

RID 450 B-SERIES

DIESEL GENERATOR SET 450 KVA



POWER RATING

OUTPUT RATINGS		PRIME	STANDBY
Power	kVA kW	454 363	499 399
Current	A	650	715
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	713713
Alternator Model	Linz PRO35S B/4
Engine Type	DOOSAN DP158LC
Generator type	synchronous
Protection class	IP 23
Control Panel	RID 1000 A

DIMENSIONS AND WEIGHTS

LENGTH (L)	WIDTH (W)	HEIGHT (H)	WEIGHT	TANK CAPACITY
3050 mm	1420 mm	2168 mm	3400 kg	1000 l

NOISE LEVEL

1 METER	4 METER	7 METER	10 METER
84 dB(A)	83 dB(A)	82 dB(A)	81 dB(A)

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ENGINE TECHNICAL DATA

ENGINE TECHNICAL DATA		PRIME	STANDBY
Engine output	kW	408	449
Engine type		DOOSAN DP158LC	
Engine size		8-Cylinder; V-type	
Injection system		Bosch in-line "P" type	
Rotational-speed range	rpm	1500	
Bore Stroke	mm	128 142	
Cooling system		water + air	
Speed regulation		electrical	
Compression ratio		15:1	
Displacement	l	14,6	
Engine dry weight with Fan	kg	1155	

FUEL SYSTEM

POWER STANDARD		25%	50%	75%	100%
Fuel consumption PRIME	l	27,6	48,9	72,9	99,6
Fuel consumption STANDBY	l	29,6	53,4	80,5	110,9

EXHAUST SYSTEM

Silencer type	Industrial	
max. exhaust gas temperature	°C	507
Exhaust gas flow	m³/h	4860
Max. exhaust back pressure	mbar	59

LUBRICATION SYSTEM

Oil type	RID 10W40	
Oil filter type	replaceable element	
Total oil volume	l	22
Max. oil temperature	°C	120

COOLING SYSTEM

Cooling system	water + air	
Cooling system capacity	l	79
Fan power consumption	kW	16
Cooling air flow	m³/h	42000

AIR SYSTEM

Air Filter Type	replaceable Element	
Combustion air volume	m³/h	1686
max. intake depression	mbar	21,6

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ALTERNATOR DATA

Alternator Model	Linz PRO35S B/4	
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	m³/h	3120
References	EN60034-1 ISO8528-3 EN55011	

ALTERNATOR PERFORMANCE DATA

VOLTAGE SERIES STAR, V	RATED POWER (125°C/40°C), KVA KW	X _d	X' _d	X'' _d
380 220	450 360	386 %	21,1 %	14,4 %
400 230	450 360	348 %	19,0 %	13,0 %
415 240	450 360	323 %	17,7 %	12,1 %
440 254	420 336	268 %	14,7 %	10,0 %

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