

Model: PDT114d - 100 kVA PERKINS Industrial Series

50
Hz

50 Hz



Cooling System: Water

T

Three Phase



Diesel



Foto Indicativa / Indicative Picture

Features

Generating Set Model	PDT114d
Power in PRP (kVA)	100
Power in LTP (kVA)	110
Engine Model	1104C-44TAG2
Engine Brand	PERKINS
Alimentation	Diesel
Cooling System	Water
Displacement (cc)	4400
Fuel Tank Capacity(lt)	120.00
Battery Capacity	1x100
Automatic Control Panel	A2G
Manual Control Panel	QMA2
Sound Proof Canopy	GK3
Frequence	50 Hz
Voltage	400/230 V + N
Rounds per Minute	1500

Standards Applied

Coelmo Generating Sets are CE marked and comply with the following regulations:
(Environmental conditions 1.000 mbar, 25°C, 30% relative humidity. Power referring to ISO 3046)

- Power: ISO 8528
- Directive Machinery : 2006/42/CE - 89/392CEE - 98/37/CE
- Low Voltage : 2006/95/CE - 73/23/CEE - 93/68/CEE
- Electromagnetic Compatibility : 2004/108/CE - 89/336/CEE - 93/68/CEE
- Emissions for non-road engines : 2002/88/CE - 97/68/CE (*)
- Acoustic emission : 2005/88/CE - 2000/14/CE (**)

* For non-stationary use only

** For Sound Proof Version Only

Basic Configuration

- Fuel tank
- Starting battery
- High temperature engine thermostat
- Low pressure oil thrust meter
- Electrovalve engine
- Initial filling of fluids

Documentation

- User's and maintenance handbook
- Electric schemes
- CE declaration
- Test report (on demand)

Available Options

- 3 or 4 poles circuit breaker
- Relay and/or differential module
- Over sized integrated fuel tank
- Engine temperature sensor
- Oil pressure sensor
- Fuel level indicator float
- Automatic refill system
- Sound proof canopy
- Catalytic muffler
- Silenced muffler
- Electro manual control panel
- Automatic control panel
- Change over mains/generating set
- Slow speed trailer
- High speed trailer
- Remote alarm control board
- Commissioning

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Engine

Diesel engine, four stroke water cooled. An efficient cooling system assures excellent performances in whichever site conditions. A low electric power/displacement ratio guarantees a full available power.

Model	1104C-44TAG2
Brand	PERKINS
Alimentation	Diesel
Number of Cylinders	4
Displacement (cc)	4400
HP at 50Hz	126
Speed Governor	Electronic
Aspiration	TCA/A
Air Flow Ventilator (m3/h)	9936
Combustion Air Flow (m3/h)	361
Exhaust Gas Flow (m3/h)	912
Maximum Exhaust Gas Temperature (°C)	514
Bore (mm)	105
Stroke (mm)	127
Oil cap (l)	7.00
Rounds Per Minute	1500
Consumption at 2/4 of the load (l/h)	11.80
Consumption at 3/4 of the load (l/h)	17.10
Consumption at 4/4 of load (l/h)	22.60

Aspiration Type

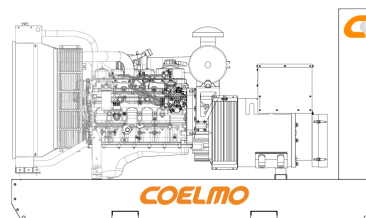
NA	= Natural Aspiration
TC	= Turbo Compressor
TCA/A	= Turbo Compressor Air/Air
W/A	= Turbo Compressor Water/Air

Alternator

Manufactured in accordance with international IEC 34-1 standards, self regulated, selfexcited, selfventilated, insulated in class "H", regulation accuracy (with load from 0 to 100%) of +/- 1%.

