

ST2000 AIR STARTER ENGINEERING DATA SPECIFICATION SHEET**GENERAL DATA**

Maximum HP	70 HP	(52 kW)
Maximum Breakaway Torque	347 ft-Lb	(469 Nm)
Maximum Flow	1290 SCFM	(609 L/s)
Maximum Operating Pressure	150 PSIG	(10.3 barg)
Minimum Operating Pressure	30 PSIG	(2.1 barg)
Speed Range	0-4000 RPM	
Pinion Rotation	Right or Left Hand	
Sealed for use in Gas and Air applications	Yes	
Engagement type	Pre-engaged	
Flange type	SAE 3	

OPERATING TEMPERATURE DATA

Maximum Ambient Temperature	200 F	(93 C)
Minimum Ambient Temperature	-40 F	(-40 C)

LUBRICATION DATA

Planetary Gear Oil	Automatic transmission fluid	
Amount of Gear Oil	5 oz.	(150 mL)

MANUFACTURING

Location	Southern Pines, NC USA	
Quality	ISO 9001:2015	

PIPING CONNECTIONS

Air Inlet	1 ½" NPT/SAE J518 Code 61 Flange	
Air Outlet	3" NPT	
Engagement Inlet	¼" NPT	
Engagement Outlet	¼" NPT	

DIMENSIONS

Length/Width/Height	18.7" x 6.25" x 6.25" (476 mm x 160 mm x 160 mm)	
Weight (radial exhaust)	40 Lbs	(18 kg)
Weight (piped exhaust)	44 Lbs	(20 kg)

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MATERIALS OF CONSTRUCTION

Inlet Cover	Aluminum Alloy
Motor Housing	Aluminum Alloy
Gear Case	Aluminum Alloy
Planetary Gears	Alloy Steel
Drive Housing	Aluminum Alloy
Turbine Rotor	Aluminum Alloy
Turbine Nozzle	Aluminum Alloy

RECOMMENDED ACCESSORIES

Solenoid Valve	150BMP-1051B	12 Volt
	150BMP-2451B	24 Volt
Push Button	SMB-618	
Relay Valve	SRV150	1 ½" NPT

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Performance Data

ST2060 B Ratio

Pressure - PSIG (Bar)	Breakaway Torque - lbf-ft (Nm)	Speed @ Max. Power - rpm	Max. Power - HP (Kw)	Flow @ Max. Power - scfm (L/s)	Weight Lbs
30 (2.1)	50 (68)	1560	8 (6.0)	370 (175)	40
60 (4.1)	120 (163)	2000	23 (17.2)	590 (278)	40
90 (6.2)	190 (258)	2270	40 (29.8)	820 (387)	40
120 (8.3)	257 (348)	2460	55(41.0)	1050 (496)	40
150 (10.3)	321 (435)	2540	70 (52.2)	1290 (609)	40

ST2099 B Ratio

Pressure - PSIG (Bar)	Breakaway Torque - lbf-ft (Nm)	Speed @ Max. Power - rpm	Max. Power - HP (Kw)	Flow @ Max. Power - scfm (L/s)	Weight Lbs
30 (2.1)	82 (111)	1425	13 (9.7)	540 (255)	44
60 (4.1)	200 (271)	1850	36 (26.8)	890 (420)	44
90 (6.2)	347 (470)	2060	68 (50.7)	1240 (585)	44

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General Arrangement Drawing

Mounting Dimensions

Pre-Engaged B Ratio:

Dual Dimension	(MM)	(IN)
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- Note:
1. For orientation information, see starter orientation method section.
 2. Starter weight: Approximately 40 Lb.
 3. Apply pipe thread sealant (IR SMB-441 or equivalent) on all pipe connections to prevent leaks.
 4. *For natural gas operation, piped exhaust must be used and drive housing vent plug removed. The drive housing must be vented to a safe location not interconnected with any other exhaust lines which may introduce a back pressure in the drive housing.

