



Industrial & Electrical Components

Power Relay

Part No.

NN82B-300



- Unique magnetic arc-extinguishing design and 1500V high capacity breaking capability.
- Unique contact design to support surge and high current resistant capability.
- Unique design to support short circuit Min. 6kA.
- Withstand voltage 4kV between high and low voltage.
- Coil optional energy conservation type, connect with polarity
- Load connect with no-polarity.
- RoHS compliant.

MAIN CONTACT DATA

Contact Arrangement	H (normal-open)
Contact Material	Silver-copper Alloy
Contact Resistive	Max.: 0.3 mΩ (at 300A)
Rating	DC1500V 300A
Min. Load Current	6V/1A
Electrical Life (Switching)	250A/1000V, 1000 OPS
Electrical Life (OFF)	250A/1500V, 100 OPS 300A/1000V, 1000 OPS
Short-Circuit Current	6000A (5ms), 1 OP
Mechanical Life	2×10 <sup>5</sup> (0.5s ON,0.5s OFF)
Ambient temperature	-40℃~+70℃
Humidity	5~85% RH
Unit weight	Approx. 350g

MAIN CONTACT CHARACTERISTICS

Operate Time	30msec. Max.
Release Time	10msec. Max.
Initial breakdown voltage	
Coil & Contact;	4000VAC (50/60Hz) for 1 min.
Open Contacts	4000VAC (50/60Hz) for 1 min.
Main & Auxiliary Contacts	4000VAC (50/60Hz) for 1 min.
Insulation Resistance	Coil & Contact: Min.1000MΩ Open Contacts: Min.1000MΩ Main & Auxiliary Contacts: Min.1000MΩ
Impulse Voltage	Between Coil & Contact: 10kV(1.2x50μs)
Shock:	Endurance 1000 m/s <sup>2</sup> Damage Excitation:100 m/s <sup>2</sup> ; No-excitation: 50 m/s <sup>2</sup>
Vibration	10~55~10Hz, 0.75mm S.A.(1.5mm D.A.)

AUXILIARY CONTACT CHARACTERISTICS

Contact Arrangement	H (normal-open)
Contact Resistance	Max.100 mΩ (at 0.1A)

Rating	DC12V 0.1A
Electrical Life (Switching)	DC12V 0.1A, 10000 OPS

Note: The datas shown above are initial values at room temperature.

ORDERING INFORMATION

e.g

NN82B - 300 / 1500 - XX - H A L 5 - 3 XXX

①            ②            ③            ④            ⑤            ⑥ ⑦ ⑧    ⑨            ⑩

- ① Model No.
- ② Load Current: 300=300A
- ③ Load Voltage:1000=1000Vdc;1500=1500Vdc
- ④ Coil Voltage:12=12Vdc, 24=24Vdc;
- ⑤ Main contact form: H (N/O)
- ⑥ Auxiliary contact form: A (N/O)
- ⑦ Coil Terminal: L= Connector
- ⑧ Main Contact Mode: 5=Internal screw thread
- ⑨ Coil Characteristics:Nil=Non-energy conservation  
3=PWM energy conservation
- ⑩ Special custom code

