

### ROTATIONAL COMPRESSION FOR ENHANCED PERFORMANCE

The S Series uses hermetically sealed scroll compressors from 30 to 100 tons, and semi-hermetically sealed screw compressors from 60 tons to 195 tons. All scroll compressors and screw compressors up to 75 tons are matched up with stainless steel brazed plate evaporators, and screw compressors from 90 to 195 tons with shell and tube evaporators. All of the scroll compressors use R-22 refrigerant while all of the screw compressors use R-134a refrigerant. The scroll compressor chillers can be configured with an integral pump tank or stand alone. All S Series central chilling stations have an operating leaving water temperature range of 30°F to 65°F and have 2 independent refrigeration circuits.

Note: Remote condensers are not designed to be used indoors.



#### Features

- High efficiency screw compressors
- Allen-Bradley Micrologix 1500 PLC control with PanelView 300 Micro monochrome/key pad interface
- Stainless steel brazed plate evaporator (60-75)
- Shell and tube evaporators (90-195)
- Two remote condensers with 1.5 hp variable speed lead fan and fan cycling (air-cooled models)
- NEMA 12 electrical enclosure
- UL listed electrical subpanel
- High and low refrigerant pressure safeties
- Branch circuit fusing
- EER BTU/W of 10.0 on remote air-cooled units
- Electronic expansion valves
- HFC-134a refrigerant
- Digital low temperature freeze stat
- Liquid line solenoid and shut-off valves
- Chilled water flow switches
- Evaporator water piping manifold
- 1 year warranty on parts and labor
- 3 year warranty on controller

#### Options

- Advanced control package includes AB SLC 5/04 PLC with PanelView 1000 color touch-screen, control of up to 2 additional circuits, cooling tower system, water treatment system, and communication capabilities
- General fault audible/visual alarm with elevated light stack
- UL listed electrical subpanel
- Disconnect, non-fused; 460/3/60; 208-230/3/60
- Special voltages: 208-230/3/60; 575/3/60; 380/3/50 or 415/3/50 (derate capacity by multiplying by 0.83)
- IEG-1 inhibited ethylene glycol; 55 gallons, P/N A0539637
- 4 year additional compressor warranty
- Startup; includes on-site labor only<sup>1</sup>

<sup>1</sup> Start-ups include on-site labor only; consult factory for travel, living expense costs and scheduling. Remote condenser units, including all piping and electrical hookups, must be installed, evacuated, and precharged before Sterling arrives on site.

# S SERIES

## Air-Cooled Central Chillers

### SPECIFICATIONS: SSC SERIES SCROLL CHILLERS

Model	No. of compressors	Cooling capacity, tons (50° LWT)	Capacity stages, qty.	EER, BTUH/W	Amp Draw, 460/3/60				No. of fans per condenser	Evaporator manifold conn. victaulic, in.	Nominal water flow, gpm
					MCA <sup>2</sup> per chiller unit	RLA <sup>1</sup> per condenser	RLA <sup>1</sup> per compressor	MCA <sup>2</sup> per condenser			
SSC 30	2	29.0	2	12.1	62	7	28	8	2	3	72
SSC 40	2	39.0	2	12.1	76	7	34	8	2	3	92
SSC 50	2	46.3	2	12.3	97	7	43	8	2	3	111
SSC 60	4	59.7	4	12.2	113	7	27	8	2	3	143
SSC 70	4	67.5	4	11.9	129	7/10.5	27/34	8/12	2/3	3	162
SSC 80	4	75.3	4	11.6	143	10.5/14	34	12	3	3	181
SSC 90	4	83.5	4	11.9	164	10.5/14	34/43	12/15	3/4	4	200
SSC 100	4	91.7	4	12.1	183	14	43	15	4	4	220

Model	Height, in.		Width, in.		Depth, in.		Ship. weight, lbs.		Max. operating weight, lbs.	
	Chiller	Cond.	Chiller	Cond.	Chiller	Cond.	Chiller	Cond.	Chiller	Cond.
SSC 30	85	50	60	45.5	45	127	1340	730	1350	790
SSC 40	85	50	83	45.5	45	127	1530	730	1550	805
SSC 50	85	50	83	45.5	45	127	1730	730	1760	885
SSC 60	85	50	83	45.5	45	127	2120	880	2150	1110
SSC 70	75	50	86	45.5	45	127/180	2360	880/1210	2400	110/1435
SSC 80	75	50	86	45.5	45	180	2600	1210	2640	1435
SSC 90	75	50	86	45.5	45	180/233	2870	1210/1580	2910	1435/1825
SSC 100	75	50	86	45.5	45	233	3170	1580	3220	1825

