

## RADE KONCAR CONTACTOR **CNN100 100**A/55kW (AC3, 400V/50Hz); 115A(AC1)

Contactor type			CNN 100			
Mechanical endurance	make/brake operations	x10 <sup>6</sup>	5			
Insulation rating		V	1000			
Permissible ambient tem	perature	°C	from -25 to +55			
Consumption of electromagnet in cold state with Un						
AC operated	closing	VA	204			
	P.F.		0,54			
	closed	VA	16			
DC aparated	P.F.	W	0,26 200			
DC operated	closing closed	W	3,5			
Coil voltage tolerances	010300	**	0.85-1.1Un			
duration of making and b	preaking					
(values are also valid for v	oltages of electromagnet from					
0.8 to 1.1 Un for each in co	old and warm state).					
	tion of opening time and duration					
of electric arc.						
AC aparatad	aloning time		0 to 25			
AC operated	closing time opening time	ms ms	9 to 35 9 to 15			
	duration of electric arc	ms	10 to 15			
DC operated	closing time	ms	20 to 50			
20 operates	opening time	ms	120 to 150			
	duration of electric arc	ms	10 to 15			
Frequency of switching	operations					
without thermal reley			4000			
utılızatı	on category AC1	s/h	1000			
	AC2, AC3 AC4	s/h s/h	600 200			
with thermal relay	AC4	s/h	15			
with thornial rolay		0,11	9.6/5			
Resistivity to shocks	(square shock)	g/ms	and			
			5.2/10			
Short-circuit protection						
contactors without overload	d relays					
Main circuit						
With fuse links acc. To IEC 60947-4-1	Type of coord "4" al/aC	^	160			
DIN VDE 0660 Part 102	Type of coord. "1" gl/gG Type of coord. "2"	A A	160 100			
Sizes of connection cond		Α	100			
for contact without thermal						
main circuit	Rigid solid	mm <sup>2</sup>				
	standed	mm²	25-70			
	multi-wire conductor with cable shoe	mm <sup>2</sup>	_			
	standed with cable lug	mm²	25-50			
			-			
	flatbar	mm	-			
			-			
	protective conductor with cable lug	mm²	-			
	Screw		M8			
	Screw head					
ouviliant oiro::!t	Tightening torque	Nm	4-4.5			
auxiliary circuit	Stanta action and action	2	4.0.5			
	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 Screw head		M3.5 PZ2			
	Tightening torque	Nm	0,8			
	rightoring torque	INIII	0,0			

