

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
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	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	
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 ³ /h	330

ALTERNATOR PERFORMANCE DATA

VOLTAGE SERIES STAR, V	RATED POWER (125°C/40°C), KVA KW	X _d	X' _d	X'' _d
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	
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