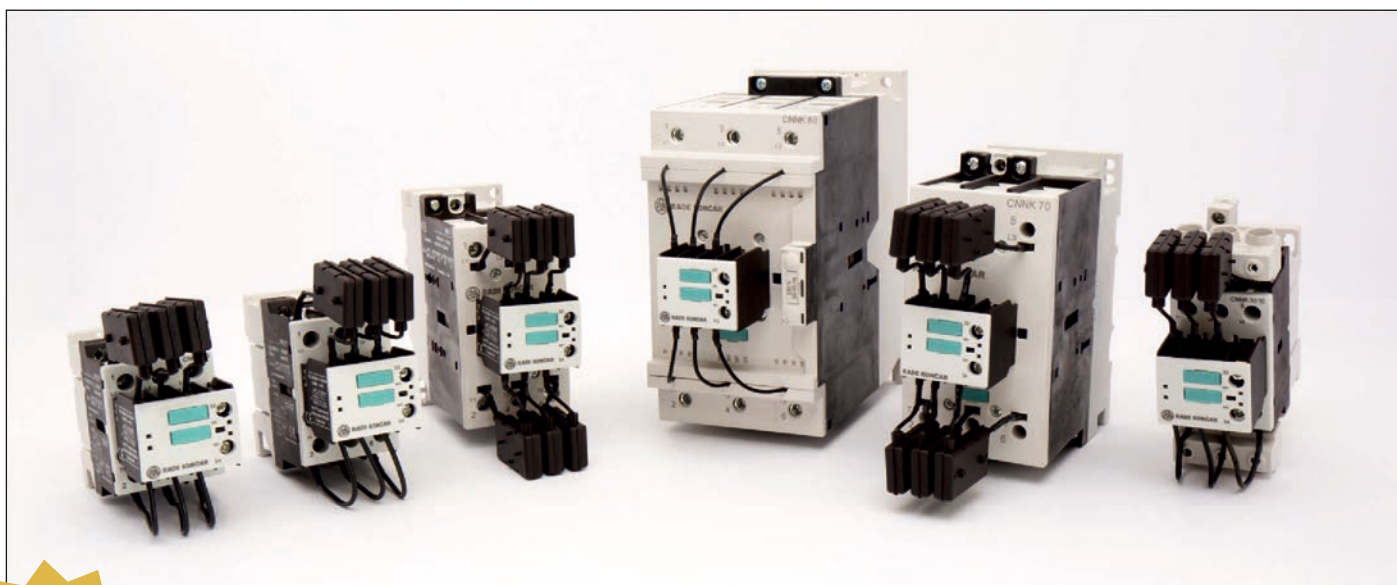




RADE KONČAR
KONTAKTORI I RELEI



Safe and affordable

**CONTACTORS FOR
CAPACITOR SWITCHING
TYPE CNNK**

QUALITY MANAGEMENT SYSTEM

ISO 9001 Quality management system

Models for quality assurance in design / development, production and distribution of low - voltage switching devices.

The **RADE KONCAR - KONTAKTORI I RELEI D.O.O.** Quality Managements System has been certified by TÜV CERT- Certification Body of TÜV Rheinland.

The Certificate No. TRBA 100 0891 issued until April 2024 confirms that the quality system is in conformance with requirements of the standard ISO 9001: 2015 and refers to our product categories: Contactors, Thermal overload relays, Rotary cam switches, Pilot devices, Moulded case circuit breakers, Electronic time relays.

Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. TRBA 100 0891

TÜV RHEINLAND-BULGARIA EOOD certifies:

Certificate Holder **RADE KONCAR-KONTAKTORI I RELEI D.O.O.**
MK-1000 Skopje
54, III Makedonska brigada Blvd.
R. of North Macedonia

Scope **Design, manufacture and sale of low-voltage switchgear and controlgear components, retro-reflective registration plates for motor vehicles and other information marking plates.**

Proof has been furnished by means of an audit that the requirements of BDS EN ISO 9001:2015 are met.


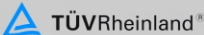

Validity The certificate is valid from **03.04.2021** until **02.04.2024**.
First certification: 2003

23.03.2021



TÜVRheinland®
Precisely Right.

www.tuv.com

	Ref. Certif. No. HD-001835-M1
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME	
CB TEST CERTIFICATE	
Product	Capacitor contactor
Name and address of the applicant	Rade Končar - Kontaktori i relei D.O.O. III Makedonska brigada br.54. 1000-Skopje, Macedonia
Name and address of the manufacturer	Rade Končar - Kontaktori i relei D.O.O. III Makedonska brigada br.54. 1000-Skopje, Macedonia
Name and address of the factory	Rade Končar - Kontaktori i relei D.O.O. III Makedonska brigada br.54. 1000-Skopje, Macedonia
Note: When more than one factory, please report on page 2	
Rated and principal characteristics	Ue (V) / Q (kVar): CNRK 60: 400-440/60; CNRK 50: 400-440/50; CNRK 40: 400-440/40; CNRK 30: 400/30; CNRK 25 and 25E: 400/25; CNRK 15: 400/15; CNRK 12: 400/12,5; CNRK 10: 400/10 UImp (kV): CNRK 10,30; 6kV; CNRK 40,60; 8 kV UI (V): CNRK-40 to 60: 1000; Remaining types: 690V (see Test Report for further details)
Trademark / Brand (if any)	RADE KONČAR
Customer's Testing Facility (CTF) Stage used	---
Model / Type Ref.	CNRK 10; CNRK 12; CNRK 15; CNRK 25; CNRK 25E; CNRK 30; CNRK 40; CNRK 50; CNRK 60
Additional information (if necessary may also be reported on page 2)	This Certificate is modification No.1 to CB Test Certificate ref. No. HD-001835, dated 2016-07-26 and it is issued to add alternate construction (see Test Report for further details)
A sample of the product was tested and found to be in conformity with	IEC 60947-4-1:2009 + AMD1:2012
As shown in the Test Report Ref. No. which forms part of this Certificate	28233500 002
This CB Test Certificate is issued by the National Certification Body	
 TÜV Rheinland InterCert KR, Division MEEI H-1132 Budapest, Váci út 48/A-B www.tuv.com	
Date: 2020-06-25	Signature:  Gabor Kassai

