
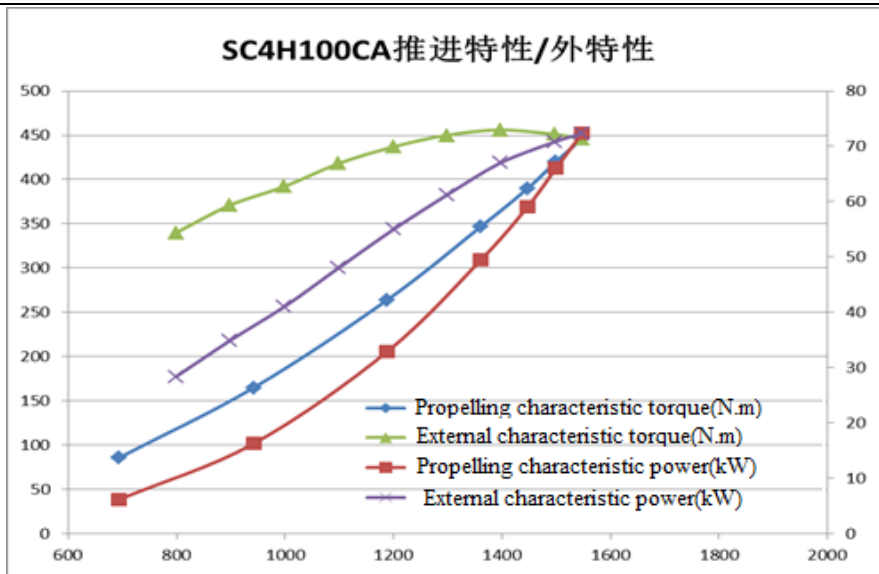


Shanghai Diesel Engine Co., Ltd.

	SDEC SPECIFICATIONS for Marine Engine		Engine model SC4H100CA2
			Order No
Displacement	4. 29L	Rated power/speed	66/1500 kW/r/min
Bore	105mm	Overload power/speed	72/1545 kW/r/min
Stroke	124mm	Oceangoing rated power/speed	63/1500 kW/r/min
Cylinder No.	4	Oceangoing overload power/speed	69/1545 kW/r/min
Fuel system	mechanical	Type	Turbocharged

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
1545	72.3	446	1545	72.3	446	203.6
1500	70.8	451	1500	66	420	206.2
1400	67	456	1447	59.1	390	208.6
1300	61.2	450	1361	49.5	347	210.6
1200	55	437	1188	32.9	264	217.3
1100	48	418	942	16.3	165	239.2
1000	41	392	694	6.2	86	311.2
900	34.9	371				
800	28.4	340				

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 guaranteed max power after running-in
- ★Power tolerance: the max tolerance between rated power or overload power should not above 5%

Shanghai Diesel Engine Co., Ltd.

General specification

Engine model.....	SC4H100CA2
Usage.....	Marine Propulsion
Type.....	Turbocharged
Rated power/speedkW/r/min	66/1500 kW/r/min
Overload power/speed.....kW/r/min	72/1545 kW/r/min
Oceangoing rated power/speed.....kW/r/min	63/1500 kW/r/min
Oceangoing overload power/speed kW/r/min	69/1545 kW/r/min
Max torque @1800r/min..... N.m	456
Max unload stable speed..... r/min	1650
max output power of crankshaft front end.....	30%
Compression Ratio.....	17.3:1
Average piston speed.....m/s	6.2
ignition order.....	1-3-4-2
Net weight.....kg	495
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.....°C	89
Air intake flowkg/h	373
Exhaust flow.....kg/h	388
Exhaust temp.....°C	≤700
Cooling system.....	Seawater-fresh water double system
open temp of thermostat°C	82
full-open temp of thermostat.....°C	95
Crankshaft Rotation.....	Anticlockwise (From flywheel)
Oversize(L×W×H).....mm	971×729×1036
Max allowable air inlet restriction.....kpa	4
Max allowable air outlet restrictionkpa	10
oil pan capacity.....L	11.4
declared working condition oil pressure.....MPa	0.21~0.55
Incline & swing	
infeed °	15
trim °	5
rolling °	22.5
pitch °	7.5

Shanghai Diesel Engine Co., Ltd.

★power output interface

flywheel house: SAE3#

flywheel: SAE11.5#

belt pulley: 4 groove B type, with flange

★seawater pump

rpm $n=2800$ rpm, flow $Q \geq 20$ m³/h,

self-suction=2m,

lift $H=15$ m

self-suction duration ≤ 90 s;

★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

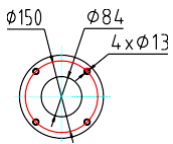
Low oil pressure stop value: 0.10MPa

over speed stop value: 2760r/min

High water temp alarm value: 95°C

High oil temp alarm value: 115°C

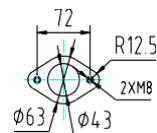
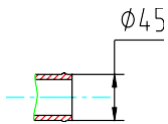
★exhaust pipe outlet size(bellow)



★cooling system

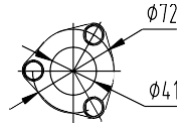
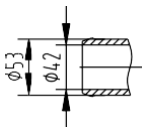
seawater inlet flange size

seawater outlet flange size

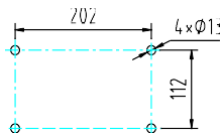


Seawater pump inlet size

seawater pump outlet size



Seawater pump install footing size



★fuel system

Fuel transfer pump inlet pipe size

fuel pump return pipe size

