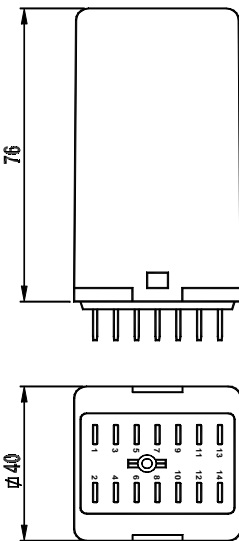

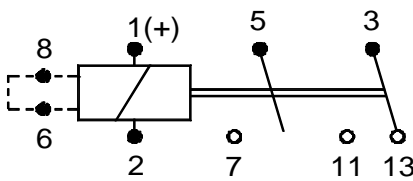
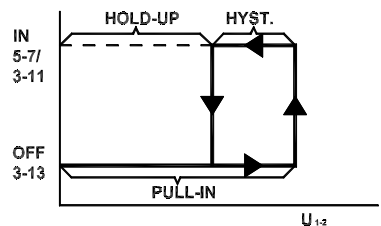
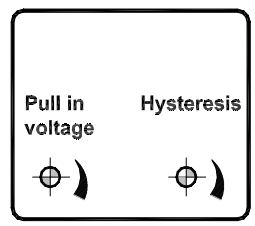
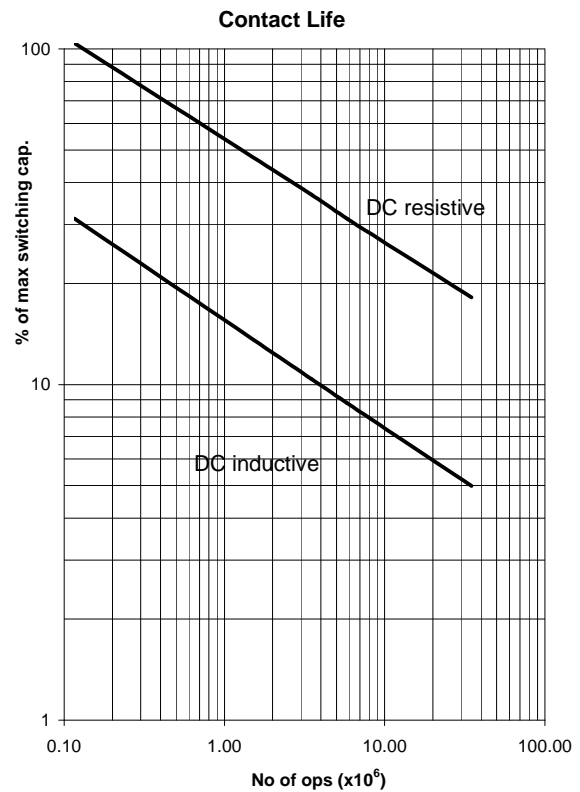
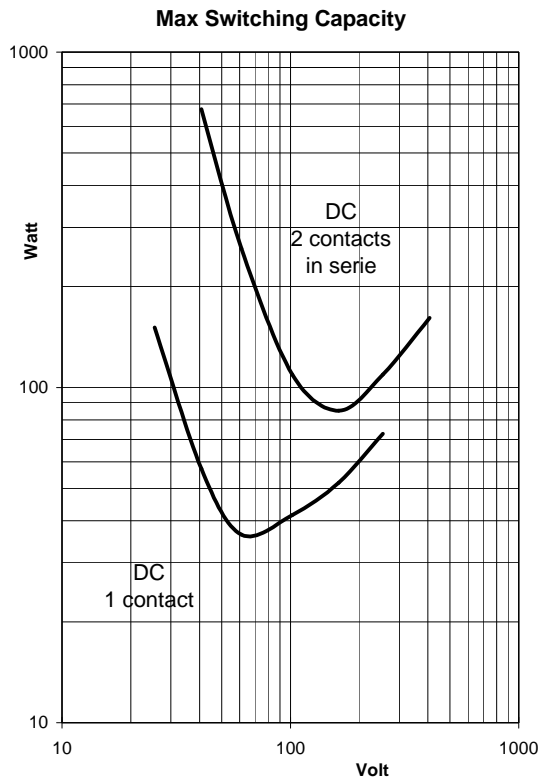