IECEE CB Scheme

Operated by the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE), the IECEE CB Scheme is an international system for mutual acceptance of test reports and certificates dealing with the safety of electrical and electronic components, equipment and products.

It is a multilateral agreement among participating countries and certification organizations, which aims to facilitate trade by promoting harmonization of national standards with International Standards and cooperation among accepted National Certification Bodies (NCBs) worldwide. By achieving this, it brings product manufacturers a step closer to the ideal concept of "one product, one test, one mark, where applicable".

Table of contents

Content.....	1
General Information.....	2
Options.....	3
Capacitor contactors.....	4
Accessories and Spare coils.....	9
Technical data.....	10
Dimension drawings.....	15



Capacitor contactors CNNK series

Precharging resistors are an integral component of the CNNK contactors, equipped with early-make contacts. This special type of contacts has the purpose of connecting for a very short time up to 5ms, during the contactor closing resistors which limit the connecting current of the capacitors. These resistors are then excluded when the closing operation is complete and the current capacity is conveyed to the main contacts. With this type of circuit, it is possible to obtain minor wear of all the components of the system especially fuses and capacitors ensuring a longer life and better reliability. Suitable for capacitors with and without reactor protection.

Advantages:

- In conformity with: IEC 60947-1, IEC 60947-4-1
- Installation on mounting plate and DIN rail (up to CNNK 75)
- Switching of 3 phase capacitors
- Ambient temperature of 55 °C
- Maximum permissible peak current $I \leq 200 I_e$, for contactors without resistors maximum permissible peak current $I \leq 100 I_e$
- Standard control voltages: 24 VAC, 48 VAC, 110 VAC, 230 VAC, 400 VAC
- Up to 3 auxiliary contacts

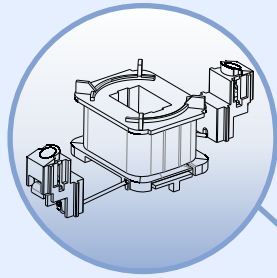


Ordering:

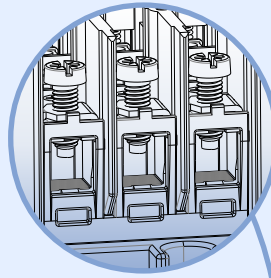
CNNK	10	1	0	230V	50/60Hz
1	2	3	4	5	6

- 1 - Contactor series
- 2 - kVar in (AC-6b,400V/50Hz)
- 3 - Number of NO auxiliary contacts
- 4 - Number of NC auxiliary contacts
- 5 - Control voltage (coil voltage)
- 6 - Frequency of the control voltage

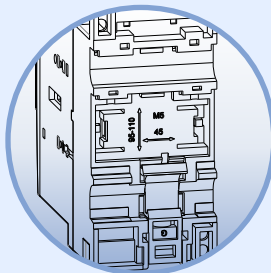
Options



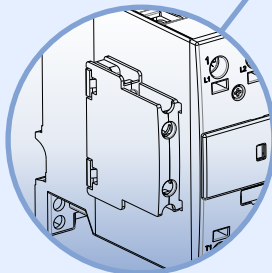
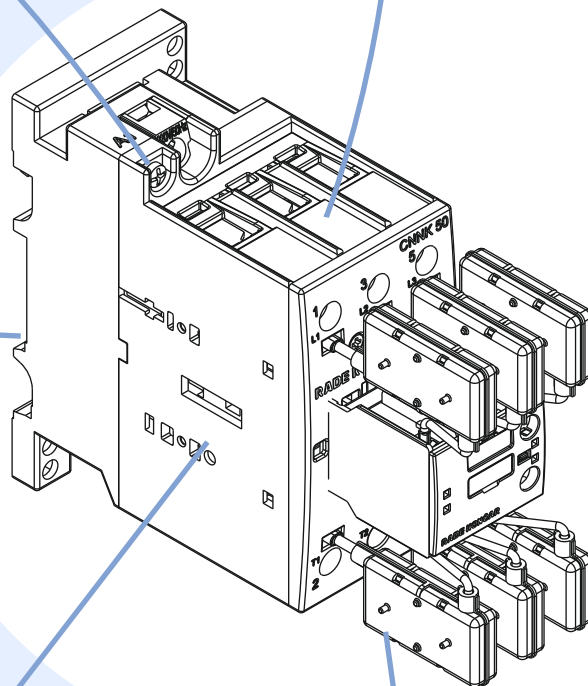
Wide range of coil voltages are provided. The users can change the coil by themselves.



