



230/400 V - 50 Hz	Generating Set Model	AC 400
Power Pf. 0,8	Standby kVA	400
	Prime kVA	356

Standby:Continuous running at variable load for duration of an emergency. No overload is permitted on these ratings. In accordance with ISO 3046, BS 5514.

Prime:Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. In accordance with ISO 8528,BS 5514. Contact us for the other running periods.Power ratings based on a 40 °C ambient temperature reference.

DESIGN SPECIFICATIONS

- High quality, reliable and complete power unit
- Compact design
- Easy start and maintenance possibility
- Every generating set is subjected to a comprehensive test programme which includes full load testing and checking and providing of all control and safety shut down functions testing
- Full engineered with a wide range of options and accessories:Canopy,soundproof canopy and mobile units

STANDARD GENSET SPECIFICATIONS

ENGINE:

- CUMMINS heavy duty diesel engine
- Four cycle, water cooled, turbo charged
- Electronic Governor Control System
- Direct injection fuel system
- 24 Vdc starter and charge alternator
- 4 Valves per cylinder (Except AC 250)
- Replaceable wet type cylinder liners
- Replaceable fuel filters, oil filters and dry element air filters
- Cooling radiator and fan
- Starter battery(with lead acid) including Rack and Cables
- Flexible fuel connection hoses and manual sump oil drain valve
- Industrial capacity exhaust silencer and steel bellow
- Jacket water heater (at automatic models)
- Operation manuals and circuit diagram documents

ALTERNATOR:

- Brushless,single bearing system,4 poles
- Insulation class H
- Standard degree of protection IP21

- Self-exciting and self-regulating
- Stator winding with 2/3 pitch for improved harmonics
- Impregnation with tropicalised epoxy varnish
- Solid state Automatic Voltage Regulator

CHASSIS:

- The complete generating set is mounted as whole on a heavy-duty fabricated, steel base frame.
- Antivibration pads are fixed between the engine/ alternator feet and the base frame.
- Base frame design incorporates an integral fuel tank.
- The generating set can be lifted or carefully pushed / pulled by the base frame
- Dial type fuel gauge and drain bung on the fuel tank

CANOPY:

- All canopy parts are designed with modular principles
- Without welding assembly
- All metal canopy parts are painted by electrostatic polyester powder paint
- Exhaust silencer is protected against environment influences
- Thermally insulated engine exhaust system
- Emergency stop push button is installed outside of canopy
- Easy lifting and moving
- Easy maintenance and operation

QUALITY STANDARDS:

- The equipment meets the following standards: ISO 3046, VDE 0530, BS 4999, BS 5000, EN 60034-I, IEC 34. The generating set is manufactured by a full accredited NQA-ISO 9001.

WARRANTY:

- 12 months warranty from commissioning date as standard.

CONTROL SYSTEM:

- Control, supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows;
- Control Modules Common Features
- Automatic controls generating set, start and shutdown
- Front panel programming of the module settings
- Remote communication via RS232 port or RS 485 "modbus" output
- Scrolling digital LCD display
- Event logging of shutdown alarms
- Control Metering via LCD display
- Generator Volts(F-F/F-N)
- Generator Amperes(L1,L2,L3)
- Generator Frequency (Hz)
- Generator kVA
- Generator kW
- Generator Cos ϕ
- Engine oil pressure (PSI&Bar)
- Engine Temperature (Cantigrade & Fahrenheit)
- Engine Speed RPM
- Engine hours run
- Plant battery volts
- Common Alarms

- Under / over generator volts
- Under / over generator frequency
- Over current
- Low oil pressure
- High engine temperature
- Under / over speed
- Low coolantlevel
- Fail to start
- Fail to stop
- Emergency stop
- Charge fail
- Low / High battery volts
- 1- Auto Mains Failure Control System P2020
- Control with DSE model 5220
- Static battery charger
- Emergency stop push button
- Additional Features
- Monitoring AC mains supply
- Provides signal to change over switch gear
- Easy pushbutton control
- Stop / Reset-Auto-Manual-Test-Start
- Additional Metering
- Mains volts (F-F / F-N)
- Mains frequency (Hz)
- Additional Alarms
- Under / over mains volts
- Under / over mains frequency
- Can data fail
- Can ECU fail
- Auto Start Control System P2010
- Control with DSE model 5010 module
- Emergency stop push button
- Additional Features
- Provides signal to load transfer
- Easy pushbutton control
- Stop / Reset-Auto-Manual-Test-Start

TECHNICAL DATA			
Diesel Generating Sets 230/400 V - 50 Hz			
G R O U P	MODEL		AC 400
	Power Pf. 0,8		400
			320
		356 284	
D I E S E L E N G I N	Engine Make		Cummins
	Model		NTA 855 G4
	Gross engine power output at rated rpm		kWm hp
			351 470
	Aspiration and Cooling		Turbo After Cooled
	Cylinders Capacity		Lt
			14
Cylinders and Build		6 In line	
Engine Speed		rpm	
		1500 rpm	

E	Bore and Stroke	mmxmm	140x152		
	Compression Ratio		14.0:1		
	Governor		Electronic		
	Fuel Consumption	Load L/hr	1/2	3/4	Full
			39	57	76
	Fuel Tank Capacity	Lt	420		
	Oil Capacity	Lt	38		
	Water Capacity	Lt	70		
Air Intake - Engine	m ³ /min	24.5			
Exhaust Gas Flow	m ³ /min	67.6			
Alternator Voltage Regulation			± %1		

OPEN TYPES		
Dimensions (length x width x height)	mm	3230x1100x2000
Dry weight	kg	3300

SOUND ATTENUATED TYPE		
Canopy Model		AS 400
Dimensions (length x width x height)	mm	4400x1430x2270
Dry weight	kg	4170

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

OPTIONAL EQUIPMENTS

- * Fuel - Water separator filter
- * Engine oil heater
- * Residential silencer
- * Trailer
- * Charge ammeter
- * Main fuel tank
- * 4 pole contactor
- * Over sized alternator
- * Automatic Synchronising and power control system
- * Automatic fuel filling system
- * Manual sump oil drain pump
- * Enclosure, Sound proof canopy
- * Low fuel level alarm
- * Anti condensation heater for alternator
- * 3 pole alternator case circuit breaker (only for automatic models)
- * Tool kit
- * Automatic transfer switch by contactor or motorized circuit breaker