Number of Poles	4
Excitation	Brushless with electronic regulator
Number of Terminals	12
IP	23
Phase	Three Phase
Cos Phi	0.8
Performance	0.92
Voltage	400/230 V + N

Dimensions



Version	Open	Soundproof
Length (mm)	2500	2700
Width (mm)	900	1000
Height (mm)	1450	1650
Weight (kg)	1055	1468

Control Panel: Automatic Model: A2G Industrial Range

Technical Data Sheet

Control Panel Model	A2G
Type	Automatic
Applicable Range(kVA)	87 - 182
Change Over	By interlocked contactor
IP	20
Control Board Model	COELMO Lexys AMF

Control Board Dimensions

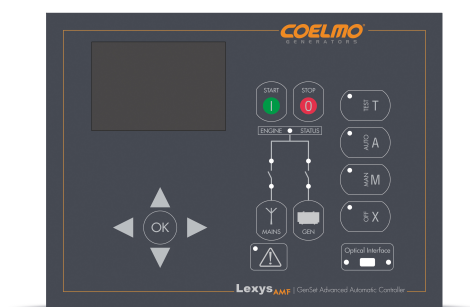
Length (mm)	600
Width (mm)	250
Height (mm)	800

Standard Set-up

- Voltage, Current, Power and energy
 - Power Factor
 - Energy Meter
 - Frequency
 - Engine Rounds
 - Number of Start Ups
 - Function Hours and Maintenance Notice
 - Engine Temperature Indicator*
 - Oil Pressure and Fuel Level Indicator*
- * Transducers Not Included

Available Options

- Remote management and reports from PC to fax or via the GSM network
- Alarm Report Control Board
- Remote Control Management Kit



Description

The automatic control panel and change over switch allows a perfect management of the Generating Set. A magnetothermic circuit breaker is available for the protection of Generating Set and eventual sockets. As an option a Change over switch Mains/Generating Set can be supplied. The control board (micro processor) that is supplied along with the Automatic control panel allows 4 different operational functions: "manual", "automatic", "test", "supermanual". The diagnostics is multilingual (Italian, English, French and Spanish), with clear messages regarding the operational state and active alarms. The electronic board is entrusted with the management of operational safety, thanks to visual/acoustic alarms and eventual engine shutdown, it can help prevent damage caused by malfunctions. The control board counts the number of start attempts and issues the following clear messages on the illuminated display: Running hours, engine speed, start attempts, phase-phase voltage and phase-neutral voltage, battery voltage, active power, apparent power, power factor, provided power, alarms, optional mechanical measurements (oil pressure, engine temperature, fuel level meter). The automatic control panel manages its own maintenance program indicating the routine maintenance to be performed. It offers the possibility to calibrate measuring instruments and to regulate more than 70 parameters. It can be managed and programmed through a PC and remotely managed thanks to an RS232 port. It has a historic memory that records the breakdowns and services.

Sound Proof Canopy

Model: **GK3**

Industrial Range



Technical Data Sheet

Canopy Model	GK3
Length (mm)	2700
Width (mm)	1000
Height (mm)	1650



Description

The canopy is a self-supported structure in pressure folded and soldered steel sheets. The structure is reinforced with four flat corner brackets made of steel sheets. Before being accurately covered in two layers of epoxy resin, the canopy is subject to an anti corrosion treatment and then highly acoustic and auto extinguishing panels are applied. The insulating separators act as thermal noise traps and room dividers, channeling the flow of cool air and prevents its mixture with hot water. The cooling system is enhanced with appropriate measures that help to provide safe characteristics of continuous service. The doors are water and dust tight, allowing an easy access to the Generating set. The lifting hooks provide a balanced handling of the Generating Set when in suspension. The Sound proof version guarantees a noise level of 70 dBA at 7 meters. As an option the Generating Set can be prepared for slow speed and high speed towing that allows the Generating Set to be moved easily.

- Dimensions are relative to the Generating Set complete with Canopy
- The height includes the muffler