

GDW-420V/FS2



Power Rating		
Emergency Standby Power ESP	kVA	419.2
Emergency Standby Power ESP	kW	335.4
Prime power PRP	kVA	382.7
Prime power PRP	kW	306.2
Voltage	V	400/230
Frequency	Hz	50
Power factor	cos ф	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
- \bullet 97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2016/1628 EC) If applicable
- EN 12100, EN 13857, EN 60204

Company with quality certification ISO 9001



Engine specifications		
Engine brand		Volvo
Model		TAD1343GE
Operation Speed Nominal	rpm	1500
Engine cooling system		Water
Exhaust emission level		Stage II
Nr. of cylinder and disposition		6 in line
Displacement	cm ³	12780
Aspiration	Туре	Turbocharged
Speed governor		Electronic
Gross Engine Power ESP	kWm	366
Gross Engine Power PRP	kWm	335
Fan Power	kWm	10
Fan Air flow	m³/min	408
Total Oil capacity	ı	36
Total Coolant capacity	ı	44
Fuel		Diesel
Specific Fuel consumption 100% ESP	g/kWh	195
Specific Fuel consumption 75% PRP	g/kWh	193
Starting system		Electric
Electric circuit	V	24



Alternator specifications		
Alternator brand		Mecc Alte
Model	ECO40 1S4 C	
Winding		Standard
Winding Connections	Туре	Parallel Star
Frequency	Hz	50
Voltage	V	400
Phases		3
Power factor	cos ф	0.8
Stand-by rating 27°C	kVA	440
Continuous Nominal Rating 40°C	kVA	400
Efficiency @ 100% of load	%	94.2
Туре		Brushless
Poles		4
Voltage tolerance	%	0.5
Class		Н
IP protection		23



Installation data		
Total air flow	m³/min	488
Exhaust gas flow PRP	m³/min	56
Exhaust gas temperature	°C	420
Fuel consumption 75% PRP	l/h	58.19
Fuel consumption 100% PRP	l/h	76.58

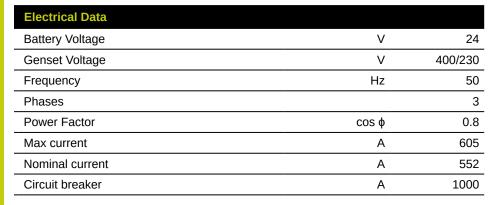


Fuel Tank - Options Available:	
To be ordered with equipment (when necessary)	
AUTONOMY	
8PFT Running time 75% PRP h 1	1.17
MFT-S Running time 75% PRP h 1	1.17
MFT-M Running time 75% PRP h 3	4.37
MFT-L Running time 75% PRP h 6	8.74
PFT Plastic Fuel Tank Type	8
8PFT Fuel tank capacity	650
8PFT Fuel tank location Inte	ernal
MFT Metal Fuel Tank Type	S
MFT-S Fuel tank capacity	650
MFT-S Fuel tank location Inte	ernal
MFT Metal Fuel Tank Type	XM
MFT-XM Fuel tank capacity	000
MFT-XM Fuel tank location With sub-b	oase
MFT-XM EXTRA Length (only for open versions) mm	689
MFT-XM EXTRA Height mm	448
MFT-XM EXTRA Weight kg	615
MFT Metal Fuel Tank Type	М
MFT-M Fuel tank capacity	2000
MFT-M Fuel tank location With sub-k	oase
MFT-M EXTRA Length (only for open versions) mm	689
MFT-M EXTRA Height mm	448
MFT-M EXTRA Weight kg	813
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MFT Metal Fuel Tank Type	L
MFT-L Fuel tank capacity	1000
MFT-L Fuel tank location With sub-b	oase
MFT-L EXTRA Length (only for open versions) mm	689
MFT-L EXTRA Height mm	860
MFT-L EXTRA Weight kg 1	L172











Control parier Options / Validation	
AUTOMATIC CONTROL PANEL	ACP
MODULAR PARALLEL PANEL	MPP



ACP - AUTOMATIC CONTROL PANEL

Control panel - Options Available

- 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



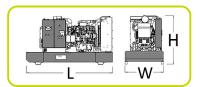
OPEN VERSION

- 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	3311
Width	(W) mm	1460
Height	(H) mm	1994



Weight	kg	3431
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OPTIONS AVAILABLE (ONLY FOR OPEN VERSION)

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



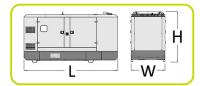
CANOPY VERSION

- 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	4000
Width	(W) mm	1460
Height	(H) mm	2147



Weight	kg	4167
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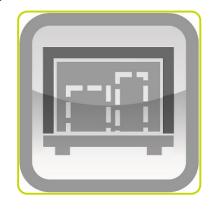
Noise Level Canopy Version

Guaranteed noise level (LWA)	dB(A)	97
Noise pressure level @ 1 m	dB(A)	78
Noise pressure level @ 7 m	dB(A)	68



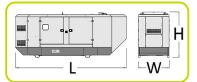
CANOPY EXTRA SILENT VERSION

- 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



Dimensional data Canopy (Extra Silent Enclosure)

Length	(L) mm	5286
Width	(W) mm	1460
Height	(H) mm	2147



Noise Level Canopy (Extra Silent Enclosure)

Guaranteed noise level (LWA)	dB(A)	94
Noise pressure level @ 1 m	dB(A)	74
Noise pressure level @ 7 m	dB(A)	64



OPTIONS AVAILABLE (ONLY FOR CANOPY VERSIONS)

Roof lifting Point	RLP
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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



