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# Screw Compressors for Commercial Air Conditioning and Refrigeration

SHL - Low Temperature

SHM - Medium Temperature

SCH - High Temperature

SDM - Medium Temperature Open Drive

SDL - Low Temperature Open Drive

SCA - R134a Optimized

20 Through 240 Horsepower

R-404A/507, R134a, R-407C, R-22

High, Medium, and Low Temperature Applications



**EMERSON**<sup>™</sup>  
Climate Technologies

# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-404A LOW TEMPECO</b>						
SHL2-2000-TWK	3567	208/230-3	81	492	114	1.54LT60-03-3118-TWK
SHL2-2000-TWK	3567	460-3	41	246	57	1.54LT60-03-3118-TWK
SHL2-2000-TWE	3567	575-3	33	183	46	1.54LT60-03-3118-TWE
SHL2-2500-TWK	4273	208/230-3	85	436	120	1.54LT60-03-3119-TWK
SHL2-2500-TWK	4273	460-3	42	218	60	1.54LT60-03-3119-TWK
SHL2-2500-TWE	4273	575-3	34	166	48	1.54LT60-03-3119-TWE
SHL2-3000-TWK	5015	208/230-3	104	532	146	1.54LT60-03-3120-TWK
SHL2-3000-TWK	5015	460-3	52	266	73	1.54LT60-03-3120-TWK
SHL2-3000-TWE	5015	575-3	42	204	58	1.54LT60-03-3120-TWE
SHL1-4000-FWC	5933	208/230-3	136	655	228	1.54LT60-03-3121-FWC
SHL1-4000-FWD	5933	460-3	65	313	109	1.54LT60-03-3121-FWD
SHL1-4000-TWE	5933	575-3	52	222	87	1.54LT60-03-3121-TWE
SHL1-5000-FWC	6992	208/230-3	165	743	240	1.54LT60-03-3122-FWC
SHL1-5000-FWD	6992	460-3	79	355	115	1.54LT60-03-3122-FWD
SHL1-5000-TWE	6992	575-3	63	281	99	1.54LT60-03-3122-TWE
SHL1-6000-FWC	8193	208/230-3	186	939	247	1.54LT60-03-3123-FWC
SHL1-6000-FWD	8193	460-3	89	449	128	1.54LT60-03-3123-FWD
SHL1-6000-TWE	8193	575-3	78	322	118	1.54LT60-03-3123-TWE
SHL1-7000-FWC	9394	208/230-3	215	1015	299	1.54LT60-03-3124-FWC
SHL1-7000-FWD	9394	460-3	103	485	143	1.54LT60-03-3124-FWD
SHL1-7000-TWE	9394	575-3	96	404	113	1.54LT60-03-3124-TWE
SHL1-7500-FWC	10665	208/230-3	249	1224	314	1.54LT60-03-3125-FWC
SHL1-7500-FWD	10665	460-3	119	585	150	1.54LT60-03-3125-FWD
SHL1-7500-TWE	10665	575-3	95	433	120	1.54LT60-03-3125-TWE

### Notes

- See individual data sheets for complete performance and operating limits of compressors.
- RLA is abbreviation for "Rated Load Amps." This maximum value regardless of refrigerant or application.
- LRA is abbreviation for "Locked Rotor Amps."
- MCC is abbreviation for "Maximum Continuous Current." This is refrigerant and application specific.

# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-22 LOW TEMP ECO</b>						
SHL2-2000-TWK	3567	208/230-3	81	492	88	1.52LT60-03-3126-TWK
SHL2-2000-TWK	3567	460-3	41	246	44	1.52LT60-03-3126-TWK
SHL2-2000-TWE	3567	575-3	33	183	35	1.52LT60-03-3126-TWE
SHL2-2500-TWK	4273	208/230-3	85	436	97	1.52LT60-03-3127-TWK
SHL2-2500-TWK	4273	460-3	42	218	49	1.52LT60-03-3127-TWK
SHL2-2500-TWE	4273	575-3	34	166	39	1.52LT60-03-3127-TWE
SHL2-3000-TWK	5015	208/230-3	104	532	118	1.52LT60-03-3128-TWK
SHL2-3000-TWK	5015	460-3	52	266	59	1.52LT60-03-3128-TWK
SHL2-3000-TWE	5015	575-3	42	204	47	1.52LT60-03-3128-TWE
SHL1-4000-FWC	5933	208/230-3	136	655	190	1.52LT60-03-3129-FWC
SHL1-4000-FWD	5933	460-3	65	313	91	1.52LT60-03-3129-FWD
SHL1-4000-TWE	5933	575-3	52	222	73	1.52LT60-03-3129-TWE
SHL1-5000-FWC	6992	208/230-3	165	743	200	1.52LT60-03-3130-FWC
SHL1-5000-FWD	6992	460-3	79	355	96	1.52LT60-03-3130-FWD
SHL1-5000-TWE	6992	575-3	63	281	83	1.52LT60-03-3130-TWE
SHL1-6000-FWC	8193	208/230-3	186	939	209	1.52LT60-03-3131-FWC
SHL1-6000-FWD	8193	460-3	89	449	106	1.52LT60-03-3131-FWD
SHL1-6000-TWE	8193	575-3	78	322	100	1.52LT60-03-3131-TWE
SHL1-7000-FWC	9394	208/230-3	215	1015	243	1.52LT60-03-3132-FWC
SHL1-7000-FWD	9394	460-3	103	485	116	1.52LT60-03-3132-FWD
SHL1-7000-TWE	9394	575-3	96	404	107	1.52LT60-03-3132-TWE
SHL1-7500-FWC	10665	208/230-3	249	1224	278	1.52LT60-03-3133-FWC
SHL1-7500-FWD	10665	460-3	119	585	133	1.52LT60-03-3133-FWD
SHL1-7500-TWE	10665	575-3	95	433	106	1.52LT60-03-3133-TWE

### Notes

- See individual data sheets for complete performance and operating limits of compressors.
- RLA is abbreviation for "Rated Load Amps." This maximum value regardless of refrigerant or application.
- LRA is abbreviation for "Locked Rotor Amps."
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# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-404A MED TEMP</b>						
SHM2-3000-TWK	3567	208/230-3	92	436	130	1.54MT60-03-3110-TWK
SHM2-3000-TWK	3567	460-3	46	218	65	1.54MT60-03-3110-TWK
SHM2-3000-TWE	3567	575-3	37	166	52	1.54MT60-03-3110-TWE
SHM2-3500-TWK	4273	208/230-3	121	532	170	1.54MT60-03-3111-TWK
SHM2-3500-TWK	4273	460-3	60	266	85	1.54MT60-03-3111-TWK
SHM2-3500-TWE	4273	575-3	48	204	68	1.54MT60-03-3111-TWE
SHM2-4000-TWK	5015	208/230-3	130	622	182	1.54MT60-03-3112-TWK
SHM2-4000-TWK	5015	460-3	65	311	91	1.54MT60-03-3112-TWK
SHM2-4000-TWE	5015	575-3	52	255	73	1.54MT60-03-3112-TWE
SHM1-5000-FWC	5933	208/230-3	165	743	258	1.54MT60-03-3113-FWC
SHM1-5000-FWD	5933	460-3	79	355	124	1.54MT60-03-3113-FWD
SHM1-5000-TWE	5933	575-3	63	281	99	1.54MT60-03-3113-TWE
SHM1-6000-FWC	6992	208/230-3	205	939	334	1.54MT60-03-3114-FWC
SHM1-6000-FWD	6992	460-3	98	449	160	1.54MT60-03-3114-FWD
SHM1-6000-TWE	6992	575-3	78	322	128	1.54MT60-03-3114-TWE
SHM1-7000-FWC	8193	208/230-3	251	1015	295	1.54MT60-03-3115-FWC
SHM1-7000-FWD	8193	460-3	120	485	141	1.54MT60-03-3115-FWD
SHM1-7000-TWE	8193	575-3	96	404	113	1.54MT60-03-3115-TWE
SHM1-8000-FWC	9394	208/230-3	263	1224	343	1.54MT60-03-3116-FWC
SHM1-8000-FWD	9394	460-3	126	585	164	1.54MT60-03-3116-FWD
SHM1-8000-TWE	9394	575-3	101	433	131	1.54MT60-03-3116-TWE
SHM1-9000-FWC	10665	208/230-3	305	1435	358	1.54MT60-03-3117-FWC
SHM1-9000-FWD	10665	460-3	146	686	171	1.54MT60-03-3117-FWD
SHM1-9000-TWE	10665	575-3	116	433	131	1.54MT60-03-3117-TWE

