Home / Brand Zone / CHNT Electric / NC1 series AC contactor



# NC1 series AC contactor

### Motor control and protection

NC1 series AC contactor (hereinafter referred to as contactor), mainly used for AC 50Hz (or 60Hz), rated working voltage to 690V, in the AC-3, 400 (380) V class under the rated working current to 95A, It can be used to connect and disconnect circuits at a long distance, and can form an electromagnetic starter with an appropriate thermal overload relay to protect the circuit from which an operational overload may occur. The contactor is suitable for frequently starting and controlling the AC motor.

NC1-N AC contactor (reversible type) is mainly used for AC 50Hz (or 60Hz), rated working voltage to 690V, rated working current to 95A, for motor reversible control. Its mechanical interlock mechanism ensures the reliability of the conversion of the two reversible contactor contacts.

In order to meet the needs of some special occasions, the NC1 series AC contactor is designed with an AC contactor with a DC operating system.

Compliance with standards: IEC/EN 60947-4-1, GB/T 14048.4.

AC contactor

### Specification

# 4 主要参数及技术性能

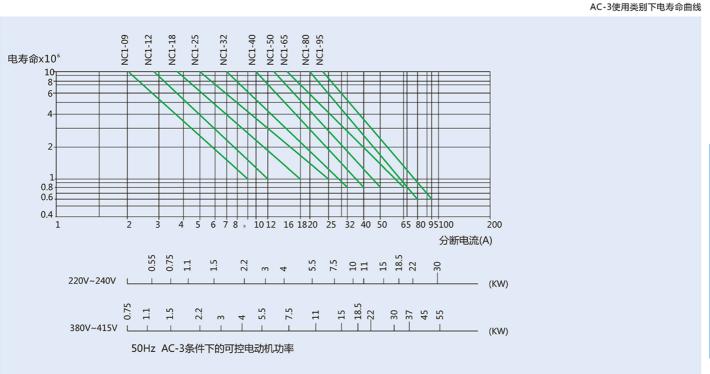
## 4.1 NC1接触器的主要参数及技术性能指标(见表1)。

| 型号                 |           |  | NC1   | L-09(Z) | NC1-1   | L2(Z) | NC1-      | 18(Z)   | NC1-2   | 25(Z)    | NC1-3   | 32(Z)  | NC1-    | 40(Z) | NC1-5   | 50(Z) | NC1-65  | 5(Z) | NC1-8    | 80(Z) | NC1-9    | 95(Z) |  |
|--------------------|-----------|--|-------|---------|---------|-------|-----------|---------|---------|----------|---------|--------|---------|-------|---------|-------|---------|------|----------|-------|----------|-------|--|
| 额定                 | 380/400V  | AC-3   | 9     |         | 12      |       | 18        |         | 25      |          | 32      | 32     |         | 40    |         | 50    |         | 65   |          | 80    |          | 95    |  |
| 工作                 | 560/400V  | AC-4   | 3.5   |         | 5       |       | 7.7       |         | 8.5     |          | 12      |        | 18.5    |       | 24      |       | 28      |      | 37       |       | 44       |       |  |
| 电流<br>(A) 660/690V |           | AC-3   | 6.6   |         | 8.9     |       | 12        |         | 18      |          | 21      |        | 34      |       | 39      |       | 42      |      | 49       |       | 49       |       |  |
|                    |           | AC-4   | 1.5   |         | 2       |       | 3.8       |         | 4.4     |          | 7.5     |        | 9       |       | 12      |       | 14      |      | 17.3     |       | 21.3     |       |  |
| 约定自                | 由空气发热电流   | 5(A)   | 20    |         | 20      |       | 32        |         | 40      |          | 50      |        | 60      |       | 80      |       | 80      |      | 95       |       | 110      |       |  |
| 额定绝线               | 缘电压(V)    |  | 690   |         | 690     |       | 690       |         | 690     |          | 690     |        | 690     |       | 690     |       | 690     |      | 690      |       | 690      |       |  |
| 可控三相鼠笼             |           | 220/230V   | V 2.2 |         | 3       |       | 4         |         | 5.5     |          | 7.5     |        | 11      |       | 15      |       | 18.5    |      | 22       |       | 25       |       |  |
|                    |           | 380/400V   | √ 4   |         | 5.5     |       | 7.5       |         | 11      |          | 15      |        | 18.5    |       | 22      |       | 30      |      | 37       |       | 45       |       |  |
| 电动机功率(AC-3)kW      |           | 660/690V   | / 5.5 |         | 7.5     |       | 10        |         | 15      |          | 18.5    |        | 30      |       | 37      |       | 37      |      | 45       |       | 45       |       |  |
| 断续周期               | 断续周期工作制下  |  | 1.5   |         | 2.2     |       | 3         |         | 4       |          | 5.5     |        | 7.5     |       | 11      |       | 15      |      | 18.5     |       | 22       |       |  |
| 电动机功率(AC-4)kW      |           | 660/690V   | 1.1 1 |         | 1.5     |       | 3.7       |         | 4       |          | 5.5     |        | 7.5     |       | 11      |       | 11      |      | 15       |       | 18.5     |       |  |
|                    | 电寿命       |  | 100   |         | 100     |       |           |         | 100     |          | 80      |        | 80      |       | 60      |       | 60      |      | 60       |       | 60       |       |  |
