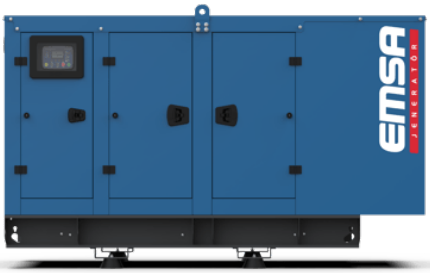
EMPOWER YOUR BUSINESS...

# E IV EM 0090

## FPT - IVECO Series
## Diesel Generator Sets

| | | |
|---|---|---|
| **STANDBY** | **kVA** | 90 |
| | **kW** | 72 |
| **PRIME** | **kVA** | 80 |
| | **kW** | 64 |




- Water Cooled
- 50 hz
- Easy maintenance
- Modular type sound-proof canopy
- 3 phase
- Diesel
- Warning system for decreasing fuel with electronic fuel level sender
- Remote control system

**Emergency Standby Power:** Emergency standby power, provided by diesel generators, acts as a backup during power outages. These generators kick in swiftly during emergencies, ensuring continuity for critical operations. Ideal for homes, businesses, and industries, their usage duration should be limited to prevent wear. Strict standards like NFPA 110 ensure their reliability.

**Prime Rated Power:** Prime rated power generators serve as primary power sources, especially in remote locations. These diesel generators handle varying loads over extended periods, making them perfect for sites without grid access. Commonly mobile, they're crucial for mining, construction, and energy industries, offering consistent, prime-rated power supply.

**Continuous Operation Power:** Continuous operation generators offer non-stop, stable power output, especially where grid access is inconsistent or expensive. These generators operate at a consistent 100% load, making them indispensable for remote mining, military, or farming sites. Unlike prime-rated generators, they don’t vary in power, ensuring unwavering power delivery.

## QUALITY STANDARDS

Our generators are manufactured in compliance with VDE 0530, BSE 4999 BS5000, IEC 34, EN12601; EN60204-1; TS ISO 8528-1 ... -13; EN12100-1; EN12100-2; EN61000-6-4; EN61000-6-2; EN61000-4-11; EN61000-4-6; EN61000-4-5; EN61000-4-2; EN55011; EN55016-2-1; EN55016-2-3; EN61000-3-2; EN61000-3-3; EN55014-1; EN61000-6-2; EN61000-4-3; EN61000-4-4; EN61000-4-8; EN61000-4-11; TS EN ISO 3744; TS EN ISO 3746; TS EN 60034-1; TS EN 60034-22; TS EN ISO 3046; BS 5514; NEMA MG 21; IEC 60034, BS 4999/5000 and TS EN 60947-1..4 standards.

We have ISO 9001-2015, ISO 14001-2015, ISO 45001-2018 and ISO 1002-2006 management system certificates from Kiwa, an accredited independent quality organization.

Our generators up to 400 kw are manufactured in compliance with 2000/14/EC European noise emission directive and certified from Ente Certificazione Macchine.

We also have TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 flame retardancy and TTS EN ISO 9227 certificates against anti-corrosion together with CE Declaration.

Emsa reserves the right to make changes in model, technical specifications, color, equipment & accessories without prior notice.

## Engine Specifications

- FPT - IVECO series heavy duty diesel engine
- 4 cycle, water cooling system, turbocharged induction
- Mechanic governor system
- 12/24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Flexible fuel pipe
- Oil discharge valve and extention pipe
- Industrial type silencer, exhaust spiral or compensator
- Maintenance free battery
- Engine block water heater
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram

| | | |
|---|---|---|
| MODEL | NEF45SM3.S500 | |
| POWER | STANDBY kW | 82 |
| | PRIME kW | 74.6 |
| SPEED (rpm) | | 1500 |
| Cycle | | 4 |
| DISPLACEMENT (lt) | | 4.5 |
| NUMBER OF CYLINDERS | | 4, in line |
| BORE AND STROKE | | 104 x 132 |
| COMPRESSION RATIO | | 17,5 : 1 |

| | | |
|---|---|---|
| GOVERNOR TYPE | Mechanic | |
| Induction | TURBOCHARGED | |
| COMBUSTION SYSTEM | | DIRECT |
| Cooling System | | WATER |
| FUEL CONSUMPTION (lt/h) | 100% OF PRIME POWER | 19.4 |
| | 75% OF PRIME POWER | 15.4 |
| | 50% OF PRIME POWER | 9.6 |
| TOTAL LUBRICATION SYSTEM CAPACITY (lt) | | 12.8 |
| TOTAL COOLANT CAPACITY (lt) | | 18.5 |

