

MODEL | MSW110-170


- > DEUTZ Diesel engine.
- > Water cooling system with radiator.
- > Internal residential silencer.
- > Central lifting eye.
- > Complete with engine and battery liquids.
- > Manual oil draining pump.
- > Leak proof tray.
- > Rental kit as option (POWER ON RENT).
- > Noise level attenuation panel as option



MODEL		MSW110	MSW145	MSW170
CODE		SC101TDA	SC131TDA	SC161TDA
PRIME POWER PRP	kVA (kW)	102 (82,0)	135 (108)	159 (127)
EMERGENCY POWER LTP	kVA (kW)	108 (86,5)	142 (113)	167 (134)
Three phase voltage	Volt	400/230	400/230	400/230
Frequency	Hz	50	50	50
Power Factor	Cos φ	0,8	0,8	0,8
Fuel capacity	Liter	320	320	320
Autonomy (100% load PRP)	h	14,4	11,0	9,8
Acoustic power	LWA	96	97	98
Acoustic pressure level at 7m	dB(A)	71	72	73
Dimensions (LxWxH)	mm	3.000x1.150x1.570	3.500x1.250x1.910	3.500x1.250x1.910
Weight	kg	2.100	2.530	2.600
DIESEL ENGINE	DEUTZ	BF4M 1013EC	BF6M 1013E	BF6M 1013EC
Cooling system	Type	Water	Water	Water
Speed	rpm	1.500	1.500	1.500
Displacement	c.c.	4.760	7.150	7.150
Cylinders and disposition	n° disp.	4 L	6 L	6 L
Aspiration	Type	Turbo - Intercooler	Turbo	Turbo - Intercooler
Engine power PRP	kWm	91,1	117,8	138,1
Fuel consumption (100% load)	l/h	22,2	29,2	32,7
Specific consumption PRP	g/kWh	205	208	199
Engine governor (standard)	Type	Mechanical	Mechanical	Mechanical
SYNCHRONOUS ALTERNATOR	STAMFORD	UCI 274 C	UCI 274 E	UCI 274 F
Insulation	Class	H	H	H
Mechanical degree of protection	Type	IP23	IP23	IP23
Voltage regulation	Type	Eletronic	Eletronic	Eletronic

TECHNICAL FEATURES

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

MANUAL CONTROL PANEL (MCP)		MSW110	MSW145	MSW170
 <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 intensity (3 phases). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Fuel level (%). • 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. • Circuit breaker protection: III poles. • Differential protection. 		
	Output	<ul style="list-style-type: none"> • Power cables connection to terminals board (external). 		

MANUAL CONTROL PANEL (MCP)

AUTOMATIC CONTROL PANEL (ACP)



Automatic control panel mounted on the genset, complete with digital control unit AC01 for monitoring, control and protection of the generating set.

AUTOMATIC CONTROL PANEL (ACP)		MSW110	MSW145	MSW170	
<p>Digital instrumentation through AC-01 control unit.</p>	<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 - kVA_r). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%). • Engine temperature. 				
	<p>Commands and others</p>	<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. 			
	<p>Protections with alarm</p>	<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. 			
	<p>Protections with shutdown</p>	<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. • Differential protection. 			
	<p>Output</p>	<ul style="list-style-type: none"> • Plinth row for connection from ACP to LTS panel. • Power cables connection to terminals board (external). 			

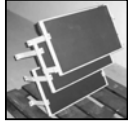
AUTOMATIC CONTROL PANEL (AMF)



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.


