

NC1 series AC Contactors



General

Certificates: CB, ESC, PCT, UKREST, UL, VDE

Electric ratings: AC50/60Hz, 660V, 95A

Utilization category: AC-3, AC-4

Standards: IEC60947-4-1, GB14048.4



Type Designation

N C 1-□□ □□

No. of contacts

10: 3 NO main contacts+1 NO auxiliary contact ($\leq 32A$)

01: 3 NO main contacts+1 NC auxiliary contact ($\leq 32A$)

11: 3 NO main contacts+1 NO 1NC auxiliary contact ($\geq 40A$)

04: 4 NO main contacts(18A, 32A excluded)

08: 2 NO 2NC main contacts(18A, 32A excluded)

Basic specification, expressed with the rated operational current(380V, AC3)

N: Company code

C: AC contactor

1: Design sequence Number



Operation Contidions

Temperature: $-5^{\circ}C \sim +40^{\circ}C$; the average value within 24h shall not exceed $+35^{\circ}C$.

Altitude: not exceed 2000m.

Pollution grade: Grade III

Air conditions:

At mounting site, relative humidity not exceed 50% at the max temperature of $+40^{\circ}C$, higher relative humidity is allowable under lower temperature. For example, RH could be 90% at $+20^{\circ}C$. Special measures should be taken to occurrence of condensation.

Mounting conditions:

The incline of the mounting plane to the vertical plane shall not exceed 5° .

The product shall be mounting and operated at a place without obvious shake, impact and vibration.

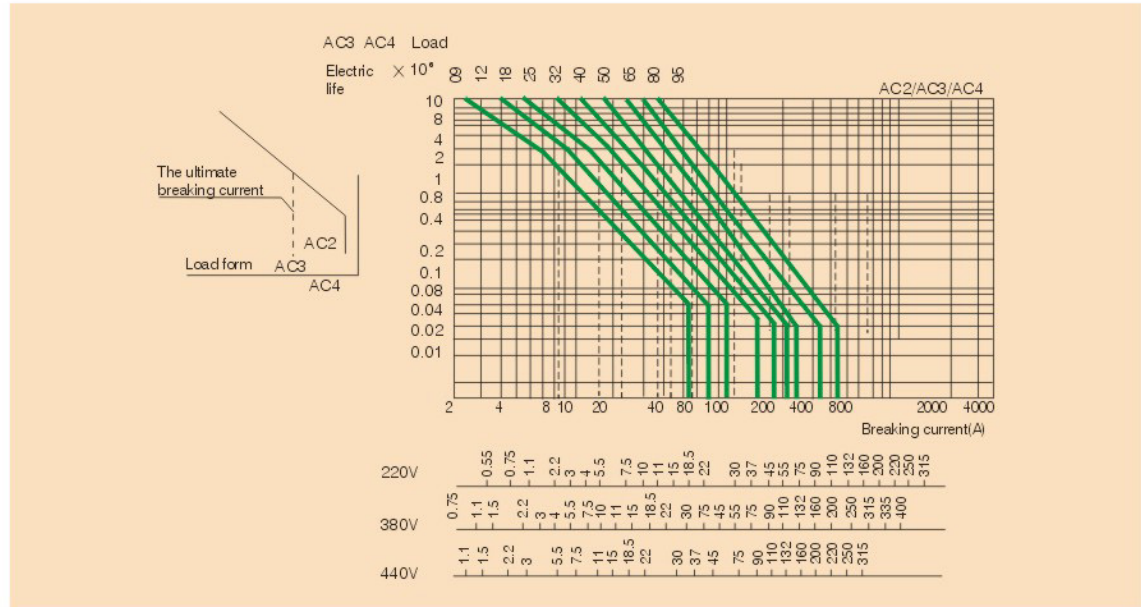


Features

The product is characterized by compact design, light weight, low power consumption, long service life, reliable and safe operation, etc.

Technical Data

Electric life



Technical Parameters

Type		NC1-09	NC1-12	NC1-18	NC1-25	NC1-32	NC1-40	NC1-50	NC1-65	NC1-80	NC1-95								
Rated operational current (A)	380V	AC3	9	12	18	25	32	40	50	65	80	95							
		AC4	3.5	5	7.7	8.5	12	18.5	24	28	37	44							
	660V	AC3	6.6	8.9	12	18	21	34	39	42	49	49							
		AC4	1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3							
Conventional heating current (A)		20	20	32	40	50	60	80	80	110	110								
Rated insulation voltage(V)		660	660	660	660	660	660	660	660	660	660								
Power of controlled 3-phase cage motor (AC-3)(kw)	220V	2.2	3	4	5.5	7.5	11	15	18.5	22	25								
	380V	4	5.5	7.5	11	15	18.5	22	30	37	45								
	660V	5.5	7.5	10	15	18.5	30	37	37	45	45								
Operating frequency (operation/h)	Electrical life	AC3	1200	1200	1200	1200	600	600	600	600	600								
	AC4	300	300	300	300	300	300	300	300	300	300								
Mechanical life		3600	3600	3600	3600	3600	3600	3600	3600	3600	3600								
Electrical life (10 ⁸ operations)	AC3	1,000	1,000	1,000	1,000	800	800	600	600	600	600								
	AC4	200	200	200	200	200	150	150	150	100	100								
Mechanical life (10 ⁸ operations)		10,000	10,000	10,000	10,000	8,000	8,000	8,000	8,000	6,000	6,000								
Matched fuse		RT16-20	RT16-20	RT16-32	RT16-40	RT16-50	RT16-63	RT16-80	RT16-80	RT16-100	RT16-125								
Piece		1~2	1~2	1~2	1 2	1 2	1 2	1 2	1 2	1 2	1 2								
Cabling	Solid wire with cold-pressed socket		2.5	2.5	4	4	4	4	10	10	16	16	16	16	50	25	50	25	
	Solid wire without cold-pressed socket		4	4	6	10	6	10	6	16	10	25	16	25	16	50	35	50	35
	Hard wire		4	4	6	6	6	6	6	10	10	25	-	25	-	50	-	50	-
Action range		Pick-up voltage: 85%~110%Us, releasing voltage: 20%~75%Us																	

