

INDUSTRIAL RANGE

1 MAIN FEATURES

T Triphasic	 Diesel fuel	 Iveco / CR13 TE7W	 Leroy somer / TAL047C	 / 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)	550 kVA	440 kW
Prime Power (PRP)	500 kVA	400 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)	556 kVA	445 kW
Prime Power (PRP)	504 kVA	403 kW
Power Continuous (COP)	- kVA	- kW

OPEN SKID

Length (L)	4015 mm
Height (H)	2145 mm
Width(W)	1410 mm
Weight	2941 kg
Daily tank	1000 L

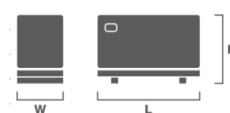


50Hz	60Hz
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Acoustic pressure level @1m	-	-
Acoustic pressure level @7m	-	-

SOUNDPROOF

Length (L)	4015 mm
Height (H)	2145 mm
Width (W)	1410 mm
Weight	3726 kg
Daily tank	1000 L



50Hz	60Hz
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Acoustic pressure level @1m	81 dB(A)	83 dB(A)
Acoustic pressure level @7m	68 dB(A)	70 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	- / -	460 / 368	506 / 405	630
1	Three-phase	440	- / -	368 / 368	405 / 405	630
0,8	Three-phase	415	- / -	500 / 400	550 / 440	800
1	Three-phase	415	- / -	400 / 400	440 / 440	630
0,8	Three-phase	400	- / -	500 / 400	550 / 440	800
1	Three-phase	400	- / -	400 / 400	440 / 440	630
0,8	Three-phase	380	- / -	475 / 380	523 / 418	800
1	Three-phase	380	- / -	380 / 380	418 / 418	630
0,8	Three-phase	240	- / -	500 / 400	550 / 440	1250
1	Three-phase	240	- / -	400 / 400	440 / 440	1000
0,8	Three-phase	230	- / -	500 / 400	550 / 440	1250
1	Three-phase	230	- / -	400 / 400	440 / 440	1000
0,8	Three-phase	220	- / -	460 / 368	506 / 405	1250
1	Three-phase	220	- / -	368 / 368	405 / 405	1000
0,8	Single phase	230	- / -	460 / 368	506 / 405	2000
1	Single phase	230	- / -	368 / 368	405 / 405	1600

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	- / -	504 / 403	556 / 445	630
1	Three-phase	480	- / -	411 / 411	455 / 455	630
0,8	Three-phase	440	- / -	502 / 401	554 / 443	800
1	Three-phase	440	- / -	410 / 410	453 / 453	630
0,8	Three-phase	416	- / -	501 / 401	552 / 442	800
1	Three-phase	416	- / -	409 / 409	452 / 452	630
0,8	Three-phase	380	- / -	498 / 398	549 / 439	800
1	Three-phase	380	- / -	408 / 408	450 / 450	630
0,8	Three-phase	240	- / -	504 / 403	556 / 445	1250
1	Three-phase	240	- / -	411 / 411	455 / 455	1000
0,8	Three-phase	220	- / -	502 / 401	554 / 443	1600
1	Three-phase	220	- / -	410 / 410	453 / 453	1250
0,8	Three-phase	208	- / -	501 / 401	552 / 442	1600
1	Three-phase	208	- / -	409 / 409	452 / 452	1250
0,8	Single phase	240	- / -	451 / 361	492 / 394	2000
1	Single phase	240	- / -	382 / 382	419 / 419	1600

2 ROOM INSTALLATION

EXHAUST SYSTEM	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Exhaust gas temperature (°C)	-	520	-	-	510	-
Exhaust gas flow (kg/h)	-	-	2027	-	-	2359
Evacuated Heat (kW)	-	294,6	324,3	-	325,9	358,3
Maximum back pressure (kPa)	5					
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)	-	26,3	-	-	31	-
Cooling airflow (m³/min)	408			510		
Maximum load losses (Pa)	196					
RADIATION	50 Hz			60 Hz		
	COP	PRP	STP	COP	PRP	STP
Engine (kW)	17,7	17,7	19,5	19,4	19,4	21,4
Alternator (kW)	24,4	24,4	28,4	29,3	29,3	33,9
Alternator (kW)	15,9	15,9	18,4	19,8	19,8	22,6

3 ENGINE SPECIFICATIONS

GENERAL SPECIFICATIONS	50 Hz	60 Hz
Model	CR13 TE7W	
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	Common rail	
No. and Cylinder arrangement	6 In-Line	
Displacement (L)	12,88	
Cylinder bore (mm)	135	
Cylinder stroke (mm)	150	
Compression Ratio	16,5:1	
Regulation	Electronic	
Rotation speed	1500	1800
Piston Speed (m/s)	7,5	9
Gross power COP (kWm)	-	-
Gross power PRP (kWm)	436,4	464
Gross power STP (kWm)	480	510
Fan power (kWm)	21	36
Net Power COP (kWm)	-	-
Net Power PRP (kWm)	426,4	428
Net Power STP (kWm)	470	474
BMEP COP (kPa)	-	-
BMEP PRP (kPa)	2682,7	2380,4
BMEP STP (kPa)	2980,7	2639,2



