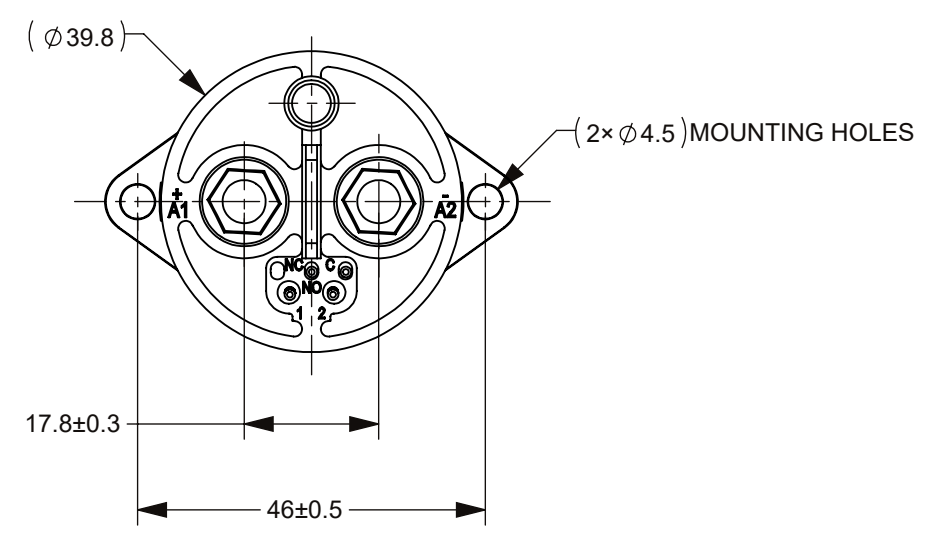


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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	GCF#524667 INITIAL RELEASE	AUG./25/2021	D. ZHANG



CIRCUIT SCHEMATIC DIAGRAM

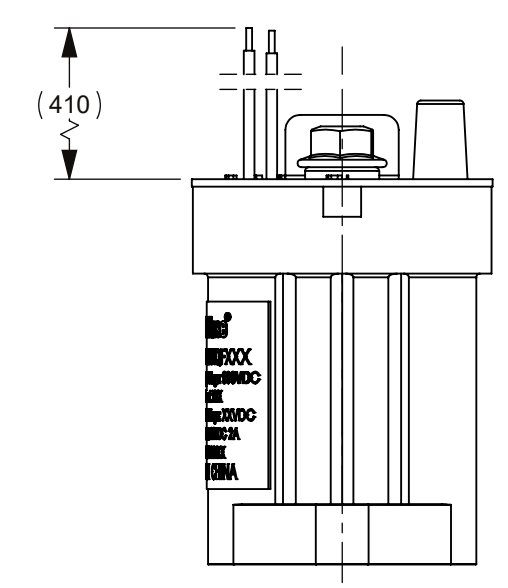
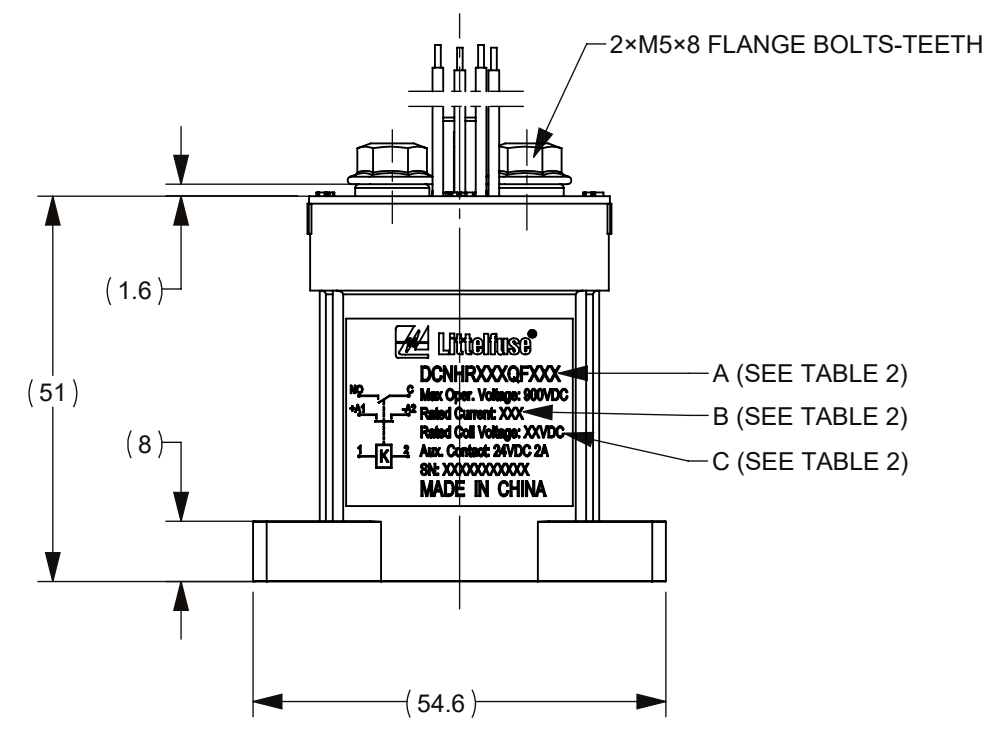
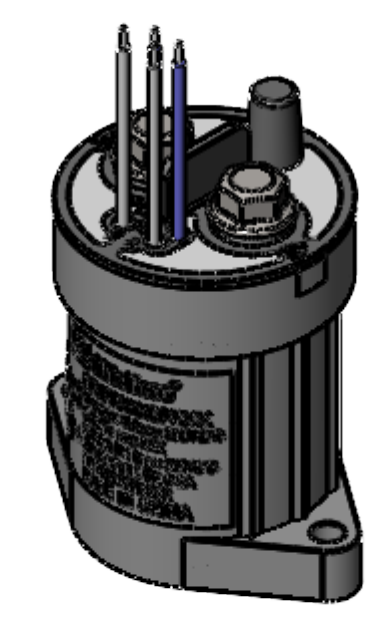
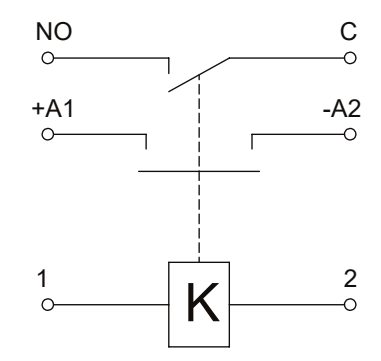


