

MSW Series

110-705V



Multipurpose, strong and reliable, these generators meet high quality standards. Available in a large range of models to serve the most demanding customer needs. Suitable both for residential and industrial areas.



Main applications:

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



**FUEL WATER
FILTER SEPARATOR**



**MOVING AND
ROTATING PARTS
PROTECTION**



**MANUAL OIL
DRAIN PUMP
(FROM MSW275V)**



MUFFLER RAIN CAP



**EASY ACCESS
FOR MAINTENANCE**



**FIREPROOF NOISE
ATTENUATION
MATERIAL**



**SINGLE LIFTING EYE
(UP TO MSW220V)**



**DOUBLE LIFTING
POINTS FRAME
STRUCTURE (FROM
MSW275V)**



**DIGITAL CONTROL
UNIT FOR ACP**



**EMERGENCY
PUSH-BUTTON**



**EXTERNAL TERMINAL
BOARD (OPTIONAL UP
TO MSW220V)**



**POWER TERMINALS
(STANDARD FROM
MSW275V)**

GENERATING SET	MSW110V		MSW150V		MSW170V		MSW220V		MSW275V	
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MAIN DATA

POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	113	90	145	116	164	131	220	176	275	220
PRIME POWER - PRP	101	81	130	104	155	124	203	162	249	199
VOLTAGE	400/230V		400/230V		400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz		50Hz		50Hz	

DIESEL ENGINE

BRAND	Volvo		Volvo		Volvo		Volvo		Volvo	
MODEL	TAD531GE		TAD532GE		TAD731GE		TAD733GE		TAD734GE	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	4 in line / 4760		4 in line / 4760		6 in line / 7150		6 in line / 7150		6 in line / 7150	
ASPIRATION	Turbocharged		Turbocharged		Turbocharged		Turbocharged		Turbocharged	
COOLING SYSTEM	Water		Water		Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 12V		Electric / 12V		Electric / 12V		Electric / 12V		Electric / 24V	
SPEED (rpm)	1500		1500		1500		1500		1500	
SPEED GOVERNOR (Type)	Mechanical		Electronic		Mechanical		Electronic		Electronic	
STAND-BY POWER [LTP] (kWm)	98		125		148		194,9		238,4	
PRIME POWER [PRP] (kWm)	88		112		133		174,9		215,4	
FUEL CONSUMPTION @ 75% PRP (l/h)	18,0		21,9		26,9		34,9		44,6	

ALTERNATOR

TYPE	Brushless		Brushless		Brushless		Brushless		Brushless	
POLES	4		4		4		4		4	
VOLTAGE REGULATION SYSTEM	Digital		Digital		Digital		Digital		Digital	

GENSET VERSION

OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY
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FUEL TANK

MATERIAL	Metal	Plastic	Metal	Plastic	Metal	Plastic	Metal	Plastic	Plastic	Plastic
CAPACITY (L)	240	350	240	350	240	350	400	350	636	636
AUTONOMY @ 75% PRP (h)	13,3	19,4	11,0	15,5	8,9	13,0	11,5	10,0	14,3	14,3

NOISE LEVEL

NOISE POWER [LWA] - dB(A)	-	97	-	97	-	97	-	94	-	97
NOISE PRESSURE @ 7 m - dB(A)	-	68	-	68	-	68	-	65	-	68

OVERALL DIMENSIONS

LENGTH (mm)	2200	3000	2200	3000	2600	3400	2650	3400	2672	3951
WIDTH (mm)	1000	1150	1000	1150	1000	1250	1180	1250	1181	1438
HEIGHT (mm)	1743	1760	1743	1760	1743	1770	1965	1980	1844	2085
DRY WEIGHT (Kg)	1433	1727	1491	1727	1796	2224	2238	2540	2177	2990

