



Three-phase filter circuit chokes according to VDE 0570 part 2-20



Adapted-output

General information:

Three-phase filter circuit chokes are used in reactive current compensation systems. With the capacitors in the reactive current compensation system they form a series resonant circuit and thereby produce defined grid conditions.

Three-phase filter circuit chokes with adapted outputs ensure the specified compensation reactive power when interconnected with capacitors of the given capacity.

Three-phase filter circuit chokes without adapted outputs are designed according to the capacitors used and lead to deviating compensation reactive powers.

For frequently selected chokes of 7% the series resonant circuit formed from the filter circuit choke and the compensating capacitors yields a resonance frequency of 189Hz.

Design:

Open frame upright design, stationary, for device installation and assembly in dry rooms. Connection up to 12.5kVAr to leakage current-resistant transformer terminals with screw and tab connectors 2.8x0.8mm to 5A, 6.3x0.8mm to 20A. The 2.8x0.8mm tab connector must only be loaded to 5A in accordance with DIN 46249 and 6.3x0.8mm to 20A. Above 12.5kVAr to 25kVAr universal terminal blocks with screw connection and at 30kVAr and above pressed cable lugs are used. The terminals are protected against back of hand and finger contact according to accident prevention regulations (BGV A3). With temperature switch in middle coil.

IP 00, insulation class E, max. ambient temperature of 40°C (ta40°C/E)

Technical data:

Nominal voltage:	3AC 400V
Choke factor:	7%
Resonance frequency:	189Hz
Nominal frequency:	50Hz
50Hz current:	1.06 x nominal current
150Hz current:	0.04 x nominal current
250Hz current:	0.31 x nominal current
350Hz current:	0.13 x nominal current

Filter circuit chokes with deviating technical data available upon request.

Type	Cur- rent A	Induct. mH	Reactive power kVAr	Capac- ity: μF	Item no:	Copper kg	Total kg	Dimensions approx. in mm						Mounting
								a	b	c	d	e		
RFDr 7/2,5	3,6	15,34	2,5	46,3	0420-000002,5	0,8	2,0	125	73	115	90	39	M4	
RFDr 7/5	7,2	7,67	5,0	92,5	0420-0000005	0,9	5,0	155	92	140	113	49	M6	
RFDr 7/7,5	10,8	5,11	7,5	138,8	0420-000007,5	1,2	5,3	155	92	140	113	49	M6	
RFDr 7/10	14,4	3,84	10,0	185,0	0420-0000010	1,8	9,0	190	102	165	136	57	M6	
RFDr 7/12,5	18,0	3,07	12,5	231,3	0420-000012,5	2,6	9,5	190	102	165	136	57	M6	
RFDr 7/15	21,7	2,56	15,0	277,5	0420-0000015	3,5	10,5	190	102	210	136	57	M6	
RFDr 7/17,5	25,3	2,19	17,5	323,8	0420-000017,5	3,5	15,0	210	117	230	175	97	M6	
RFDr 7/20	28,9	1,92	20,0	370,0	0420-0000020	4,5	16,0	210	117	230	150	80	M6	
RFDr 7/25	36,1	1,53	25,0	462,5	0420-0000025	4,8	19,0	230	148	240	176	95	M6	
RFDr 7/30	43,3	1,28	30,0	555,1	0420-0000030	6,5	20,5	230	148	205	176	95	M6	
RFDr 7/40	57,7	0,96	40,0	740,1	0420-0000040	10,0	28,0	240	146	215	190	120	M8	
RFDr 7/50	72,2	0,77	50,0	925,1	0420-0000050	10,5	33,0	265	152	235	200	102	M8	