

## APPLICATIONS

DC voltage filtering for:

- DC link
- Speed converter (drives and traction)
- Resonant filtering
- Active correction (FACTS)
- Windmills
- Substation

## PACKAGING

Rectangular none magnetic stainless steel case.  
Grounding is via a nut on the top of the case.

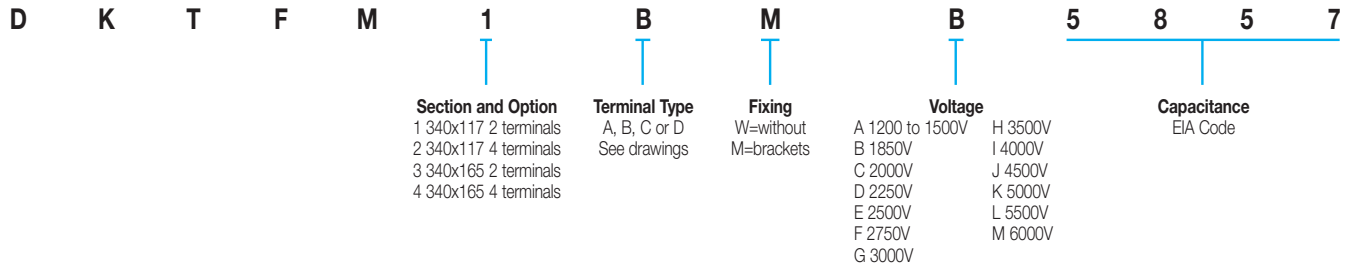
## PRESENTATION



## ELECTRICAL CHARACTERISTICS

Capacitance range $C_n$	130 $\mu$ F to 16100 $\mu$ F
Tolerance on $C_n$	$\pm 10\%$
Nominal DC voltage range	1200V to 6000V
Operating hot-spot temperature	-55°C to 85°C
Lifetime at $V_n$ and 70°C hot-spot temperature	100,000 hours
Stray inductance	min 40nH at 1MHz
Maximum Rms current	255 Arms
Test voltage between terminals	1.5 $V_n$ during 10s
Test voltage between shorten terminals and case	(2 x $V_n$ + 1000) $V_{rms}$ at 50Hz during 10s

## PART NUMBER / HOW TO ORDER



## THERMAL RESISTANCES

**Rth1: Between hot spot and case**

**Rth2: Between case and ambient air vs convection**

Height millimeters (inches)	Rth1 (°C/W)		Rth2 (°C/W) Natural convection		Rth2 (°C/W) Forced air (velocity>2m/s)	
	Base 340x117	Base 340x165	Base 340x117	Base 340x165	Base 340x117	Base 340x165
215 (8.465)	0.23	0.29	0.34	0.29	0.17	0.15
290 (11.42)	0.17	0.23	0.26	0.23	0.13	0.12
365 (14.37)	0.14	0.19	0.21	0.19	0.11	0.10
440 (17.32)	0.12	0.16	0.18	0.16	0.09	0.08
515 (20.28)	0.10	0.14	0.16	0.14	0.08	0.07
590 (23.23)	0.09	0.12	0.14	0.12	0.07	0.06
705 (27.76)	0.08	0.11	0.12	0.11	0.06	0.06
815 (32.09)	0.07	0.09	0.10	0.09	0.05	0.05

## PARASITIC INDUCTANCE VS SIZE

Height millimeters (inches)	Parasitic Inductance L (nH) Measured @ 1MHz							
	Base 340x117				Base 340x165			
	2 Terminals		4 Terminals		2 Terminals		4 Terminals	
	Type A/B	Type C/D	Type A/B	Type C/D	Type A/B	Type C/D	Type A/B	Type C/D
215 (8.465)	69	109	24	34	73	113	28	38
290 (11.42)	72	112	27	37	78	118	33	43
365 (14.37)	75	115	30	40	82	122	37	47
440 (17.32)	78	118	33	43	87	127	42	52
515 (20.28)	81	121	36	46	91	131	46	56
590 (23.23)	84	124	39	49	96	136	51	61
705 (27.76)	89	129	44	54	103	143	58	68
815 (32.09)	93	133	48	58	109	149	64	74

