

HCAD

Oil-Type Three Phase AC-Filter Capacitor



Features

- Metallized polypropylene film structure
- Excellent self-healing performance
- Overpressure disconnecter with anti-explosion design, more safety
- Aluminum case, fully sealed design

Typical Applications

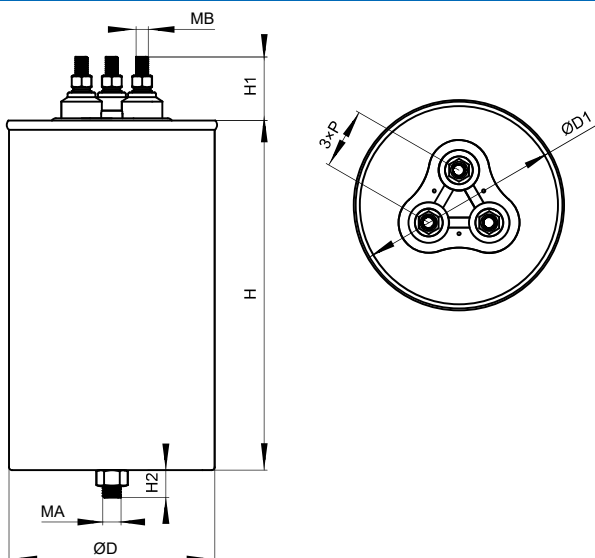
- Suitable for PV PCS、Wind power inverter grid side AC filtering circuit

Safety Approvals

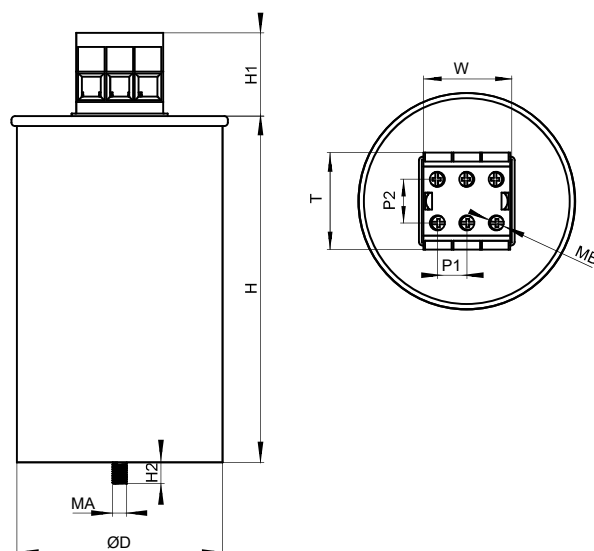
	TÜV	IEC 61071	3x6μF-3x350μF U _N : 350Va.c.-1840Va.c. U _{rms} : 250Va.c.-1300Va.c. File No.: R 50719416 0001
	CE	IEC 61071	3x8μF-3x350μF U _N : 350Va.c.-1840Va.c. U _{rms} : 250Va.c.-1300Va.c. File No.: AN 50719546 0001

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

Outline Drawing



a) Bolt type
(installation protective cover available)



b) Cap type

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

Dimensions Description

Unit: mm

Bolt type

$\varnothing D \pm 1$	$\varnothing D \pm 1$	H ± 2	H1 ± 3	MA	MB	H2 ± 1	P ± 1
76	≤ 82	See Technical Parameters Table	30	M12	M6/M8/M10	16	16
86	≤ 92		30	M12	M6/M8/M10	16	18
96	≤ 102		30	M12	M6/M8/M10	16	18
116	≤ 122		38	M12	M6/M8/M10	16	20
136	≤ 142		38	M12	M6/M8/M10	18	20

Cap type

$\varnothing D \pm 1$	$\varnothing D \pm 1$	H ± 2	H1 ± 3	MA	MB	H2 ± 1	P1 ± 1	P2 ± 1	W ± 2	T ± 2
76	≤ 82	See Technical Parameters Table	35	M12	M5	16	15	20	45	35
86	≤ 92		35	M12	M5	16	15	20	45	35
96	≤ 102		35	M12	M5	16	15	20	45	35
116	≤ 122		35	M12	M6	16	16.5	24.5	55	55
136	≤ 142		35	M12	M6	18	16.5	24.5	55	55

Specifications

Reference standards		IEC 61071, GB/T 17702	
Rated voltage	U_N	350Va.c.~1800Va.c.	
Rated RMS voltage	U_{rms}	250Va.c.~1300Va.c.	
Capacitance range	C_N	3 $\times$ 8 μ F~3 $\times$ 330 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	T_{OP}	$-40^\circ\text{C} \sim 85^\circ\text{C}$ ($\theta_{hs} \leq 85^\circ\text{C}$)	
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		3N·m(M6), 6N·m(M8), 10N·m(M12)	
Expected lifetime		100,000h@0.8 U_{rms} , $\theta_{hs} \leq 70^\circ\text{C}$	
Failure	λ	$\leq 300FIT@0.8U_{rms}$, $\theta_{hs} \leq 70^\circ\text{C}$	

