

## MODEL | GBW65-80-110 Perkins


- PERKINS Diesel engine.
- Water cooling system.
- Internal residential muffler.
- Central lifting point.
- Baseframe capable to be moved with hand pallet truck.
- Complete with engine and battery liquids.
- Oil draining pipe.



MODEL		GBW65P (*)	GBW80P (*)	GBW110P (*)		
CODE		SB610TPA / SB400SPA	SB800TPA / SB450SPA	SB101TPA / SB680SPA		
TECHNICAL FEATURES	Three phase	PRIME POWER PRP	kVA (kW)	60,7 (48,6)	74,3 (59,4)	103 (82,1)
		EMERGENCY POWER LTP	kVA (kW)	66,5 (53,2)	77,7 (62,2)	113 (90,4)
		Voltage	Volt	400/231	400/231	400/230
		Frequency	Hz	50	50	50
		Power factor	Cos φ	0,8	0,8	0,8
	Single phase	PRIME POWER PRP	kVA (kW)	40,0 (40,0)	45,0 (45,0)	68,3 (68,3)
		EMERGENCY POWER LTP	kVA (kW)	44,0 (44,0)	49,5 (49,5)	75,1 (75,1)
		Voltage	Volt	230/115	230/115	230/115
		Frequency	Hz	50	50	50
		Power factor	Cos φ	1	1	1
	Fuel capacity	Litres	120	120	120	
	Autonomy (100% load PRP)	h	8,6	6,6	4,1	
	Acoustic power	LWA	94	94	95	
	Acoustic pressure at 7m	dB(A)	69	71	70	
	Dimensions (LxWxH)	mm	2.380 x 1.000 x 1.301	2.380 x 1.000 x 1.301	2.380 x 1.000 x 1.301	
	Weight (MeccAlte/Stamford)	kg	1226 / 1255	1285 / 1324	1493 / 1480	
	<b>DIESEL ENGINE</b>	<b>PERKINS</b>	<b>1103A-33TG2</b>	<b>1104A-44TG2</b>	<b>1104C-44TAG2</b>	
	Cooling system	Type	Water	Water	Water	
	Speed	rpm	1500	1500	1500	
	Displacement	c.c.	3.300	4.400	4.400	
Cylinders and disposition	n° disp.	3 L	4 L	4 L		
Aspiration	Type	Turbocharged	Turbocharged	Turbo - Intercooler		
Engine power PRP	kWm	53,8	71,9	89,0		
Fuel consumption (100% load)	l/h	14,0	18,3	29,6		
Specific consumption PRP	g/kWh	219	235	279		
Engine governor (standard)	Type	Mechanical	Mechanical	Electronic (L-Series)		
DC Electric system	Volt	12	12	12		
<b>ALTERNATOR (1)</b>	<b>MECC ALTE</b>	<b>ECO 32 2L</b>	<b>ECO 32 3L</b>	<b>ECP 34 2S</b>		
Insulation	Class	H	H	H		
Mechanical degree of protection	Type	IP21	IP21	IP21		
Voltage regulation	Type (%)	Electronic (± 1)	Electronic (± 1)	Electronic (± 1)		


(\*) Only for non mobile applications, according to COM II regulation.


(1) Depending on availability, Stamford alternator could be installed as variant, models UCI224E, UCI224F and UCI274C respectively (featuring IP23 and ±1,5% voltage regulation)

MANUAL CONTROL PANEL (MCP)		GBW65P	GBW80P	GBW110P
MANUAL CONTROL PANEL (MCP)				
	Manual control panel mounted on the genset behind a lockable door, complete with analogue instrumentation for monitoring, control and protection of the generating set.			
	<b>Instrumentation (analogue)</b>	<ul style="list-style-type: none"> <li>• Voltmeter with selector switch (3 phases on three phase and 1 phase on single phase).</li> <li>• Frequency meter.</li> <li>• 3xAmmeter (3 phases on three phase and 1 phase on single phase).</li> <li>• Hours-counter.</li> <li>• Fuel level indicator.</li> </ul>		
	<b>Commands and others</b>	<ul style="list-style-type: none"> <li>• Start/stop selector switch with key.</li> <li>• Emergency stop button (installed on the front door).</li> </ul>		
	<b>Protections with alarm</b>	<ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature, battery charger failure.</li> </ul>		
<b>Protections with shutdown</b>	<ul style="list-style-type: none"> <li>• Engine protection unit: low fuel level, low pressure oil, high engine temperature, battery charger failure.</li> <li>• Circuit breaker protection: IV poles (III poles on single phase).</li> <li>• Differential protection.</li> </ul>			
<b>Output</b>	<ul style="list-style-type: none"> <li>• Power cables connection to terminals board (Internal).</li> </ul>			