## WEIGHT VS SIZE

Height millimeters (inches)	Weight (kg)			
	Base 340x117	Base 340x117	Base 340x165	Base 340x165
	2 terminals	4 terminals	2 terminals	4 terminals
215 (8.465)	14	15	19	20
290 (11.42)	18	19	24	25
365 (14.37)	21.5	22.5	29	30
440 (17.32)	25.5	26.5	34.5	35.5
515 (20.28)	30	31	39.5	40.5
590 (23.23)	34	35	44.5	45.5
705 (27.76)	40	41	52.5	53.5
815 (32.09)	45.5	46.5	60	61

## Table of Values

Base 340mm x 117mm (Length x Width)

Height millimeters (inches)	$V_n = 1200$ to $1500V$			$V_n = 1850V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>1900</b>	0.60	DKTFMXXXXA1907	<b>1420</b>	0.64	DKTFMXXXXB1427
290 (11.42)	<b>2850</b>	0.48	DKTFMXXXXA2857	<b>2140</b>	0.49	DKTFMXXXXB2147
365 (14.37)	<b>3800</b>	0.42	DKTFMXXXXA3807	<b>2850</b>	0.42	DKTFMXXXXB2857
440 (17.32)	<b>4750</b>	0.39	DKTFMXXXXA4757	<b>3560</b>	0.38	DKTFMXXXXB3567
515 (20.28)	<b>5700</b>	0.37	DKTFMXXXXA5707	<b>4270</b>	0.36	DKTFMXXXXB4277
590 (23.23)	<b>6750</b>	0.36	DKTFMXXXXA6757	<b>4980</b>	0.35	DKTFMXXXXB4987
705 (27.76)	<b>8100</b>	0.35	DKTFMXXXXA8107	<b>6050</b>	0.33	DKTFMXXXXB6057
815 (32.09)	<b>9500</b>	0.34	DKTFMXXXXA9507	<b>7120</b>	0.32	DKTFMXXXXB7127

Height millimeters (inches)	$V_n = 2000V$			$V_n = 2250V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>1260</b>	0.67	DKTFMXXXC1267	<b>1000</b>	0.73	DKTFMXXXD1007
290 (11.42)	<b>1880</b>	0.51	DKTFMXXXC1887	<b>1500</b>	0.55	DKTFMXXXD1507
365 (14.37)	<b>2510</b>	0.44	DKTFMXXXC2517	<b>2000</b>	0.47	DKTFMXXXD2007
440 (17.32)	<b>3140</b>	0.40	DKTFMXXXC3147	<b>2500</b>	0.42	DKTFMXXXD2507
515 (20.28)	<b>3770</b>	0.37	DKTFMXXXC3777	<b>3000</b>	0.39	DKTFMXXXD3007
590 (23.23)	<b>4400</b>	0.36	DKTFMXXXC4407	<b>3500</b>	0.37	DKTFMXXXD3507
705 (27.76)	<b>5340</b>	0.34	DKTFMXXXC5347	<b>4250</b>	0.36	DKTFMXXXD4257
815 (32.09)	<b>6280</b>	0.33	DKTFMXXXC6287	<b>5000</b>	0.35	DKTFMXXXD5007

Height millimeters (inches)	$V_n = 2500V$			$V_n = 2750V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>810</b>	0.79	DKTFMXXXE0817	<b>675</b>	0.86	DKTFMXXXF6756
290 (11.42)	<b>1220</b>	0.60	DKTFMXXXE1227	<b>1010</b>	0.64	DKTFMXXXF1017
365 (14.37)	<b>1620</b>	0.50	DKTFMXXXE1627	<b>1350</b>	0.53	DKTFMXXXF1357
440 (17.32)	<b>2030</b>	0.44	DKTFMXXXE2037	<b>1680</b>	0.47	DKTFMXXXF1687
515 (20.28)	<b>2440</b>	0.41	DKTFMXXXE2447	<b>2020</b>	0.44	DKTFMXXXF2027
590 (23.23)	<b>2840</b>	0.39	DKTFMXXXE2847	<b>2360</b>	0.41	DKTFMXXXF2367
705 (27.76)	<b>3450</b>	0.37	DKTFMXXXE3457	<b>2860</b>	0.39	DKTFMXXXF2867
815 (32.09)	<b>4060</b>	0.36	DKTFMXXXE4067	<b>3370</b>	0.37	DKTFMXXXF3377

