Film Capacitors - Power Factor Correction

Capacitor Contactors

Series/Type: **B44066S**
Ordering code: **B44066S....C242**

Date: 2020-10-20
Version: 1

Characteristics

- Excellent damping of inrush current
- Improved power quality (e.g. avoidance of voltage sags)
- Soft switching of capacitor and thus longer useful life
- Enhanced mean life expectancy
- Reduced ohmic losses
- Easy access for cable connection
- AC6b utilization category for switching 3-phase capacitor

Features	
Resistors	Protected with PTFE covering
Leading contacts	With wiper function
Aux-contacts	For all types
Usage	In applications with or without reactors

Technical data and ordering codes

Ordering code	Frequency Hz	Capacitor power at 55 °C 220 … 240 V kvar	Capacitor power at 55 °C 400 … 440 V kvar	Capacitor power at 55 °C 660 … 690 V kvar	Max. current AC6b at 50/60 Hz, 50 °C A
B44066S0711C242	50/60	0 … 4	0 … 7.5	0 … 9	8
B44066S1011C242	50/60	0 … 5.5	0 … 10	0 … 12.5	14
B44066S1211C242	50/60	0 … 6.7	0 … 12.5	0 … 18	18
B44066S1611C242	50/60	0 … 8.5	0 … 16.7	0 … 24	24
B44066S2011C242	50/60	0 … 10	0 … 20	0 … 30	29
B44066S2511C242	50/60	0 … 15	0 … 25	0 … 36	36
B44066S3312C242	50/60	0 … 20	0 … 33.3	0 … 48	48
B44066S4012C242	50/60	0 … 25	0 … 40	0 … 58	58
B44066S5012C242	50/60	0 … 27	0 … 50	0 … 62	70
B44066S6012C242	50/60	0 … 40	0 … 60	0 … 92	92
B44066S7512C242	50/60	0 … 45	0 … 75	0 … 120	108
B44066S8012C241	50	0 … 48	0 … 80	0 … 100	116 *)
B44066S9912C241	50	0 … 60	0 … 100	0 … 143	144 *)

UL listing for 5012, 7512, 8012 & 9912 are not available.

CE marking for 8012 & 9912 are not available.

*) Represents coil available at only 50 Hz. Universal coil 50/60 Hz is not available as of now.

Type/ main contacts		...0711...	...1011...	...1211	...1611...	...2011...	...2511...	...3312...	...4012...	...6012...
Capacitor power at 55 °C ■ 220 … 240 V ■ 400 … 440 V ■ 660 … 690 V	kvar	 0 ... 4 0 ... 7.5 0 ... 9	 0 ... 5.5 0 ... 10 0 ... 12.5	 0 ... 6.7 0 ... 12.5 0 ... 18	 0 ... 8.5 0 ... 16.7 0 ... 24	 0 ... 10 0 ... 20 0 ... 30	 0 ... 15 0 ... 25 0 ... 36	 0 ... 20 0 ... 33.3 0 ... 48	 0 ... 25 0 ... 40 0 ... 58	 0 ... 40 0 ... 60 0 ... 92
Max. current AC6b at 50/60 Hz ■ 50 °C	A	8	14	18	24	29	36	48	58	92
Coil voltage at 50/60 Hz	VAC	204…264	204…264	204…264	204…264	204…264	204…264	204…264	204…264	204…264
Inrush/sealed VA of contactor at max. rated capacitor current	VA	70/8	70/8	70/8	70/8	100/8.5	100/8.5	245/26	245/26	245/26
Rated insulation voltage	VAC	690[1)]	690[1)]	690[1)]	690[1)]	690[1)]	690[1)]	690[1)]	690[1)]	690[1)]
Max. frequency of operations	1/h	240	240	240	240	240	240	240	100	100
Contact life	Million operations	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Cable cross section ■ Flexible with cable end sleeve – 1 conductor ■ Flexible with cable end sleeve – 2 conductors	mm^2	 2.5 1.5	 2.5 1.5	 2.5 1.5	 4 2.5	 4 4	 6 4	 16 6	 16 6	 50 25
■ Solid without cable end sleeve – 1 conductor ■ Solid without cable end sleeve – 2 conductors	mm^2 (max.)	 4 4	 4 4	 4 4	 6 6	 10 6	 16 10	 25 16	 25 16	 50 35
Weight Type …C…	kg	0.43	0.43	0.43	0.45	0.60	0.63	1.3	1.3	1.65

1) Applies to networks with grounded star point, over voltage category I to IV, pollution severity 3 (industrial standard).

V_{imp} = 8 kV. Values for other conditions are available upon request.

