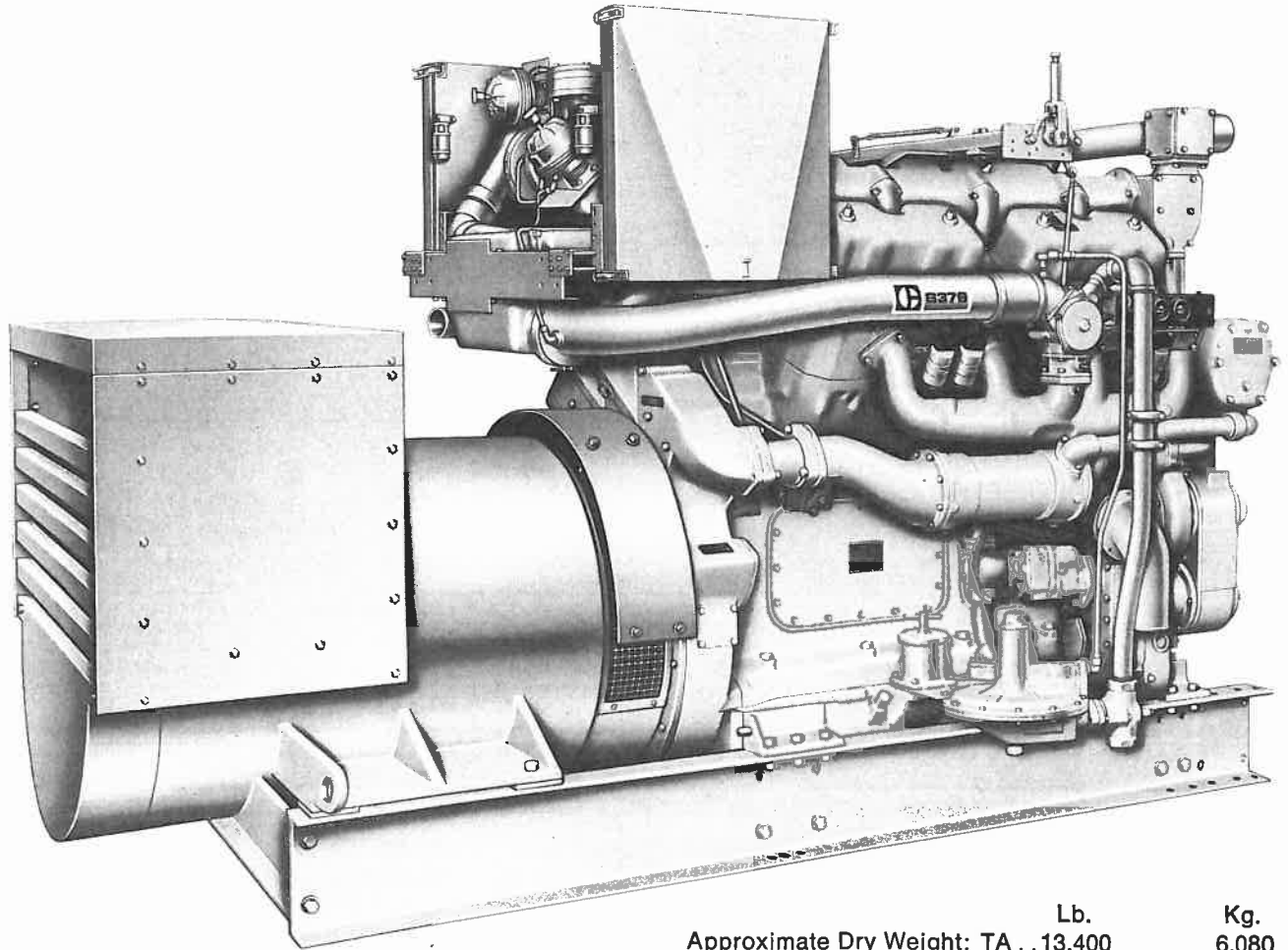


CATERPILLAR

G379 NATURAL GAS ELECTRIC SETS



Approximate Dry Weight: TA . . 13,400 Lb. 6.080 Kg.
NA . . Depends On Generator

RATINGS (continuous)

	60 Hz		50 Hz	
	*TA	NA	*TA	NA
KW @ 0.8 P.F. (w/o Fan).....	325	**230	280	**190
KVA.....	406.25	287.5	350	237.5
Voltages Available.....	125/216		200-400	
	230-460		230-460	
Phase.....	3		3	
Wire & Connection.....	10, Wye		10, Wye	

*Turbocharged-aftercooled engines require a separate supply of water to the aftercooler. Water temperature can be no higher than 90°F (32°C).
**Commercially available generator must be used.