<sup>1</sup> RLA = running load amps    <sup>2</sup> MCA = minimum circuit amps

### SPECIFICATIONS: SCW SERIES SCREW CHILLERS

Model	No. of compressors	Cooling capacity, tons (50° LWT)	Capacity stages, qty.	EER, BTUH/W	Amp Draw, 460/3/60				No. of fans per condenser	Evaporator manifold conn. victaulic, in.	Nominal water flow, gpm
					MCA <sup>2</sup> per chiller unit	RLA <sup>1</sup> per condenser	RLA <sup>1</sup> per compressor	MCA <sup>2</sup> per condenser			
SCW 60	2	53.8	Infinite unloading	11.7	133	7	58	8	2	3	129
SCW 75	2	66.8		11.8	151	10.5	66	12	3	3	161
SCW 90	2	77.3		11.1	180	10.5	79	12	3	4	190
SCW 100	2	92.5		11.9	223	14	98	15	4	4	219
SCW 115	2	103.5		11.8	281	14	124	15	4	4	250
SCW 145	2	130.8		12.3	326	17.5	144	19	5	6	313
SCW 165	2	148.3		12.3	351	17.5	155	19	5	6	356
SCW 195	2	173.8		12.3	412	28	182	29	8	6	418

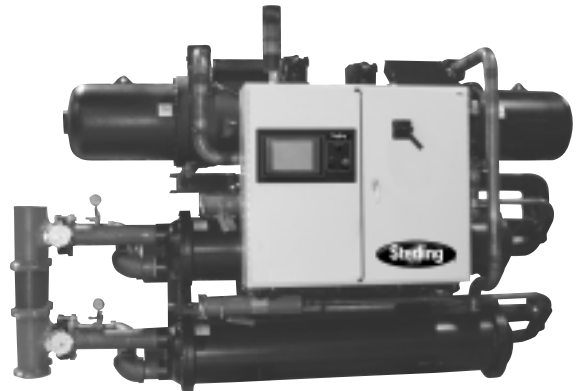
Model	Height, in.		Width, in.		Depth, in.		Ship. weight, lbs.		Max. operating weight, lbs.	
	Chiller	Cond.	Chiller	Cond.	Chiller	Cond.	Chiller	Cond.	Chiller	Cond.
SCW 60	75	50	100	45.5	45	127	2574	1190	2600	1215
SCW 75	75	50	100	45.5	45	180	2676	1210	2710	1240
SCW 90	74	50	115	45.5	72	180	3456	1580	3498	1650
SCW 100	74	50	115	45.5	72	233	3532	1620	3580	1660
SCW 115	77	50	124	45.5	72	233	4156	1760	4212	1800
SCW 145	81	50	137	45.5	75	286	7528	2380	7788	2435
SCW 165	81	50	137	45.5	75	286	7554	2480	7814	2540
SCW 195	81	50	137	88	75	233	7698	3230	8016	3300

<sup>1</sup> RLA = running load amps    <sup>2</sup> MCA = minimum circuit amps



### ROTATIONAL COMPRESSION FOR ENHANCED PERFORMANCE

The S Series uses hermetically sealed scroll compressors from 30 to 100 tons, and semi-hermetically sealed screw compressors from 60 tons to 195 tons. All scroll compressors and screw compressors up to 75 tons are matched up with stainless steel brazed plate evaporators, and screw compressors from 90 to 195 tons with shell and tube evaporators. All of the scroll compressors use R-22 refrigerant while all of the screw compressors use R-134a refrigerant. The scroll compressor chillers can be configured with an integral pump tank or stand alone. All S Series central chilling stations have an operating leaving water temperature range of 30°F to 65°F and have 2 independent refrigeration circuits.



#### Features

- High-efficiency scroll compressors (30-100 tons) or screw compressors (60-195 tons)
- Allen-Bradley Micrologix 1500 PLC control with PanelView 300 Micro monochrome/key pad interface
- Stainless steel brazed plate evaporator (30-100 tons: scroll)
- Shell and tube evaporators (60-195 tons: screw)
- Cleanable shell and tube condenser(s) (water cooled models)
- Two remote condensers with 1.5 hp variable speed lead fans and fan cycling (air-cooled models)
- NEMA 12 electrical enclosure
- UL listed electrical subpanel
- High and low refrigerant pressure safeties
- Touch-safe branch circuit fusing
- EER BTUH/W average of 15.2 on scroll chillers; 15.7 on screw chillers
- HCFC-22 refrigerant (scroll); HFC-134a refrigerant (screw)
- Digital low temperature freezestat
- Liquid line solenoid and shut-off valves
- Chilled water flow switches
- 1 year warranty on parts and labor
- 3 year warranty on controller
- 4 year additional compressor warranty