Reated continuous current lth; 35C		A	16
AC rated operational current le/AC15	230V	A	6
rated operational current le/AC13	400V	Ä	4
	500V	A	2,5
	690V	A	2,5
DC	0.07	•	40
rated operational current le/DC1; L/R ≤1ms	24V 110V	A A	10 3,2
	220V	Ä	0,9
	440V	A	0,33
	600V	A	0,22
rated operational current le/DC13	for 24V	А	10
rated operational current te/Do to	110V	A	1,8
	220V	A	0,9
	440V	A	0,27
Load carrying capacity of the main contacts	600V	Α	0,18
rated continuus current ith; 35C		A	135
AC1 utilization category			
rated current le/AC1 AC2 and AC3 utilization categories	for 230V	A kW	115 30
(slip-ring and cage motors at 50Hz)	for 230V <b>400V</b>	kW	30 <b>55</b>
tone ming and dage motors at 50Hz)	690V	kW	67
AC4 utilization category			
(electrical endurance of contacts:120.000	10/1004	Α.	00
rated curent	le/AC4	A	36
ratings of squirrel-cage motors at 50Hz for	230V	kW	8.7/10.4
	400V	kW	17/18
	500V	kW	21/24
Load carrying capacity of contactors at	690V	kW	20/30
swiyching on and off of a.c. capacitors	le	А	
(electrical endurance amounts to 0.1 milion switch		7.	
ratings of individual capacitors at 50 Hz for	230V	kvar	-
through one pole	400V	kvar	-
	500V 690V	kvar kvar	-
minimum inductive reactance between two capa	acitors		
(minimum inductive reactance between two capa	for 230V	kvar	-
ratings of capacitor banks (minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz	for 230V 400V	kvar	
(minimum inductive reactance between two capa	for 230V		-
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz Application in stator circuit of motor	for 230V 400V 500V	kvar kvar	- - -
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz	for 230V 400V 500V 690V	kvar kvar	- - -
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz Application in stator circuit of motor intermitent operation AC2	for 230V 400V 500V 690V	kvar kvar kvar	- - - - 135
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz Application in stator circuit of motor intermitent operation AC2	for 230V 400V 500V 690V c duty 20% 40%	kvar kvar kvar A A	110
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz Application in stator circuit of motor intermitent operation AC2	for 230V 400V 500V 690V c duty 20% 40% 60%	kvar kvar kvar A A A	110 100
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic	for 230V 400V 500V 690V c duty 20% 40%	kvar kvar kvar A A	110
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic stator current intermitent operation	for 230V 400V 500V 690V c duty 20% 40% 60% 80%	kvar kvar kvar A A A	110 100
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic stator current in the factor in intermitent periodic stator current at duty factor in intermitent periodic stator current intermitent periodic stator current intermitent operation	for 230V 400V 500V 690V c duty 20% 40% 60% 80%	kvar kvar kvar A A A	110 100 90
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic stator current intermitent operation	for 230V 400V 500V 690V c duty 20% 40% 60% 80%	kvar kvar kvar A A A A	110 100 90 193 193
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic stator current in the factor in intermitent periodic stator current at duty factor in intermitent periodic stator current intermitent periodic stator current intermitent operation	for 230V 400V 500V 690V c duty 20% 40% 60% 80%	kvar kvar kvar A A A A	110 100 90 193 193 173
(minimum inductive reactance between two capa switched on in parallel amounts to 6μH;50 Hz Application in stator circuit of motor intermitent operation AC2	for 230V 400V 500V 690V c duty 20% 40% 60% 80%	kvar kvar kvar A A A A	110 100 90 193 193
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic intermittent operation rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic intermittent at duty factor in intermittent periodic intermittent operation rotor current at duty factor in intermittent periodic intermittent operation operation operation intermittent periodic intermittent operation oper	for 230V 400V 500V 690V c duty 20% 40% 60% 80%	kvar kvar kvar A A A A	110 100 90 193 193 173 158
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic intermittent operation rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic intermittent at duty factor in intermittent periodic intermittent operation rotor current at duty factor in intermittent periodic intermittent operation operation operation intermittent periodic intermittent operation oper	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80%	kvar kvar kvar A A A A A A A A	110 100 90 193 193 173 158 138 138
(minimum inductive reactance between two capaswitched on in parallel amounts to 6μH;50 Hz  Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic intermittent operation rotor circuit of motor intermittent operation in rotor circuit of motor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic intermittent at duty factor in intermittent periodic continuous operation	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80%	kvar kvar kvar A A A A A A	110 100 90 193 193 173 158 138 138
Application in stator circuit of motor intermitent operation at duty factor in intermitent operation according to current at duty factor in intermitent periodic intermitent operation according to current at duty factor in intermittent periodic intermitent operation according to current at duty factor in intermittent periodic intermitent operation according to current according to continuous operation permissible voltage of motionless rotor counter of counte	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80%	kvar kvar kvar A A A A A A A	110 100 90 193 193 173 158 138 138
Application in stator circuit of motor intermittent operation rotor circuit of motor intermittent operation AC2 stator current at duty factor in intermittent periodic intermittent operation or circuit of motor intermittent operation rotor current at duty factor in intermittent periodic intermittent operation rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking	kvar kvar kvar A A A A A A A V V	110 100 90 193 193 173 158 138 138
Application in stator circuit of motor intermitent operation at duty factor in intermitent periodic stator current at duty factor in intermitent periodic intermitent operation AC2 stator current at duty factor in intermitent periodic intermitent operation rotor current at duty factor in intermittent periodic current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor counter of the counte	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking	kvar kvar kvar A A A A A A A V V	110 100 90 193 193 173 158 138 138
Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermittent periodic rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor  counter of Loadability by direct current DC1 utilization category,non-inductive loads LRs rated operational current le	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking	kvar kvar kvar A A A A A A A V V	110 100 90 193 193 173 158 138 138
Application in stator circuit of motor intermitent operation at duty factor in intermitent periodic stator current at duty factor in intermitent periodic intermitent operation AC2 stator current at duty factor in intermitent periodic intermitent operation rotor current at duty factor in intermittent periodic current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor counter of the counte	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking	kvar kvar kvar A A A A A A A V V	110 100 90 193 193 173 158 138 138 1800 880 750
Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermittent periodic rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor  counter of Loadability by direct current DC1 utilization category,non-inductive loads LRs rated operational current le	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking	kvar kvar kvar A A A A A A V V V V	110 100 90 193 193 173 158 138 138 1800 880 750
Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermittent periodic rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor  counter of Loadability by direct current DC1 utilization category,non-inductive loads LRs rated operational current le	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking current breaking	kvar kvar kvar kvar  A A A A V V V V	110 100 90 193 193 173 158 138 138 1800 880 750
Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermittent periodic rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor  counter of Loadability by direct current DC1 utilization category,non-inductive loads LRs rated operational current le	for 230V 400V 500V 690V c duty  20% 40% 60% 80%  c duty  10% 20% 40% 60% 80%  starting regulation current breaking  regulation burrent breaking	kvar kvar kvar A A A A A V V V V	110 100 90 193 193 173 158 138 138 1800 880 750
Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermittent periodic rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor  counter of Loadability by direct current DC1 utilization category,non-inductive loads LRs rated operational current le	for 230V 400V 500V 690V c duty 20% 40% 60% 80% c duty 10% 20% 40% 60% 80% starting regulation current breaking current breaking	kvar kvar kvar kvar  A A A A V V V V	110 100 90 193 193 173 158 138 138 1800 880 750
Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermittent periodic rotor current at duty factor in intermittent periodic continuous operation permissible voltage of motionless rotor  counter of Loadability by direct current DC1 utilization category,non-inductive loads LRs rated operational current le	for 230V 400V 500V 690V c duty  20% 40% 60% 80%  c duty  10% 20% 40% 60% 80%  starting regulation current breaking  regulation burrent breaking	kvar kvar kvar A A A A A V V V V	110 100 90 193 193 173 158 138 138 1800 880 750

utilization categories DC3 to DC5 series and shunt motors (L/R $\leq$ 15 ms)	110 V 220 V 440 V 600 V	A A A	100 100 6 3,4
rated operational current le			
through one pole	for 24 V	Α	6
anough one pole	60 V	A	3
	110 V	A	1,25
	220 V	A	0,35
	440 V	A	0,15
	600 V	A	0,1
through three poles connected in series	for 24 V	А	90
g p	60 V	A	90
	110 V	A	90
	220 V	A	3,8
	440 V	A	0,7
	600 V	Α	0,4

