

INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic	 Diesel fuel	 Volvo / TWD1643GE	 Leroy somer / TAL047F	 / AMF25
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Hz 50Hz	 1500 r.p.m.	V 400V	cos φ 0,8
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Standby power (STP)	706 kVA	564 kW
Prime Power (PRP)	636 kVA	509 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)	764 kVA	611 kW
Prime Power (PRP)	696 kVA	557 kW
Power Continuous (COP)	- kVA	- kW

OPEN SKID

Length (L)	4500 mm
Height (H)	2240 mm
Width(W)	1750 mm
Weight	4337 kg
Daily tank	1000 L

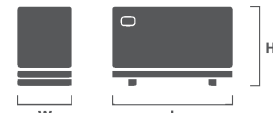


50Hz	60Hz
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Acoustic pressure level @1m	-	-
Acoustic pressure level @7m	-	-

SOUNDPROOF

Length (L)	4500 mm
Height (H)	2240 mm
Width (W)	1750 mm
Weight	5410 kg
Daily tank	1000 L



50Hz	60Hz
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Acoustic pressure level @1m	85 dB(A)	88 dB(A)
Acoustic pressure level @7m	75 dB(A)	78 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	- / -	620 / 496	682 / 546	1000
1	Three-phase	440	- / -	496 / 496	546 / 546	800
0,8	Three-phase	415	- / -	637 / 510	707 / 565	1000
1	Three-phase	415	- / -	519 / 519	576 / 576	800
0,8	Three-phase	400	- / -	636 / 509	706 / 564	1000
1	Three-phase	400	- / -	518 / 518	576 / 576	800
0,8	Three-phase	380	- / -	635 / 508	704 / 563	1000
1	Three-phase	380	- / -	516 / 516	568 / 568	800
0,8	Three-phase	240	- / -	637 / 510	707 / 565	1600
1	Three-phase	240	- / -	519 / 519	576 / 576	1250
0,8	Three-phase	230	- / -	636 / 509	706 / 564	1600
1	Three-phase	230	- / -	518 / 518	576 / 576	1600
0,8	Three-phase	220	- / -	620 / 496	682 / 546	2000
1	Three-phase	220	- / -	496 / 496	546 / 546	1600
0,8	Single phase	230	- / -	601 / 481	662 / 530	3200
1	Single phase	230	- / -	496 / 496	546 / 546	2500

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	- / -	696 / 557	764 / 611	1000
1	Three-phase	480	- / -	566 / 566	622 / 622	800
0,8	Three-phase	440	- / -	695 / 556	763 / 610	1000
1	Three-phase	440	- / -	565 / 565	621 / 621	800
0,8	Three-phase	416	- / -	693 / 555	761 / 609	1000
1	Three-phase	416	- / -	564 / 564	620 / 620	800
0,8	Three-phase	380	- / -	650 / 520	715 / 572	1000
1	Three-phase	380	- / -	520 / 520	572 / 572	800
0,8	Three-phase	240	- / -	696 / 557	764 / 611	2000
1	Three-phase	240	- / -	566 / 566	622 / 622	1600
0,8	Three-phase	220	- / -	695 / 556	763 / 610	2000
1	Three-phase	220	- / -	565 / 565	621 / 621	1600
0,8	Three-phase	208	- / -	693 / 555	761 / 609	2000
1	Three-phase	208	- / -	564 / 564	620 / 620	1600
0,8	Single phase	240	- / -	638 / 510	694 / 555	3200
1	Single phase	240	- / -	535 / 535	584 / 584	2500

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	450	463	-	422	461
Exhaust gas flow (m³/min)	-	101,6	111,8	-	119	130,1
Evacuated Heat (kW)	-	415	463	-	472	530
Maximum back pressure (kPa)	10					
Exhaust silencer attenuation (dB)	30					
Output Diameter (mm)	168					

VENTILATION SYSTEMS	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Combustion air flow (m³/min)	-	43,7	47	-	53,07	54,85
Cooling airflow (m³/min)	530			708		
Maximum load losses (Pa)	200					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	23	23	26	26	26	29
Alternator (kW)	26,5	26,5	30,8	32,0	32,0	36,9
Alternator (kW)	17,4	17,4	19,9	21,8	21,8	24,8

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	TWD1643GE	
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)	16,12	
Cylinder bore (mm)	144	
Cylinder stroke (mm)	165	
Compression Ratio	16,5:1	
Regulation	Electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	8,3	9,9
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	553	615
Gross power STP (kWm)	613	674
Fan power (kWm)	17	30
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	536	585
Net Power STP (kWm)	596	644
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	2700	2500
BMEP STP (kPa)	3000	2800



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	144,2	200	161,8	204
PRP	100%	129,5	199	146,2	202
	75%	95,6	196	106,9	197
	50%	63,8	196	72,7	201
COP	100%	-	-	-	-
	75%	-	-	-	-
	50%	-	-	-	-
Oil consumption		< 0,07% of fuel consumption			
REFERENCE CONDITIONS					
Temperature (°C)		25			
Atmospheric pressure (kPa)		100			
CAPACITY					
Coolant (L)		75			
Oil (L)		48			
STARTING SYSTEM					
Voltage (V)		24			
Power (kW)		7			
Battery (Ah)		155			

