



REF. GDS 21.00

# MODEL GPW650 - 2600


- MTU Diesel engine (Fuel Consumption Optimized).
- Water cooling system.
- AIR-TO-AIR Intercooler (Series 2000).
- AIR-TO-WATER Intercooler (Series 4000).
- Industrial mufflers with flexible compensators.
- Manual oil draining pump with pipe.
- Automatic control panel mounted on the genset.
- Main circuit breaker mounted on the genset.



MODEL		GPW650	GPW720	GPW830	GPW980	GPW1025	GPW1300	GPW1560	GPW1880	GPW2090	GPW2600	
CODE		SI651TMA	SI721TMA	SI831TMA	SI931TMA	SI102TMA	SI142TMA	SI162TMA	SI182TMA	SI212TMA	SI262TMA	
TECHNICAL FEATURES	PRIME POWER PRP	kVA (kW)	638 (510)	700 (560)	824 (659)	924 (739)	1015 (812)	1358 (1086)	1554 (1243)	1863 (1490)	2089 (1671)	2588 (2070)
	STANDBY POWER LTP	kVA (kW)	670 (536)	735 (588)	874 (699)	1016 (813)	1123 (899)	1420 (1136)	1660 (1328)	1944 (1555)	2268 (1814)	2700 (2160)
	Voltage (three phases)	Volt	400/231	400/231	400/231	400/231	400/231	400/231	400/231	400/231	400/231	400/231
	Frequency	Hz	50	50	50	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	0,8	0,8	0,8
	Fuel capacity	Litres	120	120	120	120	120	120	120	120	120	120
	Autonomy (100% load PRP)	h	0,85	0,76	0,67	0,59	0,53	0,41	0,35	0,29	0,26	0,21
	Dimensions (LxWxH)	mm	3860x1580x2070	4067x1580x2070	4398x1752x2210	4398x1752x2210	4591x1752x2451	4890x2000x2448	4890x2000x2448	5677x2286x2790	5762x2286x2790	6990x2500x3350
	Weight	kg	5.758	6.069	6.942	7.144	7.840	12.144	12.422	15.615	15.899	18.000
	DIESEL ENGINE	MTU	12V2000-G23	12V2000-G63	16V2000-G23	16V2000-G63	18V2000-G63	12V4000-G21	12V4000-G61	16V4000-G21	16V4000-G61	20V4000-G22
	Cooling system	Type	Water	Water	Water	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	1.500	1.500	1.500
	Displacement	c.c.	23.880	23.880	31.840	31.840	35.800	48.700	48.700	65.000	65.000	89.810
	Cylinders and disposition	n° disp.	12 V	12 V	16 V	16 V	18 V	12 V	12 V	16 V	16 V	20 V
	Aspiration	Type	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CWC	Turbocharged with CWC	Turbocharged with CWC	Turbocharged with CWC	Turbocharged with CWC
	Net engine power PRP	kWm	541	601	690	775	848	1.175	1.300	1.570	1.730	2.170
	Net engine power LTP	kWm	598	664	762	856	938	1.300	1.435	1.730	1.910	2.390
	Fuel consumption (100% load)	l/h	124	138	157	178	200	258	300	364	402	489
	Engine governor (standard)	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
	ALTERNATOR	STAMFORD / MECC-ALTE	ECO 40 1.5L	ECO 40 2L	ECO 43 1S	ECO 43 2S	ECO 43 1L	ECO 43 2L	PI 734 C	ECO 46 2S	ECO 46 1L	ECO 46 2L
Insulation	Class	H	H	H	H	H	H	H	H	H	H	
Mechanical degree of protection	Type	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 23	IP 21	IP 21	IP 21	
Voltage regulation	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	
Sustained short circuit current	Icc / Time	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 10 sec.	3 x In / 20 sec.	3 x In / 20 sec.	3 x In / 20 sec.	

