E57.***
DC
250...1300V DC

E57 Designed to match: Custom-tailored DC capacitors optimized for use with standard IGBT modules

E57 are designed to fit directly to the terminals of your IGBT. Our range comprises standard as well as custom-tailored solutions which can be adapted to the specific geometrical and electrical requirements of your application environment.

Connection is made through low-inductance copper bars which may vary in number, size and position according to your specifications.

The UL:V0 plastic case houses compact and stable cylindrical windings, connected in parallel for maximum current strength and lowest possible self-inductance; it is filled with polyurethane resin, covered by a layer of UL94:V0 compliant resin protecting the winding package from humidity.

Our highly reliable SecuMet™ film guarantees secure self-healing properties even under the most demanding operating conditions. Some of our E57 capacitors can be operated at ambient temperatures up to 105°C and are therefore suitable for usage in automotive and other critical applications.

E57 Kundenspezifische DC-Kondensatoren, optimiert für den Einsatz mit Standard-IGBT-Modulen

Unsere E57-Reihe bietet sowohl Standardlösungen als auch spezielle Designs, welche sich den geometrischen und elektrischen Anforderungen Ihrer Anwendung anpassen.

Der Anschluß erfolgt über niederinduktive Kupferlaschen, welche je nach Ihrer Spezifikation in Anzahl, Größe und Position variieren.

Das UL:V0-Kunststoffgehäuse beherbergt kompakte und formstabile Rundwickel, parallelgeschaltet für höchste Stromfestigkeit und minimale Eigeninduktivität. Für Schutz vor Umwelteinflüssen und Flammschutz sorgen die PU-Harz-Füllung und ein UL94:V0-gerechtes Deckharz.

Unsere hochzuverlässige SecuMet™-Folie garantiert eine ordnungsgemäße Selbstheilung auch unter extremsten Einsatzbedingungen. So können einige unserer E57 Kondensatoren bei Umgebungstemperaturen von bis zu 105°C betrieben werden und eignen sich damit auch für Anwendungen der Automobilbranche und anderer kritischer Bereiche.

for latest edition and updates
check www.powercapacitors.info

E57.A07
DC
500...1400V DC

DC capacitors in rectangular plastic case
DC-Kondensatoren in eckigem Kunststoffgehäuse

HIGH HIGH
LOW

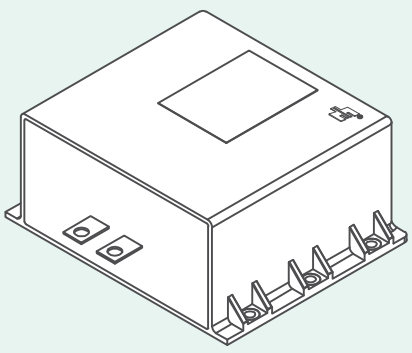
Standards	IEC 61071:2007, optional: IEC 61881:2010
can Gehäuse	Plastic (UL94:V0)
terminals	copper kupfer
mounting position Einbaulage	optional beliebig
filling material Füllmittel	PUR (solid fest)
internal protection interne Sicherung	none keine
fire load Brandlast	40 MJ/kg
U_S	1.5 × U_N

C_N tolerance Toleranz	±10%
$\tan\delta_0$	2×10^{-4}
operating temperatures Betriebstemperaturen	
Θ_{min} ... Θ_{max}	-40 ... 105°C
$\Theta_{HOTSPOT}$	≤ 70°C...105°C (see data charts_siehe Datentabellen)
storing temperature Lagertemperatur	-40 ... +105°C
statistical lifetime statistische Lebensdauer	> 100 000h
failure rate Ausfallrate	100 FIT (reference service period_Referenzbetriebsdauer 100000 h, $\Theta_{HOTSPOT}$ ≤70°C)

