
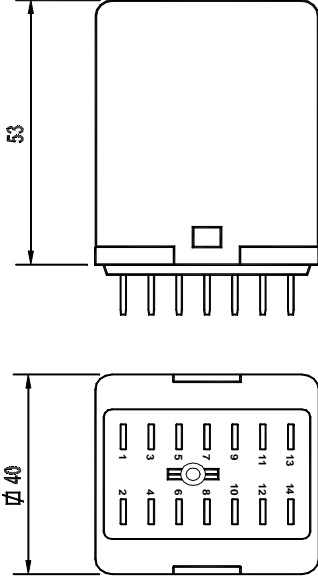
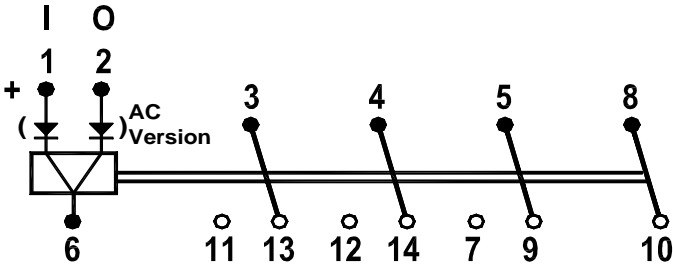
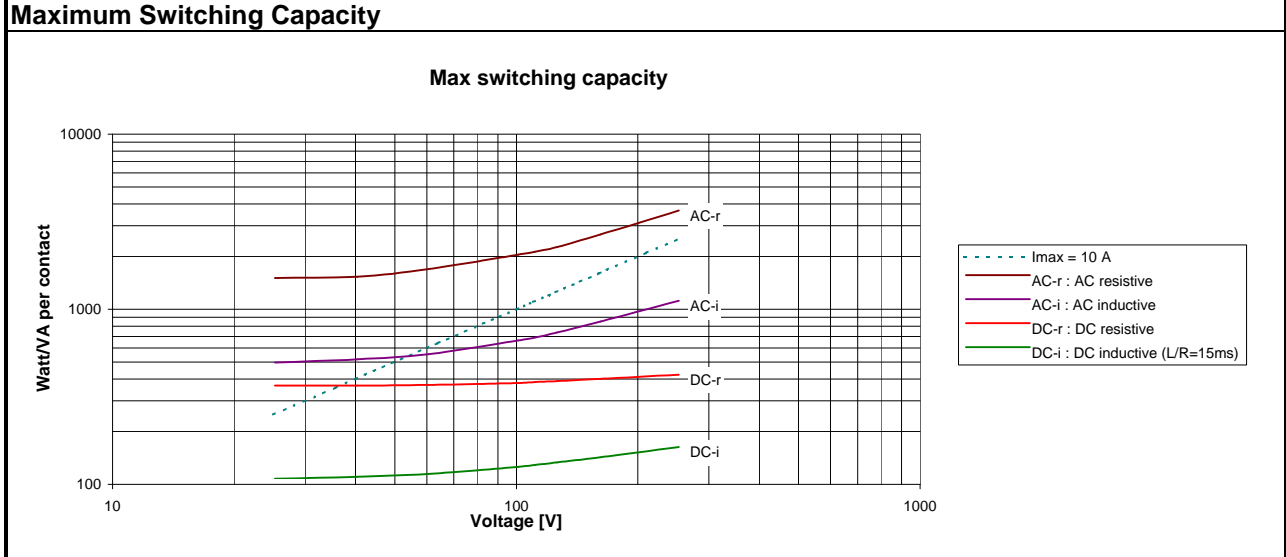


Datasheet		LATCHING RELAY			
Product		BD relay		Country of Origin: The Netherlands	
Dimensions		 <p>P.O. Box 7023 3502 KA Utrecht The Netherlands T +31 (0)30-288 13 11 F +31 (0)30-289 88 16 E sales@nieaf-smitt.nl I www.nieaf-smitt.nl</p>			
		<b>Connection Diagram</b> 			
<b>Description</b>					
Plug-in bistable relay with three change-over contacts and one normally closed contact. Bistable by means of a permanent magnet.					
<b>Coil data</b>					
Operating times at nominal voltage					
Supply range		85 % - 110 % * $U_{nom}$			
Coil consumption		DC	1.7 W at $U_{nom}$		
		AC	4 VA at $U_{nom}$		
Min. Impuls time		DC	25 ms		
		AC	50 ms		
Bounce time		NO contacts	4 ms		
		NC contacts	8 ms		
<b>Nominal voltages DC</b>					
Type code	$U_{nom}$	$U_{pull\ in}$	$R_{coil\ in}$	$R_{coil\ off}$	
BD 12 VDC	12 V	9.6 V	134 W	141 W	
BD 24 VDC	24 V	19.2 V	485 W	514 W	
BD 48 VDC	48 V	38.4 V	1930 W	2070 W	
BD 60 VDC	60 V	48.0 V	3052 W	3047 W	
BD 110 VDC	110 V	88.0 V	8684 W	8716 W	
BD 125 VDC	125 V	100.0 V	11380 W	11420 W	
<b>Nominal voltages AC 50 - 60 Hz</b>					
Type code	$U_{nom}$	$U_{pull\ in}$	$R_{coil\ in}$	$R_{coil\ off}$	
BD 24 V	24 V	19.2 V	134 W	141 W	
BD 42 V	42 V	33.6 V	444 W	466 W	
BD 110 - 115 V	115 V	92.0 V	3052 W	3047 W	
BD 220 - 240 V	220 V	176.0 V	15910 W	16090 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	DC 110 V, 1 A	Insulation between open contacts	2.5 kV, 50 Hz, 1 min
	AC 440 V		
Min. Switching Voltage	12 V	Contactforce	> 200 mN
Max. Contact Resistance	15 mW		



General Data			
Dielectric strength	Pole-Pole	IEC 255-5	4 kV, 50 Hz, 1 min
	Cont-Coil		2 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 μs)
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			10*10 <sup>6</sup> ops
Max. Switching Frequency			1200 ops/h
Weight			135 g
Temperature	T <sub>amb,max</sub>		+40 °C
	T <sub>amb,min</sub>		+60 °C, not energized      Higher T on request -25 °C
Humidity			80%, condensation not permitted
Protection			IP 50
Materials			Makrolon Polyester
Options	B		Magnetic arc blow-out for increased DC contact life
	D		Back-EMF-protection in DC-version
	S		Mechanical position indication
	combinations		