 [*]	Hp	GPM	PSI	Process Connection (FNPT)	1/2"	10	38" x 25" x 62"
20,700	21,800	1 1/2 [*]					1/2"	20	50" x 28" x 63"
24,800	25,700	2					1/2"	20	50" x 28" x 63"
34,100	35,300	3					1/2"	20	50" x 28" x 63"
56,100	58,100	5					1"	20	58" x 37" x 69"
89,200	92,000	7 1/2					1-1/2"	20	58" x 37" x 69"
117,900	121,400	10					1-1/2"	20	58" x 37" x 69"

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.

*Standard Compressor on 0.5-1.5 Ton is reciprocating type.

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

CUSTOMIZABLE OPTIONS

- High temperatures up to 380°F (193°C)
- Process cooling down to -20°F (-29°C)
- Heating capacity up to 96 kW and up to 120 Ton chilling capacity
- Multi-zone circuits
- 3-A heat exchangers and heat remover designs for process isolation
- High-efficiency pumps up to 10 Hp
- Magnetic drive sealless pumps
- Vented and pressurized tanks
- Sanitary tri-clamp connections
- Passivation/electro-polished surfaces
- 316 SS surfaces
- Welded connections
- Tool-free access panels
- Modulating cooling valve
- Stainless steel leveling legs
- Signal White RAL 9003 paint
- Audible and visual alarms
- SCR and solid state relays
- Remote interface electrical enclosures
- Electronic controllers and RTD's calibrated to ISO 17025 standards
- Variety of communication capabilities
- Remote start/stop
- CSA and CE certifications

PURA-THERM SYSTEMS FOR THE MEDICAL, PHARMACEUTICAL AND FOOD INDUSTRIES.



APPLICATIONS

- Biotechnology and pharmaceutical
- Cleanroom, sanitary and critical environments
- Extrusion
- Food and beverage processing
- Heat exchanger
- Hybrid composite materials
- Kosher
- Laboratory
- Medicine and vitamin processing
- Microelectronics
- Mixers and blenders
- Packaging
- Pet food processing
- Personal care/cosmetics
- Plastic injection and blow molding
- Reactors, sterilizers and fermenters
- Surgical equipment and devices
- Vessels/jacketed tanks

WITH OVER 60 YEARS OF SUPERIOR PERFORMANCE

Mokon has set the standard in the design and manufacture of high-performance heating and cooling process temperature control systems. Our energy-efficient lines of water and heat transfer fluid temperature control systems, portable chillers, centralized cooling systems and custom-engineered designs offer precise temperature control for any application. Through our long history of providing a quality and durable product, we have become experts in meeting customer requirements and building engineered products that meet or exceed specifications. Mokon is the right choice for all your temperature control needs.

PRODUCT TESTING AND WARRANTY

Mokon's Pura-Therm temperature control systems are qualified for service by rigid, simulated field tests, and are 100% factory calibrated and run tested. Mokon offers extended warranties as standard – 3 years on system, 5 years on controller and safeties, lifetime on piping and canister.

CUSTOMER SERVICE YOU CAN COUNT ON

At Mokon, the customer is our top priority. Our team of experienced sales and service professionals are ready to assist you before, during and after the sale. Our service capabilities include:

- 24-hour customer support right over the phone
- Installation and start-up assistance
- Customer training capabilities
- Complete factory repair and refurbishment services
- For technical support visit mokon.com/customercenter
- Find components and replacement parts at shop.mokon.com

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