TABLE 1: TECHNICAL PARAMETERS

ITEM	PARAMETER						
	DCNHR100QF12	DCNHR100QF24	DCNHR100QF48	DCNHR50QF12	DCNHR50QF24	DCNHR50QF48	
RATED COIL VOLTAGE	12V DC	24V DC	48V DC	12V DC	24V DC	48V DC	
OPERATING VOLTAGE IN COLD STATE AT (20±5) C	PICKUP (V DC)	MAX 8.4	MAX 16.8	MAX 33.6	MAX 8.4	MAX 16.8	MAX 33.6
	RELEASE (V DC)	MIN 1	MIN 2	MIN 4	MIN 1	MIN 2	MIN 4
PICK-UP TIME	MAX 25ms						
RELEASE TIME	MAX 12ms						
BOUNCE TIME	MAX 7ms						
MAIN CONTACT RESISTANCE (@ 20A)	MAX 2mΩ						
AUX. CONTACT RESISTANCE (@ 100mA)	MAX 500mΩ						
DIELECTRIC STRENGTH (LEAKAGE CURRENT ≤1 mA)	2200V AC, 50Hz, 1min.						
INSULATION RESISTANCE	≥100MΩ@500VDC						
MAXIMUM CONTACT VOLTAGE	900V DC						
RATED CONTACT CURRENT	100A	100A	100A	50A	50A	50A	
AUX. CONTACT RATED LOAD	24V DC, 2A						
LIMIT BREAKING ABILITY	4le/5ms, 1CYCLES						
ELECTRIC LIFE	3000 CYCLES(100A@450V DC)			6000 CYCLES(50A@450V DC)			
MECHANICAL LIFE	200,000 CYCLES						
WORKING DUTY	CONTINUOUS						

TABLE 2

PRODUCT NUMBER	"A"	"B"	"C"
DCNHR100QF12	DCNHR100QF12	100A	12V DC
DCNHR100QF24	DCNHR100QF24	100A	24V DC
DCNHR100QF48	DCNHR100QF48	100A	48V DC
DCNHR50QF12	DCNHR50QF12	50A	12V DC
DCNHR50QF24	DCNHR50QF24	50A	24V DC
DCNHR50QF48	DCNHR50QF48	50A	48V DC

NOTES:

- ALL SIZES ARE FOR REFERENCE ONLY.
- MATERIALS AND FINISHING:
  - HOUSING: THERMOSETTING PLASTIC, UL94V-0.
  - CONTACTS: SILVER ALLOY.
- PRODUCT PN AND NAMEPLATE CONFIGURATION RELATION SEE TABLE 2.
- PRODUCT TECHNICAL PARAMETERS: SEE TABLE 1.
- MAIN CONTACT ARRANGEMENT: SPST-NO.
- AUXILIARY CONTACT ARRANGEMENT: SPST-NO.
- CONNECTION BOLT: M5 BOLT, RECOMMENDED TORQUE 3 N·m ~ 4 N·m.
- MOUNTING: M4 BOLT, RECOMMENDED TORQUE 1.7 N·m ~ 2.5 N·m.

DIMENSIONS ARE SHOWN IN MILLIMETERS. DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ANSI/ASME Y14.5-1994.

● 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 MEASUREMENT AND TRACKING TO 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	MJ. DAI	DATE	AUG./25/2021
CHECKED	J. LI	DATE	AUG./30/2021

FORM NO. CVP-PE40-0005 REV B

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

**Expertise Applied | Answers Delivered**

TITLE: DCNHR 100A HIGH VOLTAGE CONTACTOR WITH POLARITY AND AUXILIARY CONTACT

SIZE: C  
 DWG. NO.: OL-DCNHR100QF CHART  
 OUTLINE: A  
 SCALE: 1:1  
 SHEET 1 OF 1