

ATP20 DIESEL GENSET

ATP20, DIESEL GENSET MADE IN UK

STANDARD SPECIFICATION

Three phase four wires output voltages 100-440V, 50HZ, between 0.8 lagging, protection capability abiding by the standards of NEMA1 and IP23.

General features:

- Composed of Perkins diesel engine and European alternator
- Oil and fuel filter fitted, water separator
- Lube-oil drain valve fitted
- Electric starter Charge 12V DC
- Output range: Prime-20kVA / Standby-22KVA
- Engine model: 404(A or C)-22G
- Induction system: Natural aspirated
- 8-hour operation base tank
- Key start / auto start
- Mechanical /Electrical governor
- 4 pole MCCB, set mounted starting battery
- Optional soundproof or weatherproof canopy
- Operation & Maintenance manual
- Special Integrated Steel Base tank and sprayed overall in gloss enamel paint
- Canopy Color: White

PERKINS UK



50HZ at 1500 RPM, 3-PHASE, 400V

Model			Perkins Engine,				Tank (L)	Alternator Type	Combustion Air Flow m ³ /min	Lubrication Capacity(L)	Canopy type
ATP20	KVA	(kw)	Model	Fuel Con.L/h	Bore/stroke mm	Cyl .					
Prime	20	16	404(A or C)-22G	5.4	105*127	4L	115	EUROPEAN	1.61	7.9	S20
Standby	22	17.6									

(1) Available in the following voltages: 440/254-415/240V-400/230V-380/220V-220/127V-200-115V;

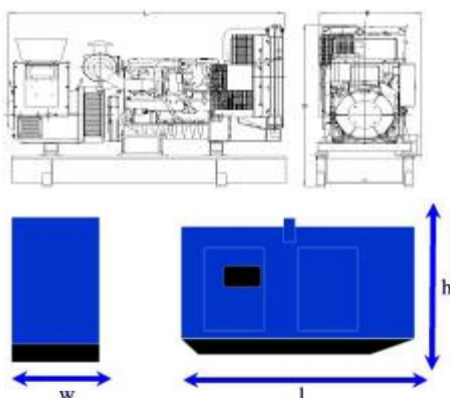
(2) ISO 8528: Ratings are given for 55 °C ambient temperature. Altitude: 1000m above sea level. Derating please contact us or refer to data sheets

PRIME: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046-1

STANDBY: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

Manufacture reserves the right to make changes in model, technical specifications color, equipment and accessories without prior notice.

Weight and Dimensions



Open Model Excluding option

Overall size (L*W*h), mm:

1500*620*1030

Weight (kg):591

With Optional Enclosure

Overall size (L*W*h), mm:

2062*900*1301

Weight (kg) :985

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SPECIFICATION & CAPABILITY

GENSET SPECIFICATION

Voltage Regulation

Voltage regulation maintained within $\pm 0.5\%$

- Between 0.8 and 1.0 lagging and unity
- From no load to full load
- At speed droop variation up to 4.5%

Frequency Adjustable Ratio

• Change load from 0-100%, within 1.0% (electric speed regulator), within 4.5% (mechanical speed regulator)

Frequency Undulation

- Load from 0-100%, Frequency undulation within 0.25%
- No load wire volts max undulation ratio within 1.8%
- Three phase balanced load in the order of 5%

Effect factor of telecom

- TIF better than 50
- THF to BS4999 Part 40 better than 2%

Electromagnetism

In compliance with BS800 and VDE levels G and N

CRITERION

ISO3046、ISO8528、BS4999、BS5514
BS5000PT99、AS1359、IEC34
UTE5100、VDE0530
CSA A22.2、CEMA、NEA

ENGINE SPECIFICATION

PERKINS (UK) 404(A or C)-22G

In-line direct injection 4-cylinder diesel engine.

Type

Water cooled, four cycle, Natural aspirated

Construction

Two valves per cylinder, forged steel crankshaft and connecting rods, cast iron block.

Starter 12 volt negative earth. battery charging alternator 35 amp on engine. Cranking current 640 amps at 0°C.

Fuel System

12 volt fail safe actuator. Spin-on paper element fuel filters with Bosch fuel pump injection system with integral

Electronic governor. Dual flexible fuel lines

And connectors. Standard fuel water separator.

Filters.

Air cleaner with dry element and restriction indicator.

Spin full flow lube oil filter.

Cooling 55°C radiator as std

Oil cooler. Drain Tap

CONTROL PANELS

DSE-701HC CONTROL PANEL

Standard Control Function

The Model 701HC is a Manual Engine Control Module, which has been designed to manually control the engine via a key switch on the front panel. The module is used to start and stop the engine, indicating fault conditions; automatically shutting down the engine and indicating the engine failure by LED giving true first up fault annunciation.



