



Smooth Continuous Cooling

The Iceman SC Series portable chillers feature a scroll compressor providing you with superior efficiency, enhanced reliability and quieter operation (reciprocating and semi-hermetic compressors available in some models). The scroll compressor has 50% fewer moving parts than standard reciprocating compressors. This increases the reliability and efficiency of the compressor, and reduces the sound levels. The chillers are equipped with a hot gas bypass control, which stops short cycling of the compressor under low load conditions. This allows the compressor to run continuously at higher efficiency levels and increases its longevity.

A unique characteristic of this compressor's design is its ability to tolerate "liquid slugging." This occurs at shutdown when the refrigerant migrates to the compressor and can cause damage or failure to conventional reciprocating types. The compressor's scroll members separate in the presence of liquid refrigerant or debris due to their radial orientation. This substantially improves durability and reliability, and enables it to operate more smoothly and quietly, with less vibration.

The Iceman SC Series product line integrates features and benefits common to the Iceman systems to ensure accurate temperature control, with durable and safe operation. Numerous other features of the Iceman SC Series provide the user with ease in maintenance and service. The end result is a highly efficient and quieter operating chiller with enhanced reliability.



Designed to Perform. Built to Last.

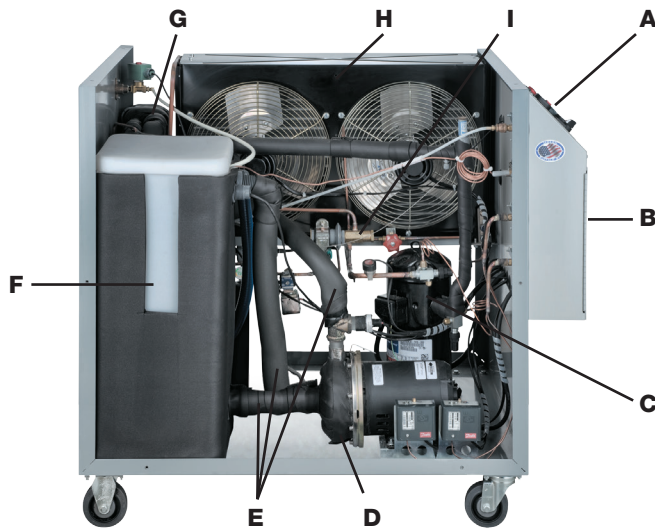
ICEMAN SC SERIES

Air-Cooled Portable Chiller
Water-Cooled Portable Chiller
20°F to 65°F (-7°C to 18°C)

- ▶ **1/2 to 40 Ton chilling capacities**
- ▶ **Green friendly refrigerant**
- ▶ **Nonferrous components**
- ▶ **Efficient brazed plate evaporator**
- ▶ **Microprocessor-based controller**
- ▶ **UL 508A labeled electrical sub-panel**
- ▶ **Meets NFPA 79 electrical safety standards**



Smooth, Continuous Temperature Control



Standard Features

- A** Microprocessor-based controller mounted in operator-friendly orientation
- B** NEMA rated electrical enclosure with safety door disconnect switch
- C** Scroll compressor (shown) – reciprocating or semi-hermetic also available
- D** Stainless steel centrifugal supply pump
- E** Insulated nonferrous plumbing and components
- F** Heavy-duty insulated plastic tank
- G** Highly efficient brazed plate evaporator
- H** Air-cooled condenser (shown) or water-cooled condenser
- I** Hot gas bypass circuit

System standard with NFPA 79 and UL 508A labeled electrical sub-panel

Specifications

| Model | | Nominal Cooling Capacity (Tons) ¹ | Horsepower | | Min/Max Flow Rate (GPM) | Nominal Pressure (PSI) | Connections | | Tank Size (Gallons) | Air-Cooled Dimensions ² L x W x H | Shipping Weight (Approx. lbs.) |
|------------|--------------|--|-----------------|-----------|-------------------------|------------------------|----------------|------------------------------------|---------------------|--|--------------------------------|
| Air-Cooled | Water-Cooled | | Compressor (Hp) | Pump (Hp) | | | Process (FNPT) | Condenser (FNPT) Water-Cooled only | | | |
| AC-.5* | WC-.5* | 0.5 | 1/2 | 3/4 | 1.2/10 | Up to 32 | 1" | 1/2" | 10 | 36" x 25" x 38" | 300 |
| AC-1* | WC-1* | 1 | 1 | 3/4 | 2.4/15 | Up to 32 | 1" | 1/2" | 10 | 36" x 25" x 38" | 330 |
| AC-1.5* | WC-1.5* | 1.5 | 1 1/2 | 3/4 | 3.6/15 | Up to 31 | 1" | 1/2" | 15 | 48" x 28" x 39" | 425 |
| AS-2** | WS-2** | 2 | 2 | 3/4 | 4.8/20 | Up to 30 | 1" | 1/2" | 15 | 48" x 28" x 39" | 450 |
| AS-3** | WS-3** | 3 | 3 | 3/4 | 7.2/25 | Up to 30 | 1" | 1/2" | 15 | 48" x 28" x 39" | 460 |
| AS-5** | WS-5** | 5 | 5 | 1 | 12/30 | Up to 37 | 1-1/2" | 1" | 20 | 56" x 37" x 45" | 565 |
| AS-7.5** | WS-7.5** | 7.5 | 7 1/2 | 1 | 18/30 | Up to 34 | 1-1/2" | 1-1/2" | 20 | 56" x 37" x 45" | 840 |
| AS-10** | WS-10** | 10 | 10 | 1 1/2 | 24/35 | Up to 37 | 1-1/2" | 1-1/2" | 20 | 56" x 37" x 45" | 860 |
| AS-12** | WS-12** | 12 | 13 | 2 | 28/40 | Up to 40 | 1-1/2" | 1-1/2" | 68 | 78" x 40" x 65" | 1,750 |
| AS-15** | WS-15** | 15 | 15 | 3 | 36/50 | Up to 55 | 1-1/2" | 1-1/2" | 68 | 78" x 40" x 65" | 1,750 |
| AS-20** | WS-20** | 20 | 20 | 3 | 48/50 | Up to 48 | 1-1/2" | 1-1/2" | 68 | 78" x 40" x 65" | 1,850 |
| AS-25** | WS-25** | 25 | 25 | 5 | 60/70 | Up to 60 | 2" | 2" | 100 | 142" x 50" x 80" | 3,700 |
| AS-30** | WS-30** | 30 | 30 | 7 1/2 | 72/90 | Up to 50 | 2" | 2" | 100 | 142" x 50" x 80" | 3,860 |
| AS-40** | WS-40** | 40 | 20/20 | 7 1/2 | 96/100 | Up to 50 | 2" | 2" | 100 | 200" x 52" x 85" | 4,995 |

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 dimensions will be the same as or smaller than air-cooled models.

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

**Standard compressor is scroll type.

Fluid temperature range is 20 to 65°F for reciprocating, scroll and semi-hermetic compressors. Fluid range up to 75°F is available as an option.

1 ton = 12,000 BTUs per hour

Iceman Chillers are available in a variety of voltages, capacities and process fluid temperatures. Heating circuits are also available.

For more information on any of the above or our line of Iceman Chillers, please contact Mokon.

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. Please contact Mokon for more information.

Product Testing & 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 one-year warranty as standard.

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.



2150 Elmwood Avenue, Buffalo, New York 14207
 Phone: 716-876-9951 ■ Fax: 716-874-8048
 www.mokon.com ■ E-mail: sales@mokon.com



Designed to Perform. Built to Last.

SC 8/16 MOK7054