

HCAE

Oil-Type Single Phase AC-Filter Capacitor(Tabs)



Features

- Metallized polypropylene film structure
- Excellent self-healing performance
- Overpressure disconnector with anti-explosion design, more safety
- Aluminum case, fully sealed design
- Capable of withstanding high harmonic current, peak current and voltage

Typical Applications

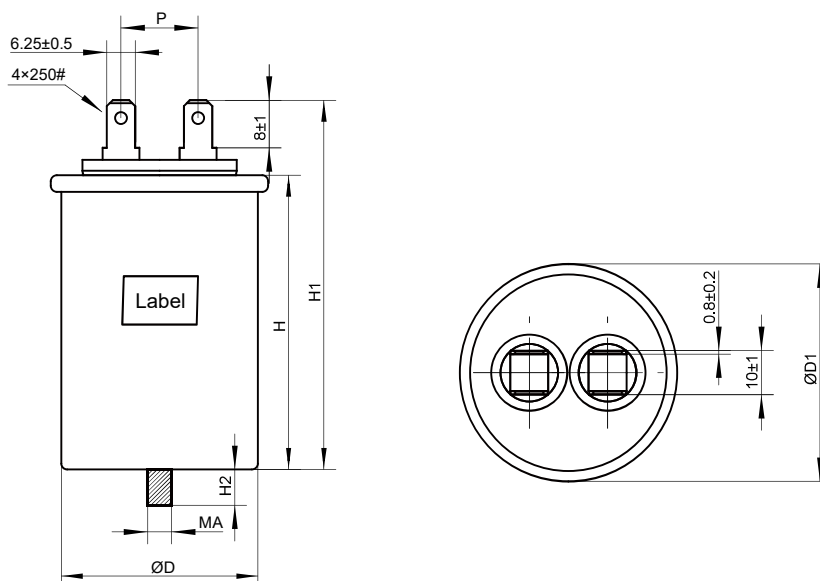
- Applicable to AC filter circuits in power electronic equipment, UPS and other power supplies

Safety Approvals

	TÜV	IEC 61071	CN: 5μF-150μF UN: 350Va.c.-760Va.c. U _{rms} : 250Va.c.-540Va.c. File No.: R 50731017 0001
	CE	IEC 61071	CN: 5μF-150μF UN: 350Va.c.-760Va.c. U _{rms} : 250Va.c.-540Va.c. File No.: AN 50734942 0001

Notes: The above certificate No.is just a license No. Please refer to the certificates we supplied for detail information.

Outline Drawing



Notes: All product dimensions are in mm.
See the Technical Parameters table for details.

Dimensions Description

Unit: mm

$\varnothing D \pm 1$	$\varnothing D \pm 1$	$H \pm 2$	$H1 \pm 3$	MA	$H2 \pm 1$	$P \pm 1$
40	≤ 44	See Technical Parameters Table	$H1 = H + 13$	M8	11	16
45	≤ 49			M8	11	18
50	≤ 54			M8	11	18
55	≤ 59			M8	11	20
60	≤ 64			M12	16	20

Specifications

Reference standards		IEC 61071, GB/T 17702	
Rated voltage	U_N	350Va.c.~760Va.c.	
Rated RMS voltage	U_{rms}	250Va.c.~540Va.c.	
Capacitance range	C_N	5 μ F~150 μ F	
Capacitance tolerance		$\pm 5\%$ (J), $\pm 10\%$ (K)	
Dielectric loss factor	$\tan \delta_d$	0.0002	
Insulation resistance (20°C, 500Vd.c., 1min)	$IR \times C_N$	$\geq 10000s$	
Climatic category		40/85/56	
Operating temperature range	θ_{hs}	-40°C~85°C	
Voltage proof	U_{t-t}	Between terminals	2.15 U_{rms} (10s, 50Hz, 20°C)
	U_{t-c}	Between terminals and case	3000Va.c.(10s, 50Hz, 20°C)
Altitude		$\leq 2000m$: No derating for current 2000m~5000m: Decreasing factor 3% per 500m for current	
Installation direction		Terminal facing upwards	
Max. Installation torque		6N·m(M8), 10N·m(M12)	
Expected lifetime		100,000h@0.8 U_{rms} , $\theta_{hs} \leq 70^\circ C$	
Failure	λ	$\leq 300FIT@0.8U_{rms}, \theta_{hs} \leq 70^\circ C$	

Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
H	C	A	E	/	T	1	5	0	0	5	J	0	0	0	0	1	0	0	(	X	X	X	)

Series code

Rated voltage

Rated capacitance

Capacitance tolerance

Internal serial number

Terminal form

Internal code

Special code

E2=250Va.c.
R1=330Va.c.
T1=540Va.c.

