RXG20 Corrugated Wirewound Resistors

Overview

Resistance wire is helically wound on a ceramic tube former.



Features

• Edge-wound flat resistance-alloy strip, supported by specially designed ceramic insulators.

• Open-coil construction promotes heat dissipation and withstands a degree of overload.

• An economical, convenient solution for inverter dynamic braking.

Typical applications

Dynamic braking; motor control; load banks; inverters, drives and servo motors; cranes and hoists; conveyors; lifts and elevators; industrial robot control; CNC equipment; packaging machinery; printing equipment.

Materials

Part	Material / content
Resistance element	Copper-nickel alloy; nickel-chromium alloy
Core material	0Cr25AL5 (as stated in the source)
Coating	Insulating varnish
Standard terminals	Zinc-plated steel
Product marking	Part number, resistance, date code, INLANX

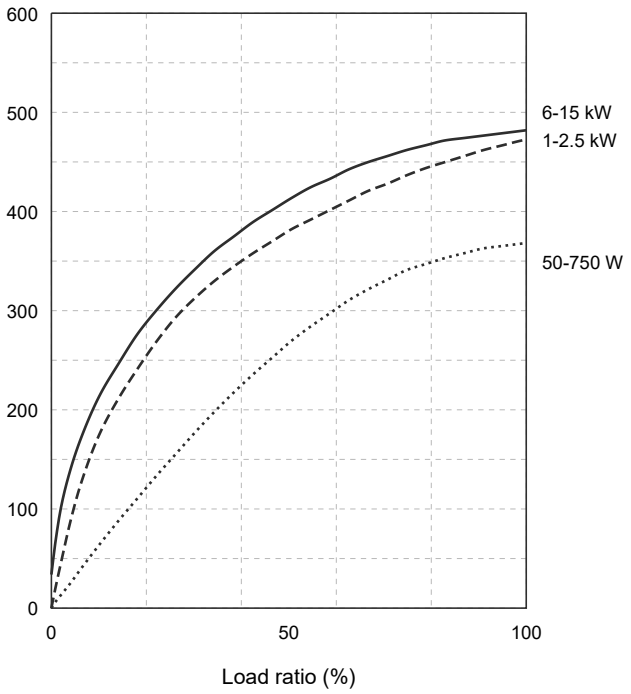
Basic technical specifications

Parameter	Specification
Power range	50-15000 W
Voltage range	<1.2 kV
Resistance range	1 Ω-10 kΩ, depending on power rating
Dielectric strength	AC 3 kV, 50 Hz, 5 s
Ingress protection	IP00
Product standard	GB 8898-2011

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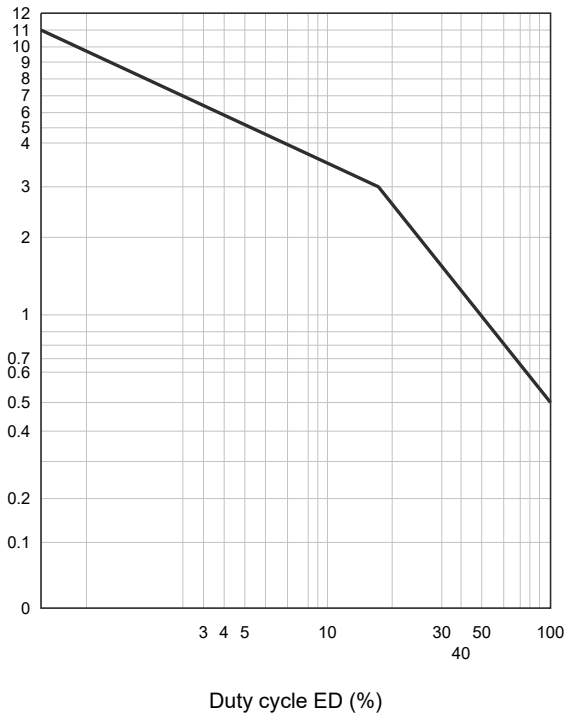
Temperature rise and overload capability

Surface rise at 120 s (°C)



Curves correspond to 50-750 W, 1-2.5 kW and 6-15 kW ratings.

