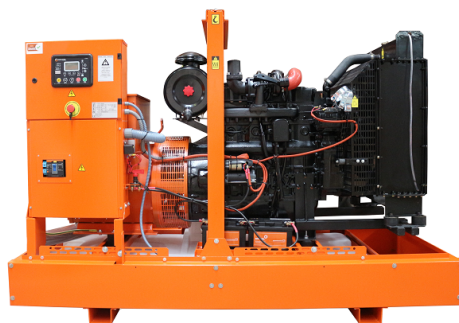




INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic	 Diesel fuel	 Iveco / N45 SM3	 Leroy somer / TAL044B	 / G-545
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Hz 50Hz	 1500 r.p.m.	V 400V	cos φ 0,8
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Standby power (STP)	88 kVA	70 kW
Prime Power (PRP)	80 kVA	64 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)	98 kVA	78 kW
Prime Power (PRP)	89 kVA	71 kW
Power Continuous (COP)	- kVA	- kW

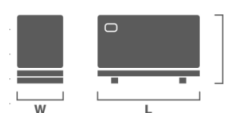
OPEN SKID

Length (L)	2315 mm
Height (H)	1570 mm
Width(W)	995 mm
Weight	932 kg
Daily tank	200 L



SOUNDPROOF

Length (L)	2315 mm
Height (H)	1570 mm
Width (W)	995 mm
Weight	1427 kg
Daily tank	200 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	- / -	72 / 58	79 / 63	100
1	Three-phase	440	- / -	58 / 58	63 / 63	80
0,8	Three-phase	415	- / -	80 / 64	88 / 70	125
1	Three-phase	415	- / -	64 / 64	70 / 70	100
0,8	Three-phase	400	- / -	80 / 64	88 / 70	125
1	Three-phase	400	- / -	64 / 64	70 / 70	100
0,8	Three-phase	380	- / -	80 / 64	88 / 70	125
1	Three-phase	380	- / -	64 / 64	70 / 70	100
0,8	Three-phase	240	- / -	80 / 64	88 / 70	200
1	Three-phase	240	- / -	64 / 64	70 / 70	160
0,8	Three-phase	230	- / -	80 / 64	88 / 70	200
1	Three-phase	230	- / -	64 / 64	70 / 70	160
0,8	Three-phase	220	- / -	72 / 58	79 / 63	200
1	Three-phase	220	- / -	58 / 58	63 / 63	160
0,8	Single phase	230	- / -	48 / 38	53 / 42	250
1	Single phase	230	- / -	38 / 38	42 / 42	200
0,8	Single phase	230	- / -	48 / 38	53 / 42	250
1	Single phase	230	- / -	38 / 38	42 / 42	200
0,8	Single phase	220	- / -	48 / 38	53 / 42	250
1	Single phase	220	- / -	38 / 38	42 / 42	200

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	- / -	89 / 71	98 / 78	125
1	Three-phase	480	- / -	74 / 74	81 / 81	100
0,8	Three-phase	440	- / -	90 / 72	98 / 79	125
1	Three-phase	440	- / -	74 / 74	81 / 81	100
0,8	Three-phase	416	- / -	87 / 70	96 / 77	125
1	Three-phase	416	- / -	70 / 70	77 / 77	100
0,8	Three-phase	380	- / -	79 / 63	87 / 70	125
1	Three-phase	380	- / -	63 / 63	70 / 70	100
0,8	Three-phase	240	- / -	89 / 71	98 / 78	250
1	Three-phase	240	- / -	74 / 74	81 / 81	200
0,8	Three-phase	220	- / -	90 / 72	98 / 79	250
1	Three-phase	220	- / -	74 / 74	81 / 81	200
0,8	Three-phase	208	- / -	87 / 70	96 / 77	250
1	Three-phase	208	- / -	70 / 70	77 / 77	200
0,8	Single phase	240	- / -	52 / 42	57 / 46	250
1	Single phase	240	- / -	42 / 42	46 / 46	200
0,8	Single phase	240	- / -	52 / 42	57 / 46	250
1	Single phase	240	- / -	42 / 42	46 / 46	200
0,8	Single phase	230	- / -	52 / 42	57 / 46	250
1	Single phase	230	- / -	42 / 42	46 / 46	200