### Notes

- Specifications subject to change without notice.
- See individual data sheets for complete performance and operating limits of compressors.
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# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-22 MED TEMP</b>						
SHM2-3000-TWK	3567	208/230-3	92	436	106	1.52MT60-03-3134-TWK
SHM2-3000-TWK	3567	460-3	46	218	53	1.52MT60-03-3134-TWK
SHM2-3000-TWE	3567	575-3	37	166	42	1.52MT60-03-3134-TWE
SHM2-3500-TWK	4273	208/230-3	121	532	138	1.52MT60-03-3135-TWK
SHM2-3500-TWK	4273	460-3	60	266	69	1.52MT60-03-3135-TWK
SHM2-3500-TWE	4273	575-3	48	204	55	1.52MT60-03-3135-TWE
SHM2-4000-TWK	5015	208/230-3	130	622	156	1.52MT60-03-3136-TWK
SHM2-4000-TWK	5015	460-3	65	311	78	1.52MT60-03-3136-TWK
SHM2-4000-TWE	5015	575-3	52	255	62	1.52MT60-03-3136-TWE
SHM1-5000-FWC	5933	208/230-3	165	743	215	1.52MT60-03-3137-FWC
SHM1-5000-FWD	5933	460-3	79	355	104	1.52MT60-03-3137-FWD
SHM1-5000-TWE	5933	575-3	63	281	83	1.52MT60-03-3137-TWE
SHM1-6000-FWC	6992	208/230-3	205	939	278	1.52MT60-03-3138-FWC
SHM1-6000-FWD	6992	460-3	98	449	133	1.52MT60-03-3138-FWD
SHM1-6000-TWE	6992	575-3	78	322	106	1.52MT60-03-3138-TWE
SHM1-7000-FWC	8193	208/230-3	251	1015	280	1.52MT60-03-3139-FWC
SHM1-7000-FWD	8193	460-3	120	485	134	1.52MT60-03-3139-FWD
SHM1-7000-TWE	8193	575-3	96	404	107	1.52MT60-03-3139-TWE
SHM1-8000-FWC	9394	208/230-3	263	1224	293	1.52MT60-03-3140-FWC
SHM1-8000-FWD	9394	460-3	126	585	140	1.52MT60-03-3140-FWD
SHM1-8000-TWE	9394	575-3	101	433	112	1.52MT60-03-3140-TWE
SHM1-9000-FWC	10665	208/230-3	305	1435	341	1.52MT60-03-3141-FWC
SHM1-9000-FWD	10665	460-3	146	686	163	1.52MT60-03-3141-FWD
SHM1-9000-TWE	10665	575-3	116	433	130	1.52MT60-03-3141-TWE

### Notes

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- See individual data sheets for complete performance and operating limits of compressors.
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# Screw Compressor Accessories

## SHM and SHL Screw Compressors for Parallel Applications

### Compressors Application Kits (one required per compressor)

Kit includes: oil filter housing, flow switch, solenoid and coils, oil sight glass, rotation switch, vibration damper, fittings and O-rings

SHM	SHL	115V	230V
30/35/40 HP	20/25/30 HP	560-0001-06	560-0001-07
50/60 HP	40/50 HP	560-0001-03	560-0001-02
70/80/90 HP	60/70/75 HP	560-0001-05	560-0001-04

### Electronic Module (one required per compressor)

ESC201 Standard Module	560-0002-02
Alarm Board for ESC201	560-0002-04

### Oil Separator Kits (one required per rack)

Kit includes: oil separator, heaters, reset thermostat, transducer valve, electronic oil level sensor, rotalock valve, sweat valve, O-rings

	115V	230V
18 liter low profile (1-2 compressors)	560-0003-00	560-0003-01
18 liter top outlet (1-2 compressors)	560-0003-02	560-0003-03
40 liter top outlet (up to 3 compressors)	560-0003-04	560-0003-05
90 liter top outlet (up to 6 compressors)	560-0003-06	560-0003-07
140 liter top outlet (up to 6 compressors)	560-0003-08	560-0003-09

### Oil Separator Sizing (SHL, SHM, SDL, and SDM models only):

Add together the total CFH of the compressors in parallel, and then size the oil separator based on these criteria:

SIZE	LOW TEMP MAX CFH	MEDIUM TEMP MAX CFH	OIL CHARGE GAL.	WEIGHT LBS.	INLET CONN.	OUTLET CONN.	OIL OUTLET	HEATER 3/8" NPTF
18 liter	10,600 CFH	7,770 CFH	4.75	165	2 1/8"	2 1/8"	7/8"	(1) 70W
40 liter	23,300 CFH	15,540 CFH	10.5	238	3 1/8"	3 1/8"	1 3/8"	(2) 70W
90 liter	46,615 CFH	31,080 CFH	24.0	445	3 5/8"	3 5/8"	1 5/8"	(3) 70W
140 liter	46,615 CFH	46,615 CFH	37.0	679	4 1/8"	4 1/8"	1 5/8"	(4) 70W

Maximum Operating Pressure 400 psig

Maximum Operating Temperature 248°F

Check with your Copeland Application Engineer for more details.

