Cat® 3512B

Diesel Generator Sets





Bore – mm (in)	170 (6.69)			
Stroke – mm (in)	190 (7.48)			
Displacement – L (in³)	51.8 (3161)			
Compression Ratio	14.0:1			
Aspiration	TA			
Fuel System	EUI			
Governor Type	ADEM™ A3			

Image shown may not reflect actual configuration

Standby	Mission Critical	Prime	Emissions Performance
60 Hz ekW (kVA)	60 Hz ekW (kVA)	60 Hz ekW (kVA)	
1400 (1750)	1400 (1750)	1275 (1593)	Optimized for Low Fuel Consumption or Low Emissions

Features

Cat® Diesel Engine

- Designed and optimized for low emissions or low fuel consumption
- Reliable performance proven in thousands of applications worldwide
- Certified alternative fuels including Hydrotreated Vegetable Oil (HVO), Renewable Diesel (RD) and Hydrotreated Renewable Diesel (HRD) which meet EN 15940 or ASTM D975 can be used or blended with EN 590 diesel

Generator Set Package

- · Accepts 100% block load in one step
- Meets NFPA 110 loading requirements
- Conforms to ISO 8528-5 G3 load acceptance requirements
- Reliability verified through torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

Alternators

- Superior motor starting capability minimizes need for oversizing generator
- Designed to match performance and output characteristics of Cat diesel engines

Cooling System

- Cooling systems available to operate in ambient temperatures up to 50°C (122°F)
- · Tested to ensure proper generator set cooling

Cat Energy Control System (ECS)

- · User-friendly interface and navigation
- Scalable system to meet a wide range of installation requirements
- Expansion modules and site specific programming for specific customer requirements
- Graphical touchscreen display
- · Easily upgradeable

Warranty

- 24 months/1000-hour warranty for standby and mission critical ratings
- 12 months/unlimited hour warranty for prime and continuous ratings
- Extended service protection is available to provide extended coverage options

Worldwide Product Support

- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

Financing

- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

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Standard and Optional Equipment

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Engine	Power Termination	Cat Connect
Air Cleaner ☐ Single element ☐ Dual element ☐ Heavy duty	Type □ Bus bar □ Circuit breaker □ 1600A □ 3000A	Connectivity ☐ Ethernet ☐ Cellular
Muffler	□ 2000A □ 3200A	Extended Service Options
☐ Industrial grade (15 dB)	□ 2500A □ IEC □ UL □ 4-pole	Terms
Starting ☐ Standard batteries ☐ Oversized batteries ☐ Standard electric starter(s)	□ 3-pole□ Manually operated□ Electrically operated	□ 2 year (prime)□ 3 year□ 5 year□ 10 year
 □ Dual electric starter(s) □ Air starter(s) □ Jacket water heater 	Trip Unit LSI LSI-G LSIG-P	Coverage ☐ Silver ☐ Gold
Alternator	Control System	☐ Platinum ☐ Platinum Plus
Output voltage	Controller	
□ 380V □ 6600V	☐ Cat ECS 100 ☐ Cat ECS 200	Ancillary Equipment
□ 440V □ 6900V □ 480V □ 12470V	□ EMCP 4.4	☐ Automatic transfer switch (ATS)
□ 600V □ 13200V □ 4160V □ 13800V □ 6300V	Attachments ☐ Local annunciator module ☐ Remote annunciator module	☐ Paralleling switchgear☐ Paralleling controls☐
Temperature Rise	☐ Expansion I/O module	Certifications
(over 40°C ambient)	☐ Remote monitoring software	□ ULC 2200 Listed
☐ 150°C ☐ 125°C/130°C	Charging	☐ IBC seismic certification☐ OSHPD pre-approval
□ 105°C □ 80°C	□ Battery charger – 10A□ Battery charger – 20A□ Battery charger – 35A	
Winding type		
☐ Random wound ☐ Form wound	Vibration Isolators	
Excitation	☐ Spring☐ Seismic rated☐	
☐ Internal excitation (IE)☐ Permanent magnet (PM)		
Attachments		
☐ Anti-condensation heater☐ Stator and bearing temperature		

