



REF. GDS **23.00**

## MODEL | GPW655 - 1880



- PERKINS Diesel engine.
- Water cooling system.
- AIR-TO-AIR Intercooler (engine Series TAG).
- AIR-TO-WATER Intercooler (engine Series TWG).
- Industrial mufflers with flexible compensators.
- Manual pump oil draining pipe.
- Automatic control panel mounted on the genset.
- Main circuit breaker mounted on the genset.




MODEL		GPW655	GPW740	GPW800	GPW975	GPW1020	GPW1250	GPW1320	GPW1500	GPW1700	GPW1850
CODE		SI651TPA	SI741TPA	SI801TPA	SI971TPA	SI102TPA	SI122TPA	SI132TPA	SI152TPA	SI172TPA	SI182TPA
<b>PRIME POWER PRP</b>	kVA (kW)	639 (511)	700 (560)	807 (646)	975 (780)	1031 (825)	1253 (1002)	1358 (1086)	1499 (1199)	1689 (1351)	1852 (1482)
<b>STANDBY POWER LTP</b>	kVA (kW)	670 (536)	735 (588)	874 (699)	1016 (813)	1134 (907)	1385 (1108)	1420 (1136)	1649 (1319)	1770 (1416)	1944 (1555)
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	0,82	0,69	0,63	0,50	0,48	0,41	0,40	0,35	0,30	0,28
Dimensions (LxWxH)	mm	5075x1870x2620	6550x2000x3450	3960x1706x2131	4830x1868x2494	4830x1868x2494	4852x1868x2686	4962x2265x3046	4962x2265x3046	5620x2150x2720	5620x2775x3516
Weight	kg	6.410	8.456	6.203	8.004	8.166	10.284	11.019	11.317	14.136	14.588
<b>DIESEL ENGINE</b>	<b>PERKINS</b>	2806C-E18TAG2	4006C-23 TAG2A	4006-23 TAG3A	4008 TAG2A	4008 TAG2A	4012 TWG2	4012 TAG1A	4012 TAG2A	4016 TWG2	4016 TAG1A
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.	18.100	22.921	22.921	30.561	30.561	45.842	45.842	45.842	61.123	61.123
Cylinders and disposition	n° disp.	6 L	6 L	6 L	8 L	8 L	12 V	12 V	12 V	16 V	16 V
Aspiration	Type	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CWC	Turbocharged with CAC	Turbocharged with CAC	Turbocharged with CWC	Turbocharged with CAC
Net engine power PRP (with fan)	kWm	542	620	679	861	861	1.044	1.136	1.254	1.406	1.537
Net engine power LTP (with fan)	kWm	599	685	760	947	947	1.154	1.250	1.380	1.550	1.690
Fuel consumption (100% load)	l/h	128	151	166	211	219	255	263	300	348	375
Engine governor (standard)	Type	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
<b>ALTERNATOR</b>	<b>STAMFORD / MECC ALTE</b>	ECO 40 1.5L	ECO 40 2L	ECO 43 1S	ECO 43 2S	ECO 43 1L	ECO 43 2L	ECO 43 2L	PI 734 C	PI734 D	ECO 46 2S
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 21	IP 23	IP 23	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 / 20 sec.	3 x In / 10 sec.	3 x In / 10 sec.	3 x In / 20 sec.

TECHNICAL FEATURES






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

AUTOMATIC/MANUAL CONTROL PANEL (ACP)		GPW655	GPW740	GPW800	GPW975	GPW1020	GPW1250	GPW1320	GPW1500	GPW1700	GPW1850
 <p>Automatic control panel mounted on the genset, complete with digital control unit <b>DST4600A</b> for monitoring, control and protection of the generating set.</p> 	<b>Digital instrumentation</b> through DST4600A 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>• 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>									
	<b>Commands and others</b>	<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>									
	<b>Auxiliary services</b>	<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>									
	<b>Protections without shutdown</b>	Battery failure (maximum/minimum voltage), pre-alarm for low oil pressure, pre-alarm for high engine coolant temperature.									
	<b>Protections with shutdown</b>	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.									
	<b>Alarms shown on display</b>	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.									


AUTOMATIC/MANUAL CONTROL PANEL (ACP)

MAIN CIRCUIT BREAKER PANEL		GPW655	GPW740	GPW800	GPW975	GPW1020	GPW1250	GPW1320	GPW1500	GPW1700	GPW1850	
MAIN CIRCUIT BREAKER PANEL		Nominal current (In)	1000A	1250A	1250A	1600A	1600A	2000A	2000A	2500A	2500A	3200A
	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>										



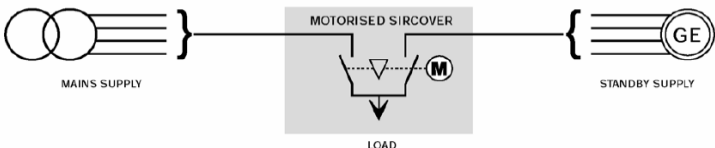
**GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)**

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		GPW655	GPW740	GPW800	GPW975	GPW1020	GPW1250	GPW1320	GPW1500	GPW1700	GPW1850	
ACCESSORIES		Motorized change over contactors	IV poles - 1250A		IV poles - 1600A		IV poles - 2000A		IV poles - 2500A		IV poles - 3150A	
		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> <div style="text-align: center;">  <p>The diagram shows a schematic of the load transfer switch. On the left, 'MAINS SUPPLY' is represented by three overlapping circles. A line connects this to a central box labeled 'MOTORISED SIRCOVER' which contains a switch symbol and a motor symbol 'M'. Another line connects this to 'STANDBY SUPPLY' represented by three overlapping circles with a 'GE' logo. A line from the bottom of the switch symbol points to 'LOAD'.</p> </div>										