



REF. GDS **PCS.17**

# MODEL | GSW145-170D

- DEUTZ Diesel engine.
- Water cooling system with radiator.
- Internal residential silencer.
- Detachable central lifting eye.
- Complete with engine and battery liquids.
- Manual oil draining pump.
- Fully bundled / Completely sealed baseframe.
- Rental kit as option (POWER ON RENT).




MODEL		GSW145D	GSW170D	
CODE		SC131TDA	SC161TDA	
TECHNICAL FEATURES	PRIME POWER PRP	kVA (kW)	135 (108)	159 (127)
	EMERGENCY POWER LTP	kVA (kW)	142 (113)	167 (134)
	Three phase voltage	Volt	400/230	400/230
	Frequency	Hz	50	50
	Power Factor	Cos φ	0,8	0,8
	Fuel capacity	Litres	340	340
	Autonomy (100% load PRP)	h	11,6	10,4
	Acoustic power	LWA	97	97
	Acoustic pressure level at 7m	dB(A)	72	72
	Dimensions (LxWxH)	mm	3.400 x 1.250 x 1.680	3.400 x 1.250 x 1.680
	Dry weight	kg	2.180	2.250
	<b>DIESEL ENGINE</b>	<b>DEUTZ</b>	<b>BF6M 1013E</b>	<b>BF6M 1013EC</b>
	Cooling system	Type	Water	Water
	Speed	r.p.m.	1.500	1.500
	Displacement	c.c.	7.150	7.150
	Cylinders and disposition	n° disp.	6 L	6 L
	Aspiration	Type	Turbo	Turbo - Intercooler
	Engine power PRP	kWm	117,8	138,1
	Fuel consumption (100% load)	l/h	29,2	32,7
	Specific consumption PRP	g/kWh	208	199
	Engine governor (standard)	Type	Mechanical	Mechanical
	Electrical system (DC)	Volt	12	12
	<b>ALTERNATOR (1)</b>	<b>STAMFORD</b>	<b>UCI 274 E</b>	<b>UCI 274 F</b>
	Insulation	Class	H	H
	Mechanical degree of protection	Type	IP23	IP23
	Voltage regulation	Type (%)	Electronic (± 1,5)	Electronic (± 1,5)


(1) Depending on availability, MeccAlte alternator could be installed as variant, models ECP34 1L and ECP34 2L respectively (featuring IP21 and ±1% voltage regulation)

MANUAL CONTROL PANEL (MCP)		GSW145D	GSW170D	
MANUAL CONTROL PANEL (MCP)		<ul style="list-style-type: none"> <li>• Generating set voltage (3 phases).</li> <li>• Generating set frequency.</li> <li>• Generating set current (3 phases).</li> <li>• Battery voltage.</li> <li>• Power ( kVA - kW - kVAr).</li> <li>• Power factor Cos φ.</li> <li>• Hours-counter.</li> <li>• Fuel level (%).</li> <li>• Engine temperature.</li> </ul>		
	Manual control panel mounted on the genset, complete with digital control unit BE23 for monitoring, control and protection of the generating set.  <i>This configuration is in modification process by other of similar features.</i>	Commands and others	<ul style="list-style-type: none"> <li>• DC supply selector switch.</li> <li>• Push-buttons: start/stop.</li> <li>• Emergency stop button.</li> <li>• Remote starting availability by means of the control unit.</li> </ul>	
		Protections with alarm	<ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature.</li> <li>• Genset protections: over-frequency, battery voltage out of limits.</li> </ul>	
		Protections with shutdown	<ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature.</li> <li>• Genset protections: under/over voltage, over-load, under/over frequency, under/over battery voltage.</li> <li>• Circuit breaker protection: III poles.</li> <li>• Differential protection.</li> </ul>	
		Output	<ul style="list-style-type: none"> <li>• Power cables connection to terminals board (external).</li> </ul>	


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AUTOMATIC CONTROL PANEL (ACP)		GSW145D	GSW170D
AUTOMATIC CONTROL PANEL (ACP)	 <p>Automatic control panel mounted on the genset, complete with digital control unit <b>AC01</b> for monitoring, control and protection of the generating set.</p>	<b>Digital instrumentation</b> through AC-01 control unit. <ul style="list-style-type: none"> <li>• Generating set voltage (3 phases).</li> <li>• Mains voltage.</li> <li>• Generating set frequency.</li> <li>• Generating set current (3 phases).</li> <li>• Battery voltage.</li> <li>• Power (kVA - kW - kVAr).</li> <li>• Power factor Cos φ.</li> <li>• Hours-counter.</li> <li>• Engine speed r.p.m.</li> <li>• Fuel level (%).</li> <li>• Engine temperature.</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 - 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 by means of the control unit.</li> <li>• Acoustic alarm.</li> <li>• Automatic battery charger.</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.</li> <li>• Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.</li> </ul>	
		<b>Protections with shutdown</b> <ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature,</li> <li>• Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.</li> <li>• Circuit breaker protection: III poles.</li> <li>• Differential protection.</li> </ul>	
		<b>Output</b> <ul style="list-style-type: none"> <li>• Plinth row for connection from ACP to LTS panel.</li> <li>• Power cables connection to terminals board (external).</li> </ul>	