Note: Some options may not be available on all models. Certifications may not be available with all model configurations. Consult factory for availability.

monitoring and protection

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Low Fuel Consumption (30°C SCAC)

Performance	Standby		Mission Critical		Prime		
Frequency	6	60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	140	1400 ekW		1400 ekW		'5 ekW	
Gen set power rating with fan @ 0.8 power factor	175	50 kVA	1750 kVA		1593 kVA		
Emissions	Lov	w Fuel	Lo	w Fuel	Lov	w Fuel	
Performance number	EM2	2668-00	EM2	2671-00	DM8	3185-03	
Fuel Consumption							
100% load with fan – L/hr (gal/hr)	364.0	(96.2)	364.0	(96.2)	331.0	(87.4)	
75% load with fan – L/hr (gal/hr)	271.6	(71.7)	271.6	(71.7)	246.9	(65.2)	
50% load with fan – L/hr (gal/hr)	186.2	(49.2)	186.2	(49.2)	172.7	(45.6)	
25% load with fan – L/hr (gal/hr)	114.6	(30.3)	114.6	(30.3)	108.0	(28.5)	
Cooling System							
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	
Radiator air flow - m³/min (cfm)	1611	(56891)	1611	(56891)	1611	(56891)	
Engine coolant capacity – L (gal)	156.8	(41.4)	156.8	(41.4)	156.8	(41.4)	
Radiator coolant capacity – L (gal)	146.0	(38.6)	146.0	(38.6)	146.0	(38.6	
Total coolant capacity – L (gal)	305.8	(80.0)	305.8	(80.0)	305.8	(80.0)	
Inlet Air							
Combustion air inlet flow rate - m³/min (cfm)	127.9	(4516.3)	127.9	(4516.3)	120.2	(4244.3)	
Exhaust System							
Exhaust stack gas temperature – °C (°F)	429.3	(804.7)	429.3	(804.7)	416.2	(781.2)	
Exhaust gas flow rate - m³/min (cfm)	315.9	(11154.9)	315.9	(11154.9)	291.3	(10285.9)	
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	
Heat Rejection							
Heat rejection to jacket water - kW (Btu/min)	571	(32473)	571	(32473)	532	(30254)	
Heat rejection to exhaust (total) – kW (Btu/min)	1345	(76492)	1345	(76492)	1217	(69208)	
Heat rejection to aftercooler – kW (Btu/min)	435	(24739)	435	(24739)	376	(21383)	
Heat rejection to atmosphere from engine – kW (Btu/min)	124	(7052)	124	(7052)	116	(6596)	
Heat rejection from alternator – kW (Btu/min)	72	(4100)	72	(4100)	64	(3657)	
Emissions* (Nominal)							
NOx mg/Nm³ (g/hp-h)	2965.2	(6.32)	2965.2	(6.32)	2732.4	(5.81)	
CO mg/Nm³ (g/hp-h)	598.3	(1.27)	598.3	(1.27)	700.8	(1.49)	
HC mg/Nm³ (g/hp-h)	199.7	(0.43)	199.7	(0.43)	128.8	(0.27)	
PM mg/Nm³ (g/hp-h)	64.7	(0.14)	64.7	(0.14)	63.3	(0.13)	
Emissions* (Potential Site Variation)							
NOx mg/Nm³ (g/hp-h)	3558.3	(7.58)	3558.3	(7.58)	3278.9	(6.97)	
CO mg/Nm³ (g/hp-h)	1076.9	(2.29)	1076.9	(2.29)	1261.4	(2.68)	
HC mg/Nm³ (g/hp-h)	265.6	(0.57)	265.6	(0.57)	171.3	(0.36)	
PM mg/Nm³ (g/hp-h)	90.6	(0.19)	90.6	(0.19)	88.6	(0.19)	

^{*} mg/Nm^3 levels are corrected to 5% O_2 . Contact your local Cat dealer for further information.

