

 **INDUSTRIAL PRODUCT LINE**

Open drive screw compressor package for ammonia refrigerant for a wide range of applications in the industry.

BENEFITS:

- Optimal energy efficiency.
- Reliable.
- Long lifetime.
- Cost effective.
- Low operating costs.
- Compact and easy to install.
- Direct coupled Motor-Compressor Flange. (Alignment not required)
- No oil pump required (except for Booster).

STANDARD FEATURES:

- High-efficiency Bitzer Screw Compressor twin rotor OS-53/74 Series.
- Automatic start unloading.
- Capacity control via hydraulically operated Step Loader (OS-53: 100/75%; OS-74: 100/75/50%).
- Horizontal three steps coalescent oil separator ASME certified with oil level indicator, oil level switch and oil heater.
- Complete oil management control (service valves, pre- filter, filter, flow switch, sight glass, solenoid valve).
- Combined discharge “Shut-off /check valve”.
- Suction shut-off valve.
- Built-in suction strainer for OS- 74 series.
- Oil cooling system for liquid injection or Thermosyphon for medium or low temperature respectively.
- Microprocessor control panel.
- High efficiency ODP 3500 RPM motor. Voltage: 208-230/460V, 200V, 460V or 575V.
- Refrigerant: R-717 (Ammonia).
- 2 year warranty.

OPTIONAL:

- Thermosyphon Oil cooling system for medium temperature or water or air cooled for medium or low temperature.
- 7” touch screen display panel.
- Power supply panel starter star-delta, soft starter or VFD (variable frequency drive).
- Premium efficiency motor.
- Motor: TEFC - Totally Enclosed External Fan Cooled (IP55) for indoor/outdoor operations.
- Built-in Economizer.
- Refrigerants: R-134A, R-404A, R-407A, R-407C, R-507A,R-717 (Ammonia)

Powered By:



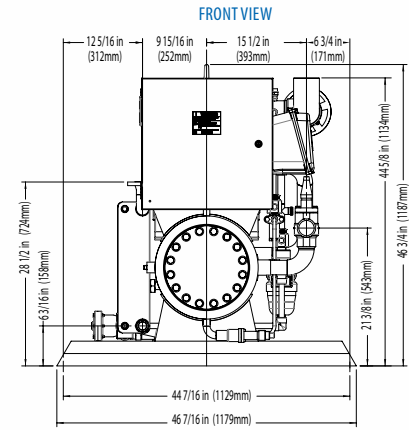
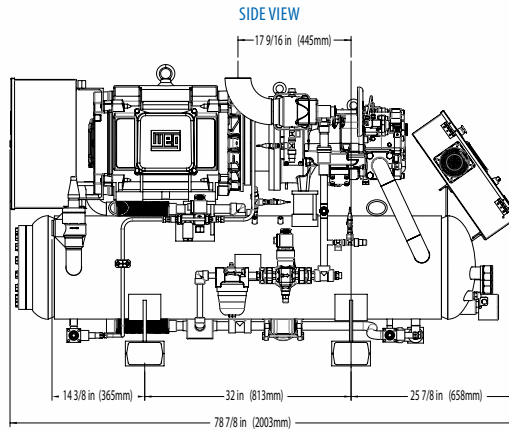
FRICON FSSC SERIES — SMALL SCREW COMPRESSOR



30 HP TO 100 HP — OPEN DRIVE SCREW COMPRESSOR PACKAGE — BITZER OS 53/74
TR (TONS OF REFRIGERATION) CAPACITIES WITH AMMONIA (R-717)

MODEL	CHARACTERISTICS				"TR" Evaporation capacity @ Different "SST" Saturated suction temperature									Physical Characteristics					
	Size / Application			BITZER COMPRESSOR MODEL OS-53 / 74	SWEPT. CFM	PERFORMANCE TR Evap. Capacity / HP Power Input	Without Eco									Packed Dimensions			Shipping Weight Lb (kg)
	+35F to +6F SST	5F to -19F SST	-20F to -40F SST				"M" Medium Temp			"L" Medium Temp			"XL" Medium Temp			Width	Length	Height	
							+35F	+20F	+15F	+5F	+0F	-15F	-20F	-25F	-40F	Inch (mm)	Inch (mm)	Inch (mm)	
				+2C	-7C	-10C	-15C	-18C	-26C	-29C	-32C	-40C							
FSSC-"L" (Low temperature application) + 95F SDT	0400-M	0400-L	0300-XL	5351 @ 3500 RPM	71	TR Evap. Cap.	34.42	24.75	22.08	22.25	19.17	13.27	11.61	10.08	6.21	37 1/8 (943)	78 (1981)	41 5/8 (1056)	1378 (626)
						HP P Input	35.00	31.11	29.90	34.73	32.99	28.43	26.95	25.48	21.08				
	0500-M	0500-L	0400-XL	5361 @ 3500 RPM	84	TR Evap. Cap.	40.08	28.92	25.75	24.92	22.25	15.48	13.54	11.77	7.26	37 1/8 (943)	78 (1981)	41 5/8 (1056)	1294 (588)
						HP P Input	41.30	36.74	35.28	40.23	38.22	32.99	31.25	29.64	24.53				
	0750-M	0750-L	0600-XL	7452 @ 3500 RPM	137	TR Evap. Cap.	69.33	50.00	44.50	40.17	35.67	24.08	20.92	18.00	10.89	37 1/8 (943)	78 (1981)	46 3/4 (1187)	1830 (832)
						HP P Input	69.06	65.17	63.70	64.50	62.09	55.92	54.18	52.43	47.47				
	0100-M	0760-L	0750-XL	7462 @ 3500 RPM	157	TR Evap. Cap.	80.75	59.75	53.58	46.92	41.75	28.50	24.83	21.42	12.84	37 1/8 (943)	78 (1981)	50 1/4 (1276)	1830 (832)
						HP P Input	78.18	74.56	72.95	74.16	70.81	61.96	59.41	593.54	51.90				
	1100-M	1000-L	0760-XL	7472 @ 3500 RPM	178	TR Evap. Cap.	86.92	65.33	58.75	51.08	45.58	31.42	27.33	23.67	14.13	37 1/8 (943)	78 (1981)	50 1/4 (1276)	1960 (891)
						HP P Input	83.68	80.33	78.58	80.33	76.44	64.10	62.36	59.41	52.84				

- Capacities for "M" application (Medium temperature) are calculated with liquid injection oil cooling and "L" and "XL" (Low temperature) with water or Thermosyphon cooling, 6 °F and 95F+ liquid sub-cooling SDT saturated discharge temperature.
- TR Evap. Cap. = Evaporation capacity in TR (ton of refrigeration)
- HP P Input = BHP (Brake horse power)
- Economizer operation calculated with DX heat exchangers plate, (10°F Superheat and 10°F DT)
- Size = Standard motor capacity for each model.
- "XL" series motor capacity only for application under -20F SST. The evaporation capacity over -20F SST will be reduced approx. 17% +/-2% because the economizer will automatically stop working in order to avoid overload on the motor.
- Consult the Bitzer software selection to find other operation point.



NOMENCLATURE

