



# KMGP-435-1 GENSET

Generating Set Powered By Perkins



Image for illustration purposes only

**STAMFORD LEROY-SOMER™**

## Output Ratings

| Frequency,Speed/Volt   | Prime Power                 | Standby Power               |
|------------------------|-----------------------------|-----------------------------|
| 1800rpm,60 Hz/416-440V | 320KW <sub>e</sub> / 400KVA | 348KW <sub>e</sub> / 435KVA |

## Genset Specifications

|                                          |                       |
|------------------------------------------|-----------------------|
| <b>Engine Make &amp; Model</b>           | Perkins 2206A-E13TAG3 |
| <b>Origin</b>                            | USA                   |
| <b>Alternator Type</b>                   | S4LID-E4I/TAL046H     |
| <b>Control Panel</b>                     | Deep Sea - 7310 MKII  |
| <b>Circuit Breaker Type</b>              | 3 Pole MCCB           |
| <b>Tropical Cooling System</b>           |                       |
| <b>Digital Electronic Governor</b>       |                       |
| <b>Turbocharged</b>                      |                       |
| <b>Exceptional Power to Weight Ratio</b> |                       |

| Fuel System (prime)   | 50% | 75% | 100% |
|-----------------------|-----|-----|------|
| 1800rpm, 60 Hz (L/hr) | 43  | 62  | 81   |

## International Standards

Engine confirm to ISO 9001:2000, ISO 14001, ISO 10054, ISO 3046, BS 5514, DIN 6271. Alternator confirm to ISO 9001, ISO 14001, BS EN 60034, BS 5000, VDE 0530, NEMA MG1-32, IEC34 CSA C22.2-100, AS 1359, BS 6861 I, B En 61000-6-2:2001



## RATING GUIDELINES

**PRIME POWER** rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A10 % overload capability for governing purpose is available for this rating.

**MAXIMUM STANDBY POWER** rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating. **1 hp = 1 kW x 1.36**

## Engine Technical Data

|                                     |              |
|-------------------------------------|--------------|
| <b>No. of Cylinders / Alignment</b> | 6 In Line    |
| <b>Cycle</b>                        | 4 Stroke     |
| <b>Aspiration</b>                   | Turbocharged |
| <b>Injection</b>                    | Direct       |
| <b>Bore, mm</b>                     | 130          |
| <b>Stroke, mm</b>                   | 157          |
| <b>Displacement, l</b>              | 12.5         |
| <b>Compression Ratio</b>            | 16.3:1       |
| <b>Starting</b>                     | 24V Electric |
| <b>Alternators, Amps</b>            | 24V/70A      |

## Alternator Technical Data

|                             |                                |
|-----------------------------|--------------------------------|
| <b>No. of Bearings</b>      | Single Bearing                 |
| <b>Insulation System</b>    | Class H                        |
| <b>Excitation</b>           | Self Excited                   |
| <b>Voltage Regulator</b>    | AS440/R150                     |
| <b>Protection</b>           | IP23                           |
| <b>Temperature Rise, °C</b> | Prime 125/40<br>Standby 163/27 |
| <b>Regulation</b>           | ±1.0%                          |
| <b>No. of Phases</b>        | 3                              |
| <b>No. of Poles</b>         | 4                              |

## Dimensions (m) & Weights (kg)

|                 | L    | W    | H    | Weight | Tank Capacity(L) |
|-----------------|------|------|------|--------|------------------|
| <b>Open</b>     | 3.5  | 1.13 | 1.99 | 2760   | 385              |
| <b>Enclosed</b> | 4.85 | 1.47 | 2.35 | 4535   | 554              |

For the enclosed type:-  
The sound level is around 85 dB(A) @ 3m .  
The height to be increased by 12cm for the hook.

