

Model: PDT44Aa - 20.30 kVA PERKINS Industrial Series

50
HZ

50 Hz



Cooling System: Water

T

Three Phase



Diesel



Foto Indicativa / Indicative Picture

Features

Generating Set Model	PDT44Aa
Power in PRP (kVA)	20.30
Power in LTP (kVA)	22
Engine Model	404A-22G1
Engine Brand	PERKINS
Alimentation	Diesel
Cooling System	Water
Displacement (cc)	2216
Fuel Tank Capacity(lt)	50.00
Battery Capacity	1x80
Automatic Control Panel	A1
Manual Control Panel	QMA2
Sound Proof Canopy	GK1
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, 25C° , 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	404A-22G1
Brand	PERKINS
Alimentation	Diesel
Number of Cylinders	4
Displacement (cc)	2216
HP at 50Hz	25
Speed Governor	Mechanical
Aspiration	NA
Air Flow Ventilator (m3/h)	2412
Combustion Air Flow (m3/h)	87
Exhaust Gas Flow (m3/h)	218
Maximum Exhaust Gas Temperature (°C)	445
Bore (mm)	84
Stroke (mm)	100
Oil cap (l)	10.60
Rounds Per Minute	1500
Consumption at 2/4 of the load (l/h)	2.90
Consumption at 3/4 of the load (l/h)	4.00
Consumption at 4/4 of load (l/h)	5.30

■ Aspiration Type

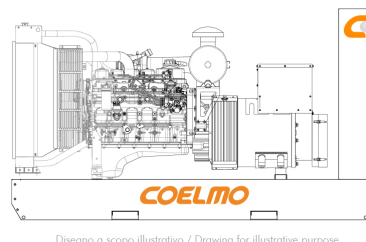
NA	= Natural Aspiration
TC	= Turbo Compressor
TCA/A	= Turbo Compressor Air/Air
W/A	= Turbo Compressor Water/Air

■ 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	0.87
Voltage	400/230 V + N

■ Dimensions



Version	Open	Soundproof
Length (mm)	1800	1800
Width (mm)	730	700
Height (mm)	1100	1100
Weight (kg)	487	709

Control Panel: Automatic Model: A1 Industrial Range

Technical Data Sheet

Control Panel Model	A1
Type	Automatic
Applicable Range(kVA)	3 - 48
Change Over	By interlocked contactor
IP	20
Control Board Model	GIOTTO AMF

Control Board Dimensions

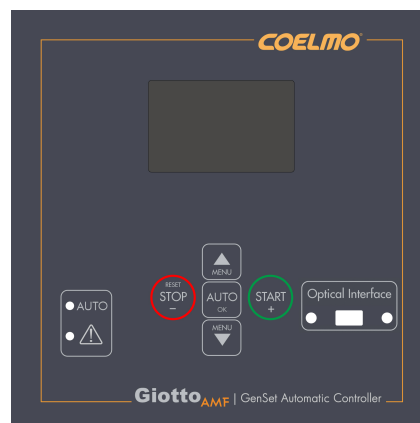
Length (mm)	400
Width (mm)	200
Height (mm)	500

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: **GK1**

Industrial Range



Technical Data Sheet

Canopy Model	GK1
Length (mm)	1800
Width (mm)	700
Height (mm)	1100



Foto indicativa - Indicative Picture

70 dB(A) at 7 meters



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