

Capacitor duty contactors CEM CK..N



CEM 2,5CK, CEM 5CK



CEM 7,5CK



CEM 10CK..N



CEM 25CK..N



CEM 60CK..N

Application - Contactors for switching capacitor banks in automatic reactive power compensation systems are designed according AC-6b category of use. Contactors CEM 10CK - CEM 70CK have already integrated auxiliary contacts (early make) with precharge resistors. When switching the capacitor ON, auxiliary contacts are closed first in order to limit the inrush current, which is forced thru precharge resistors, the main contacts are closed with a few milliseconds delay. This operation significantly reduces inrush current. Capacitor duty contactors must be selected according to the power capacity of the capacitors. For group and centralized reactive power compensation systems without detuning reactors, it is recommended to use over-sized contactors for longer life time experience. (Contactor nominal power > capacitor rated power).

- DESCRIPTION:

- mounting on DIN rail or panel;
- compliance with IEC 60947-1, IEC 60947-4 standards;
- built-in precharge resistors for limiting inrush current
- small dimensions;
- standard control voltage 230V AC;
- operating ambient temperature range up to +55 °C

Type	Code	Rated oper. power 400/440V (kVAr)	Aux. contacts	Weight (kg)	Packaging (pcs)
CEM 2,5CK.01-230V-50Hz*	004643803	2,5	1NC	0,25	1/50
CEM 5CK.01-230V-50Hz*	004643804	5	1NC	0,26	1/50
CEM 7,5CK.00-230V-50Hz*	004643805	7,5	-	0,27	1/50
CEM 10CK.02N-230V-50Hz	004643816	10	2NC	0,32	1/50
CEM 12,5CK.02N-230V-50Hz	004643817	12,5	2NC	0,32	1/50
CEM 15CK.02N-230V-50Hz	004643818	15	2NC	0,325	1/50
CEM 20CK.01N-230V-50Hz	004643819	20	1NC	0,34	1/50
CEM 25CK.01N-230V-50Hz	004643820	25	1NC	0,465	1/42
CEM 30CK.01N-230V-50Hz	004643821	30	1NC	0,53	1/23
CEM 40CK.01N-230V-50Hz	004643822	40	1NC	0,945	1/23
CEM 50CK.01N-230V-50Hz	004643823	50	1NC	0,945	1/23
CEM 60CK.01N-230V-50Hz	004643824	60	1NC	0,97	1/23
CEM 70CK.01N-230V-50Hz	004643825	70	1NC	1,4	1/10

*CEM 2,5CK, CEM 5CK and CEM 7,5CK are without auxiliary contact and precharge resistors due to small capacitor powers.

additional auxliary contact block BCMLE11 (side mounting)

Type	Code	Description	for use	Weight (kg)	Packaging (pcs)
BCMLE11	4643802	1NO + 1NC	CEM 2,5-70CK..N	0,025	2/560

An additional block contact BCMLE11 can be installed on both sides of the contactor



