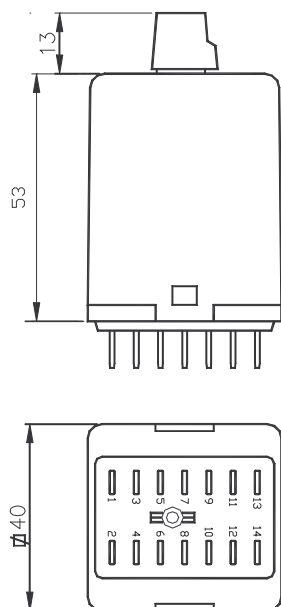


TIME DELAY RELAY

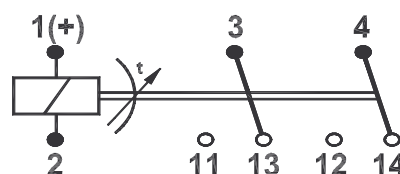
Product TDB2-U200 series 2 pole delay-on timer relay	Country of origin The Netherlands
--	--

Dimensions	Company
-------------------	----------------



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

Connection diagram

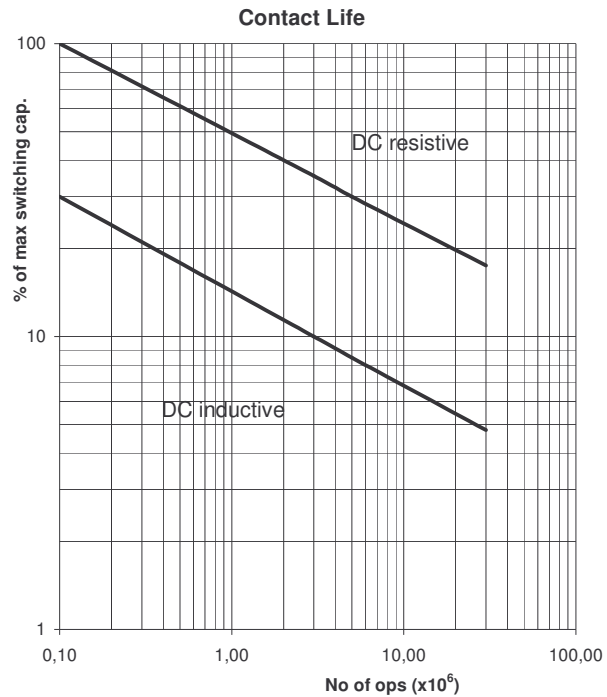
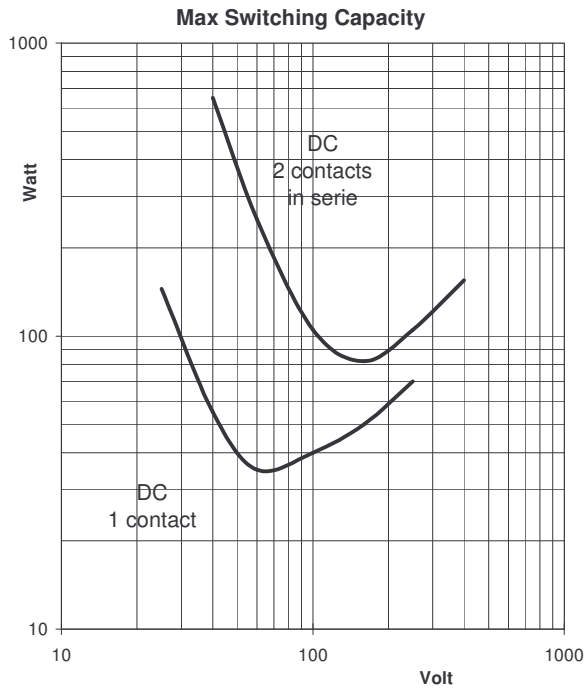


Description

Electronic plug-in railway timer-relay with two change-over contacts .
It has less height than the TDB4 relay which has four change-over contacts.
The delay time is adjustable with a lockable knob.
The relay can also be supplied with a fixed time delay. (No knob)
Standard equipped with double zenerdiode coil protection. (option Q)

Coil data (DC)				Timing diagram		
Type	U_{nom} (V)	U_{min} (V)	U_{max} (V)			
TDB2-U201-xx	24	16.8	30			
TDB2-U202-xx	48	33.6	60			
TDB2-U203-xx	72	50.4	90			
TDB2-U204-xx	110	77.0	138			
TDB2-U205-xx	96	67.2	120			
TDB2-U207-xx	36	25.2	45			
Nom. powerconsumption				during delay time: < 0.5 W		
				after switching on: < 2.0 W		
Pull-in time Depending on pull-in time setting (xx)						
Time ranges, adjustable	0.1-1 s	0.3 - 3 s	0.6 - 6 s	1 - 10 s	3 - 30 s	6 - 60 s
		0.3 - 3 min	0.6 - 6 min	1 - 10 min	3 - 30 min	
Adjustment accuracy		< 10%				
Repeat accuracy		± 0.5 %				
Time variation vs voltage variation				± 0.05 % / % U_{nom}		
vs temperature variation				± 0.02 % / K		
Recovery time		< 0.2 s				
Release time		< 40 ms				
Max permissible ripple		50%				

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		Insulation between open contacts	1 kV, 50 Hz, 1min
DC	300 V, 300 mA	Contactforce	> 20 cN
AC	250 V, 2.6 A	Note: contacts cannot have a different position. (Forced contacts, Weld no transfer)	
Min. contact continuity	4V/2mA/0.1W-VA		
Max. contact resistance	15 mΩ (initial)		
Maximum switching capacity and contact life: see graph.			



General Data		
Dielectric strength		
Pole-Pole		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)
EMC according to	EMC directive , EN50121-3-2	
Vibration	IEC 60077 IEC 60571-1 IEC 60068-2-6	5 g at 50 Hz 2 g at 10 - 150 Hz
Shock	IEC 60077	5 g at 50 Hz
Mechanical life		30*10 ⁶ ops
Max. switching frequency		1200 ops/h
Weight		110 g
Temperature	T _{amb,max} T _{amb,min}	+70 °C - 25 °C
Humidity		80%, condensation not permitted
Protection		IP 40
Materials		Makrolon Polyester
Options		
C	- 40 °C	
E	gold plated contacts	
K	special dust protection (only for fixed time setting)	
B	magnetic arc blow out	

Australian Distributor



Relay Monitoring Systems Pty Ltd
6 Anzed Court
Mulgrave, Victoria, 3170, Australia

Phone: +61 3 8544 1200
Fax: +61 3 8544 1201
Email: rms@rmspl.com.au
Web: www.rmspl.com.au