



MSW Series

815-2520P

Heavy-duty generators designed for high power demands. Regardless of the field of activity, this series offers a reliable solution for the most demanding customer needs. With a modular layout and a large list of supplements these generators are suitable for different market areas, enjoying the economic benefits of a standard production.



Main applications:

- Critical stand-by (Hospital / Data Center)
- Emergency stand-by (Industry)
- Power plant



LOCKABLE HEAVY DUTY HANDLE



MOVING AND ROTATING PARTS PROTECTION



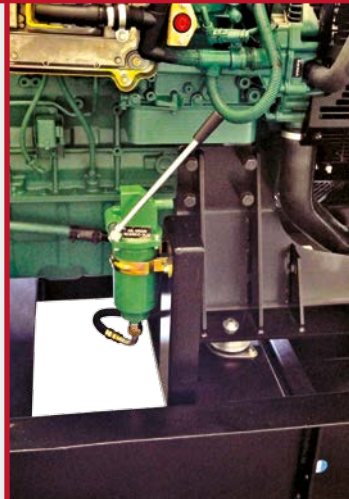
INTEGRATED METAL FUEL TANK (OPTION)



NICHE FOR EXTERNAL EMERGENCY PUSH-BUTTON



CONTROL PANEL DOOR WITH WINDOW



LUBE OIL DRAIN PUMP



ISO LIFTING HOOKS



REMOVABLE METAL PLATE FOR POWER CABLE PASSAGE

GENERATING SET	MSW815P		MSW875P		MSW1130P		MSW1400P		MSW1510P	
MAIN DATA										
POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	826	661	874	699	1147	918	1399	1119	1519	1215
PRIME POWER - PRP	751	601	807	646	1044	835	1266	1013	1382	1105
VOLTAGE	400/230V		400/230V		400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz		50Hz		50Hz	
DIESEL ENGINE										
BRAND	Perkins		Perkins		Perkins		Perkins		Perkins	
MODEL	4006-23TAG2A		4006-23TAG3A		4008 TAG2A		4012-46TWG2A		4012-46TWG3A	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	6 in line / 22921		6 in line / 22921		8 in line / 30561		12 V / 45842		12 V / 45842	
ASPIRATION	Turbocharged aftercooled		Turbocharged aftercooled		Turbocharged aftercooled		Turbocharged aftercooled		Turbocharged	
COOLING SYSTEM	Water		Water		Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 24 V		Electric / 24 V		Electric / 24 V		Electric / 24 V		Electric / 24 V	
SPEED (rpm)	1500		1500		1500		1500		1500	
SPEED GOVERNOR (Type)	Electronic		Electronic		Electronic		Electronic		Electronic	
STAND-BY POWER (LTP) (kWm)	721		786		985		1217		1314	
PRIME POWER (PRP) (kWm)	658		705		899		1106		1200	
FUEL CONSUMPTION @ 75% PRP (l/h)	125,3		133,6		163,4		214,2		229,9	
ALTERNATOR										
TYPE	Brushless		Brushless		Brushless		Brushless		Brushless	
POLES	4		4		4		4		4	
VOLTAGE REGULATION SYSTEM	Electronic		Electronic		Electronic		Electronic		Electronic	
GENSET VERSION	OPEN CONTAINER		OPEN CONTAINER		OPEN CONTAINER		OPEN CONTAINER		OPEN CONTAINER	
FUEL TANK (OPTION)										
MATERIAL	Metal		Metal		Metal		Metal		Metal	
CAPACITY (L)	500 / 1000		500 / 1000		500 / 1000		500 / 1000		500 / 1000	
AUTONOMY @ 75% PRP (h)	3,99 / 7,98		3,74 / 7,49		3,06 / 6,12		2,33 / 4,67		2,17 / 4,35	
NOISE LEVEL										
NOISE PRESSURE @ 7 m - dB(A)	-	72	-	72	-	75	-	75	-	75
OVERALL DIMENSIONS										
LENGTH (mm)	4100	6055	4100	6055	4646	12190	5004	12190	5004	12190
WIDTH (mm)	2130	2438	2130	2438	2122	2438	2200	2438	2200	2438
HEIGHT (mm)	2218	2591	2218	2591	2466	2896	2504	2896	2574	2896
DRY WEIGHT (Kg)	6641	9641	6641	9641	8170	14667	10040	16040	10330	16330

