



HIGH PERFORMANCE FROM START TO FINISH



ST1000M SERIES AIR STARTER

INTRODUCTION

Listening | Learning | Delivering

As we partnered with our customers to develop starting platforms for large industrial engines, we received valuable insights into evolving needs—especially from OEMs and field users.

Key themes emerged:

- Drop-in Compatibility with TDI starters
- Energy efficiency
- Durability in contaminated environments

These priorities shaped the development of the ST1000M Series, engineered to deliver world-class performance in all these areas. Whether it's a remote oil field or a high-demand industrial site, the ST1000M is built to start strong and stay reliable.



Features & Benefits

2 Sets of Control Ports

Dual control port configuration for air input. Enhances installation flexibility and simplifies integration into various engine setups.

Integral Slip Clutch Design

Built-in clutch eliminates need for soft-start valves or extra controls. Reduces shock-loading and protects the starter and engine during cranking.

Proprietary Wear-Resistant Coating

Specialized coating on internal components. Provides superior resistance to contamination, extending service life in harsh environments.

Patent Solid Aluminum Rotor Design

Enable reliable operation in harsh contaminated environments by providing an open flow path for particles.

Patent Fully Supported High-Speed Rotor

Extends bearing life by minimizing deflection and ensure concentric running

Patented Slip-Fit Modular Motor Design

Rotor supported at multiple points to maintain concentric running. Minimizes deflection, extends bearing life, and outperforms cantilevered designs in durability.



ST1000M SERIES Air Starter

BUILT FOR HARSH CONDITIONS

Patented solid aluminum motor ensures reliable operation in harsh environments & ideal for rugged field applications.

EXTENDED CRANKING CAPABILITY

Robust gearing supports crank cycles up to 30 sec, providing dependable starts for large engines.

PRECISION ROTOR ENGINEERING

Fully-supported high-speed rotor minimizes deflection & ensures concentric running—extending bearing life & outperforming cantilever designs.

SUPERIOR STARTING TORQUE

Delivers 19% more breakaway torque, giving engines the extra push needed to start reliably in high-resistance scenarios.

MORE POWER OUTPUT

With 12% more horsepower, the ST1000M ensures faster starts and improved operational performance.

EFFICIENT AIR USAGE

Consumes 23% less air, reducing energy costs and improving system efficiency—more power with less input.

PERFORMANCE SPECIFICATIONS

Pressure psi (bar)	Breakaway Torque ft-lb (Nm)	Speed @ Max Power rpm	Max Power HP (kW)	Flow @ Max HP scfm (L/s)
ST1060 B RATIO				
30 (2)	53 (71)	1175	7 (5)	370 (175)
60 (4)	115 (156)	1550	20 (15)	590 (278)
90 (6)	220 (298)	1780	39 (29)	820 (387)
120 (8)	295 (400)	1900	53 (39)	1050 (496)
150 (10)	353 (478)	2050	70 (52)	1290 (609)
ST1099 B RATIO				
30 (2)	82 (111)	1425	13 (9.7)	540 (255)
60 (4)	200 (271)	1850	36 (26.8)	890 (420)
90 (6)	347 (470)	2060	68 (50.7)	1240 (585)
ST1060 C RATIO				
30 (2)	62 (84)	1025	7 (5)	370 (175)
60 (4)	143 (194)	1350	20 (15)	590 (278)
90 (6)	256 (347)	1515	39 (29)	820 (387)
120 (8)	342 (463)	1675	53 (39)	1050 (496)
150 (10)	409 (554)	1780	70 (52)	1290 (609)
ST1099 C RATIO				
30 (2)	82 (111)	1425	13 (9.7)	540 (255)
60 (4)	200 (271)	1850	36 (26.8)	890 (420)
90 (6)	347 (470)	2060	68 (50.7)	1240 (585)
ST1060 D RATIO				
30 (2)	85 (115)	765	7 (5)	370 (175)
60 (4)	195 (264)	985	20 (15)	590 (278)
90 (6)	326 (442)	1125	39 (29)	820 (387)
120 (8)	462 (626)	1205	53 (39)	1050 (496)
150 (10)	557 (755)	1650	70 (52)	1290 (609)
ST1099 D RATIO				
30 (2)	132 (179)	900	13 (10)	540 (255)
60 (4)	200 (271)	1850	36 (27)	890 (420)
90 (6)	347 (470)	2060	68 (51)	1240 (585)



Learn more at www.ingersollrand.com     

Ingersoll Rand (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency.