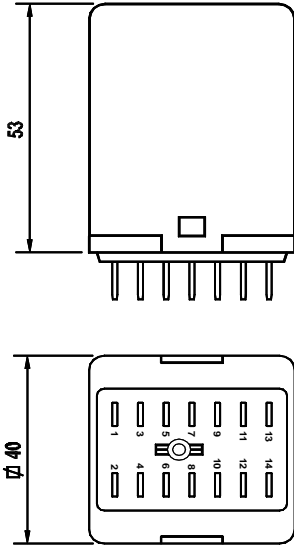

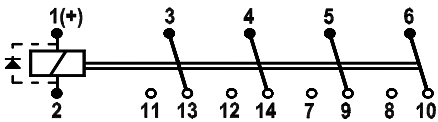
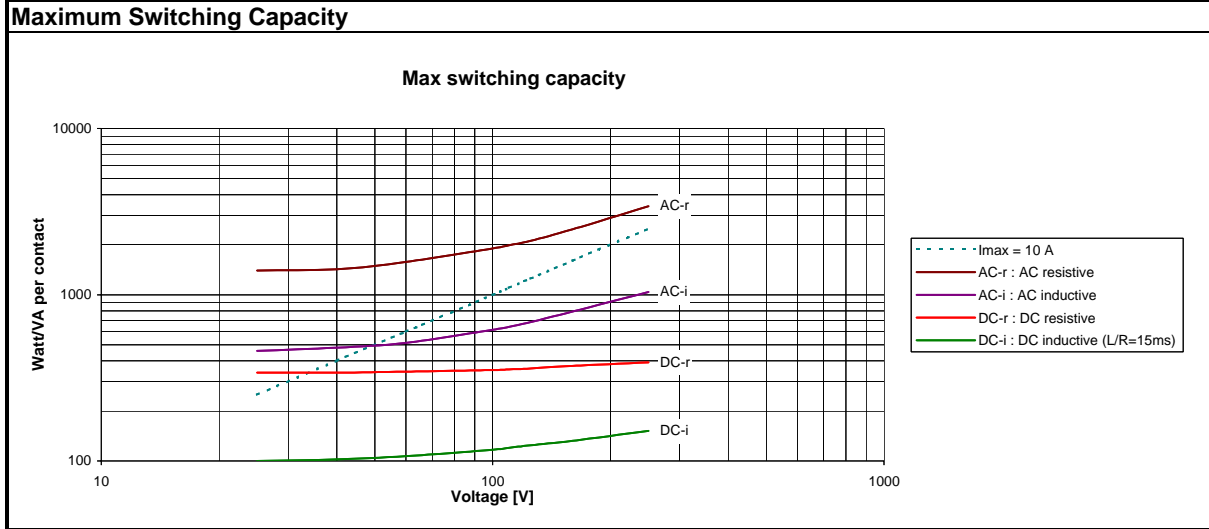


Datasheet		INSTANTANEOUS RELAY			
Product		D relays		Country of Origin: The Netherlands	
Dimensions				 <p>P.O. Box 7023 3502 KA Utrecht The Netherlands T +31 (0)30-288 13 11 F +31 (0)30-289 88 16 E sales@nieaf-smitt.nl I www.nieaf-smitt.nl</p>	
				<b>Connection Diagram</b> 	
<b>Description</b>					
Plug-in relay with four change-over contacts. Equipped with LED indication and DC-types with back EMF protection.					
<b>Coil data</b>					
Operating times at nominal voltage					
Pull-in time		20 ms DC / 10ms AC		Release time	
Bounce time NO contacts		4 ms		Bounce time NC contacts	
Coil consumption		2 WVA at $U_{nom}$		Inductance	
Min. Hold-up Voltage		DC 0.1 $U_{nom}$		Energized	
		AC 0.3 $U_{nom}$		Released	
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 $\Omega$
D 24 VDC	24 V	19.2 V	2.4 V	26.4 V	290 $\Omega$
D 48 VDC	48 V	38.4 V	4.8 V	52.8 V	1150 $\Omega$
D 60 VDC	60 V	48.0 V	6.0 V	66.0 V	1840 $\Omega$
D 110 VDC	110 V	88.0 V	11.0 V	121.0 V	6500 $\Omega$
D 120/125 VDC	125 V	96.0 V	12	137.5 V	8400 $\Omega$
D 220 VDC	220 V	176.0 V	22.0 V	242.0 V	25000 $\Omega$
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 $\Omega$
D 24 V/ 50 Hz	24 V	19.2 V	7.2 V	26.4 V	44 $\Omega$
D 42 V/ 50 Hz	42 V	33.6 V	12.6 V	46.2 V	133 $\Omega$
D 115 V/50 Hz	115 V	92.0 V	34.5 V	126.5 V	1140 $\Omega$
D 220 V/ 50 Hz	220 V	176.0 V	66.0 V	242.0 V	4400 $\Omega$
D 230 V/ 50 Hz	230 V	184.0 V	69.0 V	259.0 V	4800 $\Omega$
D 380 V/ 50 Hz	380 V	304.0 V	114.0 V	420.0 V	12500 $\Omega$

**Other voltages on request**

Contact data			
Max. Make Current	16 A	Material	silver
Max. Cont. Current	10 A (AC1 ; IEC 60947)	Contactgap	0.7 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, 10 mA		
Max. Contact Resistance	15 mΩ		



General Data			
Dielectric strength	Pole-Pole	IEC 60255-5	4 kV, 50 Hz, 1 min
	Cont-Coil		2.5 kV, 50 Hz, 1 min
Insulation Class		IEC 60255-5	serie C 380 V 50Hz/450 VDC
Pulse Withstanding		IEC 60255-5	5 kV (1.2/50 μs)
Vibration		IEC 60068-2-2	5 g at 50 Hz 2 g, 10-150 Hz
Shock		IEC 60068-2-2	15 g, 11 ms
Mechanical life			DC : 30*10 <sup>6</sup> ops AC : 10*10 <sup>6</sup>
Max. Switching Frequency			1200 ops/h
Weight			125 g
Temperature	T <sub>amb,max</sub>		+40 °C +55 °C, 1 cm detached Higher T on request
	T <sub>amb,min</sub>		-25 °C
Humidity			90%, temporary permitted condensation
Protection			IP 40
Materials			Makrolon Polyester
Electronic Components			LED
			Back EMF protection diode (DC-types)

**Australian Distributor**



**Relay Monitoring Systems Pty Ltd**  
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Mulgrave, Victoria, 3170, Australia

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