
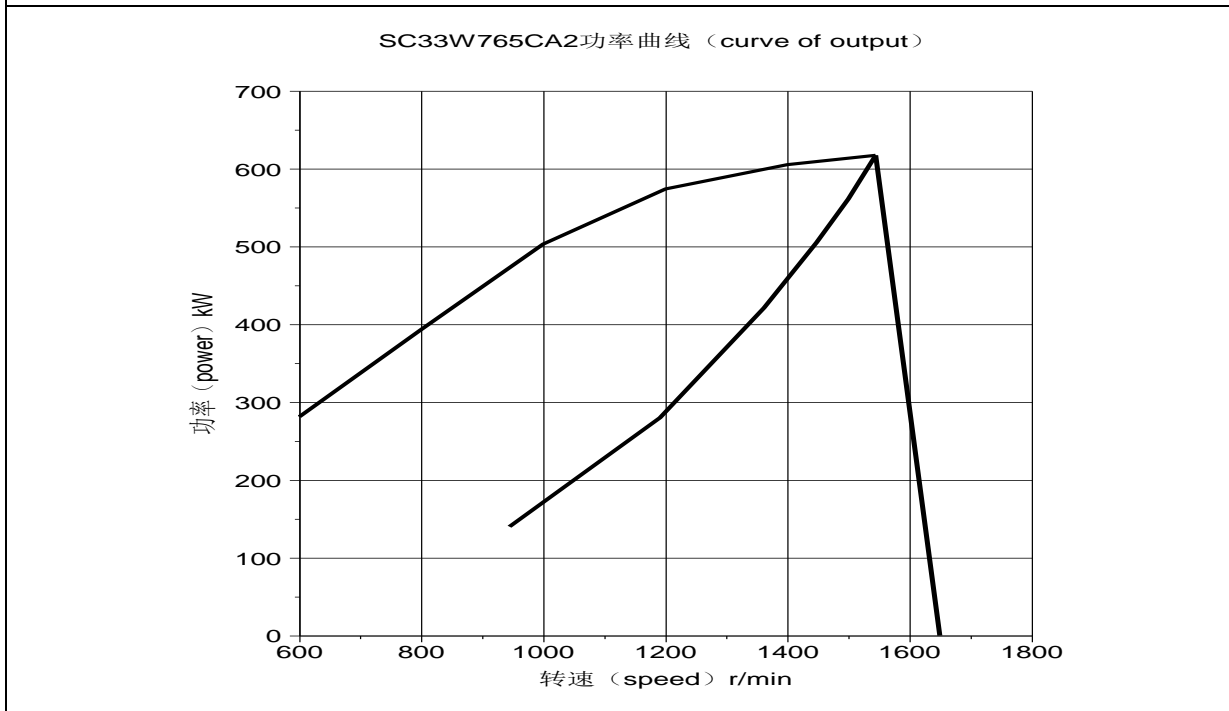


Shanghai Diesel Engine Co., Ltd.

	SDEC SPECIFICATIONS for Marine Engine		Engine model SC33W765CA2
			Order No W0103
Displacement	32.8L	Rated power/speed	561/1500 kW/r/min
Bore	180mm	Overload power/speed	617/1545 kW/r/min
Stroke	215mm	Oceangoing rated power/speed	549/1500 kW/r/min
Cylinder No.	6	Oceangoing overload power/speed	604/1545 kW/r/min
Fuel system	mechnaical	Type	Turbocharged&intercooled

Cert: CCS、IMO Tier II



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	617	3814	1545	617	3814	209.5
1400	605	4127	1500	561	3572	204.6
1200	574	4567	1448	505	3331	203.2
1000	503	4800	1362	421	2950	207.2
800	393	4693	1191	280	2249	213.5
600	281	4500	945	140	1417	225.7

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

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

General specification

Engine model.....	SC33W765CA2
Usage.....	Marine propulsion
Type.....	Turbocharged&intercooled
Rated Power/Speed.....kW/r/min	561/1500
Overload power/speed.....kW/r/min	617/1545
Oceangoing rated power/speed.....kW/r/min	549/1500
Oceangoing overload power/speed.....kW/r/min	604/1545
Max torque @1000r/min.....N.m	4800
Max unload stable speed.....r/min	1650
max output power of crankshaft front end.....	50%
Compression Ratio.....	15:1
Average piston speed.....m/s	10.75
Ignition Order.....	1-5-3-6-2-4
Net Weight.....kg	3800
Speed Governing Rate.....%	≤10
min unload speed.....r/min	≤500±25
Fuel system.....	mechanical pump, dual walled fuel pipe
advance angle of injection.....° CA	20±0.5
max temp of inlet fuel°C	45
Max fuel inlet flow.....°C	5.02
Max temp of return fuel.....°C	84
Max fuel return flow.....L/min	3.25
Air intake pressure.....kpa	190
Air intake flow.....kg/h	4352
Exhaust flow.....kg/h	4593
Exhaust temp.....°C	≤550
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	2453×1235×1951
Max allowable air inlet restriction.....kpa	6
Max allowable air outlet restrictionkpa	11
oil pan capacity.....L	75
declared working condition oil pressure.....MPa	0.35~0.55
infeed.....°	15
Incline& trim.....°	5
swing rolling.....°	22.5
pitch.....°	7.5

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★power output interface

flywheel house: SAE0# 16×M12 depth 20mm bore 27mm flywheel: SAE18# 6×M16 depth 27mm bore 35mm
belt pulley: 6groove C type, with flange

★seawater pump

transmission: 2.3l self-suction=2m; suction duration≤35s
rpm n=3000rpm, flow Q≥27m³/h, lift H=15m;

★alternator

rated power 1500W rated voltage 28V
rated speed 3500r/min rated current 54A
connection mode: double

★starter

rated power: 13kW rotation direction: clockwise(from drive end)
rated voltage: 24V connection mode: double

★Air starting motor

rated power: 17kW rated speed: 2100r/min
air pressure: 0.7-0.9Mpa air consumption: ≤240L/S
control voltage: DC24V rotation direction: clockwise(from drive end)

★instrument system

low oil pressure alarm value: 0.25MPa over speed alarm value:115% rated speed
Low oil pressure stop value: 0.20MPa over speed stop value:120% rated speed
High water temp alarm value: 90℃ High oil temp alarm value: 110℃
Electromagnet: DC24V N.O type

★Detail connection size as per outline drawing