# CHDC-D200A/D250A Series



### FEATURES

- 200A/250A Contact switching capability
- Having a set of normally open/normally closed contacts
- Meet cULus,CCC Requirements (UL508, IEC60947-4-1, GB/T 14048.4)
- RoHS compliance
- REACH SvHC compliance



File NO. E341422



File NO.2020970304001723 File NO.2020970304001720

### APPLICATIO

Telecommunication equipment, construction machinery, battery car, Electric forklift, automobile, Train, Ship,

Uninterruptible power supply and other electronic control systems.

# COIL PARAMETER

| CHDC-D200AS/BS/ASH          |                                |                                  |                               |                              |  |
|-----------------------------|--------------------------------|----------------------------------|-------------------------------|------------------------------|--|
| Nominal<br>Voltage<br>(VDC) | Rated<br>Starting<br>Power (W) | Rated<br>Starting<br>Current (A) | Rated<br>Holding<br>Power (W) | Rated Holding<br>Current (A) |  |
| 12                          | Approx. 90                     | 7.5                              | Approx. 2.0                   | 0.17                         |  |
| 24                          | Approx. 120                    | 5                                | Approx. 3.6                   | 0.15                         |  |
| 48                          | Approx. 177                    | 4                                | Approx. 4.8                   | 0.10                         |  |
| 60                          | Approx. 192                    | 3                                | Approx. 5.0                   | 0.08                         |  |

### COIL DATA @23°C

| CHDC-D200AS/BS/ASH          |  |                                    |                                     |                                     |                                     |
|-----------------------------|--|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Nominal<br>voltage<br>(VDC) | Starting coil<br>resistance<br>(Ω)±10% | Hold coil<br>resistance<br>(Ω)±10% | Max.worki<br>ng<br>Voltage<br>(VDC) | Operate<br>Voltage<br>(VDC<br>Max.) | Release<br>Voltage<br>(VDC<br>Min.) |
| 12                          | 1.6                                    | 69.9                               | 14.4                                | 9.0                                 | 1.2                                 |
| 24                          | 4.6                                    | 158.8                              | 28.8                                | 18.0                                | 2.4                                 |
| 48                          | 13.0                                   | 483.0                              | 57.6                                | 36.0                                | 4.8                                 |
| 60                          | 18.8                                   | 747.8                              | 72.0                                | 48.0                                | 6.0                                 |

| ТҮРЕ                                       | CHDC-D200AS           | CHDC-D200BS         | CHDC-D200ASH     | CHDC-D250ASH     |  |  |
|--|-----------------------|---------------------|------------------|------------------|--|--|
| Contact arrangement                        | 1A Bridge Form A      | 1B Bridge<br>Form B | 1A Bridge Form A | 1A Bridge Form A |  |  |
| Contact material                           | Ag Alloy              |                     |                  |                  |  |  |
| Initial contact resistance                 | 1.2mΩ Max. (6VDC,20A) |                     |                  |                  |  |  |
| Rated insulation voltage                   | 63VDC                 | 63VDC               | 125VDC           | 80VDC            |  |  |
| Max. switching voltage                     | 60VDC                 | 60VDC               | 80VDC            | 72VDC            |  |  |
| Max. switching current<br>(Resistive Load) | 200A                  | 200A                | 200A             | 250A             |  |  |
| Max. switching power                       | 12,000W               | 12,000W             | 16,000W          | 18,000W          |  |  |
| Mechanicalendurance<br>(No Load)           | 100,000 ops Min.      |                     |                  |                  |  |  |
| Electrical endurance<br>(Resistive Load)   | 6,000 ops Min.        |                     |                  |                  |  |  |
| Minimum load<br>(reference value)          | 100mA@ 48VDC          |                     |                  |                  |  |  |