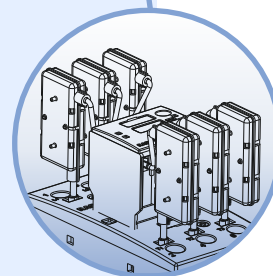
Special clamp terminals are provided for reliable connection of conductors for CNNK 40 - CNNK 80



Contactors type CNNK can be mounted on DIN rail or directly on the mounting plate.
Type CNNK 10 to CNNK 30 only
DIN rail 35mm and type CNNK 40 to CNNK 75 DIN rail 35mm or 75mm



Auxiliary contacts - side mounting



Precharging resistors with special type of contacts has the purpose of connecting for a very brief interval, up to 5ms, during the contactor closing, resistors limit the connecting current of the capacitors



Capacitor contactor CNNK 2.5; 2.5kVar (AC6-b,400V/50Hz); 3.6A (Ie)				
Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 2.5 00 230V 50/60Hz	606811		250	24
CNNK 2.5 10 230V 50/60Hz	6047786		250	24
CNNK 2.5 01 230V 50/60Hz	609205		250	24

integrated auxiliary contact 1NO or 1NC, contactor without precharging resistors
*second level packing



Capacitor contactor CNNK 5; 5kVar (AC6-b,400V/50Hz); 7.2A (Ie)				
Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 5 00 230V 50/60Hz	606812		260	24
CNNK 5 10 230V 50/60Hz	6047796		260	24
CNNK 5 01 230V 50/60Hz	609206		260	24

integrated auxiliary contact 1NO or 1NC, contactor without precharging resistors
*second level packing



Capacitor contactor CNNK 7.5; 7.5kVar (AC6-b,400V/50Hz); 11A (Ie)				
Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 7.5 00 230V 50/60Hz	609207		270	24

contactor without precharging resistors
*second level packing



Capacitor contactor CNNK 12.5; 12.5kVar (AC6-b,400V/50Hz); 18A (Ie)				
Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 12.5 00 230V 50/60Hz	609208		400	18

contactor without precharging resistors
*second level packing

Capacitor contactor CNNK 10; 10kVar (AC6-b,400V/50Hz); 14A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 10 20N 230V 50/60Hz	609209N		320	24
CNNK 10 11N 230V 50/60Hz	6047816N		320	24
CNNK 10 02N 230V 50/60Hz	609210N		320	24

integrated auxiliary contact 2NO or 1NO+1NC or 2NC
*second level packing



Capacitor contactor CNNK 12; 12.5kVar (AC6-b,400V/50Hz); 18A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 12 20N 230V 50/60Hz	609211N		320	24
CNNK 12 11N 230V 50/60Hz	6047826N		320	24
CNNK 12 02N 230V 50/60Hz	609212N		320	24

integrated auxiliary contact 2NO or 1NO+1NC or 2NC
*second level packing



Capacitor contactor CNNK 15; 15kVar (AC6-b,400V/50Hz); 22A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 15 20N 230V 50/60Hz	609213N		325	24
CNNK 15 11N 230V 50/60Hz	6047836N		325	24
CNNK 15 02N 230V 50/60Hz	609214N		325	24

integrated auxiliary contact 2NO or 1NO+1NC or 2NC
*second level packing





Capacitor contactor CNNK 20; 20kVar (AC6-b,400V/50Hz); 29A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 20 10N 230V 50/60Hz	6049056N		333	24
CNNK 20 01N 230V 50/60Hz	609215N		333	24

integrated auxiliary contact 1NO or 1NC
*second level packing



Capacitor contactor CNNK 25E; 25kVar (AC6-b,400V/50Hz); 36A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 25E 10N 230V 50/60Hz	6047616N		450	24
CNNK 25E 01N 230V 50/60Hz	609216N		450	24

integrated auxiliary contact 1NO or 1NC; without terminal blocks
*second level packing



Capacitor contactor CNNK 25; 25kVar (AC6-b,400V/50Hz); 36A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 25 10N 230V 50/60Hz	6047856N		520	10
CNNK 25 01N 230V 50/60Hz	609217N		520	10

integrated auxiliary contact 1NO or 1NC
*second level packing



Capacitor contactor CNNK 30; 30kVar (AC6-b,400V/50Hz); 44A (Ie)

Type	Order number	Wiring diagram	Weight [g]	Packing* [pcs]
CNNK 30 10N 230V 50/60Hz	6047866N		520	10
CNNK 30 01N 230V 50/60Hz	609218N		525	10

integrated auxiliary contact 1NO or 1NC
*second level packing

Capacitor contactors

Capacitor contactor CNNK 40; 40kVar (AC6-b,400V/50Hz); 58A (Ie)

Type	Order number	Wiring diagram	Weight [kg]	Packing* [pcs]
CNNK 40 10N 230V 50/60Hz	6047916N		0.94	10
CNNK 40 01N 230V 50/60Hz	6054896N		0.94	10

integrated auxiliary contact 1NO or 1NC

*second level packing



Capacitor contactor CNNK 50; 50kVar (AC6-b,400V/50Hz); 72A (Ie)

Type	Order number	Wiring diagram	Weight [kg]	Packing* [pcs]
CNNK 50 10N 230V 50/60Hz	6044536N		0.94	10
CNNK 50 01N 230V 50/60Hz	6054906N		0.94	10

integrated auxiliary contact 1NO or 1 NC

*second level packing



Capacitor contactor CNNK 60; 60kVar (AC6-b,400V/50Hz); 87A (Ie)

Type	Order number	Wiring diagram	Weight [kg]	Packing* [pcs]
CNNK 60 10N 230V 50/60Hz	606362N		0.97	10
CNNK 60 01N 230V 50/60Hz	6054916N		0.97	10

integrated auxiliary contact 1NO or 1 NC

*second level packing





Capacitor contactor CNNK 70; 70kVar (AC6-b,400V/50Hz); 101A (Ie)

