

## RID 20 S-SERIES S

### 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	713451
Alternator Model	Linz SLT18 MD
Engine Type	DEUTZ F3M2011
Generator type	synchronous
Protection class	IP 23
Control Panel	RID 1000 A

#### DIMENSIONS AND WEIGHTS

LENGTH (L)	WIDTH (W)	HEIGHT (H)	WEIGHT	TANK CAPACITY
1500 mm	782 mm	1246 mm	700 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)

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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 <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 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 <sup>3</sup> /h	236

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#### 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
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#### CONTROL PANEL

~ RID 1000 A ~

#### CONTROLLER FUNCTIONS

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

#### REMOTE MONITORING FUNCTIONS

<b>mains voltage L1, L2, L3</b>	in V, AC	available	<b>engine temperature</b>	in °C,	optional
<b>generator voltage L1, L2, L3</b>	in V, AC	available	<b>enviroment temperature</b>	in °C,	optional
<b>genset battery voltage DC</b>	in V, DC	available	<b>generator run hours</b>	in h,	available
<b>mains power total</b>	in kW,	available	<b>generator maintanace hours</b>	in h,	available
<b>generator power total</b>	in kW,	available	<b>fuel level</b>	in L,	available
<b>mains frequency</b>	in Hz	available	<b>load on mains</b>	indication	available
<b>generator frequency</b>	in Hz	available	<b>load on generator</b>	indication	available
<b>current L1, L2, L3</b>	in A,	available	<b>mains supply</b>	indication	available
<b>power L1, L2, L3</b>	in kW,	available	<b>generator supply</b>	indication	available

#### SPECIFIC ALARMS

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