GENERATING SET	MSW1650P		MSW1780P		MSW2030P		MSW2266P		MSW2520P	
MAIN DATA										
POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	1660	1328	1780	1424	2042	1634	2268	1814	2520	2016
PRIME POWER - PRP	1534	1227	1700	1360	1893	1515	2021	1617	2269	1815
VOLTAGE	400/230V		400/230V		400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz		50Hz		50Hz	
DIESEL ENGINE										
BRAND	Perkins		Perkins		Perkins		Perkins		Perkins	
MODEL	4012-46TAG2A		4012-46TAG3A		4016-TAG1A		4016-61TRG2		4016-61TRG3	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	12 V / 45842		12 V / 45842		16 V / 61123		16 V / 61123		16 V / 61123	
ASPIRATION	Turbocharged		Turbocharged aftercooled		Turbocharged		Turbocharged		Turbocharged	
COOLING SYSTEM	Water		Water		Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 24 V		Electric / 24 V		Electric / 24 V		Electric / 24 V		Electric / 24 V	
SPEED (rpm)	1500		1500		1500		1500		1500	
SPEED GOVERNOR (Type)	Electronic		Electronic		Electronic		Electronic		Electronic	
STAND-BY POWER (LTP) (kWm)	1459		1643		1690		1886		2183	
PRIME POWER (PRP) (kWm)	1331		1500		1537		1715		1975	
FUEL CONSUMPTION @ 75% PRP (l/h)	240,9		274,9		287,0		320,0		357,9	
ALTERNATOR										
TYPE	Brushless		Brushless		Brushless		Brushless		Brushless	
POLES	4		4		4		4		4	
VOLTAGE REGULATION SYSTEM	Electronic		Electronic		Electronic		Electronic		Electronic	
GENSET VERSION										
	OPEN CONTAINER		OPEN CONTAINER		OPEN CONTAINER		OPEN CONTAINER		OPEN CONTAINER	
FUEL TANK (OPTION)										
MATERIAL	Metal		Metal		Metal		Metal		Metal	
CAPACITY (L)	500 / 1000		500 / 1000		500 / 1000		500 / 1000		500 / 1000	
AUTONOMY @ 75% PRP (h)	2,08 / 4,15		1,82 / 3,64		1,60 / 3,21		1,51 / 3,01		1,40 / 2,80	
NOISE LEVEL										
NOISE PRESSURE @ 7 m - dB(A)	-	75	-	75	-	75	-	75	-	75
OVERALL DIMENSIONS										
LENGTH (mm)	5004	12190	5004	12190	5800	12190	5800	12190	5800	12190
WIDTH (mm)	2200	2438	2200	2438	2188	2438	2188	2438	2188	2438
HEIGHT (mm)	2574	2896	2610	2896	2798	2896	2798	2896	3209	2896
DRY WEIGHT (Kg)	11074	17074	11561	17561	14588	22588	14902	22900	14910	22910



ACP - Automatic control panel

Mounted on the genset, complete with digital control unit AMF26P for monitoring, control and protection of the generator, secured with lockable door.

CONTROL CABINET DIGITAL INSTRUMENTATION (AMF-26P)

- Generator voltage (3 phases)
- Mains voltage
- Generator frequency
- Generator current (3 phases)
- Battery voltage
- Power (kVA - kW - kVAr)
- Power factor Cos ϕ
- Hour meter
- Engine speed r.p.m.
- Fuel level (%)
- Engine temperature

COMMANDS AND OTHERS

- Four operation modes: OFF - Manual starting - Automatic starting - Automatic test
- Push-button for forcing Mains contactor or generator contactor
- Push-buttons: start/stop, fault reset, up/down/page/enter selection
- Remote starting availability
- DC system disconnection switch
- Acoustic alarm
- Automatic battery charger
- RS232 Communication port
- Password security option



