
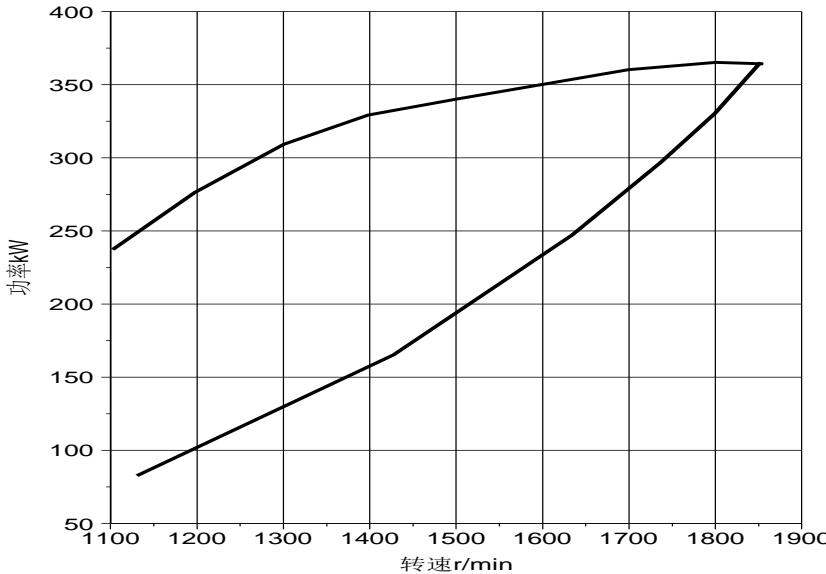


Shanghai Diesel Engine Co., Ltd.

| | | | | | | |
|---|--|---------------------------------|---------------------------------|-------|--------|------------------|
|  | SDEC SPECIFICATIONS for Marine Engine | | Engine model SC15G500.1CA2 | | | |
| | | | Order no GL0006 | | | |
| Displacement | 14.16L | Rated power/speed | 330/1800 kW/r/min | | | |
| Bore | 135mm | Overload power/speed | 363/1854 kW/r/min | | | |
| Stroke | 165mm | Oceangoing rated power/speed | 320/1800 kW/r/min | | | |
| Cylinder No. | 6 | Oceangoing overload power/speed | 352/1854 kW/r/min | | | |
| Fuel system | mechanical | Type | Turbocharged&intercooled | | | |
| Cert: CCS、IMO Tier II | | | | | | |
| SC15G500.1CA2功率曲线图 | | | | | | |
|  | | | | | | |
| external characteristic curve | | | propelling characteristic curve | | | |
| speed | power | torque | speed | power | torque | fuel consumption |
| r/min | kW | N. m | r/min | kW | N. m | g/kW.h |
| 1856 | 364 | 1876 | 1853 | 365 | 1886 | 232.6 |
| 1801 | 365 | 1935 | 1800 | 330 | 1752 | 224.9 |
| 1700 | 360 | 2021 | 1738 | 297 | 1632 | 217.7 |
| 1601 | 350 | 2093 | 1635 | 247 | 1445 | 209.5 |
| 1502 | 340 | 2169 | 1428 | 165 | 1103 | 207.8 |
| 1399 | 329 | 2244 | 1131 | 82.3 | 694 | 216.7 |
| 1301 | 309 | 2273 | | | | |
| 1198 | 276 | 2196 | | | | |
| 1103 | 237 | 2061 | | | | |
| remark: ★The measurement of rated power&speed is according to standard reference condition under ISO 8665 (atmospheric pressure 100kpa, ambient temperature 25℃, Relative humidity 30%, intercooler inlet temperature 25℃),without any accessories, the guaranteed max power after running-in ★The measurement of oceangoing power&speed is according to specified environmental condition under IACS (atmospheric pressure 100kpa, ambient temperature 25℃, Relative humidity 60%, intercooler inlet temperature 32℃),without any accessories, the | | | | | | |

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guaranteed max power after running-in

★Power tolerance: the max tolerance between rated power or overload power should not above 5%

General specification

| | |
|---|--|
| Engine model..... | SC15G500.1CA2 |
| Usage..... | Marine Propulsion |
| Type..... | Turbocharged&Intercooled |
| Rated power/speed.....kW/r/min | 330/1800 |
| Overload power/speed.....kW/r/min | 363/1854 |
| Oceangoing rated power/speed.....kW/r/min | 320/1800 |
| Oceangoing overload power/speed.....kW/r/min | 352/1854 |
| Max torque@1000r/min.....N.m | 2270/1300 |
| Max unload stable speed.....r/min | 1980 |
| max output power of crankshaft front end..... | 35% |
| Compression Ratio..... | 15.5:1 |
| Average piston speed.....m/s | 9.9 |
| ignition order..... | 1-5-3-6-2-4 |
| Net weight.....kg | 1350 |
| Speed Governing Rate.....% | ≤10 |
| min unload speed.....r/min | ≤675±25 |
| Fuel system..... | mechanical pump, dual walled fuel pipe |
| advance angle of injection.....° CA | 10±0.5 |
| Maxemp of inlet fuel.....°C | 50 |
| Max fuel inlet flow.....L/min | 2.0 |
| Max temp of return fuel.....°C | 80 |
| Max fuel return flow.....L/min | 2.0 |
| Air intake pressure.....kpa | 221.5 |
| Air intake flow.....kg/h | 2536.8 |
| Exhaust flow.....kg/h | 2622.1 |
| Exhaust temp.....°C | ≤610 |
| Cooling system..... | Seawater-fresh water double system |
| open temp of thermostat.....°C | 77 |
| full-open temp of thermostat.....°C | 90 |
| Crankshaft Rotation..... | Anticlockwise (From flywheel) |
| Oversize(L×W×H).....mm | 1680×884×1550 |
| Max allowable air inlet restriction.....kpa | 5 |
| Max allowable air outlet restriction.....kpa | 8 |
| oil pan capacity.....L | 22~30 |
| declared working condition oil pressure.....MPa | 0.2~0.5 |
| infeed.....° | 15 |
| Incline& trim.....° | 5 |
| swing rolling.....° | 22.5 |
| pitch.....° | 7.5 |

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★power output interface

flywheel house: SAE1# 12×M12 depth18mm bore25mm flywheel: SAE14# 12×M10 depth20mm bore27mm

belt pulley: 6groove B type, with flange

★seawater pump

transmission: 2.11

self-suction=2m;

rpm n=2800rpm, flow $Q \geq 20\text{m}^3/\text{h}$,

lift H=15m;

★alternator

rated power 1000W

rated voltage 28V

rated speed 6000r/min

rated current 36A

connection mode: double

★starter

rated power: 9kW

rotation direction: clockwise(from drive end)

rated voltage: 24V

connection mode: double

★instrument system

low oil pressure alarm value: 0.12MPa

over speed alarm value:115% rated speed

Low oil pressure stop value

over speed stop value:120% rated speed

High water temp alarm value: 95°C

High oil temp alarm value: 115°C

Electromagnet: DC24V,N.0 type

★detail connection size as per outline drawing