

**APD43C-RP**



POWER  
YOUR  
FUTURE

43 kVA / 34.4 kW  
POWERED by CUMMINS

**DIESEL GENERATING SET 400/230 V - 50 Hz - 3 Phase**

MODEL		APD43C-RP	
Power Pf. 0.8	Standby	kVA	43
		kW	34.4
	Prime	kVA	39
		kW	31.2

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

**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,ISO 3046.

- ✓ High quality, reliable and complete power unit
- ✓ Compact design
- ✓ Easy start and maintenance possibility
- ✓ Every generating set is subject to a comprehensive test program which includes full load testing, checking and provision of all control and safety shut down functions testing
- ✓ Fully engineered with a wide range of options and accessories: Canopy, sound proof canopy and on-road trailer



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

## ENGINE

### CUMMINS

Model		4BT3.9G2
Engine Power Output at rated rpm	kWm	40
	HP	54
Aspiration and Cooling		Turbocharged
Total Displacement	Litre	3.9
No. of Cylinders and Build		4 - Inline
Engine Speed	rpm	1500
Bore and Stroke	mmxmm	102x120
Compression Ratio		18:1
Governor		Electronic
Fuel Consumption at full load	L/hr	9.3
Fuel Tank Capacity	Litre	Canopy: 230
Oil Capacity	Litre	10.9
Coolant Capacity	Litre	21.2
Radiator Cooling Air	m <sup>3</sup> /min	150
Air Intake – Engine	m <sup>3</sup> /min	2.7
Exhaust Gas Flow	m <sup>3</sup> /min	6.48
Sound Level(1M)	dBA	75
Sound Level(7M)	dBA	62

- ✓ Heavy duty Cummins diesel engine
- ✓ Four stroke, water cooled, turbocharged
- ✓ Direct injection fuel system
- ✓ Electronic Governor system
- ✓ 12/24 V D.C. starter and charge alternator
- ✓ Replaceable fuel filter, oil filter and dry element air filter
- ✓ Cooling radiator and fan
- ✓ Starter battery (with lead acid) including Rack and Cables
- ✓ Flexible fuel connection hoses and manual oil sump drain valve
- ✓ Industrial capacity exhaust silencer and steel bellows
- ✓ Jacket water heater(at automatic models)
- ✓ Operation manuals and circuit diagram documents

## STAMFORD ALTERNATOR PI144J

Design	Brushless single bearing, revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible disc
Insulation System	Class H
Standard Temperature Rise	125 - 163°C Continuous
Exciter Type	Self Excited
Phase Rotation	A (U), B (V), C (W)
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load < 5%
Telephone Influence Factor (TIF)	<50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	<2%

- ✓ Brushless, single bearing system, flexible disc, 4 poles
- ✓ Insulation class H
- ✓ Standard degree of protection IP23
- ✓ Self-exciting and self-regulating
- ✓ Impregnation with tropicalised epoxy varnish
- ✓ Solid state Automatic Voltage Regulator
- ✓ Stator winding with 2/3 pitch for improved harmonics

## CONTROL SYSTEM

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

### 1. Auto Mains Failure Control Panel

Panel equipments:

- ✓ Control with AMF module
- ✓ Static battery charger
- ✓ Emergency stop push button

#### a) Product description:

- ✓ Single Gen-set controller for stand-by and prime power applications
- ✓ All-in-one intuitive & powerful PC tool for configuration/monitoring/control, locally or remotely
- ✓ Easy to install, configure and use



