



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              |
| PRIME POWER PRP                 | kVA (kW)                    | 639 (511)             | 700 (560)             | 807 (646)             | 975 (780)             | 1031 (825)            | 1253 (1002)           | 1358 (1086)           | 1499 (1199)           | 1689 (1351)           | 1852 (1482)           |
| STANDBY POWER LTP               | 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 (<i>optional</i>).</li> <li>• Engine coolant temperature (<i>optional</i>).</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.  |        |        |        |         |         |         |         |         |         |

| 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>  |        |        |        |         |         |         |         |         |         |       |



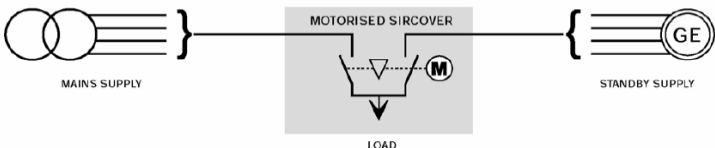
**GENSET SUPPLEMENTS (ONLY AVAILABLE WHEN ORDERED)**

|    |   |
|----|---|
| 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. |
|-----|---|

**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. Below the switch, an arrow points to 'LOAD'.</p> </div> |   |        |                  |         |                  |         |                  |         |                  |  |
|                            | <p>Load transfer switch panel built in a metal cabinet and supplied loose from the genset.</p> |   |   |        |                  |         |                  |         |                  |         |                  |  |