

### E PR EM 0022/M

#### PERKINS Series Diesel Generator Sets

	COS PHI	0,8	1
STANDBY	kVA	22	17.6
	kW	17.6	17.6
PRIME	kVA	20	16
	kW	16	16



Water Cooled



50 hz



Easy maintenance



Modular type sound-proof canopy



1 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.



## 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

MODEL	404A-22G1	
POWER	STANDBY kW	20
	PRIME kW	18
SPEED (rpm)	1500	
Cycle	4	
DISPLACEMENT (lt)	2.216	
NUMBER OF CYLINDERS	4, in line	
BORE AND STROKE	4 x 100	
COMPRESSION RATIO	23,3 : 1	

- 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

GOVERNOR TYPE	Mechanic	
Induction	NATURAL	
COMBUSTION SYSTEM	INDIRECT	
Cooling System	WATER	
FUEL CONSUMPTION (lt/h)	100% OF PRIME POWER	5.3
	75% OF PRIME POWER	4
	50% OF PRIME POWER	2.9
TOTAL LUBRICATION SYSTEM CAPACITY (lt)	10.6	
TOTAL COOLANT CAPACITY (lt)	7	



## Alternator Specifications

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

BRAND	EMSA
MODEL	EGM160-16N2
FREQUENCY (HZ)	50
POWER (KVA) (Phi 0,8 / 1)	29 / 23
DESIGN	4 pole, brushless
CONNECTION TYPE	Double Delta
VOLTAGE (V)	220

- Electronic automatic voltage regulator
- Stator 2/3 step for harmonic failure
- The alternator windings are protected by insulating varnish against oil and acid

Phase	1
A.V.R.	SX460
VOLTAGE REGULATION (+/-)	± 1%
INSULATION SYSTEM	Class H
PROTECTION	IP23
WEIGHT COMP. ALTERNATOR (KG)	222



## Genset Controllers



### Datakom SMART 500-MK2

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

**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
<b>AUTOMATIC MAINS MONITORING</b>	✓	✓	✓	✓	✓	✓	✓
<b>MANUEL START</b>	✓	✓	✓	✓	✓	✓	✓
<b>REMOTE START</b>	✓	✓	✓	✓	✓	✓	✓
<b>REMOTE MONITORING WITH SIM CARD</b>	OPTIONAL	OPTIONAL	OPTIONAL	✓	✗	OPTIONAL	OPTIONAL
<b>1 ADDITIONAL OPTION (HORN, OIL-FUEL HEATER ETC.)</b>	✗	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
<b>LIGHT WARNING AND MIMIC DIAGRAM</b>	✓	✓	✓	✓	✓	✓	✓
<b>BATTERY CHARGER</b>	✓	✓	✓	✓	✓	✓	✓
<b>RS-485 COMMUNICATION</b>	OPTIONAL	OPTIONAL	✓	✓	✗	✓	OPTIONAL
<b>ETHERNET (TCP-IP) COMMUNICATION</b>	✗	✓	✓	✓	✗	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 IntelliGen BaseBox



ComAp IntelliGen 200





## 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-flammable acoustic foam
- Nano tech cleaning system
- Container optional



Dimensions (W x L x H) mm 900x1950x1337



Weight (Kg) 690



Fuel tank capacity (lt) 82  
Internal type



Dimensions (W x L x H) mm 900x1600x1130



Weight (Kg) 509



Fuel tank capacity (lt) 82  
Internal type



### Internal type

## SILENCER OPTIONS

- Standard industrial type
- Critical type
- Hospital type

## GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature
- Low oil pressure
- High & low engine speed
- Low radiator water level

## OPTIONAL EQUIPMENTS

- Charge ammeter
- Moulded case circuit breaker (in automatic models)
- Hospital/Critical type silencer
- Modular type sound-proof canopy
- Mobile - trailer
- Synchronization control panel for 2-16 gensets

## CANOPY OPTIONS

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

- Over current load
- High & low genset voltage
- Start/stop failure

- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water separator filter
- PMG warning system