AUTOMATIC CONTROL PANEL (AMF)		GSW145D	GSW170D	
AUTOMATIC CONTROL PANEL (AMF)	 <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>	<b>Digital instrumentation</b> through AC01 control unit. <ul style="list-style-type: none"> <li>• Generating set voltage (3 phases).</li> <li>• Mains voltage.</li> <li>• Generating set frequency.</li> <li>• Generating set current (3 phases).</li> <li>• Battery voltage.</li> <li>• Power (kVA - kW - kVAr).</li> <li>• Power factor Cos φ.</li> <li>• Hours-counter.</li> <li>• Engine speed r.p.m.</li> <li>• Fuel level (%).</li> <li>• Engine temperature.</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 - 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>		
		<b>Change over contactors Mains/Genset</b>	IV poles - 200A	IV poles - 325A
		<b>Protections with alarm</b> <ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature.</li> <li>• Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.</li> </ul>		
		<b>Protections with shutdown</b> <ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature,</li> <li>• Genset protection: under/over voltage, overload, under/over battery voltage, battery charger 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 connected to terminals board (internal).</li> </ul>		


**CONTROL PANEL SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)**

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CONTROL PANEL SUPPLEMENTS	 <p><b>MAP: MANUAL ANALOGUE CONTROL PANEL.</b></p> <p>Manual control panel mounted on the genset, with analogue instrumentation, and protected through door with lockable handle.</p>		
	<b>Instrumentation (analogue)</b> <ul style="list-style-type: none"> <li>• Voltmeter with selector switch (3 phases).</li> <li>• Frequency meter.</li> <li>• Ammeter with selector switch (3 phases).</li> <li>• Hours-counter.</li> <li>• Fuel level indicator.</li> <li>• Oil pressure indicator.</li> <li>• Engine temperature 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.</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: III poles.</li> <li>• Differential protection.</li> </ul>		
<b>Output</b> <ul style="list-style-type: none"> <li>• Power cables connection to terminals board (external).</li> </ul>			


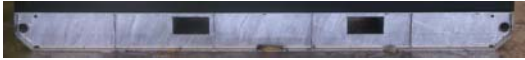
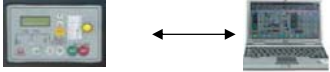

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<b>CONTROL PANEL SUPPLEMENTS</b>	<input type="checkbox"/> <b>SKB: SOCKETS KIT B WITH 5 SOCKETS.</b>	1 x 400V/63A 3P+N+T CE.
		1 x 400V/32A 3P+N+T CE.
		1 x 400V/16A 3P+N+T CE.
		1 x 230V/16A 2P+T CE.
		1 x 230V/16A Schuko.
<input type="checkbox"/> <b>RSS: REMOTE START/STOP.</b> Only for MAP.		
<input type="checkbox"/> <b>TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.</b>		

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

<b>GENSET SUPPLEMENTS</b>	<input type="checkbox"/> <b>GPA: ALTERNATOR IP23 PROTECTION.</b> Only with MeccAlte configuration	
	<input type="checkbox"/> <b>APM: PMG FOR STAMFORD ALTERNATOR + MX321 AVR.</b> Only with Stamford configuration	
	<input type="checkbox"/> <b>AFP: AUTOMATIC FUEL TRANSFER PUMP.</b>	
	<input type="checkbox"/> <b>DCC: DIFFERENT CANOPY COLOUR.</b>	
	<input type="checkbox"/> <b>EEG: ENGINE ELECTRONIC SPEED GOVERNOR ON GSW145D/70D.</b> (EMR type)	
	<input type="checkbox"/> <b>KRT: RENTAL KIT.</b> Complete of:	
	<b>Battery switch.</b>	
	<b>Fuel filter water separator.</b>	
	<b>Three way valve.</b>	
	<b>Earth rod.</b>	
<input type="checkbox"/> <b>Sockets kit (5 sockets).</b>	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.	
<input type="checkbox"/> <b>PHS: COOLANT PREHEATING SYSTEM.</b>		

**ACCESSORIES**

<b>ACCESSORIES</b>	<input type="checkbox"/> <b>LOAD TRANSFER SWITCH PANEL</b>	<b>GSW145D</b>	<b>GSW170D</b>	
	 <p>Load transfer switch panel built in a metal cabinet and supplied loose from the genset.</p>	<b>Change over contactors</b>	IV poles - 200A	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.			
<input type="checkbox"/> <b>GSB: GALVANIZED SKIDS.</b> Heavy duty galvanized skids to be installed under the genset. Easily transportable with fork lift.				
<input type="checkbox"/> <b>RCG: REMOTE CONTROL BY GSM KIT</b> (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.				
<input type="checkbox"/> <b>STR: SITE TRAILER.</b> Double axle.				
<input type="checkbox"/> <b>RTR: ROAD TRAILER (homologation only for Spanish territories).</b> Double axle.	