


## MODEL | MBW 30-45

- > New PERKINS Diesel engine.
- > STAMFORD synchronous alternator.
- > Water cooling system.
- > Industrial silencer.
- > Set easy to be transported with hand pallet.
- > Complete with engine and battery liquids.
- > Oil draining pipe with cap.



MODEL		MBW30	MBW45
CODE		SH260TPA	SH450TPA
PRIME POWER PRP	kVA (kW)	29,0 (23,6)	44,0 (35,2)
EMERGENCY POWER LTP	kVA (kW)	30,0 (24,0)	45,0 (36,0)
Voltage	VAC	400/231 Three phases	400/231 Three phases
Frequency	Hz	50	50
Power factor	Cos φ	0,8	0,8
Tank capacity	Litres	51	51
Autonomy ( 100% load PRP)	h	7,1	4,8
Dimensions (LxWxH)	mm	2.000 x 920 x 1.100	2.000 x 920 x 1.100
Weight	kg	700	785
<b>DIESEL ENGINE</b>	<b>PERKINS</b>	<b>1103A-33G</b>	<b>1103A-33TG1</b>
Cooling system	Type	Water	Water
Speed	r.p.m.	1.500	1.500
Displacement	c.c.	3.300	3.300
Cylinders and disposition	n° disp.	3 Line	3 Line
Aspiration	Type	Natural	Turbo
Power (net) - PRP	kWm	28	41
Fuel consumption (100% load)	l/h	7,1	10,7
Specific consumption PRP	g/kWh	211	215
Electrical circuit	VDC	12	12
Engine governor (standard)	Type	Mechanical	Mechanical
<b>ALTERNATOR</b>	<b>STAMFORD</b>	<b>BCI 184 F</b>	<b>BCI 184 J</b>
Insulation	Class	H	H
IP degree of protection	Type	IP23	IP23
Voltage regulation	Type	Electronic	Electronic

MANUAL CONTROL PANEL (MCP)		MBW30	MBW45									
 <p>Manual control panel, mounted on the genset and complete of: instrumentation, protection and sockets.</p>	<b>Instrumentation (analogue)</b>	<ul style="list-style-type: none"> <li>• Voltmeter.</li> <li>• Ammeter.</li> <li>• Hours-meter.</li> </ul>										
	<b>Commands and others</b>	<ul style="list-style-type: none"> <li>• Start and stop selector switch with key: OFF - ON* - START.</li> <li>• Emergency stop button.</li> </ul>										
	<b>Protections with alarm</b>	<ul style="list-style-type: none"> <li>• Engine protection: battery charger failure, low oil pressure, high engine temperature.</li> </ul>										
	<b>Protections with shutdown</b>	<ul style="list-style-type: none"> <li>• Engine protection: battery charger failure, low oil pressure, high engine temperature.</li> <li>• Circuit breaker protection: IV poles.</li> <li>• Differential protection.</li> </ul>										
	<b>Output sockets</b>	<table border="1"> <tr> <td>1 x 400V/63A 3P+N+T CE.</td> <td>1 x 400V/63A 3P+N+T CE.</td> </tr> <tr> <td>1 x 400V/32A 3P+N+T CE.</td> <td>1 x 400V/32A 3P+N+T CE.</td> </tr> <tr> <td>1 x 230V/16A 2P+T CE.</td> <td>1 x 230V/16A 2P+T CE.</td> </tr> <tr> <td>1 x 230V/16A 2P+T CE.</td> <td>1 x 230V/16A 2P+T CE.</td> </tr> <tr> <td>1 x 230V/16A SCHUKO.</td> <td>1 x 230V/16A SCHUKO.</td> </tr> </table>	1 x 400V/63A 3P+N+T CE.	1 x 400V/63A 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 230V/16A 2P+T CE.	1 x 230V/16A 2P+T CE.	1 x 230V/16A 2P+T CE.	1 x 230V/16A SCHUKO.	1 x 230V/16A SCHUKO.
1 x 400V/63A 3P+N+T CE.	1 x 400V/63A 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 230V/16A 2P+T CE.											
1 x 230V/16A 2P+T CE.	1 x 230V/16A 2P+T CE.											
1 x 230V/16A SCHUKO.	1 x 230V/16A SCHUKO.											

ON\*: when selected this position, the system will take some seconds for air preheating by means of a glow plug. The preheating period is light by the proper led on the engine protection unit.

