

# ATC2000, DIESEL GENSET

# Powered by Cummins Engine 50Hz, 380V, 1500RPM



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ISO 9001: 2008

# STANDARD SPECIFICATION

# **Voltage Regulation**

Voltage regulation maintained within ±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 phrase 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

# **General Features**

- · Heavy-duty industrial diesel engine
- Brushless synchronous alternators: four-pole construction, dynamically balanced
- Prototype tested and production tested
- Gen-set accepts rated load in one step
- Operation & Maintenance manual
- Special Integrated Steel Base tank and sprayed overall in gloss enamel paint
- · Canopy Color: white, yellow, Green
- Optional weather-proof and sound attenuated enclosures available
- Full range of accessories and options available
- · Battery Rack and batteries
- · Manufactured in an ISO-9001 certified facility
- Backed by a world wide network of parts and service center

# **CRITERION**

ISO 9001:2000、ISO3046、ISO8528 BS4999 BS5000PT99、BS5514、AS1359, IEC34 UTE5100 VDE0530、CSA A22.2, CEMA, NEA



Genset model	ATC2000
Power Output (PRP)	1600KW
	2000KVA
Power Output (ESP)	1760KW
	2200KVA
Engine Model	QSK60GS3
Alternator	EUROPEAN TYPE
Canopy Type	C2000

- Available in the following voltages: 440/254-415/240V-400/230V-380/220V -220/127V -200/115V.
- 2. ESP: Standby Power-Standby duty operation under variable, without overload.
- 3. PRP: Prime Power-Continuous duty operation, under variable load 24/24-h-10% overload permissible 1 hour/12hours.
- 4. This generator works normally at 55° C with derating.







# ATC2000, DIESEL GENSET

# **Cummins Engine**

# **Designed with Safety in Mind**

The fully GMSC Range generator set powered by the Cummins engines which manufacturing in USA & UK Cummins water cooled Diesel engine, oil and fuel filter fitted, water separator, Lube-oil drain valve fitted.

# **GENSET SPECIFICATION**

**Cast Iron Skirted Block:** With main bearing supports between each Cylinder, for maximum strength and rigidity, low weight, and optimum crank shaft support.

**Compact Size:** For ease of installation and easy access for routine maintenance.

**Direct Fuel Injection System:** With high swirl intake ports for thorough mixing of air and fuel to provide low fuel consumption.

#### Forged Steel, I-Beam Cross Section Connecting Rods:

With angle split cap-to-rod interface and cap screw attachment For maximum structural strength and ease of service.

**Starting :**24 volt negative earth. battery charging alternator 35 amp on engine. Cranking current 640 amps at 0  $^{\circ}$ c.

#### **Fuel System**

24 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.

**Turbocharger:** Holset exhaust gas driven turbocharger mounted at top of engine. Turbocharging provides increased power, improved fuel economy, altitude compensation, and lower smoke and noise levels.

#### Filters.

Air cleaner with dry element and restriction indicator.

Spin full flow lube oil filter.

#### Cooling

Oil cooler, Drain Tap

# GENSET SPECIFICATION

Engine Model		QSK60GS3	
Туре		16-cylinder diesel engine	
Apiration		Turbocharged And Air- Air Aftercooled	
Bore x Stroke	mm	159 x 190	
Compress the ratio		13.9:1	
Engine Speed	rpm	1500	
Continuous Rated Output /kw		1760	
Oil Capacity	L N/A		
Coolant Capacity	L	450	
Starting System		Electric - 24 volt DC	
Displacement	L	50.3	
Lubricant	L	154	
Battery Voltage /Capacity		24VDC/100A/254	
Governing Type		Electrical	

Exnaust 8	system
Exhaust G	as Flow

Emiliador Glad Filon	,	.0000
Exhaust Temperature	°c	518
Fuel System		
Fuel Consumption 100%	L/hr	300
Fuel Consumption 75%	L/hr	244
Fuel Consumption 50%	L/hr	184
Tank (L)		N/A

m<sup>3</sup>/h

13590





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# **AC ALTERNATOR**

#### **EUROPEAN TYPE GENERATOR END**

EUROPEAN TYPE 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 Type 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**

18/22		
Brushless		
Cast alloy aluminum		
Single, double shielded		
100% copper		
Reconnectable		
Class H		
2/3		
Full		
AS440 / R449		
± 1.5%		
Standard		
IP23		
NEMA, IEC, IEEE, CSA, BS		
A(U), B(V), C(W)		
<50		
PMG - optional		

# **CONTROL PANELS**

#### DEEPSEA ELCTRONICS CONTROL PANEL DSE-7320 / 7420

The Model 7320 / 7420 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

**Configuration** of the module can be carried out manually utilising the front panel editor, or alternatively by PC, using the 7320 / 7420 software. Operation of the module is via pushbuttons mounted on the front panel with STOP, AUTO and

alarms can be adjusted by the

customer.

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

- ► Automatic engine starting & stopping
- ➤ Automatic shutdown on fault conditio
- Custom graphical icon type display
- ➤ Provide s engine and generator instrum entation
- Provide s engine alarms and status

information

- ► LED & LCD alarm indication
- ➤ Compatible with 5200, 5300 and 5500 series modules for easy upgrade path.

Control Panel By:



# **FEATURES**

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





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► Protection for Alarm Module &

► Enclosures or Soundproof Canopy

► Manual Sump Oil Drain Pump

► Circuit Breaker MCCB & ACB

► Engine/Alternator Heaters

**Auxiliary Relay** 

▶ Trailer

> And More

► Mains auto-charger

► Packing-Export Box

**Voltage Connections** 

277/480V,3 Phase

254/440V,3 Phase

240/416V,3 Phase

# OPTIONAL FEATURES

- Low fuel level alarm shutdown
- ► Automatic Fuel Filling System
- ► Engine Oil Heater
- ► Remote Radiator
- ► Charge Voltmeter
- ▶ Charge Ammeter
- ➤ Critical Silencer
- **PMG**
- ► Tool Kit
- ▶ Residential Silencer
- Transfer Auto Switch (ATS)
- ► Earth Fault Relay
- ➤ Remote Monitor Interface
- ► Protection for Alarm Module & Auxiliary Relay
- ► Parallel Control Panel
- ► Circuit Breaker MCCB & ACB
- ► Remote Control Panel

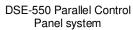




230/400V,3 Phase 220/380V,3 Phase 127/220V,3 Phase 115/200V,3 Phase 110/190V,3 Phase





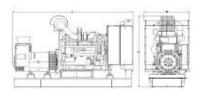




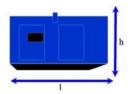
DSE7320 Remote Control Panel



# **DIMENSIONS**







#### **Open Model Excluding option**

Overall size (L\*W\*h), mm: 6175\*2286\*2700 Weight (kg):15012

#### **Enclosure Unit**

Overall size (L\*W\*h), mm: 6900\*2800\*3050

Weight (kg):1502+2900



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

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