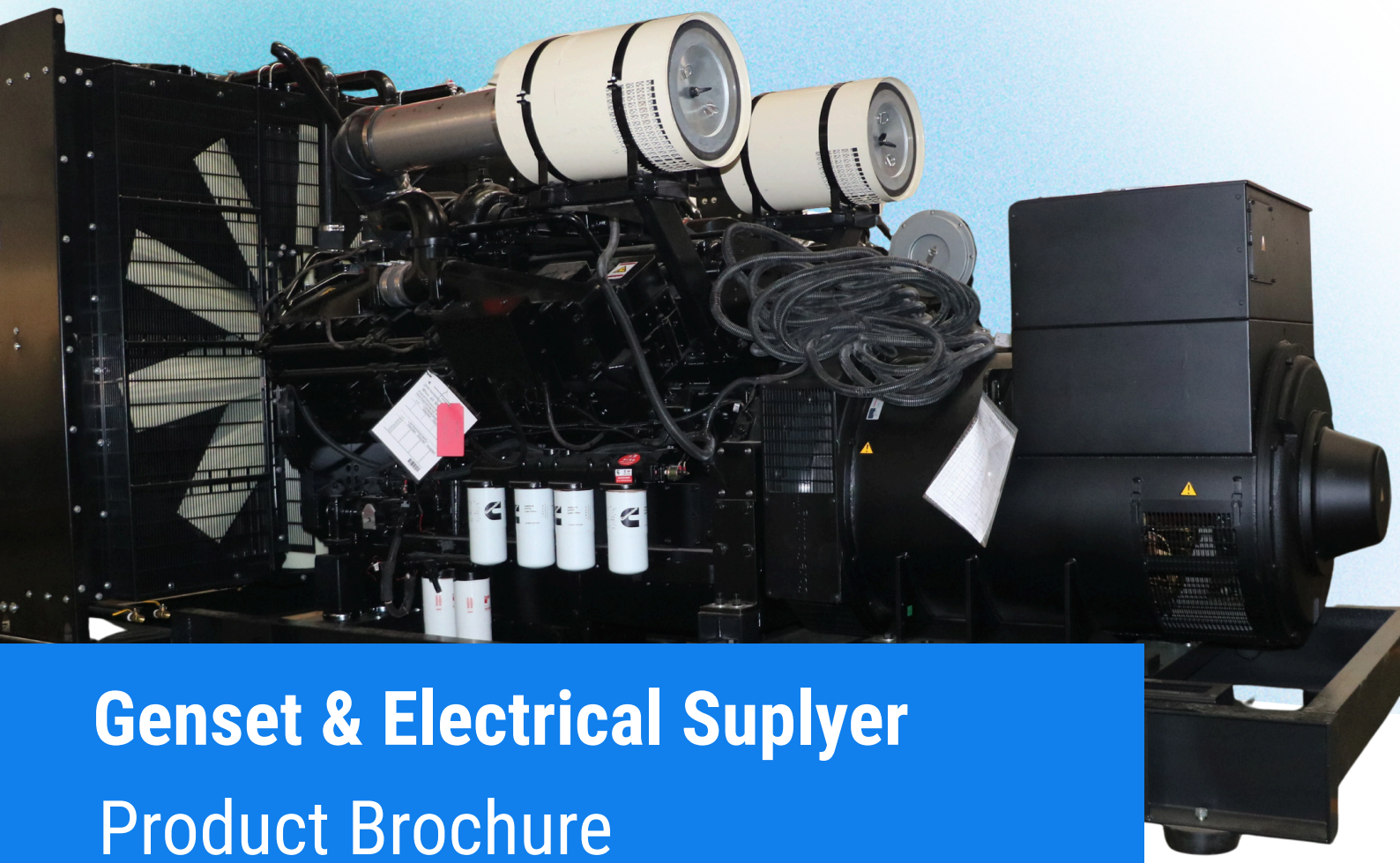
RAGEN

Genset & Electrical Suplyer



Genset & Electrical Suplyer

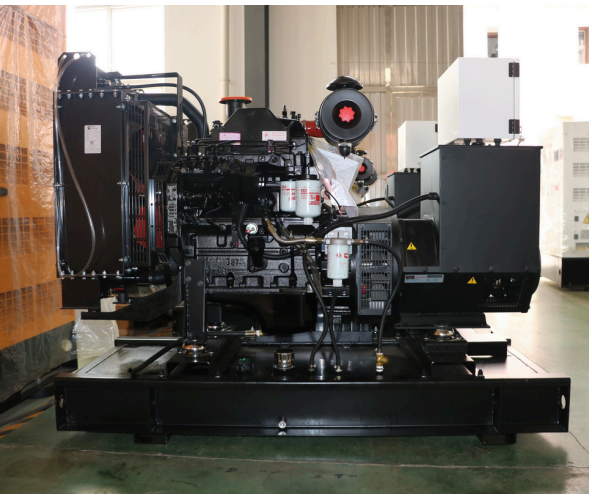
Product Brochure

www.ragen-generator-jogja.com

GENSET & ELECTRICAL SUPLYER

RAGEN ENGINEERING delivers superior solutions in Genset & Electrical Supply by combining technical precision and operational durability for both commercial and heavy industrial applications. Under the banner of '***The Badass Engineer***,' we supply a full spectrum of high-quality generator sets, including Silent Types for noise-sensitive areas, Open Types for rugged field projects, and industrial pumps. Our units are powered by industry-leading engines such as Mitsubishi, Isuzu, and Nissan Diesel.

With more than ten years of experience and a service network covering **Java, Sumatra, Kalimantan, Sulawesi, and Nusa Tenggara**, Ragen is committed to product excellence, cost-efficiency, and 24/7 technical support to guarantee maximum uptime for your business.



