ELECTRIC POWER - Technical Spec Sheet
STANDARD

G3520E

2022 ekW/ 2527 kVA/ 50 Hz/ 1500 rpm/ 400-11000 V/ 0.8 Power Factor

Rating Type: CONTINUOUS

Fuel Strategy: LOW EMISSIONS



Image shown may not reflect actual configuration

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2022 ekW/ 2527 kVA/ 50 Hz/ 1500 rpm/ 400-11000 V/ 0.8 Power Factor

	Metric	English
Generator Set Specifications		
Maximum Rating @ 0.80 pf	2527 kVA	2022 ekW
Frequency	50 Hz	
Engine Speed (rpm)	1500 RPM	
Fuel	NATURAL GAS	
Emission Standards	Noncertified	
Performance Number	DM8924-02	
Altitude Capability at 25°C (77°F) ambient, above sea level	2000 m	6562 ft

Engine Specifications		
Engine Model	G3520E	
Compression Ratio	11.90	
Aspiration	TA	
Governor Type	ADEM3 W/ IM	
Bore	170 mm	7 in
Displacement	86 L	5263 in³
Stroke	190 mm	7 in
Aftercooler Temperature	54 °C	130 °F
Jacket Water Outlet	99 °C	210 °F

Package Dimensions*		
Length	6586 mm	259 in
Width	1999 mm	79 in
Height	2364 mm	93 in

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Package Fuel Consumption (ISO 3046/1)		
100% Load without Fan	8.75 MJ/ekw-hr	8299 Btu/ekw-hr
75% Load without Fan	8.93 MJ/ekw-hr	8466 Btu/ekw-hr
50% Load without Fan	9.39 MJ/ekw-hr	8902 Btu/ekw-hr

Exhaust System		
Combustion Air Flow (0° C, 101.3 kPa) / (77° F, 14.7 psia)	3.99 Nm3/bkW-hr	5383 ft3/min
Exhaust temperature – engine outlet	430.00 °C	805 °F
Exhaust gas flow (@engine outlet temp, 14.5psia)	4.24 Nm3/bkW-hr	13658 ft3/min

Heat Rejection		
Jacket Water Circuit (JW + OC + 1AC)	1181 kW	67193 Btu/min
Heat rejection to jacket water (JW)	655 kW	37227 Btu/min
Heat rejection to atmosphere (Includes Generator)	216 kW	12274 Btu/min
Heat rejection to exhaust (LHV to 120°C / 248°F)	988 kW	56206 Btu/min

DEFINITIONS AND CONDITIONS

1. For ambient and altitude capabilities consult your Cat dealer.
2. Engine rating obtained and presented in accordance with ISO 3046/1. (Standard reference conditions of 77°F, 29.60 in Hg barometric pressure.) No overload permitted at rating shown.
3. Ratings are based on a natural gas fuel with a methane number with a LHV of 905 Btu/scf.
4. Gaseous emissions data measurements are consistent with those described in EPA 40 CFR PART 60 SUBPART JJJJ and ISO 8178 for measuring VOC, CO, and NOx.
5. Tolerance: Exhaust stack temperature +/- 8%, Inlet airflow rate +/- 5%, Exhaust flow +/- 6% Fuel rate +/- 5%, Heat rejection +/- 5%, Exhaust heat rejection +/- 10%

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142,UL489, UL869, UL2200,
NFPA37, NFPA70, NFPA99, NFPA110, IEC60034-1, ISO3046, ISO8528,
NEMA MG1-22,NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

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

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