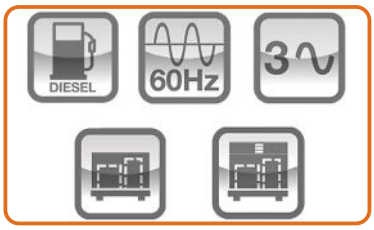
GMM-70P/ST3 [3P - 60Hz - 220-127V]

Power Rating		
Emergency Standby Power ESP	kVA	74.2
Emergency Standby Power ESP	kW	59.4
Prime power PRP	kVA	66.5
Prime power PRP	kW	53.2
Voltage	V	220/127
Frequency	Hz	60
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

Engine specifications		
Engine brand		Perkins
Model		1104D-44TG2
Operation Speed Nominal	rpm	1800
Engine cooling system		Water
Nr. of cylinder and disposition		4 in line
Displacement	cm^3	4400
Aspiration	Type	Turbocharged
Speed governor		Electronic
Gross Engine Power ESP	kWm	69
Gross Engine Power PRP	kWm	62.1
Fan Power	kWm	2.8
Fan Air flow	m^3/min	218
Total Oil capacity	l	8
Lube oil consumption @ PRP (max)	% fuel consumption	0.15
Total Coolant capacity	l	16.5
Fuel		Diesel
Specific Fuel consumption @75% PRP	g/kWh	246
Specific Fuel consumption @50% PRP	g/kWh	253
Starting system		Electric
Electric circuit	V	12

Alternator specifications		
Alternator brand		Mecc alte
Model		ECP32-2M4 C
Winding		Standard
Winding Connections	Type	Parallel Star
Frequency	Hz	60
Voltage	V	220
Phases		3
Power factor	cos ϕ	0.8
Stand-by rating 27°C	kVA	80
Continuous Nominal Rating 40°C	kVA	73
Efficiency @ 100% of load	%	89.7
Type		Brushless
Poles		4
Standard AVR		DSR
Voltage tolerance	%	1
Class		H
IP protection		23
Cooling air	m^3/s	0.31

Installation data		
Cooling air	m³/min	242
Exhaust gas flow @ PRP	m³/min	13.5
Exhaust gas temperature	°C	598
Fuel consumption @ 50% PRP	l/h	9.68
Fuel consumption @ 75% PRP	l/h	13.70
Fuel consumption @ 100% PRP	l/h	17.97

Fuel Tank - Options Available:		
To be ordered with the equipment		
AUTONOMY		
8PFT Running time @ 75% PRP	h	15.26
MFT-S Running time @ 75% PRP	h	8.76
MFT-M Running time @ 75% PRP	h	21.90

PFT	Plastic Fuel Tank	Type	8
	8PFT Fuel tank capacity	l	209
	8PFT Fuel tank location		Internal
	.		
MFT	Metal Fuel Tank	Type	S
	MFT-S Fuel tank capacity	l	120
	MFT-S Fuel tank location		Internal
	.		
MFT	Metal Fuel Tank	Type	M
	MFT-M Fuel tank capacity	l	300
	MFT-M Fuel tank location		Internal

Electrical Data		
Battery Voltage	V	12
Genset Voltage	V	220/127
Frequency	Hz	60
Phases		3
Power Factor	cos ϕ	0.8
MAX current	A	195
NOMINAL current	A	175
Circuit breaker	A	250

Control panel - Options Available:	
MANUAL REMOTE START PANEL	MRS
AUTOMATIC CONTROL PANEL	ACP
MODULAR PARALLEL PANEL	MPP

MRS - MANUAL REMOTE START PANEL

- Manual and remote start controller
- Automatic mains failure start function
- 3 phase mains measurements
- 3 phase generator protections
- Running hours
- 10 events, warnings or shutdown alarms with running hours stamp

Power supply by circuit breaker and/or terminal bus bar

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
- On-screen trends
- Colour display 5" TFT with 800x480 px resolution
- Wide range of communication and connection capabilities available

Power supply by circuit breaker and/or terminal bus bar

CONTROL PANEL - Optional Equipment:

External terminal board	ETB
Differential Protection	ADI

SOCKETS PANEL

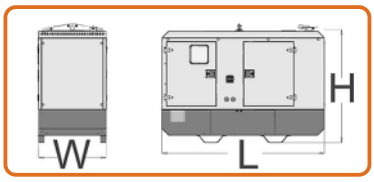
- Sockets panel positioned on the frontal side, separated from control panel cabinets
- High flexibility of sockets kit scope of supply
- Easy and fast power cables connection
- Sockets kit to be define during the order

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
- Three 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
- Robust Lifting bridge, with single lifting point positioned on the roof

Dimensional data Canopy Version

Length	(L) mm	2400
Width	(W) mm	1040
Height	(H) mm	1745



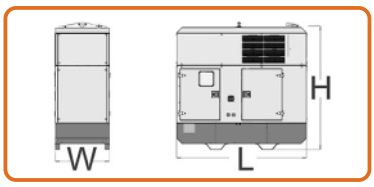
Weight	Kg	1220

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 module on the roof, 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
- Three 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
- Robust Lifting bridge, with single lifting point positioned on the roof

Dimensional data Canopy (Extra Silent Enclosure)

Length	(L) mm	2400
Width	(W) мм	1040
Height	(H) mm	2335



Weight	Kg	1332

OPTIONAL FEATURES

To be ordered with the equipment	:
Pre-Heating System	PHS
Air Shut-Off Valve	ASV
Electronic Engine Governor	EEG
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 poin	GSB