SPECIFICATIONS

Displacement:	(cm3/rev)	59.8	
	(in3/rev)	3.65	
Motor operating speed (rpm):	maximum intermittent	5600	
	maximum continuous	4300	
	minimum continuous	50	
Max. pump self-priming speed (rpm):		2350	
Torque at (1458 psi) 100 bar:	(Nm)	95	
	(lb. ft.)	70	
Motor Input flow		**Intermittent**	**Continuous**
Max intermittent (l/min)		335	257
(gpm)		88.5	67.9
Maximum Output Power		**Intermittent**	**Continuous**
(Kw)		175	110
(hp)		235	150
Maximum Operating Pressure		**Intermittent**	**Continuous**
(bar)		480	420
(psi)		7000	6000
Max. Case pressure at 1500 rpm			
(bar)		12	
(psi)		175	
Main circuit temperature, max		**Max**	**Min**
(°C)		80	–40
(°F)		175	–40
Fluid viscosity		**Maximum**	**Minimum**
(mm2/s)		1000	8
(SUS)		5000	58
Fluid contamination level (ISO code 4406)		18/13	
Mass Moment of Inertia			
(kg m2)		5.0	
(lb. ft. s2)		3.7	
Weight		**(Motor only)**	**(Starter)**
(kg)		21	30
(lb.)		46	67

TDI manufactures more than 15 different turbine air motors for aerospace R&D applications.

Hydraulic Starting of Gas Turbine Engines—Now with TDI's Legendary Front End Reliability

Sometimes pneumatic starting of gas turbine engines is not feasible. Marine and mobile applications are typical examples where hydraulic starters are a preferred solution because of space limitations and starter supply restrictions. For these situations, TDI offers a wide variety of hydraulic starter solutions featuring its highly reliable sprag clutch and front end design.

TDI hydraulic starters are field-proven replacements for a wide variety of gas turbine engines including GE LM 2500s, Pratt & Whitney FT4s, Dresser Rand DR 990s, Rolls Royce, Solar, Allison, and others. The robust construction, long life and superior front end design make TDI the preferred hydraulic retrofit for critical reliability environments. And TDI's sprag clutch provides unequaled load transfer from the starter to the frame, promoting better shaft alignment and reduced wear on gear box couplings.

Well-thought-out design – TDI hydraulic starters are very compact. We understand the space limitations of hydraulic environments. The 56H, for example is only 67 lbs. (30 Kg) replacing starters weighing upwards of 80 lbs. TDI starters run on a wide range of commercial and military fluids. They can be used on both continuous or intermittent applications. And other than the sprag clutch, all motor parts are self-lubricated for reduced maintenance.

Standard Components. Custom Hydraulic Starting Solutions. – TDI's hydraulic starter design is based on its extensive line of pneumatic gas turbine starters to provide custom hydraulic starting solutions with a price and delivery schedule similar to "off-the-shelf" starters. Using its wide array of stardard output splines, mounting pads, and gear ratios, TDI manufactures engine / starter interface configurations that are matched to your application. And because the components are "standard", the price is surprisingly low.