### SCH High Temp Compact Screw Compressors

	115V	230V
Solenoid Coil (2 required per SCH1 compressor)	023-0008-00	023-0008-01
Solenoid Coil (2 or 4 required per SCH2 compressor)	023-0008-00	023-0008-01

# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-22 HIGH TEMP</b>						
SCH2-5000-FWC	5830	208-230	145	939	162	2.53AC60-04-197-FWC
SCH2-5000-FWD	5830	460	72	411	81	2.53AC60-04-197-FWD
SCH2-5000-TWE	5830	575	58	329	65	2.53AC60-04-197-TWE
SCH2-6000-FWC	7244	208-230	205	1162	230	2.53AC60-04-201-FWC
SCH2-6000-FWD	7244	460	102	508	115	2.53AC60-04-201-FWD
SCH2-6000-TWE	7244	575	82	406	92	2.53AC60-04-201-TWE
SCH2-7000-FWC	8410	208-230	251	1015	280	2.53AC60-04-205-FWC
SCH2-7000-FWD	8410	460	120	485	134	2.53AC60-04-205-FWD
SCH2-7000-TWE	8410	575	96	404	107	2.53AC60-04-205-TWE
SCH2-8000-FWC	9682	208-230	263	1224	293	2.53AC60-04-209-FWC
SCH2-8000-FWD	9682	460	126	585	140	2.53AC60-04-209-FWD
SCH2-8000-TWE	9682	575	101	433	112	2.53AC60-04-209-TWE
SCH2-9000-FWC	10,989	208-230	305	1435	341	2.53AC60-04-213-FWC
SCH2-9000-FWD	10,989	460	146	686	163	2.53AC60-04-213-FWD
SCH2-9000-TWE	10,989	575	116	546	130	2.53AC60-04-213-TWE
SCH2-11H0-FWC	13,428	208-230	355	1988	398	2.53AC60-04-217-FWC
SCH2-11H0-FWD	13,428	460	178	895	199	2.53AC60-04-217-FWD
SCH2-11H0-TWE	13,428	575	142	713	159	2.53AC60-04-217-TWE
SCH2-12H0-FWC	15,300	208-230	396	2279	444	2.53AC60-04-221-FWC
SCH2-12H0-FWD	15,300	460	198	1054	222	2.53AC60-04-221-FWD
SCH2-12H0-TWE	15,300	575	159	843	178	2.53AC60-04-221-TWE
SCH2-14H0-FWC	17,491	208-230	449	2569	503	2.53AC60-04-225-FWC
SCH2-14H0-FWD	17,491	460	224	1139	251	2.53AC60-04-225-FWD
SCH2-14H0-TWE	17,491	575	179	918	201	2.53AC60-04-225-TWE
SCH2-18H0-EWD	22,802	460	321	1546		2.52AC60-04-229-EWD
SCH2-18H0-EWE	22,802	575	256	1236		2.52AC60-04-229-EWE
SCH2-21H0-EWD	26,212	460	385	1742		2.52AC60-04-233-EWD
SCH2-21H0-EWE	26,212	575	308	1393		2.52AC60-04-233-EWE
SCH2-24H0-EWD	29,835	460	420	2000		2.52AC60-04-237-EWD
SCH2-24H0-EWE	29,835	575	336	1600		2.52AC60-04-237-EWE

### Notes

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# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-134a HIGH TEMP</b>						
SCA2-350E-FWC	5830	208-230	112	535	126	1.53AC60-04-89-FWC
SCA2-350E-FWD	5830	460	56.1	254	62.8	1.53AC60-04-89-FWD
SCA2-350E-TWE	5830	575	44.9	203	50.2	1.53AC60-04-89-TWE
SCA2-400E-FWC	7244	208-230	150	737	168	2.53AC60-04-93-FWC
SCA2-400E-FWD	7244	460	75	329	84	2.53AC60-04-93-FWD
SCA2-400E-TWE	7244	575	60	263	67.2	2.53AC60-04-93-TWE
SCA2-500E-FWC	8410	208-230	206	743	231	2.53AC60-04-97-FWC
SCA2-500E-FWD	8410	460	103	359	115	2.53AC60-04-97-FWD
SCA2-500E-TWE	8410	575	82.5	286	92.4	2.53AC60-04-97-TWE
SCA2-600E-FWC	9682	208-230	224	939	251	2.53AC60-04-101-FWC
SCA2-600E-FWD	9682	460	112	449	125	2.53AC60-04-101-FWD
SCA2-600E-TWE	9682	575	89.5	357	100	2.53AC60-04-101-TWE
SCA2-700E-FWC	10,989	208-230	274	1021	306	2.53AC60-04-105-FWC
SCA2-700E-FWD	10,989	460	137	485	153	2.53AC60-04-105-FWD
SCA2-700E-TWE	10,989	575	109	412	123	2.53AC60-04-105-TWE
SCA2-801E-FWC	12,572	208-230	288	1170		
SCA2-801E-FWD	12,572	460	144	585		
SCA2-801E-TWE	12,572	575	115	468		
SCA2-800E-FWC	13,428	208-230	240	1416	269	2.53AC60-04-109-FWC
SCA2-800E-FWD	13,428	460	120	632	136	2.53AC60-04-109-FWD
SCA2-800E-TWE	13,428	575	96.1	505	108	2.53AC60-04-109-TWE
SCA2-901E-FWC	14,338	208-230	324	1372		
SCA2-901E-FWD	14,338	460	162	686		
SCA2-901E-TWE	14,338	575	130	548		
SCA2-900E-FWC	15,300	208-230	289	1522	324	2.53AC60-04-117-FWC
SCA2-900E-FWD	15,300	460	145	690	162	2.53AC60-04-117-FWD
SCA2-900E-TWE	15,300	575	116	555	129	2.53AC60-04-117-TWE
SCA2-11HE-FWC	17,491	208-230	331	1807	371	2.53AC60-04-125-FWC
SCA2-11HE-FWD	17,491	460	166	814	186	2.53AC60-04-125-FWD
SCA2-11HE-TWE	17,491	575	133	684	148	2.53AC60-04-125-TWE
SCA2-12HE-FWC	20,024	208-230	406	2072	455	2.53AC60-04-129-FWC
SCA2-12HE-FWD	20,024	460	203	958	227	2.53AC60-04-129-FWD
SCA2-12HE-TWE	20,024	575	162	766	182	2.53AC60-04-129-TWE
SCA2-14HE-FWC	22,602	208-230	438	2336	438	2.53AC60-04-133-FWC
SCA2-14HE-FWD	22,602	460	219	1696	245	2.53AC60-04-133-FWD
SCA2-14HE-TWE	22,602	575	175	835	196	2.53AC60-04-133-TWE



# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-134a HIGH TEMP</b>						
SCA2-16HE-EWD	26,212	460	280	1364		2.53AC60-04-137-EWD
SCA2-16HE-EWE	26,212	575	224	1091		2.53AC60-04-137-EWE
SCA2-18HE-EWD	29,835	460	310	1442		2.53AC60-04-141-EWD
SCA2-18HE-EWE	29,835	575	248	1153		2.53AC60-04-141-EWE
SCA2-21HE-EWD	34,310	460	370	1853		2.53AC60-04-145-EWD
SCA2-21HE-EWE	34,310	575	296	1482		2.53AC60-04-145-EWE
SCA2-24HE-EWD	38,786	460	420	2029		2.53AC60-04-149-EWD
SCA2-24HE-EWE	38,786	575	336	1623		2.53AC60-04-149-EWE

