







INTRODUCTION

The power generation system, providing optimum performance, and reliability, for stationary standby, prime power, and continuous duty applications. All generator sets are factory build, and production tested.

Power (kVA)

3 Phase, 50 Hz, PF 0.8

VOLTAGE	STANDBY RATING	(ESP)	PRIME RATING (PRP)		Standby Amper
VOLTAGE	kW	kVA	kW	kVA	
400/231	388,00	485	340.0	425	700.06

STANDBY RATING (ESP) Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. ESP is in accordance with ISO 8528. Overload is not allowed.

PRIME RATING (PRP) Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046.

General Characteristics

Model Name	DPX-15554
Frequency (Hz)	50
Fuel Type	Diesel
Engine Made and Model	DOOSAN P158LE
Alternator Made and Model	AK 6371
Control Panel Model	7320
Canopy	MS 70 TRP

ENGINE SPECIFICATIONS

Engine	DOOSAN
Engine Model	P158LE
Number of Cylinder (L)	8 cylinders - V type
Bore (mm.)	128
Stroke (mm.)	142
Displacement (It.)	14.618
Aspiration	Turbo Charged and Intercooled(Air to Air)
Compression Ratio	15.0:1
RPM (d/dk)	1500



Oil Capacity (Total With Filter) (It)	21
STANDBY POWER	414/563
Prime Power	363/494
Block Heater QTY	1
Block Heater Power (Watt)	3000
Fuel Type	Diesel
Injection Type and System	Direct
Type of Fuel Pump	Bosh In-Line P Type
Governor System	Electronic
Operating Voltage (Vdc)	24 Vdc
Battery and Capacity (Qty/Ah)	2x120
Charge Alternator (A)	45
Cooling Method	Water Cooled
Cooling Fan Air Flow (m3/min)	410
Coolant Capacity (engine only / with radiator) (It)	20/52
Air Filter	Dry Type
Fuel Cons. Prime With %100 Load (lt/hr)	89.3
Fuel Cons. Prime With %75 Load (lt/hr)	65.1
Fuel Cons. Prime With %50 Load (lt/hr)	43.9

ALTERNATOR CHARACTERISTICS

Manufacturer	Mecc Alte
Alternator Made and Model	AK 6371
Frequency (Hz)	50
Power (kVA)	464
VOLTAGE (V)	400
Phase	3
A.V.R.	SX440
Voltage Regulation	(+/-)1%
Insulation System	н
Protection	IP23
Rated Power Factor	0.8
WEIGHT WOUND ROTOR (Kg)	502
COOLING AIR (m ³ /min)	62.1

Open Gen.Set Dimensions (mm)

LENGHT	3110
WIDTH	1550
HEIGHT	1990
DRY WEIGHT (kg.)	3130
TANK CAPACITY (lt.)	700



Gen.Set Canopy D	imensions (mm)
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2. E 3. C Loc 4. C 5. C 6. E 7. S 8. In eas 9. B 10.	
2 radi 9 4 12.	eel structures. mergency stop push button. pontrol panel is mounted on the base frame . ted at the right side of the generator set. porrosion-resistant locks and hinges. I could be drained via valve and a hose chaust system in the canopy. becial large access doors for easy maintenance front and back side special large access doors for maintenance ase frame -fuel tank. .ifting points similar to ISO container , located on top corner of the canopy. The cap on the canopy provides easy access to ator cap. Sound proofing materials Plastic air intake pockets.

INTRODUCTION

Sound-attenuated and weather protective enclosures for our generating sets, meet event the sound requirements and provide optimum protection from inclement weather and development by our specialist acoustic engineers. Our modular designed sound insulated canopies provide ease of access for servicing and general maintenance and interchangeable components permitting on-site repair. Enclosures are designed to optimize genset cooling performance, providing you with confidence that genset ratings and ambient capability.

Control Panel

Control Module	DSE
Control Module Model	7320
Communication Ports	MODBUS
	 Menu navigation buttons Close mains button Main Status and instrumentation display Alarm LED's Close generator button Status LED's Operation selecting buttons

Devices

DSE, model 7320 Auto Mains Failure control module Static battery charger Emergency stop push button and fuses for control circuits

CONSTRUCTION and FINISH

Components installed in sheet steel enclosure.



- Phosphate chemical, pre-coating of steel provides corrosion resistant surface
- Polyester composite powder topcoat forms high gloss and extremely durable finish

Lockable hinged panel door provides for easy component access

INSTALLATION

Control panel is mounted generating set base frame on robust steel stand or power module. Located at side of generating set with properly panel visibility.

