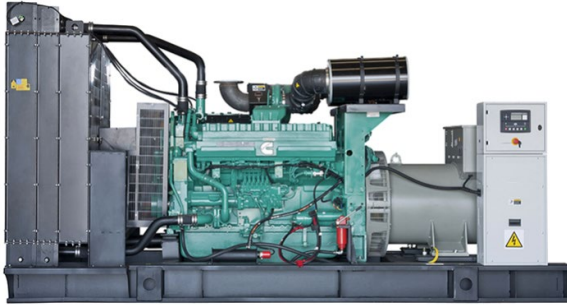




MIF-CM 450 328 kW Prime Power



**MIF PLUS INTERNATIONAL
DANISMANLIK HIZMETLERİ A.Ş.**
KAVAKLI MAH. YEŞİLYURT CAD. NO:15/2,
İC KAPI NO: 11, BEYLİKDÜZÜ / İSTANBUL



Group		Standby output	Prime output
Power	kVA	450	410
Power	kW	360	328
Engine Speed	rpm	1500	
Standard Voltage	V	400 / 230	
Power Factor	Cos Q	0,8	

STANDBY POWER RATING (ESP): ESP is applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. Under no circumstances shall the engine be allowed to operate in parallel with the public utility at the Standby Power rating. This rating should be applied where reliable utility power is available. A Standby rated engine should be sized for a maximum of an 70% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the Standby Power rating. Standby ratings should never be applied except in true emergency power outages. Negotiated power outages contracted with a utility company are not considered as an emergency.

PRIME POWER RATING (PRP): Applicable for supplying electric power in lieu of commercially purchased power. Prime Power applications must be in the form of one of the following two categories:

- **UNLIMITED TIME RUNNING PRIME POWER (ULTP):** PRP (Prime Power) is available for an unlimited number of hours per year in a variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 250 hours. The total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year.
- **LIMITED TIME RUNNING PRIME POWER (LTP):** LTP (Limited Time Prime Power) is available for a limited number of hours in a nonvariable load application. It is intended for use in situations where power outages are contracted, such as in utility power curtailment. Engines may be operated in parallel to the public utility up to 750 hours per year at power levels never to exceed the Prime Power rating. The customer should be aware, however, that the life of any engine will be reduced by this constant high load operation. Any operation exceeding 750 hours per year at the Prime Power rating should use the Continuous Power rating.

CONTINUOUS POWER RATING (COP): COP is the power that the engine can continue to use under the prescribed speed and the specified environment condition in the normal maintenance period stipulated in the manufacturing plant. And Continuous Power is applicable for supplying utility power at a constant 100% load for an unlimited number of hours per year. No overload capability is available for this rating.

PAY ATTENTION to the points below in picking and using the generator:

- * Generators can work on Continuous Power at 70% of Prime Power value if only all maintenances are done on time with original spare parts and high-quality oils that manufacturer advice.
- * Generators should not operate below 50% of Prime Power value. In such a case, the engine will burn excessive oil and eventually have irreparable damage.



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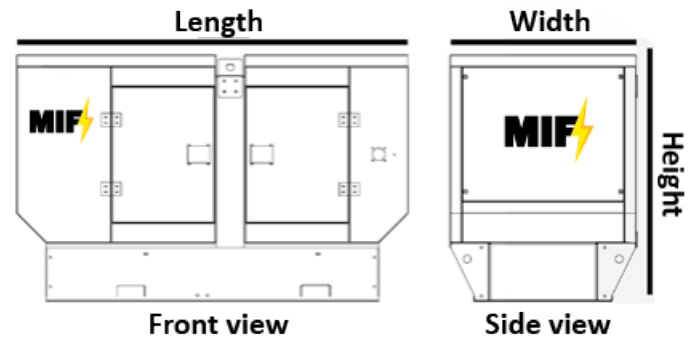
ENGINE SPECIFICATIONS

