



# MP22E

Since 1994 Marapco Generating Sets have provided reliable, dependable and trustworthy power solutions for the global market. Marapco Generating Sets combine quality and performance to deliver a superior product, making Marapco a market leading Generating Set throughout the Middle East, Asia & Africa.

## Generator Output Rating at - 50Hz

| 400V           | KVA  | KW   |
|----------------|------|------|
| <b>Prime</b>   | 20.0 | 16.0 |
| <b>Standby</b> | 22.0 | 17.6 |

@ 0.8 p.f.

## Generator Output Rating at - 60Hz

| 480V           | KVA | KW  |
|----------------|-----|-----|
| <b>Prime</b>   | N/A | N/A |
| <b>Standby</b> | N/A | N/A |

@ 0.8 p.f.

## Engine Data

|                                |                          |
|--------------------------------|--------------------------|
| <b>Engine Manufacturer:</b>    | Perkins UK               |
| <b>Engine Model:</b>           | 404A-22G1                |
| <b>Number of Cylinders:</b>    | 4                        |
| <b>Cylinder Arrangement:</b>   | Vertical In Line         |
| <b>Cycle:</b>                  | 4 Stroke                 |
| <b>Bore/Stroke mm (in):</b>    | 84.4 (3.3) x 100.0 (3.9) |
| <b>Induction:</b>              | Naturally Aspirated      |
| <b>Compression ratio:</b>      | 23.1:1                   |
| <b>Displacement l (cu.in):</b> | 2.22 (135.5)             |

## General Data

|                            | Liter                    | US/Gal |
|----------------------------|--------------------------|--------|
| <b>Fuel Tank Capacity:</b> | 100.0                    | 26.4   |
| <b>Fuel Tank:</b>          | UV Resistant MDPE        |        |
| <b>Base Frame:</b>         | Heavy Duty-Powder Coated |        |
| <b>Control Panel:</b>      | Deep Sea Electronics     |        |
| <b>Circuit Breaker:</b>    | ABB 3 Pole MCB           |        |

## Performance

|                            | 50Hz |           | 60Hz |           |
|----------------------------|------|-----------|------|-----------|
| <b>Engine Speed:</b>       | 1500 |           | 1800 |           |
| <b>Gross Engine Power:</b> | kWm  | Bhp       | kWm  | Bhp       |
| <b>Prime:</b>              | 18.7 | 25.1      | N/A  | N/A       |
| <b>Standby:</b>            | 20.6 | 27.6      | N/A  | N/A       |
| <b>Fuel Consumption:</b>   | L/Hr | US Gal/Hr | L/Hr | US Gal/Hr |
| <b>Prime:</b>              | 5.3  | 1.4       | N/A  | N/A       |
| <b>Standby:</b>            | 6.1  | 1.611     | N/A  | N/A       |

## Standard Reference Conditions:

Output ratings are presented at normal conditions of temperature and pressure. This generator set is designed to operate in high ambient temperatures and altitudes.

Please consult your dealer for specific site ratings.

## Dimensions and Weights

| Length     |      | Width      |      | Height     |      | Dry   |        | Wet   |        |
|------------|------|------------|------|------------|------|-------|--------|-------|--------|
| Millimeter | Inch | Millimeter | Inch | Millimeter | Inch | KG    | LB     | KG    | LB     |
| 1386.0     | 54.6 | 720.0      | 28.3 | 1265.0     | 49.8 | 475.0 | 1047.0 | 483.0 | 1064.0 |

\* With Lube Oil

\* With Lube Oil & Coolant

## Marapco Ltd

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## Rating Definition

### **P** Prime Rating

These rating are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. This model can supply 10% overload power for 1 hour in 12 hours.

### **S** Standby Rating

These rating are applicable for supply continuous electrical power (at variable load) in the event of utility power failure. *No overload is permitted on these ratings. The alternator model is peak continuous rated (as defined in ISO 8528-3)*

## Air Flow

### 50Hz

### 60Hz

M<sup>3</sup>/min Ft<sup>3</sup>/min M<sup>3</sup>/min Ft<sup>3</sup>/min

|                               |      |      |     |     |
|-------------------------------|------|------|-----|-----|
| Combustion Air Flow:          | 1.45 | 51   | N/A | N/A |
| Exhaust Gas Flow:             | 3.94 | 139  | N/A | N/A |
| Radiator Cooling:<br>Air Flow | 29.4 | 1038 | N/A | N/A |

\*Cooling system designed to operate in high ambient conditions

## Alternator Data

|                            |                     |
|----------------------------|---------------------|
| Alternator Manufacturer:   | Leroy Somer         |
| Alternator Model:          | LSA 40 M5   TAL040F |
| Number of Bearings:        | Single (1)          |
| Insulation Class:          | H                   |
| Total Harmonic Content:    | < 4%   < 5%         |
| Wires:                     | 12   6              |
| Ingress Protection Rating: | IP 23               |
| Excitation System:         | Shunt               |
| Winding Pitch Code:        | 2/3 - 6             |



Perkins manufactures diesel engines and power solutions to the highest levels of performance and reliability. MARAPCO incorporates this engine throughout their full range.



Leroy Somer is a world leader in the manufacturing of power generation, combining quality with performance to produce a market leading alternator for MARAPCO.



Deep Sea Electronics control modules deliver unrivaled functionality and performance. MARAPCO generating sets use this latest technology to its full potential.

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## Cooling & Lubrication

### 50Hz

### 60Hz

|                      | Liter | US/Gal | Liter | US/Gal |
|----------------------|-------|--------|-------|--------|
| Coolant Capacity:    | 7.0   | 1.9    | N/A   | N/A    |
| Lube Oil Capacity:   | 10.6  | 2.8    | N/A   | N/A    |
|                      | °C    | °F     | °C    | °F     |
| Exhaust Temperature: | 505   | 941    | N/A   | N/A    |

## Other Information

### Generating Set Standards

This generating set meets the following standards: ISO8528, BS4999, BS5514, IEC60034, VDE0530

### Warranty

This generator is covered against manufacturing and workmanship defects. Kindly refer to warrant statement for more details.

Picture shown in leaflet may include optional accessories

## Distributed & Serviced by:



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