

Product technical information



RADE KONCAR CONTACTOR **CNN40**  
40A/18,5kW (AC3, 400V/50Hz); 50A(AC1)

Contactor type		CNN 40		
<b>Mechanical endurance</b>	make/brake operations	x10 <sup>6</sup>	5	
<b>Insulation rating</b>		V	690	
<b>Permissible ambient temperature</b>		°C	from -25 to +55	
<b>Consumption of electromagnet in cold state with Un</b>				
AC operated	closing	VA	65	
	P.F.		0,75	
DC operated	closed	VA	8	
	P.F.		0,3	
	closing	W	125	
	closed	W	2,8	
<b>Coil voltage tolerances</b>			0.85-1.1Un	
<b>duration of making and breaking</b>				
(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	
<b>Frequency of switching operations</b>				
without thermal relay				
utilization category	AC1	s/h	1000	
	AC2, AC3	s/h	750	
	AC4	s/h	250	
with thermal relay			s/h	15
<b>Resistivity to shock</b> (square shock)			g/ms	8,2/5 and 4,9/10
<b>Short-circuit protection of contactors without overload relays</b>				
<b>Main circuit</b>				
With fuse links				
acc. To IEC 60947-4-1 DIN VDE 0660 Part 102	Type of coord. "1" gI/gG	A	63	
	Type of coord. "2"	A	40	
<b>Sizes of connection conductors</b>				
for contact without thermal relay				
main circuit	single-wire conductors	mm <sup>2</sup>	2.5-10	
	multi-wire conductor with cable shoe	mm <sup>2</sup>	2.5-16	
	Screw		M4	
	Screw head		PZ2	
auxiliary circuit	Tightening torque	Nm	1,6	
	single-wire conductor	mm <sup>2</sup>	1-2.5	
	multi-wire conductor with cable shoe	mm <sup>2</sup>	0.75-1.5	
	Screw		M3.5	
Screw head		PZ2		
Tightening torque	Nm	0,8		
<b>Loadability of auxiliary contacts</b>				
Rated continuous current I <sub>th</sub> ; 35C		A	-	
rated operational current I <sub>e</sub> /AC15	for 24V	A	-	
	230V	A	-	
	400V	A	-	
	500V	A	-	
	690V	A	-	
	rated operational current I <sub>e</sub> /DC13	for 24V	A	-
	110V	A	-	
	230V	A	-	

**Load carrying capacity of the main contacts**

rated continuous current  $I_{th}$

AC1 utilization category

rated operational current  $I_e/AC1$

A 50  
A 50

**AC2 and AC3 utilization categories** for 230V  
(slip-ring and cage motors at 50Hz) **400V**  
690V

kW 11  
**kW 18,5**  
kW 22

**AC4 utilization category**

(electrical endurance of contacts:120.000)

rated current

ratings of squirrel-cage motors at 50Hz

$I_e/AC4$   
for 230V  
**400V**  
500V  
690V

A 15,8  
kW 5,5  
**kW 7,5**  
kW 7,5  
kW 7,5

**Loadability by direct current**

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

rated operational current  $I_e$   
through one pole

for 24V  
48V  
110V  
220V  
440V  
600V

A 50  
A 23  
A 4,5  
A 1  
A 0,4  
A 0,25

through three poles connected in series

for 24V  
48V  
110V  
220V  
440V  
600V

A 50  
A 45  
A 45  
A 45  
A 2,9  
A 1,4

utilization category DC3 to DC5  
series and shunt motors (L/R15 ms)

rated operational current  $I_e$   
through one pole

for 24V  
48V  
110V  
220V  
440V  
600V

A 35  
A 6  
A 2,5  
A 1  
A 0,1  
A 0,06

through three poles connected in series

for 24V  
48V  
110V  
220V  
440V  
600V

A 50  
A 50  
A 50  
A 25  
A 0,6  
A 0,35

