



REF. PCO **14.00**

# MODEL | **GSW195-220 Deutz**



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


MODEL		GSW195D	GSW220D	
CODE		SG191TDA	SG211TDA	
TECHNICAL FEATURES	PRIME POWER PRP	kVA (kW)	186 (149)	208 (166)
	EMERGENCY POWER LTP	kVA (kW)	194 (155)	220 (176)
	Voltage	Volt	400/230	400/230
	Frequency	Hz	50	50
	Power factor	Cos φ	0,8	0,8
	Fuel capacity	Litres	410	410
	Autonomy ( 100% load PRP)	h	9,3	8,4
	Dimensions (LxWxH)	mm	2.650x1.100x1.965	2.650x1.100x1.965
	Weight	kg	1.980	2.030
	<b>DIESEL ENGINE</b>	<b>DEUTZ</b>	BF6M1013FC G2	BF6M1013FC G3
	Cooling system	Type	Water	Water
	Speed	rpm	1.500	1.500
	Displacement	c.c.	7.150	7.150
	Cylinders and disposition	n° disp.	6 L	6 L
	Aspiration	Type	Turbo - Intercooler	Turbo - Intercooler
	Engine power PRP	kWm	161,6	178,6
	Fuel consumption (100% load)	l/h	43,9	49,1
	Specific consumption PRP	g/kWh	228	231
	Engine governor (standard)	Type	Electronic (EMR)	Electronic (EMR)
	Electrical system (DC)	Volt	24	24
<b>ALTERNATOR (1)</b>	<b>STAMFORD</b>	UCI 274 G	UCI 274 H	
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 ECO38 1S and ECO38 2S respectively (featuring IP21 and ±1% voltage regulation)

TECHNICAL CHARACTERISTICS LISTED ARE NOT INCLUSIVE OF ANY PRODUCT CUSTOMIZATIONS AND THE PRODUCER RESERVES THE RIGHT TO MODIFY THEM FOR INNOVATIONS WITHOUT PRIOR NOTICE


MANUAL CONTROL PANEL (MCP)		GSW195D	GSW220D
MANUAL CONTROL PANEL (MCP)	<p>Manual control panel mounted on the genset, complete with digital control unit <b>BE23</b> for monitoring, control and protection of the generating set.</p> <p><i>This configuration is in modification process by other of similar features.</i></p>	<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>• Oil pressure.</li> <li>• Engine temperature.</li> </ul>	
		<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.</li> </ul>	
		<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>	
		<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>	
		<ul style="list-style-type: none"> <li>• Power cables connection to terminals board (internal).</li> </ul>	

TECHNICAL CHARACTERISTICS LISTED ARE NOT INCLUSIVE OF ANY PRODUCT CUSTOMIZATIONS AND THE PRODUCER RESERVES THE RIGHT TO MODIFY THEM FOR INNOVATIONS WITHOUT PRIOR NOTICE

AUTOMATIC CONTROL PANEL (ACP)		GSW195D	GSW220D
AUTOMATIC CONTROL PANEL (ACP)		<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>• Oil pressure.</li> <li>• Engine temperature.</li> </ul>	
	Automatic control panel mounted on the genset, complete with digital control unit AC01 for monitoring, control and protection of the generating set.	<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>Digital instrumentation</b> through AC-01 control unit.	<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>Commands and others</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>Protections with alarm</b>	<ul style="list-style-type: none"> <li>• Plinth row for control cables connection from ACP panel (mounted on the genset) to LTS panel.</li> <li>• Power cables connection to terminals board (internal).</li> </ul>	
<b>Protections with shutdown</b>			
<b>Output</b>			

AUTOMATIC CONTROL PANEL (AMF)		GSW195D	GSW220D
AUTOMATIC CONTROL PANEL (AMF)		<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>• Oil pressure.</li> <li>• Engine temperature.</li> </ul>	
	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.	<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>Digital instrumentation</b> through AC-01 control unit.	<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>Commands and others</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>Change over contactors Mains/Genset</b>	IV poles - 325A.	IV poles - 325A.
	<b>Protections with alarm</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>	
<b>Protections with shutdown</b>			
<b>Output</b>			

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


CONTROL PANEL SUPPLEMENTS		<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>	
	Manual control panel mounted on the genset, with analogue instrumentation, and protected through door with lockable handle.	<ul style="list-style-type: none"> <li>• Start/stop selector switch with key.</li> <li>• Emergency stop button.</li> </ul>	
	<b>Instrumentation (analogue)</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>Commands and others</b>	<ul style="list-style-type: none"> <li>• Circuit breaker protection: III poles.</li> <li>• Differential protection.</li> <li>• Engine protection unit: low fuel level, low pressure oil, high engine temperature, battery charger failure.</li> </ul>	
	<b>Protections with alarm</b>	<ul style="list-style-type: none"> <li>• Power cables connection directly from circuit breaker.</li> </ul>	
<b>Protections with shutdown</b>			
<b>Output</b>			
<ul style="list-style-type: none"> <li>• TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.</li> </ul>			

TECHNICAL CHARACTERISTICS LISTED ARE NOT INCLUSIVE OF ANY PRODUCT CUSTOMIZATIONS AND THE PRODUCER RESERVES THE RIGHT TO MODIFY THEM FOR INNOVATIONS WITHOUT PRIOR NOTICE

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

<b>GENSET SUPPLEMENTS</b>	● <b>GPA: ALTERNATOR IP23 PROTECTION.</b> Only with MeccAlte configuration
	● <b>APM: PMG FOR STAMFORD ALTERNATOR + MX321 AVR.</b> Only with Stamford configuration
	● <b>AFP: AUTOMATIC FUEL TRANSFER PUMP.</b>
	● <b>PHS: COOLANT PREHEATING SYSTEM.</b>

**ACCESSORIES**

<b>ACCESSORIES</b>	● <b>LOAD TRANSFER SWITCH PANEL.</b>	<b>GSW195D</b>	<b>GSW220D</b>
		<b>Change over contactors</b>	<b>IV poles - 325A.</b>
		<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>
	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.	
● <b>FEC: FLEXIBLE EXHAUST COMPENSATOR.</b>			
● <b>RES: RESIDENTIAL SILENCER.</b>			
● <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 for automatic versions with <b>ACO1</b> control unit.	