









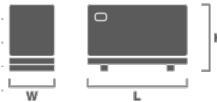
INDUSTRIAL RANGE

GENSET 600 kVA BAUDOUDIN / GRUPEL

1. MAIN FEATURES

T	Three-phase		Diesel
	Baudouin / 8M21G660/5		Grupel / 354GB563
	Grupel / G545	Hz	50 Hz
	1500 r.p.m.	V	400 V
cos φ	0.8		1000 A
Standby Power(ESP)	619 kVA		495 kW
Prime Power (PRP)	563 kVA		450 kW
Continuous Power(COP)	-		-

SOUNDPROOF

Length (L)	4530 mm	
Height (H)	2260 mm	
Width (W)	1785 mm	
Weight	5049 kg	
Fuel tank daily capacity	1000 L	
Acoustic pressure level @ 1m		89 ± 2 dB(A)
Acoustic pressure level @ 7m		81 ± 2 dB(A)

2. ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz		
	COP	PRP	ESP
Exhaust gas temperature (°C)	-	-	600
Exhaust gas flow (m³/min)	-	110.3	125.2
Evacuated heat (kW)	-	-	428.1
Maximum back pressure (kPa)		7.5	
Exhaust silencer attenuation (dB)		18-25	
Output diameter (mm)		220	

VENTILATION SYSTEMS	50 Hz		
	COP	PRP	ESP
Combustion air flow (m³/min)	-	32.6	36.2
Cooling airflow (m³/min)		800	
Maximum load losses (Pa)		50	
Alternator cooling air flow (m³/min)		60.84	

RADIATION	50 Hz		
	COP	PRP	ESP
Engine (kW)	-	-	70.4
Alternator (kW)	24.32	24.32	26.74



3. ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS		50Hz
Model		8M21G660/5
Emissions (UE/USEPA)		Not applicable / Not applicable
Performance grade		G3*, ISO 8528:5 2018
Operating method		4 stroke
Fuel type		Diesel
Refrigeration system		Closed water circuit / antifreeze
Aspiration system		Turbo-aftercooled
Injection system		Common-rail
No. and Cylinder arrangement		8 in V
Displacement (L)		16.72
Cylinder bore (mm)		127
Cylinder stroke (mm)		165
Compression ratio		15:1
Regulation		Electronic
Rotation speed (r.p.m.)		1500
Piston speed (m/s)		8.25
Gross power COP (kWm)		-
Gross power PRP (kWm)		530
Gross power ESP (kWm)		580
Fan Power (kWm)		- / 32 / 32
Net Power COP (kWm)		-
Net Power PRP (kWm)		498
Net Power ESP (kWm)		548
BMEP COP (kPa)		-
BMEP PRP (kPa)		2536
BMEP ESP (kPa)		2775



CONSUMPTION		50 Hz
Fuel consumption	l/h	g/kWh
ESP	140.7	203.7
PRP	124.2	196.9
COP	-	-
75%	95.4	201.5
50%	64.7	205.2
Oil consumption	< 0.2% of fuel consumption	

REFERENCE CONDITIONS	
Temperature (°C)	25
Atmospheric pressure (kPa)	100

CAPACITY (°C)	
Coolant (L)	101
Oil (L)	45

STARTING SYSTEM	
Voltage (V)	24
Power (kW)	8.5
Battery (Ah)	220

4. ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	354GB563
Phases No.	Three-phase
Protection	IP23
Insulation	H
Temperature rise	H
R.F.I. telephone interference	THF < 2%
R.F.I. Suppression	BS EN 61000-6-2 /6-4,VDE 0875G, VDE 0875N
Coupling	Flexible disks
Support	Single bearing



Wave form distortion with no load	< 1,5%
Wave form distortion with balanced linear load	< 5%
Winding Leads	6
Excitation (standard/optional)	Autoexcitado / PMG
AVR Model (standard/optional)	KR440 / MX341B
Voltage Regulation (standard/optional)	± 1 % / ± 0,5 %
Icc (standard/optional)	- / 3In:10s

PF (cos Ø)	Phase	Voltage (V)	Power PRP/ESP (kVA)	Efficiency PRP/ESP (%)	Xd	X'd	X''d
0.8	Three-phase	400	563 / 619	94.6 / 94.6	2.83	0.15	0.11



5. CONTROL PANEL



GENSET	Grupel G545
Voltage (F-F / F-N)	● / ●
Current intensity	●
Frequency	●
RMS Values	●
Generator phase sequence	●
Generator earth current [a]	○
No. of registered events	400
Real time clock	●
PIN Protection	●
kWh, kVAR, kVAh, kVARh, cos Ø	●
Synchroscope [i]	○
No. of available outputs [b]	4
Indication of alarms on LCD	●
Hours of engine operation	●
Total no. of LED indicators	15
No. of LED alarms	4
Sound signalling alarms	-
Schedule	●
Fuel level	●

ELECTRICAL GRID	Grupel G545
Voltage (F-F / F-N)	● / ●
Current [a]	○
Frequency	●
kVA, kW, cos Ø [a]	○
Inversion control between main-group	●

PROTECTIONS AND ALARMS	Grupel G545
High / low battery voltage	A
Failure in battery charge alternator	A
Failure to stop	A/S
Failure to start	A/S
Low fuel level	A/S
Overload	A/S
Earth leakage	A/S
Asymmetry between phases	A/S
Maintenance	A/S
High / Low generator frequency	A/S
Engine overspeed	A/S
Engine underspeed	A/S
Generator overvoltage	A/S
Generator undervoltage	A/S
ECU Alert (if applicable)	A/S
Low oil pressure	A/S
Low level of radiator water [f]	A/S
Engine high temperature	A/S
Fuel leakage/ theft	A

