genstore
power solutions

GDW780S/FNE



Power Rating		
Emergency Standby Power ESP	kVA	778.6
Emergency Standby Power ESP	kW	622.9
Prime power PRP	kVA	708.5
Prime power PRP	kW	566.8
Voltage	V	400/230
Frequency	Hz	50
Power factor	cos ϕ	0.8
Phases		3
Fuel		Diesel





Ratings definition (ISO-8528)
ESP - Emergency Standby Power:
It is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP.
PRP - Prime Power:
It is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output over 24 h of operation shall not exceed 70 % of the prime power.
G2 class load acceptance in accordance with ISO 8528-5:2013 Higher performance classes check upon request.
Gensets are compliant with EC mark which includes the following directives:
• 2006/42/CE Machinery safety.
• 2014/30/UE Electromagnetic compatibility.
• 2014/35/UE electrical equipment designed for use within certain voltage limits
• 2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by 2005/88/EC) – If applicable
• 97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2002/88/EC & 2004/26/EC) – If applicable
• EN 12100, EN 13857, EN 60204
Company with quality certification ISO 9001

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Engine specifications

Engine brand		Scania
Model		DC16 078A (2-43)
Operation Speed Nominal	rpm	1500
Engine cooling system		Water
Exhaust emission level		Non Emission Certified
Nr. of cylinder and disposition		8 V angle
Displacement	cm^3	16400
Aspiration	Type	Turbocharged
Speed governor		Electronic
Gross Engine Power ESP	kWm	680
Gross Engine Power PRP	kWm	621
Fan Power	kWm	25
Fan Air flow	m^3/min	1000
Total Oil capacity	l	48
Lube oil consumption PRP (max)	% fuel consumption	0.2
Total Coolant capacity	l	92
Fuel		Diesel
Specific Fuel consumption ESP	g/kWh	196
Specific Fuel consumption 75% PRP	g/kWh	189
Starting system		Electric
Electric circuit	V	24



Alternator specifications

Alternator brand		Mecc Alte
Model		ECO40 VL4 C
Winding		Standard
Winding Connections	Type	Parallel Star
Frequency	Hz	50
Voltage	V	400
Phases		3
Power factor	cos ϕ	0.8
Stand-by rating 27°C	kVA	825
Continuous Nominal Rating 40°C	kVA	750
Efficiency @ 100% of load	%	95.1
Type		Brushless
Poles		4
Voltage tolerance	%	0.5
Class		H
IP protection		23



Installation data

Cooling air	m^3/min	1090
Exhaust gas flow PRP	m^3/min	102
Exhaust gas temperature	°C	578
Fuel consumption 75% PRP	l/h	105.99
Fuel consumption 100% PRP	l/h	141.20



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Fuel Tank - Options Available:



To be ordered with equipment (when necessary)		
AUTONOMY		
8PFT Running time 75% PRP	h	6.13
MFT-XS Running time 75% PRP	h	4.72
MFT-S Running time 75% PRP	h	9.43
MFT-M Running time 75% PRP	h	21.70
MFT-L Running time 75% PRP	h	42.46



PFT	Plastic Fuel Tank	Type	8
	8PFT Fuel tank capacity	l	650
	8PFT Fuel tank location		Internal
	.		
MFT	Metal Fuel Tank	Type	XS
	MFT-XS Fuel tank capacity	l	500
	MFT-XS Fuel tank location		Internal
	.		
MFT	Metal Fuel Tank	Type	S
	MFT-S Fuel tank capacity	l	1000
	MFT-S Fuel tank location		Internal
	.		



MFT	Metal Fuel Tank	Type	M
	MFT-M Fuel tank capacity	l	2300
	MFT-M Fuel tank location		With sub-base
	MFT-M EXTRA Length (only for open versions)	mm	836
	MFT-M EXTRA Height	mm	422
	MFT-M EXTRA Weight	Kg	974
	.		
MFT	Metal Fuel Tank	Type	L
	MFT-L Fuel tank capacity	l	4500
	MFT-L Fuel tank location		With sub-base
	MFT-L EXTRA Length (only for open versions)	mm	836
	MFT-L EXTRA Height	mm	761
	MFT-L EXTRA Weight	Kg	1390

Electrical Data



Battery Voltage	V	24
Genset Voltage	V	400/230
Frequency	Hz	50
Phases		3
Power Factor	cos ϕ	0.8
Max current	A	1124
Nominal current	A	1023
Circuit breaker	A	1250

