

## AOSIF POWER GENERATION

MODEL: AC275-I



## **CUMMINS** Series Diesel Generator Sets

Stand by	kVA	275
	kW	220
Prime	kVA	250
	kW	200











Water Cooled

Modular type sound-proof canopy Easy maintenance

50 hz



Remote control system



Diesel



Warning system for decreasing fuel with electronic fuel level sender 3 phase

Standby Rating for a standby engine should be sized for a maximum of 70% average load factor and roughly 200 hours per year. Standby power ratings should never be applied except in true emergency outage situations. With standby rated generators there is no overload capability built into the units.

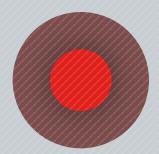
Prime Power is the maximum power accessible at the variable load for an unlimited number of hours per year in a variable load setting. It is not advisable that the variable load exceed 70% average of the prime power rating during any operational period. If the engine is running at 100% prime power, yearly hours should not exceed 500. Overload situations should be avoided however a 10% overload capability is available for a 1 hour period within a 24 hour cycle of operation.

Continuous Power is used in applications where suppliying power is at a constant 100% load for an unlimited number of hours each year. Continuous power rated units are most widely used in applications where the power grid is unreachable.

#### Adjust capacity when changing load: Automatically adjust

Makawa reserves the right to make changes in model, technical specifications, color, equip-ment & accessories without prior notice.





#### ENGINE SPECIFICATIONS

- Flexible fuel pipe
- Oil discharge valve and extention pipe
- Industrial type silencer, exhaust spiral or compensator
- Engine block water heater (in automatic models)
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram
- System starts: By starter motor, with battery

- CUMMINS series heavy duty diesel engine
- 4 cycle, water cooling system, turbocharged aftercooler induction
- Electronic governor system
- 12/24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Maintenance free battery

MODEL	CUMMINS / 6LTAA8.9-G2		
POWER	STAND BY (kW)	240	
	PRIME (kW)	220	
SPEED (rpm)	1500		
CYCLE	4		
DISPLACEMENT (lt)	8,9		
NUMBER OF CYLINDERS	6, in line		
BORE AND STROKE (mm)	114 x 145		
COMPRESSION RATIO	16.6:1		

GOVERNOR TYPE	Electronic			
INDUCTION (Air intake type)	TURBOCHARGED AFTERCOOLER			
COMBUSTION SYSTEM	Direct injection pump, electronically controlled			
COOLING SYSTEM	Forced cooling with water, combined with fan			
	100% OF PRIME POWER	53		
FUEL CONSUMPTION (lt/h)	75% OF PRIME POWER	39		
	50% OF PRIME POWER	27		
TOTAL LUBRICATION SYSTEM CAPACITY (lt)	27,6			
TOTAL COOLANT CAPACITY (lt)	34			

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#### ALTERNATOR SPECIFICATIONS

- Stator 2/3 step for harmonic failure
- The alternator windings are protected byinsulating varnish against oil and acid
- alternating current generator, Brushless, single bearing, flexible disc4 poles alternator for harmonic failure
- H type isolation class
- IP 21-23 protection class
- Self exciter
- Electronic automatic voltage regulator

BRAND	AOSIF		
MODEL	AA-250-4		
FREQUENCY (HZ)	50		
SPEED (RPM)	1500		
DESIGN	4 pole, brushless		
CONNECTION TYPE	STAR		
VOLTAGE (V)	400		

PHASE and WIRES	3 phase - 4 wires
Stand by (kVA)	275
Prime (kVA)	250
VOLTAGE REGULATION (+/-)	±1%
INSULATION SYSTEM	Class H
PROTECTION	IP23
RATED POWER FACTOR	0,8

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## GENSET CONTROLLERS DATAKOM/MEBAY





- Engine RPM
- Engine oil pressure
- Engine temperature
- Engine fuel level
- Engine battery voltage
- Charging voltage
- CAN related parameters (Only for DC5xC-4G\DC5xCR-G4G)
- DTU related parameters (displayed in the status bar)
- Mains Frequency (Only for DC52D-4G, DC52C-4G, DC52CR-G4G)
- Mains phase voltage L-N (Only for DC52D-4G, DC52C-4G, DC52CR-G4G)
- Mains phase voltage L-L Only for DC52D-4G, DC52C-4G, DC52CR-G4G)
- Generator 3 Phase voltage L-N
- Generator 3 Phase voltage L-L
- Generator 3 phase current A
- Generator Frequency Hz
- Generator Power Factor COS φ
- Generator active power KW
- Generator apparent power KVA
- Generator reactive power KVar
- Real-time load rate %
- Current load rate %
- Average loading rate %
- Current consumption KWH
- Total consumption KWH
- Total Crank times, Total running time
- Cumulative power on time of controller
   Current running time, Maintenance notice

- Switches input status display
- Output status display of relays
- Current date and time
- Overspeed/Underspeed
- Low oil pressure, High temperature
- Low fuel level
- External emergency alarm
- D+open
- RPM Lost
- Sensor Open
- Over Frequency / Under Frequency
- Overvoltage / Undervoltage
- Over current
- Non-balance of current
- Overpower
- Maintenance expire
- Low water level alarm
- Emergency Stop
- Crank failure
- Battery over voltage/Battery under voltage
- The charger fails to charge
- Charger charging failure
- Stop Failure
- ECU alarm failure
- IP65 rating with standard gasket
- Online monitoring, internet/4G connection
- ECU communication Failure