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AUTOMATIC CONTROL PANEL (ACP)		GBW65P	GBW80P	GBW110P
 <p><b>AUTOMATIC CONTROL PANEL (ACP)</b></p> <p>Automatic control panel mounted on the genset behind a lockable door, complete with digital control unit <b>AC01</b> for monitoring, control and protection of the generating set.</p>	<p><b>Digital instrumentation</b> through AC01 control unit.</p>	<ul style="list-style-type: none"> <li>• Generating set voltage (3 phases on three phase and 1 phase on single phase).</li> <li>• Mains voltage.</li> <li>• Generating set frequency.</li> <li>• Generating set current (3 phases on three phase and 1 phase on single phase).</li> <li>• Battery voltage.</li> <li>• Power (kVA - kW - kVA<sub>r</sub>).</li> <li>• Power factor Cos φ.</li> <li>• Hours-counter.</li> <li>• Engine speed r.p.m.</li> <li>• Fuel level (%).</li> </ul>		
	<p><b>Commands and others</b></p>	<ul style="list-style-type: none"> <li>• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced.</li> <li>• Push-buttons: start/stop, up/down selection, reset.</li> <li>• Emergency stop button (installed on the front door).</li> <li>• Remote starting availability by means of the control unit.</li> <li>• Acoustic alarm.</li> <li>• Automatic battery charger.</li> </ul>		
	<p><b>Protections with alarm</b></p>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature, low fuel level.</li> <li>• Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.</li> </ul>		
	<p><b>Protections with shutdown</b></p>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature, low fuel level.</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 (III poles on single phase).</li> <li>• Differential protection by means of the control unit.</li> </ul>		
	<p><b>Output</b></p>	<ul style="list-style-type: none"> <li>• Plinth row for connection from ACP to LTS panel.</li> <li>• Power cables connection to terminals board (Internal).</li> </ul>		

AUTOMATIC CONTROL PANEL (AMF)		GBW65P	GBW80P	GBW110P	
 <p><b>AUTOMATIC CONTROL PANEL (AMF)</b></p> <p>Automatic control panel for automatic starting by Mains failure. Delivered loose from the genset, and complete with digital control unit <b>AC01</b> for monitoring, control and protection of the generating set.</p>	<p><b>Digital instrumentation</b> through AC01 control unit.</p>	<ul style="list-style-type: none"> <li>• Generating set voltage (3 phases on three phase and 1 phase on single phase).</li> <li>• Mains voltage.</li> <li>• Generating set frequency.</li> <li>• Generating set current (3 phases on three phase and 1 phase on single phase).</li> <li>• Battery voltage.</li> <li>• Power (kVA - kW - kVA<sub>r</sub>).</li> <li>• Power factor Cos φ.</li> <li>• Hours-counter.</li> <li>• Engine speed r.p.m.</li> <li>• Fuel level (%).</li> </ul>			
	<p><b>Commands and others</b></p>	<ul style="list-style-type: none"> <li>• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - 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>• Acoustic alarm.</li> <li>• Automatic battery charger.</li> </ul>			
	<p><b>Change over contactors</b> Mains/Genset</p>	IV poles - 90A.	Three phase IV poles 110A.	IV poles 200A.	
		IV poles - 200A.	Single phase IV poles 325A.	IV poles 325A.	
	<p><b>Protections with alarm</b></p>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature, low fuel level.</li> <li>• Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.</li> </ul>			
	<p><b>Protections with shutdown</b></p>	<ul style="list-style-type: none"> <li>• Engine protection: low oil pressure, high engine temperature, low fuel level.</li> <li>• Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.</li> </ul>			
<p><b>Output</b></p>	<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 connected to terminals board (internal).</li> </ul>				

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

<p>● PHS: COOLANT PREHEATING SYSTEM.</p>
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**CONTROL PANEL SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)**

 <b>SKB: SOCKETS KIT B WITH 5 SOCKETS.</b> (2)	1 x 400V/63A 3P+N+T CE.
	1 x 400V/32A 3P+N+T CE.
	2 x 230V/16A 2P+T CE.
	1 x 230V/16A Schuko.

(2) On single phase version sockets are not delivered

**ACCESSORIES**

<b>GENSET SUPPLEMENTS</b>	 <b>LOAD TRANSFER SWITCH PANEL.</b>	<b>GBW65P</b>	<b>GBW80P</b>	<b>GBW110P</b>	
	 <p>Load transfer switch panel built in a metal cabinet and supplied loose from the genset.</p>	<b>Change over contactors</b>	Three phase IV poles - 90A.	Three phase IV poles 110A.	Three phase IV poles 200A.
			Single phase		
			IV poles - 200A.	IV poles 325A.	IV poles 325A.
	<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>			
	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.				