IntelliLite 4 AMF 9

#### b) Product description:

- ✓ Stand-by and prime-power application in one unit
- ✓ 8 binary outputs, 8 + 1 binary inputs, 3 analog inputs (U/I/R)
- ✓ +5 V output reference for analog inputs
- ✓ 2 high-current E-Stop binary outputs
- ✓ 1 slot for extension plug-in module (Modbus, Internet, SMS, inputs/outputs)
- ✓ Extension CAN modules
- ✓ ECU support (Tier 4 Final, Stage V)
- ✓ RTC with battery back-up (full calendar)
- ✓ Power over USB for controller configuration
- ✓ Zero power mode
- ✓ True RMS measurement
- ✓ In-built PLC, complemented with a PLC monitoring tool in IntelliConfig
- ✓ Full remote communications support (AirGate 2.0, WSV)
- ✓ Internet access using Ethernet / 4G, Modbus TCP/RTU, SNMP v1/v2c
- ✓ Active SMS and emails
- ✓ Detailed history log with up to 150 records
- ✓ Dual Mutual Standby application support
- ✓ Remote display
- ✓ User setpoints and protections
- ✓ 5 languages in the controller & Translator functionality
- ✓ User Access Management
- ✓ Cyber security improvement
- ✓ Alternative configurations
- ✓ Multi-purpose schedulers
- ✓ 3 maintenance timers
- ✓ Modbus register mapping possibility
- ✓ Fuel pump management
- ✓ Run Hours source selector
- ✓ Cut-out: 172 × 112 mm

### 2. Power Outlet Terminal Board Mounted on the Gen-set Base Frame

## OPTIONAL EQUIPMENTS

#### Diesel Engine

- ✓ Oil heater

#### Alternator

- ✓ 3/4 Pole Output Circuit Breaker
- ✓ Anti-condensation Heater

#### Panel

- ✓ Charge ammeter
- ✓ Transfer Switch 3Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

#### Accessories

- ✓ Bulk fuel tank
- ✓ Automatic filling system
- ✓ Fuel-water separator filter
- ✓ Low fuel level alarm
- ✓ Residential silencer
- ✓ Enclosure or sound proof canopy
- ✓ Trailer
- ✓ Manual oil drain pump
- ✓ Tool kit for maintenance

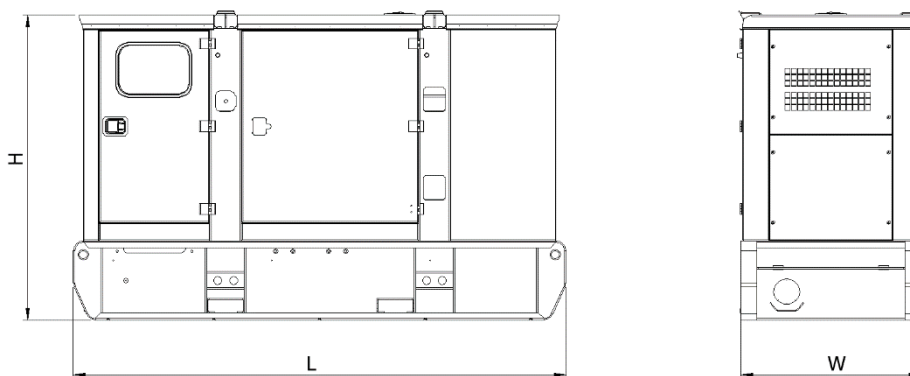
## CHASSIS

- ✓ The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 750 kVA)
- ✓ The generating set can be lifted or carefully pushed / pulled by the base frame
- ✓ Dial type fuel gauge and drain plug on the fuel tank
- ✓ Forklift pockets within base frame (up to 500kVA)

## DIMENSIONS

OPEN TYPE		
DIMENSIONS (LxWxH)	mm	N/A
DRY WEIGHT	kg	N/A
SOUND ATTENUATED TYPE		
DIMENSIONS (LxWxH)	mm	2800x1063x1703
DRY WEIGHT	kg	1540

## CANOPY(RAL-1015)



- ✓ All canopy parts are designed with modular principles
- ✓ Without welding assembly
- ✓ Doors on each side
- ✓ 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 the canopy
- ✓ Easy lifting and moving
- ✓ Easy maintenance and operation