

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	PCO: 5301357 INITIAL RELEASE	05/15/2025	D. ZHANG

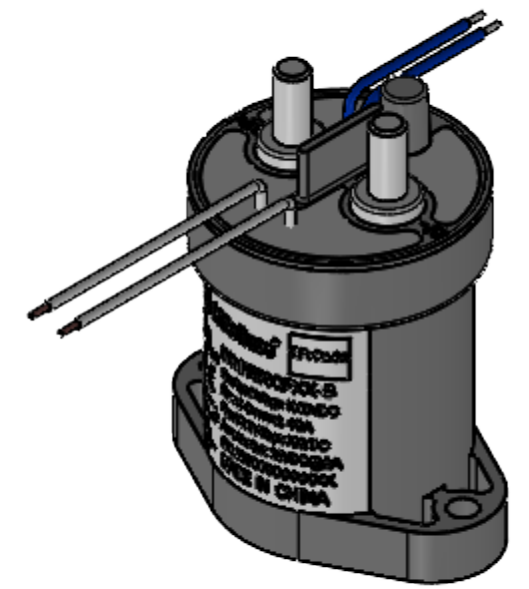
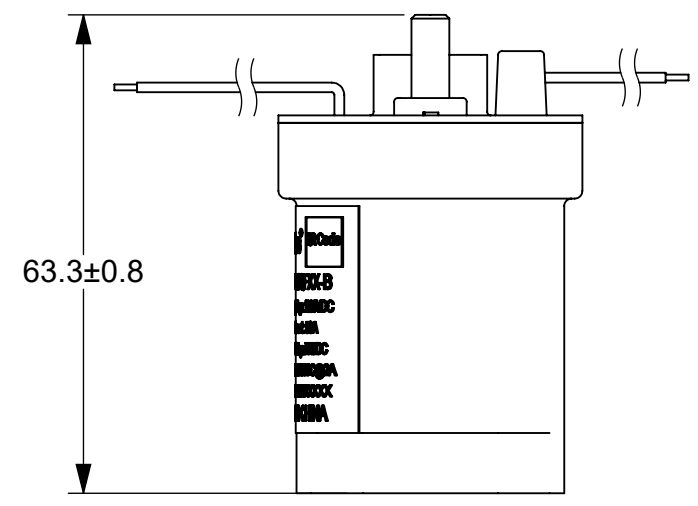
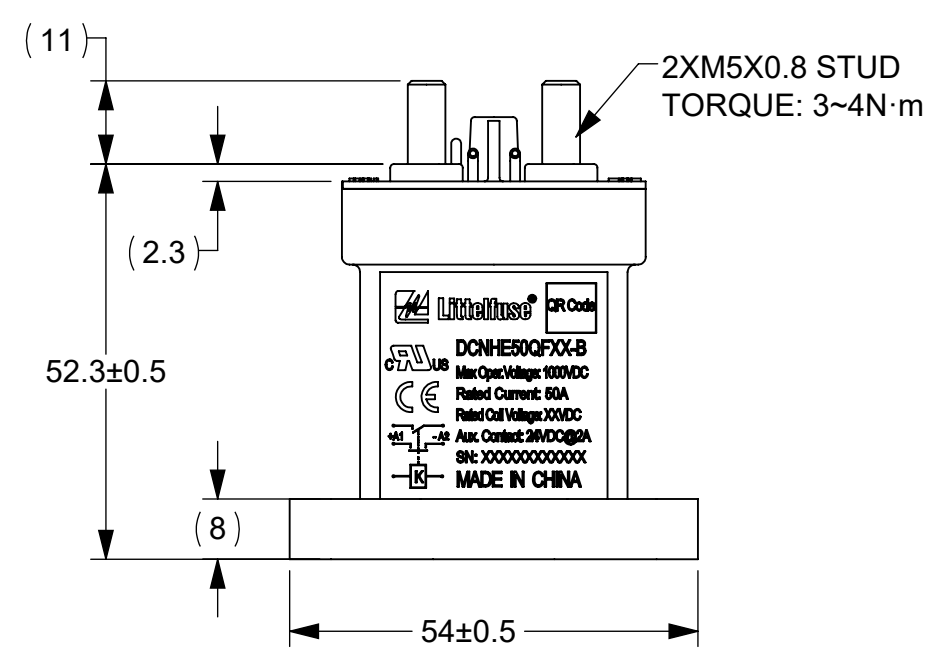
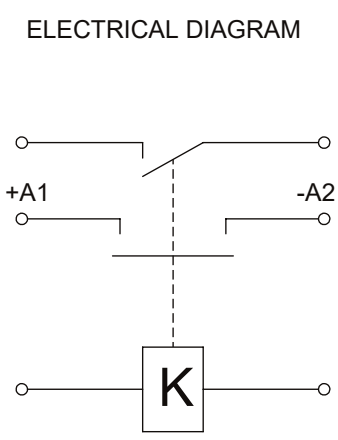
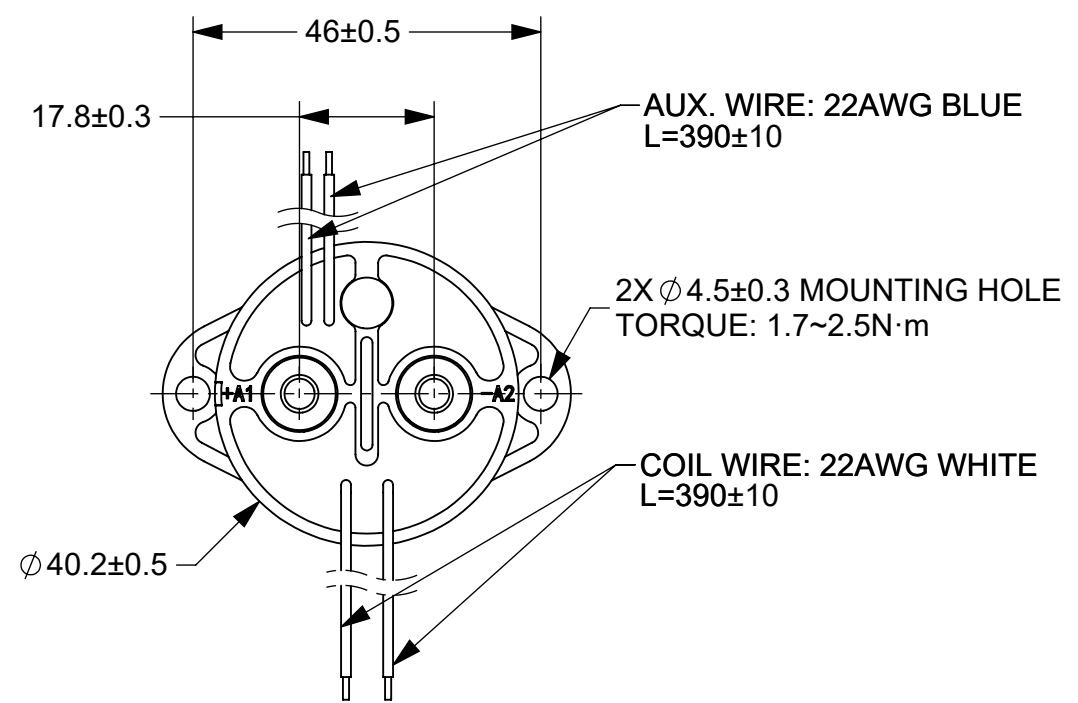