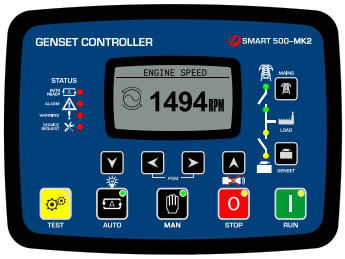
## Alternator Specifications

- Brushless, single bearing, flexible disc 4 poles alternator for harmonic failure
- H type isolation class
- IP 23 protection class
- Self exciter
- Electronic automatic voltage regulator
- Stator 2/3 step for harmonic failure
- The alternator windings are protected by insulating varnish against oil and acid

| | |
|---|---|
| BRAND | EMSA |
| MODEL | EGK225-70N |
| FREQUENCY (HZ) | 50 |
| POWER (KVA) | 90.8 |
| DESIGN | 4 pole, brushless |
| CONNECTION TYPE | Star |
| VOLTAGE (V) | 400 |

| | |
|---|---|
| Phase | 3 |
| A.V.R. | SX460 |
| VOLTAGE REGULATION (+/-) | ± 1% |
| INSULATION SYSTEM | Class H |
| PROTECTION | IP23 |
| RATED POWER FACTOR | 0.8 |
| WEIGHT COMP. ALTERNATOR (KG) | 355 |

## Genset Controllers




### Datakom SMART 500-MK2

**The SMART 500-MK2 is a cost effective genset controller ready for BMS integration and internet monitoring**

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info@emsa.gen.tr | www.emsa.gen.tr

## OPTIONAL GENSET CONTROLLERS OPTIONAL

Datakom SMART 200

Datakom D500

Datakom D500-GSM

DEEPSEA 6120

DEEPSEA 7320

ComAp AMF25

| | Datakom SMART 200 | Datakom SMART 500-MK2 | Datakom D500 | Datakom D500 GSM | DEEPSEA 6120 | DEEPSEA 7320 | ComAp AMF25 |
|---|---|---|---|---|---|---|---|
| AUTOMATIC MAINS MONITORING | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| MANUEL START | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| REMOTE START | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| REMOTE MONITORING WITH SIM CARD | OPTIONAL | OPTIONAL | OPTIONAL | ✔ | ✖ | OPTIONAL | OPTIONAL |
| 1 ADITIONAL OPTION (HORN, OIL-FUEL HEATER ETC.) | ✖ | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| LIGHT WARNING AND MIMIC DIAGRAM | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| BATTERY CHARGER | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| RS-485 COMMUNICATION | OPTIONAL | OPTIONAL | ✔ | ✔ | ✖ | ✔ | OPTIONAL |
| ETHERNET (TCP-IP) COMMUNICATION | ✖ | ✔ | ✔ | ✔ | ✖ | OPTIONAL | OPTIONAL |

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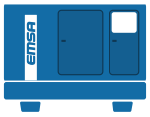
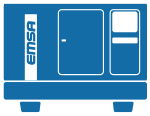


## Canopy

- Modular type sound-proof canopy
- Canopy installation executed with screw and nut, without welding process
- Epoxy and polyester powder painted canopy
- Weatherproof canopy rating is IP 23
- Canopy designed for easy maintenance
- Lockable doors on both sides of canopy
- Emergency stop button
- Transparent panel inspection window
- Insulation details: Non-flammeable acoustic foam
- Nano tech cleaning system



| | |
|---|---|
| Dimensions (W x L x H) mm | 1000x2600x1570 |
| Weight (Kg) | 1216 |
| Fuel tank capacity (lt) | 139<br>Internal type |

| | |
|---|---|
| Dimensions (W x L x H) mm | 1000x2200x1450 |
| Weight (Kg) | 991 |
| Fuel tank capacity (lt) | 139<br>Internal type |

**Internal type**

## SILENCER OPTIONS

- Standard industrial type
- Critical type
- Hospital type

## CANOPY OPTIONS

- Standard canopy
- Super silent canopy
- Extra super silent canopy (thicker insulation)

## GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature
- Low oil pressure
- High & low engine speed
- Low radiator water level
- Over current load
- High & low genset voltage
- Start/stop failure

## OPTIONAL EQUIPMENTS

- Charge ammeter
- Moulded case circuit braker (in automatic models)
- Hospital/Critical type silencer
- Modular type sound-proof canopy
- Mobile - trailer
- Synchronization control panel for 2-16 gensets
- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water seperator filter
- PMG warning system

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