APD85MP-6



YOUR FUTURE

POWER

88 Perkins

POWERED by PERKINS

DIESEL GENERATING SET 220/110V- 60 Hz

MODEL			APD85MP-6
Power Pf. 1.0	Standby	kVA	65.4
		kW	65.4
	Prime	kVA	59.5
		kW	59.5

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.

PERKINS					
Model		1104A-44TG1			
Engine Power Output	kWm	77.8			
at rated rpm	HP	104.33			
Aspiration and Cooling		Turbocharged			
Total Displacement	Litre	4.4			
No. of Cylinders and Build		4 - Inline			
Engine Speed	rpm	1800			
Bore and Stroke	mmxmm	105x127			
Compression Ratio		17.25:1			
Governor		Mechanical			
Fuel Consumption at full load	L/hr	17.8			
Fuel Tank Capacity	Litre	180			
Oil Capacity	Litre	8			
Coolant Capacity	Litre	13			
Radiator Cooling Air	m³/min	111			
Air Intake – Engine	m³/min	5.5			
Exhaust Gas Flow	m³/min	14.3			

✓ Heavy duty Perkins diesel engine

✓ Four stroke, water cooled

✓ Direct injection fuel system

- ✓ Mechanical 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 \checkmark

 \checkmark Starter battery (with lead acid) including Rack and Cables

Flexible fuel connection hoses and manual oil sump drain valve \checkmark

- Industrial capacity exhaust silencer and steel bellows \checkmark
- ✓ Jacket water heater(at automatic models)
- ✓ Operation manuals and circuit diagram documents

ALTERNATOR

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	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 IP21 (*IP22/IP23 is available.)

- Impregnation with tropicalised epoxy varnish
 Solid state Automatic Voltage Regulator

✓ Self-exciting and self-regulating

✓ 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:

Generator kVA

Generator kW

Generator Cos (o)

1. Auto Mains Failure Control Panel

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

a) Generating set control module DSE6120 features:

- ✓ The module is used to monitor main supply and starts and stops of a standby generating set
- ~ Micro-processor based design
- Automatic control of main and generator contactors
- ✓ Monitors engine performance and AC power output LED alarm indication
- Front panel configuration of timers and alarm trip points ~
- ✓ 4 configurable analogue/digital inputs, 8 configurable digital inputs
- ✓ 6 configurable DC outputs
- ✓ Easy push button control
- STOP/RESET MANUAL AUTO TEST START

b) Metering via LCD display:

- Generator Volts (L-L / L-N) ✓
- Engine oil pressure (PSI-Bar)
- ✓ Generator Ampere (L1,L2,L3)
- Engine temperature (° C&° F)
- Generator Frequency (Hz) ✓
- ~ Plant battery volts
- Engine hours run
- ✓ Mains Volts (Ph-Ph/Ph-N)



DSE 6120

c) Alarms:

- Over and Under Speed
- Low and High Battery Volt.
- √ Start and Stop Failure
- Charge fail
- ~ Over Current
- ✓ Under / Over Generator Voltage
- ✓ Low Oil Pressure
- ~ Emergency stop
- ✓ High engine temperature
- d) LED indications
- ✓ Mains available
- Generator available ✓ ~
- Mains on load ✓
- Generator on load

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

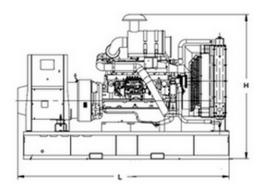
- ✓ Charge ammeter
- ✓ Transfer Switch 3Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

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

POWER YOUR FUTURE

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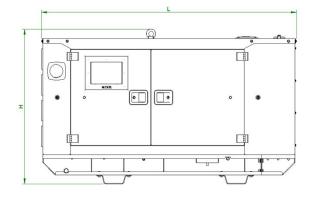


- $\checkmark\,$ The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- \checkmark Anti-vibration pads are fixed between the engine/ alternator feet and the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 1000 kVA)
- \checkmark The generating set can be lifted or carefully pushed / pulled by the base frame
- \checkmark 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	2015x950x1315					
DRY WEIGHT	kg	1060					
SOUND ATTENUATED TYPE							
DIMENSIONS (LxWxH)	mm	2282x1008x1532					

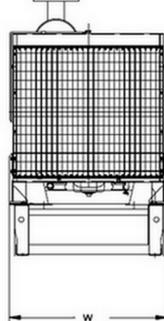
CANOPY



- ✓ 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

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