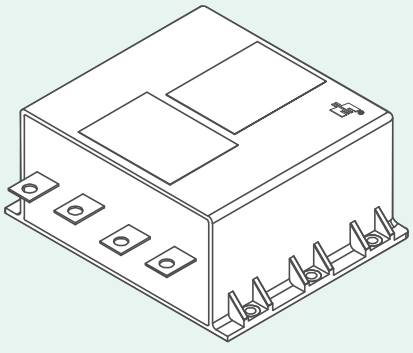
U_N DC ≤70°C	U_N DC ≤85°C	U_N DC ≤105°C	C_N (µF)	U_R (V)	U_{BB} DC (V)	R_S (mΩ)	R_{th} (K/W)	I_{max} (A)	Î (kA)	I_S (kA)	m (kg)	order no. Bestell-Nr.
500	450	250	800	50	750	0.4	3	90	2.5	15	1	E57.A07-8040xx
700	630	350	650	50	1050	0.5	3	80	2.5	15	1	E57.A07-6540xx
900	800	450	450	100	1350	0.5	3	80	2.5	15	1	E57.A07-4540xx
1000	900	500	350	100	1500	0.5	3	80	2.5	15	1	E57.A07-3540xx
1250	1100	625	240	100	1875	0.6	3	75	2.5	11	1	E57.A07-2440xx
1300	1200	650	220	100	1950	0.6	3	75	2.5	11	1	E57.A07-2240xx
1400	1250	700	180	100	2100	0.5	3	80	2.5	10	1	E57.A07-1840xx