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Low Fuel Consumption (* 0°C SCAC)

Performance	Sta	Standby		Mission Critical		Prime	
Frequency	60	60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	140	0 ekW	1400 ekW		1275 ekW		
Gen set power rating with fan @ 0.8 power factor	175	60 kVA	1750 kVA		1593 kVA		
Emissions	Lov	v Fuel	Lov	v Fuel	Low	Fuel	
Performance number	EM2	669-00	EM2	672-00	DM8	186-04	
Fuel Consumption							
100% load with fan – L/hr (gal/hr)	371.8	(98.2)	371.8	(98.2)	339.8	(89.8)	
75% load with fan – L/hr (gal/hr)	278.0	(73.4)	278.0	(73.4)	252.8	(66.8)	
50% load with fan – L/hr (gal/hr)	192.8	(50.9)	192.8	(50.9)	178.8	(47.2)	
25% load with fan – L/hr (gal/hr)	117.7	(31.1)	117.7	(31.1)	110.7	(29.2)	
Cooling System							
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	
Radiator air flow – m³/min (cfm)	1611	(56891)	1611	(56891)	1611	(56891)	
Engine coolant capacity – L (gal)	156.8	(41.4)	156.8	(41.4)	156.8	(41.4)	
Radiator coolant capacity – L (gal)	146.0	(38.6)	146.0	(38.6)	146.0	(38.6	
Total coolant capacity – L (gal)	305.8	(80.0)	305.8	(80.0)	305.8	(80.0)	
Inlet Air							
Combustion air inlet flow rate - m³/min (cfm)	123.9	(4375.0)	123.9	(4375.0)	118.8	(4194.9)	
Exhaust System							
Exhaust stack gas temperature – °C (°F)	455.1	(851.2)	455.1	(851.2)	436.2	(817.2)	
Exhaust gas flow rate - m³/min (cfm)	317.7	(11218.4)	317.7	(11218.4)	296.4	(10466.0)	
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	
Heat Rejection							
Heat rejection to jacket water – kW (Btu/min)	599	(34065)	599	(34065)	559	(31790)	
Heat rejection to exhaust (total) – kW (Btu/min)	1398	(79506)	1398	(79506)	1259	(71596)	
Heat rejection to aftercooler - kW (Btu/min)	363	(20644)	363	(20644)	317	(18027)	
Heat rejection to atmosphere from engine – kW (Btu/min)	134	(7621)	134	(7621)	124	(7051)	
Heat rejection from alternator – kW (Btu/min)	72	(4100)	72	(4100)	64	(3657)	
Emissions* (Nominal)							
NOx mg/Nm³ (g/hp-h)	3723.9	(7.94)	3723.9	(7.94)	3361.9	(7.19)	
CO mg/Nm³ (g/hp-h)	698.5	(1.94)	698.5	(1.94)	687.4	(1.47)	
HC mg/Nm³ (g/hp-h)	187.9	(0.40)	187.9	(0.40)	126.5	(0.27)	
PM mg/Nm³ (g/hp-h)	49.2	(0.11)	49.2	(0.11)	49.4	(0.11)	
Emissions* (Potential Site Variation)							
NOx mg/Nm³ (g/hp-h)	4468.7	(9.53)	4468.7	(9.53)	4034.3	(8.63)	
CO mg/Nm³ (g/hp-h)	1257.3	(2.68)	1257.3	(2.68)	1237.3	(2.65)	
HC mg/Nm³ (g/hp-h)	249.9	(0.53)	249.9	(0.53)	168.2	(0.36)	
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 $^{^*}$ mg/Nm³ levels are corrected to 5% O2. Contact your local Cat dealer for further information.

