

INDUSTRIAL RANGE

1 MAIN FEATURES

T	Triphasic		Diesel fuel		Baudouin / 6M21G440/5		Grupel / 354GB450		/ 7320
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Hz	50Hz		1500 r.p.m.	V	400V	cos φ	0,8
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Standby power (STP)	447 kVA	358 kW
Prime Power (PRP)	404 kVA	323 kW
Power Continuous (COP)	- kVA	- kW

OPEN SKID

Length (L)	4500 mm
Height (H)	2240 mm
Width(W)	1750 mm
Weight	3120 kg
Daily tank	1000 L

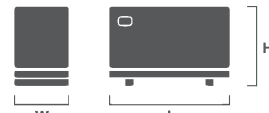


50Hz

Acoustic pressure level @1m	-
Acoustic pressure level @7m	-

SOUNDPROOF

Length (L)	4500 mm
Height (H)	2240 mm
Width (W)	1750 mm
Weight	4193 kg
Daily tank	1000 L



50Hz

Acoustic pressure level @1m	80 dB(A)
Acoustic pressure level @7m	67 dB(A)

AVAILABLE VOLTAGES - 50Hz

FP (cos Ø)	Phase	Voltage	COP (kVA/kW)	PRP (kVA/kW)	STP (kVA/kW)	Circuit breaker (A)
0,8	Three-phase	440	- / -	406 / 325	449 / 359	630
0,8	Three-phase	415	- / -	406 / 324	449 / 359	630
0,8	Three-phase	400	- / -	404 / 323	447 / 358	630
0,8	Three-phase	380	- / -	403 / 323	446 / 357	630
0,8	Three-phase	240	- / -	406 / 324	449 / 359	1000
0,8	Three-phase	230	- / -	404 / 323	447 / 358	1250
0,8	Three-phase	220	- / -	403 / 323	449 / 359	1250
0,8	Single phase	240	- / -	270 / 216	295 / 236	1250
1	Single phase	240	- / -	216 / 216	238 / 238	1000
0,8	Single phase	230	- / -	270 / 216	295 / 236	1250
1	Single phase	230	- / -	216 / 216	238 / 238	1000
0,8	Single phase	220	- / -	270 / 216	295 / 236	1250
1	Single phase	220	- / -	216 / 216	238 / 238	1000

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz		
	COP	PRP	STP
Exhaust gas temperature (°C)	-	-	580
Exhaust gas flow (m³/min)	-	63	69
Evacuated Heat (kW)	-	250,7	277,3
Maximum back pressure (kPa)		7,5	
Exhaust silencer attenuation (dB)		30	
Output Diameter (mm)		168	

VENTILATION SYSTEMS	50 Hz		
	COP	PRP	STP
Combustion air flow (m³/min)	-	25	26,7
Cooling airflow (m³/min)		398	
Maximum load losses (Pa)		150	
RADIATION	50 Hz		
	COP	PRP	STP
Engine (kW)	-	-	-
Alternator (kW) 50	24,5	24,5	26,9

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz
Model	6M21G440/5
Emissions	Not satisfy 97/68/EC
Performance grade	G2
Operating method	Four stroke
Fuel type	Diesel fuel
Refrigeration system	Water/antifreeze Closed Circuit
Aspiration system	Turbocharged
Injection system	Direct
No. and Cylinder arrangement	6 In-Line
Displacement (L)	12,54
Cylinder bore (mm)	127
Cylinder stroke (mm)	165
Compression Ratio	16:1
Regulation	Electronic
Rotation speed	1500
Piston Speed (m/s)	8,2
Gross power COP (kWm)	-
Gross power PRP (kWm)	368
Gross power STP (kWm)	405
Fan power (kWm)	21
Net Power COP (kWm)	-
Net Power PRP (kWm)	347
Net Power STP (kWm)	384
BMEP COP (kPa)	-
BMEP PRP (kPa)	2348
BMEP STP (kPa)	2584