Height millimeters (inches)	$V_n = 3000V$			$V_n = 3500V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>570</b>	0.92	DKTFMXXXG0577	<b>365</b>	0.62	DKTFMXXXH3656
290 (11.42)	<b>850</b>	0.68	DKTFMXXXG0857	<b>545</b>	0.48	DKTFMXXXH5456
365 (14.37)	<b>1140</b>	0.56	DKTFMXXXG1147	<b>730</b>	0.41	DKTFMXXXH0737
440 (17.32)	<b>1420</b>	0.50	DKTFMXXXG1427	<b>910</b>	0.38	DKTFMXXXH0917
515 (20.28)	<b>1700</b>	0.46	DKTFMXXXG1707	<b>1090</b>	0.35	DKTFMXXXH1097
590 (23.23)	<b>1990</b>	0.43	DKTFMXXXG1997	<b>1280</b>	0.34	DKTFMXXXH1287
705 (27.76)	<b>2410</b>	0.40	DKTFMXXXG2417	<b>1550</b>	0.33	DKTFMXXXH1557
815 (32.09)	<b>2840</b>	0.39	DKTFMXXXG2847	<b>1820</b>	0.32	DKTFMXXXH1827

## Table of Values

Base 340mm x 117mm (Length x Width)

Height millimeters (inches)	$V_n = 4000V$			$V_n = 4500V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>280</b>	0.68	DKTFMXXXI0287	<b>225</b>	0.74	DKTFMXXXJ2256
290 (11.42)	<b>425</b>	0.52	DKTFMXXXI4256	<b>335</b>	0.56	DKTFMXXXJ3356
365 (14.37)	<b>565</b>	0.44	DKTFMXXXI5656	<b>445</b>	0.48	DKTFMXXXJ4456
440 (17.32)	<b>705</b>	0.40	DKTFMXXXI7056	<b>560</b>	0.43	DKTFMXXXJ0567
515 (20.28)	<b>845</b>	0.38	DKTFMXXXI8456	<b>670</b>	0.40	DKTFMXXXJ0677
590 (23.23)	<b>985</b>	0.36	DKTFMXXXI9856	<b>780</b>	0.38	DKTFMXXXJ0787
705 (27.76)	<b>1200</b>	0.34	DKTFMXXXI1207	<b>950</b>	0.36	DKTFMXXXJ0957
815 (32.09)	<b>1410</b>	0.33	DKTFMXXXI1417	<b>1120</b>	0.35	DKTFMXXXJ1127

Height millimeters (inches)	$V_n = 5000V$			$V_n = 5500V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>180</b>	0.80	DKTFMXXXK0187	<b>150</b>	0.86	DKTFMXXXL0157
290 (11.42)	<b>275</b>	0.60	DKTFMXXXK2756	<b>225</b>	0.65	DKTFMXXXL2256
365 (14.37)	<b>365</b>	0.51	DKTFMXXXK3656	<b>300</b>	0.54	DKTFMXXXL0307
440 (17.32)	<b>455</b>	0.45	DKTFMXXXK4556	<b>375</b>	0.48	DKTFMXXXL3756
515 (20.28)	<b>545</b>	0.42	DKTFMXXXK5456	<b>450</b>	0.44	DKTFMXXXL0457
590 (23.23)	<b>635</b>	0.40	DKTFMXXXK6356	<b>530</b>	0.41	DKTFMXXXL0537
705 (27.76)	<b>775</b>	0.37	DKTFMXXXK7756	<b>640</b>	0.39	DKTFMXXXL0647
815 (32.09)	<b>910</b>	0.36	DKTFMXXXK0917	<b>755</b>	0.38	DKTFMXXXL7556

Height millimeters (inches)	$V_n = 6000V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>130</b>	0.93	DKTFMXXXM0137
290 (11.42)	<b>190</b>	0.69	DKTFMXXXM0197
365 (14.37)	<b>255</b>	0.57	DKTFMXXXM2556
440 (17.32)	<b>320</b>	0.50	DKTFMXXXM0327
515 (20.28)	<b>380</b>	0.46	DKTFMXXXM0387
590 (23.23)	<b>445</b>	0.43	DKTFMXXXM4456
705 (27.76)	<b>540</b>	0.41	DKTFMXXXM0547
815 (32.09)	<b>635</b>	0.39	DKTFMXXXM6356

## Table of Values

Base 340mm x 165mm (Length x Width)

