Relays

Mini relays F

Characteristic quantities		
Rated voltage	U_N	12 V
Test voltage	U_P	500 $V_{\sim eff}$
Upper limit temperature	ϑ_{max}	155 °C
Thermal resistance	R_ϑ	50 K/W
Ambient temperature	ϑ_{amb}	-40 °C...+85 °C
Graphical symbol		See connection diagram

Relays

Mini relays F

Make relay

BOSCH	**0 986 332 003**
Part number Tyco	**V23134-B0052-X301**
VW-Part number	**6DO 951 253 A**

Technical data for contact side

Contact material		$AgSnO_2$
Minimum recommended current	I_{Smin} (U_s = 13,5 V)	1 A
Max. switching current[2] - Make	I_{Smax} on[3] / off	120 A / 40 A
Limiting continuous current - Make	I_{SN} bei 23 °C	40 A
Voltage drop - Make (typ.)	10 A contact current	20 mV
Increase in coil temperature (typ.)	10 A contact current	15 K
Mechanical endurance (without load)		> 1 x 10^7 cycles
Electrical endurance[4]	U_s = 13,5 V	> 1,5 x 10^5 cycles

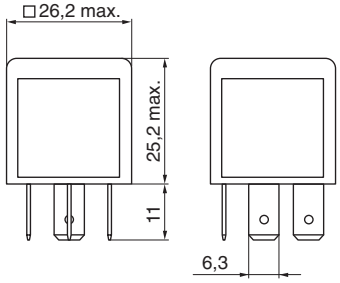
[2] The values apply to a resistive or inductive load with suitable spark suppression. [3] This current may flow for a maximum of 3 s for a make/break ratio of 1:1.
[4] for an inductive load 0.1 mH, 120 A/40 A inrush-/nominal current, ton/toff = 2 s/2 s.

Technical data for energizing side

Operate voltage[1]	$U_{85/86op}$	≤ 7,3 V
Release voltage[1]	$U_{85/86r}$	≥ 2,3 V
Coil resistance[1]	R_{Cu}	93 Ω±9 Ω
Parallel resistor	R_P	560 Ω
Total resistance	$U_{85/86}$	80 Ω±8 Ω
Nom. power consumption	P_N	1,6 W
Operate time (typ.)	t_{OP}	7,5 ms
Release time (typ.)	t_r	3,5 ms

[1] At 23 °C coil temperature.

Dimensional drawing



Figure

Connection diagram