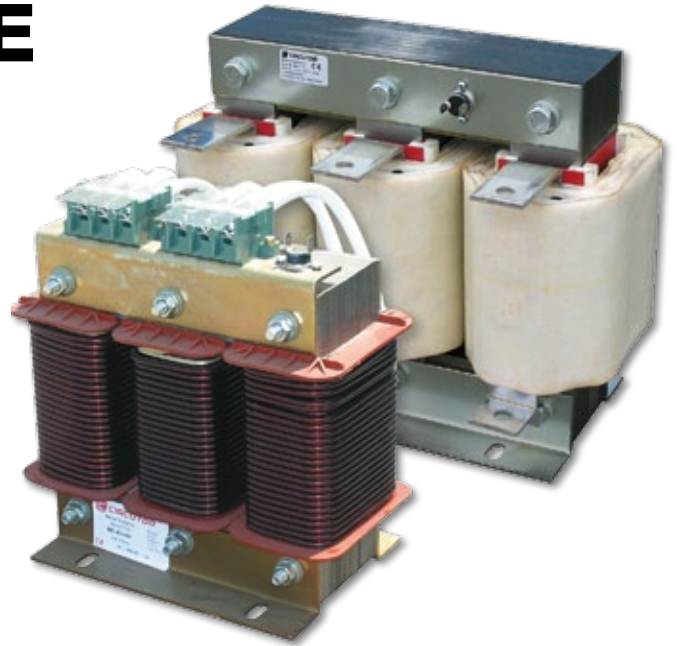


Reactors RE / RBE

Reactors III for static capacitor banks



Description

CIRCUTOR has standardized the reactors of the **RE / RBE** series, with a special design for their use in static capacitor banks. The best operation of the set requires the reactors to be connected within the triangle composed by the capacitor-reactor set. At the same power rating, the **RE / RBE** reactors have a nominal current value that is 1.73 times smaller and an inductance value that is 3 times greater than that in an **R / RB** reactor.

The company has a standard range of 400 V rejection reactors with $p = 7\%$, with a resonance frequency of 189 Hz for 50 Hz networks (or on demand 227 Hz for 60 Hz networks). In addition, reactors can be manufactured on demand for static capacitor banks adapted to any value of the power rating, $p\%$, voltage and frequency.

Low-powered reactors, **RE** type, are built with plates with low losses and are coiled with copper wire. The connection is achieved with the adequate terminals. In the case of higher power ratings, **RBE** reactors are used, with a magnetic plate nucleus and multiple steel cores, which offer excellent characteristics and a low loss ratio. The coils are made with an aluminium band (or copper band, on demand). The input and output connections run through a plate.

Both **RE** and **RBE** type reactors have a vacuum varnish sealing to increase the insulation and reduce the levels of noise.

Features

Features	
Voltage	400 V On demand: up to 1000 V
Network frequency	50 Hz On demand: 60 Hz
Power rating	In accordance with the table Other values on demand
Value of $p\%$	7 % (189 Hz) Other values on demand
Type of conductor	RE : copper wire RBE : aluminum band
Tolerance L	$\pm 5\%$
Linearity (5 % L)	$1.8 I_n$
Isolation voltage	4 kV
Maximum room temperature	-10 °C ... +45 °C
Internal isolation	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 90 °C
Degree of protection	IP 00
Indoor	Installation
Standards	
UNE-EN-60289, IEC 60076	

Application

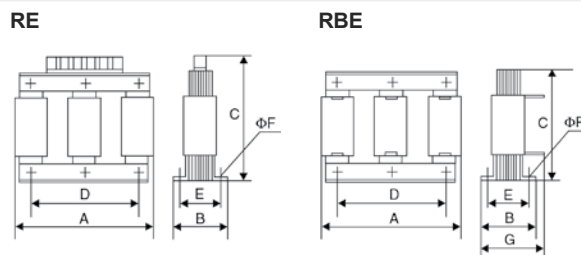
The rejection reactors of the **RE / RBE** series have been specially designed for their use in capacitor banks in installations with a high harmonic content. The reactors must be connected in series to each capacitor for the

adequate protection of capacitors, the static operations module and to avoid the resonance effects in the installation.

Reactors RE / RBE

Reactors III for static capacitor banks

Dimensions



Type	a	b	c	d	e	f	g
RE-5-400	155	92	165	75	75	7	--
RE-10-400	180	102	190	90	75	7	--
RE-15-400	180	112	190	90	85	7	--
RE-20-400	180	122	190	90	95	7	--
RE-25-400	240	122	250	130	90	9	--
RE-30-400	240	132	250	130	100	9	--
RE-40-400	240	147	250	130	115	9	--
RBE-50-400	310	154	233	160	120	9	185
RBE-60-400	310	154	234	160	120	9	185
RBE-80-400	338	165	280	180	130	11	195



References

Reactors III series RE / RBE at 400 Vac, 50 Hz, $\rho = 7\%$ (189 HZ)

For capacitors:	kvar	I_n (A)	L (mH)	Losses (W)	Weight (kg)	Type	Code
CF 46 / 6-6B	5	5	23,67	25	6	RE-5-400 / RE-6-460	P70210
CF 46 / 12.50.6B	10	9	11,27	50	8	RE-10-400 / RE-12,5-460	P70215
CF 46 / 19-6B	15	13	7,50	57	9,5	RE-15-400 / RE-19-460	P70220
CF 46 / 25-6B	20	17	5,68	76	11,5	RE-20-400 / RE-25-460	P70225
CF 46 / 30-6B	25	21	4,68	90	17	RE-25-400 / RE-30-460	P70230
CF 46 / 37-6B	30	26	3,84	120	20,5	RE-30-400 / RE-37-460	P70235
CF 46 / 50-6B	40	35	2,84	145	25,5	RE-40-400 / RE-50-460	P70240
CF 46 / 62-6B	50	42	2,29	185	29	RBE-50-400 / RBE-62-460	P70245
CF 46 / 74-6B	60	51	1,89	205	30	RBE-60-400 / RBE-74-460	P70250
CF 46 / 100-6B	80	68	1,42	235	41	RBE-80-400 / RBE-100-460	P70255

Connections

