

STAR / WATER COOLED

MSW Series

65-220 P



Reliable, strong and versatile.

With a large list of optional extras, these generators are suitable for many applications. High quality standards guaranteed.



Main applications:

- Construction
- Mobile Workshop
- Emergency stand-by (residential / industry)
- Island/Mains synchro (from 100kVA)



**PLASTIC FUEL TANK
(CANOPY VERSION)
COMPLETE WITH
THE FOLLOWING
COMPONENT:**

- Filler neck
- Air breather
(ventilation pipe)
- Minimum fuel level sensor



**HEAVY DUTY ANTI-
VIBRATION MOUNTS
FOR DAMPING,
REDUCING VIBRATION
AND SHOCK
PROTECTION**



**NOISE ATTENUATION
THANKS TO
SOUNDPROOFING
MATERIAL (ROCK
WOOL)**



**CANOPY VERSION
PROVIDED WITH
SINGLE DETACHABLE
LIFTING EYE PLACED
ON THE ROOF**



**INTEGRATED METAL
FUEL TANK
(OPEN VERSION)**



**BASEFRAME
PROVIDED WITH FEET
FOR EASY HANDLING**



**EXHAUST SILENCER
WITH RAIN FLAP**



**NICHE FOR EXTERNAL
EMERGENCY
PUSH-BUTTON**

GENERATING SET	MSW65P		MSW80P		MSW110P	
MAIN DATA						
POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	66,9	53,5	83,0	66,4	115	92
PRIME POWER - PRP	60,7	48,6	78,0	62,4	104	83
VOLTAGE (VOLT)	400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz	
DIESEL ENGINE						
BRAND	Perkins		Perkins		Perkins	
MODEL	1103A-33TG2		1104A-44TG2		1104C-44TAG2	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	3 in line / 3300		4 in line / 4400		4 in line / 4410	
ASPIRATION	Turbocharged		Turbocharged		Turbocharged	
COOLING SYSTEM	Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 12V		Electric / 12V		Electric / 12V	
SPEED (rpm)	1500		1500		1500	
SPEED GOVERNOR (Type)	Mechanical		Mechanical		Electronic	
STAND-BY POWER (LTP) (kW _m)	59,3		79,2		99,5	
PRIME POWER (PRP) kW _m	55		73,4		90,1	
FUEL CONSUMPTION @ 75% PRP (l/h)	10,4		13,4		18,0	
ALTERNATOR						
TYPE	Brushless		Brushless		Brushless	
POLES	4		4		4	
VOLTAGE REGULATION SYSTEM	Digital		Digital		Digital	
GENSET VERSION	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY
FUEL TANK						
MATERIAL	Metal	Plastic	Metal	Plastic	Metal	Plastic
CAPACITY (L)	240	209	240	209	240	209
AUTONOMY @ 75% PRP (h)	23,0	20,1	18,0	15,6	13,3	11,6
NOISE LEVEL						
NOISE POWER (LWA) - dB(A)	-	96	-	96	-	96
NOISE PRESSURE @ 7 m - dB(A)	-	67	-	67	-	67
OVERALL DIMENSIONS						
LENGTH (mm)	2200	2285	2200	2285	2200	2400
WIDTH (mm)	1000	920	1000	920	1000	1000
HEIGHT (mm)	1743	1465	1743	1465	1743	1530
DRY WEIGHT (Kg)	909	1085	964	1144	1170	1400