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# GONTROLLERS

**MODEL: AC275-I** 

#### MEASUREMENTS •

- Mains & genset PN/PP voltages Mains & genset frequency
- Mains & genset phase currents Mains & genset neutral currents Mains & genset, phase & total, kW, kVA, kVAr, pf
- Engine speed Battery voltage

**AOSIF POWER GENERATION** 

### **COMMUNICATIONS** •

- 4-band GPRS modem (optional)
- USB Device
- RS-485 (2400-115200baud)
- RS-232 (2400-115200baud)
- J1939-CANBUS
- Geo-locating through GSM
- GPS support (RS-232)
- Internet Central Monitoring
- SMS message sending
- E-mail sending
- Free PC software: Rainbow Plus
- Modbus RTU

## FUNCTIONALITIES •

- AMF unit
- ATS unit
- Remote start controller
- Manual start controller
- Engine controller
- Remote display panel
- Harmonic analysis of V & I
- Internal battery (optional)

### TOPOLOGIES •

- 3 ph 4 w, star & delta
- 3 ph 3 w, 2 CTs
- 2ph3w
- 1 phase 2 wires



# OPTIONAL GENSET CONTROLLERS



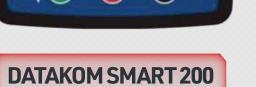
AOSIF POWER GENERATION MODEL: AC275-I

Next generation single gen-set controllers for Stand-by and Primepower applications combining multi-functionality and wide communication with EFI engines.









DATAKOM D500

DATAKOM D500-GSM







DEEPSEA 7320



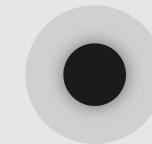
COMAPAMF25

	Datakom SMART 200	Datakom SMART500-MK2	Datakom D500	Datakom D500-GSM	DEEPSEA 6120	DEEPSEA 7320	ComAp AMF25
AUTOMATIC MAINS MONITORING	<b>✓</b>		<b>\</b>		<b>✓</b>		<b>✓</b>
MANUELSTART	<b>✓</b>		<b>/</b>	<b>/</b>	<b>1</b>	<b>/</b>	<b>/</b>
REMOTE START	<b>√</b>				<b>/</b>		<b>/</b>
REMOTE MONITORING WITH SIM CARD	Optional	Optional	Optional		X	Optional	Optional
1 ADITIONAL OPTION (HORN, OIL-FUEL HEATER ETC.)	X	Optional	Optional	Optional	Optional	Optional	Optional
LIGHT WARNING AND MIMIC DIAGRAM	<b>✓</b>				<b>/</b>		<b>✓</b>
BATTERY CHARGER	<b>✓</b>			<b>/</b>	<b>/</b>		<b>/</b>
RS-485 COMMUNICATION	Optional	Optional		<b>/</b>			Optional
ETHERNET (TCP-IP) COMMUNICATION	X				X	Optional	Optional



## GENSET CONTROLLERS FOR SYNCHRONIZATION SYSTEMS

OPTIONAL



Next generation synchronizing genset controller capable of every communication and functionality.











DEEPSEA 8610

DEEPSEA 8620

DEEPSEA 8660

COMAP INTELIGEN
BASEBOX

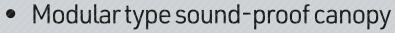
**COMAPINTELIGEN 200** 

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La Makawa Power Generator





- Canopy installation executed with screw and nut, without welding process
- Epoxy and polyester powder painted canopy
- Weatherproof canopy rating is IP 23
- Canopy designed for easy maintenance
- Lockable doors on both sides of canopy
- Emergency stop button
- Transparent panel inspection window
- Insulation details: Non-flammeable acoustic foam
- Nano tech cleaning system
- Container optional



Dimensions (WxLxH) mm

1200 x 3600 x 1950

950x 2450 x 1800



Weight (Kg)

2.710

2.050



Fuel tank capacity (lt)

500

500

#### SILENCER OPTIONS

- Standard industrial type
- Critical type
- Hospital type

2mm thick steel, powder coated. Divided by mesh to prevent rats, snakes, etc. penetrate into the chassis. Fireproof and soundproof material is made from Rockwool fireproof mineral wool, density 80kg/m³, 50mm thick, covered with glass cloth and 0.4mm thick perforated galvanized iron.

#### **CANOPY OPTIONS**

- Standard canopy
- Supersilent canopy
- Extra süper silent canoy (thicker insulation)

#### GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature
- Low oil pressure
- High & low engine speed
- Low radiator water level
- Over current load
- High & low genset voltage
- Start/stop failure

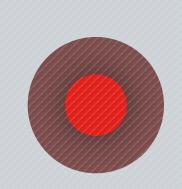
#### **OPTIONAL EQUIPMENTS**

- Charge ammeter
- Moulded case circuit braker (in automatic models)
- Hospital/Critical type silencer
- Modular type sound-proof canopy
- Mobile trailer
- Synchronization control panel for 2-16 gensets
- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water seperator filter
- PMG warning system

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# CONTACTUS



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