

Shanghai Liangxin Electrical Co., Ltd.

NDZ3T-40H DC Contactor

Product Specification

(IPD-ENG-DEV-T22 A1 2016-09-23)

Prepared	_____	Date	_____
Reviewed	_____	Date	_____
Countersign	_____	Date	_____
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Approved	_____	Date	_____

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1.Application Scope and Purpose

The NDZ3T-40H series of DC contactors apply to the DC system with the working voltage of DC1500V and working current of 40A, which are mainly used in pre-charging circuit of energy storage system..

2. Picture of the Product



3. Specification and Model Description

ND Z 3 T - 40 H / 1500V ☐

1 2 3 4 5 6 7 8

SN	SN name	NDZ3T
1	Enterprise code	ND "Nader" brand low-voltage electrical device
2	Product code	Z DC contactor
3	Design SN	3
4	Package type	T: Ceramic package
5	Basic specification code	Rated current value 40A
6	Subdivision code	H、HB
7	Load working voltage	DC 1500V
8	Coil voltage	DC12V, DC24V, DC48V

4. Main Technical Parameters

Parameter name	Description of the specific parameters
Shell frame current level	40A
Load polarity	Without polarity
Coil polarity	Without polarity
Number of poles	Single pole
Rated current (A)	40
Rated voltage DC(V)	750
Insulation voltage Ui	1500V
Type of circuit	DC
Rated control voltage Us	DC12/24V/48V Operate Voltage: $\leq 9V$ (DC12V)、 $\leq 18V$ (DC24V)、 $\leq 36V$ (DC48V) Discharge voltage: $\geq 1.2V$ (DC12V)、 $\geq 2.4V$ (DC24V)、 $\geq 4.8V$ (DC48V)
Mechanical life	200,000 times, frequency: 3,600 times/h
electrical life (on 0.6s off 5.4s) resistive load	1500VDC 15A switch: 10000 times 1500VDC 40A connect:15000 times
Maximum breaking current:	DC300V 400A more than once
Short-time withstand current:	10Ie 600ms
Contact Resistance	$\leq 4m\Omega$
Insulation resistance:	$\geq 1000M\Omega$, 1000VDC
Withstand voltage:	3000VAC 60s
Coil power consumption (20°C):	$\leq 3.3W$
Pull-in/discharge time (rated voltage 20°C):	Pull-in: $\leq 30ms$ Discharge: $\leq 10ms$
Impact strength	Stability: (sinusoidal half-wave pulse: 11ms, detection time 10 μs) ON:20g;OFF:10g Destructiveness: 50g (sinusoidal half-wave pulse: 6ms)
Vibration strength	10~500Hz 5g
Product weight	160g

5. Normal Working Environment

5.1: Operating ambient environment: -40~85°C

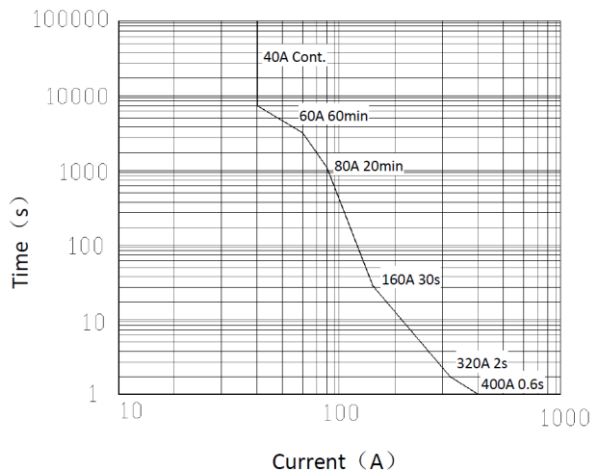
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5.2: Operating humidity: 5%~95%