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	516	-	-	510	-
Exhaust gas flow (kg/h)	-	-	345	-	-	-
Evacuated Heat (kW)	-	47,1	51,8	-	-	-
Maximum back pressure (kPa)	5					
Exhaust silencer attenuation (dB)	18-25					
Output Diameter (mm)	90					

VENTILATION SYSTEMS	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Combustion air flow (m³/min)	-	4,6	-	-	-	-
Cooling airflow (m³/min)	132					
Maximum load losses (Pa)	147					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	7,3	7,3	8	-	-	0
Alternator (kW)	6,3	6,3	7,3	7,5	7,5	8,6
Alternator (kW)	4,2	4,2	4,7	5,2	5,2	5,8

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	N45 SM3	
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	4 In-Line	
Displacement (L)	4,5	
Cylinder bore (mm)	104	
Cylinder stroke (mm)	132	
Compression Ratio	17.5:1	
Regulation	Mechanic / optional electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	6,6	7,9
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	74,6	81
Gross power STP (kWm)	82	89
Fan power (kWm)	1,3	2,25
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	73,3	78,8
Net Power STP (kWm)	81	86,8
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	1326	1180
BMEP STP (kPa)	1457	1300



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	21,2	215,8	24	224,7
PRP	100%	19,4	216,7	21,6	222,2
	75%	15,4	215,4	15,4	226,6
	50%	9,6	214,4	10,9	224,7
COP	100%	-	-	-	-
	75%	-	-	-	-
	50%	-	-	-	-
Oil consumption		< 0,1% of fuel consumption			
REFERENCE CONDITIONS					
Temperature (°C)		40			
Atmospheric pressure (kPa)		100			
CAPACITY					
Coolant (L)		18,5			
Oil (L)		12,8			
STARTING SYSTEM					
Voltage (V)		12			
Power (kW)		3			
Battery (Ah)		100			

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	TAL044B
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	72 / 79	88,1 / 87,9	2,500	0,101	0,060	0,8	Three-phase	480	100 / 110	90,6 / 90,3	3,510	0,141	0,085
1	Three-phase	440	58 / 63	92,1 / 92,2	2,500	0,101	0,060	1	Three-phase	480	80 / 88	93,5 / 93,5	3,510	0,141	0,085
0,8	Three-phase	415	80 / 88	89,6 / 89,2	3,130	0,126	0,075	0,8	Three-phase	440	92 / 101	91,0 / 90,7	3,840	0,155	0,093
1	Three-phase	415	64 / 70	93,3 / 93,2	3,130	0,126	0,075	1	Three-phase	440	74 / 81	93,7 / 93,6	3,840	0,155	0,093
0,8	Three-phase	400	80 / 88	90,1 / 89,6	3,370	0,136	0,081	0,8	Three-phase	416	87 / 96	91,0 / 90,6	4,060	0,164	0,098
1	Three-phase	400	64 / 70	93,5 / 93,3	3,370	0,136	0,081	1	Three-phase	416	70 / 77	93,6 / 93,5	4,060	0,164	0,098
0,8	Three-phase	380	80 / 88	90,3 / 89,8	3,730	0,150	0,090	0,8	Three-phase	380	79 / 87	90,7 / 90,3	4,420	0,178	0,107
1	Three-phase	380	64 / 70	93,6 / 93,3	3,730	0,150	0,090	1	Three-phase	380	63 / 70	93,4 / 93,2	4,420	0,178	0,107
0,8	Three-phase	240	80 / 88	89,6 / 89,2	3,130	0,126	0,075	0,8	Three-phase	240	100 / 110	90,6 / 90,3	3,510	0,141	0,085
1	Three-phase	240	64 / 70	93,3 / 93,2	3,130	0,126	0,075	1	Three-phase	240	80 / 88	93,5 / 93,5	3,510	0,141	0,085
0,8	Three-phase	230	80 / 88	90,1 / 89,6	3,370	0,136	0,081	0,8	Three-phase	220	92 / 101	91,0 / 90,7	3,840	0,155	0,093
1	Three-phase	230	64 / 70	93,5 / 93,3	3,370	0,136	0,081	1	Three-phase	220	74 / 81	93,7 / 93,6	3,840	0,155	0,093
0,8	Three-phase	220	72 / 79	88,1 / 87,9	2,500	0,101	0,060	0,8	Three-phase	208	87 / 96	91,0 / 90,6	4,060	0,164	0,098
1	Three-phase	220	58 / 63	92,1 / 92,2	2,500	0,101	0,060	1	Three-phase	208	70 / 77	93,6 / 93,5	4,060	0,164	0,098
0,8	Single phase	230	48 / 53	85,6 / 85,0	1,240	0,160	0,100	0,8	Single phase	240	52 / 57	87,5 / 87,1	2,020	0,190	0,120
1	Single phase	230	38 / 42	90,7 / 90,6	1,240	0,160	0,100	1	Single phase	240	42 / 46	90,9 / 90,8	2,020	0,190	0,120
0,8	Single phase	230	48 / 53	83,2 / 82,4	2,080	0,163	0,097	0,8	Single phase	240	52 / 57	84,2 / 83,5	2,480	0,194	0,116
1	Single phase	230	38 / 42	89,0 / 88,6	2,080	0,163	0,097	1	Single phase	240	42 / 46	88,6 / 88,3	2,480	0,194	0,116
0,8	Single phase	220	48 / 53	85,6 / 85,0	1,350	0,180	0,110	0,8	Single phase	230	52 / 57	87,5 / 87,1	2,200	0,210	0,130
1	Single phase	220	38 / 42	90,7 / 90,6	1,350	0,180	0,110	1	Single phase	230	42 / 46	90,9 / 90,8	2,200	0,210	0,130

