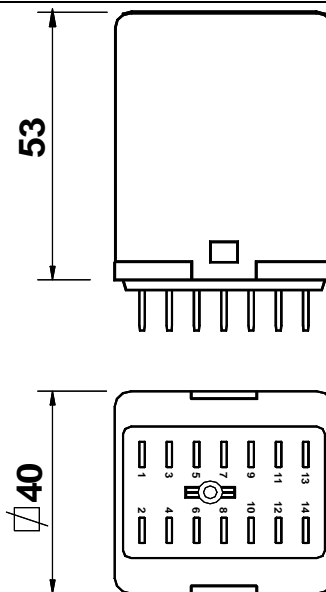

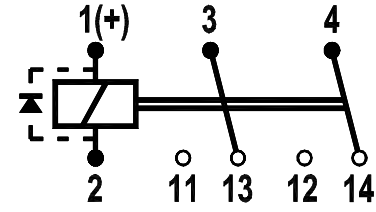


Datasheet		INSTANTANEOUS RELAY, LOW OPERATE VOLTAGE			
Product	DGG relay				
				Country of Origin:	The Netherlands
Dimensions					
				P.O. Box 7023 3502 KA Utrecht The Netherlands T +31 (0)30-288 13 11 F +31 (0)30-289 88 16 E sales@nieaf-smitt.nl I www.nieaf-smitt.nl	
				Connection Diagram 	
Description					
Plug-in relay with two change-over contacts.					
Extremely sensitive coil. (Pull-in voltage 0.4x U _{nom})					
Coil data					
Operating times at nominal voltage					
Pull-in time	20 ms DC / 10ms AC		Release time	18 ms DC/5ms AC	
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	0.05 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 °C)	R _{coil}
DGG 12 VDC	12 V	4.8 V	0.6 V	13.2 V	72 Ω
DGG 24 VDC	24 V	9.6 V	1.2 V	26.4 V	290 Ω
DGG 48 VDC	48 V	19.2 V	2.4 V	52.8 V	1150 Ω
DGG 60 VDC	60 V	24.0 V	3.0 V	66.0 V	1840 Ω
DGG 125 VDC	125 V	50.0 V	6.3 V	137.6 V	6500 Ω
DGG 220 VDC	220 V	88.0 V	11.0 V	242.0 V	25000 Ω
Nominal voltages AC 50 Hz					
DGG 12 V	12 V	7.2 V	3.6 V	13.2 V	10 Ω
DGG 24 V	24 V	14.4 V	7.2 V	26.4 V	44 Ω
DGG 42 V	42 V	25.2 V	12.6 V	46.2 V	133 Ω
DGG 115 V	115 V	69.0 V	34.5 V	126.5 V	1140 Ω
DGG 220 V	220 V	132.0 V	66.0 V	242.0 V	4400 Ω
DGG 230 V	230 V	138.0 V	69.0 V	259.0 V	4800 Ω
DGG 380 V	380 V	228.0 V	114.0 V	420.0 V	12500 Ω

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		
Maximum Switching Capacity			
Max switching capacity			
<p>The graph plots switching capacity in Watt/VA per contact against voltage in Volts [V]. Both axes are logarithmic. The y-axis ranges from 100 to 10000, and the x-axis ranges from 10 to 1000. Five curves are shown: a dashed blue line for Imax = 10 A; a solid red line for AC-r (AC resistive); a solid purple line for AC-i (AC inductive); a solid orange line for DC-r (DC resistive); and a solid green line for DC-i (DC inductive, L/R=15ms). The AC-r curve shows the highest capacity, followed by AC-i, DC-r, and DC-i.</p>			
General Data			
Dielectric strength	Pole-Pole Cont-Coil	IEC 60255-5	4 kV, 50 Hz, 1 min 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 60068-2-6	5 g at 50 Hz 2 g, 10-150 Hz
Shock		IEC 60068-2-27	15 g, 11 ms
Mechanical life			DC : 30*10 ⁶ ops, AC : 10*10 ⁶ ops
Max. Switching Frequency			1200 ops/h
Weight			125 g
Temperature	T _{amb,max} T _{amb,min}		+40 °C +50 °C, 1 cm detached Higher T on request -20 °C
Humidity			90%, temporary permitted condensation
Protection			IP 40
Materials			Makrolon Polyester
Electronic Components			Back EMF protection diode (DC-types)