

GENERATING SET GE 45 RSC

The images are for reference



FEATURES

- Rounded edges to allow rainwater to flow
- Sealed base capable of containing any leaks of liquids present in the engine, avoiding environmental pollution
- External plugs for draining oil and water
- Fully opening engine side bonnet which facilitates all maintenance operations
- Central lifting hook
- Movement with forklifts is possible from all sides
- Swinging rain cover at the exhaust gas outlet
- Brushless alternator with electronic voltage regulation "AVR" three-phase sensing with marine impregnation
- Control panel with digital control unit
- Fuel level, water temperature and oil pressure sensors
- Battery disconnect switch
- Insulation monitor (as an alternative to the electronic differential relay, only with the electrical distribution panel)
- Electronic voltage regulation AVR
- Complies with regulation 2016/1628/EU FOR STATIONARY USE ONLY

POWER RATINGS	
* Stand-By three-phase power	43 kVA (34,4 kW) / 400V / 62,1A
* PRP three-phase power	39 kVA (31,2 kW) / 400V / 56,3A
* COP three-phase power	/
Frequency	50 Hz
Cos φ	0.8

* Output powers according to ISO 8528-1



DEFINITION

Valid declared powers up to the followings environmental conditions: temperature 25°C, altitude 100 meters above sea level

LTP power: stand-by power: Maximum available power for use with variable loads for a yearly number of hours limited at 500 h. No overload is admitted.

PRP power: continue power with variable loads. Maximum power for use with variable loads for a yearly unlimited numbers of hours.

COP power: continuous power with constant load. Maximum power for use with constant loads for a yearly unlimited numbers of hours.

ENGINE 1500 RPM

4 STROKE, DIRECT INJECTION, TURBOCHARGED	
Model	RAYWIN 4D24TG0/A
* Stand-By net power	39,6 kW (53,9 hp)
* PRP net power	36 kW (49 hp)
* COP net power	/
Cylinders / Displacement	4 / 2,45 lit. (2450 cm ³)
Bore / Stroke	87 / 103 (mm)
Compression ratio	17,8 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	10,6 lit./h
100 % to PRP	9,6 lit./h
75 % to PRP	7,3 lit./h
50 % to PRP	4,8 lit./h
COOLING SYSTEM	
Total system cap. - only engine	/
Fan air flow	/
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	9,5 lit. (max)
Oil consumption at full load	/

EXHAUST SYSTEM	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	/
Maximum back pressure	10 kPa (0,1 bar)
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	
Starter motor power	2,3 kW
Battery charging alternator cap.	60 A
Cold start	- 10 °C
With cold start aid	- 30 °C
AIR FILTER	
Combustion air flow	/
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/

* Output powers according to ISO 3046-1



ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS

Continuous power	40 kVA
Stand-by power	44 kVA
Three phase voltage	380-415 Vac
Frequency	50 Hz
Cos φ	0.8
Model A.V.R.	625D - (3ph. sensing)
Voltage regulation acc.	$\pm 0,5 \%$
Sustained short circuit current	3 In
Transient dip (100% load)	10 %
Recovery time	≤ 3 sec.
Efficiency at 100% load	87,1 % (400V - Cos φ 0,8)
Insulation	Class H
Connection - Terminals	Star - N°12
Electromagnetic compatibility (R.F.I. suppr.)	EN IEC 61000-6-2 EN IEC 61000-6-4
Waveform distorsion - THD	$< 3 \%$
Telephone interference - THF	$< 2 \%$

REACTANCES (40 kVA - 400V)

Direct axis synchronuos - Xd	/
Direct axis transient - X'd	/
Subdirect axis transient - X''d	/
Quadrature axis synchronuos - Xq	/
Quadr. axis subtransient - X''q	/
Negative sequence - X2	/
Zero sequence - X0	/
TIME CONSTANTS	
Transient - T'd	/
Subtransient - T''d	/
Open circuit - T'do	/
Armature - Ta	/
Short-circuit ratio Kcc	/
Cooling air flow	0,131 m ³ /sec.
Coupling Bearing	Direct SAE 3 -11.5 ½ - N°1

GENERAL SPECIFICATIONS

Fuel tank capacity	100 lt.
Running time (75% to PRP)	13,7 h
Starter battery	12 Vdc -80Ah / 670A CCA(EN)

IP protection degree	IP 23
Pressure acoustic	75 dB(A) @ 7m
Performance class (ISO 8528)	G2



MANUAL CONTROL PANEL

- IntelNano Plus controller
- Power switch
- Siren
- Battery charge alarm light
- Emergency stop button
- TCM 35 remote control connector
- Switch magnetermic
- Differential switch
- Power terminal block (without sockets)
- Earth terminal (PE)

MANUAL CONTROL PANEL WITH SOCKETS

- Output sockets: 1x 400V 63A 3P+N+T CEE
1x 400V 32A 3P+N+T CEE
1x 400V 16A 3P+N+T CEE
1x 230V 16A 2P+T CEE
1x 230V 16A 2P+E SCHUKO
- Magnetothermic switch for 400V 32A socket
- Magnetothermic switch for 400V 16A socket
- Magnetothermic switch for 230V 16A sockets
- Earth terminal (PE)