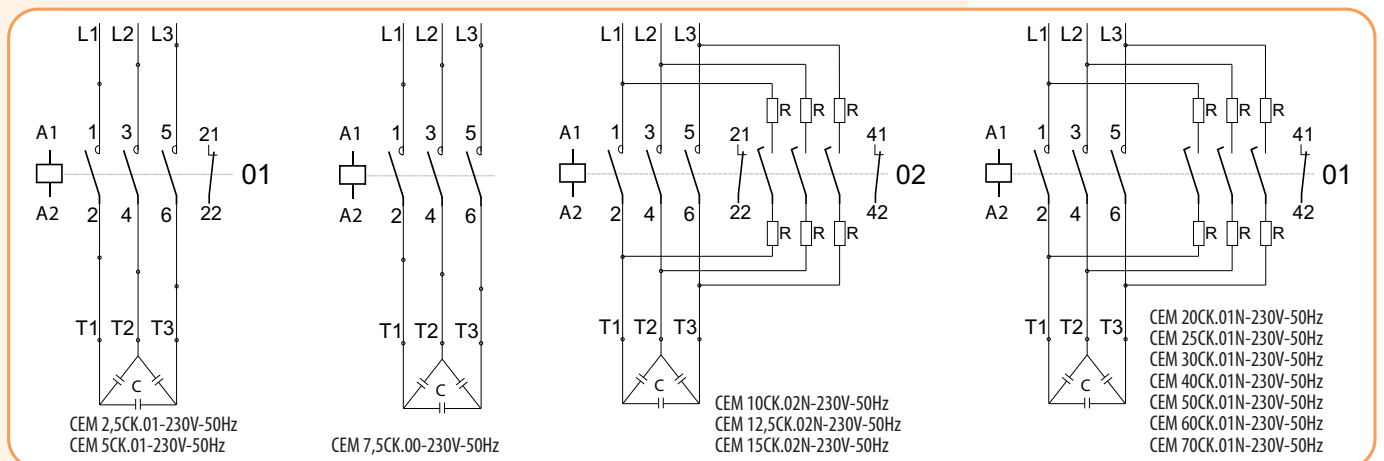
CEM CK 2,5-7,5 kVAr (230V-50Hz) / CEM CK..N 10-70 kVAr (230V-50Hz)

			CEM 2,5CK	CEM 5CK	CEM 7,5CK	CEM 10CK.02N	CEM 12,5CK.02N	CEM 15CK.02N	CEM 20CK.01N	CEM 25CK.01N	CEM 30CK.01N	CEM 40CK.01N	CEM 50CK.01N	CEM 60CK.01N	CEM 70CK.01N			
Code			004643803	004643804	004643805	004643816	004643817	004643818	004643819	004643820	004643821	004643822	004643823	004643824	004643825			
Voltage / rated power	230V	kVAr	1,4	2,8	4	5	6,7	8,5	11	14	20	25	29	32	35			
	400-440V	kVAr	2,5	5	7,5	10	12,5	15	20	25	30	40	50	60	70			
	500-550V	kVAr	3	5,5	9	12,5	15	18	24	30	35	50	60	70	75			
	660-690V	kVAr	3,7	7,5	11	15	18	22	30	35	40	58	70	80	90			
Ie (AC-6b) @ 400V	A	3,6	7,2	11	14	18	22	29	36	44	58	72	87	101				
Insulation voltage Ui	V	690										1000						
Operating temperature	°C	- 25 ... + 55																
Rated impulse withstand voltage Uimp	kV	8																
Power consumption of coil 50 / 60 Hz	Pick up (closing)	VA	62					65					155					204
			0,75										0,6					0,54
	Sealing (closed)	VA	7					8					12					16
			0,3										0,29					0,26
Coil voltage tolerance	0,85 - 1,1 Un																	
Degree of protection	IP20																	
Fuse for short circuit protection gG	Main circuit	A	20	25	25	25	35	50	50	63	80	100	125	160	160			
	Auxiliary	A	16	20	16	16	16	16	16	16	16	16	16	16	16			
max el. operating frequency	op/h	240					120					100						
Electrical lifespan	min.	100.000					250.000					175.000					100.000	