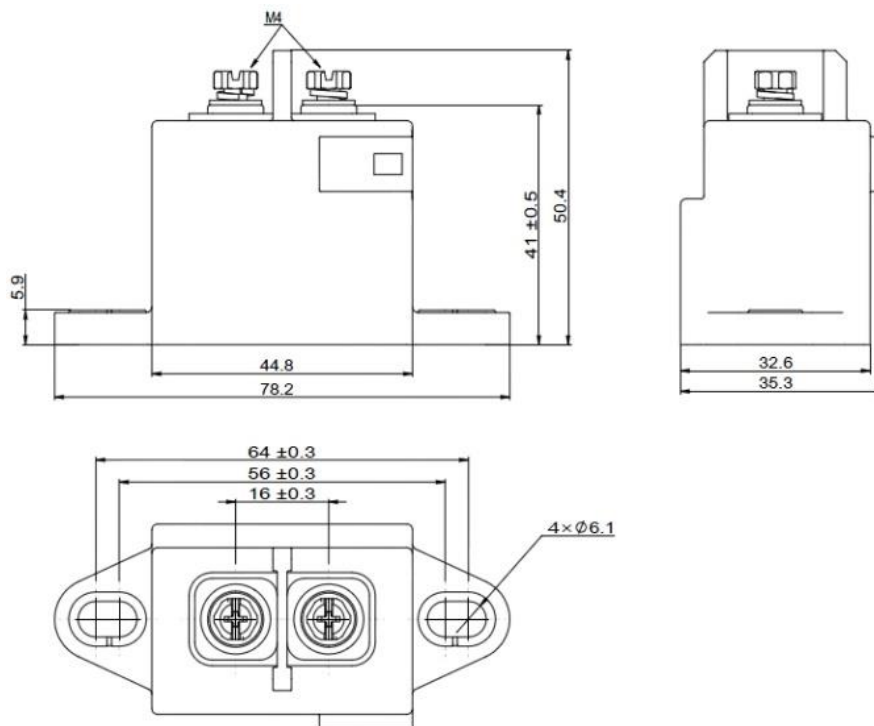
5.3: Pollution level: 3

5.4: Installation direction: Vertical installation, horizontal installation.

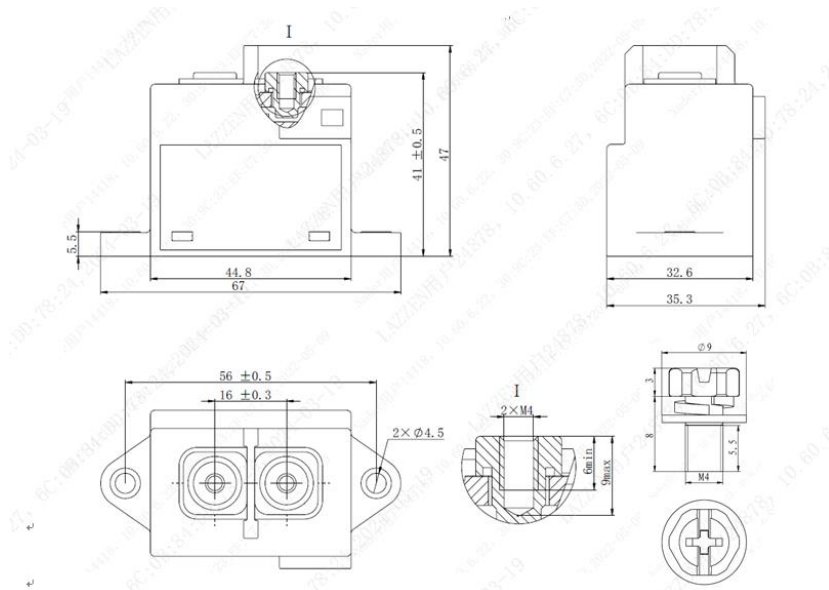
6.Current Endurance



7.External Dimensions and Installation Dimensions (mm)



NDZ3T-40H

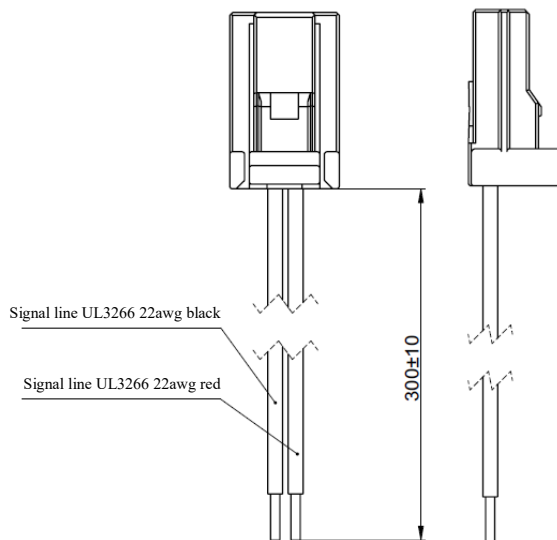


NDZ3T-40HB

9. Coil connector

(mm)

Connector
Terminal: TYCO1123343-1
Cover: TYCO1379658-1



10. Installation Mode

Screw mounting

11. Environmental Compliance

Comply with the RoHS directives

12. Precautions

- a. The drive circuit power of the contactor coil must be greater than the coil's starting power;
- b. It is strictly forbidden to use the product in places with strong magnetic fields or in proximity to thermal radiation;
- c. Wiring terminal torque
 - M4 screw 2~3N.m
 - Installation position torque
 - NDZ3T-40H:M5 screw 3~4N.m
 - NDZ3T-40HB: M4 screw 2~3N.m
- d. Avoid adhering grease and other foreign matters on the wiring terminal and use the connecting conductor with the following specifications, which may otherwise lead to the abnormal heating of the wiring part;
 - NDZ3T-40: Wire cross-section area $\geq$ 10mm²;