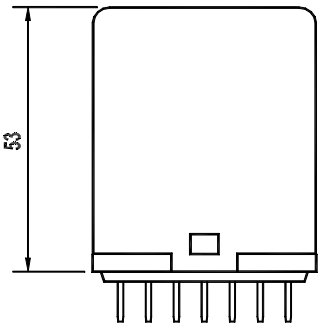

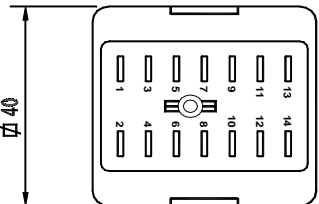
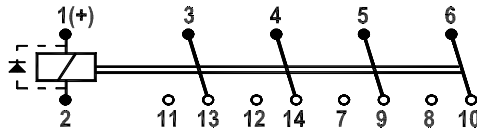
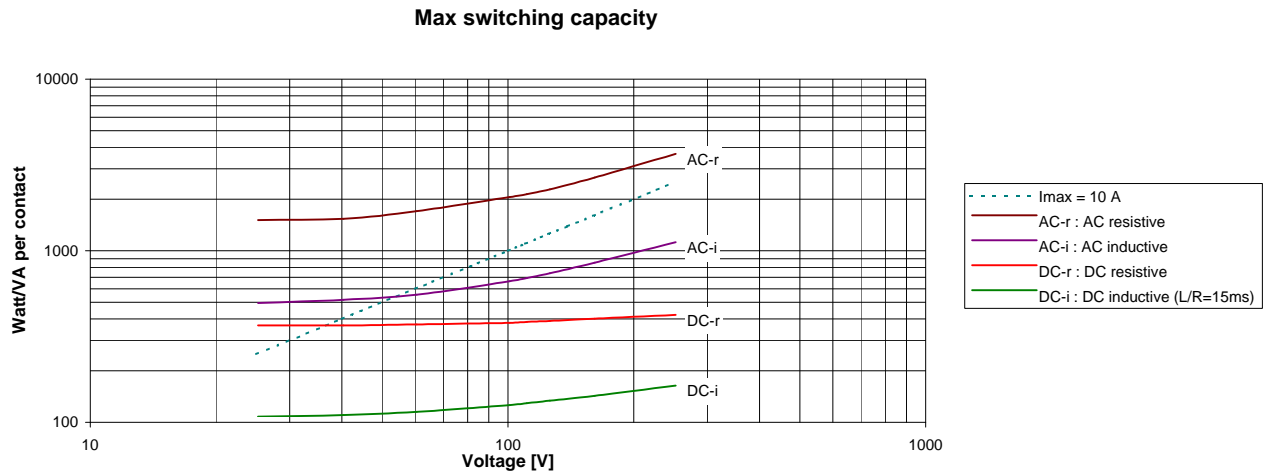