Height millimeters (inches)	$V_n = 1200$ to $1500V$			$V_n = 1850V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>3100</b>	0.78	DKTFMXXXA3107	<b>2110</b>	0.92	DKTFMXXXB2117
290 (11.42)	<b>4630</b>	0.60	DKTFMXXXA4637	<b>3170</b>	0.69	DKTFMXXXB3177
365 (14.37)	<b>6200</b>	0.52	DKTFMXXXA6207	<b>4230</b>	0.58	DKTFMXXXB4237
440 (17.32)	<b>7700</b>	0.47	DKTFMXXXA7707	<b>5290</b>	0.52	DKTFMXXXB5297
515 (20.28)	<b>9300</b>	0.44	DKTFMXXXA9307	<b>6340</b>	0.48	DKTFMXXXB6347
590 (23.23)	<b>10800</b>	0.42	DKTFMXXXA1088	<b>7400</b>	0.46	DKTFMXXXB7407
705 (27.76)	<b>13200</b>	0.40	DKTFMXXXA1328	<b>8980</b>	0.43	DKTFMXXXB8987
815 (32.09)	<b>15500</b>	0.39	DKTFMXXXA1558	<b>10600</b>	0.42	DKTFMXXXB1068

Height millimeters (inches)	$V_n = 2000V$			$V_n = 2250V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>1680</b>	1.00	DKTFMXXXC1687	<b>1420</b>	1.08	DKTFMXXXD1427
290 (11.42)	<b>2520</b>	0.75	DKTFMXXXC2527	<b>2140</b>	0.80	DKTFMXXXD2147
365 (14.37)	<b>3360</b>	0.63	DKTFMXXXC3367	<b>2850</b>	0.66	DKTFMXXXD2857
440 (17.32)	<b>4200</b>	0.56	DKTFMXXXC4207	<b>3570</b>	0.58	DKTFMXXXD3577
515 (20.28)	<b>5040</b>	0.51	DKTFMXXXC5047	<b>4280</b>	0.53	DKTFMXXXD4287
590 (23.23)	<b>5880</b>	0.48	DKTFMXXXC5887	<b>5000</b>	0.50	DKTFMXXXD5007
705 (27.76)	<b>7140</b>	0.45	DKTFMXXXC7147	<b>6070</b>	0.47	DKTFMXXXD6077
815 (32.09)	<b>8400</b>	0.44	DKTFMXXXC8407	<b>7140</b>	0.45	DKTFMXXXD7147

Height millimeters (inches)	$V_n = 2500V$			$V_n = 2750V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>1130</b>	1.18	DKTFMXXXE1137	<b>955</b>	1.27	DKTFMXXXF9556
290 (11.42)	<b>1700</b>	0.87	DKTFMXXXE1707	<b>1430</b>	0.93	DKTFMXXXF1437
365 (14.37)	<b>2260</b>	0.71	DKTFMXXXE2267	<b>1910</b>	0.76	DKTFMXXXF1917
440 (17.32)	<b>2830</b>	0.63	DKTFMXXXE2837	<b>2380</b>	0.66	DKTFMXXXF2387
515 (20.28)	<b>3400</b>	0.57	DKTFMXXXE3407	<b>2860</b>	0.60	DKTFMXXXF2867
590 (23.23)	<b>3950</b>	0.53	DKTFMXXXE3957	<b>3340</b>	0.56	DKTFMXXXF3347
705 (27.76)	<b>4820</b>	0.49	DKTFMXXXE4827	<b>4060</b>	0.52	DKTFMXXXF4067
815 (32.09)	<b>5670</b>	0.47	DKTFMXXXE5677	<b>4770</b>	0.49	DKTFMXXXF4777

Height millimeters (inches)	$V_n = 3000V$			$V_n = 3500V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>800</b>	1.37	DKTFMXXXG0807*	<b>555</b>	1.60	DKTFMXXXH5556*
290 (11.42)	<b>1200</b>	0.99	DKTFMXXXG1207	<b>833</b>	1.15	DKTFMXXXH8336
365 (14.37)	<b>1600</b>	0.81	DKTFMXXXG1607	<b>1110</b>	0.92	DKTFMXXXH1117
440 (17.32)	<b>2000</b>	0.70	DKTFMXXXG2007	<b>1390</b>	0.79	DKTFMXXXH1397
515 (20.28)	<b>2400</b>	0.63	DKTFMXXXG2407	<b>1660</b>	0.71	DKTFMXXXH1667
590 (23.23)	<b>2800</b>	0.59	DKTFMXXXG2807	<b>1940</b>	0.65	DKTFMXXXH1947
705 (27.76)	<b>3400</b>	0.54	DKTFMXXXG3407	<b>2360</b>	0.59	DKTFMXXXH2367
815 (32.09)	<b>4000</b>	0.51	DKTFMXXXG4007	<b>2780</b>	0.56	DKTFMXXXH2787

