



INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic
 Diesel fuel
 Iveco / C13 TE2A
 Grupel / 314GB375
 / 4520

Hz 50Hz
 1500 r.p.m.
V 400V
cos φ 0,8

Standby power (STP)	383 kVA	307 kW
Prime Power (PRP)	348 kVA	279 kW
Power Continuous (COP)	- kVA	- kW

Hz 60Hz
 1800 r.p.m.
V 480V
cos φ 0,8

Standby power (STP)	420 kVA	336 kW
Prime Power (PRP)	382 kVA	305 kW
Power Continuous (COP)	- kVA	- kW

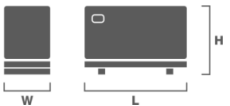
OPEN SKID

Length (L)	3800 mm
Height (H)	1920 mm
Width (W)	1250 mm
Weight	2802 kg
Daily tank	550 L



SOUNDPROOF

Length (L)	3800 mm
Height (H)	1920 mm
Width (W)	1250 mm
Weight	3587 kg
Daily tank	550 L



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

	50Hz	60Hz
Acoustic pressure level @ 1m	79 dB(A)	81 dB(A)
Acoustic pressure level @ 7m	66 dB(A)	68 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	- / -	350 / 280	385 / 308	630
0,8	Three-phase	415	- / -	350 / 280	384 / 308	630
0,8	Three-phase	400	- / -	348 / 279	383 / 307	630
0,8	Three-phase	380	- / -	350 / 280	382 / 306	630
0,8	Three-phase	240	- / -	350 / 280	384 / 308	1000
0,8	Three-phase	230	- / -	348 / 279	383 / 307	1000
0,8	Three-phase	220	- / -	350 / 280	385 / 308	1000
0,8	Single phase	240	- / -	225 / 180	248 / 198	1000
1	Single phase	240	- / -	180 / 180	197 / 197	800
0,8	Single phase	230	- / -	225 / 180	248 / 198	1000
1	Single phase	230	- / -	180 / 180	197 / 197	800
0,8	Single phase	220	- / -	225 / 180	248 / 198	1250
1	Single phase	220	- / -	180 / 180	197 / 197	1000

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	- / -	382 / 305	420 / 336	630
0,8	Three-phase	460	- / -	380 / 304	418 / 334	630
0,8	Three-phase	440	- / -	379 / 303	417 / 333	630
0,8	Three-phase	416	- / -	378 / 302	416 / 333	630
0,8	Three-phase	240	- / -	382 / 305	420 / 336	1000
0,8	Three-phase	230	- / -	380 / 304	418 / 334	1000
0,8	Three-phase	220	- / -	379 / 303	417 / 333	1000
0,8	Three-phase	208	- / -	378 / 302	416 / 333	1250
0,8	Single phase	240	- / -	248 / 198	271 / 217	1250
1	Single phase	240	- / -	247 / 247	270 / 270	1250
0,8	Single phase	230	- / -	248 / 198	271 / 217	1250
1	Single phase	230	- / -	247 / 247	270 / 270	1250
0,8	Single phase	220	- / -	248 / 198	271 / 217	1250
1	Single phase	220	- / -	247 / 247	270 / 270	1250


2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	479	-	-	451	-
Exhaust gas flow (kg/h)	-	-	1865	-	-	2216
Evacuated Heat (kW)	-	237,3	260	-	265	289,7
Maximum back pressure (kPa)	5					
Exhaust silencer attenuation (dB)	#Error					
Output Diameter (mm)	114					

VENTILATION SYSTEMS	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Combustion air flow (m³/min)	-	24,9	-	-	29,6	-
Cooling airflow (m³/min)	408			510		
Maximum load losses (Pa)	196					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	11	11	12	10,2	10,2	11,2
Alternator (kW)	21,3	21,3	23,4	23,8	23,8	26,1

3 ENGINE SPECIFICATIONS


GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	C13 TE2A	
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)	12,88	
Cylinder bore (mm)	135	
Cylinder stroke (mm)	150	
Compression Ratio	16,5:1	
Regulation	Electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	7,5	9
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	315	352
Gross power STP (kWm)	345	360
Fan power (kWm)	15	25
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	300	327
Net Power STP (kWm)	330	360
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	1948	1812
BMEP STP (kPa)	2143	1993



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	77,9	189,6	91	198,4
	100%	70	187,5	76,1	182,6
PRP	75%	57,3	191,8	67,4	202,2
	50%	38,8	207,8	43,8	210,2
COP	100%	-	-	-	-
	75%	-	-	-	-
	50%	-	-	-	-
Oil consumption	< 0,2% of fuel consumption				
REFERENCE CONDITIONS					
Temperature (°C)	40				
Atmospheric pressure (kPa)	100				
CAPACITY					
Coolant (L)	67				
Oil (L)	35				
STARTING SYSTEM					
Voltage (V)	24				
Power (kW)	5,5				
Battery (Ah)	155				

