
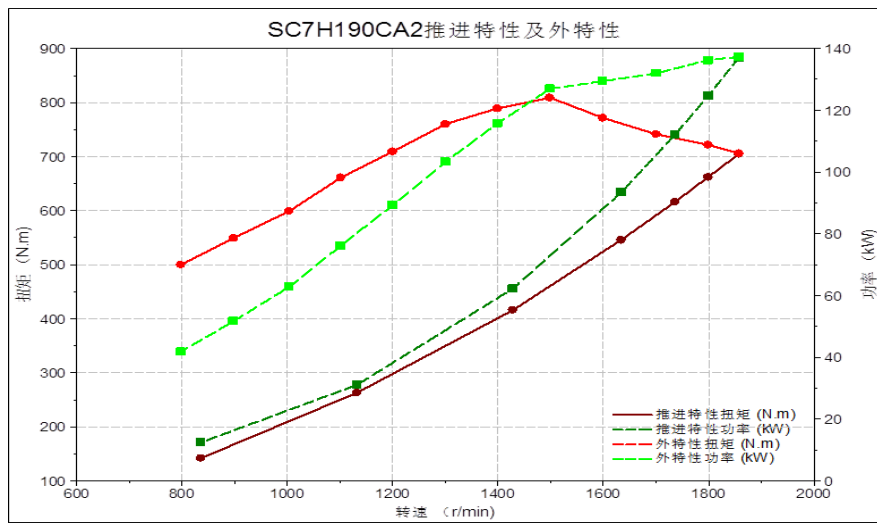


Shanghai Diesel Engine Co., Ltd.

	SDEC SPECIFICATIONS for Marine Engine		Engine model SC7H190CA2
			Order No H3627
Displacement	6.44L	Rated power/speed	125/1800 kW/r/min
Bore	105mm	Overload power/speed	137/1854 kW/r/min
Stroke	124mm	Oceangoing rated power/speed	121/1800 kW/r/min
Cylinder No.	6	Oceangoing overload power/speed	133/1854 kW/r/min
Fuel system	mechanical	Type	Turbocharged&intercooled

Cert: CCS



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
1857	137.3	706	1857	137.1	705	193.9
1800	136.2	722	1799	124.6	662	196.0
1700	132	741	1736	112.1	616	198.3
1600	129.4	772	1634	93.4	546	200.5
1500	127	809	1428	62.2	416	208.5
1400	115.7	789	1132	31.1	263	224.5
1300	103.3	760	836	12.4	142	266.4
1200	89.2	709				
1100	76.2	661				
1000	62.8	599				
900	51.7	549				
800	41.8	500				

remark:

★The measurement of rated power&speed is according to standard reference condition under ISO 8665(atmospheric pressure 100kpa, ambient temperature 25°C, Relative humidity 30%, intercooler inlet temperature 25°C),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

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100kpa, ambient temperature 25°C, Relative humidity 60%, intercooler inlet temperature 32°C), without any accessories, the 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.....	SC7H190CA2
Usage	Marine Propulsion
Type.....	Turbocharged&Intercooled
Rated power/speed.....kW/r/min	125/1800 kW/r/min
Overload power/speed	137/1854 kW/r/min
Oceangoing rated power/speed	121/1800 kW/r/min
Oceangoing overload power/speed.....kW/r/min	133/1854 kW/r/min
Max torque @1500r/min.....N.m	809
Max unload stable speed.....r/min	1980
max output power of crankshaft front end.....	30%
Compression Ratio	16:1
Average piston speed.....m/s	7.44
ignition order.....	1-5-3-6-2-4
Net weight.....kg	675
Speed Governing Rate.....%	≤10
min unload speed.....r/min	≤680±20
Fuel system.....	mechanical pump
advance angle of injection.....° CA	10±0.5
max temp of inlet fuel.....°C	43
max temp of return fuel	89
Air intake flow.....kg/h	823
Exhaust flow.....kg/h	850
Exhaust temp.....°C	≤700
Cooling system.....	Seawater-fresh water double system
open temp of thermostat	82
full-open temp of thermostatt.....°C	95
Crankshaft Rotation.....	Anticlockwise (From flywheel)
Oversize(L×W×H).....mm	1287×730×1180
Max allowable air inlet restriction.....kpa	4
Max allowable air outlet restriction..... kpa	10
oil pan capacity.....L	18
oil pressure under declared working condition	0.21~0.55
incline&swing	
infeed.....°	15
trim.....°	5
rolling	22.5
pitch	7.5

★power output interface

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flywheel house: SAE3#

flywheel: SAE11.5#

belt pulley: 4groove B type, with flange

★**seawater pump**

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

self-suction=2m,

lift H=15m

self-suction duration $\leq 90s$;

★**alternator**

rated current 35A

rated voltage 28V

connection mode: single

★**starter**

rated power: 6kW

rotation direction: clockwise(from drive end)

rated voltage: 24V

connection mode: single

★**instrument system**

low oil pressure alarm value: 0.12MPa

over speed alarm value: 2645r/min

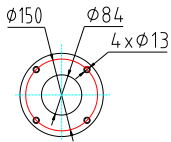
Low oil pressure stop value: 0.10MPa

over speed stop value: 2760r/min

High water temp alarm value: 95°C

High oil temp alarm value : 115°C

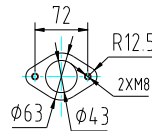
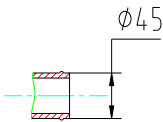
★**exhaust pipe outlet size(bellow)**



★**cooling system**

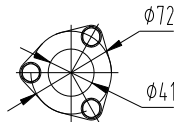
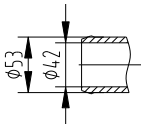
seawater inlet flange size

seawater outlet flange size

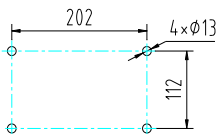


Seawater pump inlet size

seawater pump outlet size



Seawater pump install footing size



★**fuel system**

Fuel transfer pump inlet pipe size

fuel pump return pipe size