NATURAL GAS ENGINE

Four-Stroke Cycle, Spark Ignition, Turbocharged-Aftercooled or Naturally Aspirated.

Number of Cylinders V-8

Bore and Stroke: inches 6.25 x 8.00
millimeters 159 x 203

Piston Displacement: cu. in. 1964
liters 32.2

Approximate Dry Weight: NA 8,550 Lb. 3.880 Kg.

Compression Ratio 10:1

Installation Facts

	60 Hz				50 Hz			
	TA	HCR	NA	HCR	TA	HCR	NA	HCR
FUEL SYSTEM								
Fuel Pressure Range with Regulator psi • kg/cm ²	2-20 • ,14-1,4		2-20 • ,14-1,4		2-20 • ,14-1,4		2-20 • ,14-1,4	
LUBRICATING SYSTEM								
Sump Capacity (Refill) gal • lit	50 • 188		50 • 188		50 • 188		50 • 188	
COOLING WATER SYSTEM								
Volume gal • lit								
Engine only	40 • 151		40 • 151		40 • 151		40 • 151	
Radiator for max. ambient of 125°F. • 51°C.	38 • 144		28 • 106		38 • 144		28 • 106	
Maximum System Pressure—Radiator psi • kg/cm ²	7 • ,5		7 • ,5		7 • ,5		7 • ,5	
Water Pump Performance								
Jacket Water								
Capacity @ 50 ft • 15,25 m Head (60 Hz), 40 ft • 12,2 m Head (50 Hz) gpm • lit/sec	225 • 14,2		225 • 14,2		170 • 10,7		170 • 10,7	
Capacity @ 5 ft • m, Head gpm • lit/sec	346 • 21,8		346 • 21,8		284 • 17,9		284 • 17,9	
Max. Allowable Static Head ft • m	57.7 • 17,54		57.7 • 17,54		57.7 • 17,54		57.7 • 17,54	
Auxiliary Water								
Capacity @ 46 ft • 14,0 m Head (60 Hz), 30 ft • 9,15 m Head (50 Hz) gpm • lit/sec	50 • 3,2		—		50 • 3,2		—	
Max. Allowable Static Head ft • m	57.7 • 17,54		—		57.7 • 17,54		—	
Aftercooler								
Max. Allowable Flow gpm • lit/sec	150 • 9,5		—		150 • 9,5		—	
Minimum Flow Required gpm • lit/sec	50 • 3,2		—		50 • 3,2		—	
Pressure Drop Through Aftercooler @ max. flow psi • kg/cm ²	7.8 • ,55		—		7.8 • ,55		—	
Max. Allowable Pressure psi • kg/cm ²	40 • 2,8		—		40 • 2,8		—	
Maximum Temperature of Water °F. • °C.	90 • 32		—		90 • 32		—	
Heat Rejection BTU/min. • k cal/min.	1170 • 295		—		920 • 232		—	
Jacket Water System								
Heat Rejection (Incl. Standard Manifolds and Oil Cooler) BTU/min. • k cal/min.	18600 • 4690		15050 • 3795		15800 • 3980		13450 • 3390	
Maximum Temperature °F. • °C.	210 • 99		210 • 99		210 • 99		210 • 99	
Maximum Allowable Pressure psi • kg/cm ²	25 • 1,8		25 • 1,8		25 • 1,8		25 • 1,8	
Radiator Data (Does not include separate core req'd. on TA Engines)								
Fan HP or KW with 125°F. • 43°C. Radiator	30.0 • 21,0		30.0 • 21,0		17.5 • 12,3		17.5 • 12,3	
Air Flow through 125°F. • 51°C. Radiator cfm • lit/sec	54900 • 25820		38200 • 18050		45000 • 21200		31500 • 14840	
Max. Allowable Static Pressure @ Exhaust Side of Large Radiator @ 100°F. • 38°C. ambient in • mm H ₂ O	.5 • 12,7		.5 • 12,7		.5 • 12,7		.5 • 12,7	
ENGINE ROOM VENTILATION								
Combustion Air Requirements @ 85°F. • 29°C. cfm • lit/sec	675 • 318		450 • 212		575 • 272		375 • 177	
Heat Radiated by Engine BTU/min. • k cal/min.	5400 • 1360		4875 • 1230		5450 • 1374		4800 • 1210	
Heat Dissipated by Generator BTU/min. • k cal/min.	1080 • 272		896 • 226		1022 • 258		740 • 187	
Ventilation Recommended for 15°F. • -9°C. Rise (Engine and Generator radiated heat only) cfm • lit/sec	25500 • 10750		22800 • 10790		25500 • 10750		21900 • 10340	
EXHAUST SYSTEM								
Gas Volume cfm • lit/sec	2125 • 1002		1425 • 673		1700 • 804		1135 • 536	
Gas Temperature (Stack) °F. • °C.	1100 • 592		1100 • 592		1050 • 565		1025 • 551	
Max. Permissible Back Pressure in • mm H ₂ O	20 • 507		25 • 634		20 • 507		25 • 634	
STARTING SYSTEM								
Air System								
Min. Air Pressure Required at Motor psi • kg/cm ²	90 • 6,33		90 • 6,33		90 • 6,33		90 • 6,33	
Max. Air Pressure Allowed at Motor psi • kg/cm ²	150 • 10,55		150 • 10,55		150 • 10,55		150 • 10,55	
Electric (Dual) Motor System								
Voltage	30—32		30—32		30—32		30—32	
Breakaway Current (Amps.)								
@ 70°F. • 21°C.	1100		1100		1100		1100	
@ 40°F. • 04°C.	1550		1550		1550		1550	
Rolling Current (Amps.)								
@ 70°F. • 21°C.	440		440		440		440	
@ 40°F. • 04°C.	620		620		620		620	