Type	Order number	Wiring diagram	Weight [kg]	Packing* [pcs]
CNNK 70 10N 230V 50Hz	605760N		1.4	8
CNNK 70 01N 230V 50Hz	609219N		1.4	8

integrated auxiliary contact 1NO or 1NC
*second level packing



Capacitor contactor CNNK 75; 75kVar (AC6-b,400V/50Hz); 108A (Ie)

Type	Order number	Wiring diagram	Weight [kg]	Packing* [pcs]
CNNK 75 10N 230V 50Hz	607181N		1.5	8
CNNK 75 01N 230V 50Hz	607087N		1.5	8

integrated auxiliary contact 1NO or 1NC
*second level packing




Capacitor contactor CNNK 80; 80kVar (AC6-b,400V/50Hz); 116A (Ie)

Type	Order number	Wiring diagram	Weight [kg]	Packing [pcs]
CNNK 80 10 230V 50/60Hz	610640		2.6	1
CNNK 80 01 230V 50/60Hz	609901		2.6	1

integrated auxiliary contact 1NO or 1NC


Accessories

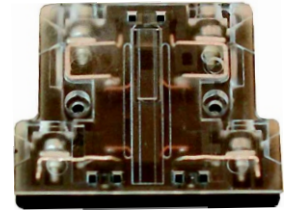
Auxiliary contact block - side mounting; 6A (AC15/AC14, 230V/50Hz)

Type	Order number	Contacts	Usage	Wiring diagram	Weight [g]	Packing [pcs]
BP3 11	602595	1NO - 1NC	CNNK 2.5 CNNK 60		20	2



Auxiliary contact block - side mounting; 6A (AC15/AC14, 230V/50Hz)

Type	Order number	Contacts	Usage	Wiring diagram	Weight [g]	Packing [pcs]
BP5 11	604839	1NO - 1NC	CNNK 70 CNNK 75 CNNK 80		50	1



Up to 2 auxiliary contacts can be added on the contactors CNNK series (additional 1NO + 1NC)

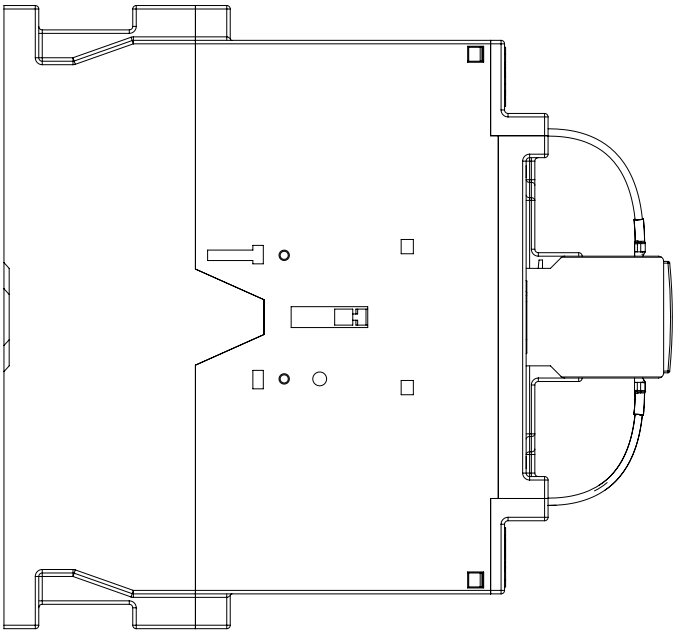
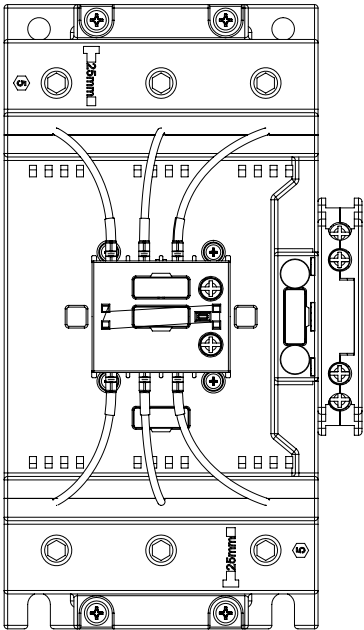
Spare coils

Spare coils

Type	Order number	AC/DC coil	Usage	Weight [g]	Packing [pcs]
Coil CNNK 20 230V 50/60Hz	606500	AC	CNNK 2.5	50	1
Coil CNNK 20 380/400V 50Hz	605231	AC	CNNK 20		
Coil CNNK 30 230V 50/60Hz	609220	AC	CNNK 25E	80	
Coil CNNK 30 380/400V 50Hz	605233	AC	CNNK 30		
Coil CNNK 60 230V 50/60Hz	609221	AC	CNNK 40	130	
Coil CNNK 60 380/400V-50Hz	604798	AC	CNNK 60		
Coil CNNK 75 230V 50Hz	609128	AC	CNNK 70	140	
Coil CNNK 75 400V 50Hz	609129	AC	CNNK 75		
Coil CNNK 80 230V 50/60Hz	610450	AC	CNNK 80	260	
Coil CNNK 80 400V 50Hz	610451	AC			



Technical data



Capacitor contactor type CNNK 2.5 - CNNK 12.5

In conformity with: IEC 60947-1, IEC 60947-4-1

Choice criteria

The contactor during the closing transition is influenced by electrical currents with high frequencies and high amplitudes. The frequencies of these currents have ranges between 1 and 10kHz and the amplitudes must have values lower than the maximum permissible peak current $I \leq 100$ times the nominal rms current of the switched capacitor.