MITSUBISHI ENGINE

Engine Model	8DCT In-line 6, 4-cycle diesel
Bore x Stroke	112mm x 149mm (4.4in x 5.9in)
Displacement	8.8 L (538 in^3)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Model	Standby	Prime	Emissions
8DCT300	**300 kVA, 240 ekW**	**275 kVA, 220 ekW**	**EU IIIA**

PACKAGE PERFORMANCE

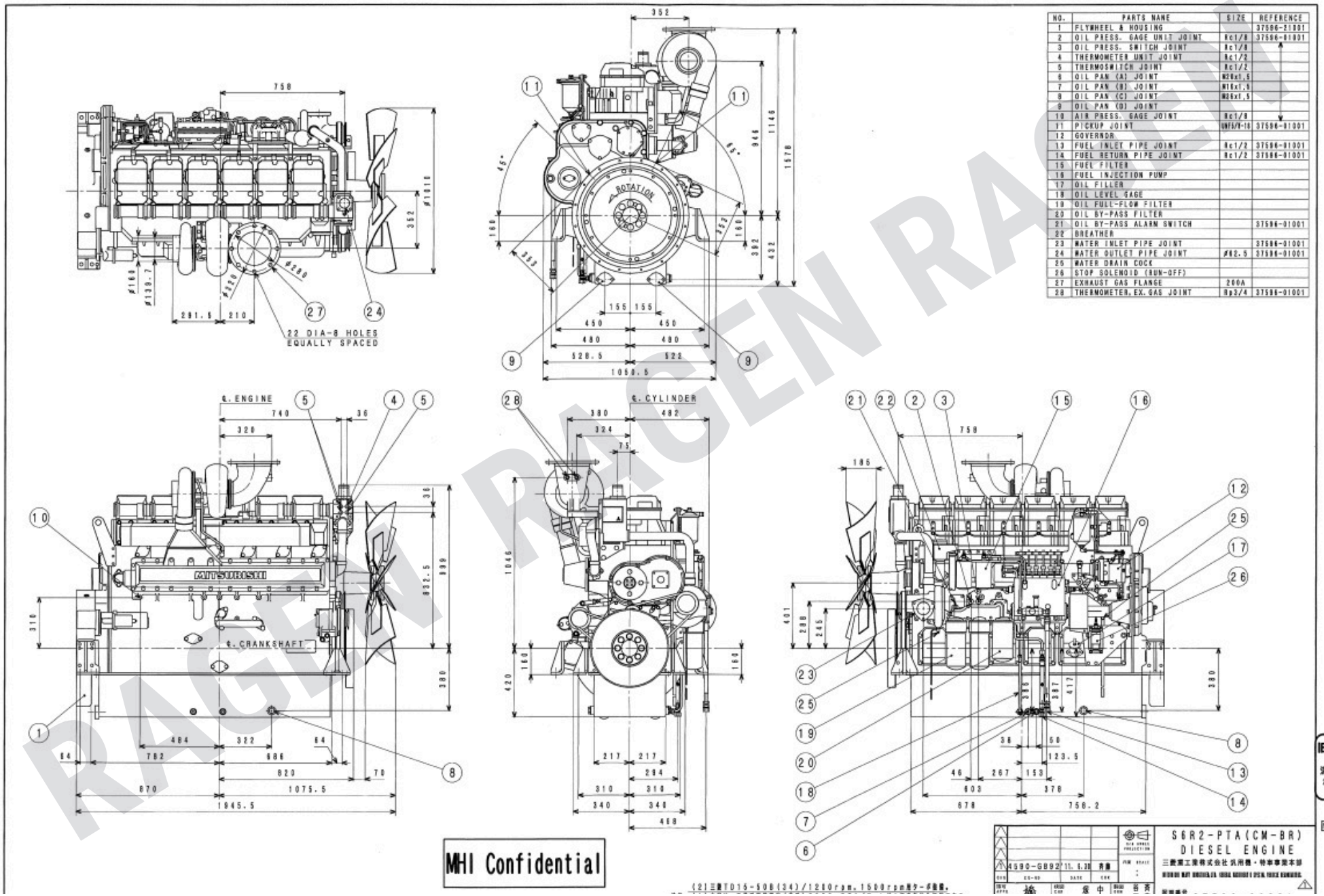
Performance	Standby	Prime
Frequency	50 Hz	
Genset Power Rating	300 kVA	275 kVA
Gen set power rating with fan @ 0.8 power factor	240 ekW	220 ekW
Fuelling strategy	EU IIIA	
Performance Number	EM1548	EM1549
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	62.6 (16.5)	58.6 (15.5)
75% load with fan, L/hr (gal/hr)	50.5 (13.4)	47.2 (12.5)
50% load with fan , L/hr (gal/hr)	37.2 (9.8)	34.9 (9.2)
25% load with fan , L/hr (gal/hr)	23.3 (6.2)	22.0 (5.8)
Cooling System[1]		
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)	
Radiator air flow, m^3/min (cfm)	438 (15467)	
Engine coolant capacity, L (gal)	13.9 (3.7)	
Radiator coolant capacity, L (gal)	43 (11.5)	
Total coolant capacity, L (gal)	56.9 (15.2)	
Inlet Air		
Combustion air inlet flow rate, m^3/min (cfm)	16.7 (592)	16 (567)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	48 (118)	48 (118)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	487 (908)	487 (908)
Exhaust gas flow rate, m^3/min (cfm)	43 (1516)	43 (1516)
Exhaust system backpressure (maximum allowable), kPa (in. Water)	10.0 (40.0)	
Exhaust System		
Heat rejection to jacket water, kW (Btu/min)	101 (5744)	95 (5411)
Heat rejection to exhaust (total), kW (Btu/min)	216 (12292)	209 (11880)
Heat rejection to aftercooler, kW (Btu/min)	45.5 (2588)	40.6 (2310)
Heat rejection to atmosphere from engine, kW (Btu/min)	47.5 (2699)	44 (2502)