For LCR information consult your Caterpillar representative.

Material and specifications subject to change without notice.

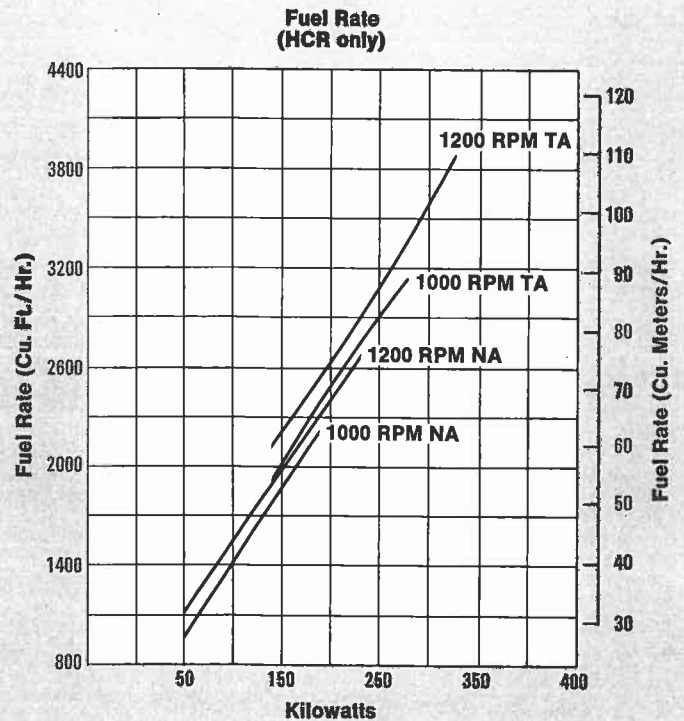
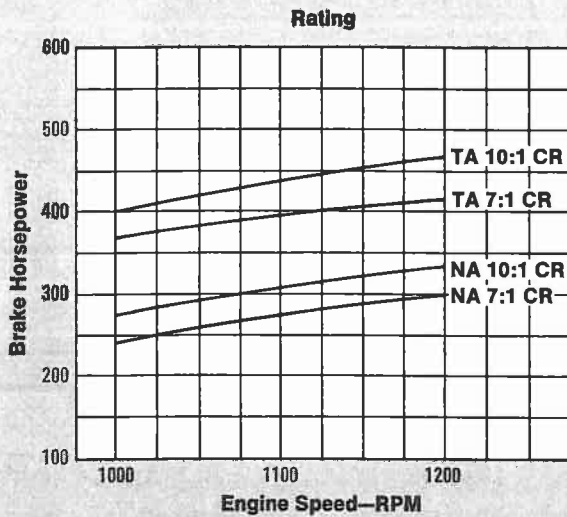


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Ratings are based on SAE standard conditions of 29.38 in. (746 mm) of mercury and 85°F (29°C).

ALTITUDE AND TEMPERATURE CAPABILITIES

Ratings apply to 6500 ft. (1950m) and 65°F (18°C) for turbocharged arrangements; to 500 ft. (150m) and 85°F (29°C) for naturally aspirated arrangements. Up to 7000 ft. (2100m) and 60°F (16°C), derate 3% for each 1000 ft. (300m) and 1% for each 10°F (6°C). Above 7000 ft. and 60°F, consult your Caterpillar representative.



$KW = BHP \times 0.746 \times \text{generator efficiency.}$

Fuel consumption applies to standard electric set without fan, based on natural gas with a low heat value of 905 btu/cu. ft. (8050 Kcal/M³).