

<b>Capacitors with Screw Terminals</b>	<b>B41875</b>
<b>GP Grade</b>	<b>B43875</b>

**For professional power supplies  
High CV product**



**Construction**

- Charge-discharge proof, polar
- Aluminum case with insulating sleeve
- Poles with screw terminal connections

**Features**

- Very compact i.e. High CV product
- High reliability and high ripple current capability

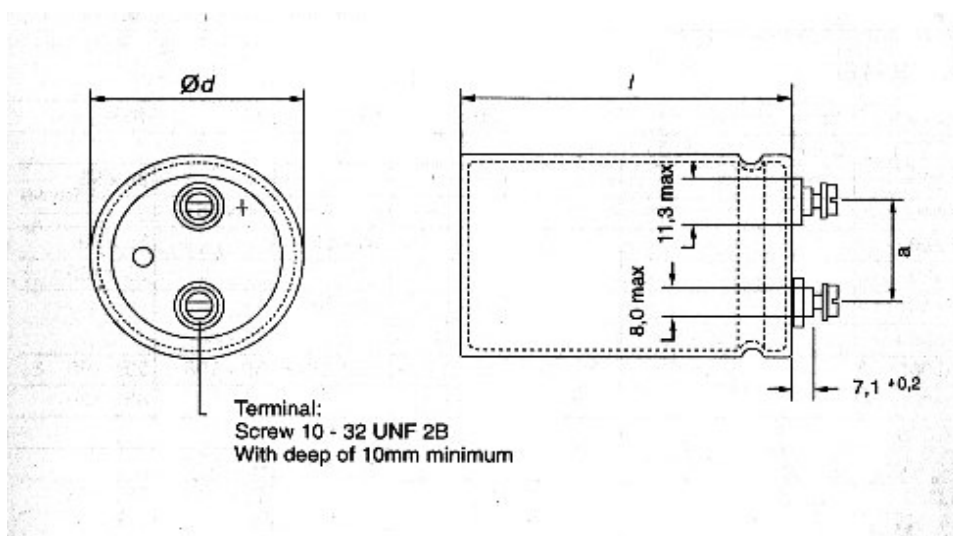
**Applications**

- Power supplies
- For switched-mode power supplies in industrial electronics

**Specifications and characteristics in brief**

	<b>B 41875</b>	<b>B43875</b>
Rated voltage VR	10...100 Vdc	160...450 Vdc
Surge voltage VS	1,15 VR	1,15 VR (for VR ≤ 250 Vdc) 1.1 VR (for VR ≥ 350 Vdc)
Rated capacitance CR	1 000...150 000 µf	220...10 000 µf
Capacitance tolerance	-10/+30 % (Q)	-10/+30 % ( Q)
Service life		
40° C, VR	>100 000h (1,3 IacR ,85°C)	> 100 000 h (1,3 IacR, 85° C)
85° C, VR ; IacR	> 2 000h	> 2 000h
Fraction failure	≤1%  (during the service life)	≤1%  (during the service life)
Failure rate	≤ 100 fit  (≤100 10 -9/h)	≤ 100 fit  (≤ 100 10 -9/h)
Voltage endurance test	1 000 h, 85° C  (at VR)	1000 h, 85 ° C  (at VR)

	B 41875	B43875
IEC climatic category	In accordance with IEC 68-1 $\leq 100$ Vdc: 40/085/56 (-40°C/+85 °C, 56 days of damp heat, steady state test) $> 100$ Vdc :25/085/56 (-25 °C/+85 °C, 56 days of damp heat, steady state test)	
Sectional specifications	IEC 384-4 DIN 45 910 part 12	
Vibration resistance	In accordance with IEC 68-2-6, test FC: displacement amplitude 0,75 mm, frequency range 10...55 Hz, acceleration max.10 g, duration 3 x 2 h.	



Dimensions (mm)			Approx. Weight (g)	Packing units (pieces)
$d+1$	$\pm 2$	$a \pm 0,4$		
35	55	12,7	69	50
35	80	12,7	96	50
35	105	12,7	117	50
35	120	12,7	154	25
50	80	22,2	182	20
50	105	22,2	292	20

Dimensions (mm)			Approx. Weight (g)	Packing units (pieces)
50	120	22,2	302	10
50	145	22,2	356	10
65	105	28,6	380	10
65	120	28,6	494	5
75	120	31,7	653	5
75	145	31,7	735	5
75	165	31,7	1013	5
75	220	31,7	1262	5