Emissions (Nominal)[2]	Standby		Prime	
NOx, mg/Nm³ (g/hp-hr)	2360 (4.97)		2515 (4.6)	
CO, mg/Nm³ (g/hp-hr)	652 (1.37)		703 (1.4)	
HC, mg/Nm³ (g/hp-hr)	16.7 (0.04)		14.6 (0.04)	
PM, mg/Nm³ (g/hp-hr)	11.7 (0.03)		14.4 (0.04)	
Alternator[3]	**Standby**		**Prime**	
Voltages	**230V**	**380V**	**400V**	**415V**
Motor Starting Capability @ 30% Voltage Dip	827 skVA	746 skVA	827 skVA	886 skVA
Current, amps	753	456	433	417
Frame Size	A2658L4			
Excitation	SE			
Temperature Rise, °C (°F)	125 (257)			

DEFINITIONS AND CONDITIONS

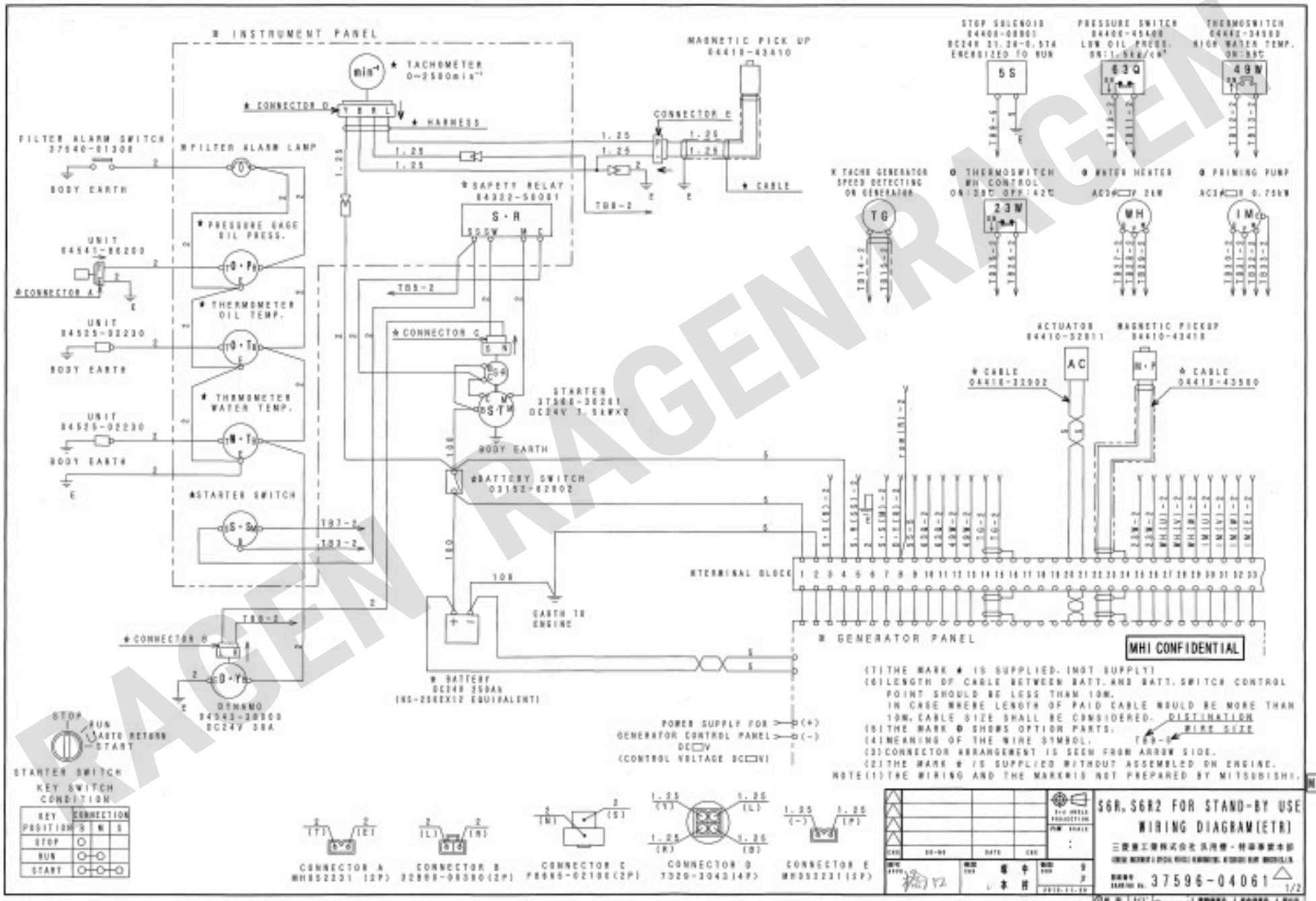
1. For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
2. Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.
3. UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

ENGINE DESIGN



NO.	PARTS NAME	SIZE	REFERENCE
1	FLYWHEEL & HOUSING		37596-21001
2	OIL PRESS. GAGE UNIT JOINT	Rc1/8	37596-01001
3	OIL PRESS. SWITCH JOINT	Rc1/8	
4	THERMOMETER UNIT JOINT	Rc1/2	
5	THERMOSWITCH JOINT	Rc1/2	
6	OIL PAN (A) JOINT	M28x1.5	
7	OIL PAN (B) JOINT	M16x1.5	
8	OIL PAN (C) JOINT	M28x1.5	
9	OIL PAN (D) JOINT		
10	AIR PRESS. GAGE JOINT	Rc1/8	
11	PICKUP JOINT	UNF5/8-18	37596-01001
12	GOVERNOR		
13	FUEL INLET PIPE JOINT	Rc1/2	37596-01001
14	FUEL RETURN PIPE JOINT	Rc1/2	37596-01001
15	FUEL FILTER		
16	FUEL INJECTION PUMP		
17	OIL FILLER		
18	OIL LEVEL GAGE		
19	OIL FULL-FLOW FILTER		
20	OIL BY-PASS FILTER		
21	OIL BY-PASS ALARM SWITCH		37596-01001
22	BREATHER		
23	WATER INLET PIPE JOINT		37596-01001
24	WATER OUTLET PIPE JOINT	ø82.5	37596-01001
25	WATER DRAIN COCK		
26	STOP SOLENOID (RUN-OFF)		
27	EXHAUST GAS FLANGE	200A	
28	THERMOMETER, EX.GAS JOINT	Rp3/4	37596-01001

CONTROL DIAGRAM



THANK YOU

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