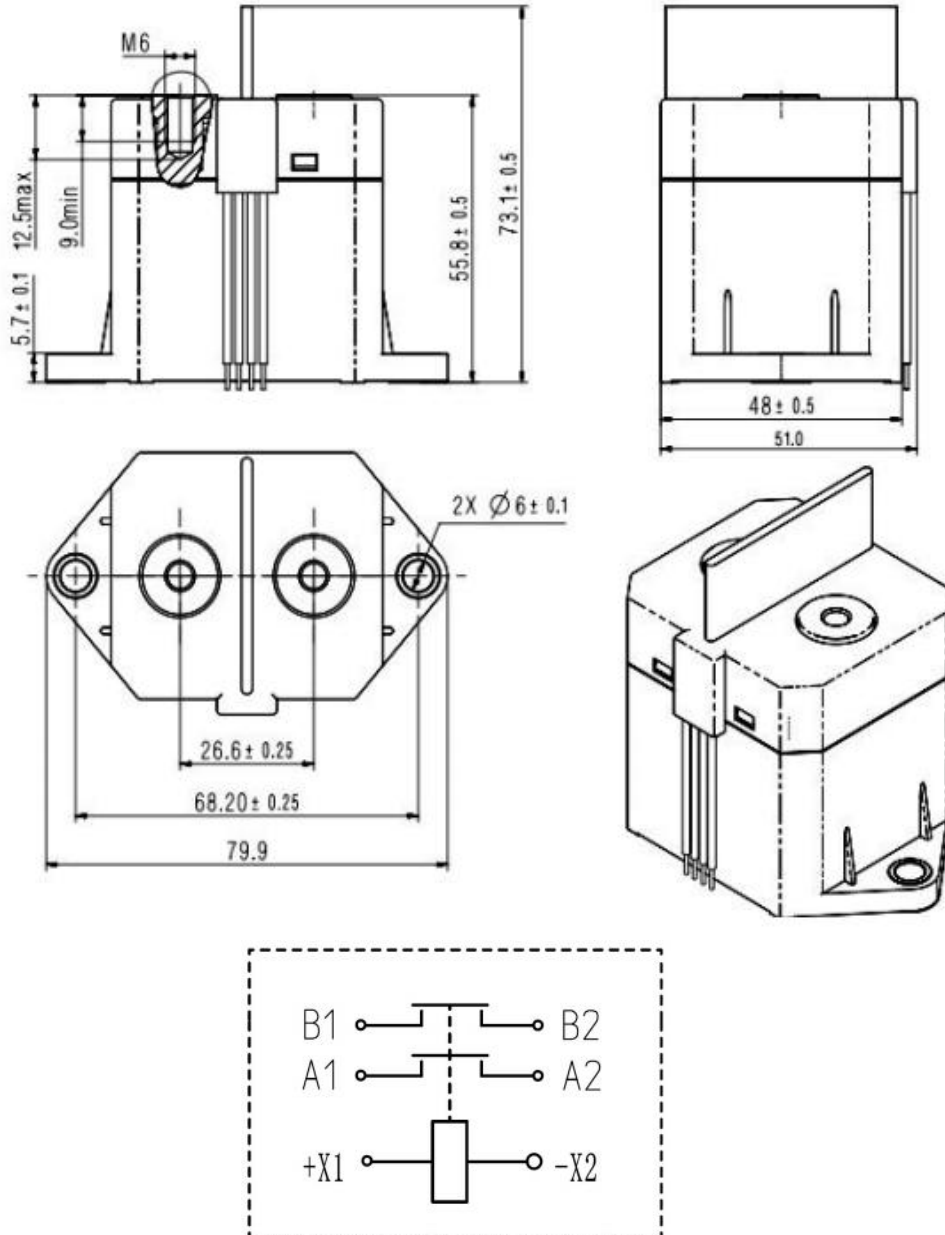
**COIL DATA (at 20°C)**

Rated Voltage	Pick-up Voltage VDC (Max)	Operate Voltage VDC	Drop-out Voltage VDC (Min)	Coil Resistance (Ω) (1± 7%)	Initial Current (A)	Initial Time (ms)	Rated Current (A)	Initial Power (W)	Steady Power (W)
12VDC	9	9~16	1	24.0	0.5	/	0.5	6.0	6
24VDC	18	18~32	2	96.0	0.5	/	0.5	6.0	6
PWM Type	9	9~36	5	3.1	3.8 *	≤150 *	0.2 *	46 *	2.5 *

**Note:** \* means at 12V volage.

**DIMENSIONS**

Unit: mm



**Notes:**

1. Load terminals A1 and A2, Load no-polarity (Cover no mark ).
2. Coil terminals +X1(Red wire) and -X2 (Black wire), polarity and connect wire 20AWG with 300±20mm.
3. Auxiliary contact B1(White wire) and B2(White wire), no-polarity, connect wire 20AWG with 300±20mm.
4. All unspecified tolerance(including outline dimensions) according to following table.

Outline dimensions hadn't specified tolerance	
Outline dimensions	Tolerance
≤10	±0.3
>10~50	±0.5
> 50	±0.8