Dry Power Film Capacitors
AC Capacitors – 420 to 1000VAC

Overview

The 1I/1J/1K/1O/1Q/1T versions are a dry polypropylene metallized film capacitors with self-healing properties. They come with a cylindrical aluminum case filled with resign (UL 94 V0) along with screw terminals (other terminals available).

Applications

- AC harmonic filtering in UPS systems
- Motor drives
- Renewable energy
- Charger/Inverter
- Automotive systems

Advantages

- Metallized polypropylene dielectric capacitor with controlled self-healing.
- Segmentation for reinforced security control upon request.
- WC for high dv/dt and high current.
- Reinforced metallization developed for high impulse currents.

Reinforced safety system *(optional)*

- Segmented film: T or S
- Fuses Security: integrated on the metallization film.

Characteristics

- Capacitance Value: from 1µF up to 1000µF.
- AC voltage range: 240 to 1000 V_{AC}
- Termination Style: Radial
- High Rms Current: up to 60 Arms.
- Hight Peak Current: up to 15kA.
- High dv/dt: up to 30V/µs.
- Very good electrical and mechanical contact.
- Very low loss ESR at high frequency up to 10 kHz.
- Unit Weight: Min (Weight) = 0.25kg; Max (Weight) = 3,2 kg
- Other dimensions upon request.
- Ls < 120 nH.
- ESR ≤ 2mΩ.
- Permissible Ambient Temperature: -40 up to 70°C (operation at rated power, current, voltage and natural cooling).
- Capacitance Tolerance (at 1 kHz) ±5%, ±10% and ±20%. Other tolerances upon request.
- Terminals Design: screw or threaded inserts M4, M5, M6, M8, M10 (other terminals type available).
- Easy to Assemble.
- Test voltage between terminals: 2.15 X Un (ac), 10s.
- Test between terminals and case: 6kVAC, 50Hz, 20s

Surge management according to IEC61071

$1{,}1 \times Vac\ (8h\ per\ day)$

$1{,}15 \times Vac\ \ (30mins\ per\ day)$

$1{,}2 \times Vac\ (5mins\ per\ day)$

$1{,}3 \times Vac\ \ (1min\ per\ day)$

Maximum Tightening Torque (N.m)

	M4	M5	M6	M8	M10	M12
Galvanized steel Screw	2.5	5	8	10	12	14
Brass threaded insert	2.5	5	8	10	12	14
Aluminum Studs				3		12

General Technical Data

Reference Standards	IEC 61071
	ISO 9001-2015
Dielectric	Polypropylene film
	Non-inductive type winding
Climatic Category	25/70/56 – IEC 60068-1
Maximum hot spot temperature	+80°C
Endurance Test IEC 61071	+70°C at case temperature
Installation	Any position
ROHS and Reach Compliant	

Life Expectancy

Life Expectancy	100,000 hours at V_{rms} with $T_{hs} \leq 75°C$
Capacitance Drop at End of Life	-5% (typical)
Failure Rate IEC 61709	At V_n: <100 for T ≤ 60°C ≤200 for 60°C ≤ T ≤ 70°C ≤ 300 for 70 < T ≤ 75°C

Custom Design

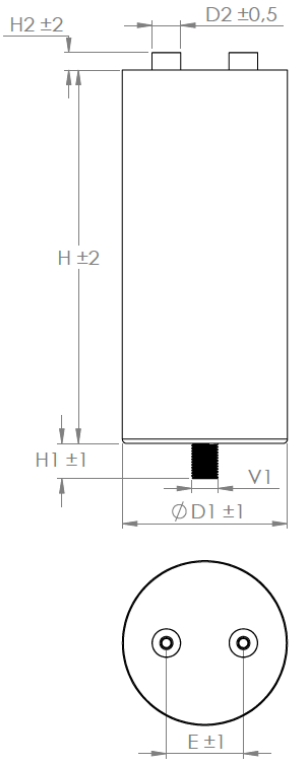
Other dimensions and/or electrical characteristics (Cp, Un, Î…) can be asked upon customer request.

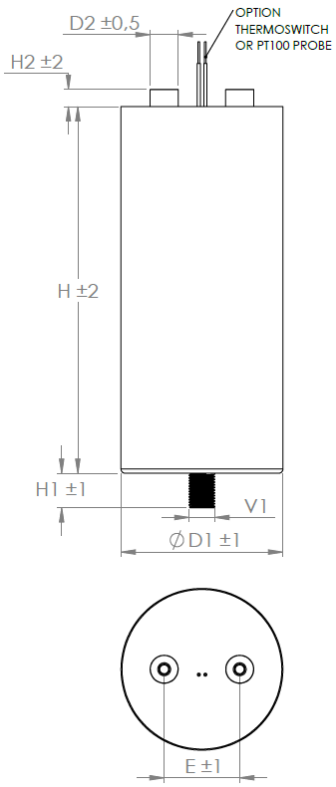
Dry Power Film Capacitors
AC Capacitors – 420 to 1000VAC

