



SMART RANGE

1 MAIN FEATURES

T Triphasic	 Diesel fuel	 Perkins / 1103A-33G	 Leroy somer / TAL042C	 / 7320
--------------------	---	---	---	--

Hz 50Hz	 1500 r.p.m.	V 400V	cos φ 0,8
----------------	---	---------------	------------------

Standby power (STP)	33 kVA	27 kW
Prime Power (PRP)	30 kVA	24 kW
Power Continuous (COP)	- kVA	- kW

Hz 60Hz	 1800 r.p.m.	V 480V	cos φ 0,8
----------------	--	---------------	------------------

Standby power (STP)	39 kVA	31 kW
Prime Power (PRP)	36 kVA	29 kW
Power Continuous (COP)	- kVA	- kW

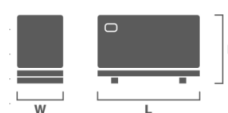
OPEN SKID

Length (L)	1700 mm
Height (H)	1110 mm
Width (W)	960 mm
Weight	663 kg
Daily tank	150 L



SOUNDPROOF

Length (L)	1950 mm
Height (H)	1110 mm
Width (W)	822 mm
Weight	863 kg
Daily tank	40 L



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

	50Hz	60Hz
Acoustic pressure level @1m	74 dB(A)	76 dB(A)
Acoustic pressure level @7m	61 dB(A)	63 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	- / -	30 / 24	33 / 26	40
1	Three-phase	440	- / -	24 / 24	26 / 26	32
0,8	Three-phase	415	- / -	30 / 24	33 / 27	50
1	Three-phase	415	- / -	26 / 26	28 / 28	40
0,8	Three-phase	400	- / -	30 / 24	33 / 27	50
1	Three-phase	400	- / -	26 / 26	28 / 28	40
0,8	Three-phase	380	- / -	30 / 24	33 / 26	50
1	Three-phase	380	- / -	25 / 25	27 / 27	40
0,8	Three-phase	240	- / -	30 / 24	33 / 27	80
1	Three-phase	240	- / -	26 / 26	28 / 28	63
0,8	Three-phase	230	- / -	30 / 24	33 / 27	80
1	Three-phase	230	- / -	26 / 26	28 / 28	80
0,8	Three-phase	220	- / -	30 / 24	33 / 26	80
1	Three-phase	220	- / -	24 / 24	26 / 26	63
0,8	Single phase	230	- / -	19 / 15	21 / 17	100
1	Single phase	230	- / -	15 / 15	17 / 17	80
0,8	Single phase	230	- / -	19 / 15	21 / 17	100
1	Single phase	230	- / -	15 / 15	17 / 17	80
0,8	Single phase	220	- / -	19 / 15	21 / 17	100
1	Single phase	220	- / -	15 / 15	17 / 17	80

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	- / -	36 / 29	39 / 31	50
1	Three-phase	480	- / -	30 / 30	33 / 33	40
0,8	Three-phase	440	- / -	35 / 28	39 / 31	50
1	Three-phase	440	- / -	30 / 30	32 / 32	40
0,8	Three-phase	416	- / -	35 / 28	39 / 31	50
1	Three-phase	416	- / -	30 / 30	32 / 32	50
0,8	Three-phase	380	- / -	35 / 28	38 / 30	63
1	Three-phase	380	- / -	28 / 28	30 / 30	50
0,8	Three-phase	240	- / -	36 / 29	39 / 31	100
1	Three-phase	240	- / -	30 / 30	33 / 33	80
0,8	Three-phase	220	- / -	35 / 28	39 / 31	100
1	Three-phase	220	- / -	30 / 30	32 / 32	80
0,8	Three-phase	208	- / -	35 / 28	39 / 31	100
1	Three-phase	208	- / -	30 / 30	32 / 32	100
0,8	Single phase	240	- / -	23 / 18	26 / 20	100
1	Single phase	240	- / -	18 / 18	20 / 20	80
0,8	Single phase	240	- / -	23 / 18	25 / 20	100
1	Single phase	240	- / -	18 / 18	20 / 20	80
0,8	Single phase	230	- / -	23 / 18	26 / 20	100
1	Single phase	230	- / -	18 / 18	20 / 20	80

