MPMC BEY#ND ENERGY

MODEL: MDS160(S)-2

Powered by Doosan





Applicable Standards

- ISO 8528-5:2018
- GB/T2820.5-2009
- CE

General Information		Prime power	Standby power	
Rated Power (kVA)		180	200	
Power Rating (kW)		144	160	
Frequency (Hz)		60		
Engine Model		DP086TA		
Engine Speed (RPM)		1800		
Phase		3		
PF		0.8		
Control System		Digital		
Rated voltage (V)		440/254 (According to customer requirements)		
Fuel tank capacity operating time		≥ 8h @ 75% load		
Fuel Consumption (L/h)	110% load	37.07		
	100% load	33.7		
	75% load	25.28		
	50% load	16.85		
н		Н	L	

Dimension and Weight					
Model	MDS160-2 Open type	MDS160S-2 Silent type			
Length (L) mm	2938	3600			
Width (W) mm	998	1330			
Height (H) mm	1888	2080			
Dry weight (kg)	1780	2800			
Tank capacity (L)	470	620			
The loading capacity (40'HC)	8 units	3 units			

7<mark>w</mark>

Note: Specifications and illustrations are subject to revision without notice.

7**w**

Environmental Conditions

- Ambient temperature: +5°C~+40°C
- Altitude: ≤1000m

Remark: If your conditions are different from the above, please contact our sales.

Factory Inspection

- Complete design and quality inspection
- 0%, 25%, 50%, 75%, 100%, 110% load test.
- Function test.
- Protection test

Painting Process

- MPMC has the most advanced automatic spraying / powder coating production line, and is equipped with various sandblasting equipment to ensure higher quality.
- Canopy painting: Henkel pretreatment process and world famous brand AkzoNobel powder.
- Base Frame painting: Sandblasting process and AkzoNobel powder (Hempel paint is optional).





Engine Specifications

Engine model & manufacturer		DP086TA(Doosan)
Emission Certification		
Number of cylinders		6
Cylinder arrangement		In-line
Cycle		Four stroke
Aspiration		Turbocharger
Bore x Stroke		111 x 139mm
Displacement		8.071 L
Compression ration		16.7:1
Prime power /speed		168 kW/1800 rpm
Standby power /speed		187 kW/1800 rpm
Speed governor		Electric
Cooling system		Forced Water Cooling Cycle
Frequency droop		≤ 5%
Total lubrication system capacity		15.5 L
Coolant capacity (engine only)		14 L
Fuel consumption	100% load	209 g/kWh @1800 rpm
Starter motor		DC 24V
Charge alternator		DC 24V
 Heavy duty diesel engine 		 Starter battery (with lead acid) including rack and cables
 Anti-vibration mount 		 Flexible fuel connection hoses
 Replaceable fuel filter, oil filter & air filter 		 Exhaust silencer and bellows
Cooling radiator and fan		Operation manuals and circuit diagram documents

• Cooling radiator and fan

Operation manuals and circuit diagram documents

Alternator Specifications

Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Bearing	Single bearing
Voltage regulator	A.V.R
Coupling	Flexible disc

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Control Panel

DSE 4520 MKII

Auto start and auto mains failure control module (Alternator frequency & can speed sensing)



Key features

- Auto Start and AMF mode in one module.
- J1939-75 support and CAN alarm ignore function.
- Alternator frequency & CAN speed sensing in one variant.
- Largest back-lit icon display in its class.
- Heated display option.
- Real time clock provides accurate event logging.
- Fully configurable via the fascia or PC using USB communication.
- Extremely efficient power save mode.
- 3 phase generator sensing.
- 3 phase mains (utility) sensing
- Compatible with 600 V ph to ph nominal systems.
- Generator/load power monitoring (kW, kVA, kVar, PF).
- Accumulated power monitoring (kWh, kVAh, kVarh).
- Generator overload protection.
- Generator/load current monitoring and protection.
- Fuel and start outputs (configurable when using CAN).
- 4 configurable DC outputs.
- 3 configurable analogue/digital inputs

Key benefits

- Ultimate size to feature ratio.
- Automatically transfers between mains (utility) and generator.
- Hours counter provides accurate information for monitoring and maintenance periods.
- User-friendly set-up and button layout for ease of use.
- Multiple parameters are monitored simultaneously which are clearly displayed on the largest back-lit icon display in its class.
- The module can be configured to suit a wide range of applications.
- Compatible with a wide range of CAN engines including Tier 4.
- IP65 rating (with optional gasket) offers increased resistance to water ingress.
- 4 configurable digital inputs.
- Configurable staged loading outputs.
- 3 engine maintenance alarms.
- Engine speed protection.
- Engine hours counter.
- Engine pre-heat.
- Engine run-time scheduler.
- Engine idle control for starting & stopping.
- Tier 4 engine instrumentation screens.
- Battery voltage monitoring.
- Start on low battery voltage.
- Configurable remote start input.
- 1 alternative configuration.
- Comprehensive warning, electrical trip or shutdown protection upon fault condition.
- LCD alarm indication.
- Event log (50)

Options

Engine	Alternator	Fuel System	Generating Set
 Water Jacket Preheater Oil Preheater Oil manual pump 	 PMG excitation Space heater Winding temperature measuring 	 12 / 24 hour base tank Bunded fuel tank External fuel tank Automatic fuel feeding Switch between external tank and base tank (three-way valve) 	 Deepsea, ComAp, Smartgen etc. controller Trailer Tools with the machine





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