# Copeland Screw Compressors

## 60 Hertz

English Measure

Standard Model	CFH	Volts Phase	Amperage Ratings			Performance Data Sheet
			RLA	LRA	MCC	
<b>R-407C HIGH TEMP</b>						
SCH2-500E-FWC	5830	208-230	145	939	192	2.5eAC60-04-153-FWC
SCH2-500E-FWD	5830	460	72	411	96	2.5eAC60-04-153-FWD
SCH2-500E-TWE	5830	575	58	329	77	2.5eAC60-04-153-TWE
SCH2-600E-FWC	7244	208-230	205	1162	230	2.53AC60-04-157-FWC
SCH2-600E-FWD	7244	460	102	508	115	2.53AC60-04-157-FWD
SCH2-600E-TWE	7244	575	82	406	92	2.53AC60-04-157-TWE
SCH2-700E-FWC	8410	208-230	251	1015	264	2.53AC60-04-161-FWC
SCH2-700E-FWD	8410	460	120	485	127	2.53AC60-04-161-FWD
SCH2-700E-TWE	8410	575	96	404	102	2.53AC60-04-161-TWE
SCH2-800E-FWC	9682	208-230	263	1224	316	2.53AC60-04-165-FWC
SCH2-800E-FWD	9682	460	126	585	152	2.53AC60-04-165-FWD
SCH2-800E-TWE	9682	575	101	433	122	2.53AC60-04-165-TWE
SCH2-900E-FWC	10,989	208-230	305	1435	351	2.53AC60-04-169-FWC
SCH2-900E-FWD	10,989	460	146	686	169	2.53AC60-04-169-FWD
SCH2-900E-TWE	10,989	575	116	546	136	2.53AC60-04-169-TWE
SCH2-11HE-FWC	13,428	208-230	355	1988	375	2.53AC60-04-173-FWC
SCH2-11HE-FWD	13,428	460	178	895	188	2.53AC60-04-173-FWD
SCH2-11HE-TWE	13,428	575	142	713	150	2.53AC60-04-173-TWE
SCH2-12HE-FWC	15,300	208-230	396	2279	421	2.53AC60-04-177-FWC
SCH2-12HE-FWD	15,300	460	198	1054	211	2.53AC60-04-177-FWD
SCH2-12HE-TWE	15,300	575	159	843	169	2.53AC60-04-177-TWE
SCH2-14HE-FWC	17,491	208-230	449	2569	463	2.53AC60-04-181-FWC
SCH2-14HE-FWD	17,491	460	224	1139	232	2.53AC60-04-181-FWD
SCH2-14HE-TWE	17,491	575	179	918	185	2.53AC60-04-181-TWE
SCH2-18HE-EWD	22,802	460	321	1546		2.5eAC60-04-185-EWD
SCH2-18HE-EWE	22,802	575	256	1236		2.5eAC60-04-185-EWE
SCH2-21HE-EWD	26,212	460	385	1742		2.5eAC60-04-189-EWD
SCH2-21HE-EWE	26,212	575	308	1393		2.5eAC60-04-189-EWE
SCH2-24HE-EWD	29,835	460	420	2000		2.5eAC60-04-193-EWD
SCH2-24HE-EWE	29,835	575	336	1600		2.5eAC60-04-193-EWE

# Open Drive Screw Compressors

## Medium Temperature

Copeland Model No.	Disp/Hr CFH-60 Hz	Overall Dim			Shipping Weight	Service Valves	
		Length	Width	Height		Suction	Discharge
SDM1-0084-XXX-200	3540	17.91	13.07	13.88	143	2 1/8	1 5/8
SDM1-0100-XXX-200	4260	17.91	13.07	13.88	143	2 1/8	1 5/8
SDM1-0118-XXX-200	5040	17.91	13.07	13.88	143	2 1/8	1 5/8
SDM1-0165-XXX-200	7020	21.25	22.44	18.50	337	3 1/8	2 1/8
SDM1-0192-XXX-200	8220	21.25	22.40	18.50	388	3 1/8	2 1/8
SDM1-0220-XXX-200	9420	21.25	22.40	18.50	388	3 1/8	2 1/8
SDM1-0250-XXX-200	10680	22.13	22.44	18.50	415	3 1/8	2 1/8

## Low Temperature

Copeland Model No.	Disp/Hr CFH-60 Hz	Overall Dim			Shipping Weight	Service Valves	
		Length	Width	Height		Suction	Discharge
SDL1-0084-XXX-200	3540	17.91	13.07	13.88	143	2 1/8	1 5/8
SDL1-0100-XXX-200	4260	17.91	13.07	13.88	143	2 1/8	1 5/8
SDL1-0118-XXX-200	5040	17.91	13.07	13.88	143	2 1/8	1 5/8
SDL1-0165-XXX-200	7020	21.25	22.44	18.50	337	3 1/8	2 1/8
SDL1-0192-XXX-200	8220	21.25	22.40	18.50	388	3 1/8	2 1/8
SDL1-0220-XXX-200	9420	21.25	22.40	18.50	388	3 1/8	2 1/8
SDL1-0250-XXX-200	10680	22.13	22.44	18.50	415	3 1/8	2 1/8

**Included In Price:** Suction shut-off valve • Discharge side: braze bushing • Oil injection nozzle • Integrated check valve • Discharge temperature sensor • Internal pressure relief valve • Capacity control/start unloaders

**Not included in price:**

Capacity control coils • Compressor to motor coupling kit • Application accessory Kit • ESC-201 electronic module

## Open Drive Coupling Kits (one required per compressor)

**Kit Includes:** coupling housing • coupling guard • coupling • compressor mounting bolts

Copeland Model No.	Coupling Kit
SDL1/SDM1-0084	560-0004-08/09
SDL1/SDM1-0100	560-0004-08/09
SDL1/SDM1-0118	560-0004-08/09
SDL1/SDM1-0165	560-0004-10/11
SDL1/SDM1-0192	560-0004-10/11
SDL1/SDM1-0220	560-0004-10/11
SDL1-0250	560-0004-10/11/18
SDM1-0250	560-0004-10/11/18

Coupling Kit	Motor Frame Sizes	Shaft Dia.	Shaft Lng.
560-0004-08	284TSC - 286TSC	1-5/8"	3"
560-0004-09	324TSC - 326TSC	1-7/8"	3-1/2"
560-0004-10	324TSC - 326TSC	1-7/8"	3-1/2"
560-0004-11	405TSC	2-1/8"	4"
560-0004-18	365TSC	1-7/8"	3-1/2"

# Open Drive Screw Compressor Accessories

## Seal Repair Kits

Copeland Model Number	Description	Shaft Seal Repair Kit
SDM1-0084-XXX-200	30HP MT OD SCREW	560-0004-13
SDM1-0100-XXX-200	35HP MT OD SCREW	560-0004-13
SDM1-0118-XXX-200	40HP MT OD SCREW	560-0004-13
SDM1-0165-XXX-200	60HP MT OD SCREW	560-0004-12
SDM1-0192-XXX-200	70HP MT OD SCREW	560-0004-12
SDM1-0220-XXX-200	80HP MT OD SCREW	560-0004-12
SDM1-0250-XXX-200	90HP MT OD SCREW	560-0004-12
SDL1-0084-XXX-200	20HP LT OD SCREW	560-0004-13
SDL1-0100-XXX-200	25HP LT OD SCREW	560-0004-13
SDL1-0118-XXX-200	30HP LT OD SCREW	560-0004-13
SDL1-0165-XXX-200	50HP LT OD SCREW	560-0004-12
SDL1-0192-XXX-200	60HP LT OD SCREW	560-0004-12
SDL1-0220-XXX-200	70HP LT OD SCREW	560-0004-12
SDL1-0250-XXX-200	75HP LT OD SCREW	560-0004-12