Type designation	CNNK 2.5	CNNK 5	CNNK 7.5	CNNK 12.5
Capacitor rating at operating voltage				
230V kVAr	1,4	2,8	4	6,7
400-440V kVAr	2,5	5	7,5	12,5
50/60Hz 500-550V kVAr	3	5,5	9	15
660-690V kVAr	3,7	7,5	11	18
Rated operational current $I_e/AC-6b$ et 400 V	A	7,2	11	18
Insulation rating U_i	V 690			
Permissible ambient temperature	°C - 25 to + 55			
Rated impuls withstand voltage U_{imp}	kV 6			
Consumption of electromagnet in cold state with U_n AC operated				
closing p.f.		62		65
closed p.f.		0,75		0,75
		7		8
		0,3		0,3
Voltage tolerances	0,85 - 1,1 U_n			
Coil Tightening torque	Nm 0,8			
Terminal screw/Screw head	M3,5/PZ2			
Maximum permissible fuse ratings				
main circuit gL/gG	A 20	A 25	A 40	A 50
auxilliary circuit	A 16	A 16	A 16	A 16
Frequency of switching operations	s/h 240			
Electrical endurance	min. 150.000 120.000 100.000 100.000			
Sizes of connecting conductors - main circuit				
multi-wire conductor	mm ² 1.5-6	mm ² 1.5-6	mm ² 2.5-10	mm ² 2.5-10
multi-wire conductor with cable shoe	mm ² 1.5-6	mm ² 1.5-6	mm ² 2.5-10	mm ² 2.5-10
Terminal screw	M4	M4	M4	M4
Screw head	PZ2	PZ2	PZ2	PZ2
Tightening torque	Nm 1,2	Nm 1,2	Nm 1,4	Nm 1,6
- auxiliary circuit				
multi-wire conductor	mm ² 1-2,5			
multi-wire conductor with cable shoe	mm ² 0,75-1,5			
Terminal screw	M3,5			
Screw head	PZ2			
Tightening torque	Nm 0,8			
Loadability of auxiliary contacts rated continuous current $I_{th}; 35^\circ C$	A 10			
AC rated operational current $I_e/AC15$				
for 230V	A 6			
400V	A 4			
500V	A 2			
690V	A 1			

Capacitor contactors type CNNK 10 - CNNK 30

In conformity with: IEC 60947-1, IEC 60947-4-1

Main characteristics

These contactors are equipment with early - make contacts. This special type of contact has the purpose of connecting for a very brief interval, up to 5 ms, during the contactor closing, resistors which limit the connecting current of the capacitors. These resistors are then excluded when the closing operation is complete and the current capacity is conveyed to the main contacts. Maximum permissible peak current $1 \leq 200$ times the nominal rms current of the switched capacitor.

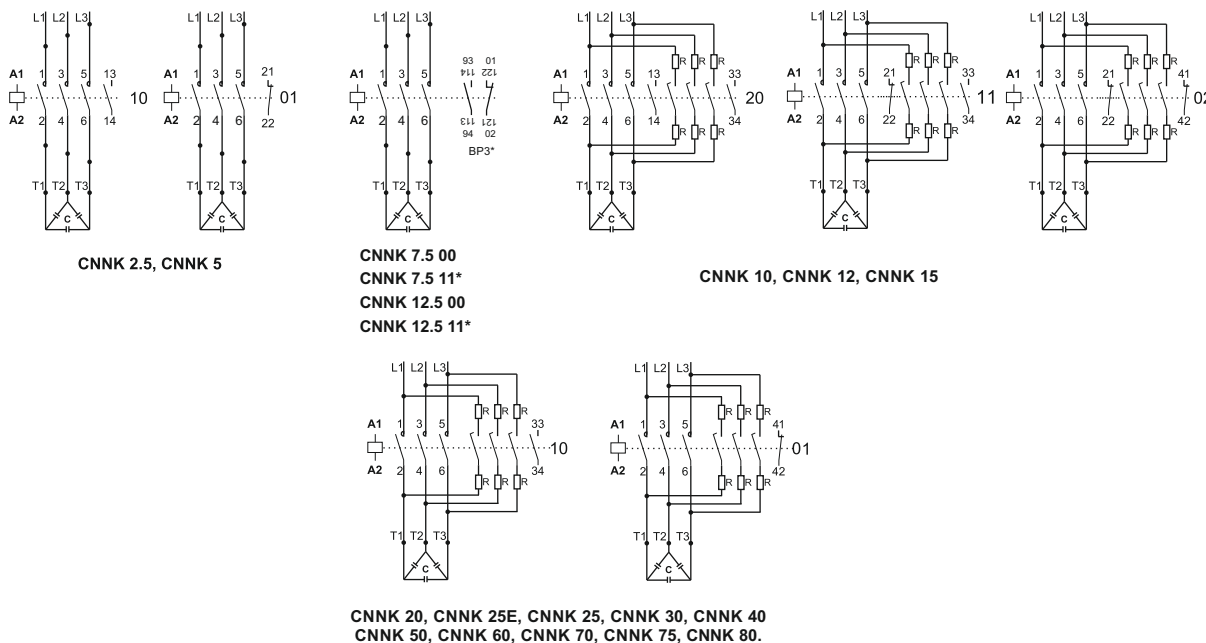
Type designation	CNNK 10	CNNK 12	CNNK 15	CNNK 20	CNNK 25E	CNNK 25	CNNK 30
Capacitor rating 230V kVAr	5	6,7	8,5	11	14	14	20
at operating voltage 400-440V kVAr	10	12,5	15	20	25	25	30
50/60Hz 500-550V kVAr	12,5	15	18	24	30	30	35
660-690V kVAr	15	18	22	30	35	35	40
Rated operational current I_e /AC-6b at 400V A	14	18	22	29	36	36	44
Rated operational current I_{th} at 400V A	25	25	30	40	50	60	60
Insulation rating U_i V	690						
Permissible ambient temperature °C	- 25 to + 55						
Rated impuls withstand voltage U_{imp} kV	8						
Consumption of electromagnet in cold state with U_n AC operated							
closing VA	62			65			
p.f.	0,75			0,75			
closed VA	7			8			
p.f.	0,3			0,3			
Voltage tolerances	0,85 - 1,1 U_n						
Coil Tightening torque Nm	0,8						
Terminal screw/Screw head	M3,5/PZ2						
Maximum permissible fuse ratings							
main circuit gL/gG A	25	35	50	50	63	63	80
auxilliary circuit A	16	16	16	16	16	16	16
Frequency of switching operations s/h	240			120			
Electrical endurance min.	250.000			175.000	125.000		
Sizes of connecting conductors - main circuit							
multi-wire conductor mm ²	1.5-6	1.5-6	1.5-6	2.5-10	2.5-10	6-25	6-25
multi-wire conductor with cable shoe mm ²							
Terminal screw	M4	M4	M4	M4	M4	M5	M5
Screw head	PZ2	PZ2	PZ2	PZ2	PZ2	Hexagon socket 2.5	
Tightening torque Nm	1,2	1,2	1,2	1,4	1,6	2	2
- auxiliary circuit							
multi-wire conductor mm ²	1-2,5						
multi-wire conductor with cable shoe mm ²	0,75-1,5						
Terminal screw	M3,5						
Screw head	PZ2						
Tightening torque Nm	0,8						
Loadability of auxiliary contacts rated continuous current 35°C							
AC rated operational current I_e /AC15 A				10			
for 230V A				6			
400V A				4			
500V A				2			
690V A				1			