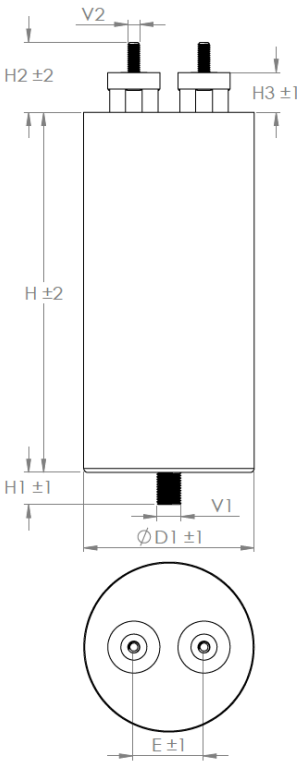
Ratings & Part Number Reference

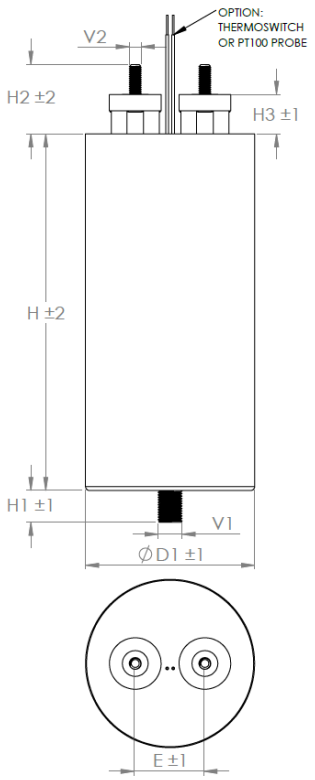
Part number	Capacitance (µF)	Vac	Vrms	Î (kA)	Îs (kA)	I_{rms} I_{eff} (A)	ESR (mΩ)	Dv/dt (µs/V)	Ø (mm)	L (mm)	Terminals (screws)	Weight (g)
420VAC – 300VRMS												
1K2P50UAVT6H26	50	420	300	1	2	30	2	25	60	140	M6	550
1J2P100UAVT6H26	100	420	300	1,2	2,4	35	2	25	60	140	M6	550
1J2P150UAVT10H26	150	420	300	1,5	3	35	2	15	75	140	M10	750
1I2P200UAVT10H26	200	420	300	2	4	40	1,5	15	75	140	M10	750
1I2P250UAVT10H26	250	420	300	3	6	40	1,5	15	85	140	M10	1000
1GV300UAVT10H26	300	420	300	3.5	7	45	1,5	15	85	140	M10	1000
1K2P400UAVT10H26	400	420	300	4	8	48	1,5	7,5	85	252	M10	1800
1J2P500UAVT10H26	500	420	300	4.5	9	50	1,5	7,5	85	252	M10	1800
1J2P600UAVT10H26	600	420	300	5	10	55	1,5	7,5	100	252	M10	2400
1J2P700UAVT10H26	700	420	300	5,5	11	55	1,5	7,5	100	252	M10	2400
1K2P800UAVT10H26	800	420	300	6	12	55	1,5	7,5	120	252	M10	3200
1J2P900UAVT10H26	900	420	300	6,5	13	60	1,5	7,5	120	252	M10	3200
1J2P1000UAVT10H26	1000	420	300	7	14	60	1,5	7,5	120	252	M10	3200
680VAC – 480VRMS												
1Q50UAVT6H26	50	680	480	1,5	3	20	2	25	75	140	M6	800
1O100UAVT6H26	100	680	480	2	4	30	2	25	85	140	M6	950
1O150UAVT6H26	150	680	480	3	6	35	2	25	100	140	M6	1250
1O2P200UAVT10H26	200	680	480	4	8	40	1,2	15	120	140	M10	1850
1O2P250UAVT10H26	250	680	480	4,5	8	45	1,2	7,5	100	252	M10	2400
1O2P300UAVT10H26	300	680	480	5	10	50	1,2	7,5	120	252	M10	3200
1O2P350UAVT10H26	350	680	480	5,5	11	55	1,2	7,5	120	252	M10	3200
1O2P400UAVT10H26	400	680	480	6	12	60	1,2	7,5	120	252	M10	3200
820VAC – 580VRMS												
1Q2P50UAVT6H26	50	820	580	1,5	3	25	2	25	80	140	M6	950
1Q2P50UAVT6H26-2	50	820	580	1	2	15	2	15	60	252	M6	1100
1Q2P100UAVT6H26	100	820	580	2	4	35	2	25	100	140	M6	1250
1Q2P100UAVT6H26-2	100	820	580	1,5	3	25	2	10	75	252	M6	1500
1Q2P150UAVT10H26	150	820	580	2,5	5	30	2	10	90	252	M10	2000
1Q2P200UAVT10H26	200	820	580	3	6	35	2	10	100	252	M10	2400
1Q2P250UAVT10H26	250	820	580	4	8	45	1,2	10	120	252	M10	3200
1Q2P300UAVT10H26	300	820	580	5	10	55	1,2	10	120	252	M10	3200
890VAC – 630VRMS												
1T2P50UAVT6H26	50	890	630	1,5	3	25	2	30	90	140	M6	1200
1T2P100UAVT6H26	100	890	630	2	6	25	2	15	90	252	M6	2000
1T2P150UAVT10H26	150	890	630	2,5	5	35	1,2	15	120	252	M10	3200
T2P200UAVT10H26	200	890	630	3	6	40	1,2	15	120	252	M10	3200