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	314GB375
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)	SX440/ 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 (%)	PRP/STP (%)	Xd
0,8	Three-phase	440	350 / 385	93,5 / 93,5	2,250	0,140	0,105	0,8	Three-phase	480	450 / 495	93,4 / 93,4	2,885	0,165	0,115
0,8	Three-phase	415	375 / 413	93,2 / 93,2	2,250	0,140	0,105	0,8	Three-phase	460	450 / 495	92,9 / 92,9	2,885	0,165	0,115
0,8	Three-phase	400	375 / 413	92,9 / 92,9	2,250	0,140	0,105	0,8	Three-phase	440	450 / 495	92,6 / 92,6	2,885	0,165	0,115
0,8	Three-phase	380	375 / 413	92,6 / 92,6	2,250	0,140	0,105	0,8	Three-phase	416	450 / 495	92,4 / 92,4	2,885	0,165	0,115
0,8	Three-phase	240	375 / 413	93,2 / 93,2	2,250	0,140	0,105	0,8	Three-phase	240	450 / 495	93,4 / 93,4	2,885	0,165	0,115
0,8	Three-phase	230	375 / 413	92,9 / 92,9	2,250	0,140	0,105	0,8	Three-phase	230	450 / 495	92,9 / 92,9	2,885	0,165	0,115
0,8	Three-phase	220	350 / 385	93,5 / 93,5	2,250	0,140	0,105	0,8	Three-phase	220	450 / 495	92,6 / 92,6	2,885	0,165	0,115
0,8	Single phase	240	225 / 248	94,1 / 94,1	2,250	0,140	0,105	0,8	Three-phase	208	450 / 495	92,4 / 92,4	2,885	0,165	0,115
1	Single phase	240	225 / 246	94,1 / 94,1	2,250	0,140	0,105	0,8	Single phase	240	248 / 271	94,1 / 94,1	2,885	0,165	0,115
0,8	Single phase	230	225 / 248	94,1 / 94,1	2,250	0,140	0,105	1	Single phase	240	247 / 270	94,1 / 94,1	2,885	0,165	0,115
1	Single phase	230	225 / 246	94,1 / 94,1	2,250	0,140	0,105	0,8	Single phase	230	248 / 271	94,1 / 94,1	2,885	0,165	0,115
0,8	Single phase	220	225 / 248	94,1 / 94,1	2,250	0,140	0,105	1	Single phase	230	247 / 270	94,1 / 94,1	2,885	0,165	0,115
1	Single phase	220	225 / 246	94,1 / 94,1	2,250	0,140	0,105	0,8	Single phase	220	248 / 271	94,1 / 94,1	2,885	0,165	0,115
								1	Single phase	220	247 / 270	94,1 / 94,1	2,885	0,165	0,115

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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	Applications	DEEPSEA 4520	OPTIONAL
Engine Speed	•	•	Automatic or manual starting	•	•
Low oil pressure protection	•	•	Remote start by NO dry contact	•	•
Oil pressure reading [c]	o	o	Automatic by mains failure	•	•
High temperature engine protection	•	•	Alternating with timesharing	-	o
Engine temperature reading [c]	o	o	Multi-generators synchronization and load sharing (Max. 32 generators) (m)	-	o
Engine battery voltage	•	•	Generator-Main in synchronism and load sharing (1 generator and 1 main) (m)	-	o
Intensity of the engine battery [d]	o	o			
Fuel Consumption [e]	•	•	Optional expansions	DEEPSEA 4520	OPTIONAL
Low level of radiator water [f]	o	o	DSE2130 (8 inputs dig.) IG-IOM (8 in/outputs dig. + 4 inputs anal.) G-08 (8 inputs dig.)	-	o
Engine maintenance scheduled	•	•	DSE2157 I-RB8 G-06 (8 relay outputs)	-	o
Communication	DEEPSEA 4520	OPTIONAL	DSE890 IL-NT-GPRS G-GSM (GSM and/or GPS)	•	•
USB female type B plug (Max. 6m) [g]	•	•	DSE891 IB-LITE G-ETH (ethernet module)	•	•
USB female type A plug (n)	-	o	DSE892 IB-LITE - (ethernet module according SNMP protocol)	•	•
RS232 port (Max. 15m) (n)	-	o	DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	-	o
RS485 port (Max. 1,2Km) [h]	-	o	DSE2510 / 20 (mirror controller, maximum distance 1km)	-	o
Ethernet port RJ45 [i]	o	o	Standards		
GSM and/or GPS [j]	o	o	Working temperature	-30 -> 70°C	
ModBus RTU protocol [h]	-	o	Protection index (when assembled with sealing gasket)	IP65	
ModBus TCP protocol [i]	-	o	Degree of humidity (during 48hr)	93% / 40°C	
SNMP protocol [l]	o	o			
CAN port (Max. 40m)	•	•			
MSC port (Max. 240m) (m)	-	o			
PLC functionality	-	o			

Legend

•	Available	[d]	Needs additional ammeter
o	Optional	[e]	If information provided by the engine ECU
-	Not available	[f]	Required additional sensor
A	Warning Alarm	[g]	Requires the addition of the IL-NT-S-USB module
S	Stop alarm	[h]	Requires the addition of the IL-NT-RS232-485 module
[a]	Need additional CT	[i]	DeepSea: Requires the addition of the DSE891 module/ ComAp: Requires the addition of the IB-LITE module
[b]	No. of outputs available for standard configuration. The outputs do not include relays and additional terminal connections.	[j]	DeepSea: Requires the addition of the DSE890 module/ ComAp: Requires the addition of the IL-NT-GPRS module
[c]	If the information is not provided by the engine-ECU, you need an additional sensor	[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