Capacitor contactor type CNNK 40 - CNNK 80

In conformity with: IEC 60947-1, IEC 60947-4-1

Type designation	CNNK 40	CNNK 50	CNNK 60	CNNK 70	CNNK 75	CNNK 80
Capacitor rating at operating 230V kVAr	25	29	32	35	38	45
voltage 400-440V kVAr	40	50	60	70	75	80
50/60Hz 500-550V kVAr	50	60	70	75	80	100
660-690V kVAr	58	70	80	90	105	115
Rated operational current I_e/AC-6b et 400 V A	58	72	87	101	108	116
Rated operational current I _{th} at 400V A	85	100	125	137	150	160
Insulation rating U _i V	1000					
Permissible ambient temperature °C	- 25 to + 55					
Rated impuls wihtstand voltage U _{imp} kV	8					
Consumption of electromagnet in cold state with U _n AC operated						
closing VA		155		204		400
p.f.		0,6		0,54		0,48
closed VA		12		16		26
p.f.		0,29		0,26		0,24
Voltage tolerances	0,85 - 1,1 U _n					
Coil Tightening torque Nm	0,8					
Terminal screw/Screw head	M3,5/PZ2					
Maximum permissible fuse ratings main circuit gL/gG A	100	125		160		
auxilliary circuit A	16	16		16		
Frequency of switching operations s/h	100					
Electrical endurance min.	125.000			100.000		75.000
Sizes of connecting conductors - main circuit						
multi-wire conductor mm ²	16-35	16-35	16-35	25-50		16-95
multi-wire conductor with cable shoe mm ²						2x(16-70)
Terminal screw	M6			M8		M10
Screw head	PZ2			⬡4		⬡5
Tightening torque Nm	3 - 4			4 - 4.5	5 - 6	10-12
- auxiliary circuit multi-wire conductor mm ²	1-2,5					
multi-wire conductor with cable shoe mm ²	0,75-1,5					
Terminal screw	M3,5					
Screw head	PZ2					
Tightening torque Nm	0,8					
Loadability of auxilliary contacts rated continuous current I _{th} ; 35°C A	16					
AC rated operational current I _e /AC15						
I _{th} ; for 230V A	10					
400V A	6					
500V A	4					
690V A	2					

CONNECTION DIAGRAMS AND TERMINAL MARKINGS FOR SINGLE COMPENSATION



VERY IMPORTANT NOTES:

For single compensation air coils or 3 - phase reactors (coils with magnetic core and air gap) are not necessary.

When the contactor is used for group compensation it is recommendable to use appropriate 3-phase filter circuit reactors (coils with magnetic core and air gap). This will reduce the value of higher harmonics and will prevent resonant current to prevail.

For single compensation the power of selected contactor is according to capacitor rated power.

For group and central compensation, when reactors are not in use, one step higher rating of the contactor is recommendable.



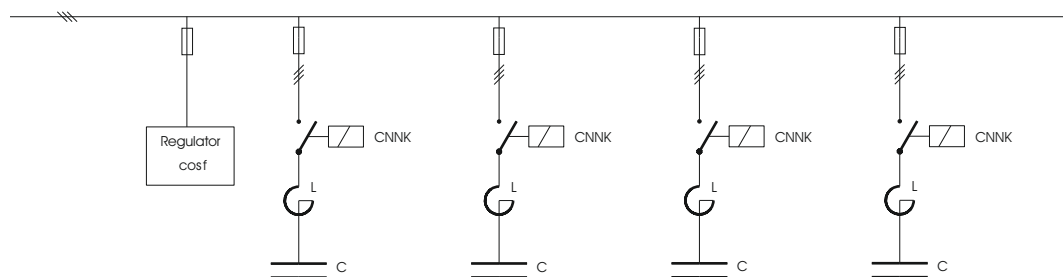
Maximum permissible peak current $1 \leq 200$ times the nominal rms current of the switched capacitor.

