INGERSOLL-RAND
ST400 Systems for Industrial and Marine Applications

PHOENIX
Air Starting Systems

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

Simplified Manual Valve
• Diaphragm valve design helps eliminate freeze-up and improves reliability
• Powder coated exterior resist 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

<table>
<thead>
<tr>
<th></th>
<th>ST400</th>
<th>ST455</th>
<th>ST499</th>
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</thead>
<tbody>
<tr>
<td>30 PSI</td>
<td></td>
<td></td>
<td>53ft-lb, 7Hp, 5SCFS</td>
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<tr>
<td>60 PSI</td>
<td>60ft-lb, 8Hp, 6 SCFS</td>
<td>82ft-lb, 11Hp, 7 SCFS</td>
<td>113ft-lb, 17Hp, 9 SCFS</td>
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<tr>
<td>90 PSI</td>
<td>90ft-lb, 14Hp, 8 SCFS</td>
<td>130ft-lb, 18Hp, 9 SCFS</td>
<td>174ft-lb, 26Hp, 13 SCFS</td>
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<tr>
<td>120 PSI</td>
<td>120ft-lb, 19Hp, 11 SCFS</td>
<td>170ft-lb, 25Hp, 12 SCFS</td>
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<tr>
<td>150 PSI</td>
<td>150ft-lb, 25Hp, 13 SCFS</td>
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**ST400** – 44% ARC
(Max. 150 PSI)

**ST455** – 55% ARC
(Max. 120 PSI)

**ST499** – 95% ARC
(Max. 90 PSI)

L – 1" NPT
C – Gear Ratio
Z – Zinc Housing
No Letter – SAE Split Flange
00 – Cradle Mount
01 – SAE 1 Flange
03 – SAE 3 Flange
R – Right Hand
31 – Pinion Code
L – Left Hand

INGERSOLL-RAND®
PRODUCTION EQUIPMENT

Ingersoll-Rand Company
Engine Starting Systems
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(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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