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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 "-."

65.8±0.5

SCHEMATIC CIRCUIT DIAGRAM

+A1

-A2

K

PCBA

+ RED

- BLACK

Littelfuse

DCNHR300QFA

Max Oper. Voltage: 900V DC

Rated Current: 300A

Coil Voltage: 9~36V DC

Aux. Contact: 2A 24V DC

SN: XXXXXXXXXXXX

MADE IN CHINA

SCALE 2:1

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

●	FIT/ FUNCTION CRITICAL CHARACTERISTICS	
<S>	SAFETY/ COMPLIANCE CRITICAL CHARACTERISTICS SYMBOL	
CPK	DENOTES CPK DIMENSIONS MINIMUM CPK VALUE	
(ST)	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE.PROCEDURE FOR MEASUREMENTAND TRACKINGTO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS	
CP	DENOTES CP DIMENSIONS. -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE	

DRAWN

JY. SHI

JUL./19/2021

CHECKED

J. LI

JUL./21/2021

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FORM NO: CVP-PE40-0005 REV B

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

SCALE 1:1

DO NOT SCALE DRAWING

SCALE 1:1

NAME

DATE

DCNHR 9-36V COIL POLAR CONTACTOR WITH AUXILIARY CONTACT

OL-DCNHR300QFA, CHARAT

REV.

A

Expertise Applied | Answers Delivered

TITLE

DCNHR 9-36V COIL POLAR CONTACTOR WITH AUXILIARY CONTACT

SIZE

C

DWG. NO.

OUTLINE

OL-DCNHR300QFA, CHARAT

REV.

A

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