## Required Application Accessories

Model Number	Description	Accessory Kit 115V(230V)	Module	Coupling Kit **
SDM1-0084-XXX-200	30HP MT OD SCREW	560-0001-00(01)	560-0002-02	560-0004-08(09)
SDM1-0100-XXX-200	35HP MT OD SCREW	560-0001-00(01)	560-0002-02	560-0004-08(09)
SDM1-0118-XXX-200	40HP MT OD SCREW	560-0001-00(01)	560-0002-02	560-0004-08(09)
SDM1-0165-XXX-200	60HP MT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11)
SDM1-0192-XXX-200	70HP MT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11)
SDM1-0220-XXX-200	80HP MT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11, 18)
SDM1-0250-XXX-200	90HP MT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11, 18)
SDL1-0084-XXX-200	20HPLT OD SCREW	560-0001-00(01)	560-0002-02	560-0004-08(09)
SDL1-0100-XXX-200	25HPLT OD SCREW	560-0001-00(01)	560-0002-02	560-0004-08(09)
SDL1-0118-XXX-200	30HPLT OD SCREW	560-0001-00(01)	560-0002-02	560-0004-08(09)
SDL1-0165-XXX-200	50HPLT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11)
SDL1-0192-XXX-200	60HPLT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11)
SDL1-0220-XXX-200	70HPLT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11, 18)
SDL1-0250-XXX-200	75HPLT OD SCREW	560-0001-05(04)	560-0002-02	560-0004-10(11, 18)

**\*\* Coupling Kit Includes:**

Coupling Housing  
 Coupling Guard  
 Coupling  
 Compressor Mounting Bolts

**Note:** Contact Copeland Application Engineering for coupling kit selection assistance

**Note:** Oil Separator selection per page 5  
 One oil separator required per rack

# Screw Compressor Dimensional Summary

Standard Model	Overall Dimensions (Inches)			Mounting Dimensions (Inches)		Service Valve Dimensions (Inches)		Ship Weight (Pounds)	No. Per Skid	Dimension Drawing Number
	L	W	H	L	W	Disch.	Suct.			
SHL2-2000	29.88	17.25	15.13	15.13	10.83	1 5/8	2 1/8	366	1	497-0320-00
SHL2-2500	29.88	17.25	15.13	15.13	10.83	1 5/8	2 1/8	374	1	497-0320-00
SHL2-3000	29.88	17.25	15.13	15.13	10.83	1 5/8	2 1/8	392	1	497-0320-00
SHL1-4000	36.00	20.00	17.00	11.13	12.00	1 5/8	2 1/8	515	1	497-0321-00
SHL1-5000	36.00	20.00	17.00	11.13	12.00	1 5/8	2 1/8	524	1	497-0321-00
SHL1-6000	40.13	20.69	16.56	14.13	12.00	2 1/8	3 1/8	653	1	497-0322-00
SHL1-7000	40.13	20.69	16.56	14.13	12.00	2 1/8	3 1/8	682	1	497-0322-00
SHL1-7500	41.00	20.69	16.56	14.13	12.00	2 1/8	3 1/8	717	1	497-0323-00
SHM2-3000	29.88	17.25	15.13	15.13	10.83	1 5/8	2 1/8	375	1	497-0320-00
SHM2-3500	29.88	17.25	15.13	15.13	10.83	1 5/8	2 1/8	385	1	497-0320-00
SHM2-4000	29.88	17.25	15.13	15.13	10.83	1 5/8	2 1/8	400	1	497-0320-00
SHM1-5000	36.00	20.00	17.00	11.13	12.00	1 5/8	2 1/8	524	1	497-0321-00
SHM1-6000	36.00	20.00	17.00	11.13	12.00	1 5/8	2 1/8	541	1	497-0321-00
SHM1-7000	40.13	20.69	16.56	14.13	12.00	2 1/8	3 1/8	671	1	497-0322-00
SHM1-8000	40.13	20.69	16.56	14.13	12.00	2 1/8	3 1/8	691	1	497-0322-00
SHM1-9000	43.00	20.69	16.56	14.13	12.00	2 1/8	3 1/8	739	1	497-0324-00
SCH2-5000	43.57	22.13	22.44	18.00	12.00	1 5/8	2 1/8	671	1	497-0421-00
SCH2-6000	43.57	22.13	22.44	18.00	12.00	1 5/8	2 1/8	693	1	497-0421-00
SCH2-7000	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1058	1	497-0325-00
SCH2-8000	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1076	1	497-0325-00
SCH2-9000	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1091	1	497-0325-00
SCH2-11H0	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1749	1	497-0420-00
SCH2-12H0	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1762	1	497-0420-00
SCH2-14H0	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1784	1	497-0420-00
SCH2-18H0	72.19	27.63	33.26	31.25	17.75	3 1/8	4 1/8	2734	1	
SCH2-21H0	72.19	27.63	33.26	31.25	17.75	3 1/8	4 1/8	2778	1	
SCH2-24H0	72.19	27.63	33.26	31.25	17.75	3 1/8	4 1/8	2800	1	
SCA2-350E	43.57	22.13	22.44	18.00	12.00	1 5/8	2 1/8	671	1	497-0421-00
SCA2-400E	43.57	22.13	22.44	18.00	12.00	1 5/8	2 1/8	693	1	497-0421-00
SCA2-500E	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1058	1	497-0325-00
SCA2-600E	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1076	1	497-0325-00
SCA2-700E	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1091	1	497-0325-00
SCA2-801E	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1076	1	497-0325-00
SCA2-901E	52.94	22.25	24.19	17.94	12.00	2 1/8	3 1/8	1091	1	497-0325-00
SCA2-800E	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1749	1	497-0420-00
SCA2-900E	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1762	1	497-0420-00
SCA2-11HE	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1784	1	497-0420-00
SCA2-12HE	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1786	1	497-0420-00
SCA2-14HE	60.63	27.80	29.19	27.38	15.75	3 1/8	4 1/8	1808	1	497-0420-00
SCA2-16HE	72.19	27.63	33.26	31.25	17.75	4 1/8	5	2712	1	
SCA2-18HE	72.19	27.63	33.26	31.25	17.75	4 1/8	5	2724	1	
SCA2-21HE	72.19	27.63	33.26	31.25	17.75	4 1/8	5	2867	1	
SCA2-24HE	72.19	27.63	33.26	31.25	17.75	4 1/8	5	2911	1	

**Notes:**

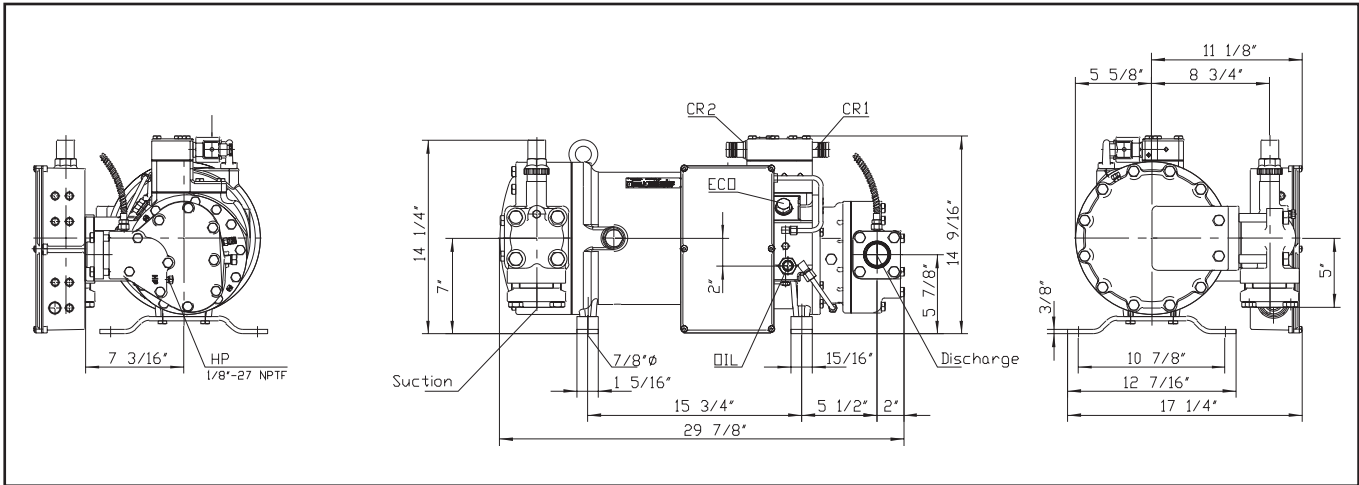
Compressors listed in U.L. File No. SA 7129

