E PR EM 0033

PERKINS Series
Diesel Generator Sets

STAND BY	kVA	33
	kW	26
PRIME	kVA	30
	kW	24



- 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

Standby Rating for a standby engine should be sized for a maximum of 70% average load factor and roughly 200 hours per year. Standby power ratings should never be applied except in true emergency outage situations. With standby rated generators there is no overload capability built into the units.

Prime Power is the maximum power accessible at the variable load for an unlimited number of hours per year in a variable load setting. It is not advisable that the variable load exceed 70% average of the prime power rating during any operational period. If the engine is running at 100% prime power, yearly hours should not exceed 500. Overload situations should be avoided however a 10% overload capability is available for a 1 hour period within a 12 hour cycle of operation.

Continuous Power is used in applications where suppliying power is at a constant %100 load for an unlimited number of hours each year. Continuous power rated units are most widely used in applications where the power grid is unreachable.

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.

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Engine Specifications

- PERKINS series heavy duty diesel engine
- 4 cycle, water cooling system, natural 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 (in automatic models)
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram

MODEL		1103A-33G
POWER	STAND BY kW	30,4
	PRIME kW	27,7
SPEED (rpm)		1500
CYCLE		4
DISPLACEMENT (lt)		3,3
NUMBER OF CYLINDERS		3, in line
BORE AND STROKE		105 x 127
COMPRESSION RATIO		19,25 : 1

GOVERNOR TYPE		Mechanic
INDUCTION		NATURAL
COMBUSTION SYSTEM		DIRECT
COOLING SYSTEM		WATER
FUEL CONSUMPTION (lt/h)	100% OF PRIME POWER	7.2
	75% OF PRIME POWER	5.61
	50% OF PRIME POWER	4.6
TOTAL LUBRICATION SYSTEM CAPACITY (lt)		8,3
TOTAL COOLANT CAPACITY (lt)		10,2

Alternator Specifications

- Brushless, single bearing, flexible disc 4 poles alternator for harmonic failure
- H type isolation class
- IP 21-23 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

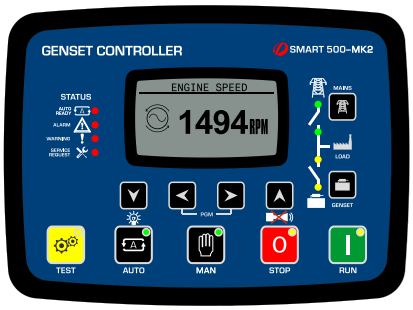
BRAND	EMSA
MODEL	EGK180-24N2
FREQUENCY (HZ)	50
POWER (KVA)	35
DESIGN	4 pole, brushless
CONNECTION TYPE	Star
VOLTAGE (V)	400

PHASE	3
A.V.R.	SX460
VOLTAGE REGULATION (+/-)	± 1%
INSULATION SYSTEM	Class H
PROTECTION	IP23
RATED POWER FACTOR	0,8
WEIGHT COMP. ALTERNATOR (KG)	132

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Genset Controllers



Datakom

SMART 500-MK2

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

FEATURES

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable languages
- Waveform display of V & I
- Harmonic analysis of V & I
- 16Amp MCB & GCB outputs
- 8 configurable digital inputs
- Inputs expandable to 40
- 6 configurable digital outputs
- Outputs expandable to 38
- 3 configurable analog inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of gensets
- Manual “speed fine adjust” on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel filling & fuel theft alarms
- Battery back-up real time clock
- Idle speed control
- Battery charge run enabled
- Combat mode support
- Multiple nominal conditions
- Tactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Modem diagnostics display
- Configurable through USB, RS-485 and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (RS232)
- Easy USB firmware upgrade
- IP65 rating with standard gasket

MEASUREMENTS

- Mains & genset PN/PP voltages
- Mains & genset frequency
- Mains & genset phase currents
- Mains & genset neutral currents
- Mains & genset, phase & total, kW, kVA, kVAr, pf
- Engine speed
- Battery voltage

COMMUNICATIONS

- 4-band GPRS modem (optional)
- USB Device
- RS-485 (2400-115200baud)
- RS-232 (2400-115200baud)
- J1939-CANBUS
- Geo-locating through GSM
- GPS support (RS-232)
- Internet Central Monitoring
- SMS message sending
- E-mail sending
- Free PC software: Rainbow Plus
- Modbus RTU

FUNCTIONALITIES

- AMF unit
- ATS unit
- Remote start controller
- Manual start controller
- Engine controller
- Remote display panel
- Harmonic analysis of V & I
- Internal battery (optional)

TOPOLOGIES

- 3 ph 4 w, star & delta
- 3 ph 3 w, 2 CTs
- 2 ph 3 w
- 1 phase 2 wires

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OPTIONAL GENSET CONTROLLERS OPTIONAL

Next generation single gen-set controllers for Stand-by and Primepower applications combining multi-functionality and wide communication with EFI engines.

Datakom SMART 200



Datakom D500



Datakom D500-GSM



DEEPSEA 6120



DEEPSEA 7320



ComAp AMF25



	Datakom SMART 200	Datakom SMART500-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

GENSET CONTROLLERS FOR SYNCHRONIZATION SYSTEMS OPTIONAL

Next generation synchronizing genset controller capable of every communication and functionality.

DEEPSEA 8610



DEEPSEA 8620



DEEPSEA 8660



ComAp InteliGen BaseBox

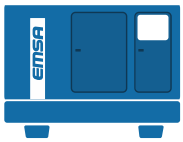


ComAp InteliGen 200



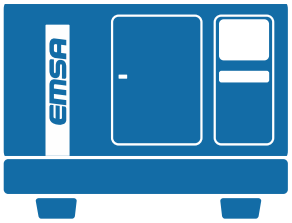
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Canopy

- 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	1000 x 2300 x 1545		**Dimensions (W x L x H) mm**	1000 x 1900 x 1396
KG	**Weight (Kg)**	899	KG	**Weight (Kg)**	689
	Fuel tank capacity (lt)	101		**Fuel tank capacity (lt)**	101

SILENCER OPTIONS

- Standard industrial type
- Critical type
- Hospital type

CANOPY OPTIONS

- Standard canopy
- Super silent canopy
- Extra süper silent canoy (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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