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

AUTOMATIC/MANUAL CONTROL PANEL (ACP)		GPW650	GPW720	GPW830	GPW980	GPW1025	GPW1300	GPW1560	GPW1880	GPW2090	GPW2600
AUTOMATIC/MANUAL 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>• Active power (kW).</li> <li>• Reactive power (kVar).</li> <li>• Apparent power (kVA).</li> <li>• Power factor (cos φ).</li> <li>• Start-counter.</li> <li>• Active energy counter (kWh) no fiscal.</li> <li>• Hours-counter.</li> <li>• Oil pressure (optional).</li> <li>• Engine coolant temperature (optional).</li> </ul>									
	Automatic control panel mounted on the genset, complete with digital control unit DST4600A for monitoring, control and protection of the generating set.	<ul style="list-style-type: none"> <li>• Key operated mode selector switch: Automatic starting - Manual starting - Program - OFF/RESET - Test.</li> <li>• Engine start push button.</li> <li>• Engine stop push button.</li> <li>• Emergency stop push button.</li> <li>• Acoustic alarm silencing push button.</li> <li>• UP/DOWN push button for display selection.</li> </ul>									
		<ul style="list-style-type: none"> <li>• Automatic battery charger.</li> <li>• Engine coolant preheating system power supply (single phase).</li> <li>• Acoustic alarm.</li> <li>• Programmable periodic test.</li> <li>• Genset report.</li> </ul>									
	Protections without shutdown	Battery failure (maximum/minimum voltage), pre-alarm for low oil pressure, pre-alarm for high engine coolant temperature.									
	Protections with shutdown	High engine coolant temperature, low oil pressure, overspeed (derived from generator frequency), engine over-crank, generator overload (derived from external contact of MCB), fuel reserve with delayed shutdown, no fuel, emergency stop.									
	Alarms shown on display	Belts failure, overload and short circuit (electronic protection), running under conditions not reached, generator under voltage, generator over voltage, generator under frequency, generator over frequency, maximum power, free alarm (w/o shutdown), power reverse, closing of Mains contactor or genset contactor failed, stop failure.									

MAIN CIRCUIT BREAKER PANEL		GPW650	GPW720	GPW830	GPW980	GPW1025	GPW1300	GPW1560	GPW1880	GPW2090	GPW2600	
MAIN CIRCUIT BREAKER PANEL		Nominal current (In)	1000A	1250A	1250A	1600A	1600A	2000A	2500A	3200A	3200A	4000A
	Main features	<ul style="list-style-type: none"> <li>• Number of poles: III poles.</li> <li>• Type of construction: fix moulded case.</li> <li>• Operating type: automatic.</li> <li>• Use category (EN60947-2): Curve B.</li> <li>• Current transformers and tripping coil.</li> <li>• Electronic protection by interchangeable relays for maximum current against overloads and short-circuits for alternate current.</li> <li>• Rated service voltage (Ue) 50/60Hz: 690V.</li> </ul> <p>Supplied in a separate panel (made of steel sheets) for mounting on the baseframe. It protects the generator against overloads (thermal section) and short circuits (magnetic section).</p>										



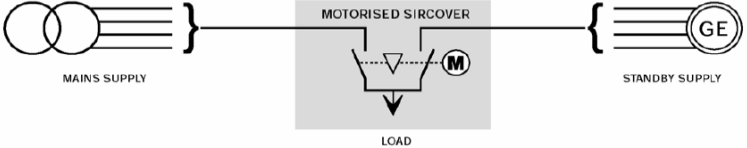
**GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)**

GS	• EFO: EXTENDED CAPACITY ON BASE FUEL TANK.
	• DPP: DIFFERENTIAL PROTECTION.
	• AFP: AUTOMATIC REFUELING SYSTEM.
	• RES: RESIDENTIAL SILENCER.
	• PHS: COOLANT PREHEATING SYSTEM. It is absolutely necessary for starting under ambient conditions < +10°C.

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

CPS	• TIF: IV POLES CIRCUIT BREAKER INSTEAD OF III POLES.
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**ACCESSORIES**

LOAD TRANSFER SWITCH PANEL		GPW650	GPW720	GPW830	GPW980	GPW1025	GPW1300	GPW1560	GPW1880	GPW2090	GPW2600	
ACCESSORIES		Motorized change over contactors	IV poles - 1250A		IV poles - 1600A		IV poles - 2000A	IV poles - 2500A	IV poles - 3200A		IV poles - 4000A	
		Commands	<ul style="list-style-type: none"> <li>• Motorized contactors integrated into Sircover (SOCOME) device.</li> <li>• 3 positions selector switch, placed on the front of the panel, which allows selecting manually the following positions:                             <ul style="list-style-type: none"> <li>⇒ AUTO: operating mode based on the automatic logic control DST4600A.</li> <li>⇒ MAINS: Mains power supply forcement.</li> <li>⇒ GENSET: Genset power supply forcement.</li> </ul> </li> <li>• Manual pulley, placed on the own change over contactors, for emergency load transfer.</li> </ul>									
		Connections	<ul style="list-style-type: none"> <li>• Plinth row for connection from MCB (main circuit breaker) to LTS panel.</li> <li>• Terminals board for power cables connection (GENSET - MAINS - LOAD).</li> </ul>									
		Protections	<ul style="list-style-type: none"> <li>• Mechanically and electrically interlocked.</li> <li>• 2 visual LED's to show the contactors position: MAINS - GENSET.</li> <li>• Mechanical degree of protection: IP40 (external) and IP20 (internal).</li> </ul>									
		<p>Automatic control panel + LTS panel measures the Mains voltage and starts automatically the genset within few seconds to supply load in case of Mains failure. It transfers immediately the load back to the Mains when its voltage returns within the rated values.</p>  <p>Load transfer switch panel built in a metal cabinet and supplied loose from the genset.</p>										