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Low Fuel Consumption (90°C SCAC)

Performance	Standby		Mission Critical		Prime		
Frequency	60	60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	1400) ekW	1400	0 ekW	1275 ekW		
Gen set power rating with fan @ 0.8 power factor	175	0 kVA	175	0 kVA	1593	1593 kVA	
Emissions	Low	/ Fuel	Low	/ Fuel	Low	Fuel	
Performance number	EM2	670-00	EM2	673-00	DM8	187-02	
Fuel Consumption							
100% load with fan – L/hr (gal/hr)	379.8	(100.3)	379.8	(100.3)	342.7	(90.5)	
75% load with fan – L/hr (gal/hr)	277.9	(73.4)	277.9	(73.4)	253.5	(67.0)	
50% load with fan – L/hr (gal/hr)	195.0	(51.5)	195.0	(51.5)	180.8	(47.8)	
25% load with fan – L/hr (gal/hr)	119.3	(31.5)	119.3	(31.5)	112.4	(29.7)	
Cooling System							
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	
Radiator air flow – m³/min (cfm)	1611	(56891)	1611	(56891)	1611	(56891)	
Engine coolant capacity – L (gal)	156.8	(41.4)	156.8	(41.4)	156.8	(41.4)	
Radiator coolant capacity – L (gal)	146.0	(38.6)	146.0	(38.6)	146.0	(38.6)	
Total coolant capacity – L (gal)	305.8	(80.0)	305.8	(80.0)	305.8	(80.0)	
Inlet Air							
Combustion air inlet flow rate – m³/min (cfm)	122.4	(4322.1)	122.4	(4322.1)	116.6	(4117.2)	
Exhaust System							
Exhaust stack gas temperature – °C (°F)	485.0	(905.0)	485.0	(905.0)	459.9	(859.8)	
Exhaust gas flow rate – m³/min (cfm)	327.2	(11554.0)	327.2	(11554.0)	300.7	(10617.8)	
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	
Heat Rejection							
Heat rejection to jacket water – kW (Btu/min)	635	(36113)	635	(36113)	591	(33609)	
Heat rejection to exhaust (total) – kW (Btu/min)	1468	(83487)	1468	(83487)	1308	(74383)	
Heat rejection to aftercooler – kW (Btu/min)	315	(17915)	315	(17915)	269	(15298)	
Heat rejection to atmosphere from engine – kW (Btu/min)	147	(8360)	147	(8360)	136	(7735)	
Heat rejection from alternator – kW (Btu/min)	72	(4100)	72	(4100)	64	(3657)	
Emissions* (Nominal)							
NOx mg/Nm³ (g/hp-h)	4386.5	(9.55)	4386.5	(9.55)	4152.9	(8.97)	
CO mg/Nm³ (g/hp-h)	659.1	(1.44)	659.1	(1.44)	667.4	(1.44)	
HC mg/Nm³ (g/hp-h)	191.7	(0.42)	191.7	(0.42)	123.1	(0.27)	
PM mg/Nm³ (g/hp-h)	44.7	(0.10)	44.7	(0.10)	41.8	(0.09)	
Emissions* (Potential Site Variation)							
NOx mg/Nm³ (g/hp-h)	5263.8	(11.47)	5263.8	(11.47)	4983.5	(10.77)	
CO mg/Nm³ (g/hp-h)	1186.4	(2.58)	1186.4	(2.58)	1201.3	(2.60)	
HC mg/Nm³ (g/hp-h)	255.0	(0.56)	255.0	(0.56)	163.7	(0.35)	
PM mg/Nm³ (g/hp-h)	62.6	(0.14)	62.6	(0.14)	58.5	(0.13)	

 $^{^*}$ mg/Nm³ levels are corrected to 5% O $_2$. Contact your local Cat dealer for further information.

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Low Emissions (30°C SCAC)