Type/ auxiliary contacts		...0711...	...1011...	...1211...	...1611...	...2011...	...2511...	...3312...	...4012...	...6012...
Normal Open (NO) Normal Closed (NC)		1 1	1 1	1 1	1 1	1 1	1 1	1 2	1 2	1 2
Rated insulation voltage	VAC	690[2)]	690[2)]	690[2)]	690[2)]	690[2)]	690[2)]	690[2)]	690[2)]	690[2)]
Rated operational current, utilization category AC15 ■ 220 ... 240 V ■ 380 ... 400 V ■ 440 V	 A A A	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14
Thermal rated current at ambient temperature ■ 40 °C ■ 60 °C	 A A	 10 8	 10 8	 10 8	 10 8	 10 8	 10 8	 10 8	 10 8	 10 8
Short circuit protection: Max. fuse size, slow, gL (gG)	A	10	10	10	10	10	10	10	10	10

2) Applies to networks with grounded star point, over voltage category I to IV, pollution severity 3 (industrial standard).

V_{imp} = 8 kV. Values for other conditions are available upon request.

*) Represents coil available at only 50 Hz. Universal coil 50/60 Hz is not available as of now.

Type/ main contacts		...5012…	...7512...	…8012	...9912...
Capacitor power at 55 °C ■ 220 … 240 V ■ 400 … 440 V ■ 660 … 690 V	kvar	 0 ... 27 0 ... 50 0 ... 62	 0 ... 45 0 ... 75 0 ... 120	 0 ... 48 0 ... 80 0 ... 100	 0 ….60 0 ... 100 0 ... 143
Max. current AC6b at 50/60 Hz ■ 50 °C	A	70	108	116	144
Coil voltage at 50/60 Hz	VAC	204…264	204…264	204…264*)	204…264*)
Inrush/sealed VA of contactor at max. rated capacitor current	VA	245/26	245/26	350/28	350/28
Rated insulation voltage	VAC	690[1)]	690[1)]	690[1)]	690[1)]
Max. frequency of operations	1/h	100	100	100	100
Contact life	Million operations	0.1	0.1	0.1	0.1
Cable cross section ■ Flexible with cable end sleeve – 1 conductor ■ Flexible with cable end sleeve – 2 conductors	mm^2	 16 6	 50 25	 50 25	 50 25
■ Solid without cable end sleeve – 1 conductor ■ Solid without cable end sleeve – 2 conductors	mm^2 (max.)	25 16	50 35	50 35	50 35
Weight: Type …C…	kg	1.65	1.65	2.58	2.58

1) Applies to networks with grounded star point, over voltage category I to IV, pollution severity 3 (industrial standard).

V_{imp} = 8 kV. Values for other conditions are available upon request.

*) Represents coil available at only 50 Hz.

UL listing for 5012, 7512, 8012 & 9912 are not available.

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Type/ auxiliary contacts		...5012…	...7512...	…8012	...9912...
Normal Open (NO Normal Closed (NC)		1 2	1 2	1 2	1 2
Rated insulation voltage	VAC	690[2)]	690[2)]	690[2)]	690[2)]
Rated operational current, utilization category AC15 ■ 220 ... 240 V ■ 380 ... 400 V ■ 440 V	 A A A	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14	 2.09 1.25 1.14
Thermal rated current at ambient temperature ■ 40 °C ■ 60 °C	 A A	 10 8	 10 8	 10 8	 10 8
Short circuit protection: Max. fuse size, slow, gL (gG)	A	10	10	10	10

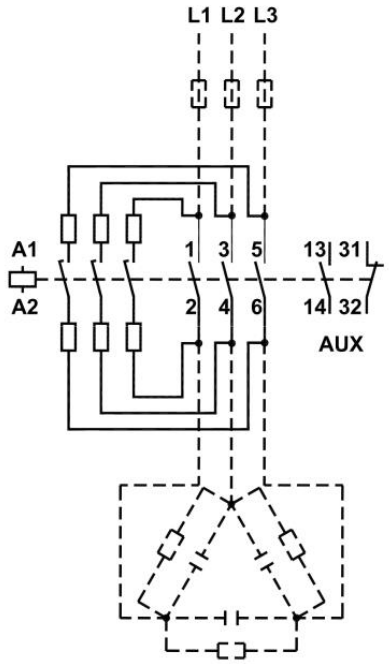
2) Applies to networks with grounded star point, over voltage category I to IV, pollution severity 3 (industrial standard).
V_{imp} = 8 kV. Values for other conditions are available on request.