INTELINANO PLUS CONTROLLER CHARACTERISTICS

Operating mode	<ul style="list-style-type: none"> • MAN. - AUTO
Display	<ul style="list-style-type: none"> • Graphic back-light LCD display 128x64 pixels
LEDs	<ul style="list-style-type: none"> • Engine operation • AUTO operating mode • Alarm
Buttons	<ul style="list-style-type: none"> • START button • STOP button • AUTO button • N° 2 buttons for controller programming
Generator Measures	<ul style="list-style-type: none"> • Voltage : L1-L2/L2-L3/L3-L1/N-L1/N-L2/N-L3 • Voltage : L1-L2 (Automatic control panel only) • Current : I1 • Powers : kVA • Frequency
Engine Measures	<ul style="list-style-type: none"> • Water temperature (optional) • Oil pressure (optional) • Fuel level • Rpm meter • Battery voltage • Maintenance • Hours meter
Generator Protections	<ul style="list-style-type: none"> • Short circuit • Over-Udervoltage • Over-Uderfrequency • Phase sequence (Automatic control panel only)
Engine Protections	<ul style="list-style-type: none"> • Overspeed • High water temperature alarm • High water temperature warning • Low oil pressure warning • Low fuel level warning • Under battery voltage • Battery charge alternator failure • Start failure • Stop failure • Emergency stop
AMF functions (Automatic control panel only)	<ul style="list-style-type: none"> • Measure mains voltage : L1-L2 / L2-L3 / L3-L1 - N-L1 / N-L2 / N-L3 • Measure mains frequency • Three phase detection • Over-Under mains voltage • Over-Under mains frequency • Phase sequence
Features	<ul style="list-style-type: none"> • Event log and alarms (10 events) • Operator interface with icons, no text • Remote Start and Stop • Pre-heating • Fully programmable from the panel or from PC • Direct connection to engines with ECU via Can bus J1939 • Manual operation (MRS) with remote start • IP65 protection • Operation temperature: -20°C / +70°C
Communication	<ul style="list-style-type: none"> • Setup USB port • CAN BUS interface (J1939 only)



WEIGHT - DIMENSIONS AND ACCESSORIES

GE 45 RSC

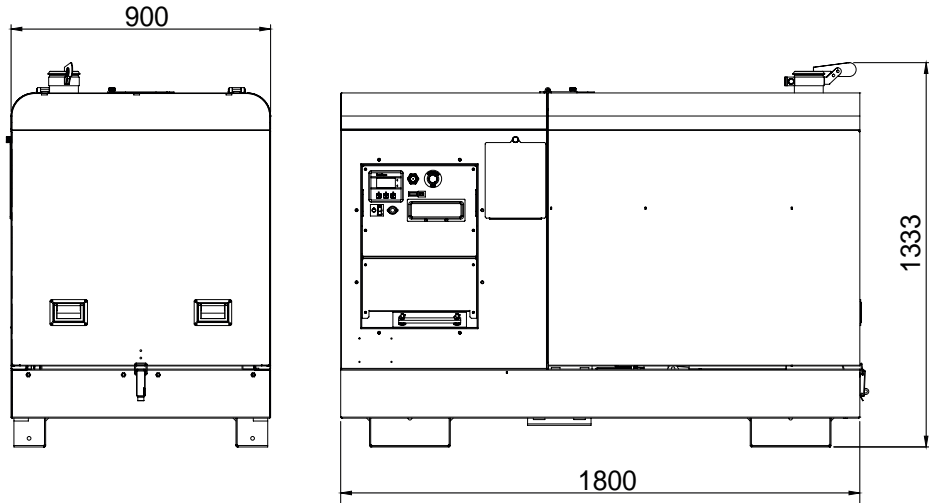


DRY WEIGHT MACHINE:
• 865 Kg

Generating set pictured may include optional accessories.



DIMENSIONS DRAW



VERSIONS IN ADDITION TO THE STANDARD FEATURES

	SAFETY	HEATER	OIL & GAS	TOP	ISOMETER	REMOTE	PLUS
GFI Electronic	✓		✓	✓		✓	✓
Engine water heater		✓		✓			
Low level water sensor			✓	✓	✓		
Radio control						✓	
Cold start aid			✓			✓	✓
Isometer					✓		

OPTIONS ON REQUEST

- Automatic transfer switch unit (ATS) PAC-I 42 (60A)
- Remote control TCM35
- Site tow CTL30
- Road trailer CTV1
- Earthing kit MT25

VERSIONS AVAILABLE

CCN5U8052	STANDARD (MANUAL WITHOUT SOCKETS)
CCN5U8052A	HEATER (MANUAL WITHOUT SOCKETS)
CCN5U8052R	SAFETY (MANUAL WITHOUT SOCKETS)
CN5U8052DER	OIL & GAS (MANUAL WITHOUT SOCKETS)
CCN5U8012	STANDARD (MANUAL WITH SOCKETS)
CCN5U8012R	SAFETY (MANUAL WITH SOCKETS)
CCN5U8012DR	PLUS (MANUAL WITH SOCKETS)
CCN5U8012ET	ISOMETER (MANUAL WITH SOCKETS)
CCN5U8012AER	TOP (MANUAL WITH SOCKETS)
CCN5U8012DRW	REMOTE (MANUAL WITH SOCKETS)

GENERAL INFORMATION

COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS

- 2006/42 / EC (Machines Directive)
- 2014/35 / EU (Low Voltage Directive)
- 2014/30 / EU (EMC Directive)
- 2000/14 / EC (Directive Acoustic Emission for machines for use outdoors)
- ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets)



ISO 9001:2008 - Cert. 0192

WARRANTY

All devices are covered by the manufacturer's warranty.

Non-contractual document. Specification subject to change without notice.

© MOSA - Viale Europa, 59 - 20047 Cusago (Milano) - Italy - phone +39-0290352.1 - fax + 39-0290390466 E-mail: info@mosa.it Web site: www.mosa.it