Switching onto discharged capacitors is permitted with CNNK contactors. (the voltage at the terminals must be < 50 V).



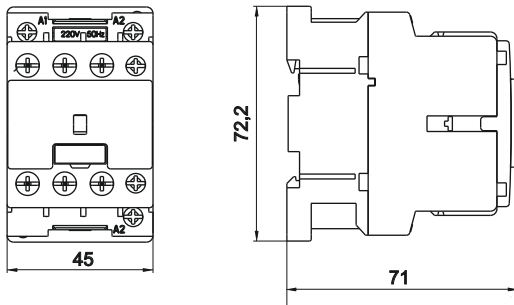
Manual operation for function tests is not permitted. The series resistors must not be removed. During exploitation, current value must not exceed the declared values.

CONNECTION DIAGRAM FOR GROUP (CENTRAL) COMPENSATION

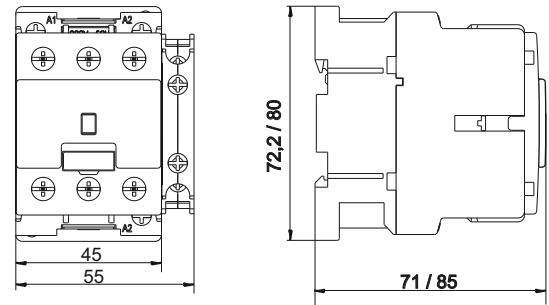


Dimension drawings (mm)

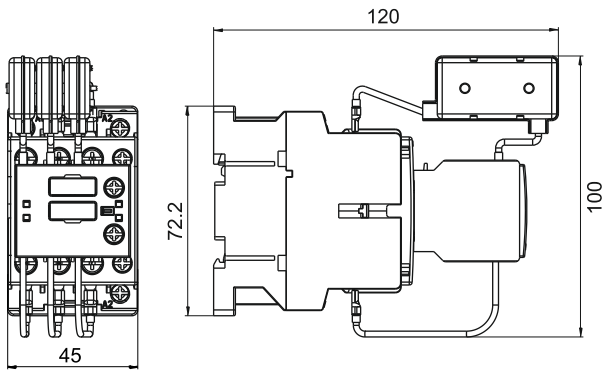
CNNK 2,5; CNNK 5



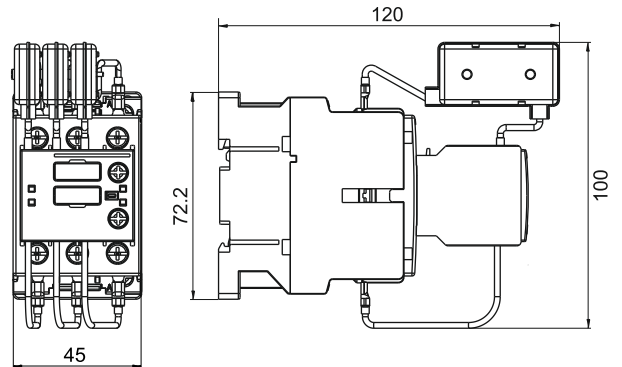
CNNK 7,5 / CNNK12



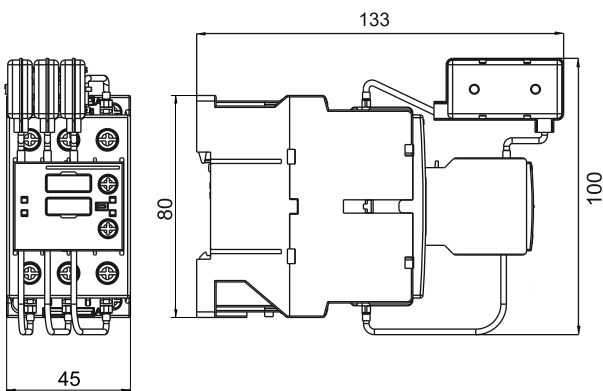
CNNK 10; CNNK 12; CNNK 15



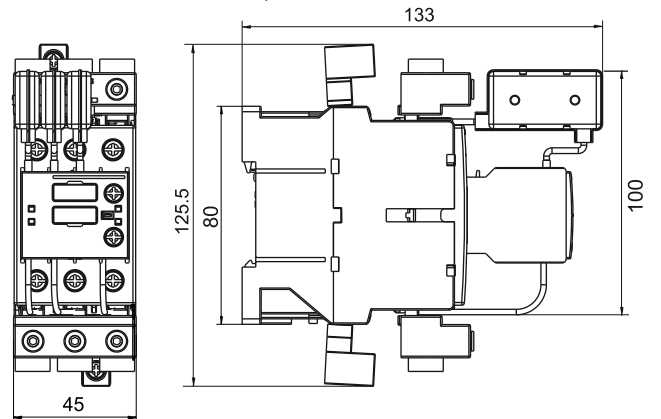
CNNK 20



CNNK 25E

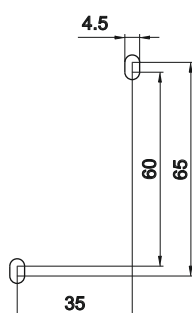


CNNK 25; CNNK 30

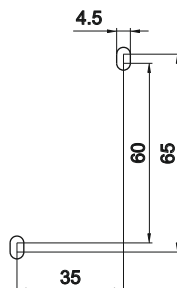


Drilling plan (mm)