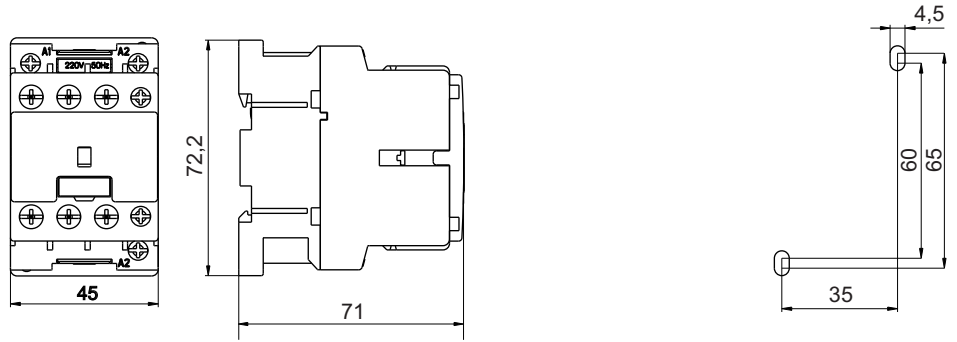
Connection

Main circuit Cable cross section	mm ²	1,5-6					2,5-10					6-25					16-35					25-50									
Screw size		M4										M5					M6					M8									
Screw type		PZ2										Imbus					PZ2					Imbus									
Torque	Nm	1,2					1,4					1,6					2,0					3 - 4					4 - 4,5				
Aux. circuit Cable cross section	solid cable	mm ²	1 - 2,5																												
	cable with ferule	mm ²	0,75 - 1,5																												
Screw size		M 3,5																													
Screw type		PZ2																													
Torque	Nm	0,8																													
Auxiliary circuit thermal current	Ith; 35°C	A	10										16																		
	230V	A	6										10																		
	400V	A	4										6																		
	500V	A	2										4																		
	690V	A	1										2																		
Standards	IEC 60947-1, IEC 60947-4																														

