REF. GDS **11.**01

MODEL **GSW310-590 Volvo**

- **VOLVO Diesel engine.**
- **MeccAlte alternator.**
- **Water cooling system with radiator.**
- **Industrial muffler.**
- **Complete with engine and battery liquids.**

MODEL			GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V
	CODE		SG281TWA	SG331TWA	SG371TWA	SG401TWA	SG451TWA	SG501TWA	SG571TWA
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
	Dimensions (LxWxH)	mm	3.300 x 1.400 x 1.887	3.300 x 1.400 x 1.887	3.300 x 1.400 x 1.917	3.300 x 1.400 x 1.917	3.500 x 1.500 x 2.120	3.500 x 1.500 x 2.120	3.500 x 1.500 x 2.120
	Weight (dry)	kg	2.600	2.600	3.050	3.050	3.620	3.620	3.850
	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	241,0	279,0	323,0	352,0	393,0	430,0	485,0
	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 IMPEGNATIVE 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)	 Manual / Automatic control panel mounted on the genset, protected by a locking door, complete with digital control unit **AC01** for monitoring, control and protection of the generating set.	**Digital instrumentation** through AC-01 control unit (CAN BUS).	• Genereting set voltage (3 phases). • Mains voltage. • Generating set frequency. • Generating set current (3 phases). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%). • Oil pressure. • Engine temperature.					
		Commands and others	• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced. • Push-buttons: start/stop, up/down selection, reset. • Emergency stop button. • DC system disconnection key. • Acoustic alarm. • Automatic battery charger.					
		Protections with alarm	• Engine protections: low fuel level, low oil pressure, high engine temperature. • Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure. • Circuit breaker protection: III poles. • Differential protection.					
		Protections with shutdown	• Engine protections: low fuel level, low oil pressure, high engine temperature, low coolant level. • Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.					
		Output	• Plinth row for connection from ACP to LTS panel. • Power cables connection to terminals board (external).					

AUTOMATIC CONTROL PANEL (AMF)

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.

AUTOMATIC CONTROL PANEL (AMF)	GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V
Digital instrumentation through AC-01 control unit (CAN BUS).	• Genereting set voltage (3 phases). • Mains voltage. • Generating set frequency. • Generating set current (3 phases). • Battery voltage. • Power (kVA - kW - kVAr). • Power factor Cos φ. • Hours-counter. • Engine speed r.p.m. • Fuel level (%). • Oil pressure. • Engine temperature.						
Commands and others	• Selector switch with six positions: Automatic test - Automatic starting - Engine locked - Mains contactor forced - Manual starting - Genset contactor forced. • Push-buttons: start/stop, up/down selection, reset. • Emergency stop button. • Remote starting availability. • Acoustic alarm. • Automatic battery charger.						
Change over contactors Mains/Genset	IV poles - 500A	IV poles - 500A	IV poles - 700A	IV poles - 700A	IV poles - 700A	IV poles - 1.000A	IV poles - 1.000A
Protections with alarm	• Engine protections: low fuel level, low oil pressure, high engine temperature. • Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure.						
Protections with shutdown	• Engine protections: low fuel level, low oil pressure, high engine temperature, low coolant level. • Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.						
Output	• Plinth row for connection from pre-wired panel (mounted on the genset) to AMF panel. • Power cables connected to terminals board (internal).						

GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

GENSET SUPPLEMENTS

- **GPA: ALTERNATOR IP23 PROTECTION.**
- **AFP: AUTOMATIC FUEL TRANSFER PUMP.**
- **PHS: COOLANT PREHEATING SYSTEM.**

CONTROL PANEL SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)

CONTROL PANEL SUPPLEMENTS

- **TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.**
- **RSS: REMOTE START & STOP PRE-ARRANGED FREE CONTACTS.**

ACCESSORIES

ACCESSORIES

- **LOAD TRANSFER SWITCH PANEL.**

Load transfer switch panel built in a metal cabinet and supplied loose from the genset.

LOAD TRANSFER SWITCH PANEL.	GSW310V	GSW330V	GSW415V	GSW450V	GSW510V	GSW560V	GSW590V
Change over contactors	IV poles - 500A	IV poles - 500A	IV poles - 700A	IV poles - 700A	IV poles - 700A	IV poles - 1.000A	IV poles - 1.000A
Connections	• Plinth row for connection from ACP to LTS panel. • Terminals board for power cables connection (Genset-Mains-Load).						
Protections	• Contactors mechanically and electrically interlocked. • Emergency stop button.						
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.							

- **FEC: FLEXIBLE EXHAUST COMPENSATOR.**
- **RES: RESIDENTIAL SILENCER.**
- **RCG: REMOTE CONTROL BY GSM KIT** (kit for genset management and control by remote PC; comunication available by means of RS232 directly to PC or through GSM modem). Available only for automatic versions with **AC01** control unit.