



INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic	 Diesel fuel	 Perkins / 1106A-70TAG2	 Leroy somer / TAL044J	 / 7320
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Hz 50Hz	 1500 r.p.m.	V 400V	cos φ 0,8
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Standby power (STP)	165 kVA	132 kW
Prime Power (PRP)	150 kVA	120 kW
Power Continuous (COP)	- kVA	- kW

Hz 60Hz	 1800 r.p.m.	V 480V	cos φ 0,8
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Standby power (STP)	185 kVA	148 kW
Prime Power (PRP)	168 kVA	134 kW
Power Continuous (COP)	- kVA	- kW

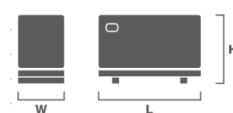
OPEN SKID

Length (L)	3100 mm
Height (H)	1790 mm
Width(W)	1165 mm
Weight	1450 kg
Daily tank	400 L



SOUNDPROOF

Length (L)	3100 mm
Height (H)	1790 mm
Width (W)	1165 mm
Weight	2000 kg
Daily tank	400 L



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

	50Hz	60Hz
Acoustic pressure level @1m	75 dB(A)	77 dB(A)
Acoustic pressure level @7m	62 dB(A)	64 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	- / -	135 / 108	149 / 119	200
1	Three-phase	440	- / -	108 / 108	119 / 119	160
0,8	Three-phase	415	- / -	150 / 120	165 / 132	250
1	Three-phase	415	- / -	120 / 120	132 / 132	200
0,8	Three-phase	400	- / -	150 / 120	165 / 132	250
1	Three-phase	400	- / -	120 / 120	132 / 132	200
0,8	Three-phase	380	- / -	150 / 120	165 / 132	250
1	Three-phase	380	- / -	120 / 120	132 / 132	200
0,8	Three-phase	240	- / -	150 / 120	165 / 132	400
1	Three-phase	240	- / -	120 / 120	132 / 132	400
0,8	Three-phase	230	- / -	150 / 120	165 / 132	400
1	Three-phase	230	- / -	120 / 120	132 / 132	400
0,8	Three-phase	220	- / -	135 / 108	149 / 119	400
1	Three-phase	220	- / -	108 / 108	119 / 119	400
0,8	Single phase	230	- / -	80 / 64	88 / 70	400
1	Single phase	230	- / -	64 / 64	70 / 70	400
0,8	Single phase	230	- / -	80 / 64	88 / 70	400
1	Single phase	230	- / -	64 / 64	70 / 70	400
0,8	Single phase	220	- / -	80 / 64	88 / 70	400
1	Single phase	220	- / -	64 / 64	70 / 70	400

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	- / -	168 / 134	185 / 148	200
1	Three-phase	480	- / -	138 / 138	152 / 152	200
0,8	Three-phase	440	- / -	168 / 134	185 / 148	250
1	Three-phase	440	- / -	138 / 138	151 / 151	200
0,8	Three-phase	416	- / -	163 / 130	179 / 143	250
1	Three-phase	416	- / -	130 / 130	143 / 143	200
0,8	Three-phase	380	- / -	148 / 118	163 / 130	250
1	Three-phase	380	- / -	118 / 118	130 / 130	200
0,8	Three-phase	240	- / -	168 / 134	185 / 148	400
1	Three-phase	240	- / -	138 / 138	152 / 152	400
0,8	Three-phase	220	- / -	168 / 134	185 / 148	630
1	Three-phase	220	- / -	138 / 138	151 / 151	400
0,8	Three-phase	208	- / -	163 / 130	179 / 143	630
1	Three-phase	208	- / -	130 / 130	143 / 143	400
0,8	Single phase	240	- / -	95 / 76	105 / 84	400
1	Single phase	240	- / -	76 / 76	84 / 84	400
0,8	Single phase	240	- / -	95 / 76	105 / 84	400
1	Single phase	240	- / -	76 / 76	84 / 84	400
0,8	Single phase	230	- / -	95 / 76	105 / 84	630
1	Single phase	230	- / -	76 / 76	84 / 84	400

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	484	484	-	407	407
Exhaust gas flow (m³/min)	-	23,78	25,53	-	30,53	32,29
Evacuated Heat (kW)	-	96,6	105,6	-	110,7	120,6
Maximum back pressure (kPa)	6					
Exhaust silencer attenuation (dB)	18-25					
Output Diameter (mm)	114					

VENTILATION SYSTEMS	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Combustion air flow (m³/min)	-	10,2	10,67	-	14,41	14,97
Cooling airflow (m³/min)	222			282		
Maximum load losses (Pa)	200					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	11	11	12,2	11,3	11,3	12,3
Alternator (kW)	9,2	9,2	10,6	10,9	10,9	12,5
Alternator (kW)	6,0	6,0	6,8	7,4	7,4	8,3

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	1106A-70TAG2	
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)	7,01	
Cylinder bore (mm)	105	
Cylinder stroke (mm)	135	
Compression Ratio	18,2:1	
Regulation	Electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	6,8	8,1
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	136	152,6
Gross power STP (kWm)	149,1	167,9
Fan power (kWm)	5	8
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	131	144,6
Net Power STP (kWm)	144,1	159,9
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	1552,1	1477,9
BMEP STP (kPa)	1701,6	1633,9




CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	35,2	197,6	40,7	204,5
	100%	32,3	198,6	37,5	206,9
	75%	24,2	198,8	28,8	212,1
	50%	16,5	203,2	18,5	203,6
COP	100%	-	-	-	-
	75%	-	-	-	-
	50%	-	-	-	-
Oil consumption		< 0,1% of fuel consumption			
REFERENCE CONDITIONS					
Temperature (°C)		25			
Atmospheric pressure (kPa)		100			
CAPACITY					
Coolant (L)		21			
Oil (L)		18			
STARTING SYSTEM					
Voltage (V)		12			
Power (kW)		4,2			
Battery (Ah)		155			

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	TAL044J
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	CEM 2014/30/UE
Coupling	Semi-Flexible



Wave form distortion with no load	< 3,5%
Wave form distortion with balanced linear load	< 5%
Winding Leads	6
Excitation (standard / option)	SHUNT / AREP
AVR Model (standard / option)	R120 / R180



INDUSTRIAL RANGE

RATED POWER - 50Hz								RATED POWER - 60Hz							
FP (cos Ø)	Phase	Voltage (V)	Power PRP/STP (kVA)	Efficiency PRP/STP (%)	Xd	X'd	X''d	FP (cos Ø)	Phase	Voltage (V)	Power PRP/STP (kVA)	Efficiency PRP/STP (%)	Xd	X'd	X''d
0,8	Three-phase	440	135 / 149	91,8 / 91,6	2,670	0,126	0,075	0,8	Three-phase	480	188 / 207	92,7 / 92,4	3,750	0,177	0,106
1	Three-phase	440	108 / 119	94,7 / 94,7	2,670	0,126	0,075	1	Three-phase	480	150 / 165	95,1 / 95,0	3,750	0,177	0,106
0,8	Three-phase	415	150 / 165	92,2 / 91,8	3,320	0,157	0,094	0,8	Three-phase	440	172 / 189	92,9 / 92,6	4,080	0,193	0,116
1	Three-phase	415	120 / 132	95,0 / 94,9	3,320	0,157	0,094	1	Three-phase	440	138 / 151	95,1 / 95,0	4,080	0,193	0,116
0,8	Three-phase	400	150 / 165	92,4 / 92,0	3,590	0,170	0,102	0,8	Three-phase	416	163 / 179	92,8 / 92,4	4,330	0,205	0,123
1	Three-phase	400	120 / 132	95,0 / 94,9	3,590	0,170	0,102	1	Three-phase	416	130 / 143	95,0 / 94,8	4,330	0,205	0,123
0,8	Three-phase	380	150 / 165	92,3 / 91,9	3,980	0,188	0,113	0,8	Three-phase	380	148 / 163	92,5 / 92,1	4,710	0,223	0,133
1	Three-phase	380	120 / 132	95,0 / 94,7	3,980	0,188	0,113	1	Three-phase	380	118 / 130	94,8 / 94,6	4,710	0,223	0,133
0,8	Three-phase	240	150 / 165	92,2 / 91,8	3,320	0,157	0,094	0,8	Three-phase	240	188 / 207	92,7 / 92,4	3,750	0,177	0,106
1	Three-phase	240	120 / 132	95,0 / 94,9	3,320	0,157	0,094	1	Three-phase	240	150 / 165	95,1 / 95,0	3,750	0,177	0,106
0,8	Three-phase	230	150 / 165	92,4 / 92,0	3,590	0,170	0,102	0,8	Three-phase	220	172 / 189	92,9 / 92,6	4,080	0,193	0,116
1	Three-phase	230	120 / 132	95,0 / 94,9	3,590	0,170	0,102	1	Three-phase	220	138 / 151	95,1 / 95,0	4,080	0,193	0,116
0,8	Three-phase	220	135 / 149	91,8 / 91,6	2,670	0,126	0,075	0,8	Three-phase	208	163 / 179	92,8 / 92,4	4,330	0,205	0,123
1	Three-phase	220	108 / 119	94,7 / 94,7	2,670	0,126	0,075	1	Three-phase	208	130 / 143	95,0 / 94,8	4,330	0,205	0,123
0,8	Single phase	230	80 / 88	89,0 / 88,5	1,420	0,180	0,110	0,8	Single phase	240	95 / 105	89,7 / 89,2	2,290	0,240	0,140
1	Single phase	230	64 / 70	92,9 / 92,8	1,420	0,180	0,110	1	Single phase	240	76 / 84	92,8 / 92,6	2,290	0,240	0,140
0,8	Single phase	230	80 / 88	86,6 / 85,8	1,990	0,183	0,109	0,8	Single phase	240	95 / 105	86,1 / 85,4	2,600	0,239	0,143
1	Single phase	230	64 / 70	91,2 / 90,9	1,990	0,183	0,109	1	Single phase	240	76 / 84	90,3 / 89,9	2,600	0,239	0,143
0,8	Single phase	220	80 / 88	89,0 / 88,5	1,550	0,200	0,120	0,8	Single phase	230	95 / 105	89,7 / 89,2	2,490	0,260	0,160
1	Single phase	220	64 / 70	92,9 / 92,8	1,550	0,200	0,120	1	Single phase	230	76 / 84	92,8 / 92,6	2,490	0,260	0,160

5

CONTROL PANEL



GENSET	DEEPSSEA 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	DEEPSSEA 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	DEEPSSEA 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



CONTROL PANEL

Applications	DEEPSEA 7320	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)	-	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	

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.

Parque empresarial de Soza, Parcela A, Lote 5 - 3840-342 Soza - Vagos - Portugal
T: (+351) 234 790 070 F: (+351) 234 920 670 - grupei@grupei.eu - www.grupei.eu