

AC Feedthrough Capacitors - Class Y2

AFC Series



Component Recognized by
UL to US and Canadian Requirements

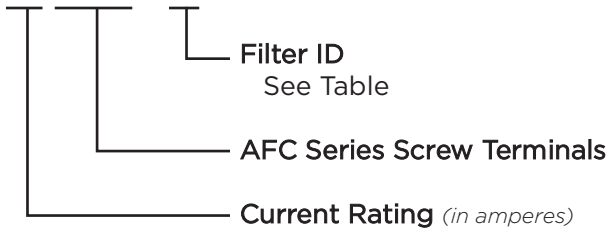


AFC Series

- AC feedthrough capacitors
- Current ratings from 10 to 300A
- Designed to meet the very stringent safety requirements of EN132400 class Y2 including the 5000V pulse test
- Custom versions available

Ordering Information

10 AFC6 - A



Filter Options / Specifications

Filter ID	Value (nF)	Max. Leakage Current (mA)‡
A	2.2	0.21
B	4.7	0.44
C	10	0.94
F	33	3.1
G	47	4.4
H	100	9.4
K	220	21
N	470	44
P	1000	94

‡ @250VAC 60 Hz

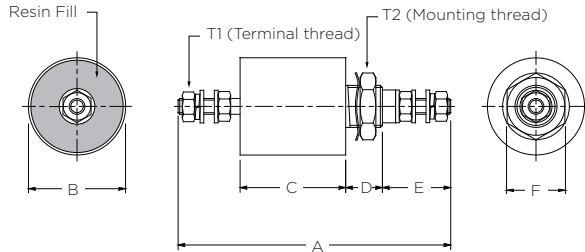
Specifications

Rated Voltage (max):	250 VAC
Rated Frequency:	50/60 Hz
Rated Current:	10 to 300A
Test Voltage (two seconds):	5000 VDC
Capacitor Class (EN132400):	Designed to meet Y2
Pulse Test (EN132400):	5000V Peak
Insulation Resistance (within 1 minute):	
	For C < 0.33µF, R > 15000MΩ
	For C > 0.33µF, RC(MΩ*µF) > 5000s
Operating Ambient Temperature Range (at rated current I _r):	
	10 to 200A: -40°C to +60°C
	250 & 300A: -40°C to +40°C
Category Temperature Range:	-40°C to +85°C
Current Derating Above Ambient:	
	10-200 amp: For temperature, θ I _θ = IR √((85-θ)/25)
	250 & 300 amp: For temp., θ I _θ = IR √((85-θ)/45)
Climatic Category:	40/85/21
MTBF:	> 10 million hours typical
Insulating Materials Flammability Rating:	UL94V-0
Case & Terminal Material:	Nickel Plated Brass

AC Feedthrough Capacitors - Class Y2 (continued)

AFC Series

Case Style



T1 - Terminal Thread

Part Number(s)	Thread	Torque max. in.lb.
10AFC6-A/B	M3	4
16AFC6-B/C/G/H	M4	11
20AFC6-B		
32AFC6-B/C/F/G/H		
63AFC6-C/G/H	M6	22
100AFC6-G/H/K/N	M8	44
200AFC6-H/K/N/P	M10	71
250AFC6-H/K/N/P	M12	97
300AFC6-H/K/N/P	M16	177

T2 - Mounting Thread

Part Number(s)	Thread	Torque max. in.lb.
10AFC6-A/B	M10 x 1	27
16AFC6-B/C/G	M12 x 1	35
20AFC6-B		
32AFC6-B/C/G/F		
16AFC6-H	M16 x 1	62
32AFC6-H		
63AFC6-C/G/H		
100AFC6-G/H	M20 x 1	89
100AFC6-K/N	M24 x 1	124
200AFC6-H/K		
200AFC6-N/P	M27 x 1.5	142

Case Dimensions

Part Number	A <i>±.04</i> 1	B <i>±.02</i> 0.5	C <i>±.08</i> 2	D <i>±.04</i> 1	E <i>±.08</i> 2	F (max)
10AFC6-A	2.24	0.59	0.71	0.39	0.63	0.51
10AFC6-B	57	15	18	10	16	13
16AFC6-B	2.48	0.79	0.71	0.47	0.71	0.67
16AFC6-C	63	20	18	12	18	17
16AFC6-G	2.95	0.79	1.18	0.47	0.71	0.67
	75	20	30	12	18	17
16AFC6-H	3.03	0.98	1.18	0.55	0.71	0.87
	77	25	30	14	18	22
20AFC6-B	2.48	0.79	0.71	0.47	0.71	0.67
	63	20	18	12	18	17
32AFC6-B	2.48	0.79	0.71	0.47	0.71	0.67
32AFC6-C	63	20	18	12	18	17
32AFC6-F	2.95	0.79	1.18	0.47	0.71	0.67
32AFC6-G	75	20	30	12	18	17
32AFC6-H	3.03	0.98	1.18	0.55	0.71	0.87
	77	25	30	14	18	22
63AFC6-C	3.78	0.98	1.18	0.55	1.02	0.87
63AFC6-G	96	25	30	14	26	22
63AFC6-H	3.78	0.98	1.18	0.55	1.02	0.87
	96	25	30	14	26	22
100AFC6-G	4.45	1.26	1.30	0.63	1.26	1.06
100AFC6-H	113	32	33	16	32	27
100AFC6-K	4.57	1.50	1.30	0.75	1.26	1.06
	116	38	33	19	32	27
200AFC6-H	5.24	1.50	1.97	0.75	1.26	1.06
200AFC6-K	133	38	50	19	32	27
200AFC6-N	5.12	1.50	1.30	0.75	1.57	1.06
200AFC6-P	130	38	33	19	40	27
250AFC6-H	5.79	2.13	1.97	0.75	1.57	1.57
250AFC6-K	147	54	50	19	40	40
250AFC6-N	5.83	2.13	1.65	0.75	1.81	1.57
250AFC6-P	148	54	42	19	46	40
300AFC6-H	6.30	2.13	2.13	0.75	1.81	1.57
300AFC6-K	160	54	54	19	46	40
300AFC6-N	5.83	2.13	1.65	0.75	1.81	1.57
300AFC6-P	148	54	42	19	46	40

AC Feedthrough Capacitors - Class Y2 *(continued)*

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Available Part Numbers

10AFC6-A	32AFC6-H	200AFC6-P
10AFC6-B	63AFC6-C	250AFC6-H
16AFC6-B	63AFC6-G	250AFC6-K
16AFC6-C	63AFC6-H	250AFC6-N
16AFC6-G	100AFC6-H	250AFC6-P
16AFC6-H	100AFC6-H	300AFC6-H
20AFC6-B	100AFC6-K	300AFC6-K
32AFC6-B	100AFC6-N	300AFC6-N
32AFC6-C	200AFC6-H	300AFC6-P
32AFC6-F	200AFC6-K	
32AFC6-G	200AFC6-N	

Performance Data

Typical Insertion Loss – Line to ground in 50 ohm circuit

Filter ID	Frequency – MHz							
	0.01	0.03	0.1	0.3	1	10	100	1000
A	-	-	-	-	-	8	38	45
B	-	-	-	-	-	14	43	60
C	-	-	-	-	3	21	45	70
F	-	-	-	4	12	30	48	90
G	-	-	2	6	15	34	50	90
H	-	2	5	11	20	40	65	90
K	-	4	11	18	27	45	85	90
N	6	9	16	22	33	33	90	90
P	10	15	22	30	40	42	90	90