Datasheet		MONITORING RELAY				
<b>Product</b>	<b>ACD</b> Battery voltage monitoring relay	<b>Country of Origin:</b> The Netherlands				
<b>Dimensions</b>		P.O. Box 7023 3502 KA Utrecht The Netherlands <b>T</b> +31 (0)30-288 13 11 <b>F</b> +31 (0)30-289 88 16 <b>E</b> sales@nieaf-smitt.nl <b>I</b> www.nieaf-smitt.nl				
		<b>Connection Diagram</b>				
						
<b>Description</b>						
<p>Electronic plug-in monitoring relay for battery voltages.          The relay reacts on the mean value of a DC-voltage with ripple.          The pull-in voltage and hysteresis is adjustable by means of multiturn trimpotentiometers.          The pull-in time after crossing the setpoint is &lt; 15ms.          The drop-out time is approximately 20 ms, which can be extended to 250 ms. (see below)          Optional the relay can be supplied with fixed (sealed) set values, or led indication.          The ACD relays are pluggable into standard D and D-U sockets.</p>						
<b>Input data</b>						
<b>Type</b>		<b>ACD-024</b>	<b>ACD-048</b>	<b>ACD-060</b>	<b>ACD -110</b>	<b>ACD -125</b>
<b>Range of pull-in voltage</b>		21 .. 33 VDC	42 .. 66 VDC	52 .. 82 VDC	90 .. 140 VDC	110 .. 160 VDC
<b>Range of hysteresis</b>		1 .. 8 VDC	2 .. 16 VDC	3 .. 20 VDC	4 .. 32 VDC	5 .. 40 VDC
<b>Max. continuous voltage</b>		35 VDC	70 VDC	88 VDC	160 VDC	180 VDC
<b>Power Consumption</b>	<b>drop-out:</b>	0.4 W	0.7 W	0.9 W	1.2 W	1.3 W
	<b>pull-in:</b>	0.55 W	0.85 W	1.1 W	1.35 W	1.5 W
<b>Triptime pull-in</b>		<15 ms				
<b>Triptime drop-out</b>		20 ms	terminals 6/8 open			
		250 ms	terminals 6/8 closed			
<b>Repeat accuracy</b>		± 1 %				
<b>Temperature coefficient</b>		± 0.1 %/K				
<b>Working Principle</b>			<b>Adjustments</b>			
						
			Top view			

Contact data			
Max. make current	15 A	Material	Ag+0.2µm Au
Max. cont. current	6 A ( AC1 ; IEC 947 )	Contact gap	0.3 mm
Max. switching voltage		Insulation between open contacts	1 kV; 50 Hz; 1 min
DC	300 V, 300 mA	Contact force	> 20 cN
AC	250 V, 2.6 A	Note : contacts cannot have a different position. (Forced contacts, Weld-no-transfer)	
Min. switching voltage	4V / 2mA / 0.1W-VA		
Max. contact resistance	5 m W		

Maximum switching capacity and contact life: see graph



General Data			
Dielectric strength	Pole-Pole	IEC 255-5	3,5 kV, 50 Hz
	Cont-Coil	IEC 77	4 kV, 50 Hz
Pulse withstanding		IEC 255-5	5 kV ( 1.2/50 µs )
EMC		IEC 255-5	2.5 kV, 1 MHz, 400 Hz, 10 s
Vibration		IEC 77	5 g at 50 Hz
		IEC 571-1	2 g, 10-150 Hz
		IEC 68-2-6	
Shock		IEC 68-2-27	15 g, 11 ms
Mechanical life			30*10 <sup>6</sup> ops
Max. switching frequency			1200 ops/h
Weight			120 g
Temperature	T <sub>amb,max</sub>		+ 70 °C
	T <sub>amb,min</sub>		- 25 °C
Humidity			80 %, temporary permitted condensation
Protection			IP 50
Materials			Polyester Makrolon