## Overview of available types

### Type B 41875

VR (Vdc)	10	15	25	40	63	75	100
CR (µf)	Case dimensions d x l (mm)						
1 000							35 x 55
1 500						35 x 55	
2 200					35 x 55		35 x 80
3 300							35 x 105
4 700			35 x 55	35 x 55	35 x 80		
6 800		35 x 55		35 x 80		50 x 80	
10 000		35 x 55	35 x 80	35 x 105	35 x 120	50 x 105	50 x 105
15 000			35 x 105				65 x 120
16 000					50 x 80		
22 000		35 x 80	35 x 120	50 x 80	50 x 120	65 x 120	
33 000	35 x 80		50 x 105	50 x 120	65 x 105	75 x 145	75 x 165
47 000			50 x 120				
68 000				75 x 120			
100 000			75 x 120				
150 000	50 x 120						

## Type B 43875

VR (Vdc)	160	200	250	350	450
CR (μf)	Case dimensions d x l (mm)				
220				35 x 55	
470		35 x 55			50 x 80
1 000		35 x 105	50 x 80	50 x 105	
1 500		50 x 80			65 x 120
2 200		50 x 105	50 x 105	65 x 120	75 x 145
3 300		50 x 120	50 x 145	75 x 120	75 x 145
4 700		65 x 105	65 x 120	75 x 145	75 x 145
6 800	65 x 105		75 x 145		
10 000		75 x 165	75 x 220		

The capacitance and voltage ratings listed above are available in smaller cases upon request.

Other voltage and capacitance ratings are also available upon request.

## Technical data and ordering codes

VR	CR	Case	IL max	ESRtyp	ESRmax	Iac max	IacR	Ordering code
Vdc	120 Hz	Dimensions	5 min	120 Hz	120 Hz	120 Hz	120 Hz	code
	25°C	d x l	25 ° C	25 °C	25 °C	40 °C	85 ° C	
	μf	mm	mA	Ω	Ω	A	A	Short Code
<b>B41875</b>								
10	33 000	35 x 80	1,72	0,012	0,020	15,0	9,4	-A2339-Q
	150 000	50 x 120	3,67	0,008	0,012	23,2	14,5	-A2150-Q
15	6 800	35 x 55	0,96	0,019	0,087	4,6	2,9	-A4688-Q
	10 000	35 x 55	1,16	0,018	0,059	8,6	5,4	-A4109-Q
	22 000	35 x 80	1,72	0,012	0,027	9,4	4,9	-A4229-Q

VR	CR	Case	IL max	ESRtyp	ESRmax	Iac max	IacR	Ordering
Vdc	120 Hz	Dimensions	5 min	120 Hz	120 Hz	120 Hz	120 Hz	code
	25°C	d x l	25 ° C	25 ° C	25 ° C	40 ° C	85 ° C	
	µf	mm	mA	Ω	Ω	A	A	Short Code
25	4 700	35 X 55	1,03	0,018	0,110	5,6	3,5	-A5478-Q
	10 000	35 X 80	1,50	0,028	0,052	9,3	5,8	-A5109-Q
	15 000	35 X 105	1,84	0,020	0,034	11,2	7,0	-A5159-Q
	22 000	35 X 120	2,22	0,013	0,028	16,0	10,0	-A5229-Q
	33 000	50 X105	2,72	0,016	0,024	17,6	11,0	-A5339-Q
	47 000	50 X 120	3,25	0,013	0,017	20,8	13,0	-A5479-Q
	100 000	75 X 120	4,74	0,003	0,011	29,0	18,1	-A5100-Q
40	4 700	35 X 55	1,30	0,019	0,094	7,0	4,4	-A7478-Q
	6 800	35 X 80	1,56	0,042	0,065	8,6	5,4	-A7688-Q
	10 000	35 X 105	1,90	0,012	0,044	11,5	7,2	-A7109-Q
	22 000	50 X 80	2,81	0,012	0,023	14,9	9,3	-A7229-Q
	33 000	50 X 120	3,45	0,010	0,016	22,4	14,0	-A7339-Q
	68 000	75 X 120	4,95	0,004	0,016	24,0	15,0	-A7689-Q
63	2 200	35 X 55	1,12	0,070	0,167	4,3	2,7	-A8228-Q
	4 700	35 X 80	1,63	0,063	0,078	7,0	4,4	-A8478-Q
	10 000	35 X 120	2,38	0,010	0,037	13,3	8,3	-A8109-Q
	16 000	50 X 80	2,92	0,017	0,029	14,1	8,8	-A8169-Q
	22 000	50 X 120	3,53	0,013	0,020	20,0	12,5	-A8229-Q
	33 000	65 X 105	4,33	0,003	0,018	21,4	13,4	-A8339-Q
75	1 500	35 X 55	1,01	0,024	0,246	3,8	2,4	-A0158-Q
	6 800	50 X 80	2,14	0,023	0,054	10,2	6,4	-A0688-Q
	10 000	50 X 105	2,60	0,010	0,037	14,4	9,0	-A0109-Q
	22 000	65 X 120	3,85	0,003	0,020	21,6	13,5	-A0229-Q
	33 000	75 X 145	4,72	0,003	0,018	24,6	15,4	-A0339-Q