For example:
5006=500×10⁶pF
=500 μ F

J=±5%
K=±10%

For example:
00001
00002
⋮

Notes: Non-unique serial number,
please consult Hongfa

0=Tabs

0=Standard

To identify when special
requirements needed

Technical Parameters

U _N =350Va.c. Urms=250Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	Î (A)	I _{max} (A) θ _{amb} =55°C	D (mm)	H (mm)	G (kg)	Ordering Information
20	14.4	80	17.9	100	11	40	75	0.10	HCAE/E22005-*****0
30	13.5	90	15.6	200	12	40	85	0.12	HCAE/E23005-*****0
40	14.6	100	13.4	200	12	40	100	0.14	HCAE/E24005-*****0
50	8.2	100	13.8	300	16	50	75	0.17	HCAE/E25005-*****0
60	7.5	100	12.2	400	16	55	80	0.21	HCAE/E26005-*****0
80	9.7	120	10.7	400	16	50	100	0.23	HCAE/E28005-*****0
100	8.7	140	9.5	400	16	55	105	0.27	HCAE/E21006-*****0
120	8.0	160	8.8	500	16	60	105	0.33	HCAE/E21206-*****0
150	9.7	200	7.4	500	16	60	130	0.40	HCAE/E21506-*****0

U _N =470Va.c. Urms=330Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	Î (A)	I _{max} (A) θ _{amb} =55°C	D (mm)	H (mm)	G (kg)	Ordering Information
15	15.5	80	17.8	100	10	40	75	0.10	HCAE/R11505-*****0
20	15.7	90	15.7	200	11	40	85	0.12	HCAE/R12005-*****0
25	13.4	90	15.4	200	12	40	85	0.12	HCAE/R12505-*****0
30	15.6	100	13.3	200	12	40	100	0.14	HCAE/R13005-*****0
35	16.4	100	12.2	200	12	40	110	0.15	HCAE/R13505-*****0
40	10.0	100	12.5	300	15	50	85	0.18	HCAE/R14005-*****0
50	11.2	120	10.8	300	15	50	100	0.22	HCAE/R15005-*****0
60	11.7	120	9.7	300	15	50	115	0.25	HCAE/R16005-*****0
80	12.0	160	8.5	400	16	50	130	0.28	HCAE/R18005-*****0
100	10.7	200	7.4	500	16	60	130	0.40	HCAE/R11006-*****0

Notes: 1) “-” means capacitance tolerance, J=±5%, K=±10%;
 2) “*****” means internal serial number and terminal form.

Technical Parameters

U _N =760Va.c. Urms=540Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	Î (A)	I _{max} (A) θ _{amb} =55°C	D (mm)	H (mm)	G (kg)	Ordering Information
10	12.3	90	15.4	200	12	40	85	0.12	HCAE/T11005-*****0
12	13.9	100	13.4	200	12	40	100	0.14	HCAE/T11205-*****0
15	7.4	100	13.8	400	16	50	75	0.16	HCAE/T11505-*****0
20	7.1	100	12.2	400	16	50	85	0.18	HCAE/T12005-*****0
25	8.9	100	9.9	300	16	50	110	0.24	HCAE/T12505-*****0
30	9.6	120	8.8	300	16	50	125	0.27	HCAE/T13005-*****0
35	6.1	140	8.8	500	16	60	105	0.33	HCAE/T13505-*****0
40	6.4	140	8.2	500	16	60	115	0.36	HCAE/T14005-*****0
45	7.2	160	7.4	500	16	60	130	0.40	HCAE/T14505-*****0
50	6.7	200	7.3	600	16	60	130	0.40	HCAE/T15005-*****0

Notes: 1) “-” means capacitance tolerance, J=±5%, K=±10%;
 2) “*****” means internal serial number and terminal form.