CONSUMPTION	50 Hz		
Fuel consumption	LOAD	lt/h	g/kWh
STP	100%	94,9	196,7
	100%	85	195,1
PRP	75%	63,5	193,4
	50%	43,1	197,1
	100%	-	-
COP	75%	-	-
	50%	-	-
Oil consumption	< 0,2% of fuel consumption		
REFERENCE CONDITIONS			
Temperature (°C)	25		
Atmospheric pressure (kPa)	100		
CAPACITY			
Coolant (L)	55		
Oil (L)	32		
STARTING SYSTEM			
Voltage (V)	24		
Power (kW)	5.4		
Battery (Ah)	155		

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	354GB450
Phases No.	Triphasic
Protection	IP23
Insulation	H
Temperature Rise	H
50Hz R.F.I. telephone interference	THF<2%
60Hz R.F.I. telephone interference	TIF<50
R.F.I. Suppression	BS EN 61000-6-2 / 6-4, VDE 0875G, VDE 0875N.
Coupling	Semi-Flexible
Support	Single bearing



Wave form distortion with no load	< 1,5%
Wave form distortion with balanced linear load	< 5%
Winding Leads	6
Excitation (standard / option)	Self-excited / PMG
AVR Model (standard / option)	KR440/MX341B
Voltage Regulation (standard / option)	± 1,0%/ ± 0,5%



INDUSTRIAL RANGE

RATED POWER - 50Hz

FP (cos Ø)	Phase	Voltage (V)	Power	Efficiency	Xd	X'd	X''d
			PRP/STP (kVA)	PRP/STP (%)			
0,8	Three-phase	440	431 / 474	93,6 / 93,6	2,720	0,140	0,100
0,8	Three-phase	415	450 / 495	93,5 / 93,5	2,720	0,140	0,100
0,8	Three-phase	400	450 / 495	93,2 / 93,2	2,720	0,140	0,100
0,8	Three-phase	380	450 / 495	93,0 / 93,0	2,720	0,140	0,100
0,8	Three-phase	240	450 / 495	93,5 / 93,5	2,720	0,140	0,100
0,8	Three-phase	230	450 / 495	93,2 / 93,2	2,720	0,140	0,100
0,8	Three-phase	220	450 / 495	93,0 / 93,6	2,720	0,140	0,100
0,8	Single phase	240	270 / 295	94,4 / 94,4	2,720	0,140	0,100
1	Single phase	240	270 / 297	94,4 / 94,4	2,720	0,140	0,100
0,8	Single phase	230	270 / 295	94,4 / 94,4	2,720	0,140	0,100
1	Single phase	230	270 / 297	94,4 / 94,4	2,720	0,140	0,100
0,8	Single phase	220	270 / 295	94,4 / 94,4	2,720	0,140	0,100
1	Single phase	220	270 / 297	94,4 / 94,4	2,720	0,140	0,100

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CONTROL PANEL



GENSET	DEEPSEA 7320	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity	•	•
Frequency	•	•
RMS values	•	•
Generator phase sequence	•	•
Generator earth current [a]	0	0
No. of registers events	250	250
Real time clock	•	•
PIN protection	•	•
kWh, kVAr, kVAh, kVAh, cos Ø	•	•
Synchroscope (m)	-	0
Nº of available outputs [b]	6	6
Engine run hours	•	•
Indication of alarms on LCD	•	•
Total no. of LED indicators	12	12
No. of LED alarms	4	4
Sound signalling alarms	•	•
Scheduler	•	•
Fuel Level	•	•

Electrical network	DEEPSEA 7320	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity [a]	-	0
Frequency	•	•
kVA, kW, cos Ø (a)	-	0
Inversion control between main-group	•	•
Protections and Alarms	DEEPSEA 7320	OPTIONAL
High / low battery voltage	A	0
Failure in Battery Charge Alternator	A	0
Failure to stop	A/S	A/S
Failure to start	A/S	A/S
Low fuel level	A/S	A/S
Overload	A/S	A/S
Earth leakage	A/S	A/S
Asymmetry between phases	A/S	A/S
Maintenance	A/S	A/S
High / Low generator frequency	A/S	A/S
Engine overspeed	A/S	A/S
Engine underspeed	A/S	A/S
Generator overvoltage	A/S	A/S
Generator undervoltage	A/S	A/S
ECU Alert (if applicable)	A/S	A/S
Low oil pressure	A/S	A/S
Low level of radiator water [f]	A/S	A/S
Engine high temperature	A/S	A/S
Fuel leakage/ theft	A	0