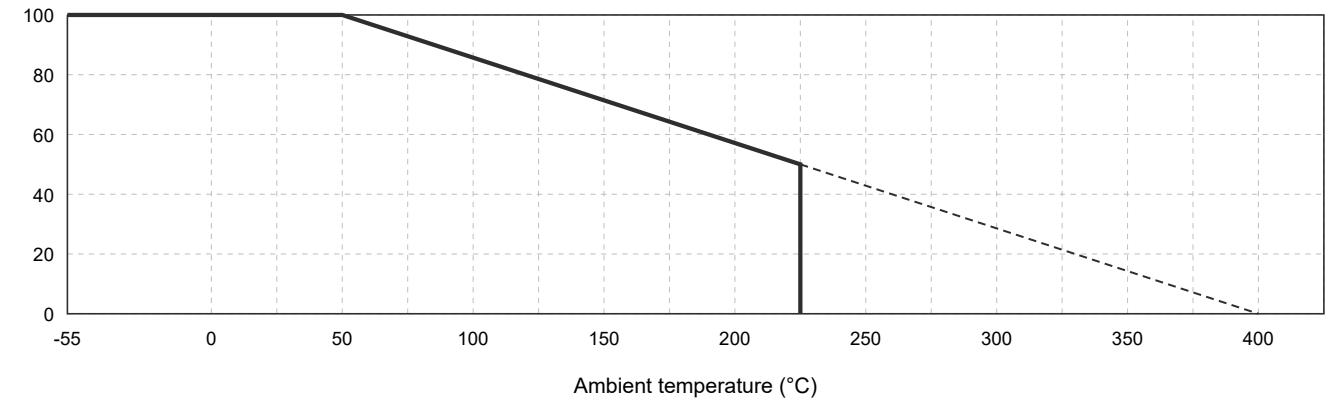
Multiple of rated power



Maximum braking cycle: 120 s.

Ambient-temperature derating

Rated power (%)



Dimension key

L1: resistor-body length; L2: bracket spacing; L3: overall length; D: tube diameter; B / B1: mounting-base dimensions; H / H1: heights; N: terminal dimension; Ød: mounting-hole diameter; O: projection shown. Locations: page 3. Selection dimensions: page 4.

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Performance tests

Test	Conditions	Acceptance
Temperature coefficient (TCR)	30-100 °C; resistance change rate for each 1 °C increase	±400 ppm/°C
Short-time overload	10 times rated power or maximum working voltage, whichever is lower, for 5 s	ΔR ≤ ±(2%R + 0.05 Ω)
Resistance to soldering heat	350 ±10 °C solder bath; immersion for 2-3 s	ΔR ≤ ±(1%R + 0.05 Ω)
Solderability	245 ±10 °C solder bath; immersion for 2-3 s	ΔR ≤ ±(1%R + 0.05 Ω)
Temperature cycling	5 cycles: -55 °C for 30 min; 125 °C for 10-15 min; 25 °C for 10-15 min	ΔR ≤ ±(1%R + 0.05 Ω)
Damp-heat endurance	40 ±2 °C, 90%-95% RH; rated or maximum working voltage, whichever is lower; 1000 h, 1.5 h ON / 0.5 h OFF	ΔR ≤ ±(5%R + 0.05 Ω)
Rated-power endurance	70 ±2 °C; rated power or maximum working voltage, whichever is lower; 1000 h, 1.5 h ON / 0.5 h OFF	ΔR ≤ ±(5%R + 0.05 Ω)
Flame resistance	5 or 10 times rated power for 5 s	No visible flame

Outline and mounting dimensions · mm

Figure A: 50-200 W

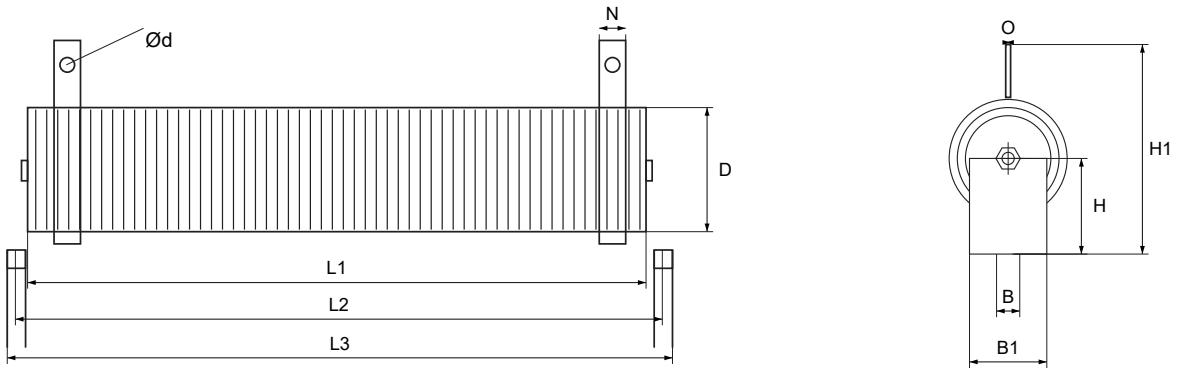
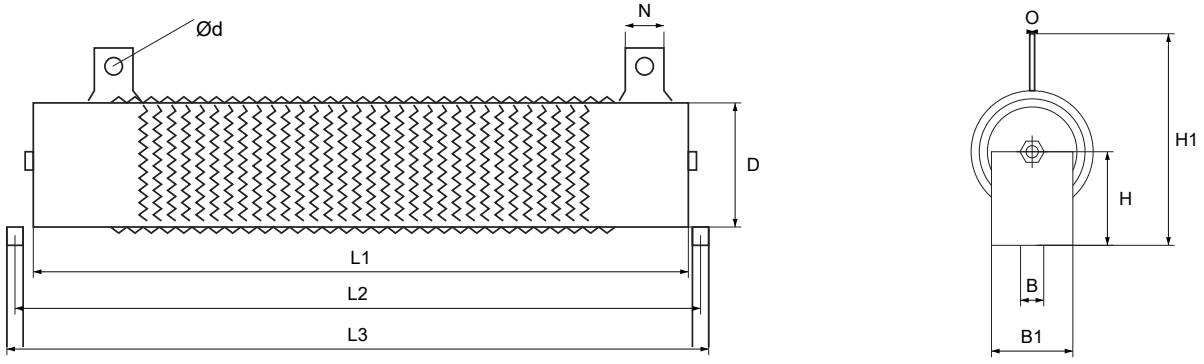


