



## NCH8 Modular AC Contactor

### 1. General

- 1.1 Electric ratings: up to 20A, 25A, 40A, 63A, 230V, AC50/60Hz;
- 1.2 Utilization category: AC-1, AC-7a, AC-7b;
- 1.3 Standard: IEC/EN 61095

### 2. Features

- 2.1 Compact design and modularization design;
- 2.2 Insulation material with excellent performances has been adopted to enhance the operation security to a great extent;
- 2.3 Elegant appearance. A mounting instruction diagram is appended for convenient operation;
- 2.4 No noise during operation.

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### 3. Technical data

#### 3.1 Ratings

| Model   | Utilization category | Ui (V) | Ue (V~) | Conventional heating current (A) | Ie (A) | Controlled power (kW) |
|---------|----------------------|--------|---------|----------------------------------|--------|-----------------------|
| NCH8-20 | AC-1,AC-7a           | 500    | 230     | 20                               | 20     | 4                     |
| NCH8-20 | AC-7b                | 500    | 230     | 20                               | 9      | 1.2                   |
| NCH8-25 | AC-1,AC-7a           | 500    | 400     | 25                               | 25     | 16                    |
| NCH8-40 | AC-1,AC-7a           | 500    | 400     | 40                               | 40     | 40                    |
| NCH8-63 | AC-1,AC-7a           | 500    | 400     | 63                               | 63     | 40                    |

#### 3.2 Making and breaking capacity

| Model   | Utilization category | Making and breaking conditions |       |            | Electrification time (s) | Interval time (s) | Operating cycle times |
|---------|----------------------|--------------------------------|-------|------------|--------------------------|-------------------|-----------------------|
|         |                      | Ic/Ie                          | Ur/Ue | COS $\phi$ |                          |                   |                       |
| NCH8-20 | AC-1,AC-7a           | 1.5                            | 1.05  | 0.8        | 0.05                     | 10                | 50                    |
| NCH8-20 | AC-7b                | 8                              | 1.05  | 0.45       | 0.05                     | 10                | 50                    |
| NCH8-25 | AC-1,AC-7a           | 1.5                            | 1.05  | 0.8        | 0.05                     | 10                | 50                    |
| NCH8-40 | AC-1,AC-7a           | 1.5                            | 1.05  | 0.8        | 0.05                     | 10                | 50                    |
| NCH8-63 | AC-1,AC-7a           | 1.5                            | 1.05  | 0.8        | 0.05                     | 10                | 50                    |

#### 3.3 Conventional Operating Performances

##### 3.3.1 Conventional operating performances of NCH8-20~25

| Utilization category | Making conditions |      |            | Breaking conditions |       |            | Electrification time (s) | Interval time (s) | Operating frequency |
|----------------------|-------------------|------|------------|---------------------|-------|------------|--------------------------|-------------------|---------------------|
|                      | I/Ie              | U/Ue | COS $\phi$ | Ic/Ie               | Ur/Ue | COS $\phi$ |                          |                   |                     |
| AC-1                 | 1.0               | 1.05 | 0.8        | 1.0                 | 1.05  | 0.8        | 0.05                     | 10                | 6000                |
| AC-7a                | 1.0               | 1.05 | 0.8        | 1.0                 | 1.05  | 0.8        | 0.05                     | 10                | 30000               |
| AC-7b                | 6.0               | 1.0  | 0.45       | 1.0                 | 0.17  | 0.45       | 0.05                     | 10                | 30000               |

##### 3.3.2 Conventional operating performances of NCH8-40~63

| Utilization category | Making and breaking conditions |       |            | Electrification time (s) | Interval time (s) | Operating frequency |
|----------------------|--------------------------------|-------|------------|--------------------------|-------------------|---------------------|
|                      | Ic/Ie                          | Ur/Ue | COS $\phi$ |                          |                   |                     |
| AC-1                 | 1.0                            | 1.05  | 0.8        | 0.05                     | 10                | 6000                |
| AC-7a                | 1.0                            | 1.05  | 0.8        | 0.05                     | 10                | 30000               |

#### 3.4 Conventional heating current under different ambient temperature

| Rated current | 40°C | 50°C | 60°C | 70°C |
|---------------|------|------|------|------|
| Ie=20A        | 20A  | 18A  | 16A  | 14A  |
| Ie=25A        | 25A  | 22A  | 18A  | 16A  |
| Ie=40A        | 40A  | 38A  | 36A  | 32A  |
| Ie=63A        | 63A  | 57A  | 50A  | 46A  |

