# INGERSOLL-RAND.

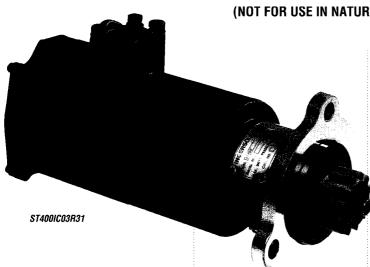
**ST400 Systems for Industrial and Marine Applications** 



INGERSOLL-RAND
PRODUCTION EQUIPMENT

## The New Phoenix ST400 Air Starting System

(NOT FOR USE IN NATURAL GAS APPLICATIONS)



#### **Features**

- Turbine wheel speed management without the use of external or internal shut off devices
- · Starter requires no external lubrication
- One hose hook-up, 1", NPT inlet
- No muffler required
- · Weighs just 23 lbs., measures only 12.5" long
- · Infinitely indexable flange for easy installation and orientation changes

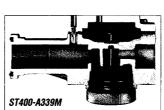
- mechanism extends ring gear life

Patented pre-engagement

- · Special versions are available for hazardous environments
- · Easily adaptable to international applications with metric pinions and flanges
- · Typical applications include: marine, generator sets, fire pumps, small compressors, and mining

#### Simplified Manual Valve

- · Diaphragm valve design helps eliminate freeze-up and improves reliability
- Powder coated exterior resists corrosion and adds durability
- O-ring sealed connections eliminate air leaks at the valve
- Multiple NPT ports for auxiliary connections



If an electronic valve is preferred, the ST400-A339 electric valve can be specified. The traditional Ingersoll-Rand SRV100 valve can be used for manual NPT installations.



#### Air Strainers\*

The ST900-267-16 one inch strainer helps extend product life by protecting components from sludge and rust. The strainer is recommended for all ST400 industrial and marine applications.

These points are just the beginning. Your IR representative or distributor can demonstrate why the Phoenix system is the best way to start your engine.

Stall Torque, MAX Hp & SCFS			
	ST400	ST455	ST499
30 PSI	-	-	53ft-lb, 7Hp, 5SCFS
60 PSI	60ft-lb, 8Hp, 6 SCFS	82ft-lb, 11Hp, 7 SCFS	113ft-lb, 17Hp, 9 SCFS
90 PSI	90ft-lb, 14Hp, 8 SCFS	130ft-lb, 18Hp, 9 SCFS	174ft-lb, 26Hp, 13 SCFS
120 PSI	120ft-lb, 19Hp, 11 SCFS	170ft-lb, 25Hp, 12 SCFS	_
150 PSI	150ft-lb, 25Hp, 13 SCFS	-	-

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ST400 - 44% ARC (Max. 150 PSI) **ST455** – 55% ARC (Max. 120 PSI) **ST499** - 99% ARC (Max. 90 PSI)

I – 1" NPT

Z - Zinc Housing

No Letter - SAE Split Flange

C - Gear Ratio

00 - Cradle Mount R - Right Hand 31 - Pinion Code

**01** – SAE 1 Flange L - Left Hand

03 - SAE 3 Flange

#### INGERSOLL-RAND PRODUCTION EQUIPMENT

Ingersoll-Rand Company **Engine Starting Systems** P.O. Box 8000 Southern Pines, NC 28388-8000 (910) 692-8700

\* The warranty does not apply to ST400 series starters which do not have an ST900-267 air strainer installed, or product that has been misused or abused, improperly maintained by the user or where the malfunction or defect can be attributed to the use of non-genuine IR parts.

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