\* see particular Rms current value on page 20

## Table of Values

Base 340mm x 165mm (Length x Width)

Height millimeters (inches)	$V_n = 4000V$			$V_n = 4500V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>438</b>	1.78	DKTFMXXXI4386*	<b>335</b>	1.08	DKTFMXXXJ3356
290 (11.42)	<b>657</b>	1.26	DKTFMXXXI6576	<b>503</b>	0.80	DKTFMXXXJ5036
365 (14.37)	<b>876</b>	1.00	DKTFMXXXI8766	<b>670</b>	0.67	DKTFMXXXJ0677
440 (17.32)	<b>1090</b>	0.87	DKTFMXXXI1097	<b>839</b>	0.59	DKTFMXXXJ8396
515 (20.28)	<b>1310</b>	0.77	DKTFMXXXI1317	<b>1000</b>	0.54	DKTFMXXXJ1007
590 (23.23)	<b>1530</b>	0.70	DKTFMXXXI1537	<b>1170</b>	0.50	DKTFMXXXJ1177
705 (27.76)	<b>1860</b>	0.64	DKTFMXXXI1867	<b>1420</b>	0.47	DKTFMXXXJ1427
815 (32.09)	<b>2190</b>	0.59	DKTFMXXXI2197	<b>1680</b>	0.45	DKTFMXXXJ1687

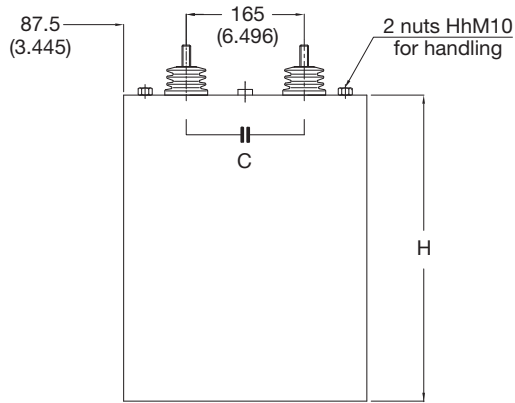
Height millimeters (inches)	$V_n = 5000V$			$V_n = 5500V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>266</b>	1.19	DKTFMXXXK2666	<b>224</b>	1.28	DKTFMXXXL2246
290 (11.42)	<b>400</b>	0.87	DKTFMXXXK0407	<b>336</b>	0.93	DKTFMXXXL3366
365 (14.37)	<b>532</b>	0.72	DKTFMXXXK5326	<b>448</b>	0.76	DKTFMXXXL4486
440 (17.32)	<b>666</b>	0.63	DKTFMXXXK6666	<b>560</b>	0.67	DKTFMXXXL0567
515 (20.28)	<b>800</b>	0.57	DKTFMXXXK0807	<b>672</b>	0.60	DKTFMXXXL6726
590 (23.23)	<b>932</b>	0.53	DKTFMXXXK9326	<b>785</b>	0.56	DKTFMXXXL7856
705 (27.76)	<b>1130</b>	0.50	DKTFMXXXK1137	<b>953</b>	0.52	DKTFMXXXL9536
815 (32.09)	<b>1330</b>	0.47	DKTFMXXXK1337	<b>1120</b>	0.49	DKTFMXXXL1127

Height millimeters (inches)	$V_n = 6000V$		
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	Part Number
215 (8.465)	<b>188</b>	1.38	DKTFMXXXM1886*
290 (11.42)	<b>282</b>	1.00	DKTFMXXXM2826
365 (14.37)	<b>376</b>	0.81	DKTFMXXXM3766
440 (17.32)	<b>470</b>	0.70	DKTFMXXXM0477
515 (20.28)	<b>564</b>	0.64	DKTFMXXXM5646
590 (23.23)	<b>659</b>	0.59	DKTFMXXXM6596
705 (27.76)	<b>800</b>	0.54	DKTFMXXXM0807
815 (32.09)	<b>940</b>	0.51	DKTFMXXXM0947