Mark:		CUMMINS
Model:		QSG12G2
Standby:	kWm	409
Cylinder Displacement:	Lt	11,8
Number of Cylinder/Type:		6, in line
Bore x Stroke:	mm X mm	132X144
Compression Ratio:		17:1
Governor Type:		Electronic
Aspiration:		Turbocharged Aftercooler
Injection Type:		Direct Injection
Cooling System:		Liquid Cooled
Voltage:	V	24

ALTERNATOR SPECIFICATIONS

Output Voltage:	V	230/400
Frequency:	Hz	50
Phase:		3
Pole:		4
Overload:		1 hour at 110%
Voltage Regulation:	%	±1
Power Factor:	Cos Q	0,8
Warning System:		Self-Alert
Total Harmonic Losing:	%	≤3,5
Connection Type:		Star
Protection Class:		IP 23
Isolation Class:		H

Fuel Consumption:	100% lt/h	82,0
Fuel Consumption:	75% lt/h	60,0
Fuel Consumption:	50% lt/h	41,0
Fuel Tank:	Lt	570
Oil Capacity:	Lt	34,1
Cooling Liquid Capacity:	Lt	48
Linear dimensions (LxWxH):	mm	3350x1400x2970
Weight:	kg	3565



Cummins Inc. is an American multinational corporation that designs, manufactures, and distributes diesel engines, electric vehicle components, and power generation products. Cummins also services engines and related equipment, including fuel systems, air handling systems controls, filtration, emission control, electrical power generation systems, and engine control units. Cummins sells in approximately 190 countries and territories through a network of more than 600 company-owned and independent distributors and approximately 7,200 dealers.



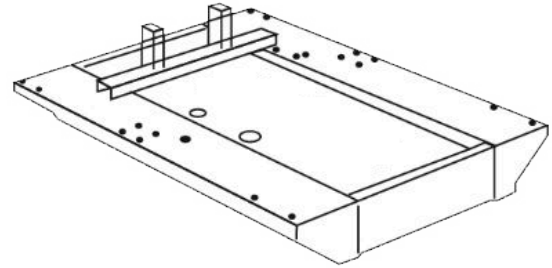
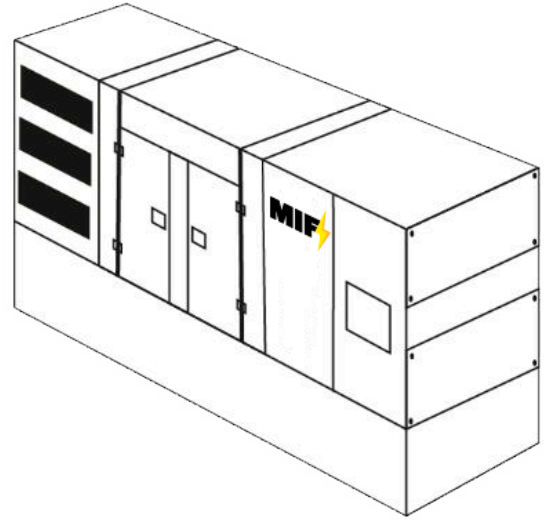
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CANOPY

Generator chassis are manufactured from steel with a special modular design. The fuel tank is mounted on the chassis. Engine alternator and radiator connections are made with vibration wedges and vibration is minimized. Special chassis and fuel tank designs can be made in line with the demands.



CHASSIS PROPERTIES

- Emergency Stop Button
- Transparent Control Window
- Special Sound Insulation
- Exhaust Silencer
- Electrical Powder Paint Resistant to Corrosion and Rusting

CONTROL SYSTEM

Generator control panels are durable panels that are easy to use and it can be updated with secure software. It can be remotely controlled with ETHERNET and GPRS optionally. The panel body is made of steel sheet and painted with electrostatic powder paint. Control panel electronics have an isolated and waterproof design.

As standard we use DATAKOM control panels, but we can offer an option from BLUE SEA.



CONTROL SYSTEM PROPERTIES

- LCD Screen Automatic Control System
- Remote monitoring possibility
- Multifunctional business opportunity
- Multi language support
- Programable over USB, RS-232 and GSM

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