## ALMAR 220



## Diesel Generating Sets



#### **Prime Power**

Refers to the main power supply, working under 70% average load for unlimited time. 10% overloading is allowed.

**Stand-by Power**Refers to the back up power supplied to the varying load for a limited time. Overloading is not allowed.

### Generator

			Prime		Stand-by	
Power (kVA)	kVA		200		220	
Power kW	kW		160		176	
Generator Model:	ALMAR 220					
Engine Manufacturer Model:	Alimar / AYD6TI83					
Fuel Type:	Diesel					
Frequency:	50 Hz					
Power Factor:	$\cos \Phi = 0.8$					
Voltage:	400/231 V					
Dimensions			With Ca	nopy	Open Skid	
Length		mm	3100		2600	
Height		mm	1930		1520	
Width		mm	1100		900	
Weight		kg	2280		1930	
Fuel Tank Capacity		lt	270		215	

H: External K: Container TBA: To be added



# **Your Solution Partner in Energy**

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## iesel Generating Sets

## Engine

Facine Manufacturer		ALIMAD
Engine Manufacturer:		ALIMAR
Engine Model:		AYD6TI83
Engine Type:	1.344	4 Stroke Diesel Engine
Engine Stand-by Power:	kWm	185
Engine Prime Power:	kWm	168
Cylinder Arrangement:		6L
Displacement:	lt	8,27
Cooling System:		Water Cooling
Bore x Stroke:	mm	114 x 135
Compression Ratio:		18:1
Aspiration:		Turbocharger, Intercooler
Governor Type:		Electronic
Electrical System:	VDC	24
Lubricant Oil Capacity:	lt	34
Coolant Capacity:	Lt	26
Frequency Lt:	Hz - rpm	50 - 1500
Jacket Water Heater:	Piece x W	TBA
Battery:	Piece x AH	TBA
Charge Alternator Current:	Α	TBA
Injection System:		Direct
Cooling Air Flow:	m³/min	TBA
Combustion Air Flow:	m³/min	TBA
Exhaust Gas Flow:	m³/min	TBA
Exhaust Gas Temperature:	°С	TBA
Fuel Consumption Under 100% Load:	lt/h	41
Fuel Consumption Under 75% Load:	lt/h	30,75
Fuel Consumption Under 50% Load:	lt/h	20,55

### Alternator

Phase / Pole Number:		3/4+
Excitation System:		Self Excited, Brushless
Voltage Regulator:		A.V.R. (Automatic)
Voltage Regulation:		±%1
Insulation Class:		Н
Protection Class:		IP23
Connection Type:		Star
Frequency:	Hz	50
Power Factor:		$Cos \Phi = 0.8$
Total Harmonic Distortion (No Load):		< % 3.5
Output Voltage:	VAC	231/400

TBA: To be added



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# alimar 7

## iesel Generating Sets

### Control Panel



ALM929



AMF9

#### Alimar ALM-929 Automatic Control Module

AMF function
ATS function
Remote start function
Manual start function
Engine control function
Suitable for remote monitoring

#### Mains and Genset LL- LN Voltages

Mains and generator frequency
Mains and genset phase currents
Mains and generator neutral currents
Grid and generator phase and total, kW, kVA,kVAr
Power factor, engine speed, battery voltage and more

#### Connections

3 phase 4 wire, stars & delta 3 phase 3 wire, 2 current transformer 2 phase 3 wire 1 phase 2 wire

#### Communication

RS232 – 485 connection with cable J1939-CANBUS GSM / GPRS connection Ethernet connection Modbus RTU

#### **Protection Functions**

- Overvoltage
- Low voltage
- Voltage asymmetry and phase sequence
- High frequency
- Low frequency
- Short-circuit current
- Overcurrent
- Power factor
- Coolant temperature
- · Low oil pressure

#### Auto Panel Features

- Automatic generator, grid control and fault monitoring
- Easy control with a user-friendly interface from the panel screen
- Remote operation with optional communication cards
- Manual programming with password-protected service interface
- Manual control of generator and transfer panel with buttons on the front panel
- Front panel protection class IP65
- With an operating temperature of -20 C to +70 C and a storage temperature of -40 C to +80 C



## ALMAR 220

## Generating Sets

### Standard Features

**Engine** 

Low fuel consumption and high performance latest technology diesel engines are used with electronic or mechanical governor, water-cooled radiator system, replaceable oil, fuel, air filters.

Alternator

With its robust and compact structure. steel bodv. maintenance-free single bearing system, brushless, self-excited system and electronic type AVR. alternators suitable for the special needs of different applications are used.

**Gen-Set Canopy**Modular cabinets are used in accordance with 2000/14/EC directives, covered with sound and heat insulation flame-resistant sponge, corrosion and rust resistant paint, locks and hinges, large lockable doors on both sides for easy service and maintenance. Exhaust and silencer insulated according to engine suitability. Small and medium power fuel tank is designed as underchassis. Lifting ears on chassis. Vibration prevention wedges are used under the chassis. Standard Accessories

Industrial silencer and stainless steel compensator

Maintenance-free lead-acid starter battery, cable and stand

lacket water heater with thermostat

Automatic control module

SMPS battery charger Relays and fuses

Emergency stop button

#### **Optional Features**

Remote radiator

Coolant level sensor

Fuel level sensor

Winding dehumidifier heater

Winding and bearing temperature sensors

**MCCB** 

PMG/AREP

#### Other Accessories

Electronic/Manual oil drain pump

Critical type silencer

Main fuel tank stainless and insulated

Automatic transfer panel

Spring loaded seismic isolator

Oil and fuel tank heater

Maintenance tools and kits

**Cabin:** Alimar Generator cabins are user-friendly. It provides easy maintenance and repair. Cabin monitoring the control module from outside and emergency stop button can be accessed. The inner surface of the cabinets is sound and high intensity flame that provides heat insulation does not walk covered with sponge. Cabin paint is resistant to corrosion and rust. It is resistant to. Muffler hardware on certain models hidden inside the cabin.