The following models require a U.L. Recognized Overload Relay:

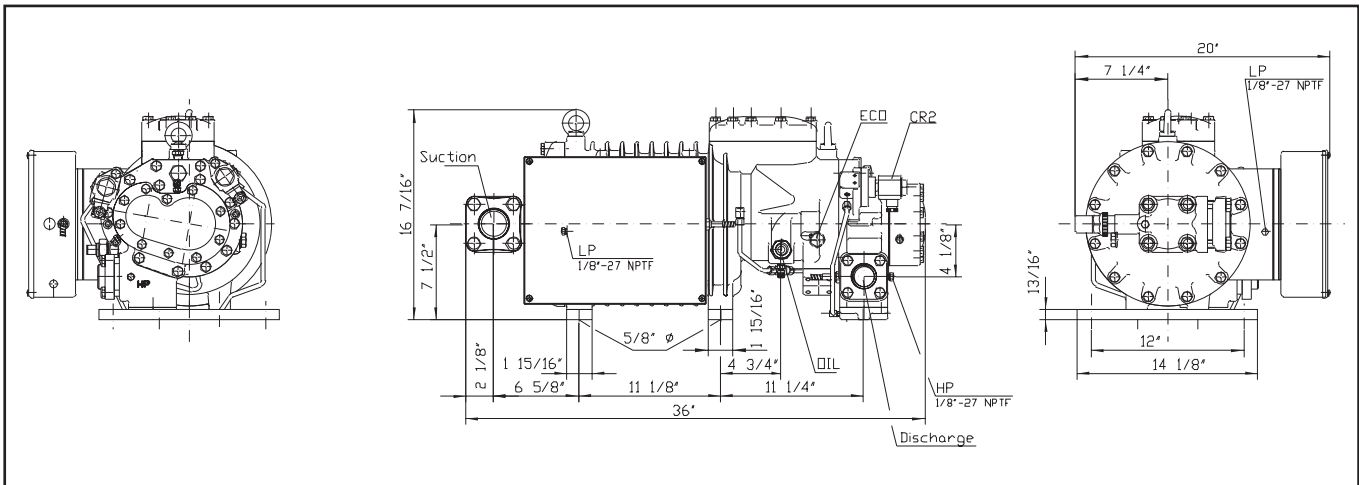
- SHL – 40,50,60,70,75
- SHM – 50,60,70,80,90
- SCH – 50,60,70,80,90,110,125,140, 180, 210, 240
- SCA – 35, 40, 50,60,70,80,90,110,125,140, 160, 180, 210

# Copeland Screw Dimensional Drawings

## Low/Medium Temperature



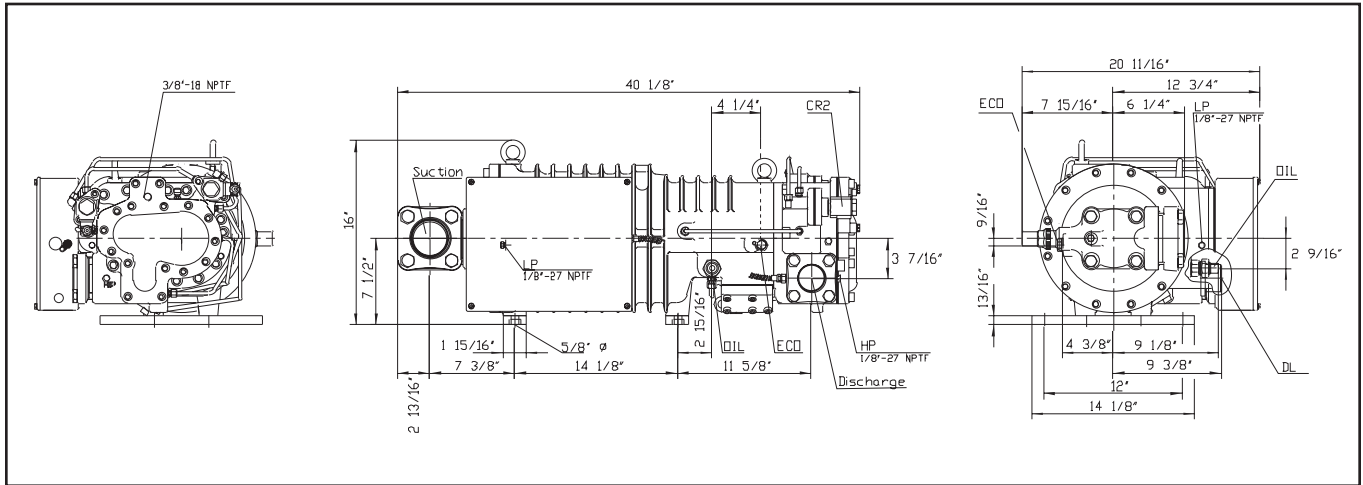
**SHM2-3000/3500/4000, SHL2-2000/2500/3000**