AUTOMATIC CONTROL PANEL (AMF)		MSW110	MSW145	MSW170	
<p>Digital instrumentation through AC01 control unit.</p>	<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 - kVA_r). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%). • Engine temperature. 				
	<p>Commands and others</p>	<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. 			
	<p>Change over contactors Mains/Genset</p>	IV poles - 200A.	IV poles - 200A.	IV poles - 325A.	
	<p>Protections with alarm</p>	<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. 			
	<p>Protections with shutdown</p>	<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. 			
	<p>Output</p>	<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)


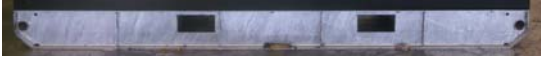


GENSET SUPPLEMENTS	> APM: PMG FOR STAMFORD ALTERNATOR + MX321 AVR.		
	> PMK: PARALLEL KIT FOR SYNCHRONIZING WITH OTHER ALTERNATOR.		
	> PWF: PARALLEL KIT FOR SYNCHRONIZING WITH THE MAINS.		
	> AFP: AUTOMATIC FUEL TRANSFER PUMP.		
	> DCC: DIFFERENT CANOPY COLOUR.		
	> EEG: ENGINE ELECTRONIC SPEED GOVERNOR.		
	> KRT: RENTAL KIT. Not allowed with PHS or AFP. Complete of:		
	Battery switch.		
	Fuel filter water separator.		
	Three way valve.		
Leak proof tray.			
Earth rod.			
Sockets kit (5 sockets).	1 x 400V/63A 3P+N+T CE.	1 x 400V/125A 3P+N+T CE.	1 x 400V/125A 3P+N+T CE.
	1 x 400V/32A 3P+N+T CE.	1 x 400V/63A 3P+N+T CE.	1 x 400V/63A 3P+N+T CE.
	1 x 400V/16A 3P+N+T CE.	1 x 400V/32A 3P+N+T CE.	1 x 400V/32A 3P+N+T CE.
	1 x 230V/16A 2P+T CE.	1 x 400V/16A 3P+N+T CE.	1 x 400V/16A 3P+N+T CE.
	1 x 230V/16A Schuko.	1 x 230V/16A Schuko.	1 x 230V/16A Schuko.
> NAP: NOISE ATTENUATION PANEL. Noise reduction 2/3 dB(A).			
> PHS: COOLANT PREHEATING SYSTEM.			



CONTROL PANEL SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

CONTROL PANEL SUPPLEMENTS	> MAP: MANUAL ANALOGUE CONTROL PANEL.					
	 <p>Manual control panel mounted on the genset, with analogue instrumentation, and protected through door with lockable handle.</p>	Instrumentation (analogue)	<ul style="list-style-type: none"> • Voltmeter with selector switch (3 phases). • Frequency meter. • Ammeter with selector switch (3 phases). • Hours-counter. • Fuel level indicator. • Oil pressure indicator. • Engine temperature indicator. 			
		Commands and others	<ul style="list-style-type: none"> • Start/stop selector switch with key. • Emergency stop button. 			
		Protections with alarm	<ul style="list-style-type: none"> • Engine protections: low fuel level, low oil pressure, high engine temperature, battery charger failure. 			
		Protections with shutdown	<ul style="list-style-type: none"> • Engine protection unit: low fuel level, low pressure oil, high engine temperature, battery charger failure. • Circuit breaker protection: III poles. • Differential protection. 			
		Output	<ul style="list-style-type: none"> • Power cables connection to terminals board (external). 			
	> SKB: SOCKETS KIT B WITH 5 SOCKETS.	1 x 400V/63A 3P+N+T CE.	1 x 400V/32A 3P+N+T CE.	1 x 400V/16A 3P+N+T CE.	1 x 230V/16A 2P+T CE.	1 x 230V/16A Schuko.
	> RSS: REMOTE START/STOP. Only for MAP.					
	> TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.					

ACCESSORIES

		MSW110	MSW145	MSW170	
ACCESSORIES	> LOAD TRANSFER SWITCH PANEL.				
		Change over contactors	IV poles - 200A.	IV poles 200A.	IV poles - 325A.
		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.			
> GSB: GALVANIZED BASEFRAME. Heavy duty galvanized skid to be installed under the genset. Easily transportable with fork lift and complete with leak proof tray.					
> 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 on the automatic versions.					
> STR: SITE TRAILER. Single axle for GSW105 and double axle for GSW135-160.					
> RTR: ROAD TRAILER (only for Spanish market). Double axle.	