Performance	Standby		Mission Critical		Prime	
Frequency	6	0 Hz	60 Hz		60 Hz	
Gen set power rating with fan	140	00 ekW	140	0 ekW	1275 ekW	
Gen set power rating with fan @ 0.8 power factor	175	50 kVA	175	60 kVA	1593 kVA	
Emissions	Low E	Emissions	Low E	missions	Low En	nissions
Performance number	EM2	2674-00	EM2	.677-00	DM8194-02	
Fuel Consumption						
100% load with fan – L/hr (gal/hr)	390.0	(103.0)	390.0	(103.0)	357.0	(94.3)
75% load with fan – L/hr (gal/hr)	289.3	(76.4)	289.3	(76.4)	262.8	(69.4)
50% load with fan – L/hr (gal/hr)	192.5	(50.8)	192.5	(50.8)	178.4	(47.1)
25% load with fan – L/hr (gal/hr)	116.6	(30.8)	116.6	(30.8)	110.2	(29.1)
Cooling System						
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m³/min (cfm)	1611	(56891)	1611	(56891)	1611	(56891)
Engine coolant capacity – L (gal)	156.8	(41.4)	156.8	(41.4)	156.8	(41.4)
Radiator coolant capacity – L (gal)	146.0	(38.6)	146.0	(38.6)	146.0	(38.6)
Total coolant capacity – L (gal)	305.8	(80.0)	305.8	(80.0)	305.8	(80.0)
Inlet Air						
Combustion air inlet flow rate - m³/min (cfm)	137.2	(4844.7)	137.2	(4844.7)	130.0	(4590.4)
Exhaust System						
Exhaust stack gas temperature – °C (°F)	461.7	(863.1)	461.7	(863.1)	446.3	(835.3)
Exhaust gas flow rate - m³/min (cfm)	354.7	(12525.0)	354.7	(12525.0)	328.5	(11599.4)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection						
Heat rejection to jacket water - kW (Btu/min)	602	(34236)	602	(34236)	561	(31902)
Heat rejection to exhaust (total) – kW (Btu/min)	1544	(87809)	1544	(87809)	1397	(79445)
Heat rejection to aftercooler – kW (Btu/min)	595	(33840)	595	(33840)	437	(24851)
Heat rejection to atmosphere from engine – kW (Btu/min)	138	(7848)	138	(7848)	126	(7166)
Heat rejection from alternator – kW (Btu/min)	72	(4100)	72	(4100)	64	(3657)
Emissions* (Nominal)						
NOx mg/Nm³ (g/hp-h)	2150.5	(4.93)	2150.5	(4.93)	1962.6	(4.50)
CO mg/Nm³ (g/hp-h)	737.9	(1.69)	737.9	(1.69)	702.0	(1.61)
HC mg/Nm³ (g/hp-h)	213.7	(0.49)	213.7	(0.49)	129.0	(0.30)
PM mg/Nm³ (g/hp-h)	88.4	(0.20)	88.4	(0.20)	86.6	(0.20)
Emissions* (Potential Site Variation)						
NOx mg/Nm³ (g/hp-h)	2580.6	(5.92)	2580.6	(5.92)	2355.1	(5.40)
CO mg/Nm³ (g/hp-h)	1328.3	(3.05)	1328.3	(3.05)	1263.6	(2.90)
HC mg/Nm³ (g/hp-h)	284.2	(0.65)	284.2	(0.65)	171.6	(0.39)
PM mg/Nm³ (g/hp-h)	123.8	(0.28)	123.8	(0.28)	121.2	(0.28)

 $^{^*\}mbox{mg/Nm}^3$ levels are corrected to 5% O2. Contact your local Cat dealer for further information.

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Low Emissions (* 0°C SCAC)