6 CONTROL PANEL

Engine	DEEPSEA 7320	OPTIONAL
Engine Speed	•	•
Low oil pressure protection	•	•
Oil pressure reading [c]	0	0
High temperature engine protection	•	•
Engine temperature reading [c]	0	0
Engine battery voltage	•	•
Intensity of the engine battery [d]	0	0
Fuel Consumption [e]	•	•
Low level of radiator water [f]	0	0
Engine maintenance scheduled	•	•
Communication	DEEPSEA 7320	OPTIONAL
USB female type B plug (Max. 6m) [g]	•	•
USB female type A plug (n)	-	0
RS232 port (Max. 15m) (n)	•	•
RS485 port (Max. 1,2Km) [h]	•	•
Ethernet port RJ45 [i]	0	0
GSM and/or GPS [j]	0	0
ModBus RTU protocol [h]	•	•
ModBus TCP protocol [i]	0	0
SNMP protocol [l]	0	0
CAN port (Max. 40m)	•	•
MSC port (Max. 240m) (m)	-	0
PLC functionality	•	•

Applications	DEEPSEA 7320	OPTIONAL
Automatic or manual starting	•	•
Remote start by NO dry contact	•	•
Automatic by mains failure	•	•
Alternating with timesharing	-	0
Multi-generators synchronization and load sharing (Max. 32 generators) (m)	-	0
Generator-Main in synchronism and load sharing (1 generator and 1 main) (m)	-	0
Optional expansions	DEEPSEA 7320	OPTIONAL
DSE2130 (8 inputs dig.) IG-IOM (8 in/outputs dig. + 4 inputs anal.) G-08 (8 inputs dig.)	•	•
DSE2157 I-RB8 G-06 (8 relay outputs)	•	•
DSE890 IL-NT-GPRS G-GSM (GSM and/or GPS)	•	•
DSE891 IB-LITE G-ETH (ethernet module)	•	•
DSE892 IB-LITE - (ethernet module according SNMP protocol)	•	•
DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	•	•
DSE2510 / 20 (mirror controller, maximum distance 1km)	•	•
Standards		
Working temperature	-30 -> 70°C	
Protection index (when assembled with sealing gasket)	IP65	
Degree of humidity (during 48hr)	93% / 40°C	

Legend

•	Available
o	Optional
-	Not available
A	Warning Alarm
S	Stop alarm
[a]	Need additional CT
[b]	No. of outputs available for standard configuration. The outputs do not include relays and additional terminal connections.
[c]	If the information is not provided by the engine-ECU, you need an additional sensor

[d]	Needs additional ammeter
[e]	If information provided by the engine ECU
[f]	Required additional sensor
[g]	Requires the addition of the IL-NT-S-USB module
[h]	Requires the addition of the IL-NT-RS232-485 module
[i]	DeepSea: Requires the addition of the DSE891 module/ ComAp: Requires the addition of the IB-LITE module
[j]	DeepSea: Requires the addition of the DSE890 module/ ComAp: Requires the addition of the IL-NT-GPRS module
[l]	DeepSea: Requires the addition of the DSE892 module/ ComAp: Requires the addition of the IB-LITE module

Indicative weights and dimensions. Reference ambient conditions: 100kPa, 25°C, 30% relative humidity and fuel temperature below 40°C. Power in accordance with ISO 8528: Continuous power (PRP): Maximum available power to feed a variable electrical load for an unlimited period. The average of load factor in 24h of operation, shall not exceed 70% of the PRP. Admits 10% of overload during the maximum period of 1h every 12h of operation. The operation under overload shall not exceed 25h/year. Emergency Power (STP): Maximum available power to feed variable electrical load for a maximum period of 200h/year. The average of load factor in 24h of operation shall not exceed 70% of the STP. No overload. These specifications are subject to change without notice.

Distribuidor