

CUMMINS RANGE OF STANDARD GENERATOR SETS SC160 - SC280



STAMFORD
power generation

- Voltage: 400V/230V
- Frequency: 50Hz
- Power factor: 0.8
- Phase: 3P4W

MAIN SPECIFICATIONS OF GENERATOR SETS

GENSET MODEL	Continuous model	SC160	SC180	SC200	SC215	SC250	SC280
	Standby model	SC176S	SC198S	SC220S	SC236S	SC275S	SC310S
Continuous output (kW/kVA)		160/200	180/225	200/250	215/267	250/313	280/350
Standby output (kW/kVA)		176/220	198/248	220/275	236/295	275/344	310/388

Rating Definitions

Continuous Power Model SC with no Suffix

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Standby Power Model SC with Suffix (S)

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO8528-3) at 27°C.

TECHNICAL DATA

DIESEL ENGINE MODEL	NTA855-G1	NTA855-G1	NTA855-G1	NTA855-G1	NTA855-G2	NTA855-G4
Engine Characters	Water-cooled, in line, 6 cylinders, 4-cycle, direct injection, Wet cylinder liner, 1500rpm					
Constant Output(kW)	240	240	240	240	283	317
Standby Output(kW)	265	265	265	265	321	351
Aspiration	Turbocharger and Aftercooler					
Bore(mm) x Stroke(mm)	140X152					
Cubic Capacity (Liters)	14					
Piston Speed(m/s)	7.6					
Compression Ratio	15:1					
Cooling System Volume(L)	51					
Max. Water Temperature	100°C					
Speed characteristics	The speed stability bandwidth $\leq \pm 0.25\%$. The steady governing rate $\leq 1\%$					
Fuel Consumption(l/h)	45.6	51.3	57	62	70	76
Lube Consumption (prime)	$\leq 1.36\text{g/kWh}$					
Radiated Heat to Ambient(kW _m)	37			42		46
Heat Rejection to coolant(kW _m)	153			167		187
Heat Rejection to Exhaust(kW _m)	208			208		212
Fan Cooling Air Flow(m ³ /h)	19980			29380		29448
Intake Air Flow(l/s)	321			375		408
Exhaust Gas Flow(m ³ /h)	3160			3550		4060
Exhaust Temperature(°C)	432°C			485°C		541°C
Exhaust Back Pressure	10kPa(Maximum)					
ALTERNATOR MODEL	UCI274H	UCD274J	HCI444C	HCI444D	HCI444E	HCI444F
Continuous Output(kW/kVA)	160/200	184/230	200/250	236/295	260/325	304/380
Power Efficiency	93.3%	93.1%	92%	92.3%	93%	92.6%
Voltage Regulation	$\pm 1.0\%$ with 4% engine governing					
Waveform Distortion	No load <1.5% and non-distorting balanced linear load <5%					
THF / TIF	<2% / <50					
Fan Cooling Air Flow(l/s)	486					

DIMENSIONS AND WEIGHTS

Genset Cont. MODEL	SC160	SC180	SC200	SC215	SC250	SC280
Length: mm	3090	3150	3550	3500	3550	3620
Width: mm	1120	1120	1120	1120	1120	1120
Height: mm	1600	1600	1600	1600	1600	1600
Net Weight: kg	2800	2900	3200	3300	3400	3550