TABLE 1: ENGINEERING DESIGN DATA

ITEM	DATA		
	DCNHE50QF12-B	DCNHE50QF24-B	DCNHE50QF48-B
RATED COIL VOLTAGE	12 VDC	24 VDC	48 VDC
HOLDING CURRENT(25°C)	MAX 0.6A	MAX 0.3A	MAX 0.16A
HOLDING POWER(25°C)	5W ~ 7W	5W ~ 7W	5W ~ 7W
OPERATING VOLTAGE	OPERATE	MAX 9 VDC	MAX 18 VDC
IN COLD STATE AT 25°C	RELEASE	MIN 1 VDC	MIN 2 VDC
OPERATE TIME		MAX 30ms	
RELEASE TIME		MAX 10ms	
MAIN CONTACT VOLTAGE DROP		60mV@50A	
DIELECTRIC STRENGTH (LEAKAGE CURRENT ≤1 mA)	BETWEEN THE CONTACT AND CONTACT: 4000V AC, 50Hz/60Hz, 1min. BETWEEN THE CONTACT AND COIL AND AUX. CONTACT: 2200V AC, 50Hz/60Hz, 1min.		
INSULATION RESISTANCE		100MQ@1000 VDC	
CONTACT VOLTAGE RANGE		12 VDC~1000 VDC	
RATED CONTACT CURRENT		50A	
OPERATING TEMP		-40°C ~ +85°C	
MAX. BREAKING CURRENT		1000A@320VDC, 1CYCLE	
ELECTRICAL LIFE (RESISTIVE LOAD)	6000 CYCLES (50A @ 450V DC); 1000 CYCLES (50A @ 750V DC); 1000 CYCLES (20A @ 1000V DC)		
MECHANICAL LIFE		300,000 CYCLES	

- NOTES:
- ALL SIZES ARE FOR REFERENCE ONLY.
  - MATERIALS AND FINISHED:
    - HOUSING: THERMOPLASTIC, UL94V-0.
    - CONTACTS: COPPER ALLOY.
  - PRODUCT TECHNICAL PARAMETERS: SEE TABLE 1.
  - MAIN CONTACT ARRANGEMENT: SPST-NO, WITH POLAR.
  - AUXILIARY CONTACT ARRANGEMENT: SPST-NO.
  - CERTIFICATIONS: UL, CE.
  - RoHS AND REACH COMPLIANT.
  - APPROX WEIGHT 200g.

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

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 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	05/16/2025
CHECKED	D. ZHANG	05/16/2025

FORM NO: CVP-PE40-0005 REV B  
THIRD ANGLE PROJECTION

**Littelfuse**  
Expertise Applied | Answers Delivered

TITLE: DCNH 50A CONTACTOR

SIZE: C  
DWG. NO.: OL-DCNHE50QF-B CHT  
SCALE: 1:1

DO NOT SCALE DRAWING

SHEET 1 OF 1