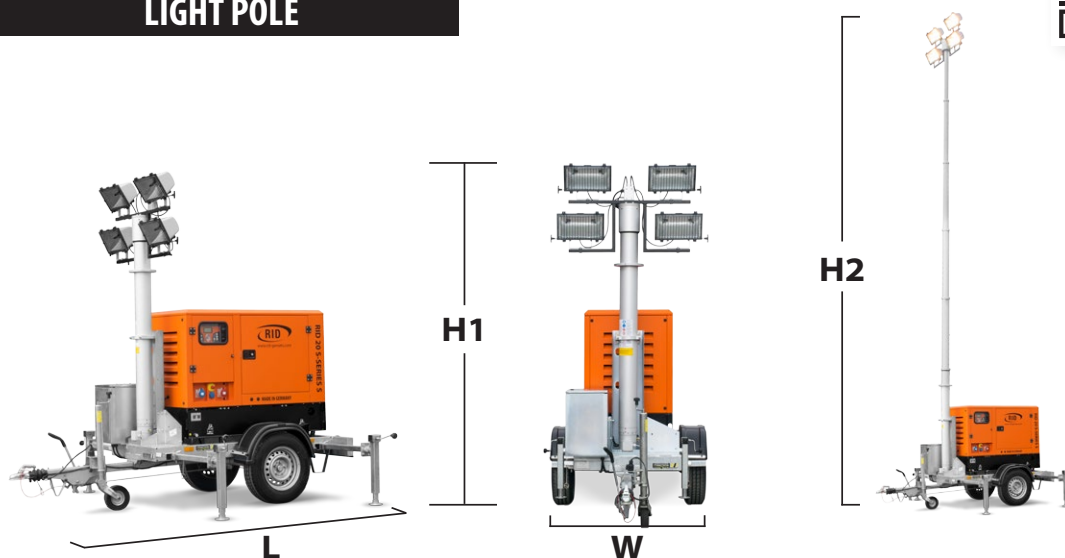


## RID 20 S-SERIES S

DIESEL GENERATOR SET 20 KVA

LIGHT POLE



### 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       |

### PRODUCT OVERVIEW

| RATINGS DATA     |                                     |
|------------------|-------------------------------------|
| Engine Type      | DEUTZ F3M2011                       |
| Alternator Model | Linz SLT18 MD                       |
| Generator type   | synchronous                         |
| Control Panel    | RID 1000 A                          |
| Protection class | IP 23                               |
| Floodlights      | 4x 1500 watt ; 124,000 total lumens |

### DIMENSIONS AND WEIGHTS

| LENGTH (L) | WIDTH (W) | HEIGHT (H1) / (H2) | WEIGHT  | TANK CAPACITY |
|------------|-----------|--------------------|---------|---------------|
| 3010 mm    | 1318 mm   | 2946 / 8991 mm     | 1200 kg | 150 l         |

### NOISE LEVEL

| 1 METER  | 4 METER  | 7 METER  | 10 METER |
|----------|----------|----------|----------|
| 75 dB(A) | 70 dB(A) | 64 dB(A) | 62 dB(A) |

## RID 20 S-SERIES S

### DIESEL GENERATOR SET 20 KVA

### LIGHT POLE



#### 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           | l   | 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 <sup>3</sup> /h | 1800      |

#### AIR SYSTEM

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

#### LUBRICATION SYSTEM

|                      |    |                     |
|----------------------|----|---------------------|
| Oil type             |    | RID 10W40           |
| 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 <sup>3</sup> /h | 236        |

## RID 20 S-SERIES S

DIESEL GENERATOR SET 20 KVA

LIGHT POLE



### ALTERNATOR DATA

|                      |                                     |                   |
|----------------------|-------------------------------------|-------------------|
| Alternator Model     | Linz SLT18 MD                       |                   |
| 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        | I                                   | with damping cage |
| Winding Pitch        | 2/3                                 |                   |
| THD at full load     | <3%                                 |                   |
| Overspeed            | rpm                                 | 2250              |
| Air Flow Requirement | m <sup>3</sup> /h                   | 330               |

### ALTERNATOR PERFORMANCE DATA

| VOLTAGE SERIES STAR, V | RATED POWER (125°C/40°C), KVA   KW | X <sub>d</sub> | X' <sub>d</sub> | X'' <sub>d</sub> |
|------------------------|------------------------------------|----------------|-----------------|------------------|
| 380   220              | 20   16                            | 268 %          | 21,1 %          | 10,0 %           |
| 400   230              | 20   16                            | 242 %          | 19,0 %          | 9,0 %            |
| 415   240              | 20   16                            | 225 %          | 17,7 %          | 8,4 %            |
| 440   254              | 18   14,4                          | 180 %          | 14,1 %          | 6,7 %            |

### CERTIFICATIONS AND NORMS

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

## RID 20 S-SERIES S

DIESEL GENERATOR SET 20 KVA

LIGHT POLE



### TRAILER TECHNICAL DATA

- total weight (Genset + Trailer): 6500 kg
- trailer Dimensions: 3010 x 1318 mm
- wheel type: 185 R14 C
- electronic system and lighting bar
- generator mounted on platform
- parking Jacks adjustable
- number of wheels: 2
- zink coating
- maximum on road speed: 80 km / h

### MAST & FLOODLIGHTS TECHNICAL DATA

- pneumatische teleskopmaste
- maximum extension 8,076 m, diameter 152mm, 6-sections
- with internal cable
- can withstand temperatures between -40°C and +60°C
- the mast are made of light aluminum alloy tubes, anodized and corrosion-proof even in presence of sea fog
- turning hand wheel
- complete lamp unit 4x1500W Halogen (2 floodlights mounted above and 2 below)
- silicone gaskets for moisture and dust protection - IP 65

## RID 20 S-SERIES S

DIESEL GENERATOR SET 20 KVA

LIGHT POLE



### 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 <sub>r</sub> , 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   |