**AUTOMATIC CONTROL PANEL (ACP)**



Automatic control panel mounted on the genset, complete with digital control unit AC02 for monitoring, control and protection of the generating set.

AUTOMATIC CONTROL PANEL (ACP)	MBW30	MBW45
<b>Digital instrumentation</b> through AC02 control unit.	<ul style="list-style-type: none"> <li>• Generating set voltage.</li> <li>• Generating set frequency.</li> <li>• Generator set current.</li> <li>• Battery voltage.</li> <li>• Hours-counter.</li> <li>• Mains voltage.</li> </ul>	
<b>Commands and others</b>	<ul style="list-style-type: none"> <li>• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - * <b>Manual starting</b> - Genset contactor forced.</li> <li>• Push-buttons: start/stop, up/down selection, reset.</li> <li>• Emergency stop button.</li> <li>• Remote starting availability.</li> <li>• Automatic battery charger.</li> </ul>	
<b>Protections with alarm</b>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature.</li> <li>• Genset protection: under/over voltage, overload, battery charger failure, battery voltage out of limits, under/over frequency, start failure.</li> </ul>	
<b>Protections with shutdown</b>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature.</li> <li>• Genset protection: under/over voltage, overload, battery charger failure, battery voltage out of limits, under/over frequency, start failure.</li> <li>• Circuit breaker protection: IV poles.</li> <li>• Differential protection.</li> </ul>	
<b>Output and sockets</b>	<ul style="list-style-type: none"> <li>• Plinth row for connection from ACP to LTS panel.</li> </ul>	
	1 x 400V/63A 3P+N+T CE	1 x 400V/63A 3P+N+T CE
<p>* <b>Manual Starting:</b> the preheating period begins automatically when this position is selected. It is necessary to select again this position to enable one more time the preheating period.</p>		

**AUTOMATIC CONTROL PANEL (AMF)**




Automatic control panel for automatic starting by Mains failure. Delivered loose from the genset, and complete with digital control unit AC02 for monitoring, control and protection of the generating set.

AUTOMATIC CONTROL PANEL (AMF)	MBW30	MBW45
<b>Digital instrumentation</b> through AC02 control unit.	<ul style="list-style-type: none"> <li>• Generating set voltage.</li> <li>• Generating set frequency.</li> <li>• Generator set current.</li> <li>• Battery voltage.</li> <li>• Hours-counter.</li> <li>• Mains voltage.</li> </ul>	
<b>Commands and others</b>	<ul style="list-style-type: none"> <li>• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - * <b>Manual starting</b> - Genset contactor forced.</li> <li>• Push-buttons: start/stop, up/down selection, reset.</li> <li>• Emergency stop button.</li> <li>• Remote starting availability.</li> <li>• Automatic battery charger.</li> <li>• Acoustic alarm.</li> </ul>	
<b>Change over contactors Mains/Genset</b>	IV poles - 45A.	IV poles - 90A.
<b>Protections with alarm</b>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature.</li> <li>• Genset protection: under/over voltage, overload, battery charger failure, battery voltage out of limits, under/over frequency, start failure.</li> </ul>	
<b>Protections with shutdown</b>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature.</li> <li>• Genset protection: under/over voltage, overload, battery charger failure, battery voltage out of limits, under/over frequency, start failure.</li> </ul>	
<b>Output</b>	<ul style="list-style-type: none"> <li>• Plinth row for connection from pre-wired panel (mounted on the genset) to AMF panel.</li> <li>• Power cables connection to terminals (internal).</li> </ul>	
<p>* <b>Manual Starting:</b> the preheating period begins automatically when this position is selected. It is necessary to select again this position to enable one more time the preheating period.</p>		

**GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)**

<b>SUP.</b>	> PHS: COOLANT PREHEATING SYSTEM.
-------------	-----------------------------------

**ACCESSORIES**

	LOAD TRANSFER SWITCH PANEL.	MBW30	MBW45
<b>ACCESSORIES</b>		IV poles - 45A.	IV poles - 90A.
	<b>Connections</b>	<ul style="list-style-type: none"> <li>• Plinth row for connection from ACP to LTS panel.</li> <li>• Terminals board for power cables connection (Genset-Mains-Load).</li> </ul>	
	<b>Protections</b>	<ul style="list-style-type: none"> <li>• Contactors mechanically and electrically interlocked.</li> <li>• Emergency stop button.</li> </ul>	
<p>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.</p>			