

## HA air-cooled diesels

**Model:** HA Series of Engines

### Specifications:

No. of Cylinders	No. of Cylinders
Aspiration	Naturally Aspirated (NA), Turbocharged (TC) (4 and 6 cylinder versions)
Model nomenclature	HA294 (2cyl NA), HA394 (3 cyl NA), HA494 (4cyl NA), HA494TC (4cyl TC), HA694 (6 cyl NA), HA694TC (6 cyl TC)
Bore X Stroke (mm X mm)	100 X 120
Cooling	Aircooled, integral cooling system using engine driven axial blower.
Power range	14 kW - 84.5 kW
Speed range	1500 rpm - 2500 rpm (2800 rpm for special applications)
Torque range	92 N.m - 443 N.m
Weight to power ratio (kg/hp) Wt : Dry weight w/o flywheel Hp : Max. continuous Duty rating	Engine model    Ratio HA294    8.83 HA394    6.38 HA494    5.36 HA494TC    5.01 HA694    4.52 HA694TC    3.89
Space envelope	Engine model    L X W X H (dimensions in mm) HA294    678 X 704 X 872 HA394    808 X 704 X 868 HA494    938 X 704 X 868 HA494TC    938 X 704 X 868 HA694    1207 X 704 X 922 HA694TC    1145 X 760 X 878
Emmission (@ 1500 rpm)	Enginemodel    Smoke level in Bosch Scale Unit HA294    < 3.5 HA394    < 3.5 HA494    < 3.5 HA494TC    < 2.5 HA694    < 3.5 HA694TC    < 2.5
Power take off	Clutch Torque converter Coupling Jackshaft
Optional accessories	24 V Electrical (as against 12 V standard) Instruments Flywheel housing (SAE 1,2,3 & 4), fresh air inlet and exhaust-hot air outlet, ductings to suit containerised equipment applications Safety system against low lub oil pressure, high cylinder head temp. V-Belt failure, overspeed Hydraulic oil cooler

	<i>Hand start arrangement (2 and 3 cyl)</i> <i>Absorption type silencer</i> <i>Spark arrestor</i> <i>Dry type air cleaner (as against oil bath type std)</i> <i>Special lub oil sumps to suit high inclinations</i> <i>Raised oil filling and raised dipstick arrangement</i> <i>Gear driven hydraulic pump</i> <i>Belt/gear driven compressor</i> <i>Flexible coupling</i> <i>PTOs</i>
--	--

**Maintenance and usage warranties:** 12 months from the date of despatch or 18 months from the date of manufacturing or 3600 working hours whichever is earlier under normal working conditions. (Only for sale in India)

**Service call - time response:** Average Mean Time to repair is 3 days. (Only for installation in India)

**Additional product information:**

<i>User Application Sector</i>	<i>Power, Oil and Gas, Construction and Earthmoving, Agriculture, Utilities, Transport</i>
<i>User Sub Sector</i>	<i>Power generation, Exploration, Extraction, Residential and commercial, Excavation and mining, Large community irrigation schemes, Farm irrigation, Harvesting, Water supply and sewerage, Natural disaster</i>
<i>Industry Sector</i>	<i>Diesel power, Co-generation, Fire fighting systems, Road transport, Water transport</i>
<i>Application Areas</i>	<i>Power plants, Prime movers, Electrical systems, Pumping systems, Refrigeration systems, Extraction equipment, Ground breaking, Excavation, Irrigation systems, Flood irrigation, Sprinkler irrigation, Agricultural implements, Tractors, Water supply systems</i>

<i><b>Name</b></i>	<i><b>Designation</b></i>	<i><b>Mobile</b></i>
<i>Mr. Ravichandrakumar. R</i>	<i>- Director</i>	<i>- 9841018485</i>
<i>Mr. Bhaskaran. S</i>	<i>- Manager - Projects</i>	<i>- 9841819845</i>
<i>Mr. Keerthivasan. N</i>	<i>- Manager - Admin</i>	<i>- 9841819844</i>
<i>Mr. Saravanan. K</i>	<i>- Manager - Service</i>	<i>- 9841018495</i>



	<p><b>ATLANTIS ENGINEERING INDIA (P) LTD.</b>          New No. 2/3, Old No. 4, Bashyam Layout Main Road,          Ganesh Nagar, Chennai - 600 088.          Tele Fax: 044 - 2244 4134 / 2244 4135 / 2255 1698.          Mobile: +91 - 98410 18485.          Email:          Url:</p>
--	--