5

CONTROL PANEL



GENSET	GRUPEL G-545	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity	•	•
Frequency	•	•
RMS values	•	•
Generator phase sequence	•	•
Generator earth current [a]	•	•
No. of registers events	400	250
Real time clock	•	•
PIN protection	•	•
kWh, kVAh, kVAh, kVAh, cos Ø	•	•
Synchroscope (m)	0	0
Nº of available outputs [b]	4	6
Engine run hours	•	•
Indication of alarms on LCD	•	•
Total no. of LED indicators	15	12
No. of LED alarms	4	4
Sound signalling alarms	-	0
Scheduler	•	•
Fuel Level	•	•

Electrical network	GRUPEL G-545	OPTIONAL
Voltage (Ph-Ph / Ph-N)	• / •	• / •
Current intensity [a]	0	0
Frequency	•	•
kVA, kW, cos Ø (a)	0	0
Inversion control between main-group	•	•
Protections and Alarms	GRUPEL G-545	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	GRUPEL G-545	OPTIONAL	Applications	GRUPEL G-545	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	0
Engine battery voltage	•	•	Generator-Main in synchronism and load sharing (1 generator and 1 main) (m)	0	0
Intensity of the engine battery [d]	0	0			
Fuel Consumption [e]	•	•	Optional expansions	GRUPEL G-545	OPTIONAL
Low level of radiator water [f]	0	0	DSE2130 (8 inputs dig.) IG-IOM (8 in/outputs dig. + 4 inputs anal.) G-08 (8 inputs dig.)	•	•
Engine maintenance scheduled	•	•	DSE2157 I-RB8 G-06 (8 relay outputs)	•	•
Communication	GRUPEL G-545	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)	0	0	DSE892 IB-LITE - (ethernet module according SNMP protocol)	-	0
RS232 port (Max. 15m) (n)	0	0	DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	-	0
RS485 port (Max. 1,2Km) [h]	•	•	DSE2510 / 20 (mirror controller, maximum distance 1km)	-	0
Ethernet port RJ45 [i]	0	0	Standards		
GSM and/or GPS [j]	0	0	Working temperature	-30 -> 70°C	
ModBus RTU protocol [h]	•	•	Protection index (when assembled with sealing gasket)	IP65	
ModBus TCP protocol [i]	0	0	Degree of humidity (during 48hr)	93% / 40°C	
SNMP protocol [l]	0	0			
CAN port (Max. 40m)	•	•			
MSC port (Max. 240m) (m)	0	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