

PRIME POWER (P.R.P.) (ISO 8528):

Prime Power is available for an unlimited number of annual hours in variable load application in accordance with ISO 8528, A 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation.

STAND-BY POWER (L.T.P.) (ISO 8528):

Standby Power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, limited to 500 operation hours per year

NOTE:

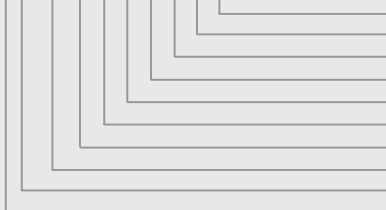
All parameters are given for reference conditions: ambient air temperature up to 40 °C and site altitude above sea level 1000m.

STANDARD WARRANTY

Prime Power – 12 months

GENERATING SET DESCRIPTION

FD 450 N A S C G P L



GENERAL DATA		
Standby Power L.T.P. (cos φ = 0,8)	kVA / kW	500 / 400
Prime Power P.R.P. (cos φ = 0,8)	kVA / kW	454 / 363
Nominal current	Amps	654
Nominal voltage	V	230/400
Frequency	Hz	50
ENGINE	DOOSAN	P158LE-S
Emission standard	TIER	I
Engine speed	rpm	1500
Class 8528 / engine governor	G3	ELECTRONIC
Engine speed regulation	%	± 1
Cylinder configuration	8	V
Fuel	-	Diesel EN 590
Cooling type	LIQUIDE / AIR	ANTIFREEZE + AIR
Displacement	l	14,6
Engine power PRP ISO 3046	kW	402
Battery charging alternator voltage	V	24
ALTERNATOR	MECC ALTE ECO40-3S/4	SINCRO SK315SM
Type	Brushless self exciting, synchronous	Brushless, self exciting, synchronous
Pole / Connecting type	4 / star Y	4 / star Y
Insulation class	H	H
Protection grade	IP 21	IP 21
Voltage regulation type	ELECTRONIC AVR UVR6	ELECTRONIC AVR DBL 1
Voltage regulation	±1%	±0,25%
Short circuit current capacity	300% In	300% In
Waveform distortions THD	< 2,6%	< 2,5%
Reactances Xd"	18,3%	12,2%

L - Light tower
P - Generating set mounted on a trailer
G - Engine preheating for cold start
C - Silent canopy, CC – Super silent canopy, no letter open version mounted on a base frame
S - With Automatic Transfer Switches (ATS)
A - Automatic start, R - Manual start
N – Synchronization with main, P – Synchronization with other genset
Prime power kVA
Engine: V -Volvo, I - Iveco, M - Mitsubishi, B - JCB, U - MTU, P-Perkins, D-Doosan
FOGO Generating set

FD 450

INSTALLATION GUIDELINE

Power output connection	connectors	mm ²	5xM12
Power output cables	elastic cable	mm ²	2x5x185(≤30m)
ATS control connection	elastic cable	mm ²	7x1,5 (≤30m)
Preheating, battery charger ect	elastic cable	mm ²	3x2,5 (≤30m)
Above 30 m connection cables– please contact technical department *** NOTE: For reference only***			
ATS box overall size (connection from the bottom)	mm		1200/700/500 wall mouthed
Engine exhaust outlet diameter	mm		2 x 78
Exhaust pipe diameter (max. 7m, 4 elbows)	mm		2 x 114,3
Exhaust pipe diameter (max. 15m, 4 elbows)	mm		2 x 114,3

OPEN VERSION

Dimensions(LxWxH)	mm	3480x1600x 2120
Weight (without fuel)	kg	3260
Fuel tank capacity	liters	700
Autonomy (100% load, full tank)	hours	7,0
Radiator high	mm	1170
Radiator width	mm	1130
Radiator distance from the floor	mm	-*
Air outlet surface	m ²	1,32
Air inlet surface	m ²	1,65
Noise level (LWA)	dB	119**



CANOPY VERSION

Dimensions (LxWxH)	mm	4100x1600x2615
Weight (without fuel)	kg	4300
Fuel tank capacity	liters	700
Autonomy (100% load, full tank)	hours	7,0
Noise level (LWA)	dB	97***



Pictures for reference only

OPERATION DATA

Engine oil type	15W40	Rimula R3X
Total oil capacity	l	28
Oil consumption (per 1 kW)	l/h	-*
Oil change intervals	hours/year	100 (first time) 500 / 1
Coolant type (glycol)	- 38°C Antifreeze	Glicoshell
Coolant quantity	l	89,5
Coolant change intervals	hours/years	1000 / 2
Starting battery capacity	Ah	2 x 180
Fuel type	Diesel	EN 590
Fuel consumption 100% load	l/h	99,5
Fuel consumption 75% load	l/h	74,0
Fuel consumption 50% load	l/h	49,3
Fuel filters change interval	hours	500
Oil filters change interval	hours	500
Foundation concrete slab (for reference only) L/W	mm	4300x1800

* - please contact technical department
** - for installation, noise protection required
*** - according to 2005/88/EC

POWERED BY



STANDARD EQUIPMENT:

- diesel engine
- alternator
- starting batteries
- on engine wiring
- fuel tank with on engine fuel installation
- elastic engine and alternator mountings
- exhaust compensators
- silencer
- on engine liquids (engine oil and cooling liquid, without fuel)
- generating set terminal box
- main circuit bracer
- generating set control panel with engine and alternator parameters indication
- emergency stop
- acoustic warning signal

Version:

- R** - open version, manual start
- standard equipment,
- AG** - open version, automatic start
- standard equipment,
- + battery charger,
- + with external start command
- ASG** - open version, automatic start, AMF+ATS
- standard equipment,
- + battery charger,
- + AMF+ATS Automatic Transfer Switches with Automatic Mains Failure
- RC** - soundproof, manual start,
- standard equipment,
- + soundproof canopy
- ACG** - soundproof, automatic start
- standard equipment,
- + soundproof canopy,
- + battery charger,
- + with external start command,
- ASCG** - soundproof, automatic start, AMF+ATS
- standard equipment,
- + soundproof canopy,
- + battery charger,
- + AMF+ATS Automatic Transfer Switches with Automatic Mains Failure,

ACCESSORY:

- external fuel tank,
- synchronization with other generator set,
- ventilation,
- exhaust piping system,
- differential protection,
- other voltage application,
- individual ATS,
- spark arrestor,
- remote control,
- maintenance contract,
- others*