



RADE KONČAR CONTACTOR **CNN12**
12A/5,7kW (AC3, 400V/50Hz); 25A(AC1)

| Contactor type | | | CNN 12 | |
|---|--------------------------------------|----------|------------------|-----------------|
| Mechanical endurance | make/brake operations | | x10 ⁶ | 5 |
| Insulation rating | | | V | 690 |
| Permissible ambient temperature | | | °C | from -25 to +55 |
| Consumption of electromagnet in cold state with Un | | | | |
| AC operated | closing | | VA | 62 |
| | P.F. | | | 0,75 |
| | closed | | VA | 7 |
| | P.F. | | | 0,3 |
| DC operated | closing | | W | 123 |
| | closed | | W | 2,8 |
| Coil voltage tolerances | | | | 0.85-1.1Un |
| duration of making and breaking | | | | |
| (values are also valid for voltages of electromagnet from 0.8 to 1.1 Un for each in cold and warm state). | | | | |
| Total breaking time is addition of opening time and duration of electric arc. | | | | |
| AC operated | closing time | | ms | 12 to 22 |
| | opening time | | ms | 4 to 19 |
| | duration of electric arc | | ms | 10 |
| Frequency of switching operations | | | | |
| without thermal relay | | | | |
| | utilization category | AC1 | s/h | 1000 |
| | | AC2, AC3 | s/h | 750 |
| | | AC4 | s/h | 250 |
| with thermal relay | | | | |
| | | | s/h | 15 |
| Resistivity to shocks (square shock) | | | | 7/5 and 4.2/10 |
| Short-circuit protection of contactors without overload relays | | | | |
| Main circuit | | | | |
| With fuse links | | | | |
| acc. To IEC 60947-4-1 | Type of coord. "1" | gI/gG | A | 25 |
| DIN VDE 0660 Part 102 | Type of coord. "2" | | A | 20 |
| Sizes of connection conductors | | | | |
| for contact without thermal relay | | | | |
| main circuit | single-wire conductors | | mm ² | 1.5-6 |
| | multi-wire conductor with cable shoe | | mm ² | 1.5-6 |
| | Screw | | | M4 |
| | Screw head | | | PZ2 |
| | Tightening torque | | Nm | 1,2 |
| auxiliary circuit | single-wire conductor | | mm ² | 1-2.5 |
| | multi-wire conductor with cable shoe | | mm ² | 0.75-1.5 |
| | Screw | | | M3.5 |
| | Screw head | | | PZ2 |
| | Tightening torque | | Nm | 0,8 |
| Loadability of auxiliary contacts | | | | |
| Rated continuous current Ith ; 35°C | | | A | 10 |
| rated operational current Ie/AC15 | for 24V | | A | 6 |
| | 230V | | A | 6 |
| | 400V | | A | 4 |
| | 500V | | A | 2 |
| | 690V | | A | 1 |
| | for 24V | | A | 4 |
| rated operational current Ie/DC13 | 110V | | A | 0,6 |
| | 230V | | A | 0,3 |

Load carrying capacity of the main contacts

rated continuous current I_{th}

AC1 utilization category

A 25

rated operational current $I_e/AC1$

A 25

AC2 and AC3 utilization categories for 230V

kW 3,5

(slip-ring and cage motors at 50Hz)

400V

kW 5,7

690V

kW 7,5

AC4 utilization category

(electrical endurance of contacts:120.000)

rated current

$I_e/AC4$

A 5

ratings of squirrel-cage motors at 50Hz

for 230V

kW 1,1

400V

kW 2,2

500V

kW 2,2

690V

kW 2,2

Loadability by direct current

DC1 utilization category, non-inductive loads L/R1 ms

rated operational current I_e

for 24V

A 20

through one pole

48V

A 20

110V

A 2,1

220V

A 0,8

440V

A 0,6

600V

A 0,6

through three poles connected in series

for 24V

A 20

48V

A 20

110V

A 20

220V

A 20

440V

A 1,3

600V

A 1

utilization category DC3 to DC5

series and shunt motors (L/R15 ms)

rated operational current I_e

for 24V

A 20

through one pole

48V

A 5

110V

A 1,5

220V

A 0,75

440V

A -

600V

A -

through three poles connected in series

for 24V

A 20

48V

A 20

110V

A 20

220V

A 6

440V

A 0,2

600V

A 0,2