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Control panel - Options Available:

AUTOMATIC CONTROL PANEL	ACP
MODULAR PARALLEL PANEL	MPP



ACP - AUTOMATIC CONTROL PANEL

- Auto Mains Failure (AMF) function
- Gen-set controller for single genset operating in standby or prime power modes
- Full gen-set monitoring and protection
- Detailed event and performance log with time and date
- Wide range of remote control modules available as option
- Wide range of I/O expansion modules available as option



Power supply by circuit breaker and/or terminal bus bar

MPP - MODULAR PARALLEL PANEL

- Modular parallel panel allows the genset to work in parallel (up to 32 gen-sets)
- Easy switching between parallel to mains or multiple genset applications
- Full gen-set monitoring and protection
- Detailed event and performance log with time and date
- Wide range of communication and connection capabilities available



Power supply by circuit breaker and/or terminal bus bar

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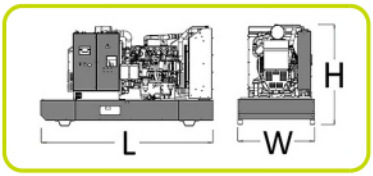
OPEN VERSION

Baseframe made of welded steel profile
Anti-vibration mountings properly sized
Screwed support legs
Hole for handling by crane
Moving and rotating parts protection against accidental contact
Grounding point to connect all metal parts to ground



Dimensional data Open Version

Length	(L) mm	3864
Width	(W) mm	1745
Height	(H) mm	2341



Weight	Kg	4415

OPTIONS AVAILABLE (ONLY FOR OPEN VERSION)

Industrial Exhaust System	IES
Residential Exhaust System	RES
Critical Exhaust System	CES



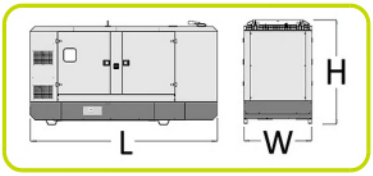
CANOPY VERSION

Weatherproof Enclosure made of galvanized sheet metal allows to protect genset from corrosion and aggressive condition
Soundproofed enclosure tanks to high quality soundproof material and residential silencer, allows to have low noise emission level
Big large lateral doors allows an easy service and maintenance operation
Doors equipped with key lockable handles
Baseframe made of welded steel profile
Anti-vibration mountings properly sized
Screwed support legs
Hole for handling by crane
Moving and rotating parts protection against accidental contact
Grounding point to connect all metal parts to ground



Dimensional data Canopy Version

Length	(L) mm	4700
Width	(W) mm	1745
Height	(H) mm	2533



Weight	Kg	5497

Noise Level Canopy Version

Guaranteed noise level (LWA)	dB(A)	105
Noise pressure level @ 1 m	dB(A)	85
Noise pressure level @ 7 m	dB(A)	75



CANOPY EXTRA SILENT VERSION

Extra silent Enclosure with low noise emission, suitable for installation near city centre and in any place where severe noise emission restriction are present
Extra Silent Enclosure guarantee very low noise emission thanks to an additional soundproofing modules, high quality soundproof material and residential silencer installed inside the enclosure
Weatherproof Enclosure made of galvanized sheet metal allows to protect genset from corrosion and aggressive condition
Big large lateral doors allows an easy service and maintenance operation
Doors equipped with key lockable handles
Baseframe made of welded steel profile
Anti-vibration mountings properly sized
Screwed support legs
Hole in the baseframe for handling by crane
Moving and rotating parts protection against accidental contact
Grounding point to connect all metal parts to ground



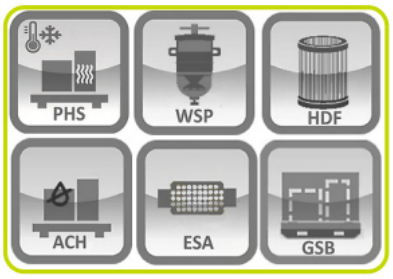
OPTIONS AVAILABLE (ONLY FOR CANOPY VERSIONS)

Roof lifting Point	RLP



OPTIONAL FEATURES

To be ordered with equipment (when necessary)	:
Pre-Heating System	PHS
Heavy-Duty Air Filter	HDF
Water Separator Filter	WSP
Exhaust Spark Arrestor	ESA
Hot Parts Protection	HPP
Alternator Winding Total Protection	WTP
Alternator anti-condensation heater	ACH
Galvanized skid base with fork lift point	GSB



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