VR	CR	Case	IL max	ESRtyp	ESRmax	Iac max	IacR	Ordering
Vdc	120 Hz	Dimensions	5 min	120 Hz	120 Hz	120 Hz	120 Hz	code
	25° C	d x l	25 ° C	25 ° C	25 ° C	40 ° C	85 ° C	
	µf	mm	mA	Ω	Ω	A	A	Short Code
100	1 000	35 X 55	0,95	0,022	0,295	3,4	2,1	-A9108-Q
	2 200	35 X 80	1,41	0,070	0,134	5,8	3,6	-A9228-Q
	3 300	35 X 105	1,72	0,073	0,089	8,0	5,0	-A9338-Q
	10 000	50 X 105	3,00	0,014	0,029	16,8	10,5	-A9109-Q
	15 000	65 X 120	3,67	0,003	0,025	19,2	12,0	-A9159-Q
	33 000	75 X 165	5,45	0,003	0,016	27,7	17,3	-A9339-Q

VR	CR	Case	IL MAX	ESRtyp	ESRmax	Iacmax	IacR	Ordering
Vdc	120 Hz	Dimensions	5 min	120Hz	120Hz	120Hz	120Hz	code
	25° C	d x l	25° C	25° C	25° C	40° C	85° C	
	µf	mm	mA	Ω	Ω	A	A	Short Code
<b>B43875</b>								
160	6 800	65 x 105	2,50	0,022	0,295	3,4	2,1	-A1688-Q
200	470	35 X 55	0,92	0,0120	0,314	4,5	2,8	-A2477-Q
	1 000	35 X 105	1,34	0,0120	0,147	5,8	3,6	-A2108-Q
	1 500	50 X 80	1,64	0,073	0,098	7,2	4,5	-A2158-Q
	2 200	50 X 105	1,99	0,047	0,067	9,6	6,0	-A2228-Q
	3 300	50 X 120	2,44	0,031	0,045	13,4	8,4	-A2338-Q
	4 700	65 X 105	2,91	0,017	0,031	16,3	10,2	-A2478-Q
	10 000	75 X 165	4,24	0,007	0,015	28,5	17,8	-A2109-Q

VR	CR	Case	IL MAX	ESRtyp	ESRmax	Iacmax	IacR	Ordering code
Vdc	120 Hz	Dimensions	5 min	120Hz	120Hz	120Hz	120Hz	
	25°C	d x l	25° C	25° C	25° C	40° C	85° C	
	µf	mm	mA	Ω	Ω	A	A	Short Code
250	1 000	50 X 80	1,50	0,050	0,147	6,1	3,8	-F2108 -Q
	2 200	50 X 105	2,22	0,049	0,067	10,1	6,3	-F2228-Q
	3 300	50 X 145	2,72	0,034	0,045	14,6	9,1	-F2338-Q
	4 700	65 X 120	3,25	0,010	0,031	16,0	10,0	-F2478-Q
	6 800	75 X 145	3,91	0,010	0,022	22,2	13,9	-A2688-Q
	10 000	75 X 220	4,74	0,007	0,015	30,4	19,0	-F2109-Q
350	220	35 X 55	0,83	0,380	0,670	2,6	1,6	-A4227-Q
	1 000	50 X 105	1,77	0,123	0,147	6,4	4,0	-A4108-Q
	2 200	65 X 120	2,63	0,044	0,067	10,1	6,3	-A4228-Q
	3 300	75 X 120	3,22	0,025	0,045	14,2	8,9	-A4338-Q
	4 700	75 X 145	3,85	0,020	0,031	17,6	11,0	-A4478-Q
450	470	50 X 80	1,38	0,343	0,490	3,2	2,0	-A5477-Q
	1 500	65 X 120	2,46	0,140	0,196	6,9	4,3	-A5158-Q
	2 200	75 X 145	2,98	0,060	0,088	11,2	7,0	-A5228-Q
	3 300	75 X 145	3,66	0,045	0,070	12,8	8,0	-A5338-Q
	4 700	75 X 145	4,36	0,031	0,045	15,68	9,8	-A5478-Q