| (万次)               | (万次) AC-4 |  | 20 20 |         | 20      |       | 20        |         | 20      |          | 15      |        | 15      |       | 15      |       | 10      |      | 10       |       |          |       |  |
| 机械寿命               | 机械寿命(万次)  |  | 1000  |         | 1000    |       | 1000      |         | 1000    |          | 800     |        | 800     |       | 800     |       | 800     |      | 600      |       | 600      |       |  |
| 配用熔                | 配用熔断器型号   |  | RT1   | 6-20    | RT16-20 |       | RT16-32   |         | RT16-40 |          | RT16-50 |        | RT16-63 |       | RT16-80 |       | RT16-80 |      | RT16-100 |       | RT16-125 |       |  |
|                    | 非预制端头软    | 线  | 1     | 2       | 1       | 2     | 1         | 2       | 1       | 2        | 1       | 2      | 1       | 2     | 1       | 2     | 1       | 2    | 1        | 2     | 1        | 2     |  |
| 冷压                 | 有预制端头软    |  | 1/2   | 51/2.5  | 1/2.5   | 1/2.5 | 1.5/4     | 1.5/4   | 1.5/4   | 1.5/4    | 2.5/6   | 2.5/6  | 6/25    | 4/10  | 6/25    | 4/10  | 6/25    | 4/10 | 10/35    | 6/16  | 10/35    | 6/16  |  |
| 端头                 |           | mm²  | 1/4   | 1/2.5   | 1/4     | 1/2.5 | 1.5/6     | 1.5/6   | 1.5/10  | 1.5/6    | 2.5/10  | 2.5/6  | 6/25    | 4/10  | 6/25    | 4/10  | 6/25    | 4/10 | 10/35    | 6/16  | 10/35    | 6/16  |  |
|                    | 非预制端头硬    | 线  | 1/4   | 1/4     | 1/4     | 1/4   | 1.5/6     | 1.5/6   | 1.5/6   | 1.5/6    | 2.5/10  | 2.5/10 | 6/25    | 4/10  | 6/25    | 4/10  | 6/25    | 4/10 | 10/35    | 6/16  | 10/35    | 6/16  |  |
| 接线端                | 子螺钉大小     |  | M3.5  |         | M3.5    |       | M3.5      |         | M4      | M4       | M4      | M4     | M8      |       | M8      |       | M8      |      | M10      |       | M10      |       |  |
| 及拧紧;               | 力矩(N·m)   |  | 0.8   |         | 0.8     |       | 0.8       |         | 1.2     |          | 1.2     |        | 4       |       | 4       |       | 4       |      | 10       |       | 10       |       |  |
| 交流<br>线圈           | 50Hz      | 吸合(VA)   | 70    |         | 70      |       | 70        |         | 110     |          | 110     |        | 300     |       | 300     |       | 300     |      | 300      |       | 300      |       |  |
|                    |           | 保持(VA)   | 9.0   |         | 9.0     |       | 9.5       |         | 14.0    |          | 14.0    |        | 57.0    |       | 57.0    |       | 57.0    |      | 57.0     |       | 57.0     |       |  |
| 功率                 |           | 功率(W)  | 1.8~  | 2.7     | 1.8~2.  | 7     | 3~4       |         | 3~4     |          | 3~4     |        | 6~10    |       | 6~10    |       | 6~10    |      | 6~10     |       | 6~10     |       |  |
| 直流线                | 圈功率       | 功率(W)  | 9     |         | 9       |       | 11        |         | 11      |          | 11      | 1 20   |         | 20 20 |         | 20    |         | 20   |          |       |          |       |  |
| 动作范                | 韦         | 吸合电压为:85%Us~110%Us;释放电压为:20%Us~75%Us(直流为10%Us~75%Us) |       |         |         |       |           |         |         |          |         |        |         |       |         |       |         |      |          |       |          |       |  |
| 辅助触                | 头基本参数     | AC-15: Ie:0  | ).95A | ; Ue:38 | 0/400V  | DC-1  | 3: Ie:0.1 | 15A; Ue | :220/25 | 50V; Ith | : 10A   |        |         |       |         |       |         |      |          |       |          |       |  |

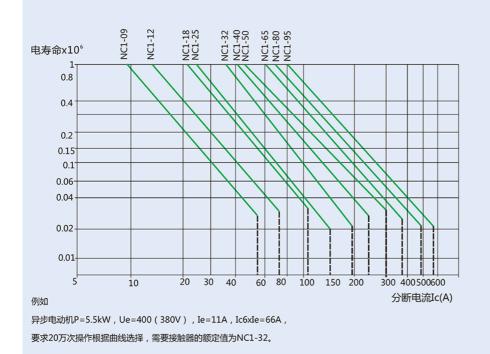
表1

### 2019/12/5

### 4.2 电寿命曲线



AC-4使用类别下电寿命曲线



#### 4.3 线圈额定控制电源电压Us及代号(见表2)。

| 线圈电压Us(V) | 24 | 36 | 42 | 48 | 110 | 127 | 220 | 230 | 240 | 380 | 400 | 415 | 440 | 480 | 500 | 600 | 660 |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50Hz      | B5 | C5 | D5 | E5 | F5  | G5  | M5  | P5  | U5  | Q5  | V5  | N5  | R5  | T5  | S5  | X5  | Y5  |
| 60Hz      | B6 | C6 | D6 | E6 | F6  | G6  | M6  | P6  | U6  | Q6  | V6  | N6  | R6  | Т6  | S6  | X6  | Y6  |
| 50/60Hz   | B7 | C7 | D7 | E7 | F7  | G7  | M7  | P7  | U7  | Q7  | V7  | N7  | R7  | T7  | S7  | X7  | Y7  |

4.4 直流线圈额定控制电源电压Us见表3。

|           |    |    |    |    |    |     |     | 表3  |
|-----------|----|----|----|----|----|-----|-----|-----|
| 线圈电压Us(V) | 24 | 36 | 48 | 60 | 72 | 110 | 125 | 220 |
| 代号        | BD | CD | ED | ND | SD | FD  | GD  | MD  |

## **Product Show**

表2