

TURBOSTART™ 56 Series Delivers Reliable Gas Turbine Engine Starts in Your Most Challenging Environments



Derived from Aerospace. Designed for Industry.

TurboStart 56 Series gas turbine air starters employ TDI's extensive background in the design and manufacture of jet engine simulators. The result is a line of high quality turbine air starters derived from aerospace technology, but designed specifically for the challenges of an industrial gas turbine engine environment.

Do You Really Need FAA Approval for Your Stationary Gas Turbine Engine Starter?

Aeroderivative starters cost significantly more because they must meet stringent FAA approval specifications for flight.

But do you really need FAA approval for a stationary gas turbine engine starter? Instead of focusing on FAA requirements, TDI engineers went to work designing fewer moving parts to improve reliability, and improving ways to make the starter more resistant to contaminants.

Open Gas Path Design Allows Contaminants to Pass Right Through

TurboStart's unique open gas path design allows contaminants like moisture, rust, pipe scale, dirty gas/air and microsand to pass-through the motor, minimizing the effects that lead to costly downtime.

TurboStart Sprag Clutch: Even Torque Distribution

TurboStart's unique Sprag Clutch evenly distributes torque to 22 separate points rather than just three found on most pawl and ratchet clutches. This eliminates the need for sophisticated controls required for precise ramping speeds. More importantly, it allows full-crank starting and a simpler and smoother engagement. The multiple contact points also spread the "wear" on the clutch providing longer life and greater reliability of the starter.



22 contact points

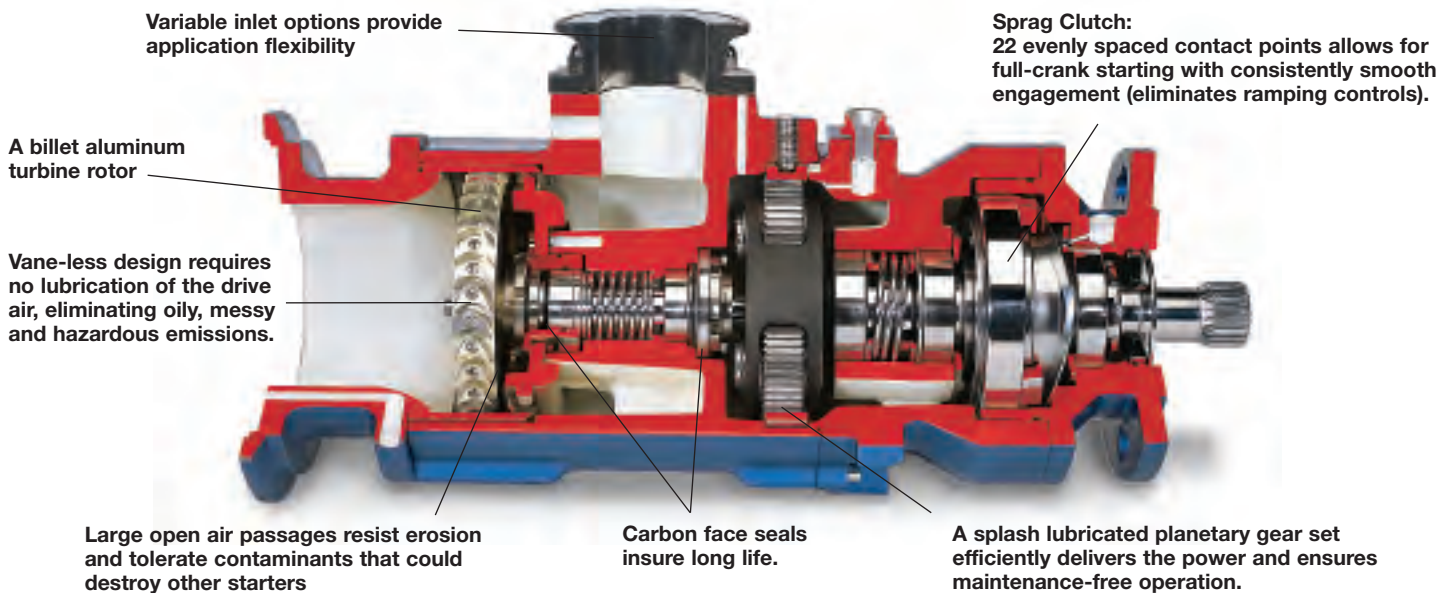


TDI
TECH DEVELOPMENT

ANYTHING LESS THAN A
TURBOTWIN IS A COMPROMISE.



TURBOSTART™ 56 Series Gas Turbine Air Starters



All TurboStart 56 Series models provide a durable and reliable solution for starting your stationary gas turbine engines. TurboStart provides aerospace quality for an industrial price. Compare TurboStart features and performance, and you'll find no one provides more value in gas turbine engine starting.

- Proprietary Sprag Clutch
- Single Planetary Gear
- No Pre-Lubricated Drive Air
- Fewer Moving Parts
- Tolerance to Contaminants

Basic Specifications

Power: 90-210 HP

Weight: 48 lbs. (21.8 Kg)

Air/Gas Supply: Compressed Air or Natural Gas

Engines: See Table for matching engines and 56 models

| MANUFACTURER | ENGINE (Model) | TDI PART NUMBER | REMARKS | MOUNT | SPLINE PITCH |
|------------------|--|--|--|--|---|
| ALLISON | 570 KA 501 KB 501 KC | 56B-1021L 5-51680-021 56K-4021L | Inst. on Gearbox Pad | MS3332-2 SAE C AND20002-XII | 20/40 SAE C 20/30 |
| DRESSER CLARK | DC-990 | 56B-2021L | | MS3332-2 | 20/40 |
| DRESSER-RAND | DR-990 DJ-50 | 56B-2021L 56B-2021L | | MS3332-2 MS3332-2 | 20/40 20/40 |
| GENERAL ELECTRIC | LM500 LM1600 LM2500 | 56B-1021L 56G-2021L-000-0-75 56G-3021L-000-0-75 | Custom Custom | MS3332-2 Special Special | 20/40 16/32 16/32 |
| KAWASAKI | PU2500 to PU4000 | 5-51250-021-6-20 5-51250-021-6-21 5-51250-021-6-22 | | SAE C | |
| KONGSBERG | KG2 KG3 | 5-51255-021-0-02 5-51650-021-2-00 | Custom | SAE C SAE C | SAE C |
| PRATT & WHITNEY | GG3 & GG4 FT4, FT8 | 56A-1121L-200-3 56A-1121L-206-3 56A-1121L-200-3 56A-1121L-206-3 | Air Use Natural Gas Air Use Natural Gas | AND20002-XII AND20002-XII | 20/30 20/30 |
| ROLLS ROYCE | AVON SPEY | 56A-1121L 56A-1121L-001-0-09 | Special w/ Speed P/U | AND20002-XII AND20002-XII | 20/30 20/30 |
| SOLAR | SATURN MARKI or MARKII CENTAUR TAURUS CENTAUR TAURUS | 56S-2007L 56S-2001L T106-60006-MSL-1 T112-60057-CSL-9E T115-60057-CSL-9E T121-60057-CSL-9E T112-60069-CSL-9E T115-60069-CSL-9E T121-60069-CSL-9E | Std. Pres. Low Pres. Contact Factory Replaces I-R SS800 & TS700 (Square Body) Replaces I-R 201 RM (Round Body) | w/ Clutch w/ Clutch w/o Clutch Special Mount Special Mount | 20/30 Special Coupling Special Coupling |



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