



RADE KONCAR CONTACTOR **CNM250 250**A/132kW (AC3, 400V/50Hz); 300A(AC1)

Contactor type			CNM 250
Mechanical endurance	make/brake operations	x10 ⁶	3
nsulation rating		V	1000
Permissible ambient ter	nperature	O°	from -25 to +55
Consumption of electro	magnet in cold state with Un		
AC operated	closing	VA	1340
	P.F.		0,46
	closed	VA	84
	P.F.		0,23
DC operated	closing	W	1180
	closed	W	8
Coil voltage tolerances			0.85-1.1Un
luration of making and	breaking		
values are also valid for	voltages of electromagnet from		
).8 to 1.1 Un for each in c	cold and warm state).		
otal breaking time is add	lition of opening time and duration		
of electric zrc.			
AC operated	closing time	ms	20 to 50
	opening time	ms	10 to 30
	duration of electric arc	ms	10 to 15
DC operated	closing time	ms	25 to 80
	opening time	ms	15 to 30
	duration of electric arc	ms	10 to 15
Frequency of switching	operations		
vithout thermal reley			
utilizat	tion category AC1	s/h	1000
	AC2, AC3	s/h	500
	AC4	s/h	250
with thermal relay		s/h	15
			10/5.6
Resistivity to shocks	(square shock)	g/ms	and
			5/12
Short-circuit protection			
contactors without overloa	ad relays		
Main circuit			
With fuse links			
acc. To IEC 60947-4-1	Type of coord. "1" gl/gG	A	400
DIN VDE 0660 Part 102	Type of coord. "2"	A	250
Sizes of connection cor			
or contact without therma	al relay		
main circuit	Rigid solid	mm ²	
	0		-
	standed	mm²	
			_
	multi-wire conductor with cable shoe	mm ²	-
			- 70-150
	multi-wire conductor with cable shoe standed with cable lug	mm ² mm ²	
	multi-wire conductor with cable shoe	mm ²	70-150 25x3
	multi-wire conductor with cable shoe standed with cable lug flatbar	mm² mm² mm	25x3
	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug	mm ² mm ²	25x3 35-70
	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug Screw	mm² mm² mm	25x3
	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug Screw Screw head	mm² mm² mm mm²	25x3 35-70 M10
	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug Screw	mm² mm² mm	25x3 35-70
auxiliary circuit	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug Screw Screw head Tightening torque	mm ² mm ² mm mm ² Nm	25x3 35-70 M10 4
auxiliary circuit	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug Screw Screw head	mm² mm² mm mm² Nm mm²	25x3 35-70 M10
auxiliary circuit	multi-wire conductor with cable shoe standed with cable lug flatbar protective conductor with cable lug Screw Screw head Tightening torque	mm ² mm ² mm mm ² Nm	25x3 35-70 M10 4