- ▶ Manual Engine Control Module
- ▶ Low Oil Pressure
- ▶ High Engine Temperature
- ▶ Auxiliary Shutdown
- ▶ Overspeed Protection
- ▶ Protection hold-off timer

PLC-5220 CONTROL PANEL

▶ Charge Failure warning

Standard Control Function

- Under / Over Mains Volts /Frequency
- External Remote control start output (load / un-load)
- Configurable relay outputs
- All function telecom remote control
- Engine and Alternator instrumentation monitor
- 9 Configurable input trip point by users
- 4 user output trip point
- Control LCD brightness in low brightness environment
- PIN password
- Send SMS via GSM modem
- Reflect load relay output
- Control vary trip point



ATP20 DIESEL GENSET

CONTROL PANELS – DEEPSEA ELECTRONICS CONTROL PANEL 5110

The Model 5110 is an **Automatic Engine Control Module** which has been designed to allow the OEM to meet demand for increased capability within the industry. The module has been designed to automatically start and stop the engine, indicating the operational status and fault conditions, shutting down the engine and indicating the engine failure by means of a graphical LCD display and a flashing LED on the front panel. Selected operational timers and alarms can be adjusted by the customer.

Configuration of the module can be carried out manually utilising the front panel editor, or alternatively by PC, using the 5110 software. Operation of the module is via pushbuttons mounted on the front panel with STOP, AUTO and MANUAL modes.

A further pushbutton provides an LCD DISPLAY SCROLL function to view the instrumentation.

Multiple alarm channels

- ▶ Under/Over speed

- ▶ Charge alternator failure
- ▶ Emergency stop
- ▶ Low oil pressure
- ▶ High engine temperature
- ▶ Fail to start
- ▶ Fail to come to rest
- ▶ Loss of speed sensing signal

Digital Inputs

- ▶ Emergency Stop - A N/C DC positive input
- ▶ 5 fully configurable warning or shutdown inputs.

Metering

Generator Volts L1-N, L2-N, L3-N
 Generator Volts L1-L2, L2-L3, L3-L1
 Generator Amps L1, L2, L3
 Generator Frequency Hz
 Engine Speed RPM
 Engine Oil Pressure (PSI & Bar)
 Engine Temperature (°C & °F)
 Plant Battery Volts
 Engine Hours Run

FEATURES

- ▶ Micro-processor based design
- ▶ Fully PC or front panel configuration

- ▶ Automatic engine starting & stopping
- ▶ Automatic shutdown on fault condition
- ▶ Custom graphical icon type display
- ▶ Provides engine and generator instrumentation
- ▶ Provides engine alarms and status information
- ▶ LED & LCD alarm indication
- ▶ Compatible with 5200, 5300 and 5500 series modules for easy upgrade path.



Control Panel By:



AC ALTERNATOR

EUROPEAN GENERATOR END

EUROPEAN has a long history of producing high-quality reliable products for the power generation market. Their portfolio of high quality generator ends is recognized as an industry standard.

Alternator Technical Data

European AC alternator

- Brushless, self exciting
- Class 'H' insulation
- Standard degree of protection is IP23
- Self regulating
- With fan cooling
- Resist humid grease
- AC excitation, rotating rectification tube
- Stator grease insulation covered
- Rotator and excitation high polymer, Resist the corruption of oil and acid.
- Rotator balance is in accordance with BS5625 standard 12.5
- High-quality lubrication sealed long-time bearing
- Rotator silicon steel close tight

Alternator Technical Data

Generator Frame	18/22
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Bearing	Single, double shielded
Windings	100% copper
Connection Type	Reconnectable
Insulation Type	Class H
Pitch	2/3
Amortisseur Winding	Full
Voltage Regulator	SX460 / R230
Voltage Regulation NL - FL	± 1.5%
Underspeed Protection	Standard
Overexcitation Protection	IP23
Standards	NEMA, IEC, IEEE, CSA, BS
Phase Sequence	A(U), B(V), C(W)
TIF (1960 Weightings)	<50
Excitation System	PMG - optional

★ In line with our policy of continuous product development, we reserve the right to change specification without notice.

AT Generators (UAE) FZ

Sharjah – Saif Zone (A2-018)
 Tel : +971-6-557 0560 Fax: +971-6-557 0935
 Mob.: +971 50 274 9259

Jebel Ali – Free Zone (UB-06)
 Tel : +971 4 883 2662 Fax: +971 4 883 2663
 www.atgenerators.com