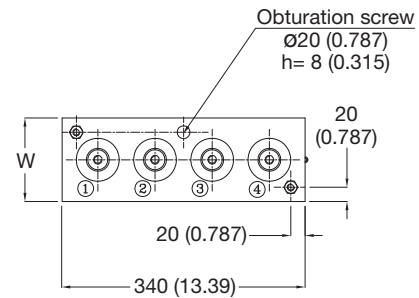
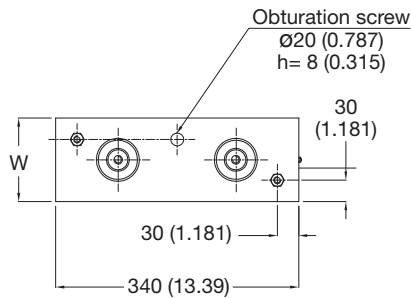
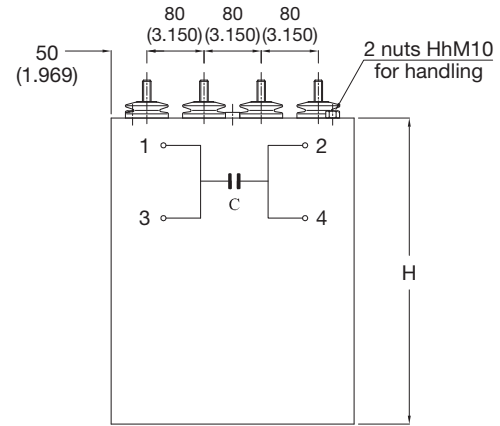
\* see particular Rms current value

Particular Rms Current Value	
Part Number	$I_{rms\ max}$ (A)
DKTFMXXXG0807	244
DKTFMXXXH5556	204
DKTFMXXXI4386	181
DKTFMXXXM1886	244

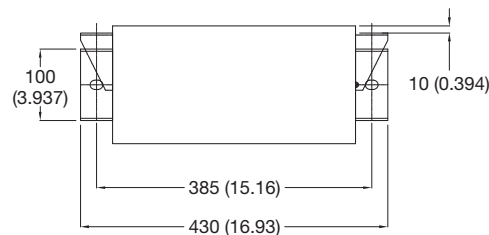
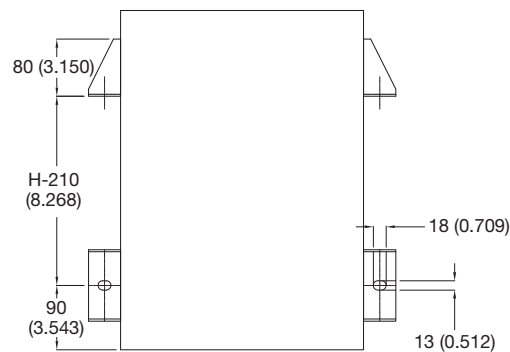
### Standard Design



### Low Inductance Option



### Mounting Brackets (suggested) Lower Brackets Removed for H < 500 mm



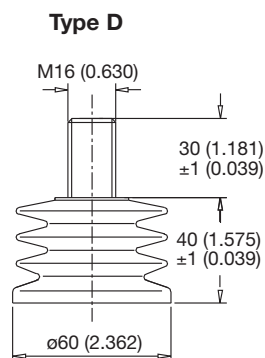
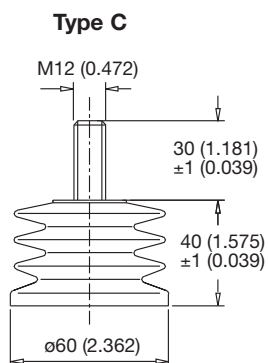
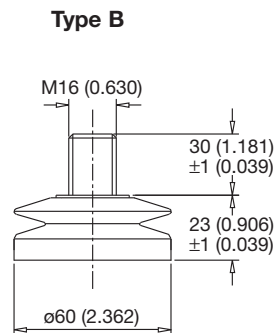
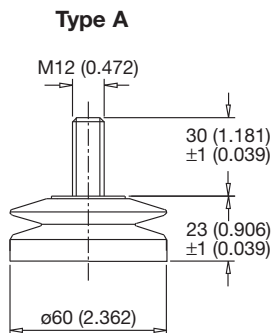
## Terminals and Connections

Epoxide terminals assembled by O-ring

Other specific connections on request

millimeters (inches)

Type	Creepage distance	Air distance
Type A / Type B	52 (2.047)	30 (1.181)
Type C / Type D	84 (3.307)	50 (1.969)



Other terminals types are available on request.