L_e xx = 10: ca. 50 nH
xx = 20: ca. 30 nH

xx = 10



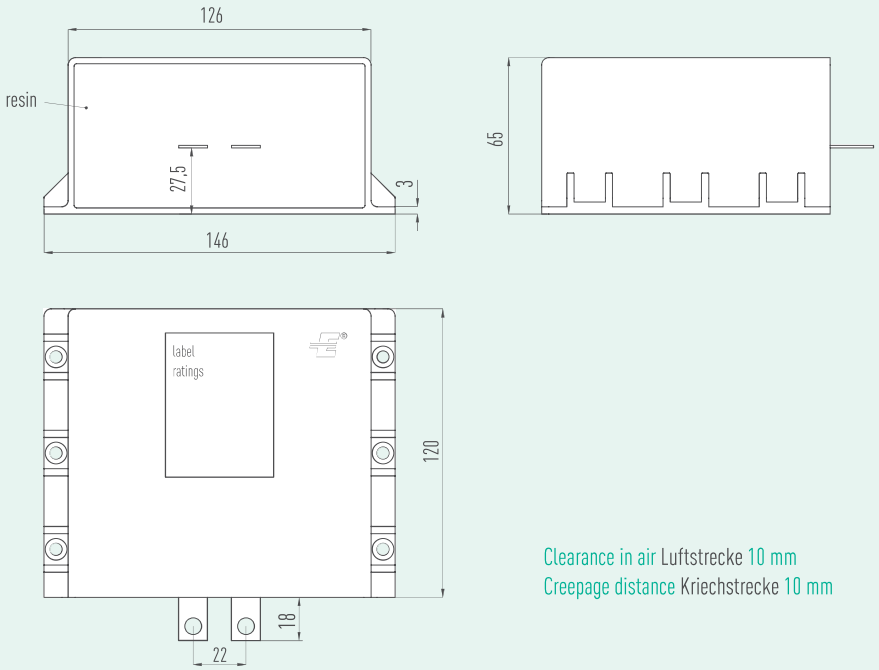
xx = 20



E57.A07
DC
500...1400V DC

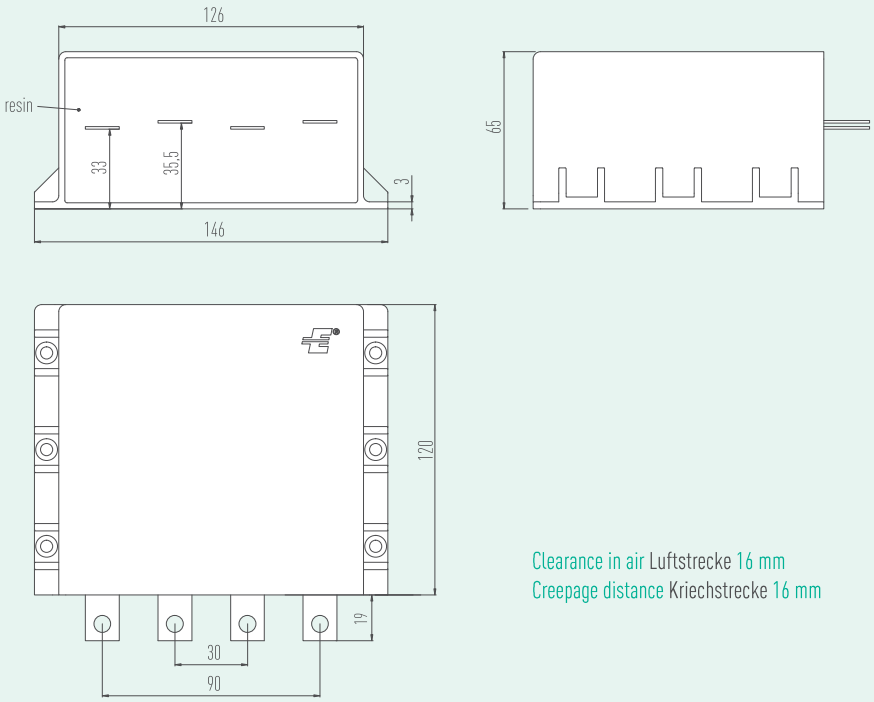
Dimension Drawings Maßbilder

xx = 10



Clearance in air Luftstrecke 10 mm
Creepage distance Kriechstrecke 10 mm

xx = 20



Clearance in air Luftstrecke 16 mm
Creepage distance Kriechstrecke 16 mm

for latest edition and updates
check www.powercapacitors.info

E57.A12
DC
1200...3000V DC

DC capacitors in rectangular plastic case
DC-Kondensatoren in eckigem Kunststoffgehäuse

HIGH HIGH
LOW

Standards . . . . . IEC 61071:2007
optional: IEC 61881:2010

can Gehäuse . . . . . Plastic (UL94:V0)
terminals Anschlüsse
xx=10 . . . . . copper Kupfer
xx=20 . . . . . brass Messing
mounting position Einbaulage . . . . . optional beliebig
filling material Füllmittel . . . . . PUR (solid fest)

internal protection interne Sicherung . . . . none keine
fire load Brandlast . . . . . 40 MJ/kg

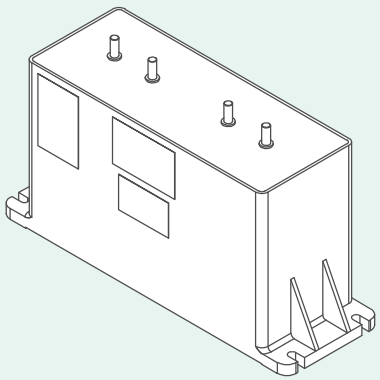
C_N tolerance Toleranz . . . . . ±10%
$\tan\delta_0$ . . . . . 2×10^{-4}

operating temperatures Betriebstemperaturen
Θ_{min} ... Θ_{max} . . . . . -25 ... 85°C
$\Theta_{HOTSPOT}$ . . . . . ≤ 85°C

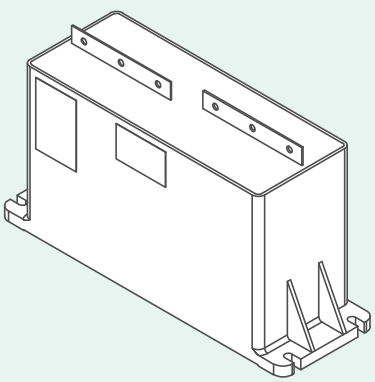
storing temperature Lagertemperatur . . . . . -40 ... +85°C
statistical lifetime statistische Lebensdauer . . . . > 100 000h
failure rate Ausfallrate . . . . . 100 FIT
(reference service period_Referenzbetriebsdauer 100000 h, $\Theta_{HOTSPOT}$ ≤70°C)

U_N DC (V) ≤	C_N (µF)	U_R (V)	U_S (V)	U_{BB} DC (V)	R_S (mΩ)	R_{th} (K/W)	I_{max} (A)	Î (kA)	I_S (kA)	L_e (nH)	m (kg)	order no. Bestell-Nr.
1200	4500	200	2000	1800	0.31	1.3	210	10	40	<40	16	E57.A12-4550XX
1750	2150	200	2500	2625	0.31	1.3	200	10	40	<40	16	E57.A12-2150XX
2200	1300	200	3600	3300	0.35	1.3	200	10	40	<40	16	E57.A12-1350XX
2600	900	200	3800	3900	0.35	1.3	180	8	35	<40	16	E57.A12-9040XX
3000	700	200	4000	4500	0.38	1.3	170	7	30	<40	16	E57.A12-7040XX