Performance	Standby		Mission Critical		Prime		
Frequency	60	0 Hz	60 Hz		60 Hz		
Gen set power rating with fan	140	1400 ekW		1400 ekW		5 ekW	
Gen set power rating with fan @ 0.8 power factor	175	1750 kVA		1750 kVA		1593 kVA	
Emissions	Low E	missions	Low E	missions	Low En	nissions	
Performance number	EM2	675-00	EM2	2678-00	DM81	95-03	
Fuel Consumption							
100% load with fan – L/hr (gal/hr)	391.2	(103.3)	391.2	(103.3)	345.6	(91.3)	
75% load with fan – L/hr (gal/hr)	292.1	(77.2)	292.1	(77.2)	261.6	(69.1)	
50% load with fan – L/hr (gal/hr)	197.4	(52.2)	197.4	(52.2)	178.2	(47.1)	
25% load with fan – L/hr (gal/hr)	118.6	(31.3)	118.6	(31.3)	109.2	(28.9)	
Cooling System							
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	
Radiator air flow – m³/min (cfm)	1611	(56891)	1611	(56891)	1611	(56891)	
Engine coolant capacity – L (gal)	156.8	(41.4)	156.8	(41.4)	156.8	(41.4)	
Radiator coolant capacity – L (gal)	146.0	(38.6)	146.0	(38.6)	146.0	(38.6)	
Total coolant capacity – L (gal)	305.8	(80.0)	305.8	(80.0)	305.8	(80.0)	
Inlet Air							
Combustion air inlet flow rate - m³/min (cfm)	131.5	(4643.4)	131.5	(4643.4)	124.9	(4410.3)	
Exhaust System							
Exhaust stack gas temperature – °C (°F)	469.2	(876.6)	469.2	(876.6)	441.1	(826.0)	
Exhaust gas flow rate – m³/min (cfm)	343.8	(12140.2)	343.8	(12140.2)	313.5	(11069.8)	
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	
Heat Rejection							
Heat rejection to jacket water - kW (Btu/min)	618	(35146)	618	(35146)	578	(32871)	
Heat rejection to exhaust (total) – kW (Btu/min)	1500	(85307)	1500	(85307)	1356	(77112)	
Heat rejection to aftercooler – kW (Btu/min)	407	(23147)	407	(23147)	358	(20358)	
Heat rejection to atmosphere from engine – kW (Btu/min)	145	(8246)	145	(8246)	133	(7563)	
Heat rejection from alternator – kW (Btu/min)	72	(4100)	72	(4100)	64	(3657)	
Emissions* (Nominal)							
NOx mg/Nm³ (g/hp-h)	2829.9	(6.36)	2829.9	(6.36)	2768.8	(6.16)	
CO mg/Nm³ (g/hp-h)	659.1	(1.48)	659.1	(1.48)	695.6	(1.55)	
HC mg/Nm³ (g/hp-h)	216.4	(0.49)	216.4	(0.49)	127.9	(0.28)	
PM mg/Nm³ (g/hp-h)	57.5	(0.13)	57.5	(0.13)	59.8	(0.13)	
Emissions* (Potential Site Variation)							
NOx mg/Nm³ (g/hp-h)	3395.9	(7.63)	3395.9	(7.63)	3322.5	(7.39)	
CO mg/Nm³ (g/hp-h)	1186.4	(2.67)	1186.4	(2.67)	1252.1	(2.79)	
HC mg/Nm³ (g/hp-h)	287.8	(0.65)	287.8	(0.65)	170.1	(0.38)	
PM mg/Nm³ (g/hp-h)	80.5	(0.18)	80.5	(0.18)	83.7	(0.19)	

 $^{^*\}mbox{mg/Nm}^3$ levels are corrected to 5% O2. Contact your local Cat dealer for further information.

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Low Emissions (90°C SCAC)

