# SPARK AGREGAT www.sparkagregat.com

## **ENSURE YOUR ENERGY INDEPENDENCE**

### **SPARK PR EM 0112**

PERKINS Se Diesel Gene		
STAND BY	kVA	112
	kW	90
PRIME	kVA	101,4
	kW	81





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.

# Easy maintenance

sender



Modular type soundproof canopy



Remote control system

### **QUALITY STANDARDS**

Warning system for

decreasing fuel with electronic fuel level

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.

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### **Engine Specifications**

- PERKINS series heavy duty diesel engine
- 4 cycle, water cooling system, turbocharged intercooler induction
- Electronic governor system
- 12/24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Flexible fuel pipe

MODEL	1104C	C-44TAG2
POWER	STAND BY kW	99,5
	PRIME kW	90,1
SPEED (rpm)		1500
Cycle		4
DISPLACEMENT (It)		4,4
NUMBER OF CYLINDERS		4, in line
BORE AND STROKE		105 x 127
COMPRESSION RAT	TIO	18,2:1

- 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	Elec	tronic	
Induction	TURBOCHARGED - INTERCOOLER		
COMBUSTION SYSTEM		DIRECT	
Cooling System		WATER	
FUEL CONSUMPTION (lt/h)	100% OF PRIME POWER	22,6	
	75% OF PRIME POWER	17,1	
	50% OF PRIME POWER	11,2	
TOTAL LUBRICATION SYSTEM CAPACITY (It)		8	
TOTAL COOLANT CAPACITY (It)		12,6	



### **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	EGK225-80N
FREQUENCY (HZ)	50
POWER (KVA)	110
DESIGN	4 pole, brushless
CONNECTION TYPE	Star
VOLTAGE (V)	400

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

Phase	3
A.V.R.	AS440
VOLTAGE REGULATION (+/-)	± 1%
INSULATION SYSTEM	Class H
PROTECTION	IP23
RATED POWER FACTOR	0,8
WEIGHT COMP. ALTERNATOR (KG)	413



### **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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#### **OPTIONAL GENSET CONTROLLERS** OPTIONAL



	Datakom SMART 200	Datakom SMART 500-MK2	Datakom D500	Datakom D500 GSM	DEEPSEA 6120	DEEPSEA 7320	ComAp AMF25
AUTOMATIC MAINS MONITORING	1	1	1	1	1	1	1
MANUEL START	1	1	1	1	1	1	1
REMOTE START	1	1	1	1	1	1	1
REMOTE MONITORING WITH SIM CARD	OPTIONAL	OPTIONAL	OPTIONAL	1	×	OPTIONAL	OPTIONAL
1 ADITIONAL OPTION (HORN, OIL-FUEL HEATER ETC.)	×	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
LIGHT WARNING AND MIMIC DIAGRAM	1	1	1	1	1	1	1
BATTERY CHARGER	1	1	1	1	1	1	1
RS-485 COMMUNICATION	OPTIONAL	OPTIONAL	1	1	×	<ul> <li>Image: A second s</li></ul>	OPTIONAL
ETHERNET (TCP-IP) COMMUNICATION	×	1	1	1	×	OPTIONAL	OPTIONAL

#### GENSET CONTROLLERS FOR SYNCHRONIZATION SYSTEMS OPTIONAL

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

DEEPSEA 8610

DEEPSEA 8620



ComAp InteliGen BaseBox













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### **SPARK PR EM 0112**





- 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
- Container optional



#### 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 braker (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 süper silent canoy (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 seperator filter
- PMG warning system

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