xx = 20



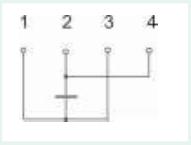
xx = 10

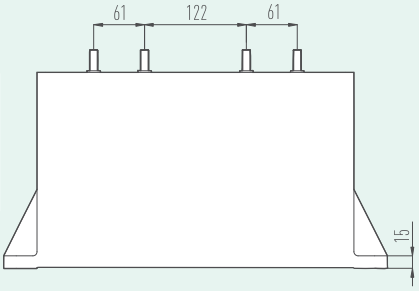


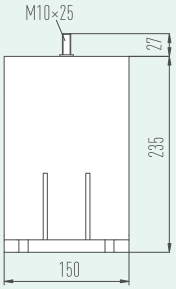
E57.A12
DC
1200...3000V DC

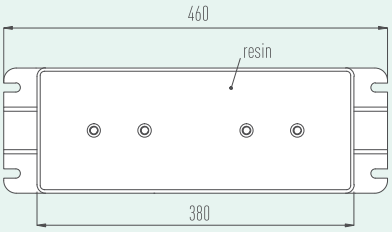
Dimension Drawings Maßbilder

xx = 20



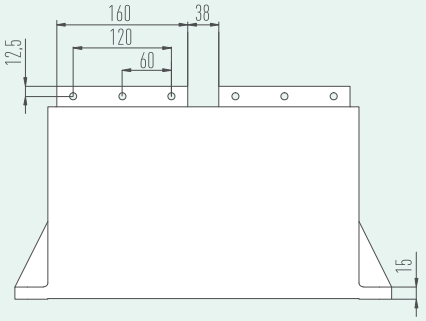


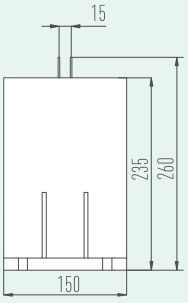


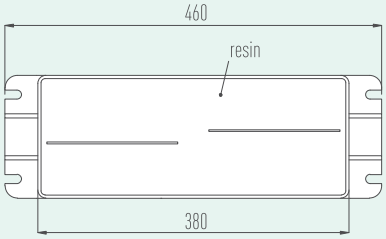


Clearance in air Luftstrecke 45 mm
Creepage distance Kriechstrecke 45 mm

xx = 10







Clearance in air Luftstrecke 38 mm
Creepage distance Kriechstrecke 38 mm

for latest edition and updates
check www.powercapacitors.info

E57.A40
DC
700...2100V DC

DC capacitors in rectangular plastic case
DC-Kondensatoren in eckigem Kunststoffgehäuse

HIGH HIGH
L_e I_{rms} I_S
LOW

Standards . . . . . IEC 61071:2007
optional: IEC 61881:2010

can Gehäuse . . . . . Plastic (UL94:V0)
terminals . . . . . brass Messing
mounting position Einbaulage . . . . . optional beliebig
filling material Füllmittel . . . . . PUR (solid fest)

internal protection interne Sicherung . . . none keine

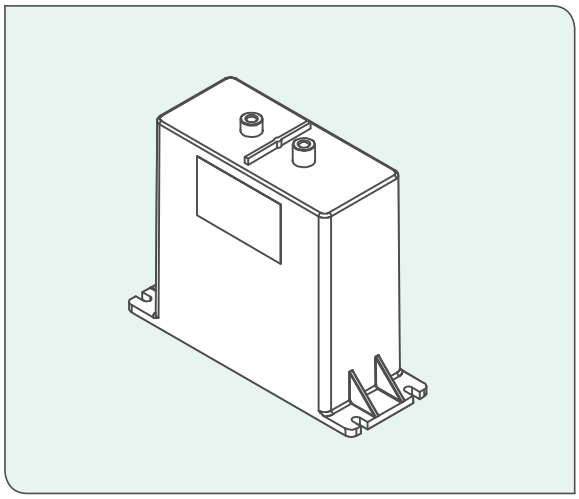
fire load Brandlast . . . . . 40 MJ/kg

C_N tolerance Toleranz . . . . . ±10%
tanδ_0 . . . . . 2×10^{-4}

operating temperatures Betriebstemperaturen
Θ_{min} ... Θ_{max} . . . . . -40 ... 85°C
$\Theta_{HOTSPOT}$ . . . . . ≤ 85°C

