

# **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 percent 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.



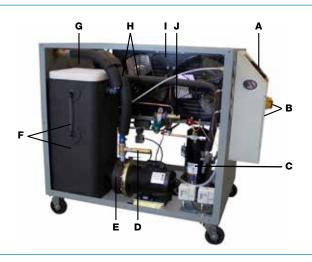
### ICEMAN SC SERIES

Air-Cooled Portable Chiller Water-Cooled Portable Chiller 5°F to 65°F (-15°C to 18°C)

- ➤ 1/2 to 50 Ton chilling capacities
- ➤ Green-friendly refrigerant
- ➤ Nonferrous components
- ➤ Efficient brazed plate evaporator
- ➤ Microprocessor-based controller
- ➤ UL 508A labeled electrical subpanel
- ➤ Meets NFPA 79 electrical safety standards



## **Smooth, Continuous Temperature Control**



#### **Standard Features**

- A Microprocessor-based controller in easily accessible panel
- B Electrical enclosure with safety door disconnect switch
- C Scroll compressor
- Flow switch
- E Stainless steel centrifugal supply pump
- F Heavy-duty insulated plastic tank with sight glass
- G Highly efficient brazed plate evaporator (not shown)
- H Insulated nonferrous plumbing and components
- I Air-cooled condenser (shown) or water-cooled condenser
- J Hot gas bypass circuit

#### Fluid Temperature Range: 5°F to 30°F (-15°C to -1°C)

Model		Cooling Capacity (BTU/hr)							Co		
Air-Cooled	Water-Cooled	Air-Cooled Fluid Temperature <sup>1</sup>		Water-Cooled Fluid Temperature <sup>2</sup>		Pump (Hp)	Min/Max Flow Rate (GPM)	Nominal Pressure (PSI)	Process	Condenser (FNPT) Water-	Tank Size (Gallons)
		5°F (-15°C)	30°F (-1°C)	5°F (-15°C)	30°F (-1°C)		(31.11)		(FNPT)	Cooled only	
ASL-1.5	WSL-1.5	9,100	18,600	9,800	19,675	1.5	4/25	Up to 45	1"	1"	15
ASL-2	WSL-2	14,600	28,400	15,600	29,800	1.5	5/25	Up to 45	1"	1"	15
ASL-3	WSL-3	22,150	42,300	23,500	44,600	2.0	7/40	Up to 42	1-1/2"	1"	20
ASL-5	WSL-5	32,400	62,150	34,400	65,475	3.0	12/40	Up to 53	1-1/2"	1-1/2"	20
ASL-7.5	WSL-7.5	48,850	90,650	51,200	94,450	3.0	18/50	Up to 50	1-1/2"	1-1/2"	20

<sup>&</sup>lt;sup>1</sup> Air-cooled based on 5 to 30°F chilled water at 2.4 GPM/Ton and 90°F ambient air.

Capacities based on the use of 35% ethylene glycol. Dimensions - 1.5 and 2 Ton: 48"L x 28"W x 39"H Dimensions - 3 through 7.5 Ton: 56"L x 37"W x 45"H Approximate Weight - 1.5 and 2 Ton: 525 lbs. Approximate Weight - 3 Ton: 650 lbs. Approximate Weight - 5 Ton: 800 lbs. Approximate Weight - 7.5 Ton: 890 lbs.

#### Fluid Temperature Range: 20°F to 65°F (-7°C to 18°C)

Model		Nominal			Min/Max	Nominal	Connections		Tank	Air-Cooled	Shipping
Air-Cooled	Water-Cooled	Cooling Capacity (Tons) <sup>1</sup>	Compressor (Hp)	Pump (Hp)	Flow Rate (GPM)	Pressure (PSI)	Process (FNPT)	Condenser (FNPT) Water- Cooled only	Size (Gallons)	Dimensions <sup>2</sup> (L x W x H)	Weight (Approx. lbs.)
AC5*	WC5*	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
AS-50**	WS-50**	50	25/25	10	120/140	Up to 65	3"	3"	150	200" x 52" x 85"	5,495

 $<sup>^1</sup>$  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 is scroll type.
Fluid range up to 75°F is available as an option.

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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<sup>&</sup>lt;sup>2</sup> Water-cooled based on 5 to 30°F chilled water at 2.4 GPM/Ton and 85°F condensing water at 3 GPM/Ton

<sup>&</sup>lt;sup>2</sup> Water-cooled dimensions will be the same as or smaller than air-cooled models.

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