



INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic	Diesel fuel	Iveco / C10 TE1F	Grupel / 274GB250	/ 4520
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

OPEN SKID			SOUNDPROOF		
Length (L)	3800 mm		Length (L)	3800 mm	
Height (H)	1920 mm		Height (H)	1920 mm	
Width(W)	1250 mm		Width (W)	1250 mm	
Weight	2281 kg		Weight	3066 kg	
Daily tank	550 L		Daily tank	550 L	
		50Hz			50Hz
Acoustic pressure level @1m	-		Acoustic pressure level @1m	78 dB(A)	
Acoustic pressure level @7m	-		Acoustic pressure level @7m	65 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

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz		
	COP	PRP	STP
Exhaust gas temperature (°C)	-	520	-
Exhaust gas flow (kg/h)	-	-	1343
Evacuated Heat (kW)	-	195,3	214,6
Maximum back pressure (kPa)		5	
Exhaust silencer attenuation (dB)		30	
Output Diameter (mm)		114	

VENTILATION SYSTEMS	50 Hz		
	COP	PRP	STP
Combustion air flow (m³/min)	-	18,16	-
Cooling airflow (m³/min)		390	
Maximum load losses (Pa)		196	
RADIATION	50 Hz		
	COP	PRP	STP
Engine (kW)	-	23,8	26,2
Alternator (kW) 50	9,8	9,8	11,7

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz
Model	C10 TE1F
Emissions	Not satisfy 97/68/EC
Performance grade	G3
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)	10
Cylinder bore (mm)	125
Cylinder stroke (mm)	140
Compression Ratio	16,5:1
Regulation	Electronic
Rotation speed	1500
Piston Speed (m/s)	7
Gross power COP (kWm)	-
Gross power PRP (kWm)	273
Gross power STP (kWm)	300
Fan power (kWm)	10
Net Power COP (kWm)	-
Net Power PRP (kWm)	263
Net Power STP (kWm)	290
BMEP COP (kPa)	-
BMEP PRP (kPa)	2128
BMEP STP (kPa)	2330



CONSUMPTION		50 Hz	
Fuel consumption	LOAD	lt/h	g/kWh
STP	100%	74,8	209,6
	100%	64,3	197,8
	75%	52,4	209,5
PRP	50%	32,1	198,5
	100%	-	-
	75%	-	-
COP	50%	-	-

Oil consumption < 0,2% of fuel consumption

REFERENCE CONDITIONS	
Temperature (°C)	25
Atmospheric pressure (kPa)	100
CAPACITY	
Coolant (L)	63
Oil (L)	30
STARTING SYSTEM	
Voltage (V)	24
Power (kW)	6
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

FP (cos Ø)	Phase	Voltage (V)	Power		Efficiency		
			PRP/STP (kVA)	PRP/STP (%)	Xd	X'd	X''d
0,8	Three-phase	440	230 / 256	94,2 / 94,2	2,550	0,119	0,078
0,8	Three-phase	415	250 / 275	94,0 / 94,0	2,550	0,119	0,078
0,8	Three-phase	400	250 / 275	95,1 / 94,7	2,550	0,119	0,078
0,8	Three-phase	380	250 / 275	93,3 / 93,3	2,550	0,119	0,078
0,8	Three-phase	240	250 / 275	94,0 / 94,0	2,550	0,119	0,078
0,8	Three-phase	230	250 / 275	93,8 / 93,8	2,550	0,119	0,078
0,8	Three-phase	220	250 / 275	93,3 / 93,3	2,550	0,119	0,078
0,8	Single phase	240	150 / 165	93,4 / 93,4	2,550	0,119	0,078
1	Single phase	240	150 / 165	93,4 / 93,4	2,550	0,119	0,078
0,8	Single phase	230	150 / 165	93,4 / 93,4	2,550	0,119	0,078
1	Single phase	230	150 / 165	93,4 / 93,4	2,550	0,119	0,078
0,8	Single phase	220	150 / 165	93,4 / 93,4	2,550	0,119	0,078
1	Single phase	220	150 / 165	93,4 / 93,4	2,550	0,119	0,078

5 CONTROL PANEL



GENSET	DEEPSEA 4520	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity	•	•
Frequency	•	•
RMS values	•	•
Generator phase sequence	-	o
Generator earth current [a]	-	o
No. of registers events	15	250
Real time clock	•	•
PIN protection	•	•
kWh, kVAr, kVAh, kVAh, cos Ø	•	•
Synchroscope (m)	-	o
Nº of available outputs [b]	2	6
Engine run hours	•	•
Indication of alarms on LCD	•	•
Total no. of LED indicators	3	12
No. of LED alarms	-	4
Sound signalling alarms	•	•
Scheduler	•	•
Fuel Level	•	•

Electrical network	DEEPSEA 4520	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity [a]	-	o
Frequency	•	•
kVA, kW, cos Ø (a)	-	o
Inversion control between main-group	-	o
Protections and Alarms	DEEPSEA 4520	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	-	o
Asymmetry between phases	-	o
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	-	o

6 CONTROL PANEL

Engine	DEEPSEA 4520	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	DEEPSEA 4520	OPTIONAL
USB female type B plug (Max. 6m) [g]	•	•
USB female type A plug (n)	-	o
RS232 port (Max. 15m) (n)	-	o
RS485 port (Max. 1,2Km) [h]	-	o
Ethernet port RJ45 [i]	o	o
GSM and/or GPS [j]	o	o
ModBus RTU protocol [h]	-	o
ModBus TCP protocol [i]	-	o
SNMP protocol [l]	o	o
CAN port (Max. 40m)	•	•
MSC port (Max. 240m) (m)	-	o
PLC functionality	-	o

Applications	DEEPSEA 4520	OPTIONAL
Automatic or manual starting	•	•
Remote start by NO dry contact	•	•
Automatic by mains failure	•	•
Alternating with timesharing	-	o
Multi-generators synchronization and load sharing (Max. 32 generators) (m)	-	o
Generator-Main in synchronism and load sharing (1 generator and 1 main) (m)	-	o
Optional expansions	DEEPSEA 4520	OPTIONAL
DSE2130 (8 inputs dig.) IG-IOM (8 in/outputs dig. + 4 inputs anal.) G-08 (8 inputs dig.)	-	o
DSE2157 I-RB8 G-06 (8 relay outputs)	-	o
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)	-	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