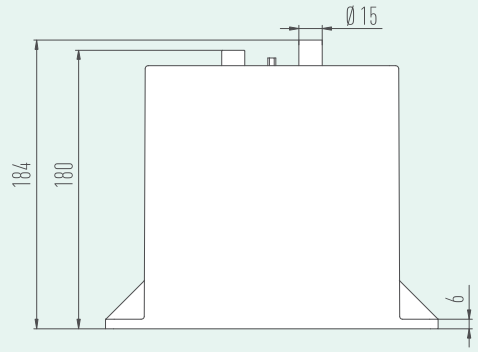
storing temperature Lagertemperatur . . . . . -40 ... +85°C
statistical lifetime statistische Lebensdauer . . . > 100 000h
failure rate Ausfallrate . . . . . 100 FIT
(reference service period_Referenzbetriebsdauer 100000 h, $\Theta_{HOTSPOT}$ ≤70°C)

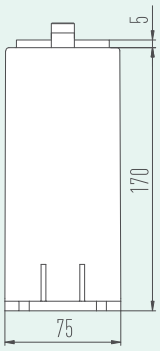
U_N DC (V) ≤	C_N (µF)	U_R (V)	U_S (V)	U_{BB} DC (V)	R_S (mΩ)	R_{th} (K/W)	I_{max} (A)	Î (kA)	I_S (kA)	L_e (nH)	m (kg)	order no. Bestell-Nr.
700	1200	100	1400	1050	0.3	3.7	165	3	30	30	2.5	E57.A40-125010
850	900	100	1600	1275	0.35	3.7	160	3	25	30	2.5	E57.A40-904010
1000	750	120	1800	1500	0.35	3.7	155	3	25	30	2.5	E57.A40-754010
1250	500	120	2200	1875	0.4	3.7	150	3	25	30	2.5	E57.A40-504010
1350	400	120	2500	2025	0.45	3.7	145	2.5	20	30	2.5	E57.A40-404010
1450	340	150	2700	2175	0.45	3.7	140	2.5	20	30	2.5	E57.A40-344010
1600	280	150	2900	2400	0.5	3.7	135	2	20	30	2.5	E57.A40-284010
1850	200	200	3200	2775	0.55	3.7	125	2	15	30	2.5	E57.A40-204010
2100	160	200	3600	3150	0.6	3.7	120	2	15	30	2.5	E57.A40-164010

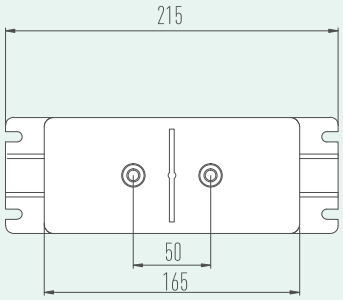


E57.A40
DC
700...2100V DC

Dimension Drawings Maßbilder







Clearance in air Luftstrecke 35 mm
Creepage distance Kriechstrecke 45 mm

Other availble designs and capacitance/voltage ratings
Weitere verfügbare Designs und Kapazitäts-/Spannungswerte

U_N DC @ $\Theta_{HOTSPOT}$					
70°C	80°C	105°C	E57. A11-*** L × W × H 173 × 94 × 105 mm	E57. A14-*** L × W × H 237 × 50 × 72 mm	E57. A17-*** L × W × H 139 × 50 × 72 mm
500V	450V	250V	1300 µF	720 µF	390 µF
700V	630V	350V	1000 µF	535 µF	300 µF
750V	680V	450V	-	530 µF	-
900V	800V	450V	750 µF	410 µF	225 µF
1000V	900V	500V	600 µF	325 µF	180 µF
1100V	1000V	550V	500 µF	275 µF	150 µF
1250V	1100V	625V	400 µF	215 µF	-
1300V	1200V	650V	360 µF	200 µF	110 µF

Other values and designs on request. Please discuss your specification with our sales team or use the enquiry form for power electronics capacitors on our web-site at www.electronicon.com.

Andere Ausführungen und Nennwerte auf Anfrage. Bitte besprechen Sie Ihre Spezifikation mit unserem Vertrieb oder nutzen Sie unser Anfrageformular für Leistungselektronikkondensatoren unter www.electronicon.com.