



Version Full Rental Power

BASE

- Analog engine
- Connection terminal box rental type
- Four-pole circuit breaker
- 2 points lifting ring with integrated ladder
- soundproofed enclosure dedicated to rental
- Fuel low level
- AREP Leroy-Somer alternator
- Easy access to the radiator
- Swing valve

ADDITIONAL EQUIPMENT - FULL

- Containment fuel tank and large autonomy
- Central lifting eye
- Inlet air preheating
- Voltage adjustment potentiometer
- Adjustable earth fault protection and earthing rod
- Battery isolating switch



Prime Power

PRP : Prime Power is available for an unlimited number of annual operating hours in variable load applications (Mitsubishi Engines are limited to 2000 hours a year), in accordance with ISO8528-1. The average power output shall not exceed x% of the prime power rating, in accordance with ISO 3046-1.

Standby power

ESP : The Standby Power Rating is applicable for supplying emergency power in variable load applications for up to 200 hours per year (Mitsubishi Engines are limited to 100 hours a year) in accordance with ISO8528-1. Overload is not allowed.

R630C2 (CE)

| | |
|-----------------|-------------|
| Motor type | TAD1642GE |
| Alternator type | LSA472L9-AR |
| Canopy Type | M230 |

GENERAL CHARACTERISTICS

| | |
|------------------------|--------------|
| Frequency (Hz) | 50 |
| Reference voltage (V) | 400/230 |
| Max power (kVA) | 630 |
| Max power ESP (kWe) | 504 |
| Max power ESP (kVA) | 572.7 |
| Max power PRP (kWe) | 458.2 |
| Intensity (A) | 909 |
| Standard Control Panel | TELYS |
| Optional control panel | KERYS Rental |

DIMENSIONS

| | |
|----------------------------|------|
| Length (mm) | 5083 |
| Width (mm) | 1690 |
| Height (mm) | 2955 |
| Dry weight (kg) | 5850 |
| Tank capacity (L) | 1950 |
| Autonomy @ 50% of load (h) | 30.7 |
| Autonomy @ 75% of load (h) | 20.6 |

DIMENSIONS BASE VERSION

| | |
|----------------------------|------|
| Length (mm) | 5031 |
| Width (mm) | 1690 |
| Height (mm) | 2922 |
| Dry weight (kg) | 5300 |
| Tank capacity (L) | 610 |
| Autonomy @ 50% of load (h) | 10.7 |
| Autonomy @ 75% of load (h) | 7.2 |

NOISE LEVEL

| | |
|------------------|------|
| dB(A)@1m (50Hz) | 81.8 |
| dB(A)@7m (50Hz) | 71.5 |
| dB(A)@15m (50Hz) | 67.5 |
| LWA (50Hz) | 100 |

ENGINE SPECIFICATIONS

GENERAL CHARACTERISTICS

| | |
|---------------------------------|------------|
| Description | TAD1642GE |
| Motor model | VOLVO |
| Cylinder arrangement | L |
| Number of cylinders | 6 |
| Bore (mm) | 144 |
| Stroke (mm) | 165 |
| Displacement (C.I.) | 16.12 |
| Compression ratio | 16.5 : 1 |
| Speed (RPM) | 1500 |
| Pistons speed (m/s) | 8.25 |
| Maximum stand-by power at rated | 536 |
| Governor type | Electronic |
| Frequency regulation (%) | +/- 0.5% |
| BMEP (bar) | 24.06 |

COOLING SYSTEM

| | |
|--|-----------------|
| Radiator & Engine capacity (L) | 60 |
| Max water temperature (°C) | 103 |
| Outlet water temperature (°C) | 93 |
| Fan power (kW) | 11 |
| Fan air flow w/o restriction (m3/s) | 10 |
| Available restriction on air flow (mm) | 30 |
| Type of coolant | Glycol-Ethylene |
| Thermostat (°C) | 86-96 |

EMISSIONS

| | |
|-----------------------|-------|
| Emission HC (g/kW.h) | 0.12 |
| Emission Nox (g/kW.h) | 5.3 |
| Emission CO (g/kW.h) | 1.2 |
| Emissions PM (g/kW.h) | 0.100 |