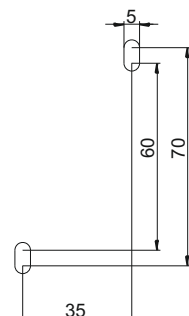
CNNK 2,5; CNNK 5
CNNK 7,5; CNNK 12



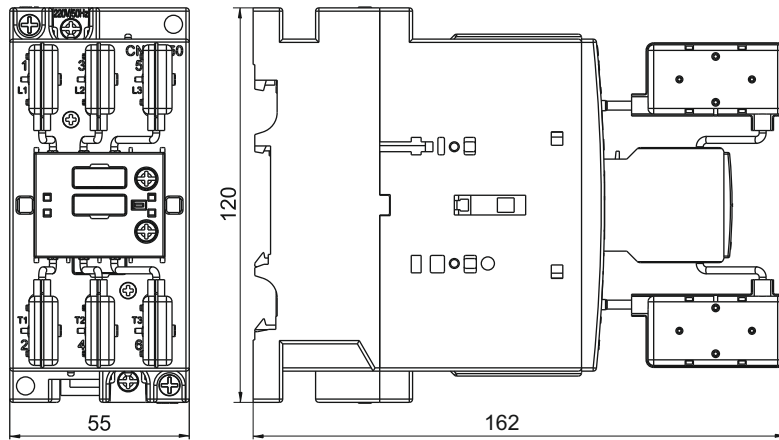
CNNK 10; CNNK 12
CNNK 15; CNNK 20



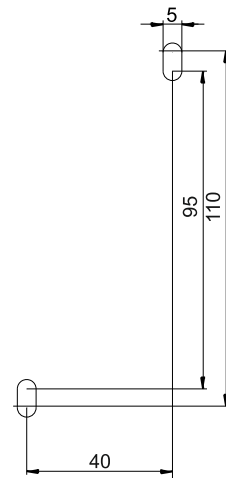
CNNK 25E; CNNK 25,
CNNK 30



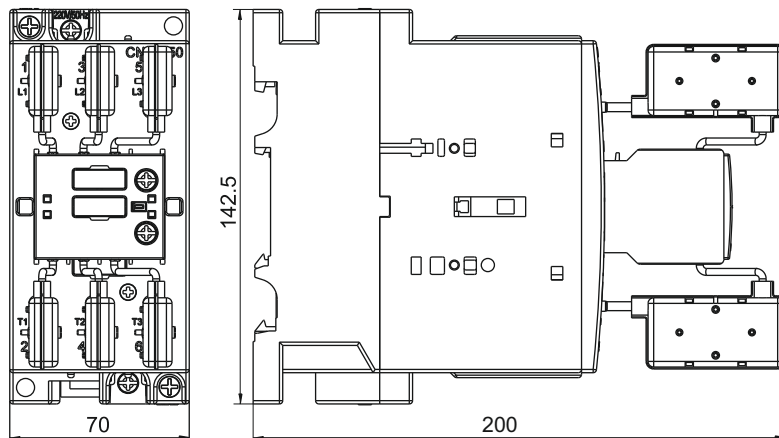
CNNK 40; CNNK 50; CNNK 60



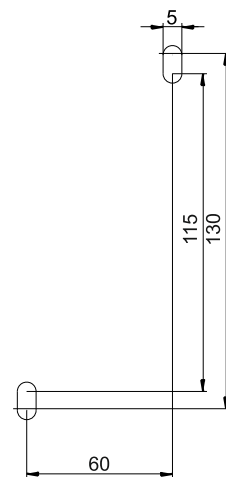
Drilling plan (mm)



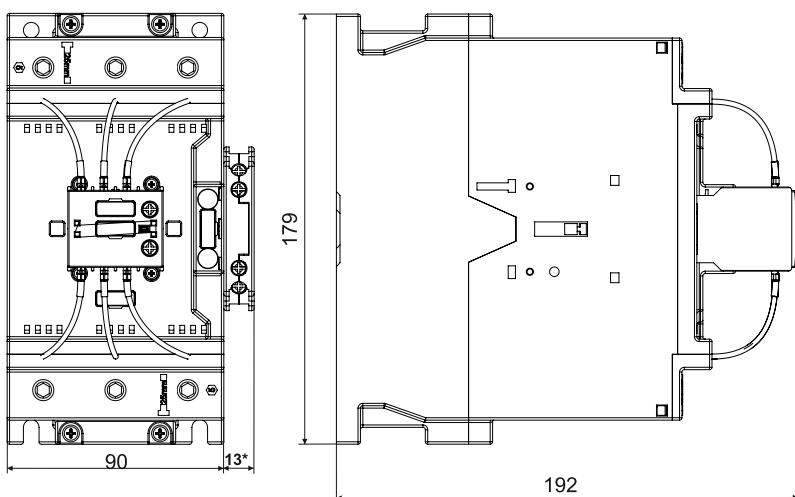
CNNK 70; CNNK 75



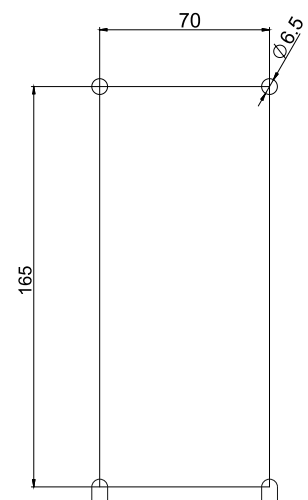
Drilling plan (mm)



CNNK 80



Drilling plan (mm)



*Width of auxiliary block