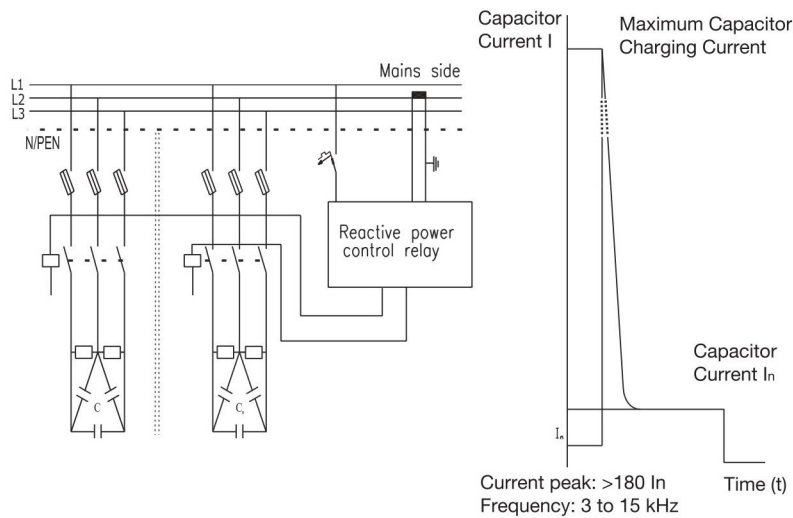


APPLICATION

In low voltage installations, when a Capacitor is switched-on, it results in resonant circuit damped to a greater degree. In addition to the rated current, over current of high amplitude ($> 180 I_n$) and high frequencies (3 ~ 15 kHz) occur during transit period (1 to 2 ms). The resultant high in-rush current peaks, caused due to capacitor switching, depends upon following factors (Network inductances, Transformer power and short circuit voltage, Harmonics presence in the system...). The in-rush current of such high magnitudes is undesirable and it is likely to weld main poles of any standard contactor.



Capacitor contactor are specially designed to meet stringent requirements of capacitor switching as deliberated above. These contactors are fitted with front-mounted block of 3 early make auxiliary contact in series with quick discharge damping 6-resistors, 2-resistors per phase to limit peak current to value within contactor making capacity such that normal rated capacitor current is carried by main contacts which, after closing, effectively short out the resistors.

SALIENT FEATURES

- Damping of inrush current
- Low ohmic losses
- Power quality improvement
- Enhanced equipment life
- Low maintenance and down – time
- Optimized solution cost
- Capacitor bank switching in parallel without derating (Permanent current that can reach 1.5 time the nominal current of capacitor bank)



GENERAL TECHNICAL PARAMETERS

Number of poles	3 poles
Rated Operational Voltage (Ue)	690V
Rated Insulation Voltage (Ui)	690V
Impulse Withstand Voltage (Uimp)	8kV
Rated Frequency	50/60Hz
Reference Standard	IEC 60947-4-1
Contactors fitted with a block of early make poles and damping resistors	Yes

Product Code (2)	Operating Power 50/60 Hz $\theta \leq 55^\circ\text{C}$ (kVAr) (1)			Instataneous auxillary contacts		Maximum operating rate (Operations/ hours)	Electrical durability atnominal load (Operations)		Prospective peak current at switch on (In)
	200V/240V	400V/440V	660V/690V	NO	NC		400V	690V	
BCC10K11**	5.5	10	12.5	1	1	240	300000	200000	200
BCC15K11**	8.5	16.7	24	1	1	240	300000	200000	200
BCC20K11**	10	20	30	1	1	240	300000	200000	200
BCC25K11**	15	25	36	1	1	240	300000	200000	200
BCC30K12**	20	33.3	48	1	2	240	300000	200000	200
BCC40K12**	25	40	58	1	2	100	300000	200000	200
BCC50K12**	30	50	72	1	2	100	300000	200000	200
BCC60K12**	40	60	92	1	2	100	300000	200000	200
BCC75K12**	45	75	120	1	2	100	300000	200000	200
BCC80K12**	48	80	128	1	2	100	300000	200000	200
BCC100K12**	60	100	143	1	2	100	300000	200000	200

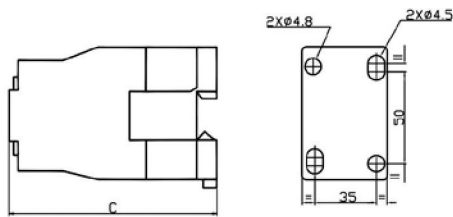
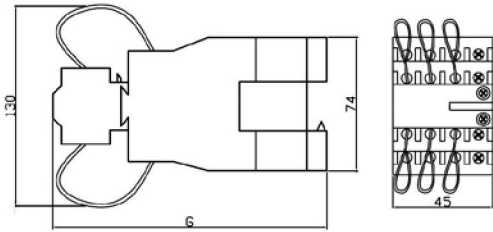
(1) The average temperature over a 24-hour period, in accordance with standards IEC 60070 and 60831 is 45°C

(2) ** AC Coil Voltage – Capacitor Duty Contactor

Control circuit voltage (Uc)	24V	110V	220V	415V
50Hz	B5	F5	M5	N5
50/60Hz	B7	F7	M7	N7
Operating range at $\leq 60^\circ\text{C}$	0.8 ~ 1.1 Uc			
Drop-out	0.3 ~ 0.6 Uc			

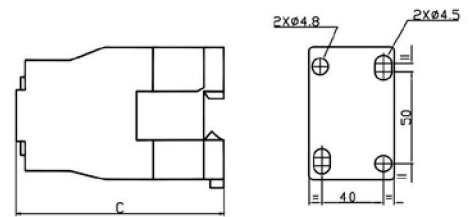
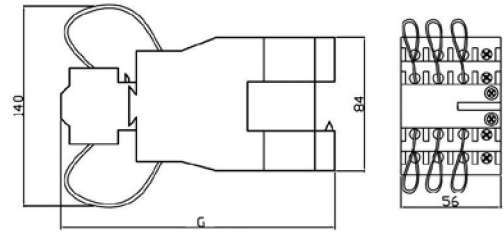
CONTACTORS DRAWING

BCC-10K11, 15K11



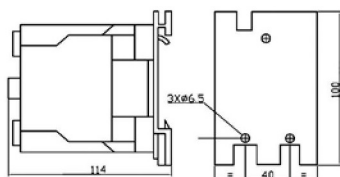
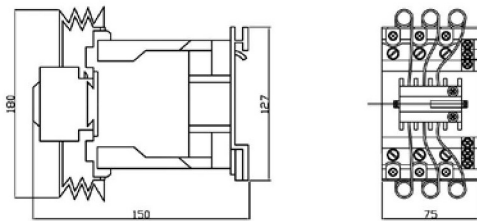
BCC	10K11	15K11
C	80	85
G	117	122

BCC-20K12, 25K12

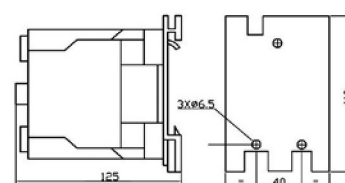
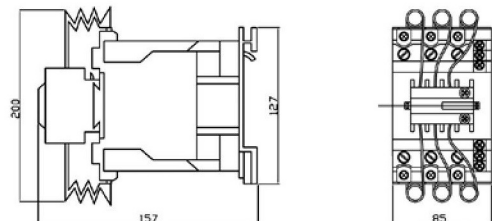


BCC	20K11	25K11
C	93	98
G	130	135

BCC-30K12, 40K12, 50K12



BCC-60K12, 75K12



BCC-80K12, 100K12