### CHARACTERISTICS

CONTACT DATA

| Operate voltag                             | e                         | 75% of nominal voltage or less   |  |  |
|--|---------------------------|--|--|--|
| Release voltage                            | e                         | 10% of nominal voltage or more   |  |  |
| Operate time (                             | At nominal voltage)       | ≤30ms  |  |  |
| Release time (A                            | At nominal voltage)       | ≤30ms  |  |  |
| Closed bounce                              | time (rated voltage)      | ≤3ms   |  |  |
| Insulation resis                           | tance                     | 1,000 MΩ (at 500 VDC)  |  |  |
| Dielectric                                 | Between coil and contacts | 1,500 VAC, 50/60 Hz (1 Min)  |  |  |
| strength                                   | Between open contacts     | 1,500 VAC, 50/60 Hz (1 Min)  |  |  |
| Rated impulse<br>withstand<br>voltage      | Between coil and contacts | 25,000V(1.2/50µs)  |  |  |
|  | Between open contacts     | 25,000V(1.2/50μs)  |  |  |
| Vibration                                  | Functional                | 10 ~ 55 Hz.,Acceleration≤2G  |  |  |
| Vibration<br>resistance                    | Destructive               | 10 ~ 55 Hz.,Acceleration≤5G  |  |  |
| Shock                                      | Functional                | 25,000V(1.2/50μs)<br>10 ~ 55 Hz,Acceleration≤2G<br>10 ~ 55 Hz,Acceleration≤5G<br>3G Min.<br>50G Min.<br>Operating: -40~+70°C |  |  |
| resistance                                 | Destructive               | 50G Min.   |  |  |
| Ambient temp                               | erature                   | Operating: -40~+70°C<br>(without icing or condensation)  |  |  |
| Storage ambie                              | nt temperature            | Operating: -40~+75°C<br>(without icing or condenasation)   |  |  |
| Ambient humidity                           |                           | 5% to 95%Rh at 20°C  |  |  |
| Mounting Type                              |                           | Bolt terminal installation (M8)  |  |  |
| Protection grade                           |                           | IP00   |  |  |
| Pollution degree(94V-0 Flammability Rating |                           | Ш(Case)  |  |  |
| Weight                                     |                           | 420g   |  |  |

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# ORDERING INFORMATION

|                                  |                     | 1               | 10                    | D2004C                    | Ц                | 000 |
|----------------------------------|---------------------|-----------------|-----------------------|---------------------------|------------------|-----|
|                                  | СПОС                | - 1             | 40                    | DZUUAS                    | п                | 000 |
|                                  |                     |                 |                       |                           |                  |     |
|                                  |                     |                 |                       |                           |                  |     |
| 1. Product Family                |                     |                 |                       |                           |                  |     |
| CHDC Series                      |                     |                 |                       |                           |                  |     |
| 2. Number of Poles               |                     |                 |                       |                           |                  |     |
| 1=1 pole (Bridge type)           |                     |                 |                       |                           |                  |     |
| 3. Rated Coil Voltage            |                     |                 |                       |                           |                  |     |
| 12 =12VDC 24 =24VDC 48=4         | 8VDC 60=60VD0       | 2               |                       |                           |                  |     |
| 4. Current Frame                 |                     |                 |                       |                           |                  |     |
| D200AS: DC 200A(Form A)          |                     |                 |                       |                           |                  |     |
| D200BS: DC 200A(Form B)          |                     |                 |                       |                           |                  |     |
| D250AS: DC 200A(Form A)          |                     |                 |                       |                           |                  |     |
| 5. Load Voltage                  |                     |                 |                       |                           |                  |     |
| Blank =60VDC contact rating(only | y with available w  | /ith 12V~48V c  | oils)                 |                           |                  |     |
| H =72VDC contact rating (only w  | vith available with | n 12V~48V coil  | s); 80VDC contact ra  | ating (only available wit | h 60V coil)      |     |
| 6. Additional numbers and /or le | tters               |                 |                       |                           |                  |     |
| 000-999, AAA-ZZZ, aaa-zzz or b   | plank, which doe    | es not represer | nt electrical changes | only for specific custo   | mer requirements |     |

## OUTLINE DIMENSION



#### WIRING DIAGRAMS(BOTTOM



BRIDGE FORM A

BRIDGE FORM B

#### Remark:

The reference tolerance in outline dimension: :

outline dimension  $\leq$ 1mm, reference tolerance is ±0.2mm;

outline dimension > 1mm and  $\leq$ 5mm, reference tolerance is ±0.3mm;

outline dimension > 5mm, reference tolerance is  $\pm 0.5$ mm.

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### PACKING







#### **Reference Date**



10 pcs inside a box 20 pcs inside a carton

#### Matters needing attention

1. When installing contactor, the tightening torque of main circuit connection screw and nut is 8 ~ 13N.m, and the

tightening torque of control circuit connection screw and nut is 1 ~ 1.5N.m.

2. The starting coil power must be no less than the relay coil power. Otherwise, the relay can not operate normally.

3. The product is non-waterproof. Avoid use in the environment where relay case or terminals may contact water, solvent, or oil.

4. The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change with

#### Disclaimer:

The specification is for reference only, if you need more detail information, please contact Churod. We could not evaluate all the performance and all parameters for every possible application.

And the user should be in a right position to choose the suitable product for their own application. If there is any new need, please contact Churod for the technical service.

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