PROTECTION WITH ALARM

- Engine protection: low fuel level, low oil pressure, high engine temperature
- Generator protection: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage

PROTECTIONS WITH SHUTDOWN

- Engine protection: low fuel level, low oil pressure, high engine temperature
- Generator protection: under/over voltage, overload, under/over battery voltage, battery charger failure
- Earth Fault included in the control unit

OTHER PROTECTIONS

- Emergency stop button
- Panel secured with lockable door

POWER CABINET

- Generator Circuit Breaker 3 or 4 poles
- ETB - External Terminal Board as standard
- Other Configurations and/or special versions available on request



**MPP - Modular parallel panel**

Mounted on the generator, complete with digital control unit IG-NTC for monitoring, control, protection and load sharing for both single and multiple generators operating in standby or parallel modes (up to 32 generators in island).

CONTROL CABINET**DIGITAL INSTRUMENTATION (Graphical display 128x64 pixels)**

- Mains: Voltage, Intensity, Frequency
- Mains kW - kVA_r -Power factor Cos φ
- Generator voltage (3 phases)
- Generator frequency
- Generator current (3 phases)
- Generator Power (kVA - kW - kVA_r - Cos φ)
- Generator kWh and kVAh
- Battery voltage
- Hour meter
- Engine speed r.p.m.
- Fuel level (%)
- Engine temperature - Oil pressure

COMMANDS AND OTHERS

- Operation modes: OFF - AMF function - Single Parallel to mains Island application - Single Parallel to Mains AMF application - Multiple parallel Generator Island application
- Push-button for forcing Mains Breaker/contactor or Generator Breaker/contactor
- Push-buttons: start/stop, fault reset, up/down/page/enter selection
- Multiple parallel and Power Management operation with digital load AVR sharing
- Automatic synchronizing and power control (via speed governor or ECU)
- Base load Import/Export and Peak shaving
- Voltage and PF control (AVR)
- Configurable digital I/O (12/12) and analogue inputs (3)
- Integrate PLC programmable functions
- Event-based history (up to 500records)
- Selectable measurement range 120/277V and 0-1/0-5A
- Remote starting and Blocking signal availability
- DC system disconnection switch
- Acoustic alarm
- Automatic battery charger
- 2xRS232/RS485/USB Communication ports
- Multi-pin connector (in and out) for parallel with other generators

PROTECTION

- Engine protection: low fuel level, low oil pressure, high engine temperature
- Generator protection: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage
- Others: overcurrent, short circuit, reverse power, earth fault
- Emergency stop button
- Panel secured with lockable door

POWER CABINET

- Generator Circuit Breaker 3 or 4 poles motorized
- External Terminal Board as standard





MAIN SUPPLEMENTS

- Lead-Acid starting batteries kit
- Fully bundled base frame
- Manual Battery Switch
- Leakage detection sensor
- Fuel Cut Off Valve
- Automatic Fuel Pump
- Coolant Pre-Heating System
- Automatic Lube Oil Top up System with lube oil tank 100L

LTS - Load transfer switch panel - Accessories

The Load Transfer Switch (LTS) panel operates the power supply changeover between the generator and the Mains in backup applications, guaranteeing the feeding to the load within a short period of time.

It consists of a standalone cabinet which can be installed separate from the generator. The logic control of the power supply changeover is operated by means of the Automatic Control panel mounted on the generator, therefore no logic device is required on the LTS panel.

MAIN FEATURES

The enclosure is made of metal sheet folded and painted with high-resistance epoxy powder, guaranteeing external IP40 and internal IP20. Standard color is RAL7035. The lower side of the panel presents a removable plate for power cables connection.

The front door presents an emergency push-button to stop the generator.

Inside the enclosure, a lever is provided to allow a manual selection of the power supply between the generator and the Mains (I-O-II).

According to the changeover control signal, the power supply is transferred from one source to the other by means of two motorized IV-poles changeover switches. A mechanical and electrical interlocking prevents both power sources to be connected at the same time, avoiding any damage for the load or the alternator.



www.masonsgenerators.com

MASONS DISTRIBUTOR IN YOUR AREA IS:

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