Screw head Tightening torque		Nm	PZ2 0,8
Loadability of auxiliary contacts Reated continuous current Ith ; 35C		А	16
AC	0001/		0
rated operational current le/AC15	230V 400V	A A	6 4
	500V	A	2,5
	690V	A	2,5
DC			,
rated operational current le/DC1; L/R ≤1ms	24V	A	10
	110V	A	8
	220V	A	2
	440V 600V	A A	0,6 0,4
	0000	7.	0,4
rated operational current le/DC13	for 24V	А	10
	110V	A	2,4
	220V	A	1,1
	440V 600V	A A	0,32 0,2
Load carrying capacity of the main contacts	0001	11	0,2
rated continuus current ith ; 35C		А	300
AC1 utilization category			
rated current le/AC1	for 2201/	A	300
AC2 and AC3 utilization categories (slip-ring and cage motors at 50Hz)	for 230V 400V	kW kW	75 132
onpring and cage motors at 30FIZ)	400V 690V	kW	160
AC4 utilization category	000 v	r v V	100
(electrical endurance of contacts:120.000			
rated curent	le/AC4	А	100
	2201/	1-147	24
ratings of squirrel-cage motors at 50Hz for	230V 400V	kW kW	31 55
	500V	kW	72
	690V	kW	92
Load carrying capacity of contactors at			
swiyching on and off of a.c. capacitors	le	А	216
Swryening on and on of a.e. capacitors	le	~	210
(electrical endurance amounts to 0.1 milion switching or	perations)	~	
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for	230V	kvar	87
(electrical endurance amounts to 0.1 milion switching or	perations) 230V 400V	kvar kvar	87 150
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for	perations) 230V 400V 500V	kvar kvar kvar	87 150 190
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for	perations) 230V 400V	kvar kvar	87 150
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for	perations) 230V 400V 500V	kvar kvar kvar	87 150 190
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors	perations) 230V 400V 500V	kvar kvar kvar	87 150 190
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz	230V 400V 500V 690V 230V 400V	kvar kvar kvar kvar	87 150 190 150 66 115
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz	230V 400V 500V 690V 230V 400V 500V	kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for	230V 400V 500V 690V 230V 400V	kvar kvar kvar kvar kvar	87 150 190 150 66 115
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for	230V 400V 500V 690V 230V 400V 500V	kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2	230V 400V 500V 690V 230V 400V 500V	kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for	230V 400V 500V 690V 230V 400V 500V	kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2	230V 400V 500V 690V 230V 400V 500V 690V	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2	230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 145 115 462 367 327
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty	230V 400V 500V 690V 230V 400V 500V 690V 20% 40%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 145 115
(electrical endurance amounts to 0.1 milion switching or ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2	230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 145 115 462 367 327
<pre>(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for</pre> Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermitent operation	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 145 115 462 367 327 300
<pre>(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for</pre> Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermitent operation	230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730
<pre>(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for</pre> Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermitent operation	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580
<pre>(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for</pre> Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermitent operation	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517
(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474
<pre>(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for</pre> Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermitent operation	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517
(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty (minimitent operation rotor current at duty factor in intermittent periodic duty (minimitent operation for corrent at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for corrent at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty (minimitent operation for current at duty factor in intermittent periodic duty	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60% 80% starting	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000
(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty (minimum at duty factor in intermittent periodic duty	berations) 230V 400V 500V 690V 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% starting egulation	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000 1000
(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6μH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty Implication periodic duty factor in intermittent periodic duty Continuous operation permissible voltage of motionless rotor recounter current Loadability by direct current	berations) 230V 400V 500V 690V 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% starting egulation	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000
(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty intermistent operation permissible voltage of motionless rotor Totor current Loadability by direct current DC1 utilization category,non-inductive loads LR≤1 ms	berations) 230V 400V 500V 690V 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% starting egulation	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000 1000
(electrical endurance amounts to 0.1 milion switching op ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty I I I I I I I I I I I I I I I I I I I	Derations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60% 80% starting egulation breaking	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 145 115 462 367 327 300 759 730 580 517 474 474 474 2000 1000 880
(electrical endurance amounts to 0.1 milion switching of ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty intermistent operation permissible voltage of motionless rotor Totor current Loadability by direct current DC1 utilization category,non-inductive loads LR≤1 ms	perations) 230V 400V 500V 690V 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60% 80% starting egulation breaking	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000 1000 880
(electrical endurance amounts to 0.1 milion switching op ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty I I I I I I I I I I I I I I I I I I I	perations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60% 80%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000 1000 880 300 300 300
(electrical endurance amounts to 0.1 milion switching op ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty I I I I I I I I I I I I I I I I I I I	perations) 230V 400V 500V 690V 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60% 80% starting egulation breaking	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000 1000 880 300 300 33
(electrical endurance amounts to 0.1 milion switching op ratings of individual capacitors at 50 Hz for through one pole ratings of capacitor banks (minimum inductive reactance between two capacitors switched on in parallel amounts to 6µH;50 Hz for Application in stator circuit of motor intermitent operation AC2 stator current at duty factor in intermitent periodic duty Application in rotor circuit of motor intermittent operation rotor current at duty factor in intermittent periodic duty I I I I I I I I I I I I I I I I I I I	perations) 230V 400V 500V 690V 230V 400V 500V 690V 20% 40% 60% 80% 10% 20% 40% 60% 80%	kvar kvar kvar kvar kvar kvar kvar kvar	87 150 190 150 66 115 145 115 462 367 327 300 759 730 580 517 474 474 2000 1000 880 300 300 300

through three poles connected in series	for 24 V	А	300
	60 V	A	300
	110 V	A	300
	220 V	A	300
	440 V	A	11
	600 V	A	5,2
utilization categories DC3 to DC5			
series and shunt motors (L/R ≤ 15 ms)			
rated operational current le 55° C			
through one pole	for 24 V	A	35
	60 V	A	11
	110 V	A	3
	220 V	А	0,6
	440 V	А	0,18
	600 V	А	0,12
there are a second start in a second	for 04.14	٨	200
through three poles connected in series	for 24 V	A	300
	60 V	A	300
	110 V	A	300
	220 V	A	300
	440 V	A	1,4
	600 V	А	0,75

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