

MODEL | MSW195-560


- > VOLVO Diesel engine.
- > Water cooling system.
- > Industrial muffler.
- > Complete with engine and battery liquids.




MODEL		MSW195	MSW220	MSW275	MSW330	MSW415	MSW450	MSW510	MSW560
CODE		SG181TWA	SG201TWA	SG251TWA	SG331TWA	SG371TWA	SG401TWA	SG451TWA	SG501TWA
PRIME POWER PRP	kVA (kW)	186 (149)	208 (166)	254 (203)	320 (256)	376 (301)	410 (328)	462 (370)	506 (405)
EMERGENCY POWER LTP	kVA (kW)	194 (155)	220 (176)	275 (220)	330 (264)	412 (330)	440 (352)	508 (406)	556 (445)
Voltage	Volt	400/230	400/230	400/230	400/230	400/230	400/230	400/230	400/230
Frequency	Hz	50	50	50	50	50	50	50	50
Power factor	Cos φ	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Fuel capacity	Litres	330	330	448	636	636	636	636	636
Autonomy (100% load PRP)	h	8,4	7,6	8,5	9,1	7,9	7,4	8,3	7,5
Dimensions (LxWxH)	mm	2.650x1.100x1.850	2.650x1.100x1.850	2.950x1.300x1.800	3.300x1.400x1.877	3.300x1.400x1.907	3.300x1.400x1.907	3.500x1.500x2.120	3.500x1.500x2.120
Weight	kg	1.980	2.030	2.245	2.800	3.010	3.100	3.600	3.770
DIESEL ENGINE	VOLVO	TAD721GE	TAD722GE	TAD740GE	TAD941GE	TAD1241GE	TAD1242GE	TAD1640GE	TAD1641GE
Cooling system	Type	Water	Water	Water	Water	Water	Water	Water	Water
Speed	rpm	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Displacement	c.c.	7.150	7.150	7.280	9.360	12.130	12.130	16.120	16.120
Cylinders and disposition	n° disp.	6 L	6 L	6 L	6 L	6 L	6 L	6 L	6 L
Aspiration	Type	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler
Engine power PRP	kWm	162,0	179,0	220,0	279,0	323,0	352,0	393,0	430,0
Fuel consumption (100% load)	l/h	39,3	43,3	52,0	65,0	76,0	83,0	91,0	101,0
Specific consumption PRP	g/kWh	204	203	198	200	198	194	194	196
Engine governor (standard)	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
SYNCHRONOUS ALTERNATOR	Brand	STAMFORD			MECCALTE				
Model		UCI274G	UCI274H	ECO 38 1L	ECO 38 2L	ECO 40 1S	ECO 40 2S	ECO 40 3S	ECO 40 3S
Insulation	Class	H	H	H	H	H	H	H	H
Mechanical degree of protection	Type	IP23	IP23	IP21	IP21	IP21	IP21	IP21	IP21
Voltage regulation	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic

TECHNICAL CHARACTERISTICS NOT IMPEGNATIVE RESERVATION OF MODIFICATIONS FOR INNOVATION OF THE PRODUCT

MANUAL CONTROL PANEL (MCP)		MSW195	MSW220	MSW275	MSW330	MSW415	MSW450	MSW510	MSW560
<p>Manual control panel mounted on the genset, complete with digital control unit BE23 for monitoring, control and protection of the generating set.</p>	Digital instrumentation through BE23 control unit.	<ul style="list-style-type: none"> • Generating set voltage (3 phases). • Generating set frequency. • Generating set current (3 phases). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Fuel level (%). • Oil pressure. • Engine temperature. 							
	Commands and others	<ul style="list-style-type: none"> • DC supply selector switch. • Push-buttons: start/stop. • Emergency stop button. • Remote starting availability. 							
	Protections with alarm	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature. • Genset protections: over-frequency, battery voltage out of limits. 							
	Protections with shutdown	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature. • Genset protections: under/over voltage, over-load, under/over frequency, under/over battery voltage. • Circuit breaker protection: III poles. Supplied in a separate panel. • Differential protection. 							
	Output	<ul style="list-style-type: none"> • Power cables connection to terminals board (internal). 							