Figure B: 300-15000 W



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Selection and dimensions

Dimensions in mm; mass in kg. Figures refer to the outline drawings on page 3.

Power W	Fig.	L1	L2	L3	D	B	B1	H	H1	N	Ød	O	Mass kg	Resistance range
50	A	90	112	134	28	6.5	28	28	62	9.5	4.5	1.2	0.2	1Ω-10kΩ
60	A	90	112	134	28	6.5	28	28	62	9.5	4.5	1.2	0.2	1Ω-10kΩ
80	A	140	162	184	28	6.5	28	28	62	9.5	4.5	1.2	0.2	1Ω-10kΩ
100	A	170	192	214	28	6.5	28	28	62	9.5	4.5	1.2	0.2	1Ω-10kΩ
120	A	170	192	214	28	6.5	28	28	62	9.5	4.5	1.2	0.2	1Ω-10kΩ
150	A	215	235	241	28	6.5	28	28	62	9.5	5.5	2.0	0.4	1Ω-10kΩ
200	A	267	287	293	28	6.5	28	28	62	9.5	5.5	2.0	0.4	1Ω-10kΩ
300	B	260	290	328	40	8.0	40	45	90	10	4	1.2	0.55	1Ω-10kΩ
400	B	300	330	360	40	8.0	40	45	90	10	4	1.2	0.65	1Ω-10kΩ
500	B	300	334	370	50	8.0	50	45	100	10	4	1.2	0.85	1Ω-10kΩ
600	B	330	360	390	50	8.0	50	45	100	10	4	1.2	1.0	1Ω-10kΩ
800	B	300	334	365	60	8.0	60	55	114	15	6.5	2.0	1.78	1Ω-10kΩ
1000	B	300	334	365	60	8.0	60	55	114	15	6.5	2.0	1.78	5Ω-10kΩ
1200	B	420	445	475	60	8.0	60	55	114	15	6.5	2.0	1.96	5Ω-10kΩ
1500	B	420	445	475	60	8.0	60	55	114	15	6.5	2.0	1.96	5Ω-10kΩ
1800	B	420	445	475	60	8.0	60	55	114	15	6.5	2.0	1.96	5Ω-10kΩ
2000	B	420	455	485	70	8.0	70	60	125	15	6.5	2.0	2.35	5Ω-10kΩ
2500	B	420	455	485	70	8.0	70	60	125	15	6.5	2.0	2.35	5Ω-10kΩ
3000	B	420	455	485	70	8.0	70	60	125	15	8.0	2.0	2.38	5Ω-10kΩ
3500	B	510	550	570	70	8.0	70	60	125	15	8.0	2.0	2.8	5Ω-1kΩ
4000	B	400	535	570	100	8.0	100	85	180	15	8.0	2.0	4.5	5Ω-1kΩ
5000	B	500	535	570	100	8.0	100	85	180	15	8.0	2.0	4.5	5Ω-1kΩ
6000	B	500	535	570	100	8.0	100	85	180	15	8.0	2.0	4.5	5Ω-1kΩ
7000	B	600	685	720	100	8.0	100	85	180	15	8.0	2.0	6.2	5Ω-1kΩ
8000	B	600	735	770	100	8.0	100	85	180	15	8.0	2.0	6.5	5Ω-1kΩ
9000	B	700	735	770	100	8.0	100	85	180	15	8.0	2.0	6.5	5Ω-1kΩ
10000	B	600	655.5	696	150	8.0	150	108	228	18	8.0	2.0	16.0	5Ω-1kΩ
12000	B	600	655.5	696	150	8.0	150	108	228	18	8.0	2.0	16.0	5Ω-1kΩ
15000	B	600	655.5	696	150	8.0	150	108	228	18	8.0	2.0	16.0	5Ω-1kΩ

Note: L3 = 241 mm for the 150 W model is retained from the source table. Verify against the manufacturer drawing when selecting.

Ordering information

Part-number format: INLANX - RXG20 - Rated power / Resistance.