



REF. GDS **24.01**

# MODEL | GSW310-590 Volvo

- VOLVO Diesel engine.
- MeccAlte alternator.
- Water cooling system with radiator.
- Internal residential muffler.
- Double lifting points frame structure.
- Complete with engine and battery liquids.
- Manual pump oil draining pipe.
- Leak proof tray facilities.
- Weather proof version.




MODEL		GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V	
CODE		SC281TWA	SC331TWA	SC371TWA	SC401TWA	SC451TWA	SC501TWA	SC571TWA	
TECHNICAL FEATURES	PRIME POWER PRP	kVA (kW)	283 (226)	315 (252)	378 (302)	411 (329)	461 (369)	505 (404)	571 (457)
	EMERGENCY POWER LTP	kVA (kW)	311 (249)	330 (264)	414 (331)	437 (350)	507 (406)	546 (437)	601 (481)
	Voltage	Volt	400/231	400/231	400/231	400/231	400/231	400/231	400/231
	Frequency	Hz	50	50	50	50	50	50	50
	Power factor	Cos φ	0,8	0,8	0,8	0,8	0,8	0,8	0,8
	Fuel capacity	Litres	636	636	636	636	636	636	636
	Autonomy (100% load PRP)	h	10,1	8,9	7,6	7,0	6,4	5,7	5,0
	Acoustic power	LWA	97	97	97	97	98	TBA	TBA
	Acoustic pressure at 7m	dB(A)	72	72	72	72	73	#IVALOR!	#IVALOR!
	Dimensions (LxWxH)	mm	3.950 x 1.460 x 2.095	3.950 x 1.460 x 2.095	3.950 x 1.460 x 2.095	3.950 x 1.460 x 2.095	4.400 x 1.560 x 2.250	4.400 x 1.560 x 2.250	4.400 x 1.560 x 2.250
	Weight (dry)	kg	3.200	3.200	3.675	3.675	4.500	4.500	4.890
	DIESEL ENGINE	VOLVO	TAD940GE	TAD941GE	TAD1241GE	TAD1242GE	TAD1640GE	TAD1641GE	TAD1642GE
	Cooling system	Type	Water	Water	Water	Water	Water	Water	Water
	Speed	r.p.m.	1.500	1.500	1.500	1.500	1.500	1.500	1.500
	Displacement	c.c.	9.360	9.360	12.130	12.130	16.120	16.120	16.120
	Cylinders and disposition	n° disp.	6 L	6 L	6 L	6 L	6 L	6 L	6 L
	Aspiration	Type	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler	Turbo - Intercooler
	Engine power PRP	kWm	241	279	323	352	393	430	485
	Fuel consumption (100% load)	l/h	57,7	65,0	76,0	83,0	91,0	101,0	116,0
	Specific consumption PRP	g/kWh	201	200	198	198	198	196	197
Engine governor (standard)	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	
ALTERNATOR	MECCALTE	ECO38 2L	ECO38 2L	ECO40 1S	ECO40 1S	ECO40 3S	ECO40 3S	ECO40 1L	
Insulation	Class	H	H	H	H	H	H	H	
Mechanical degree of protection	Type	IP21	IP21	IP21	IP21	IP21	IP21	IP21	
Voltage regulation	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	

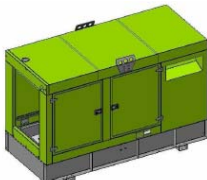
TECHNICAL CHARACTERISTICS NOT IMPERATIVE RESERVATION OF MODIFICATIONS FOR INNOVATION OF THE PRODUCT

MANUAL / AUTOMATIC CONTROL PANEL (ACP)		GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V
MANUAL / 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>						
		<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>• DC system disconnection key.</li> <li>• Acoustic alarm.</li> <li>• Automatic battery charger.</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, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.</li> <li>• Circuit breaker protection: III poles.</li> <li>• Differential protection.</li> </ul>						
		<ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature, low coolant level.</li> <li>• Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.</li> </ul>						
		<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>						

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

AUTOMATIC CONTROL PANEL (AMF)		GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V
 <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 ACO1 for monitoring, control and protection of the generating set.</p>	<p><b>Digital instrumentation</b> through AC-01 control unit (CAN BUS).</p> <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>							
	<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 Mains/Genset</b></p>	IV poles - 500A	IV poles - 500A	IV poles - 700A	IV poles - 700A	IV poles - 700A	IV poles - 1.000A	IV poles - 1.000A
	<p><b>Protections with alarm</b></p>	<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>						
	<p><b>Protections with shutdown</b></p>	<ul style="list-style-type: none"> <li>• Engine protections: low fuel level, low oil pressure, high engine temperature, low coolant 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><b>GENSET SUPPLEMENTS</b></p>	<p>● <b>GPA: ALTERNATOR IP23 PROTECTION.</b></p>	
	<p>● <b>AFP: AUTOMATIC FUEL TRANSFER PUMP.</b></p>	
	<p>● <b>DCC: DIFFERENT CANOPY COLOUR.</b></p>	
	<p>● <b>FBD: FULLY BUNDED BASEFRAME</b></p>	
	<p>● <b>PHS: COOLANT PREHEATING SYSTEM.</b></p>	
	<p>● <b>WPC: WEATHER PROOF VERSION (*).</b> Economy canopy version useful in applications where is not necessary to reduce the noise level, but is necessary a weather protection. It includes only the sheet metal canopy, without the soundproof panels and the expulsion air module. Industrial silencer on radiator side.</p> <p>Dimensions (mm). Lifting points and exhaust silencer not included:  <b>GSW310/330/415/450V:</b> 3300 x 1460 x 2016 - <b>GSW510/560/590V:</b> 3500 x 1560 x 2250</p> <p>(*). This version does not comply with 2000/14EC regulation.</p>	

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

<p><b>CONTROL PANEL SUPPLEMENTS</b></p>	<p>● <b>TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.</b></p>	
	<p>● <b>SKB: SOCKETS KIT B WITH 5 SOCKETS.</b></p>	<p>1 x 400V/63A 3P+N+T CE.</p>
		<p>1 x 400V/32A 3P+N+T CE.</p>
		<p>1 x 400V/16A 3P+N+T CE.</p>
		<p>1 x 230V/16A 2P+T CE.</p>
<p>1 x 230V/16A Schuko.</p>		
<p>● <b>RSS: REMOTE START &amp; STOP PRE-ARRANGED FREE CONTACTS.</b></p>		

**ACCESSORIES**

ACCESSORIES		GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V
 <p>Load transfer switch panel built in a metal cabinet and supplied loose from the genset.</p>	<p><b>Change over contactors</b></p>	IV poles - 500A	IV poles - 500A	IV poles - 700A	IV poles - 700A	IV poles - 700A	IV poles - 1.000A	IV poles - 1.000A
	<p><b>Connections</b></p>	<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>						
	<p><b>Protections</b></p>	<ul style="list-style-type: none"> <li>• Contactors mechanically and electrically interlocked.</li> <li>• Emergency stop button.</li> </ul>						
<p>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>								
<p>● <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.</p>	