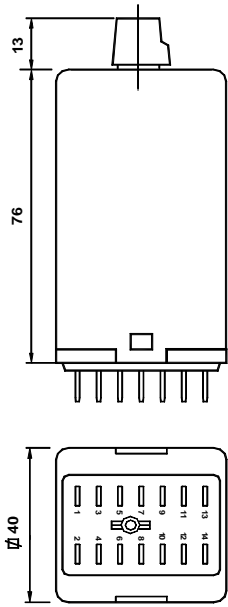

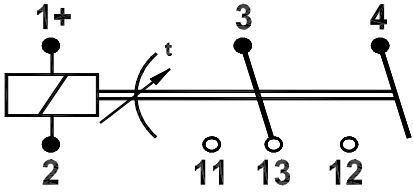

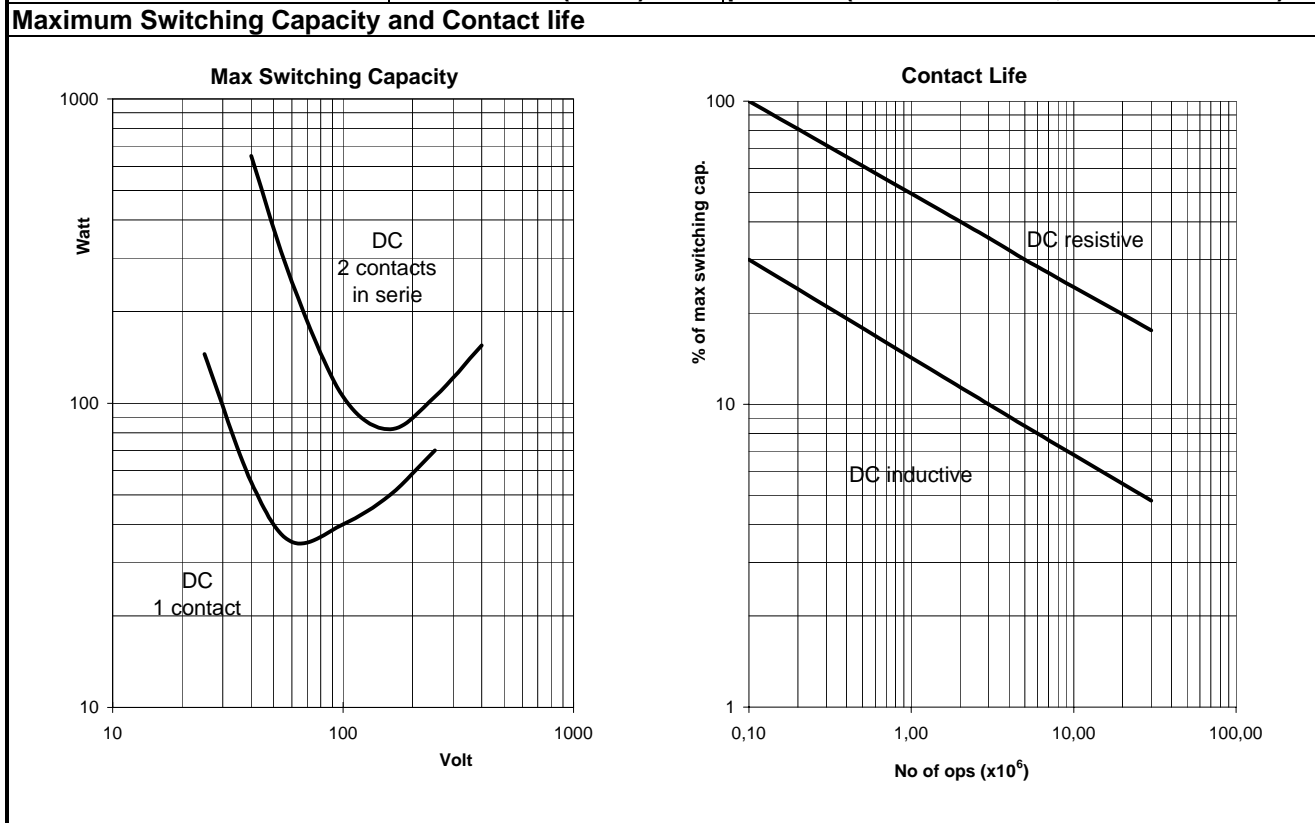


TIME DELAY RELAY						
Product		TDE-U200 series 2-pole delay-off timer relay		Country of Origin: The Netherlands		
Dimensions		Company				
		 <p>P.O. Box 7023 3502 KA Utrecht The Netherlands T +31 (0)30-288 13 11 F +31 (0)30-289 88 16 E sales@nieaf-smitt.nl I www.nieaf-smitt.nl/railway</p>				
Connection Diagram						
						
Description						
<p>Electronic plug-in delay-off railway timer-relay with one change-over contact and one NO contact. Equipped with one LED that indicates energization . The delay-off time is adjustable with a lockable knob. Fixed times are possible. (No knob) The TDE-U200 does not need auxilliary supply. The TDE-U200 relays are pluggable into standard D-U relay bases.</p>						
Coil Data (DC)			Timing diagram			
Type	U_{nom} (V)	U_{min} (V)	U_{max} (V)			
TDE-U201	24	16.8	30			
TDE-U202	48	33.6	60			
TDE-U203	72	50.4	90			
TDE-U204	110	77.0	138			
TDE-U205	96	67.2	120			
TDE-U207	36	25.2	45			
Nom. powerconsumption			< 1.5 W at U_{nom}			
Release time		depending on set value of the drop-out time				
Standard time ranges, adjustable		0.1 - 1 s	0.3 - 3s	1 - 10 s	3 - 30 s	10 - 100 s
Adjustment accuracy			< 10%			
Repeat accuracy			± 2 %			
Time variation			vs voltage variation		± 0.1 %/ % U_{nom}	
			vs temperature variation		± 0.2 % / K	
Recovery time			< 0.3 s			
Pull-in time			< 40 ms			
Max permissible ripple			24 % U_{nom}			
Min permissible residual voltage			5 % U_{nom}			

Contact data			
Max. Make Current	15 A	Material	Ag + 0.2 µm Au
Nom. Current	6 A (AC1 ; IEC 60947)	Contactgap	0.3 mm
Max. Breaking Capacity	DC 300 V, 300 mA	Insulation between open contacts	1 kV, 50 Hz, 1 min
	AC 250 V, 2.6 A		
Min. Contact continuity	4V/2mA/0.1W-VA	Note: contacts cannot have a different position. (Forced contacts, Weld no transfer)	
Max. Contact Resistance	15 m Ω (initial)		



General Data			
Dielectric strength	Pole-Pole	EN 50155	2 kV, 50 Hz, 1 min
	Cont-Coil	IEC 60077	2 kV, 50 Hz, 1 min
Pulse Withstanding		IEC 60255-5	5 kV (1.2/50 µs)
Vibration		IEC 60077	5 g at 50 Hz
		IEC 60571	2 g at 10 - 150 Hz
		EN 50155	
Shock		IEC 60077	5 g at 50 Hz
Mechanical life			30*10 ⁶ ops
Max. Switching Frequency			1200 ops/h
Weight			140 g
Temperature	T _{amb,max}		+70 °C
	T _{amb,min}		-25 °C
Humidity			80%, condensation not permitted
Protection			IP 40
Materials			Makrolon
			Melamine Polyester
Options			
B	Magnetic arc blowout		
E	Gold plated contacts		
K	Special dust protection (only for fixed time setting)		
U	Double make contact		