GENERATING SET	MSW330V		MSW370V		MSW415V		MSW460V		MSW510V	
MAIN DATA										
POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	330	264	370	296	416	333	456	365	506	405
PRIME POWER - PRP	315	252	354	283	380	304	415	332	455	364
VOLTAGE	400/230V		400		400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz		50Hz		50Hz	
DIESEL ENGINE										
BRAND	Volvo		Volvo		Volvo		Volvo		Volvo	
MODEL	TAD1342GE		TAD1342GE		TAD1343GE		TAD1344GE		TAD1345GE	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	6 in line / 12780		6 in line / 12780		6 in line / 12780		6 in line / 12780		6 in line / 12780	
ASPIRATION	Turbocharged		Turbocharged intercooled		Turbocharged		Turbocharged		Turbocharged	
COOLING SYSTEM	Water		Water		Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 24V		Electric / 24V		Electric / 24V		Electric / 24V		Electric / 24V	
SPEED (rpm)	1500		1500		1500		1500		1500	
SPEED GOVERNOR (Type)	Electronic		Electronic		Electronic		Electronic		Electronic	
STAND-BY POWER [LTP] (kWm)	333		343		325		354		388	
PRIME POWER [PRP] (kWm)	303		313		227,5		247,8		271,6	
FUEL CONSUMPTION @ 75% PRP (l/h)	48,5		54,4		58,1		64,4		70,4	
ALTERNATOR										
TYPE	Brushless		Brushless		Brushless		Brushless		Brushless	
POLES	4		4		4		4		4	
VOLTAGE REGULATION SYSTEM	Digital		Digital		Digital		Digital		Digital	
GENSET VERSION										
	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY
FUEL TANK										
MATERIAL	Plastic		Plastic		Plastic		Plastic		Plastic	
CAPACITY (L)	636		636		636		636		636	
AUTONOMY @ 75% PRP (h)	13,1		11,7		10,9		9,9		9,0	
NOISE LEVEL										
NOISE POWER [LWA] - dB(A)	-	97	-	97	-	97	-	98	-	98
NOISE PRESSURE @ 7 m - dB(A)	-	68	-	68	-	68	-	69	-	69
OVERALL DIMENSIONS										
LENGTH (mm)	3300	3951	3300	3951	3300	3951	3300	3951	3300	3951
WIDTH (mm)	1460	1438	1460	1438	1400	1438	1460	1438	1400	1438
HEIGHT (mm)	1913	2085	1965	2085	1913	2085	1913	2085	1913	2085
DRY WEIGHT (Kg)	3020	3671	3160	3671	3050	3671	3370	3671	3180	4100

GENERATING SET	MSW560V		MSW600V		MSW650V		MSW705V	
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MAIN DATA

POWER RATING	kVA	kWe	kVA	kWe	kVA	kWe	kVA	kWe
STAND BY POWER - LTP	546	437	601	481	653	522	703	562
PRIME POWER - PRP	505	404	567	454	593	474	632	505
VOLTAGE	400/230V		400/230V		400/230V		400/230V	
FREQUENCY	50Hz		50Hz		50Hz		50Hz	

DIESEL ENGINE

BRAND	Volvo		Volvo		Volvo		Volvo	
MODEL	TAD1641GE		TAD1642GE		TAD1642GE		TWD1643GE	
NUMBER OF CYLINDERS / DISPLACEMENT (cc)	6 in line / 16120		6 in line / 16120		6 in line / 16120		6 in line / 16120	
ASPIRATION	Turbocharged		Turbocharged		Turbocharged		Turbocharged	
COOLING SYSTEM	Water		Water		Water		Water	
STARTING SYSTEM / ELECTRIC CIRCUIT (Volt)	Electric / 24V		Electric / 24V		Electric / 24V		Electric / 24V	
SPEED (rpm)	1500		1500		1500		1500	
SPEED GOVERNOR (Type)	Electronic		Electronic		Electronic		Electronic	
STAND-BY POWER [LTP] (kWm)	473		554		554		596	
PRIME POWER [PRP] (kWm)	430		503		503		536	
FUEL CONSUMPTION @ 75% PRP (l/h)	77,6		86,0		89,9		97,4	

ALTERNATOR

TYPE	Brushless		Brushless		Brushless		Brushless	
POLES	4		4		4		4	
VOLTAGE REGULATION SYSTEM	Digital		Digital		Digital		Digital	

GENSET VERSION

OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY	OPEN	CANOPY
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FUEL TANK

MATERIAL	Plastic		Plastic		Plastic		Plastic	
CAPACITY (L)	636		636		636		636	
AUTONOMY @ 75% PRP (h)	8,2		7,4		7,1		8,2	

NOISE LEVEL

NOISE POWER [LWA] - dB(A)	-	105	-	105	-	105	-	105
NOISE PRESSURE @ 7 m - dB(A)	-	75	-	75	-	75	-	75

OVERALL DIMENSIONS

LENGTH (mm)	3500	4400	3500	4400	3500	4400	3800	4700
WIDTH (mm)	1500	1560	1500	1560	1500	1560	1670	1757
HEIGHT (mm)	2120	2250	2120	2250	2120	2250	2320	2510
DRY WEIGHT (Kg)	3467	4495	3620	4888	3680	4945	4590	5490

**MCP - Manual control panel (up to MSW220V)**

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 protected through door with lockable handle

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 module for engine protection.

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 - kVAr -Power factor Cos ϕ
- Generator voltage (3 phases)
- Generator frequency
- Generator current (3 phases)
- Generator Power (kVA - kW - kVAr)
- 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)
- Baseload 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
- Other: 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



www.masonsgenerators.com

MASONS DISTRIBUTOR IN YOUR AREA IS:

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