GENERATING SET	MSW150P		MSW165P		MSW200P		MSW220P	
MAIN DATA								
POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	148	118	164	131	203	162	216	173
PRIME POWER - PRP	138	110	153	122	183	146	196	157
VOLTAGE (VOLT)	400/230V		400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz		50Hz	
DIESEL ENGINE								
BRAND	Perkins		Perkins		Perkins		Perkins	
MODEL	1106A-70TG1		1106A-70TAG2		1106A-70TAG3		1106A-70TAG4	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	6 in line / 7000		6 in line / 7000		6 in line / 7000		6 in line / 7000	
ASPIRATION	Turbocharged		Turbocharged		Turbocharged		Turbocharged	
COOLING SYSTEM	Water		Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 12V		Electric / 12V		Electric / 12 V		Electric / 12 V	
SPEED (rpm)	1500		1500		1500		1500	
SPEED GOVERNOR (Type)	Mechanical		Mechanical		Mechanical		Electronic	
STAND-BY POWER [LTP] (kWm)	136,9		203,3		180,2		191,3	
PRIME POWER [PRP] (kWm)	123,7		199,7		162,7		173,9	
FUEL CONSUMPTION @ 75% PRP (l/h)	22,72		24,47		30,9		33,6	
ALTERNATOR								
TYPE	Brushless		Brushless		Brushless		Brushless	
POLES	4		4		4		4	
VOLTAGE REGULATION SYSTEM	Digital		Digital		Electronic		Electronic	
GENSET VERSION	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY
FUEL TANK								
MATERIAL	Metal	Plastic	Metal	Plastic	Metal	Plastic	Metal	Plastic
CAPACITY (L)	240	350	240	350	240	350	240	350
AUTONOMY @ 75% PRP (h)	10,6	15,4	9,8	14,3	7,8	11,3	7,1	10,4
NOISE LEVEL								
NOISE POWER [LWA] - dB(A)	-	97	-	97	-	97	-	97
NOISE PRESSURE @ 7 m - dB(A)	-	68	-	68	-	68	-	68
OVERALL DIMENSIONS								
LENGTH (mm)	2600	3000	2600	3000	2600	3400	2600	3400
WIDTH (mm)	1000	1150	1000	1150	1000	1250	1000	1250
HEIGHT (mm)	1743	1760	1743	1760	1743	1770	1743	1770
DRY WEIGHT (Kg)	1417	2080	1451	2038	1980	2088	2030	2138



MCP - Manual control panel

Mounted on the generator and complete with analogue instrumentation, control, module for engine protection, secured with lockable door.

INSTRUMENTATION (ANALOGUE)

- Voltmeter (1 phase)
- Ammeter (1 phase)
- Hour meter

COMMANDS

- Start/stop selector switch with key
- Emergency stop button

PROTECTION WITH ALARM

- Low fuel level
- Battery charger failure
- Low oil pressure
- High engine temperature
- Earth Fault

PROTECTION WITH SHUTDOWN

- Low fuel level
- Battery charger failure
- Low oil pressure
- High engine temperature.
- Circuit breaker protection: III poles
- Emergency stop button

OTHER PROTECTION

- Panel secured with lockable door

POWER OUTPUT

- Power cables connection to circuit breaker



ACP - Automatic control panel

Automatic control panel mounted on the generator, complete with digital control unit AMF26P for monitoring, control and protection of the generator.

DIGITAL INSTRUMENTATION (AMF-26P)

- Mains voltage
- Generator voltage (3 phases)
- Generator frequency
- Generator current (3 phases)
- Battery voltage
- Hour meter

COMMANDS AND OTHER

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

PROTECTION

- Engine protection: low oil pressure, high engine temperature
- Generator protection: under/over voltage, overload, under/over battery voltage
- Circuit breaker protection: III poles
- Differential protection

OUTPUT PANEL ACP

- Plinth row for connection from ACP to LTS panel



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).

DIGITAL INSTRUMENTATION (through IG-NTC control unit)

- 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)
- Generator Power factor Cos ϕ
- Generator kWh and kVAh
- Battery voltage
- Hour meter
- Engine speed r.p.m.
- Fuel level (%)
- Engine temperature (depending on model)
- Oil pressure (depending on model)

COMMAND AND OTHER

- Graphical display 128x64 pixels
- 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 goveroner 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
- Password security option

PROTECTION WITH ALARM AND SHUTDOWN

- 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

OTHER PROTECTION

- Circuit breaker protection: IV poles Motorized
- Emergency stop button
- Panel secured with lockable door

OUTPUT PANEL MPP

- Multi-pin connectors (in and out) for parallel with other generators
- Connecting cable with 2 connectors multipin (length 10m)
- ETB External terminal board



KPR - PREMIUM KIT

To upgrade the generator equipment with a leak proof tray, leak detection sensor and manual lube oil drain pump



EFT - EXTENDED FUEL TANK

Larger metal fuel tank integrated in a bigger base frame allowing longer generator autonomy, at least till 48h at 75% PRP. Provided with pull bars and drainage facility



AFP - AUTOMATIC FUEL PUMP

Automatic fuel transfer system from an external storage fuel tank to the one integrated in the generator



LTS - LOAD TRANSFER SWITCH

To allow load transferring operations from Mains to generator and vice-versa. Up to 140A equipped with contactors and from 160A equipped with motorized changeover switch



RCG - REMOTE CONTROL

Large list of additional modules/devices for remote operation and control of the generator



www.masonsgenerators.com

MASONS DISTRIBUTOR IN YOUR AREA IS:

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