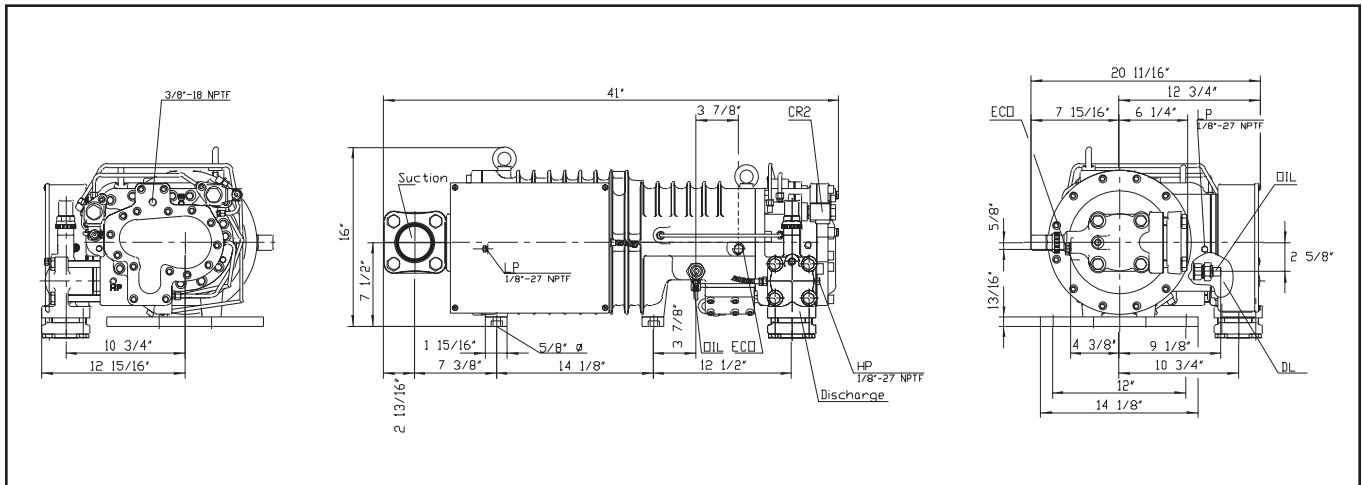
**SHMI-5000/6000, SHLI-4000/5000**

# Copeland Screw Dimensional Drawings

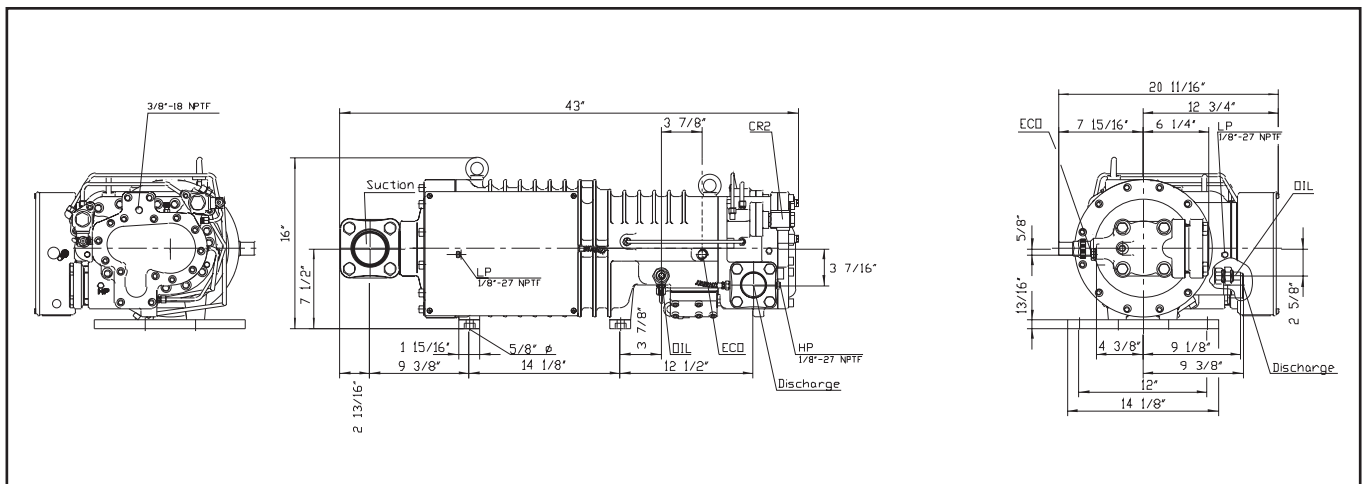
## Low/Medium Temperature



**SHMI-7000/8000, SHLI-6000/7000**



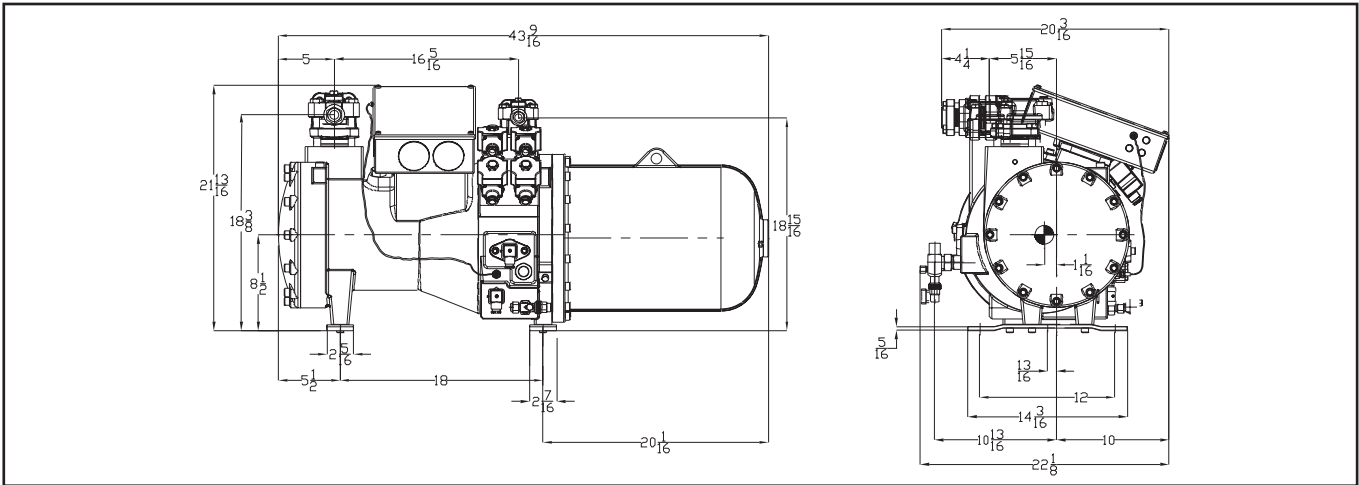
**SHLI-7500**



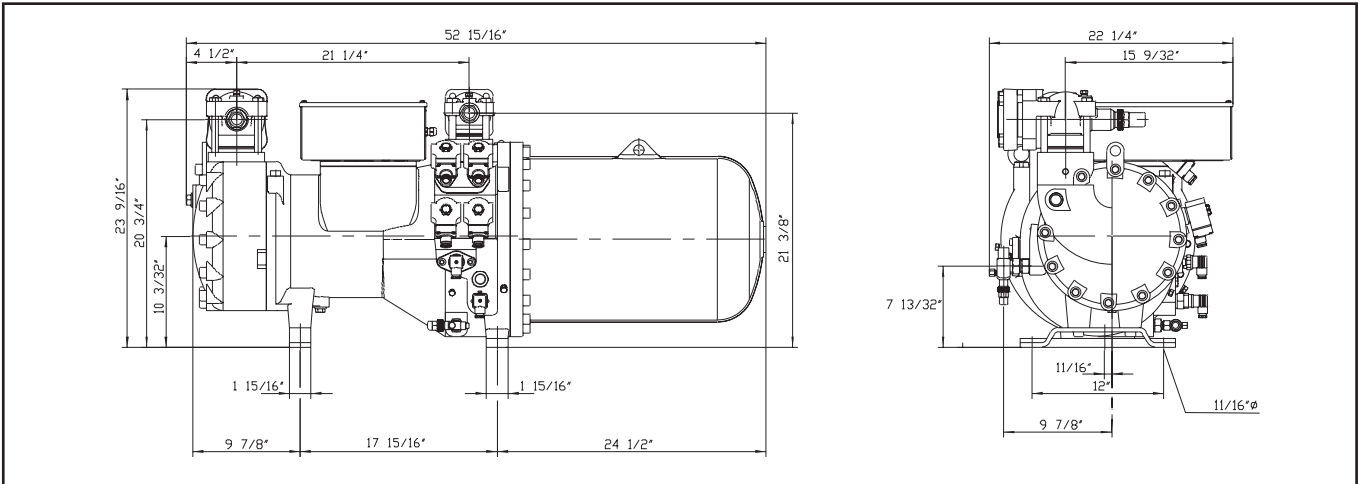
**SHMI-9000**

# Copeland Screw Dimensional Drawings

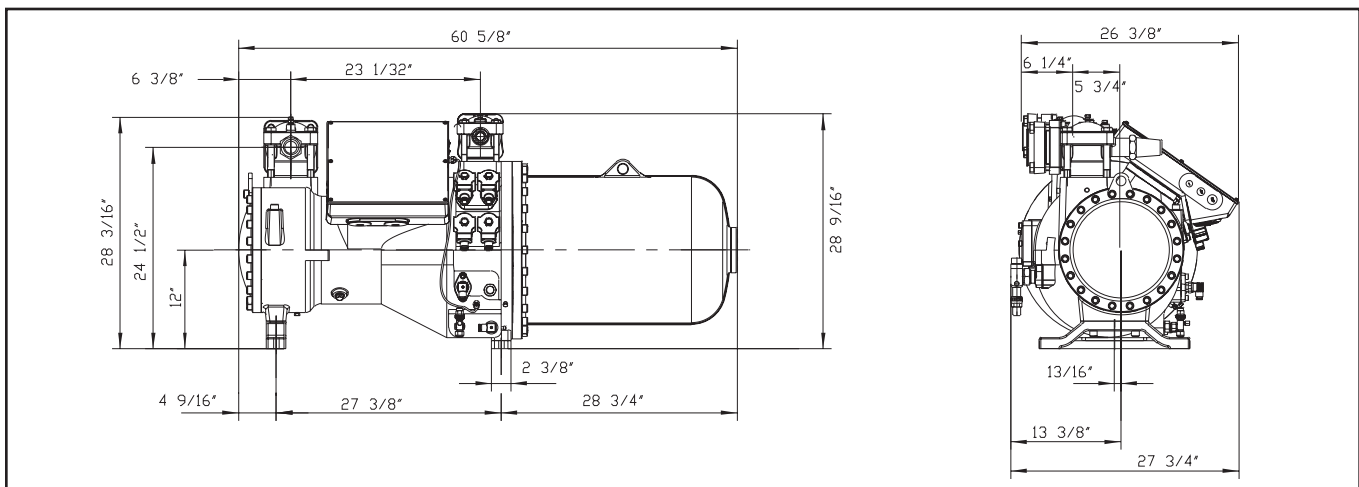
## High Temperature



**SCH2-5000/6000**  
**SCA2-350E/400E**



**SCH2-7000/8000/9000**  
**SCA2-500E/600E/700E/801E/901E**

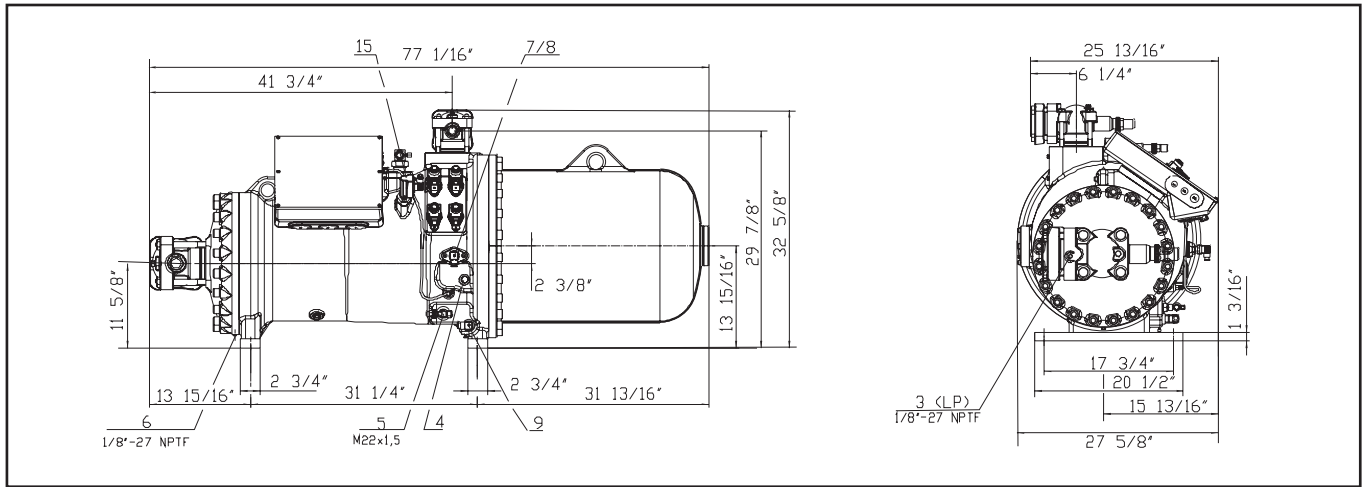


**SCH2-11HO/12HO/14HO**  
**SCA2-800E/900E/11HE**



# Copeland Screw Dimensional Drawings

## High Temperature



**SCH2-18HO/21HO/2HO**  
**SCA2-16HE/18HE/21HE/24HE**

# Copeland Screw Nomenclature

**Screw Compressor Model Type**

**Body Type**

Code	Description
C	Compact Semi-hermetic
H	Semi-hermetic
D	Open Drive

**Compressor Motor Types**

Phase	Description	Code
3	6 Lead Part Winding or Across The Line—except 575 V Misc. 3 Phase	F T
3	• Single voltage 3 lead • Dual voltage 9 lead • 575 V 60 H/500 V 50 HZ Under 20 H.P. 3 lead	