AUTOMATIC CONTROL PANEL (ACP)		MSW195	MSW220	MSW275	MSW330	MSW415	MSW450	MSW510	MSW560
 <p>Automatic control panel mounted on the genset, complete with digital control unit AC01 for monitoring, control and protection of the generating set.</p>	Digital instrumentation through AC-01 control unit.	<ul style="list-style-type: none"> • Generating set voltage (3 phases). • Mains voltage. • Generating set frequency. • Generating set current (3 phases). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%). • Oil pressure. • Engine temperature. 							
	Commands and others	<ul style="list-style-type: none"> • Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced. • Push-buttons: start/stop, up/down selection, reset. • Emergency stop button. • Remote starting availability. • Acoustic alarm. • Automatic battery charger. 							
	Protections with alarm	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature. • Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure. 							
	Protections with shutdown	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature, • Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure. • Circuit breaker protection: III poles. Supplied in a separate panel. • Differential protection. 							
	Output	<ul style="list-style-type: none"> • Plinth row for connection from ACP to LTS panel. • Power cables connection to terminals board (internal). 							

AUTOMATIC CONTROL PANEL (AMF)		MSW195	MSW220	MSW275	MSW330	MSW415	MSW450	MSW510	MSW560	
 <p>Automatic control panel for automatic starting by Mains failure. Delivered loose from the genset, and complete with digital control unit AC01 for monitoring, control and protection of the generating set.</p>	Digital instrumentation through AC-01 control unit.	<ul style="list-style-type: none"> • Generating set voltage (3 phases). • Mains voltage. • Generating set frequency. • Generating set current (3 phases). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%). • Oil pressure. • Engine temperature. 								
	Commands and others	<ul style="list-style-type: none"> • Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced. • Push-buttons: start/stop, up/down selection, reset. • Emergency stop button. • Remote starting availability. • Acoustic alarm. • Automatic battery charger. 								
	Change over contactors Mains/Genset	IV poles - 325A.	IV poles - 325A.	IV poles - 400A.	IV poles - 500A.	IV poles - 700A.	IV poles - 700A.	IV poles - 700A.	IV poles - 700A.	IV poles - 1.000A.
	Protections with alarm	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature. • Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure. 								
	Protections with shutdown	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature, • Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure. 								
	Output	<ul style="list-style-type: none"> • Plinth row for connection from pre-wired panel (mounted on the genset) to AMF panel. • Power cables connected to terminals board (internal). 								



GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

GENSET SUPPLEMENTS	> APM: PMG FOR STAMFORD ALTERNATOR + MX321 AVR.
	> PMK: PARALLEL KIT FOR SYNCHRONIZING WITH OTHER ALTERNATOR.
	> PWF: PARALLEL KIT FOR SYNCHRONIZING WITH THE MAINS.
	> AFP: AUTOMATIC FUEL TRANSFER PUMP.
	> PHS: COOLANT PREHEATING SYSTEM.

CONTROL PANEL SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

> TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.

ACCESSORIES

		MSW195	MSW220	MSW275	MSW330	MSW415	MSW450	MSW510	MSW560	
ACCESSORIES	> LOAD TRANSFER SWITCH PANEL.									
		Change over contactors	IV poles - 325A.	IV poles - 325A.	IV poles - 400A.	IV poles - 500A.	IV poles - 700A.	IV poles - 700A.	IV poles - 700A.	IV poles - 1.000A.
		Connections	<ul style="list-style-type: none"> • Plinth row for connection from ACP to LTS panel. • Terminals board for power cables connection (Genset-Mains-Load). 							
		Protections	<ul style="list-style-type: none"> • Contactors mechanically and electrically interlocked. • Emergency stop button. 							
	Load transfer switch panel built in a metal cabinet and supplied loose from the genset.	Automatic control panel + LTS panel measures the Mains voltage and starts automatically the genset within few seconds in case of Mains failure. It transfers immediately the load again to the genset when the Mains voltage returns within the rated values.								
> FEC: FLEXIBLE EXHAUST COMPENSATOR.										
> RES: RESIDENTIAL SILENCER.										
> RCG: REMOTE CONTROL BY GSM KIT (kit for genset management and control by remote PC; communication available by means of RS232 directly to PC or through GSM modem). Available only for automatic versions with ACO1 control unit.							↔	