#### Options

- Advanced control package includes AB SLC 5/04 PLC with PanelView 1000 color touch-screen, control of up to 2 additional circuits, cooling tower system, water treatment system, and communication capabilities
- General fault audible/visual alarm with elevated light stack
- 2 and 4 compressor non-fused disconnect; 460/3/60V; 208-230/3/60
- Special voltages: 208-230/3/60, 575/3/60, 380/3/50 or 415/3/50; derate capacity by multiplying by 0.83
- Condenser Manifold: W 30 to 60 (3" Victaulic connection); W 70-1- (4" Victaulic connection)
- IEG-1 inhibited ethylene glycol; 55 gallons, P/N A0539637
- Startup; includes on-site labor only<sup>1</sup>

<sup>1</sup> Consult factory for travel and living expense costs and scheduling. Remote condenser units, including all piping and electrical hookups, must be installed, evacuated, and precharged before Sterling arrives on site.

# S SERIES

## Water-Cooled Central Chillers

### SPECIFICATIONS: SSC SERIES SCROLL CHILLERS

Model	No. of compressors	Cooling capacity, tons (50° LWT)	Capacity stages, qty.	EER, BTUH/W	Amp Draw, 460/3/60		Nominal flow, gpm		Condenser conn. (no manifold) flange conn., in.	Evaporator manifold conn. victaulic, in.
					RLA <sup>1</sup> per compressor	MCA <sup>2</sup> per chiller unit	Evaporator	Condensers		
SSC 30	2	31.3	2	15.6	28	62	78	97	(2) 2	3
SSC 40	2	42.2	2	15.2	34	76	99	124	(2) 2	3
SSC 50	2	50.2	2	15.4	43	97	120	151	(2) 2	3
SSC 60	4	64.8	4	15.7	27	113	156	194	(2) 2.5	3
SSC 70	4	73.2	4	15.1	27/34	129	175	219	(2) 2.5	3
SSC 80	4	81.5	4	14.7	34	143	196	244	(2) 2.5	3
SSC 90	4	90.4	4	15.0	34/43	164	217	271	2.5/3	4
SSC 100	4	99.3	4	15.2	43	183	238	298	(2) 3	4

Model	Height, in.	Width, in.	Depth, in.	Ship. weight, lbs.	Max. operating weight, lbs.
SSC 30	85	66	45	1520	1610
SSC 40	85	94	45	1900	2010
SSC 50	85	94	45	2120	2260
SSC 60	85	94	45	2700	2870
SSC 70	75	94	45	3000	3200
SSC 80	75	94	45	3300	3520
SSC 90	75	115	45	3580	3830
SSC 100	75	115	45	3880	4160

1 RLA = running load amps 2 MCA = minimum circuit amps

### SPECIFICATIONS: SCW SERIES SCREW CHILLERS

Model	No. of compressors	Cooling capacity, tons (50° LWT)	Capacity stages, qty.	EER, BTUH/W	Amp Draw, 460/3/60		Nominal flow, gpm		Condenser conn. (no manifold) flange conn., in.	Evaporator manifold conn. victaulic, in.
					RLA <sup>1</sup> per compressor	MCA <sup>2</sup> per chiller unit	Evaporator	Condensers		
SCW 60	2	60.3	Infinite unloading	15.2	58	133	145	181	2.5	3
SCW 75	2	74.8		15.1	66	151	180	225	2.5	3
SCW 90	2	88.5		14.5	79	180	213	266	3	4
SCW 100	2	104.3		15.6	98	223	245	307	3	4
SCW 115	2	116.2		15.3	124	281	279	349	3	4
SCW 145	2	146.3		16.1	144	326	350	438	4	6
SCW 165	2	166.2		16.0	155	351	399	499	4	6
SCW 195	2	192.8		16.2	182	412	463	579	4	6

Model	Height, in.	Width, in.	Depth, in.	Ship. weight, lbs.	Max. operating weight, lbs.
SCW 60	85	100	45	3266	3468
SCW 75	85	100	45	3512	3754
SCW 90	74	115	72	4336	4594
SCW 100	74	115	72	4982	5246
SCW 115	77	124	72	5298	5584
SCW 145	81	137	75	8844	9428
SCW 165	81	137	75	9376	10102
SCW 195	81	137	75	9580	10364

1 RLA = running load amps 2 MCA = minimum circuit amps

