



INDUSTRIAL RANGE

1 MAIN FEATURES


T Triphasic
 Diesel fuel
 Perkins / 1506A-E88TAG3
 Grupel / 274GB250
 / G-545

Hz 50Hz	1500 r.p.m.	V 400V	cos φ 0,8
Standby power (STP)	275 kVA	220 kW	
Prime Power (PRP)	250 kVA	200 kW	
Power Continuous (COP)	- kVA	- kW	

Hz 60Hz	1800 r.p.m.	V 480V	cos φ 0,8
Standby power (STP)	327 kVA	261 kW	
Prime Power (PRP)	294 kVA	235 kW	
Power Continuous (COP)	- kVA	- kW	

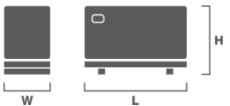
OPEN SKID

Length (L)	3800 mm
Height (H)	1920 mm
Width (W)	1250 mm
Weight	2282 kg
Daily tank	550 L



SOUNDPROOF

Length (L)	3800 mm
Height (H)	1920 mm
Width (W)	1250 mm
Weight	3067 kg
Daily tank	550 L



	50Hz	60Hz
Acoustic pressure level @ 1m	-	-
Acoustic pressure level @ 7m	-	-

	50Hz	60Hz
Acoustic pressure level @ 1m	78 dB(A)	80 dB(A)
Acoustic pressure level @ 7m	65 dB(A)	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	- / -	230 / 184	256 / 205	400
0,8	Three-phase	415	- / -	250 / 200	275 / 220	400
0,8	Three-phase	400	- / -	250 / 200	275 / 220	400
0,8	Three-phase	380	- / -	250 / 200	275 / 220	400
0,8	Three-phase	240	- / -	250 / 200	275 / 220	630
0,8	Three-phase	230	- / -	250 / 200	275 / 220	630
0,8	Three-phase	220	- / -	250 / 200	275 / 220	800
0,8	Single phase	240	- / -	150 / 120	165 / 132	630
1	Single phase	240	- / -	120 / 120	132 / 132	630
0,8	Single phase	230	- / -	150 / 120	165 / 132	800
1	Single phase	230	- / -	120 / 120	132 / 132	630
0,8	Single phase	220	- / -	150 / 120	165 / 132	800
1	Single phase	220	- / -	120 / 120	132 / 132	630

AVAILABLE VOLTAGES - 60Hz

FP (cos Ø)	Phase	Voltage	COP (kVA/kW)	PRP (kVA/kW)	STP (kVA/kW)	Circuit breaker (A)
0,8	Three-phase	480	- / -	294 / 235	327 / 261	400
0,8	Three-phase	460	- / -	292 / 234	325 / 260	400
0,8	Three-phase	440	- / -	292 / 233	324 / 259	400
0,8	Three-phase	416	- / -	291 / 233	323 / 259	630
0,8	Three-phase	240	- / -	294 / 235	327 / 261	800
0,8	Three-phase	230	- / -	292 / 234	325 / 260	800
0,8	Three-phase	220	- / -	292 / 233	324 / 259	800
0,8	Three-phase	208	- / -	291 / 233	323 / 259	1000
0,8	Single phase	240	- / -	165 / 132	181 / 145	800
1	Single phase	240	- / -	165 / 165	181 / 181	800
0,8	Single phase	230	- / -	165 / 132	181 / 145	800
1	Single phase	230	- / -	165 / 165	181 / 181	800
0,8	Single phase	220	- / -	165 / 132	181 / 145	800
1	Single phase	220	- / -	165 / 165	181 / 181	800


2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	537	558	-	477	496
Exhaust gas flow (m³/min)	-	37,5	40,4	-	48,9	45,3
Evacuated Heat (kW)	-	168	170	-	191	204
Maximum back pressure (kPa)	10					
Exhaust silencer attenuation (dB)	30					
Output Diameter (mm)	114					

VENTILATION SYSTEMS	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Combustion air flow (m³/min)	-	14,1	15	-	18,6	19,8
Cooling airflow (m³/min)	370			482		
Maximum load losses (Pa)	125					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	15	15	15	12	12	12
Alternator (kW)	9,8	9,8	11,7	14,4	14,4	15,8

3 ENGINE SPECIFICATIONS


GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	1506A-E88TAG3	
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)	8,8	
Cylinder bore (mm)	112	
Cylinder stroke (mm)	149	
Compression Ratio	16,1:1	
Regulation	Electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	7,4	8,9
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	236	270
Gross power STP (kWm)	258	297
Fan power (kWm)	8	13
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	222	250
Net Power STP (kWm)	244	278
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	2145	2045
BMEP STP (kPa)	2345	2250



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	60,7	199,9	69,8	199,5
	75%	55,5	199,4	63,1	198,5
	50%	41,6	199,3	47,5	199,3
PRP	100%	-	-	-	-
	75%	-	-	-	-
	50%	-	-	-	-
COP	100%	-	-	-	-
	75%	-	-	-	-
	50%	-	-	-	-
Oil consumption	< 0,1% of fuel consumption				
REFERENCE CONDITIONS					
Temperature (°C)	25				
Atmospheric pressure (kPa)	100				
CAPACITY					
Coolant (L)	29,6				
Oil (L)	41				
STARTING SYSTEM					
Voltage (V)	24				
Power (kW)	5,3				
Battery (Ah)	155				

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	274GB250
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	12
Excitation (standard / option)	Self-excited / PMG
AVR Model (standard / option)	SX460/ MX341
Voltage Regulation (standard / option)	± 1,0%/ ± 0,5%



