

RID 20 S-SERIES

DIESEL GENERATOR SET 20 KVA



POWER RATING

| OUTPUT RATINGS | | PRIME | STANDBY |
|-----------------------|----------|-----------|-----------|
| Power | kVA kW | 20 16 | 22 17,6 |
| Current | A | 29 | 31,9 |
| Voltage | V | 230 / 400 | 230 / 400 |
| Frequency | Hz | 50 | |
| Rated at power factor | cos φ | 0,8 | |

POWER RATING DESCRIPTION

Prime Rating

The ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Standby Rating

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

PRODUCT OVERVIEW

| RATINGS DATA | |
|------------------------|---|
| Order number Generator | 713450 |
| Alternator Model | Linz SLT18 MD Leroy - Somer TAL 040 F |
| Engine Type | DEUTZ F3M2011 |
| Generator type | synchronous |
| Control Panel | RID 1000 A |

DIMENSIONS AND WEIGHTS

| LENGTH (L) | WIDTH (W) | HEIGHT (H) | WEIGHT | TANK CAPACITY |
|------------|-----------|------------|--------|---------------|
| 1500 mm | 752 mm | 1160 mm | 550 kg | 150 l |

NOISE LEVEL

| 1 METER | 4 METER | 7 METER | 10 METER |
|----------|----------|----------|----------|
| 84 dB(A) | 82 dB(A) | 80 dB(A) | 79 dB(A) |

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ENGINE TECHNICAL DATA

| ENGINE TECHNICAL DATA | | PRIME | STANDBY |
|----------------------------|-----|-----------------------|---------|
| Engine output | kW | 20,4 | 21,4 |
| Engine type | | DEUTZ F3M2011 | |
| Engine size | | 3-Cylinder; in-line | |
| Injection system | | single injection pump | |
| Rotational-speed range | rpm | 1500 | |
| Bore Stroke | mm | 94 112 | |
| Cooling system | | oil + air | |
| Speed regulation | | mechanical | |
| Compression ratio | | 19:1 | |
| Displacement | l | 2,3 | |
| Engine with cooling system | kg | 265 | |

FUEL SYSTEM

| POWER STANDARD | | 25% | 50% | 75% | 100% |
|------------------------|-----|-----|-----|-----|------|
| Fuel consumption PRIME | l/h | 1,9 | 2,9 | 4,2 | 5,8 |

COOLING SYSTEM

| | | |
|---------------------------------|-------------------|------|
| Cooling system | oil + air | |
| Cooling system capacity | l | 9 |
| Max. coolant outlet temperature | °C | 128 |
| Heat dissipation (radiator) | kW | 10,9 |
| Fan power consumption | kW | 0,4 |
| Cooling air flow | m ³ /h | 1800 |

AIR SYSTEM

| | | |
|------------------------|---------------------|----|
| Air Filter Type | replaceable Element | |
| Combustion air volume | m ³ /h | 86 |
| max. intake depression | mbar | 20 |

LUBRICATION SYSTEM

| | | |
|----------------------|---------------------|-----|
| Oil type | RID 5W30 | |
| Oil filter type | replaceable element | |
| Total oil volume | l | 9 |
| Max. oil temperature | °C | 130 |

EXHAUST SYSTEM

| | | |
|------------------------------|-------------------|-----|
| Silencer type | Industrial | |
| Max. exhaust back pressure | mbar | 30 |
| max. exhaust gas temperature | °C | 611 |
| Exhaust gas flow | m ³ /h | 236 |

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ALTERNATOR DATA

| | | | |
|-----------------------------|-------------------------------------|-------------------------|---------|
| Alternator Model | Linz SLT18 MD | Leroy - Somer TAL 040 F | |
| Generator type | synchronous | | |
| Insulation Class | H | | |
| Regulation Type | AVR | | |
| Control System | self excited | | |
| Execution | brushless | | |
| Protection class | IP 23 | | |
| Stator Winding | Double layer with auxiliary winding | | |
| Rotor Winding | with damping cage | | |
| Winding Pitch | 2/3 | | |
| THD at full load | <3% | <5% | |
| Overspeed | rpm | 2250 | |
| Air Flow Requirement | m ³ /h | 330 | 216 |
| References | EN60034-1 | ISO8528-3 | EN55011 |

CERTIFICATIONS AND NORMS

| | | | |
|-----------|-----------|---------|--|
| EN60034-1 | ISO8528-3 | EN55011 | Outdoor Noise Equipment Directive 2000/14/EC |
|-----------|-----------|---------|--|

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CONTROL PANEL

~ RID 1000 A ~

CONTROLLER FUNCTIONS

| FUNCTIONS | RANGES, VALUES | |
|---|---|-----------|
| operating modes | automatic, manual, test and remote | available |
| mains control with limits | voltage, frequency, phase sequence | available |
| generator control with limits | voltage, frequency, power, phase sequence. | available |
| engine control with limits | start, stop, shutdown by alarms | available |
| power control | current, kW, kVA, kVA _r , power factor | available |
| statistic data mains | voltage, frequency and current | available |
| statistic data generator | voltage, frequency and current | available |
| fuel level control | in % and in liters | available |
| fuel consumption control and history | in l/h | available |
| working hours per day | in h | available |
| service hours | in h | available |
| battery service | in h | available |
| events log with time and date | 255 events | available |
| alarm list programming | 77 alarms | available |
| protocols | GSM, Ethernet, Modbus, Canbus, RID protocol | available |

REMOTE MONITORING FUNCTIONS

| | | | | | |
|-------------------------------------|----------|-----------|------------------------------------|------------|-----------|
| mains voltage L1, L2, L3 | in V, AC | available | engine temperature | in °C, | optional |
| generator voltage L1, L2, L3 | in V, AC | available | environment temperature | in °C, | optional |
| genset battery voltage DC | in V, DC | available | generator run hours | in h, | available |
| mains power total | in kW, | available | generator maintenance hours | in h, | available |
| generator power total | in kW, | available | fuel level | in L, | available |
| mains frequency | in Hz | available | load on mains | indication | available |
| generator frequency | in Hz | available | load on generator | indication | available |
| current L1, L2, L3 | in A, | available | mains supply | indication | available |
| power L1, L2, L3 | in kW, | available | generator supply | indication | available |

SPECIFIC ALARMS

| GENSET DOOR OPEN | FUEL TANK OPEN | AIR FILTER CLOGGING | FIRE ALARM |
|------------------|----------------|---------------------|------------|
| optional | optional | optional | optional |