UL listing for 5012, 7512, 8012 & 9912 are not available.

CE marking for 8012 & 9912 are not available.

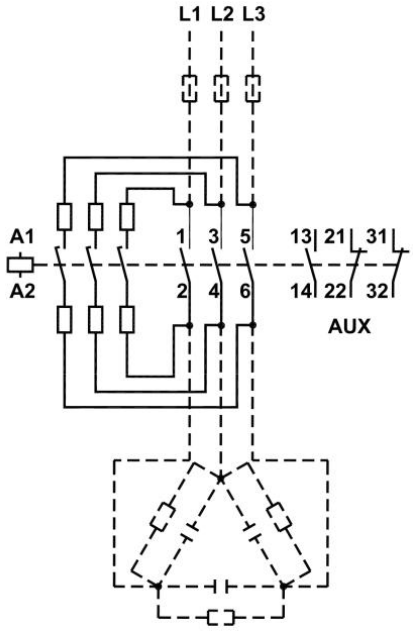
Connection diagram for all types B44066S…1C242

0711..., 1011..., 1211…, 1611…, 2011..., 2511...

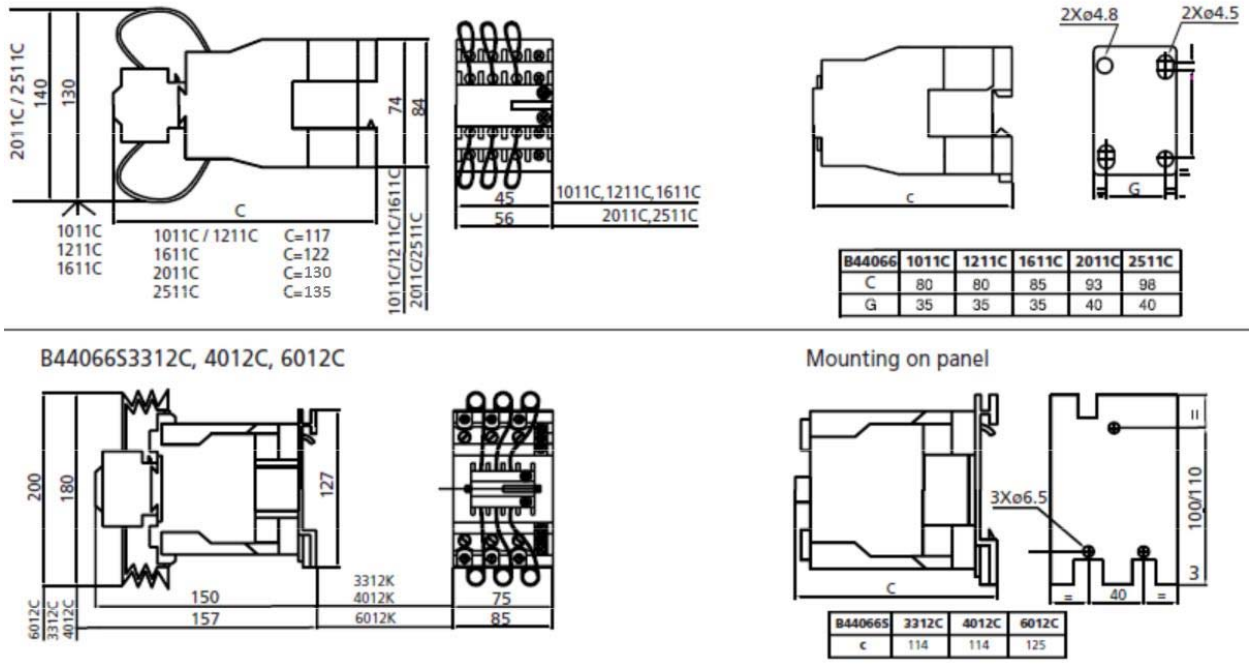


Connection diagram for all types B44066S…2C241 / C242

...3312..., 4012..., 5012…,6012…,7512…, 8012…, 9912…



Dimensional drawing



B44066	1011C	1211C	1611C	2011C	2511C
C	80	80	85	93	98
G	35	35	35	40	40

B44066S	3312C	4012C	6012C
c	114	114	125

B44066	5012C	7512C
c	110	110
e	17.5	22.5

Cautions and warnings

In case auxiliary contacts are used for switching of discharge resistors (not in accordance with IEC 60831 standard), make sure that the current of the discharge resistors is not higher than the rated current of the auxiliary contacts.

Mounting instructions

No inflammable material or material sensitive to heat must be close-by the capacitor switching contactors because temperatures may increase around the resistance spirals.

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Important notes

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