3	Star (WYE) Delta	E

**Product Variations Numbers will be assigned as follows:**

1. Number - 200 indicates a STANDARD Compressor and Component Parts B/M and model no.
2. Number - 800 indicates a STANDARD replacement compressor and component parts B/M and model no.

**S H L 1 - 4 0 0 0 - F W D - 2 0 0**

**Contour Screw Compressor**

**Temperature Application**

H = High  
M = Medium  
L = Low  
A = Optimized For R-134a (COMPACT ONLY)

**Model Variation**

A number assigned to indicate major variations within any one family series.

**Comp. Motor Rating**

Nominal (HP)	Code
20	200
25	250
30	300
35	350
40	400
50	500
60	600
70	700
75	750
80	800
90	900
110	11H
125	12H
140	14H
160	16H
180	18H
210	21H
240	24H

**Lubricant**

0 = R22  
E = HFC

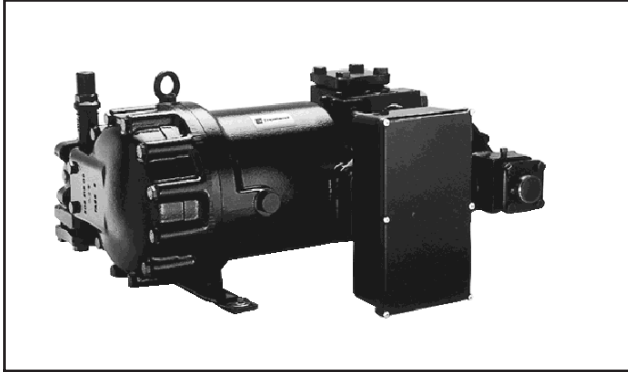
**Electrical Codes**

60 Hz.	50 Hz.	Code
208/230-3	200/220-3	C
460-3	380/420-3	D
575-3	550-3	E
208/230/460-3	200/380/400-3	K

**Compressor Motor Protection**

Type Protection	Code
Internal Thermal Protectors— Electronic Sensors; and Control Module External	
Use with Contactor	W





**SHL/SHM**



**SDM/SDL**



**SCH2/SCA2**