



DESCRIPTIVE

- ➡ Electronic governor
- ➡ Mechanically welded chassis with antivibration suspension
- ➡ Radiator for wiring temperature of 48/50°C max with mechanical fan
- ➡ Protective grille for fan and rotating parts
- ➡ Exhaust compensators with flanges
- ➡ 24 V charge alternator and starter
- ➡ Delivered with oil and coolant -30°C
- ➡ Manual for use and installation

POWER DEFINITION

PRP : Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

ESP : The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

TERMS OF USE

According to the standard, the nominal power assigned by the genset is given for 25°C Air Inlet Temperature, of a barometric pressure of 100 kPA (100 m A.S.L), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.

T2200

| | |
|-----------------|-------------|
| Engine type | S16R-PTAA2 |
| Alternator type | LSA 51.2M60 |

GENERAL CHARACTERISTICS

| | |
|------------------------|---------|
| Frequency (Hz) | 50 |
| Reference voltage (V) | 400/230 |
| Max power ESP (kVA) | 2200 |
| Max power ESP (kWe) | 1760 |
| Max power PRP (kVA) | 2000 |
| Max power PRP (kWe) | 1600 |
| Intensity (A) | 3176 |
| Optional control panel | M80 |
| Optional Control Panel | TELYS |
| Optional control panel | KERYS |

DIMENSIONS AND NOISE LEVELS

DIMENSIONS COMPACT VERSION

| | |
|-----------------|-------|
| Length (mm) | 5497 |
| Width (mm) | 2286 |
| Height (mm) | 2580 |
| Dry weight (kg) | 14371 |

POWERS

| Voltage | ESP | | PRP | | Standby Amps |
|---------|------|------|------|------|--------------|
| | kWe | kVA | kWe | kVA | |
| 415/240 | 1760 | 2200 | 1600 | 2000 | 3061 |
| 400/230 | 1760 | 2200 | 1600 | 2000 | 3176 |
| 380/220 | 1760 | 2200 | 1600 | 2000 | 3343 |



T2200

TECHNICAL SPECIFICATIONS

GENERAL ENGINE DATAS

| | |
|--|---|
| Engine model | MITSUBISHI S16R-PTAA2 , 4-temps, TURBO , AIR/AIR 16 X |
| Cylinder arrangement | V |
| Displacement (C.I.) | 65.37 |
| Bore (mm) x Stroke (mm) | 170 x 180 |
| Compression ratio | 13.5 |
| Speed (RPM) | 1500 |
| Pistons speed (m/s) | 9 |
| Maximum stand-by power at rated RPM (kW) | 1895 |
| Frequency regulation (%) | 0.25 |
| BMEP (bar) | 20.61 |
| Governor type | ELEC |

COOLING SYSTEM

| | |
|---|---------|
| Radiator & Engine capacity (L) | 413 |
| Max water temperature (°C) | 98 |
| Outlet water temperature (°C) | 95 |
| Fan power (kW) | 39 |
| Fan air flow w/o restriction (m3/s) | 39 |
| Available restriction on air flow (mm EC) | 20 |
| Type of coolant | GENCOOL |
| Thermostat (°C) | 71-85 |

EMISSIONS

| | |
|------------------------|-----|
| Emission PM (g/kW.h) | N/A |
| Emission CO (g/kW.h) | N/A |
| Emission HCNOx (g/kWh) | N/A |
| Emission HC (g/kW.h) | N/A |

EXHAUST

| | |
|------------------------------------|------|
| Exhaust gas temperature (°C) | 524 |
| Exhaust gas flow (L/s) | 7000 |
| Max. exhaust back pressure (mm EC) | 600 |

FUEL

| | |
|-------------------------------|-------|
| Consumption @ 110% load (L/h) | 458.1 |
| Consumption @ 100% load (L/h) | 401.7 |
| Consumption @ 75% load (L/h) | 307.3 |
| Consumption @ 50% load (L/h) | 212.8 |
| Maximum fuel pump flow (L/h) | 588 |

OIL

| | |
|---------------------------------|-----|
| Oil capacity (L) | 230 |
| Min. oil pressure (bar) | 2.5 |
| Max. oil pressure (bar) | 6.5 |
| Oil consumption 100% load (L/h) | 1.5 |
| Carter oil capacity (L) | 140 |

HEAT BALANCE

| | |
|--------------------------------|---------|
| Heat rejection to exhaust (kW) | 1443 |
| Radiated heat to ambient (kW) | 139 |
| Heat rejection to coolant (kW) | 603+556 |

