





INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic  Diesel fuel  Volvo / TAD734GE  Leroy somer / TAL046B  / 4520

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

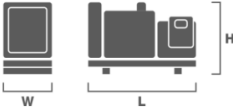
Standby power (STP)	220 kVA	176 kW
Prime Power (PRP)	200 kVA	160 kW
Power Continuous (COP)	- kVA	- kW

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

Standby power (STP)	275 kVA	220 kW
Prime Power (PRP)	250 kVA	200 kW
Power Continuous (COP)	- kVA	- kW

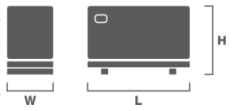
OPEN SKID

Length (L)	3800 mm
Height (H)	1920 mm
Width (W)	1250 mm
Weight	2010 kg
Daily tank	550 L



SOUNDPROOF

Length (L)	3800 mm
Height (H)	1920 mm
Width (W)	1250 mm
Weight	2795 kg
Daily tank	550 L



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

	50Hz	60Hz
Acoustic pressure level @ 1m	77 dB(A)	79 dB(A)
Acoustic pressure level @ 7m	67 dB(A)	69 dB(A)

AVAILABLE VOLTAGES - 50Hz

FP (cos φ)	Phase	Voltage	COP (kVA/kW)	PRP (kVA/kW)	STP (kVA/kW)	Circuit breaker (A)
0,8	Three-phase	440	- / -	190 / 152	209 / 167	250
1	Three-phase	440	- / -	152 / 152	167 / 167	200
0,8	Three-phase	415	- / -	200 / 160	220 / 176	400
1	Three-phase	415	- / -	160 / 160	176 / 176	250
0,8	Three-phase	400	- / -	200 / 160	220 / 176	400
1	Three-phase	400	- / -	160 / 160	176 / 176	250
0,8	Three-phase	380	- / -	200 / 160	220 / 176	400
1	Three-phase	380	- / -	160 / 160	176 / 176	250
0,8	Three-phase	240	- / -	200 / 160	220 / 176	630
1	Three-phase	240	- / -	160 / 160	176 / 176	400
0,8	Three-phase	230	- / -	200 / 160	220 / 176	630
1	Three-phase	230	- / -	160 / 160	176 / 176	400
0,8	Three-phase	220	- / -	190 / 152	209 / 167	630
1	Three-phase	220	- / -	152 / 152	167 / 167	400
0,8	Single phase	230	- / -	120 / 96	132 / 106	630
1	Single phase	230	- / -	96 / 96	106 / 106	630

AVAILABLE VOLTAGES - 60Hz

FP (cos φ)	Phase	Voltage	COP (kVA/kW)	PRP (kVA/kW)	STP (kVA/kW)	Circuit breaker (A)
0,8	Three-phase	480	- / -	250 / 200	275 / 220	400
1	Three-phase	480	- / -	200 / 200	220 / 220	250
0,8	Three-phase	440	- / -	230 / 184	253 / 202	400
1	Three-phase	440	- / -	184 / 184	202 / 202	250
0,8	Three-phase	416	- / -	215 / 172	237 / 189	400
1	Three-phase	416	- / -	172 / 172	189 / 189	250
0,8	Three-phase	380	- / -	200 / 160	220 / 176	400
1	Three-phase	380	- / -	160 / 160	176 / 176	250
0,8	Three-phase	240	- / -	250 / 200	275 / 220	630
1	Three-phase	240	- / -	200 / 200	220 / 220	630
0,8	Three-phase	220	- / -	230 / 184	253 / 202	630
1	Three-phase	220	- / -	184 / 184	202 / 202	630
0,8	Three-phase	208	- / -	215 / 172	237 / 189	630
1	Three-phase	208	- / -	172 / 172	189 / 189	630
0,8	Single phase	240	- / -	132 / 106	145 / 116	630
1	Single phase	240	- / -	106 / 106	116 / 116	630


2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	495	550	-	475	510
Exhaust gas flow (m³/min)	-	33	33,4	-	36,7	37,9
Evacuated Heat (kW)	-	160	177	-	174	189
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)	-	16,1	16,3	-	18,3	18,9
Cooling airflow (m³/min)	234,4			285,4		
Maximum load losses (Pa)	170					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	24	24	26	25	25	28
Alternator (kW)	13,8	13,8	15,9	16,4	16,4	18,8
Alternator (kW)	9,2	9,2	10,4	11,3	11,3	12,8