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| Performances                 |  | 1800rpm  |
|------------------------------|--|----------|
| <b>Alternator Efficiency</b> |  | 93.4%    |
| <b>Engine Power</b>          |  |          |
| Prime Power, KWm(hp)         |  | 349(468) |
| Standby Power, KWm(hp)       |  | 381(511) |
| <b>Alternator</b>            |  |          |
| Prime Power, KWe             |  | 320      |

| Lubrication System                            |  | 1800rpm                                |
|-----------------------------------------------|--|----------------------------------------|
| <b>Oil Consumption (l/hr)</b>                 |  | 0.15% of fuel consumption at full load |
| <b>Oil Sump Capacity, l</b>                   |  | 38                                     |
| <b>Oil System Capacity Include Filters, l</b> |  | 40                                     |

| Cooling System                                                     |  | 1800rpm    |
|--------------------------------------------------------------------|--|------------|
| <b>Heat Radiation from Engine and Alternator, Power KW</b>         |  | 49.6       |
| <b>Heat Rejection to Coolant and Lube Oil at Standby Power, KW</b> |  | 139.5      |
| <b>Radiator Cooling Air Flow, m<sup>3</sup>/min (cfm)</b>          |  | 716(25285) |
| <b>Coolant Capacity, l</b>                                         |  | 51.4       |

| Intake & Exhaust System                                             |  | 1800rpm    |
|---------------------------------------------------------------------|--|------------|
| <b>Air Flow Combustion at Standby Power, m<sup>3</sup>/min(cfm)</b> |  | 29(1024)   |
| <b>Heat Rejection Exhaust at Standby Power, KW</b>                  |  | 273.7      |
| <b>Exhaust Gas Temperature at Standby °C</b>                        |  | 660        |
| <b>Max Allowable Back Pressure in Exhaust Line, Kpa</b>             |  | 10         |
| <b>Exhaust Gas Flow at Standby Power, m<sup>3</sup>/min(cfm)</b>    |  | 73.5(2595) |

| Accessories                     |                                    |
|---------------------------------|------------------------------------|
| <b>Standard Silencer</b>        | <b>Anti-Vibration Pads</b>         |
| <b>Stainless Steel Flexible</b> | <b>Genuine Coolant 'Ready Mix'</b> |
| <b>Genuine Oil</b>              |                                    |

| Control Panel Readings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• AC volts, AC currents, DC volts, frequency, rpm, hour counter, power factor.</li> <li>• Low oil pressure, high water temperature, boost pressure and temperature, KW, KWh, KVA, KVAR, fuel consumption, relative load</li> <li>• Oil pressure, water temperature, low oil level, high oil temperature</li> <li>• DC alternator failure, over speed, over crank (Fail to start), over under voltage, over under current, any sensor failure</li> <li>• Low coolant level - Configurable inputs&amp;outputs</li> <li>• Upgradable for GSM network connection, Signal SMS messages.</li> </ul> |

| Optional Equipment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• <b>Engine</b></li> <li>-Coolant heater</li> <li>-Oversize batteries</li> <li>-Extra fuel pre-filter water separator</li> <li>• <b>Alternator</b></li> <li>-Permanent magnet generator (PMG)</li> <li>-Upgrade to 3 phase sensing AVR</li> <li>-Qadrature droop kit</li> <li>-Anti-condensation heater</li> <li>-Air inlet filters</li> <li>• <b>General</b></li> <li>-Upgrade to modular controller for paralleling</li> <li>-Upgrade to 4 pole circuit breaker</li> <li>-Battery charger</li> <li>-Automatic transfer switch</li> <li>-Fuel level switch High / Low for alarm and control</li> <li>-Fuel transfer pump Automatic / Manual</li> <li>-Residential grade silencer</li> <li>-Weather protective and acoustic enclosure.</li> </ul> |

| Spare Parts Kit (Optional)      | Genuine - Perkins |
|---------------------------------|-------------------|
| Oil filter, full flow           | (2)               |
| Fuel filter                     | (1)               |
| Fuel pre-filter water separator | (1)               |
| Air filter                      | (1)               |
| Fan belt set                    | (1)               |
| Alternator belt set             | (1)               |

| General Information                                                                                     |
|---------------------------------------------------------------------------------------------------------|
| <b>Documentation</b><br>Engine instruction book-English<br>Alternator manual- English<br>Wiring diagram |

| Warranty                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------|
| One year with unlimited hours against all defects in material or workmanship, subject to the terms and conditions of the Manufacturer's warranty |

