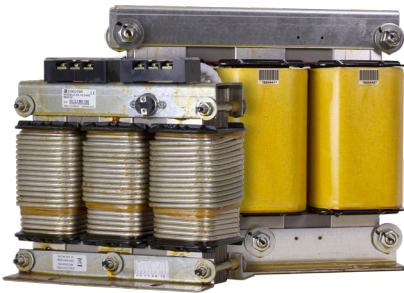


# RZ / RBZ



## Three-phase reactors for detuned filters

### Descripción

CIRCUTOR has a complete range of detuned reactors,  $p = 7\%$ , with a resonance frequency of 189 Hz for 50 Hz networks (or, on demand, 227 Hz for 60 Hz networks). This is the most frequent tuning value to avoid any resonance with the 5th harmonic and over. The set of capacitors-reactors absorbs part of the current of the 5th harmonic and acts as a detuned filter for higher frequencies. In some installations, anyway, other value of  $p(\%)$  can be required, for example, 8,7 % (170 Hz), 14 % (134 Hz)... CIRCUTOR can manufacture reactors adapted to any power,  $p(\%)$ , frequency, voltage ( $U_n \leq 1000$  VAC).

Reactors for low power rating, RZ range, are built with low losses magnetic sheets and coiled with aluminum wires. A terminal block for the connection of the reactor is fitted. Higher powers are covered by RBH range. These reactors are based on a magnetic sheet core with multiple air gaps, which provides them with excellent characteristics and low loss ratios.

Both RZ and RBZ reactors are subjected to a varnish vacuum impregnation, based on polyester resin, to increase the insulation, providing a greater mechanical resistance and reducing the level of noise.

### Applications

RZ and RBZ detuned reactors have been specially designed for their use in installations with capacitor banks with considerably high harmonic distortion rates. The reactors must be connected in series to the proper power capacitor for the satisfactory protection of the own capacitors and to avoid the resonance effects in the installation.

### Technical features

Features	Voltage	400 Va.c. On demand: up to 1000 Va.c.
	Mains frequency	50 Hz On demand: 60 Hz
	Power	According to the table Other values on demand
	Value of $p\%$	7% (189 Hz) Other values on demand
	Type of conductor	<b>RZ:</b> aluminium wire <b>RBZ:</b> aluminium winding
	Tolerance $L$	$\pm 5\%$
	Linearity (5% $L$ )	$1,75 I_n$
	Insulation voltage	3 kV
	Maximum room temperature	-10 °C...+45 °C
	Internal insulation	Class F (155 °C) On demand: Class H (180 °C)
Maximum overload	Permanent	$1,17 I_n$
	Temporary (1 min)	$2 I_n$
Safety	Protection thermostat	Opening at 125 °C
	Protection degree	IP 00
	Installation	Indoor
Standards	IEC 60289, IEC 60076	

# RZ / RBZ

## Three-phase reactors for rejection filters

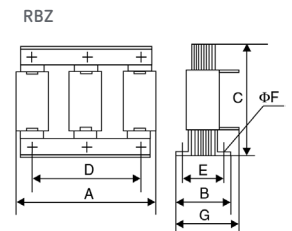
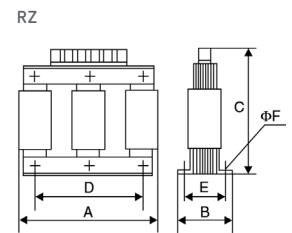
### References

Reactors III RZ / RBZ series @ 400 Vc.a., 50 Hz,  $p = 7\%$  (189 HZ)

Type	Code	For cilindric capacitors	For prismatic capacitors	Qc (kvar)	In (A)	L (mH)
RZ-5-400	P73110.	CLZ-FP-46/6,25-HD	CFB-46/6	5	7,2	3 x 7,66
RZ-6,25-400	P73112.	CLZ-FP-52/10-HD	CFB-46/7,75	6,25	9	3 X 6,10
RZ-10-400	P73115.	CLZ-FP-46/12,5-HD	CFB-46/12,5	10	15	3 x 3,83
RZ-12,5-400	P73117.	CLZ-FP-46/15-HD	CFB-46/15	12,5	18	3 X 3,05
RZ-15-400	P73120.	CLZ-FP-46/19-HD	CFB-46/19	15	22	3 x 2,55
RBZ-20-400	P73125.	CLZ-FP-46/25-HD	CFB-46/25	20	29	3 x 1,91
RBZ-25-400	P73130.	CLZ-FP-46/30-HD	CFB-46/30	25	36	3 x 1,53
RBZ-30-400	P73135.	2 x CLZ-FP-46/19-HD	CFB-46/37	30	43	3 x 1,27
RBZ-40-400	P73140.	2 x CLZ-FP-46/25-HD	CFB-46/50	40	58	3 x 0,95
RBZ-50-400	P73145.	2 x CLZ-FP-46/30-HD	CFB-46/62	50	72	3 x 0,76
RBZ-60-400	P73150.	3 x CLZ-FP-46/25-HD	CFB-46/74	60	87	3 x 0,63
RBZ-80-400	P73155.	3 x CLZ-FP-46/33,3-HD	CFB-46/100	80	115	3 x 0,48

### Dimensions

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Weight (kg)	Loses (W)
RZ-5-400	155	76	165	75	55	7	-	4	26
RZ-6,25-400	180	102	190	90	75	7	-	6	33
RZ-10-400	180	102	190	90	75	7	-	6,5	52
RZ-12,5-400	180	112	190	90	85	7	-	7	57
RZ-15-400	180	112	190	90	85	7	-	8	59
RBZ-20-400	235	125	165	150	95	7	145	14	79
RBZ-25-400	235	125	165	150	95	7	145	14	93
RBZ-30-400	255	125	200	160	95	9	150	19	124
RBZ-40-400	255	125	200	160	95	9	150	20	149
RBZ-50-400	255	145	220	160	115	9	175	25	189
RBZ-60-400	255	145	240	160	115	9	175	28	210
RBZ-80-400	305	155	255	180	115	11	190	31	241



### Connections