EXHAUST

| | |
|------------------------------------|------|
| Exhaust gas flow (L/s) | 1678 |
| Exhaust gas temperature (°C) | 494 |
| Max. exhaust back pressure (mm CE) | 1000 |

FUEL

| | |
|-------------------------------|--------|
| Consumption @ 110% load (L/h) | 129.75 |
| Consumption @ 100% load (L/h) | 115.93 |
| Consumption @ 75% load (L/h) | 85.21 |
| Consumption @ 50% load (L/h) | 57.1 |
| Maximum fuel pump flow (L/hr) | 180 |

OIL SYSTEM

| | |
|---------------------------------|-----|
| Oil capacity (L) | 48 |
| Min. oil pressure (bar) | 0.7 |
| Max. oil pressure (bar) | 6.5 |
| Oil consumption 100% load (L/h) | 0.1 |
| Carter oil capacity (L) | 42 |

HEAT BALANCE

| | |
|--------------------------------|-----|
| Heat rejection to exhaust (kW) | 426 |
| Radiated heat to ambient (kW) | 20 |
| Haet rejection to coolant (kW) | 218 |

AIR INTAKE

| | |
|---------------------------------|-----|
| Intake air flow (L/s) | 676 |
| Max. intake restriction (mm CE) | 500 |

ALTERNATOR

GENERAL CHARACTERISTICS

| | |
|-----------------------------------|-------------|
| Description | LSA 47.2 L9 |
| Alternator brand | LEROY SOMER |
| Number of phase | 3 |
| Altitude (m) | 0 à 1000 |
| Overspeed (rpm) | 2250 |
| Number of pole | 4 |
| Excitation system | AREP |
| Insulation class | H |
| Regulation | R448 |
| Sustained short circuit current | 3 IN" 10s |
| #Taux d'harmonique à vide TGH/THC | < 1.5% |
| #Taux d'harmonique en charge | < 2% |
| Wave form : CEI=FHT-(TGH/THC) | < 2% |
| Wave form : NEMA=TIF-(TGH/THC) | < 50 |
| Number of bearing | 1 |
| Coupling | Direct |
| #Régulation de tension à régime | +/- 0.5% |
| Air flow (m3/s) | 0.9 |

OTHER CHARACTERISTICS

| | |
|---------------------------------------|-------|
| No load excitation current (io) (A) | 0.9 |
| Full load excitation current (ic) (A) | 3.7 |
| Full load excitation voltage (uc) (V) | 36 |
| Recovery time (Delta U = 20%) | 500 |
| Motor start (Delta U = 20% perm. or | 1400 |
| Transient dip (4/4 charge) - PF : 0,8 | 12.2 |
| No load losses (W) | 6780 |
| Heat rejection (W) | 27490 |

REACTANCES (R) - TIME CONSTANT(CT)

| | |
|---------------------------------------|------|
| Short circuit ratio (Kcc) | 0.37 |
| Direct axis synchro reactance | 330 |
| Quadra axis synchro reactance | 198 |
| Open circuit time constant (T'do) | 1997 |
| Direct axis transient reactance | 16.5 |
| Short circuit transient time constant | 100 |
| Direct axis subtransient reactance | 11.4 |
| Subtransient time constant (T"d) (ms) | 10 |
| Quadra axis subtransient reactance | 15 |
| Zero sequence reactance unsaturated | 0.9 |
| Negative sequence reactance | 13.2 |
| Armature time constant (Ta) (ms) | 15 |

POWERS

| | |
|-----------------------------------|------|
| Power factor (Cos Phi) | 0.8 |
| Continuous Nominal Rating 40°C | 600 |
| Standby Nominal Rating 40°C (kVA) | 630 |
| Standby Rating 27°C (kVA) | 660 |
| Efficiencies 4/4 load (%) | 94.5 |

CONTROL PANELS

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.

KERYS (coupling and adaptability)



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:

Coupling: pre-programmed coupling mode selector.

Electrical measurements: voltmeter, frequency meter, ammeter.

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