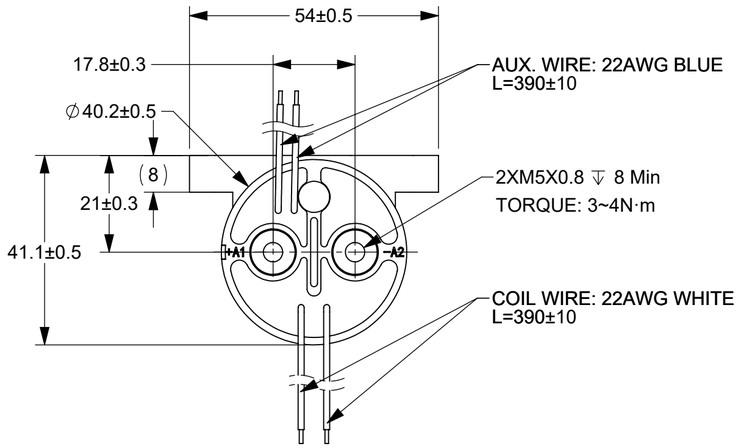
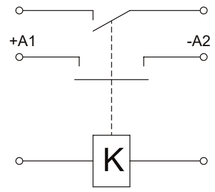
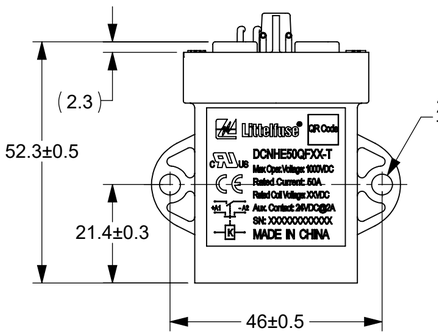
THIS DRAWING AND THE INFORMATION CONTAINED WITHIN IT ARE CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF LITTELFUSE.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	PCO: 5301385, INITIAL RELEASE	08/15/2025	D. ZHANG



ELECTRICAL DIAGRAM





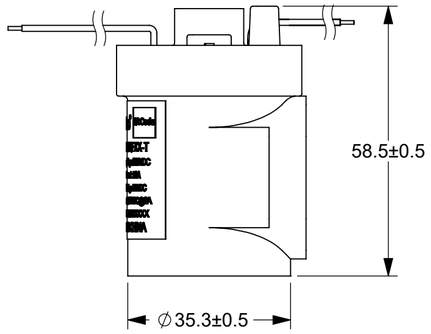
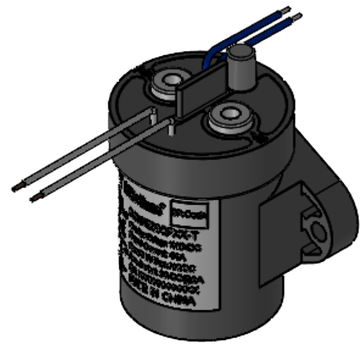


TABLE 1: ENGINEERING DESIGN DATA				
ITEM		DATA		
		DCNHE50QF12-T	DCNHE50QF24-T	DCNHE50QF48-T
RATED COIL VOLTAGE		12 VDC	24 VDC	48 VDC
HOLDING CURRENT(25°C)		MAX 0.6A	MAX 0.3A	MAX 0.16A
HOLDING POWER(25°C)		5W ~ 7W	5W ~ 7W	5W ~ 7W
OPERATING VOLTAGE IN COLD STATE AT 25°C	OPERATE	MAX 9 VDC	MAX 18 VDC	MAX 36 VDC
	RELEASE	MIN 1 VDC	MIN 2 VDC	MIN 4 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		100MΩ@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:
1. ALL SIZES ARE FOR REFERENCE ONLY.
2. MATERIALS AND FINISHED:
2.1 HOUSING: THERMOPLASTIC, UL94V-0.
2.2 CONTACTS: COPPER ALLOY.
3. PRODUCT TECHNICAL PARAMETERS: SEE TABLE 1.
4. MAIN CONTACT ARRANGEMENT: SPST-NO, WITH POLAR.
5. AUXILIARY CONTACT ARRANGEMENT: SPST-NO.
6. CERTIFICATIONS: UL, CE.
7. RoHS AND REACH COMPLIANT.
8. APPROX WEIGHT 200g.



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

PER CHI-NPD20-0008 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

	NAME	DATE
DRAWN	MJ. DAI	08/16/2025
CHECKED	D. ZHANG	08/16/2025
	-	-
	-	-

FORM NO: CVP-PE40-0005 REV B

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

Littelfuse
Expertise Applied | Answers Delivered

TITLE
DCNH 50A CONTACTOR

SIZE C | DWG. NO. OUTLINE OL-DCNHE50QFXX-T CHART | REV. A

SCALE 2:1 | SHEET 1 OF 1