INDUSTRIAL RANGE

RATED POWER - 50Hz								RATED POWER - 60Hz							
FP (cos Ø)	Phase	Voltage (V)	Power		Efficiency			FP (cos Ø)	Phase	Voltage (V)	Power		Efficiency		
			PRP/STP (kVA)	PRP/STP (%)	PRP/STP (%)	Xd	X'd				X''d	PRP/STP (kVA)	PRP/STP (%)	Xd	X'd
0,8	Three-phase	440	230 / 256	94,2 / 94,2	2,550	0,119	0,078	0,8	Three-phase	480	300 / 330	94,0 / 94,0	2,903	0,136	0,089
0,8	Three-phase	415	250 / 275	94,0 / 94,0	2,550	0,119	0,078	0,8	Three-phase	460	300 / 330	93,5 / 93,5	2,903	0,136	0,089
0,8	Three-phase	400	250 / 275	95,1 / 94,7	2,550	0,119	0,078	0,8	Three-phase	440	300 / 330	93,3 / 93,3	2,903	0,136	0,089
0,8	Three-phase	380	250 / 275	93,3 / 93,3	2,550	0,119	0,078	0,8	Three-phase	416	300 / 330	93,0 / 93,0	2,903	0,136	0,089
0,8	Three-phase	240	250 / 275	94,0 / 94,0	2,550	0,119	0,078	0,8	Three-phase	240	300 / 330	94,0 / 94,0	2,903	0,136	0,089
0,8	Three-phase	230	250 / 275	93,8 / 93,8	2,550	0,119	0,078	0,8	Three-phase	230	300 / 330	93,5 / 93,5	2,903	0,136	0,089
0,8	Three-phase	220	250 / 275	93,3 / 93,3	2,550	0,119	0,078	0,8	Three-phase	220	300 / 330	93,3 / 93,3	2,903	0,136	0,089
0,8	Single phase	240	150 / 165	93,4 / 93,4	2,550	0,119	0,078	0,8	Three-phase	208	300 / 330	93,0 / 93,0	2,903	0,136	0,089
1	Single phase	240	150 / 165	93,4 / 93,4	2,550	0,119	0,078	0,8	Single phase	240	165 / 181	93,4 / 93,4	2,903	0,136	0,089
0,8	Single phase	230	150 / 165	93,4 / 93,4	2,550	0,119	0,078	1	Single phase	240	165 / 181	93,4 / 93,4	2,903	0,136	0,089
1	Single phase	230	150 / 165	93,4 / 93,4	2,550	0,119	0,078	0,8	Single phase	230	165 / 181	93,4 / 93,4	2,903	0,136	0,089
0,8	Single phase	220	150 / 165	93,4 / 93,4	2,550	0,119	0,078	1	Single phase	230	165 / 181	93,4 / 93,4	2,903	0,136	0,089
1	Single phase	220	150 / 165	93,4 / 93,4	2,550	0,119	0,078	0,8	Single phase	220	165 / 181	93,4 / 93,4	2,903	0,136	0,089
								1	Single phase	220	165 / 181	93,4 / 93,4	2,903	0,136	0,089

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CONTROL PANEL



GENSET	GRUPEL G-545	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity	•	•
Frequency	•	•
RMS values	•	•
Generator phase sequence	•	•
Generator earth current [a]	•	•
No. of registers events	400	250
Real time clock	•	•
PIN protection	•	•
kWh, kVAr, kVAh, kVAh, cos Ø	•	•
Synchroscope (m)	o	o
Nº of available outputs [b]	4	6
Engine run hours	•	•
Indication of alarms on LCD	•	•
Total no. of LED indicators	15	12
No. of LED alarms	4	4
Sound signalling alarms	-	o
Scheduler	•	•
Fuel Level	•	•

Electrical network	GRUPEL G-545	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity [a]	o	o
Frequency	•	•
kVA, kW, cos Ø (a)	o	o
Inversion control between main-group	•	•
Protections and Alarms	GRUPEL G-545	OPTIONAL
High / low battery voltage	A	o
Failure in Battery Charge Alternator	A	o
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	o

6 CONTROL PANEL

Engine	GRUPEL G-545	OPTIONAL
Engine Speed	•	•
Low oil pressure protection	•	•
Oil pressure reading [c]	o	o
High temperature engine protection	•	•
Engine temperature reading [c]	o	o
Engine battery voltage	•	•
Intensity of the engine battery [d]	o	o
Fuel Consumption [e]	•	•
Low level of radiator water [f]	o	o
Engine maintenance scheduled	•	•
Communication	GRUPEL G-545	OPTIONAL
USB female type B plug (Max. 6m) [g]	•	•
USB female type A plug (n)	o	o
RS232 port (Max. 15m) (n)	o	o
RS485 port (Max. 1,2Km) [h]	•	•
Ethernet port RJ45 [i]	o	o
GSM and/or GPS [j]	o	o
ModBus RTU protocol [h]	•	•
ModBus TCP protocol [i]	o	o
SNMP protocol [l]	o	o
CAN port (Max. 40m)	•	•
MSC port (Max. 240m) (m)	o	o
PLC functionality	•	•

Applications	GRUPEL G-545	OPTIONAL
Automatic or manual starting	•	•
Remote start by NO dry contact	•	•
Automatic by mains failure	•	•
Alternating with timesharing	•	•
Multi-generators synchronization and load sharing (Max. 32 generators) (m)	o	o
Generator-Main in synchronism and load sharing (1 generator and 1 main) (m)	o	o
Optional expansions	GRUPEL G-545	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)	-	o
DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	-	o
DSE2510 / 20 (mirror controller, maximum distance 1km)	-	o
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