| Datasheet | | INSTANTANEOUS RELAY | | | |
|--|---|--|--|---------------------------|----------------|
| Product | D relays | | | | |
| | | Country of Origin: The Netherlands | | | |
| Dimensions |  | |  <p>P.O. Box 7023 3502 KA Utrecht The Netherlands T +31 (0)30-288 13 11 F +31 (0)30-289 88 16 E sales@nieaf-smitt.nl I www.nieaf-smitt.nl</p> | | |
| |  | | | | |
| | | Connection Diagram  | | | |
| Description | | | | | |
| Plug-in relay with four change-over contacts. Equipped with LED indication and DC-types with back EMF protection. | | | | | |
| Coil data | | | | | |
| Operating times at nominal voltage | | | | | |
| Pull-in time | 20 ms DC / 10ms AC | | Release time | | 18 msDC/ 5msAC |
| Bounce time NO contacts | 4 ms | | Bounce time NC contacts | | 8 ms |
| Coil consumption | 2 W/VA at U_{nom} | | Inductance | Energized | 11 ms |
| Min. Hold-up Voltage | DC | $0.1 U_{nom}$ | L/R at U_{nom} | Released | 8 ms |
| | AC | $0.3 U_{nom}$ | | | |
| Nominal voltages DC | | | | | |
| Type code | U_{nom} | $U_{pull\ in}$ | $U_{hold\ up}$ | $U_{max}\ (40\ ^\circ C)$ | R_{coil} |
| D 12 VDC | 12 V | 9.6 V | 1.2 V | 13.2 V | 72 W |
| D 24 VDC | 24 V | 19.2 V | 2.4 V | 26.4 V | 290 W |
| D 48 VDC | 48 V | 38.4 V | 4.8 V | 52.8 V | 1150 W |
| D 60 VDC | 60 V | 48.0 V | 6.0 V | 66.0 V | 1840 W |
| D 110 VDC | 110 V | 88.0 V | 11.0 V | 121.0 V | 6500 W |
| D 125 VDC | 125 V | 100.0 V | 12.5 V | 137.5 V | 8400 W |
| D 220 VDC | 220 V | 176.0 V | 22.0 V | 242.0 V | 25000 W |
| Nominal voltages AC 50 Hz | | | | | |
| Type code | U_{nom} | $U_{pull\ in}$ | $U_{hold\ up}$ | $U_{max}\ (40\ ^\circ C)$ | R_{coil} |
| D 12 V/ 50 Hz | 12 V | 9.6 V | 3.6 V | 13.2 V | 10 W |
| D 24 V/ 50 Hz | 24 V | 19.2 V | 7.2 V | 26.4 V | 44 W |
| D 42 V/ 50 Hz | 42 V | 33.6 V | 12.6 V | 46.2 V | 133 W |
| D 115 V/50 Hz | 115 V | 92.0 V | 34.5 V | 126.5 V | 1140 W |
| D 220 V/ 50 Hz | 220 V | 176.0 V | 66.0 V | 242.0 V | 4400 W |
| D 230 V/ 50 Hz | 230 V | 184.0 V | 69.0 V | 259.0 V | 4800 W |
| D 380 V/ 50 Hz | 380 V | 304.0 V | 114.0 V | 420.0 V | 12500 W |

Other voltages on request

| Contact data | | | |
|-------------------------|---------------------------|----------------------------------|----------------------|
| Max. Make Current | 16 A | Material | silver |
| Max. Cont. Current | 10 A (AC1 ; IEC 947) | Contactgap | 0.8 mm |
| Max. Breaking Capacity | | Insulation between open contacts | 2.5 kV, 50 Hz, 1 min |
| | DC 110 V, 1 A AC 440 V | Contactforce | > 200 mN |
| Min. Switching Voltage | 12 V | | |
| Max. Contact Resistance | 15 mW | | |

Maximum Switching Capacity



General Data

| | | | |
|--------------------------|----------------------|---|----------------------|
| Dielectric strength | Pole-Pole | IEC 255-5/ | 4 kV, 50 Hz, 1 min |
| | Cont-Coil | | 2.5 kV, 50 Hz, 1 min |
| Insulation Class | IEC 255-5 | serie C 380 V 50Hz/450 VDC | |
| Pulse Withstanding | IEC 255-5 | 5 kV (1.2/50 μ s) | |
| Vibration | IEC 68-2-6 | 5 g at 50 Hz 2 g, 10-150 Hz | |
| Shock | IEC 68-2-27 | 15 g, 11 ms | |
| Mechanical life | | 30*10 ⁶ ops | |
| Max. Switching Frequency | | 1200 ops/h | |
| Weight | | 125 g | |
| Temperature | T _{amb,max} | +40 °C +55 °C, 1 cm detached Higher T on request | |
| | T _{amb,min} | -25 °C | |
| Humidity | | 90%, temporary permitted condensation | |
| Protection | | IP 50 | |
| Materials | | Makrolon Polyester | |
| Electronic Components | | Back EMF protection diode (DC-types) | |