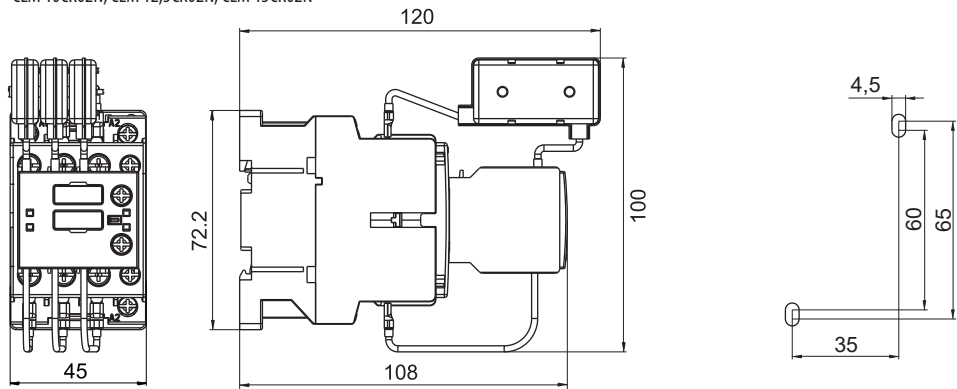
El. scheme



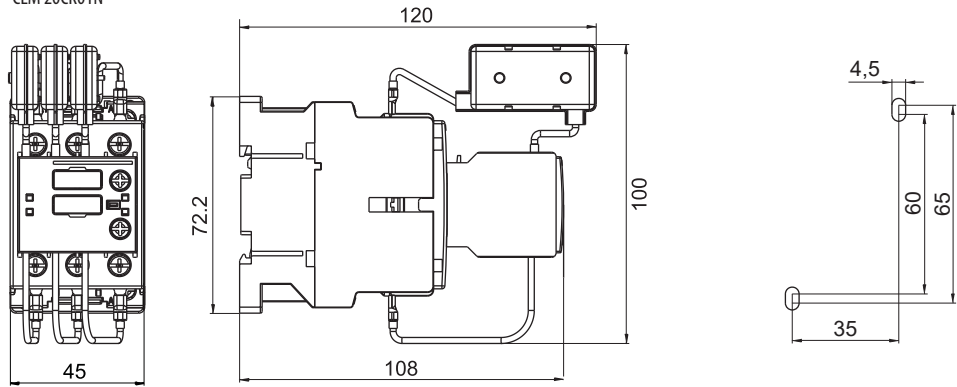
Dimensions



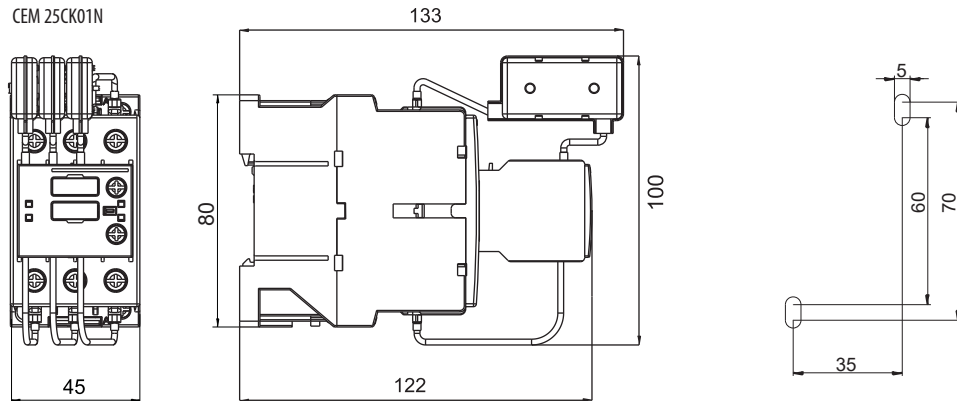
CEM 10CK02N, CEM 12,5CK02N, CEM 15CK02N



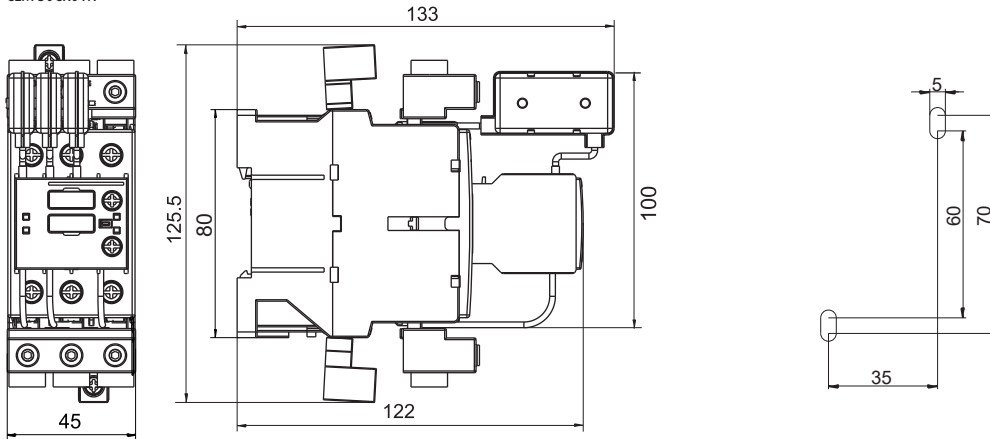
CEM 20CK01N



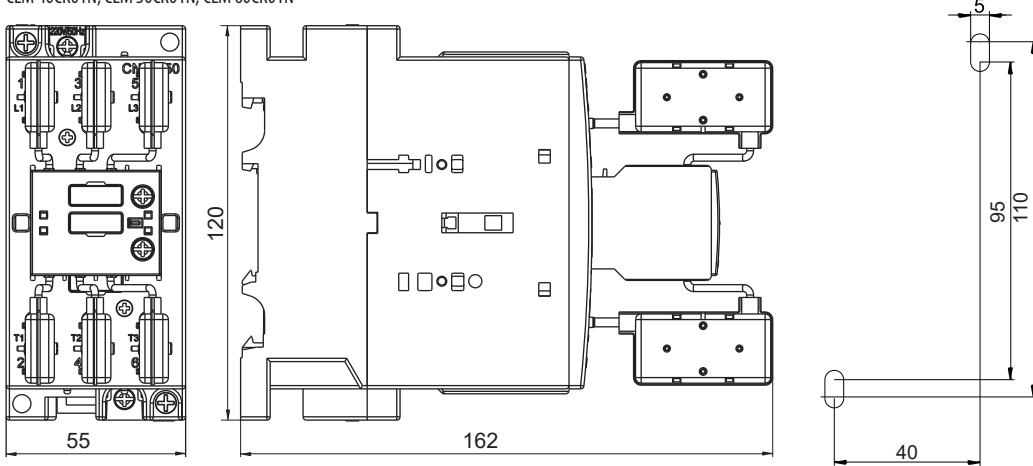
CEM 25CK01N



CEM 30CK01N



CEM 40CK01N, CEM 50CK01N, CEM 60CK01N



CEM 70CK01N