Specifications of coil

Type		NC1-09	NC1-12	NC1-18	NC1-25	NC1-32	NC1-40	NC1-50	NC1-65	NC1-80	NC1-95	
Coil power	50Hz	Pick-up(VA)	70	70	70	110	110	200	200	200	200	200
		Holding(VA)	8	8	8	11	11	20	20	20	20	20
		Power(W)	1.8~2.7	1.8~2.7	1.8~2.7	3~4	3~4	6~10	6~10	6~10	6~10	6~10

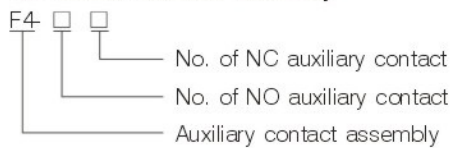
Derived Products



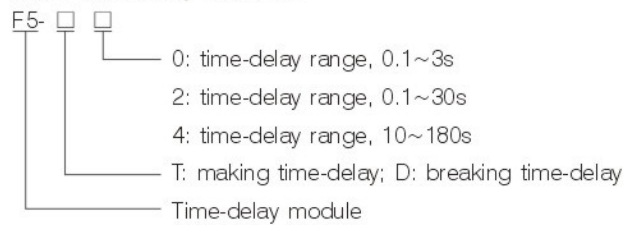
Derived products	Contactor	Accessorial modular	Picture
Time-delay contactor		 Air-time-delay block	
Reversible contactor		 Mechanical interlocking	
Magnetic starter		 Thermal relay	
Capacitor changeover contactor		 Current-limiting contact assembly	
Wye-delta starter		 Air time-delay module	 Auxiliary contact assembly

Accessories

F4 Auxiliary contact assembly




F5 Air time-delay module





Combination of contactor and other functional modules



Model	Time delay range	Number of contact	Picture
F5-T0	0.1~3s	NO+NC	
F5-T2	0.1~30s	NO+NC	
F5-T4	10~180s	NO+NC	
F5-D0	0.1~3s	NO+NC	
F5-D2	0.1~30s	NO+NC	
F5-D4	10~180s	NO+NC	

The contactor body($\leq 32A$)has one pair of NO and NC auxiliary contact. For contactors($\geq 40A$), besides one pair of NO and NC auxiliary contact, it can be still equipped with F4 auxiliary contact assembly (two sets or four sets).

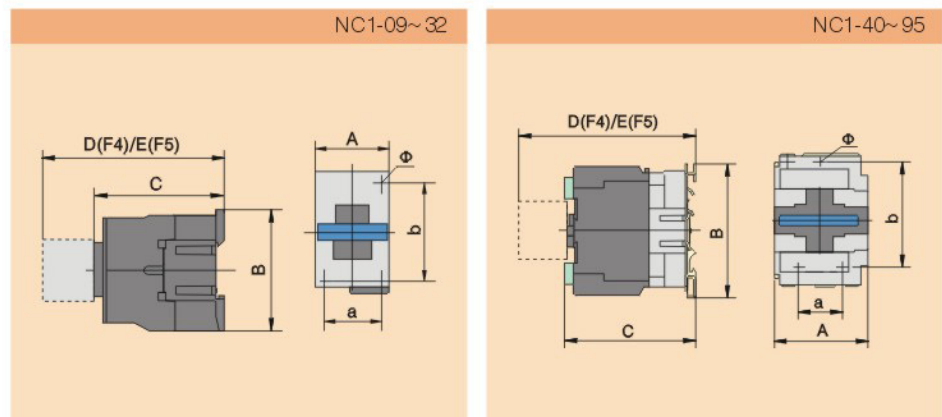


Auxiliary contact set type	Number of contacts		Picture
	NO (normal open)	NC (normal close)	
F4-20	2	0	
F4-11	1	1	
F4-02	0	2	
F4-40	4	0	
F4-31	3	1	
F4-22	2	2	
F4-13	1	3	
F4-04	0	4	

Besides mounting with screw, the product can be mounted to a 35mm standard clamp rail (NC1-09~95), and with a 75mm standard clamp rail (NC1-40~95).



Overall and Mounting Dimensions (mm)



Contactor model	A max	B max	C max	D max	E max	a	b	Φ
NC1-09~12	47	76	82	120.5	140.5	35	50/60	4.5
NC1-18	47	76	87	125.5	145.5	35	50/60	4.5
NC1-25	57	86	95	133.5	153.5	40	48/60	4.5
NC1-32	57	86	100	138.5	158.5	40	48/60	4.5
NC1-40~65	77	129	116	154.5	174.5	40	105	6.5
NC1-80~95	87	129	127	165.5	175.5	40	105	6.5