GENERATING SET CONTROL UNIT

The DSE 7320 control module is a standard addition to our generator sets from 220 kVA upwards and it has been designed to start and stop diesel and gas generating sets that include electronic and non-electronic engines.

The DSE 7320 includes the additional capability of being able to monitor a mains (utility) supply and is therefore suitable for controlling a standby generating set in conjunction with an automatic transfer switch.

The DSE7320 also indicates operational status and fault conditions, automatically shutting down the generating set and indicating faults by means of its LCD display on the front panel.

STANDARD SPECIFICATIONS

Microprocessor controlled

- 132 x 64 pixel LCD display makes information easy to read
- Front panel programming and also via PC software
- Soft touch membrane keypad and five key menu navigation
- Remote communications via RS232, RS485 and Ethernet and SMS messaging
- Event logging (50) showing date and time
- Multiple date and time engine exercise mode and maintenance scheduler
- Engine block heater control.
- Controls; stop, Manuel, auto, test, start, mute lamb test/transfer to generator, transfer to mains, menu navigation.

Instruments ENGINE Engine speed

Oil pressure

Coolant temperature

Run time Battery volts

Engine maintenance due

GENERATOR

Voltage (L-L, L-N)

Current (L1-L2-L3)

Frequency

Earth current

kW

Pf

kVAr

kWh, kVAh, kVArh

Phase sequence

MAINS



Doosan 490 kVA

Voltage (L-L, L-N) Frequency WARNING Charge failure Battery under voltage Fail to stop Low fuel level (opt.) kW over load Negative phase sequence Loss of speed signal PRE-ALARMS Low oil pressure High engine temperature Low engine temperature Over /Under speed Under/over generator frequency Under/over generator voltage ECU warning SHUT DOWNS Fail to start Emergency stop Low oil pressure High engine temperature Low coolant level Over /Under speed Under/over generator frequency Under/over generator voltage Oil pressure sensor open Phase rotation ELECTRICAL TRIP Earth fault kW over load Generator over current Negative phase sequence Options High oil temperature shut down Low fuel level shut down Low fuel level alarm High fuel level alarm



EXPANSION MODULES

Additional LED module (2548)

Expansion relay module (2157)

Expansion input module (2130)

Standards

electrical Safety / EMC compatibility

BS EN 60950 Electrical business equipment

BS EN 61000-6-2 EMC immunity standard

BS EN 61000-6-4 EMC emission standard

STATIC BATTERY CHARGER

Battery charger is manufactured with switching-mode and SMD technology and it has high efficiency.

Battery charger models' output V-I characteristic is very close to square

2405 has fully output shot circuit protection and it can be used as a current source.

2405 charger has high efficiency, long life, low failure rate, light weight and low heat radiated in accordance with linear alternatives.

The charger is fitted with a protection diode across the output.

Charge fail output is available.

Connect charge fail relay coil between positive output and CF output.

Input: 196-264V.

Output: 27,6V 5A or 13,8V 5A.

STANDARD SPECIFICATIONS

- Water cooled, Diesel engine
- Radiator with mechanical fan
- Protective grille for rotating and hot parts
- Electric starter and charge alternator
- Starting battery (with lead acid) including rack and cables
- Engine coolant heater
- Base frame design incorporates an integral fuel tank and anti-vibration isolators
- Flexible fuel connection hoses
- Single bearing, class Halternator
- Industrial exhaust silencer and steel bellows supplied separately(for open sets)
- Static battery charger
- Manual for application and installation

OPTIONAL EQUIPMENTS

ENGINE

Fuel-Water Separator Filter

Oil heater

ALTERNATOR

Anti-Condensation Heater



Oversized alternator
PMG excitation + AVR
Main line circuit breaker
CONTROL SYSTEM
Automatic synchronizing and power control system (multi gen-set Parallel)
Parallel system with mains.
Remote relay output
Alarm output relays
Remote communication with modem
Earth fault, single set
Charge Ammeter
TRANSFER SWITCH
Three Pole Contactor
Four Pole Contactor
Three or four pole motor operated circuit breaker
OTHER ACCESSORIES
Main Fuel Tank
Automatic or manual fuel filling system
Manual oil drain pump
Low and high fuel level alarm
Residential silencer
Enclosure: weather protective or sound attenuated
Duct adapter (on radiator)
Inlet and outlet motorized louvers
Inlet and outlet acoustic baffles
Trailer
Tool kit for maintenance
1500/3000 hours maintenance kit
Double wall chassis
GENSET CERTIFICATES
- TS ISO 8528

- TS ISO 9001-2008
- CE
- SZUTEST
- 2000/14/EC