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	TAL047F
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 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	620 / 682	95,3 / 95,1	2,550	0,139	0,097	0,8	Three-phase	480	825 / 908	95,1 / 94,9	3,420	0,186	0,130
1	Three-phase	440	496 / 546	96,9 / 96,8	2,550	0,139	0,097	1	Three-phase	480	660 / 726	96,7 / 96,6	3,420	0,186	0,130
0,8	Three-phase	415	660 / 726	95,1 / 94,8	3,050	0,166	0,116	0,8	Three-phase	440	755 / 831	95,0 / 94,7	3,720	0,203	0,142
1	Three-phase	415	528 / 581	96,8 / 96,7	3,050	0,166	0,116	1	Three-phase	440	604 / 664	96,6 / 96,4	3,720	0,203	0,142
0,8	Three-phase	400	660 / 726	95,0 / 94,7	3,280	0,179	0,125	0,8	Three-phase	416	715 / 787	94,8 / 94,6	3,950	0,215	0,150
1	Three-phase	400	528 / 581	96,7 / 96,6	3,280	0,179	0,125	1	Three-phase	416	572 / 629	96,4 / 96,3	3,950	0,215	0,150
0,8	Three-phase	380	645 / 710	94,8 / 94,5	3,550	0,194	0,135	0,8	Three-phase	380	650 / 715	94,5 / 94,2	4,300	0,234	0,164
1	Three-phase	380	516 / 568	96,6 / 96,4	3,550	0,194	0,135	1	Three-phase	380	520 / 572	96,2 / 96,1	4,300	0,234	0,164
0,8	Three-phase	240	660 / 726	95,1 / 94,8	3,050	0,166	0,116	0,8	Three-phase	240	825 / 908	95,1 / 94,9	3,420	0,186	0,130
1	Three-phase	240	528 / 581	96,8 / 96,7	3,050	0,166	0,116	1	Three-phase	240	660 / 726	96,7 / 96,6	3,420	0,186	0,130
0,8	Three-phase	230	660 / 726	95,0 / 94,7	3,280	0,179	0,125	0,8	Three-phase	220	755 / 831	95,0 / 94,7	3,720	0,203	0,142
1	Three-phase	230	528 / 581	96,7 / 96,6	3,280	0,179	0,125	1	Three-phase	220	604 / 664	96,6 / 96,4	3,720	0,203	0,142
0,8	Three-phase	220	620 / 682	95,3 / 95,1	2,550	0,139	0,097	0,8	Three-phase	208	715 / 787	94,8 / 94,6	3,950	0,215	0,150
1	Three-phase	220	496 / 546	96,9 / 96,8	2,550	0,139	0,097	1	Three-phase	208	572 / 629	96,4 / 96,3	3,950	0,215	0,150
0,8	Single phase	230	620 / 682	89,7 / 88,9	9,330	0,509	0,356	0,8	Single phase	240	825 / 908	87,2 / 86,2	13,690	0,747	0,523
1	Single phase	230	496 / 546	93,2 / 92,6	9,330	0,509	0,356	1	Single phase	240	660 / 726	91,4 / 90,7	13,690	0,747	0,523

5

CONTROL PANEL



GENSET	COMAP AMF25	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity	•	•
Frequency	•	•
RMS values	•	•
Generator phase sequence	-	0
Generator earth current [a]	0	0
No. of registers events	350	250
Real time clock	•	•
PIN protection	S	0
kWh, kVAR, kVAh, kVARh, cos Ø	•	•
Synchroscope (m)	-	0
Nº of available outputs [b]	4	6
Engine run hours	•	•
Indication of alarms on LCD	•	•
Total no. of LED indicators	-	12
No. of LED alarms	-	4
Sound signalling alarms	•	•
Scheduler	•	•
Fuel Level	•	•

Electrical network	COMAP AMF25	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	COMAP AMF25	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	-	0

6 CONTROL PANEL

Engine	COMAP AMF25	OPTIONAL	Applications	COMAP AMF25	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	-	0
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	COMAP AMF25	OPTIONAL	Optional expansions	COMAP AMF25	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.)	0	0
USB female type A plug (n)	-	0	DSE2157 I-RB8 G-06 (8 relay outputs)	0	0
RS232 port (Max. 15m) (n)	0	0	DSE890 IL-NT-GPRS G-GSM (GSM and/or GPS)	0	0
RS485 port (Max. 1,2Km) [h]	0	0	DSE891 IB-LITE G-ETH (ethernet module)	0	0
Ethernet port RJ45 [i]	0	0	DSE892 IB-LITE - (ethernet module according SNMP protocol)	0	0
GSM and/or GPS [j]	0	0	DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	0	0
ModBus RTU protocol [h]	0	0	DSE2510 / 20 (mirror controller, maximum distance 1km)	0	0
ModBus TCP protocol [i]	0	0			
SNMP protocol [l]	0	0			
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