3 ENGINE SPECIFICATIONS


GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	TAD734GE	
Emissions	FASE II	
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)	7,15	
Cylinder bore (mm)	108	
Cylinder stroke (mm)	130	
Compression Ratio	17:1	
Regulation	Electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	6,5	7,8
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	228	239
Gross power STP (kWm)	250	263
Fan power (kWm)	9	16
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	219	223
Net Power STP (kWm)	241	247
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	2500	2200
BMEP STP (kPa)	2800	2400



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	60,3	205	64	207
	75%	54,5	204	57,6	205
	50%	43,5	217	46,8	222
PRP	100%	31,1	233	33,3	237
	75%	-	-	-	-
	50%	-	-	-	-
COP	75%	-	-	-	-
	50%	-	-	-	-
Oil consumption	< 0,05% of fuel consumption				
REFERENCE CONDITIONS					
Temperature (°C)	25				
Atmospheric pressure (kPa)	100				
CAPACITY					
Coolant (L)	32				
Oil (L)	29				
STARTING SYSTEM					
Voltage (V)	24				
Power (kW)	5				
Battery (Ah)	155				

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	TAL046B
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)	R150 / R180



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	190 / 209	91,3 / 91,0	2,550	0,131	0,105	0,8	Three-phase	480	250 / 275	91,8 / 91,5	3,380	0,174	0,139
1	Three-phase	440	152 / 167	94,2 / 94,1	2,550	0,131	0,105	1	Three-phase	480	200 / 220	94,3 / 94,2	3,380	0,174	0,139
0,8	Three-phase	415	200 / 220	91,4 / 91,0	3,010	0,155	0,124	0,8	Three-phase	440	230 / 253	91,6 / 91,2	3,700	0,191	0,153
1	Three-phase	415	160 / 176	94,3 / 94,2	3,010	0,155	0,124	1	Three-phase	440	184 / 202	94,2 / 94,0	3,700	0,191	0,153
0,8	Three-phase	400	200 / 220	91,4 / 90,9	3,250	0,167	0,134	0,8	Three-phase	416	215 / 237	91,4 / 91,0	3,870	0,200	0,160
1	Three-phase	400	160 / 176	94,3 / 94,1	3,250	0,167	0,134	1	Three-phase	416	172 / 189	94,0 / 93,8	3,870	0,200	0,160
0,8	Three-phase	380	200 / 220	92,0 / 91,5	3,600	0,185	0,148	0,8	Three-phase	380	200 / 220	90,9 / 90,4	4,320	0,223	0,178
1	Three-phase	380	160 / 176	94,1 / 93,8	3,600	0,185	0,148	1	Three-phase	380	160 / 176	93,6 / 93,4	4,320	0,223	0,178
0,8	Three-phase	240	200 / 220	91,4 / 91,0	3,010	0,155	0,124	0,8	Three-phase	240	250 / 275	91,8 / 91,5	3,380	0,174	0,139
1	Three-phase	240	160 / 176	94,3 / 94,2	3,010	0,155	0,124	1	Three-phase	240	200 / 220	94,3 / 94,2	3,380	0,174	0,139
0,8	Three-phase	230	200 / 220	91,4 / 90,9	3,250	0,167	0,134	0,8	Three-phase	220	230 / 253	91,6 / 91,2	3,700	0,191	0,153
1	Three-phase	230	160 / 176	94,3 / 94,1	3,250	0,167	0,134	1	Three-phase	220	184 / 202	94,2 / 94,0	3,700	0,191	0,153
0,8	Three-phase	220	190 / 209	91,3 / 91,0	2,550	0,131	0,105	0,8	Three-phase	208	215 / 237	91,4 / 91,0	3,870	0,200	0,160
1	Three-phase	220	152 / 167	94,2 / 94,1	2,550	0,131	0,105	1	Three-phase	208	172 / 189	94,0 / 93,8	3,870	0,200	0,160
0,8	Single phase	230	120 / 132	87,7 / 87,0	5,890	0,304	0,243	0,8	Single phase	240	132 / 145	86,9 / 86,2	7,150	0,369	0,295
1	Single phase	230	96 / 106	91,6 / 91,1	5,890	0,304	0,243	1	Single phase	240	106 / 116	90,7 / 90,3	7,150	0,369	0,295

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, kVAh, 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