CONSUMPTION		50Hz		60Hz	
Fuel consumption	LOAD	lt/h	g/kWh	lt/h	g/kWh
STP	100%	112,6	195,8	123,3	202
	100%	100,6	192,7	110,9	199,6
	75%	80,2	191,7	87,7	196,9
PRP	50%	51,5	197,7	57	204,3
	100%	-	-	-	-
	75%	-	-	-	-
COP	50%	-	-	-	-
	50%	-	-	-	-
Oil consumption	< 0,2% of fuel consumption				

REFERENCE CONDITIONS	
Temperature (°C)	40
Atmospheric pressure (kPa)	100
CAPACITY	
Coolant (L)	32
Oil (L)	38,1
STARTING SYSTEM	
Voltage (V)	24
Power (kW)	7,8
Battery (Ah)	155

4 ALTERNATOR SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	TAL047C
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	460 / 506	94,5 / 94,2	2,830	0,165	0,116	0,8	Three-phase	480	625 / 688	94,1 / 93,8	3,870	0,227	0,159
1	Three-phase	440	368 / 405	96,4 / 96,3	2,830	0,165	0,116	1	Three-phase	480	500 / 550	96,0 / 95,9	3,870	0,227	0,159
0,8	Three-phase	415	500 / 550	94,1 / 93,8	3,450	0,202	0,141	0,8	Three-phase	440	590 / 649	93,8 / 93,4	4,350	0,255	0,178
1	Three-phase	415	400 / 440	96,2 / 96,0	3,450	0,202	0,141	1	Three-phase	440	472 / 519	95,8 / 95,6	4,350	0,255	0,178
0,8	Three-phase	400	500 / 550	93,9 / 93,5	3,720	0,218	0,152	0,8	Three-phase	416	555 / 611	93,6 / 93,2	4,580	0,268	0,188
1	Three-phase	400	400 / 440	96,0 / 95,8	3,720	0,218	0,152	1	Three-phase	416	444 / 488	95,6 / 95,4	4,580	0,268	0,188
0,8	Three-phase	380	475 / 523	93,8 / 93,4	3,920	0,229	0,160	0,8	Three-phase	380	520 / 572	93,1 / 92,7	5,140	0,301	0,211
1	Three-phase	380	380 / 418	95,9 / 95,7	3,920	0,229	0,160	1	Three-phase	380	416 / 458	95,3 / 95,0	5,140	0,301	0,211
0,8	Three-phase	240	500 / 550	94,1 / 93,8	3,450	0,202	0,141	0,8	Three-phase	240	625 / 688	94,1 / 93,8	3,870	0,227	0,159
1	Three-phase	240	400 / 440	96,2 / 96,0	3,450	0,202	0,141	1	Three-phase	240	500 / 550	96,0 / 95,9	3,870	0,227	0,159
0,8	Three-phase	230	500 / 550	93,9 / 93,5	3,720	0,218	0,152	0,8	Three-phase	220	590 / 649	93,8 / 93,4	4,350	0,255	0,178
1	Three-phase	230	400 / 440	96,0 / 95,8	3,720	0,218	0,152	1	Three-phase	220	472 / 519	95,8 / 95,6	4,350	0,255	0,178
0,8	Three-phase	220	460 / 506	94,5 / 94,2	2,830	0,165	0,116	0,8	Three-phase	208	555 / 611	93,6 / 93,2	4,580	0,268	0,188
1	Three-phase	220	368 / 405	96,4 / 96,3	2,830	0,165	0,116	1	Three-phase	208	444 / 488	95,6 / 95,4	4,580	0,268	0,188
0,8	Single phase	230	460 / 506	87,4 / 86,4	10,360	0,607	0,425	0,8	Single phase	240	625 / 688	84,3 / 83,1	15,510	0,909	0,636
1	Single phase	230	368 / 405	91,5 / 90,9	10,360	0,607	0,425	1	Single phase	240	500 / 550	89,3 / 88,5	15,510	0,909	0,636

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, kVAr, 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]	•	•			
Low level of radiator water [f]	0	0			
Engine maintenance scheduled	•	•			
Communication	GRUPEL G-545	OPTIONAL			
USB female type B plug (Max. 6m) [g]	•	•	Optional expansions	GRUPEL G-545	OPTIONAL
USB female type A plug (n)	0	0	DSE2130 (8 inputs dig.) IG-IOM (8 in/outputs dig. + 4 inputs anal.) G-08 (8 inputs dig.)	•	•
RS232 port (Max. 15m) (n)	0	0	DSE2157 I-RB8 G-06 (8 relay outputs)	•	•
RS485 port (Max. 1,2Km) [h]	•	•	DSE890 IL-NT-GPRS G-GSM (GSM and/or GPS)	•	•
Ethernet port RJ45 [i]	0	0	DSE891 IB-LITE G-ETH (ethernet module)	•	•
GSM and/or GPS [j]	0	0	DSE892 IB-LITE - (ethernet module according SNMP protocol)	-	0
ModBus RTU protocol [h]	•	•	DSE2548 IGL-RA15 - (expansion with 8 additional LEDs)	-	0
ModBus TCP protocol [i]	0	0	DSE2510 / 20 (mirror controller, maximum distance 1km)	-	0
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