#### 3.5 Number of appended lamps with voltage up to 230V

| Unit power | Tungsten filament and halogen 230V |      |      |      |      |       |
|------------|------------------------------------|------|------|------|------|-------|
|            | 60W                                | 100W | 200W | 300W | 500W | 1000W |
| 20A        | 20                                 | 12   | 6    | 4    | 2    | 1     |
| 25A        | 36                                 | 20   | 11   | 7    | 4    | 2     |
| 40A        | 85                                 | 50   | 25   | 17   | 10   | 5     |
| 63A        | 115                                | 70   | 35   | 23   | 14   | 7     |

**4. Overall and mounting dimensions (mm)**



| Model      | D  |    | L  | L1   | L2 | H    | H1 | H2 |
|------------|----|----|----|------|----|------|----|----|
|            | 2P | 4P |    |      |    |      |    |    |
| NCH8-20~25 | 18 | 36 | 85 | 35.5 | 45 | 65.5 | 60 | 44 |
| NCH8-40~36 | 36 | 54 | 85 | 35.5 | 45 | 65.5 | 60 | 44 |

**5. Ordering information**

| Model    | Number of contact | Coil voltage | CTN | Order code |        |
|----------|-------------------|--------------|-----|------------|--------|
|          |                   |              |     | Standard   | RoHS   |
| NCH8-20  | 2NO               | 230V 50Hz    | 128 | 153000     | 981874 |
| NCH8-20  | 2NO               | 24V 50Hz     | 128 | 153001     | 981875 |
| NCH8-20  | 1NO+1NC           | 220/230V     | 128 | 153002     | 981876 |
| NCH8-20  | 1NO+1NC           | 24V 50Hz     | 128 | 153003     | 981877 |
| NCH8-20  | 2NC               | 220/230V     | 128 | 153020     | 981878 |
| NCH8-20  | 2NC               | 24V 50Hz     | 128 | -          | 986779 |
| NCH8-20  | 4NO               | 220/230V     | 96  | -          | 986780 |
| NCH8-20  | 4NO               | 24V 50Hz     | 96  | -          | 986781 |
| NCH8-20  | 2NO+2NC           | 220/230V     | 96  | -          | 986782 |
| NCH8-20  | 2NO+2NC           | 24V 50Hz     | 96  | -          | 986783 |
| NCH8-25  | 4NO               | 220/230V     | 96  | -          | 986784 |
| NCH8-25  | 4NO               | 24V 50Hz     | 96  | -          | 986785 |
| NCH8-25  | 2NO+2NC           | 220/230V     | 96  | -          | 986786 |
| NCH8-25  | 2NO+2NC           | 24V 50Hz     | 96  | -          | 986787 |
| NCH8-40  | 4NO               | 230V         | 64  | 153004     | 981879 |
| NCH8-40  | 4NO               | 24V          | 64  | 153005     | 981880 |
| NCH8-40* | 2NO+2NC           | 230V         | 64  | 153006     | 981881 |
| NCH8-40* | 2NO+2NC           | 24V          | 64  | 153007     | 981882 |
| NCH8-40  | 2NO               | 230V         | 64  | 153008     | 981883 |
| NCH8-40  | 2NO               | 24V          | 64  | 153009     | 981884 |
| NCH8-40  | 1NO+1NC           | 230V         | 64  | 153010     | 981885 |
| NCH8-40  | 1NO+1NC           | 24V          | 64  | 153011     | 981886 |
| NCH8-40* | 3NO+1NC           | 220/230V     | 64  | -          | 986788 |
| NCH8-40* | 4NC               | 220/230V     | 64  | -          | 986789 |
| NCH8-63  | 4NO               | 230V 50Hz    | 64  | 153012     | 981887 |
| NCH8-63  | 4NO               | 24V 50Hz     | 64  | 153013     | 981888 |
| NCH8-63* | 2NO+2NC           | 230V 50Hz    | 64  | 153014     | 981889 |
| NCH8-63* | 2NO+2NC           | 24V 50Hz     | 64  | 153015     | 981890 |
| NCH8-63  | 2NO               | 230V 50Hz    | 64  | 153016     | 981891 |
| NCH8-63  | 2NO               | 24V 50Hz     | 64  | 153017     | 981892 |
| NCH8-63  | 1NO+1NC           | 230V50Hz     | 64  | 153018     | 981893 |
| NCH8-63  | 1NO+1NC           | 24V 50Hz     | 64  | 153019     | 981894 |
| NCH8-63* | 3NO+1NC           | 220/230V     | 64  | -          | 986790 |
| NCH8-63* | 4NC               | 220/230V     | 64  | -          | 986791 |

Note: "\*" means the product is not available during current development