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2x Ø5.8±0.3

26.7±0.3

68.3±0.5

400±10

2xM8

72.8±1

80.5±0.5

12.7±0.3

WIRE OF AUX. SWITCH  
UL1332 22AWG WHITE

WIRE OF COIL, UL3321 22AWG  
THE RED WIRE CONNECTS "+"  
THE BLACK WIRE CONNECTS "-."

SCHEMATIC CIRCUIT DIAGRAM

+A1

-A2

K

PCBA

RED

BLACK

DCNHR300QFA

Max Oper. Voltage: 900V DC

Rated Current: 300A

Coil Voltage: 9~36V DC

Aux. Contact: 2A 24V DC

90~300000000000

MADE IN CHINA

DCNHR300QFA

Max Oper. Voltage: 900V DC

Rated Current: 300A

Coil Voltage: 9~36V DC

Aux. Contact: 2A 24V DC

SN: XXXXXXXXXXXX

MADE IN CHINA

TABLE 1

|                                            |             |                                                                     |
|--------------------------------------------|-------------|---------------------------------------------------------------------|
| MAX OPER. VOLTAGE                          |             | 900V DC                                                             |
| RATED CONTACT CURRENT                      | DCNHR150QFA | 150A                                                                |
|                                            | DCNHR200QFA | 200A                                                                |
|                                            | DCNHR250QFA | 250A                                                                |
|                                            | DCNHR300QFA | 300A                                                                |
| COIL VOLTAGE                               |             | 9~36V DC                                                            |
| OPERATING VOLTAGE IN COLD STATE @ (23±5)°C | PICK-UP     | 9V MAX                                                              |
|                                            | DROP-OUT    | 6V MIN                                                              |
| OPERATE TIME                               |             | 25ms                                                                |
| CONTACT BOUNCE TIME                        |             | 7ms                                                                 |
| RELEASE TIME                               |             | 12ms                                                                |
| MAIN CONTACT RESISTANCE(@ 20A)             |             | ≤2mΩ                                                                |
| AUXILIARY CONTACT RESISTANCE(@ 100mA)      |             | ≤500mΩ                                                              |
| INSULATION RESISTANCE @ 500 V (INITIAL)    |             | ≥100MΩ                                                              |
| DIELECTRIC STRENGTH (LEAKAGE CURRENT≤1 mA) |             | 2200V AC, 1 MINUTE(1000V AC MINUTE, BETWEEN THE AUXILIARY CONTACTS) |
| ELECTRIC LIFE                              | DCNHR150QFA | 5000 CYCLES (150A @ 450V DC)                                        |
|                                            | DCNHR200QFA | 3500 CYCLES (200A @ 450V DC)                                        |
|                                            | DCNHR250QFA | 1500 CYCLES (250A @ 450V DC)                                        |
|                                            | DCNHR300QFA | 600 CYCLES (300A @ 450V DC)                                         |
| MECHANICAL LIFE (NO LOAD, CYCLES)          |             | 200,000                                                             |
| WORKING DUTY                               |             | CONTINUOUS                                                          |

TABLE 2

|     |             |             |                     |        |
|-----|-------------|-------------|---------------------|--------|
| NO. | PN          | "A"         | "B"                 | REMARK |
| 1   | DCNHR150QFA | DCNHR150QFA | Rated Current: 150A |        |
| 2   | DCNHR200QFA | DCNHR200QFA | Rated Current: 200A |        |
| 3   | DCNHR250QFA | DCNHR250QFA | Rated Current: 250A |        |
| 4   | DCNHR300QFA | DCNHR300QFA | Rated Current: 300A |        |

NOTES:

1. ALL DIMENSIONS ARE REFERENCE ONLY.

2. SEE TABLE 2 FOR NAME PLATE AND PNs

3. PRODUCT TYPE: SPST-NO, POLAR CONTACTOR WITH AUXILIARY CONTACT;  
AUXILIARY TYPE: SPST-NO.

4. MATERIALS AND FINISH:

4.1 HOUSING: THERMOPLASTIC PLASTICS.

4.2 CONTACTS: COPPER ALLOY.

4.3 CONTACT STUDS: COPPER ALLOY.

4.4 COIL TERMINALS: XLPE INSULATION WIRE(HALOGEN FREE) UL3321 22AWG.

5. MAIN CONTACT M8 STUD, TORQUE: 8~12N•m.

6. MOUNTING: M5 BOLT, RECOMMENDED TORQUE 1.8 N•m ~ 3.5 N•m.

7. CONTACTOR PARAMETERS ARE SHOWN IN TABLE 1.

8. THE COIL AND CONTACT OF THE CONTACTOR ARE POLAR, SO THE CONNECTION OF THE COIL AND CONTACT SHOULD BE OPERATED ACCORDING TO THE SCHEMATIC CIRCUIT DIAGRAM.

REVISIONS

| ZONE | REV. | DESCRIPTION                | DATE         | APPROVED |
|------|------|----------------------------|--------------|----------|
|      | A    | GCF#524671 INITIAL RELEASE | JUL./28/2021 | D. ZHANG |

PER CHNFPD20-008 PROCEDURE

NAME

DATE

JY. SHI

JUL./19/2021

CHECKED

J. LI

JUL./21/2021

FORM NO.

CVP-PE40-0005 REV B

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

DCNHR 9-36V COIL POLAR CONTACTOR WITH AUXILIARY CONTACT

SIZE C

DWG. NO. OUTLINE

OL-DCNHR300QFA, CHARAT

REV. A

SCALE 1:1

SHEET 1 OF 1

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