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 D				/	W 1		5 0 0 6				J	0 0 0 0 1					A	0	(X X X)						
Series code				Rated voltage			Rated capacitance				Capacitance tolerance	Internal serial number					Terminal form	Internal code	Special code						
				E2=250Va.c. T1=540Va.c. W1=850Va.c.							J=±5% K=±10%	For example: 00001 00002 ⋮					0=Cap type A=Bolt type	0=Standard	To identify when special requirements needed						
							For example: 5006=500×10 ⁶ pF =500μF				Notes: Non-unique serial number, please consult Hongfa														

Technical Parameters

U _N =350Va.c. U _{rms} =250Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	Î (A)	I _{max} (A) θ	D (mm)	H (mm)	G (kg)	Ordering Information
3×50	2.86	100	6.2	700	3×32	76	145	0.7	HCAD/E25005-*****0
3×75	2.36	100	5.8	1000	3×35	76	145	0.7	HCAD/E27505-*****0
3×100	1.13	120	4.9	1000	3×37	76	175	0.9	HCAD/E21006-*****0
3×150	1.31	100	3.8	900	3×40	76	235	1.2	HCAD/E21506-*****0

U _N =760Va.c. U _{rms} =540Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	Î (A)	I _{max} (A) θ	D (mm)	H (mm)	G (kg)	Ordering Information
3×8	7.08	100	6.9	500	3×20	55	130	0.6	HCAD/T18004-*****0
3×15	5.22	110	5.9	700	3×26	60	145	0.7	HCAD/T11505-*****0
3×22	4.69	120	4.4	500	3×29	60	205	1.0	HCAD/T12205-*****0
3×39	3.30	120	3.9	1000	3×36	86	205	1.3	HCAD/T13905-*****0
3×48	3.37	130	3.4	1000	3×37	86	235	1.5	HCAD/T14805-*****0
3×60	2.66	130	3.2	1200	3×43	96	235	1.9	HCAD/T16005-*****0
3×75	2.13	120	3.0	1900	3×47	116	205	2.4	HCAD/T17505-*****0
3×100	2.10	130	3.1	2000	3×43	116	235	2.7	HCAD/T11006-*****0
3×133	1.90	120	2.35	2700	3×52	136	235	3.8	HCAD/T11336-*****0

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

Technical Parameters

UN=1000Va.c. Urms=690Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	$\hat{I}$ (A)	I _{max} (A) θ	D (mm)	H (mm)	G (kg)	Ordering Information
3×10	7.29	120	4.5	400	3×24	76	205	1.0	HCAD/U21005-*****0
3×23	4.59	130	3.5	800	3×32	86	235	1.5	HCAD/U22305-*****0
3×28	4.05	130	3.4	900	3×34	86	235	1.5	HCAD/U22805-*****0
3×40	2.64	120	3.2	1100	3×39	116	205	1.9	HCAD/U24005-*****0
3×50	2.62	130	2.7	1700	3×45	116	235	2.7	HCAD/U25005-*****0
3×56	2.48	130	3.2	1900	3×46	116	235	2.0	HCAD/U25605-*****0
3×75	2.18	130	2.4	2500	3×50	136	235	3.8	HCAD/U27505-*****0

UN=1200Va.c. Urms=850Va.c.									
C _N (μF)	ESR@1kHz (mΩ)	L _s (nH)	R _{th} (K/W)	$\hat{I}$ (A)	I _{max} (A) θ	D (mm)	H (mm)	G (kg)	Ordering Information
3×8	7.03	110	5.0	7030	3×22	76	175	0.9	HCAD/W18004-*****0
3×10	5.92	110	4.6	5920	3×25	86	175	1.1	HCAD/W11005-*****0
3×12	5.17	110	4.5	5170	3×27	86	175	1.1	HCAD/W11205-*****0
3×17	3.77	110	3.8	3770	3×33	106	175	1.7	HCAD/W11705-*****0
3×23	3.94	120	3.2	3940	3×35	96	235	1.9	HCAD/W12305-*****0
3×28	3.46	130	3.0	3460	3×38	106	235	2.3	HCAD/W12805-*****0
3×33	3.13	130	2.9	3130	3×39	106	235	2.3	HCAD/W13305-*****0
3×40	2.81	130	2.7	2810	3×41	116	235	2.7	HCAD/W14005-*****0
3×49	2.53	130	2.4	2530	3×45	136	235	3.8	HCAD/W14905-*****0
3×56	2.37	130	2.4	2370	3×46	136	235	3.8	HCAD/W15605-*****0

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