

## “S” Series Scroll Enclosure Engineering Specification

### General Provisions:

As a world class manufacturer of oil-less scroll compressors, Coaire’s scroll enclosures are designed and constructed for optimal performance and clean, oil-less compressed air. The scroll enclosures shall be manufactured and assembled in an ISO 9001 facility.

### Scroll Enclosure:

The scroll enclosure shall include all necessary equipment for the unit to operate and function properly without the need for field assembly. The unit shall have single point air discharge and electrical connections. Each compressor / motor module shall be capable of being individual electrically and mechanically isolated to facilitate easy and safe maintenance while allowing only (1) compressor to be shut down. Enclosure systems that do not have individual mechanical and electrical compressor isolation shall not be accepted. The enclosure shall be constructed of a heavy steel panel structure on a steel base. The enclosure shall be powder coated to ensure robust durability. The enclosure panels shall be able to be easily removed for maintenance. The panels shall include proper venting to facilitate heat dissipation. Inside each enclosure shall be a fan to ensure proper air flow inside of the enclosure. Units that do not include a fan in the enclosure shall not be accepted.

### Scroll Compressor / Motor Assembly:

Each compressor shall be an air cooled, single stage, oil-less scroll compressor and shall operate without the need for intake or exhaust valves. Each compressor shall be belt driven utilizing a pivot motor base for ease of belt adjusting. The discharge air after cooler and connecting fittings shall be made with non-ferrous materials. After cooler assemblies made with ferrous materials shall not be accepted. The compressors shall utilize external bearings which can be greased. Bearing shall be greased every 10,000 hours (5,000 hours for the high pressure scrolls). Tip seals shall be made of a PTFE composite material and rated for 10,000 hours (5,000 hours for the high pressure scrolls). Each compressor shall have an integral cooling fan. Each compressor shall also include a 10 micron inlet filter.

Each compressor shall be driven by a NEMA rated, 1750 RPM, ODP motor. Motors shall be EISA compliant. Each compressor / motor assembly shall utilize an OSHA compliant belt guard. Units that do not include OSHA compliant belt guards for each compressor / motor assembly shall not be accepted.

### Electrical Controls:

Each enclosure shall include a soft-touch microprocessor controller. Electrical components shall be UL listed.

3 & 5 horsepower enclosures shall include on / off push buttons, power on, run, high temperature, and alarms lights. An hour meter and pressure gauge shall also be included.

8 through 50 horsepower enclosures shall include a digital display screen with a start / stop control buttons, power “on” and “run” lights, digital pressure, hour, and temperature readings. The unit shall shut down upon high air temperature and over current draw. The panel shall display error codes for various alarm conditions as well as a time indication when the alarm occurred. The panel shall include a dry contact for remote alarm wiring.

### Low Pressure Units

Model	HP	Outlet Connection	SCFM @ 100psi	Max Pressure	dB(A)	L(Inch)	W(inch)	H(Inch)	Net Weight (lbs)
CSOF-S3PL	3	1/2" npt	8.5	115psi	49	21.7	24.4	30.5	255
CSOF-S5PL	5	1/2" npt	14.1	115psi	50	21.7	24.4	30.5	265
CSOF-S8PL	8	1" npt	22.6	115psi	52	25.2	46.5	40.2	536
CSOF-S10PL	10	1" npt	28.2	115psi	53	25.2	46.5	40.2	587
CSOF-S15PL	15	1" npt	42.3	115psi	56	29.5	50.4	49.6	1003
CSOF-S20PL	20	1" npt	56.4	115psi	58	29.5	50.4	64	1169
CSOF-S30PL	30	1" npt	84.6	115psi	62	63	50.4	49.6	1985
CSOF-S40PL	40	1" npt	112.8	115psi	63	63	50.4	64	2205
CSOF-S50PL	50	1" npt	141	115psi	65	63	50.4	80.3	2645

### High Pressure Units

Model	HP	Outlet Connection	SCFM @ 135psi	Max Pressure	dB(A)	L(Inch)	W(inch)	H(Inch)	Net Weight (lbs)
CSOF-S3PH	3	1/2" npt	7.2	140psi	49	21.7	24.4	30.5	255
CSOF-S5PH	5	1/2" npt	12	140psi	50	21.7	24.4	30.5	265
CSOF-S8PH	8	1" npt	19.2	140psi	52	25.2	46.5	40.2	536
CSOF-S10PH	10	1" npt	24	140psi	53	25.2	46.5	40.2	587
CSOF-S15PH	15	1" npt	36	140psi	56	29.5	50.4	49.6	1003
CSOF-S20PH	20	1" npt	48	140psi	58	29.5	50.4	64	1169
CSOF-S30PH	30	1" npt	72	140psi	62	63	50.4	49.6	1985
CSOF-S40PH	40	1" npt	96	140psi	63	63	50.4	64	2205
CSOF-S50PH	50	1" npt	120	140psi	65	63	50.4	80.3	2645