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	500	520	-	520	530
Exhaust gas flow (m³/min)	-	5,7	5,8	-	6,4	6,6
Evacuated Heat (kW)	-	22	25	-	27	34
Maximum back pressure (kPa)	10					
Exhaust silencer attenuation (dB)	18-25					
Output Diameter (mm)	65					

VENTILATION SYSTEMS	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Combustion air flow (m³/min)	-	2,16	2,15	-	2,6	2,57
Cooling airflow (m³/min)	53				70	
Maximum load losses (Pa)	125					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	5	5	6	5	5	6
Alternator (kW)	3,1	3,1	3,6	3,6	3,6	4,2
Alternator (kW)	2,0	2,0	2,3	2,5	2,5	2,8

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	1103A-33G	
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	Natural	
Injection system	Direct	
No. and Cylinder arrangement	3 In-Line	
Displacement (L)	3,3	
Cylinder bore (mm)	105	
Cylinder stroke (mm)	127	
Compression Ratio	19,25:1	
Regulation	Mechanic	
Rotation speed	1500	1800
Piston Speed (m/s)	6,4	7,62
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	28,2	33,2
Gross power STP (kWm)	31	36,5
Fan power (kWm)	0,6	1,1
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	27,7	32,2
Net Power STP (kWm)	30,4	35,4
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	684	669
BMEP STP (kPa)	752	736



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	8,1	222,1	9,5	219,2
	100%	7,2	217	8,6	218,1
	75%	5,6	225,5	6,6	223,2
PRP	50%	4,1	244,8	4,9	248,5
	100%	-	-	-	-
	75%	-	-	-	-
COP	50%	-	-	-	-
Oil consumption	< 0,15% of fuel consumption				

REFERENCE CONDITIONS	
Temperature (°C)	25
Atmospheric pressure (kPa)	100
CAPACITY	
Coolant (L)	10,2
Oil (L)	8,3
STARTING SYSTEM	
Voltage (V)	12
Power (kW)	3
Battery (Ah)	60

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	TAL042C
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