### How to determine the ordering code

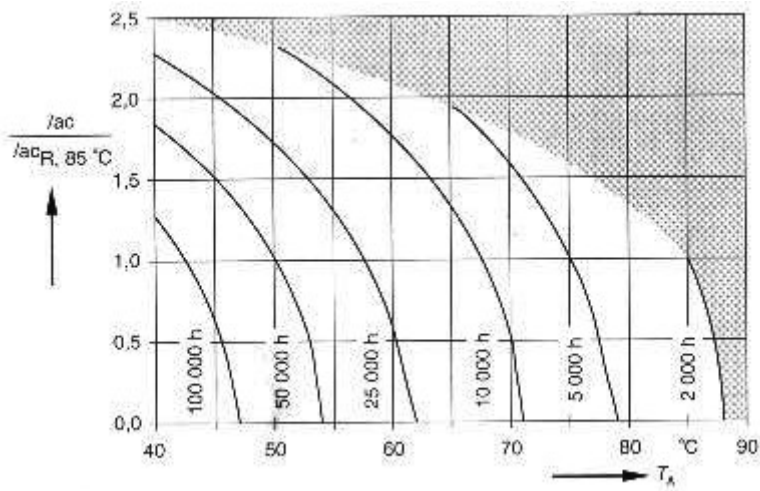
To obtain the required ordering code, prefix the type number to the short code.

E.g: B43875-A5478-Q

	VR = 10...100 Vdc	VR = 160...450 Vdc
Type number	B41875-	B43875-

Service life

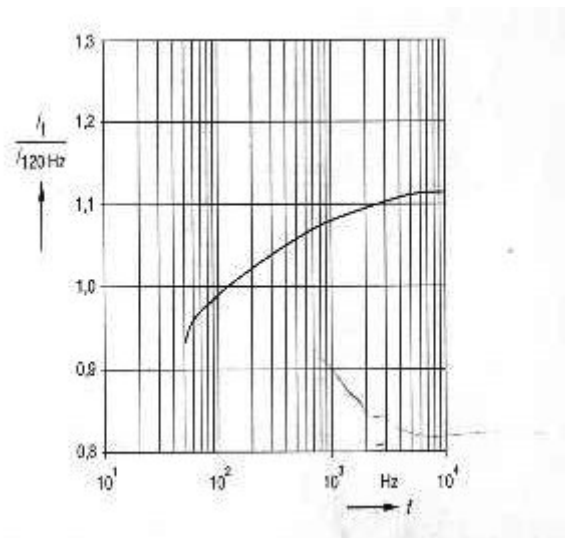
versus temperature  $T_A$  under ripple operating conditions



**Permissible ripple current  $I_{ac}$**

versus frequency  $f$

$V_R \leq 100$  Vdc

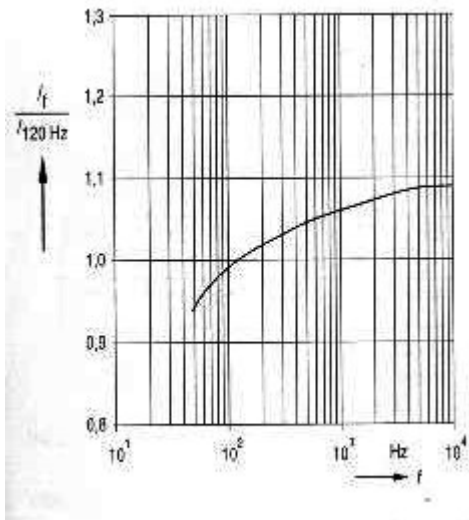




## Permissible ripple current $I_{ac}$

versus frequency  $f$

$V_R \geq 160$  Vdc

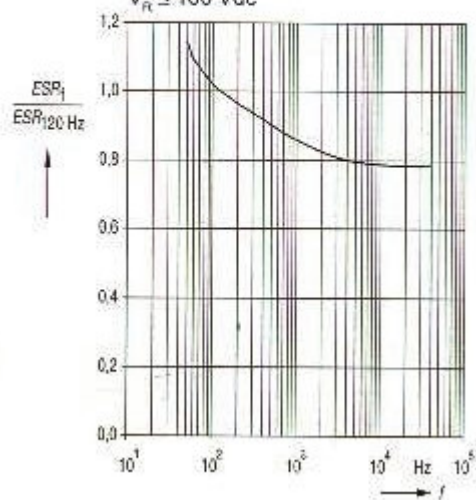


### Equivalent series resistance $ESR$

versus frequency  $f$

Typical behavior

$V_R \leq 100$  Vdc



### Equivalent series resistance $ESR$

versus frequency  $f$

Typical behavior

$V_R \geq 160$  Vdc