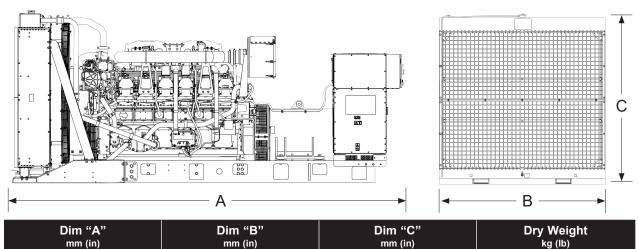
Performance	Standby		Mission Critical		Prime	
Frequency	60) Hz	60 Hz		60 Hz	
Gen set power rating with fan	140	1400 ekW		1400 ekW		i ekW
Gen set power rating with fan @ 0.8 power factor	175	0 kVA	1750 kVA		1593 kVA	
Emissions	Low E	missions	Low E	missions	Low En	nissions
Performance number	EM26	676-00	EM2	679-00	DM8196-02	
Fuel Consumption						
100% load with fan – L/hr (gal/hr)	379.8	(100.3)	379.8	(100.3)	341.8	(90.3)
75% load with fan – L/hr (gal/hr)	291.0	(76.9)	291.0	(76.9)	269.4	(71.2)
50% load with fan – L/hr (gal/hr)	208.6	(55.1)	208.6	(55.1)	193.5	(51.1)
25% load with fan – L/hr (gal/hr)	125.6	(33.2)	125.6	(33.2)	117.8	(31.1)
Cooling System						
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m³/min (cfm)	1611	(56891)	1611	(56891)	1611	(56891)
Engine coolant capacity – L (gal)	156.8	(41.4)	156.8	(41.4)	156.8	(41.4)
Radiator coolant capacity – L (gal)	146.0	(38.6)	146.0	(38.6)	146.0	(38.6)
Total coolant capacity – L (gal)	305.8	(80.0)	305.8	(80.0)	305.8	(80.0)
Inlet Air						
Combustion air inlet flow rate - m³/min (cfm)	122.4	(4322.1)	122.4	(4322.1)	116.4	(4110.1)
Exhaust System						
Exhaust stack gas temperature – °C (°F)	485.0	(905.0)	485.0	(905.0)	457.2	(855.0)
Exhaust gas flow rate - m³/min (cfm)	327.2	(11554.0)	327.2	(11554.0)	299.2	(10564.9)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection						
Heat rejection to jacket water - kW (Btu/min)	633	(35999)	633	(35999)	593	(33724)
Heat rejection to exhaust (total) – kW (Btu/min)	1456	(82804)	1456	(82804)	1314	(74724)
Heat rejection to aftercooler – kW (Btu/min)	314	(17858)	314	(17858)	271	(15411)
Heat rejection to atmosphere from engine – kW (Btu/min)	147	(8360)	147	(8360)	137	(7792)
Heat rejection from alternator – kW (Btu/min)	72	(4100)	72	(4100)	64	(3657)
Emissions* (Nominal)						
NOx mg/Nm³ (g/hp-h)	4386.6	(9.56)	4386.6	(9.56)	4290.7	(9.24)
CO mg/Nm³ (g/hp-h)	659.1	(1.44)	659.1	(1.44)	668.9	(1.44)
HC mg/Nm³ (g/hp-h)	190.1	(0.41)	190.1	(0.41)	123.3	(0.27)
PM mg/Nm³ (g/hp-h)	44.7	(0.10)	44.7	(0.10)	42.0	(0.09)
Emissions* (Potential Site Variation)						
NOx mg/Nm³ (g/hp-h)	5264.0	(11.47)	5264.0	(11.47)	5148.8	(11.09)
CO mg/Nm³ (g/hp-h)	1186.4	(2.58)	1186.4	(2.58)	1204.0	(2.59)
HC mg/Nm³ (g/hp-h)	252.8	(0.55)	252.8	(0.55)	164.0	(0.35)
PM mg/Nm³ (g/hp-h)	62.6	(0.14)	62.6	(0.14)	58.8	(0.13)

 $^{^\}star mg/Nm^3$ levels are corrected to 5% O2. Contact your local Cat dealer for further information.

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Weights and Dimensions



Note: For reference only. Do not use for installation design. Contact your local Cat dealer for precise weights and dimensions.

2286 (90.0)

Ratings Definitions

5487 (216.0)

Standby

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby rated ekW. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Mission Critical

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 85% of the mission critical rated ekW. Typical peak demand up to 100% of rated ekW for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Prime

Output available with varying load for an unlimited time. Average power output is 70% of the prime rated ekW. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

Applicable Codes and Standards

2420 (95.3)

AS 1359, ULC 2200 3rd edition, UL 489, UL 869A, IBC, IEC 60034-1, ISO 3046, ISO 8528, NEMA MG1-22, NEMA MG1-33, 2014/35/EU, 2006/42/EC, 2014/30/EU and facilitates compliance to NFPA 37, NFPA 70, NFPA 99, NFPA 110.

Note: Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

Data Center Applications

- All ratings Tier III/Tier IV compliant per Uptime Institute requirements.
- All ratings ANSI/TIA-942 compliant for Rated-1 through Rated-4 data centers.

Fuel Rates

Fuel consumption reported in accordance with ISO 3046-1, based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 15°C (59°F) and weighing 850 g/liter (7.0936 lbs/U.S. gal.) All fuel consumption values refer to rated engine power.

www.cat.com/electricpower

11 297 (24,906)

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Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.