SMART 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	30 / 33	87,7 / 87,3	2,170	0,126	0,063	0,8	Three-phase	480	40 / 44	88,6 / 88,1	2,920	0,169	0,084
1	Three-phase	440	24 / 26	91,9 / 91,8	2,170	0,126	0,063	1	Three-phase	480	32 / 35	92,3 / 92,1	2,920	0,169	0,084
0,8	Three-phase	415	32 / 35	87,9 / 87,3	2,610	0,151	0,075	0,8	Three-phase	440	40 / 44	88,1 / 87,5	3,470	0,201	0,100
1	Three-phase	415	26 / 28	92,1 / 91,9	2,610	0,151	0,075	1	Three-phase	440	32 / 35	92,0 / 91,6	3,470	0,201	0,100
0,8	Three-phase	400	32 / 35	87,9 / 87,2	2,800	0,162	0,081	0,8	Three-phase	416	38 / 42	87,8 / 87,2	3,690	0,214	0,107
1	Three-phase	400	26 / 28	92,1 / 91,8	2,800	0,162	0,081	1	Three-phase	416	30 / 33	91,7 / 91,4	3,690	0,214	0,107
0,8	Three-phase	380	31 / 34	87,8 / 87,1	3,010	0,174	0,087	0,8	Three-phase	380	35 / 38	87,3 / 86,6	4,010	0,233	0,116
1	Three-phase	380	25 / 27	92,0 / 91,6	3,010	0,174	0,087	1	Three-phase	380	28 / 30	91,3 / 90,9	4,010	0,233	0,116
0,8	Three-phase	240	32 / 35	87,9 / 87,3	2,610	0,151	0,075	0,8	Three-phase	240	40 / 44	88,6 / 88,1	2,920	0,169	0,084
1	Three-phase	240	26 / 28	92,1 / 91,9	2,610	0,151	0,075	1	Three-phase	240	32 / 35	92,3 / 92,1	2,920	0,169	0,084
0,8	Three-phase	230	32 / 35	87,9 / 87,2	2,800	0,162	0,081	0,8	Three-phase	220	40 / 44	88,1 / 87,5	3,470	0,201	0,100
1	Three-phase	230	26 / 28	92,1 / 91,8	2,800	0,162	0,081	1	Three-phase	220	32 / 35	92,0 / 91,6	3,470	0,201	0,100
0,8	Three-phase	220	30 / 33	87,7 / 87,3	2,170	0,126	0,063	0,8	Three-phase	208	38 / 42	87,8 / 87,2	3,690	0,214	0,107
1	Three-phase	220	24 / 26	91,9 / 91,8	2,170	0,126	0,063	1	Three-phase	208	30 / 33	91,7 / 91,4	3,690	0,214	0,107
0,8	Single phase	230	19 / 21	77,5 / 76,2	1,430	0,190	0,100	0,8	Single phase	240	23 / 26	75,6 / 74,0	2,140	0,260	0,130
1	Single phase	230	15 / 17	84,8 / 84,2	1,430	0,190	0,100	1	Single phase	240	18 / 20	82,8 / 81,8	2,140	0,260	0,130
0,8	Single phase	230	19 / 21	78,1 / 76,9	1,740	0,197	0,098	0,8	Single phase	240	23 / 25	76,7 / 75,3	2,280	0,257	0,128
1	Single phase	230	15 / 17	85,3 / 84,7	1,740	0,197	0,098	1	Single phase	240	18 / 20	83,5 / 82,7	2,280	0,257	0,128
0,8	Single phase	220	19 / 21	77,5 / 76,2	1,570	0,210	0,110	0,8	Single phase	230	23 / 26	75,6 / 74,0	2,330	0,280	0,140
1	Single phase	220	15 / 17	84,8 / 84,2	1,570	0,210	0,110	1	Single phase	230	18 / 20	82,8 / 81,8	2,330	0,280	0,140

5 CONTROL PANEL



GENSET	DEESEA 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, kVAh, 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	DEESEA 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	DEESEA 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	Applications	DEEPSEA 7320	OPTIONAL
Engine Speed	•	•	Automatic or manual starting	•	•
Low oil pressure protection	•	•	Remote start by NO dry contact	•	•
Oil pressure reading [c]	0	0	Automatic by mains failure	•	•
High temperature engine protection	•	•	Alternating with timesharing	•	•
Engine temperature reading [c]	0	0	Multi-generators synchronization and load sharing (Max. 32 generators) (m)	-	0
Engine battery voltage	•	•	Generator-Main in synchronism and load sharing (1 generator and 1 main) (m)	-	0
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	Optional expansions	DEEPSEA 7320	OPTIONAL
USB female type B plug (Max. 6m) [g]	•	•	DSE2130 (8 inputs dig.) IG-IOM (8 in/outputs dig. + 4 inputs anal.) G-08 (8 inputs dig.)	•	•
USB female type A plug (n)	-	0	DSE2157 I-RB8 G-06 (8 relay outputs)	•	•
RS232 port (Max. 15m) (n)	•	•	DSE890 IL-NT-GPRS G-GSM (GSM and/or GPS)	•	•
RS485 port (Max. 1,2Km) [h]	•	•	DSE891 IB-LITE G-ETH (ethernet module)	•	•
Ethernet port RJ45 [i]	0	0	DSE892 IB-LITE - (ethernet module according SNMP protocol)	•	•
GSM and/or GPS [j]	0	0	DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	•	•
ModBus RTU protocol [h]	•	•	DSE2510 / 20 (mirror controller, maximum distance 1km)	•	•
ModBus TCP protocol [i]	0	0			
SNMP protocol [l]	•	•			
CAN port (Max. 40m)	•	•			
MSC port (Max. 240m) (m)	-	0			
PLC functionality	•	•			

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