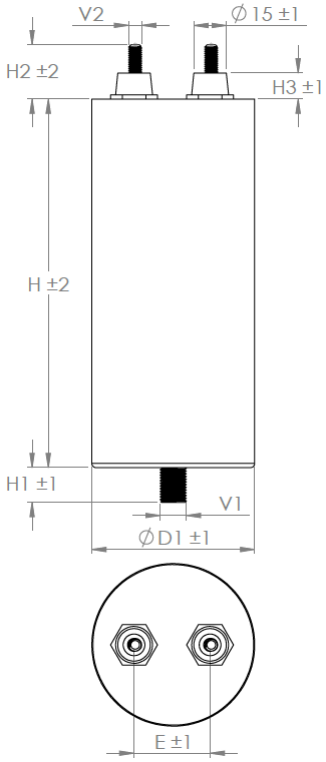
Drawings

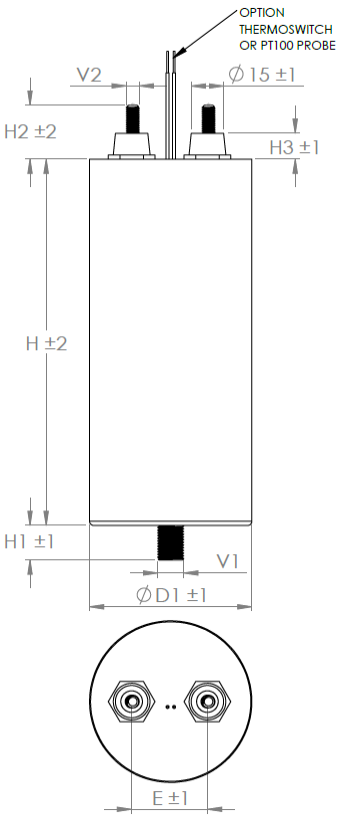

H2 ±2
D2 ±0,5
H ±2
H1 ±1
V1
ØD1 ±1
E ±1

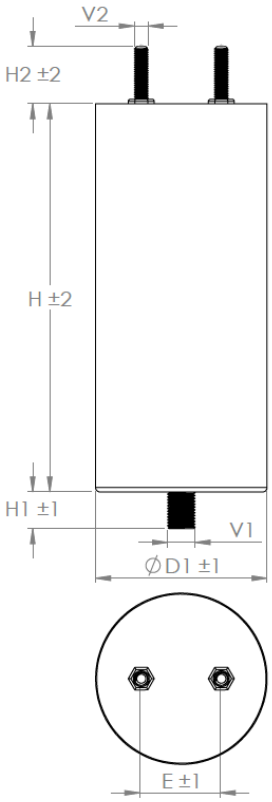

D2 ±0,5
OPTION
THERMOSWITCH
OR PT100 PROBE
H2 ±2
H ±2
H1 ±1
V1
ØD1 ±1
E ±1

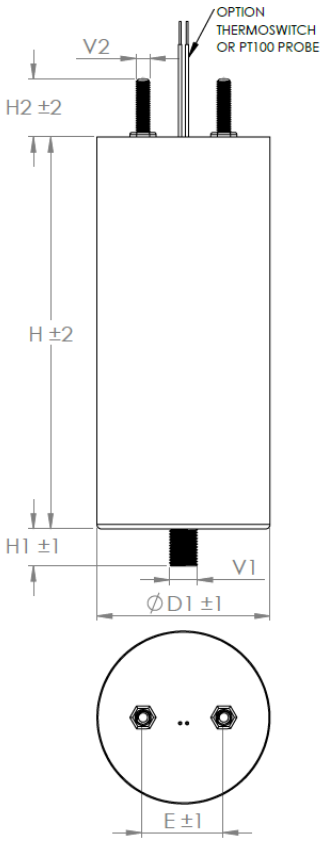

V2
H2 ±2
H3 ±1
H ±2
H1 ±1
V1
ØD1 ±1
E ±1


OPTION:
THERMOSWITCH
OR PT100 PROBE
V2
H2 ±2
H3 ±1
H ±2
H1 ±1
V1
ØD1 ±1
E ±1


V2
Ø 15 ±1
H2 ±2
H3 ±1
H ±2
H1 ±1
V1
ØD1 ±1
E ±1


OPTION
THERMOSWITCH
OR PT100 PROBE
V2
Ø 15 ±1
H2 ±2
H3 ±1
H ±2
H1 ±1
V1
ØD1 ±1
E ±1


V2
H2 ±2
H ±2
H1 ±1
V1
ØD1 ±1
E ±1


OPTION
THERMOSWITCH
OR PT100 PROBE
V2
H2 ±2
H ±2
H1 ±1
V1
ØD1 ±1
E ±1