AIR INTAKE

| | |
|---------------------------------|------|
| Max. intake restriction (mm EC) | 400 |
| Intake air flow (L/s) | 2650 |



T2200

ALTERNATOR SPECIFICATIONS

GENERAL DATAS

| | |
|--|--------------|
| Alternator brand | LERROY SOMER |
| Alternator type | LSA 51.2M60 |
| Number of phase | 3 |
| Power factor (Cos Phi) | 0.8 |
| Altitude (m) | 0-1000 |
| Overspeed (rpm) | 2250 |
| Number of pole | 4 |
| Excitation system | AREP |
| Insulation class / T° class, continuous 40°C | H / H-125 |
| Regulation | R449 |
| Harmonic factor, no load TGH/THC | <3.5 |
| Wave form : NEMA=TIF-(TGH/THC) | INF50 |
| Wave form : CEI=FHT-(TGH/THC) | INF2 |
| Number of bearing | 1 |
| Coupling | DIRECT |
| Voltage regulation at established rating (%) | 0.5 |
| Recovery time (Delta U = 20% transient) (ms) | 700 |

OTHER DATAS

| | |
|---|-------|
| Continuous Nominal Rating 40°C (kVA) | 2050 |
| Standby Rating 27°C (kVA) | 2255 |
| Efficiencies 4/4 load (%) | 95.7 |
| Air flow (m3/s) | 2.5 |
| Short circuit ratio (Kcc) | 0.35 |
| Direct axis synchro reactance unsaturated (Xd) (%) | 357 |
| Quadra axis synchro reactance unsaturated (Xq) (%) | 214 |
| Open circuit time constant (T'do) (ms) | 2770 |
| Direct axis transient reactance saturated (X'd) (%) | 26.8 |
| Short circuit transient time constant (T'd) (ms) | 245 |
| Direct axis subtransient reactance saturated (X''d) (%) | 14 |
| Subtransient time constant (T''d) (ms) | 23 |
| Quadra axis subtransient reactance saturated (X''q) (%) | 17.5 |
| Zero sequence reactance unsaturated (Xo) (%) | 3.3 |
| Negative sequence reactance saturated (X2) (%) | 15.7 |
| Armature time constant (Ta) (ms) | 41 |
| No load excitation current (io) (A) | 1.4 |
| Full load excitation current (ic) (A) | 5.5 |
| Full load excitation voltage (uc) (V) | 63 |
| Recovery time (Delta U = 20% transient) (ms) | 700 |
| Engine start (Delta U = 20% perm. or 50% trans.) (kVA) | 4100 |
| Transient dip (4/4 load) - PF : 0,8 AR (%) | 13.9 |
| No load losses (W) | 16600 |
| Heat rejection (W) | 73000 |

M80, transfer of information



The M80 is a dual-function control unit. It can be used as a basic terminal block for connecting a control box and as an instrument panel with a direct read facility, with displays giving a global view of your generating set's basic parameters.

Offers the following functions:

Engine parameters: tachometer, working hours counter, coolant temperature indicator, oil pressure indicator, emergency stop button, customer connection terminal block, CE

TELYS, ergonomic and user-friendly



The highly versatile TELYS control unit is complex yet accessible, thanks to the particular attention paid to optimising its ergonomics and ease of use. With its large display screen, buttons and scroll wheel, it places the accent on simplicity and communication.

The TELYS offers the following functions:

Electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, oil pressure, coolant temperature, fuel level, engine speed, battery voltage.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed, alternator min./max., battery voltage min./max., emergency stop, fuel level.

Ergonomics: wheel for navigating around the various menus.

Communication: remote control and operation software, USB connections, PC connection.

For more information on the product and its options, please refer to the sales documentation.



The KERYS control unit has been designed to fulfil the specific requirements of professionals in terms of operating and monitoring generating sets. It therefore offers a wide range of functions.

This control unit is fitted as standard to all generating sets designed to be used for coupling and is offered as an option across the rest of our range.

The KERYS can be built into the central console, fitted directly on the generating set, or in a separate cabinet, to fulfil all the requirements for low and high output power plants.

>The KERYS offers the following functions:

Electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, oil pressure, coolant temperature, fuel level, engine speed, battery voltage.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed, alternator min./max., battery voltage min./max., emergency stop.

Additional functions: coupling, website, diagnostic aid, assistance and maintenance, graphs and archiving, load impact management, 8 available installation configurations, certification in line with international standards.

For more information, please refer to the sales documentation.

Additional specifications :Website, Troubleshooting, Assistance and Maintenance, Plotting and logging, Load impact, 8 configurations available, Compliance with international standards...