

Relays

Mini relays FA7

Characteristic quantities

Rated voltage	U_N	12 V
Release voltage	U_{12r}	$\geq 1,8 \text{ V (23 } ^\circ\text{C)}$
Test voltage	U_P	500 V _{-rms}
Sustained thermal load	P_θ	3,4 W
Upper limit temperature	ϑ_{\max}	155 °C
Thermal resistance	R_θ	40 K/W
Ambient temperature	ϑ_{amb}	-40...+85 °C
Max. switching frequency	$f_{S\max}$	20 Hz
Release time (ms)	t_r	4,0 ms
Graphical symbol		See connection diagram

Relays

Mini relays FA7

NO relays

BOSCH
Part number Tyco
VW-Part number

0 986 332 001
V23136-J0006-X045
7MO 951 253

Technical data for contact side

Contact material		AgNiO, 15
Minimum recommended current	$I_{Smin} (U_s = 13,5 V)$	1 A
Max. switching current ²⁾ - Break	I_{Smax} on ³⁾ / off	45 A / 40 A
Max. switching current ²⁾ - Make	I_{Smax} on ³⁾ / off	120 A / 60 A
Limiting continuous current - Break	I_{SN} at 23 °C / 85 °C	40 A / 30 A
Limiting continuous current - Make	I_{SN} at 23 °C / 85 °C	40 A / 30 A
Voltage drop - Break (typ.)	10 A contact current	100 mV
Voltage drop - Make (typ.)	10 A contact current	100 mV
Increase in coil temperature (typ.)	10 A contact current	3 K
Mechanical endurance (without load)		> 1 x 10 ⁷ cycles
Electrical endurance ⁴⁾	$U_s = 13,0 V$	> 2 x 10 ⁵ cycles

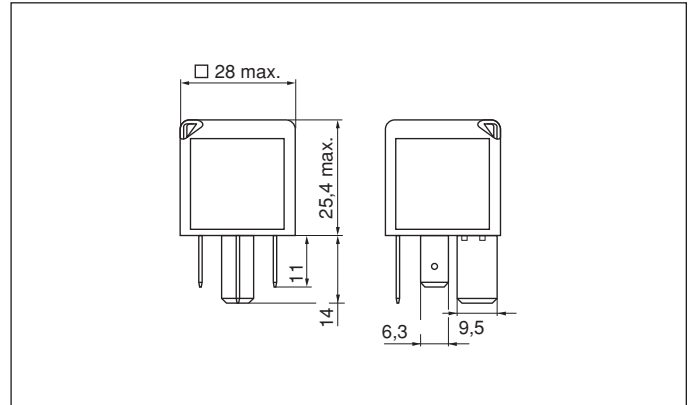
²⁾ The values apply to a resistive or inductive load with suitable spark suppression. ³⁾ This current may flow for a maximum of 3 s for a make / break ratio of 1:10.
⁴⁾ for an inductive load of 400 µH, 120 A/70 A on/off current, ton/toff = 2 s / 8 s.

Technical data for energizing side

Operate voltage ¹⁾	U_{12op}	≤ 6,8 V
Coil resistance	R_{Cu}	71 Ω ± 5,6 Ω
Parallel resistor	R_P	560 Ω
Total resistance	R_{12}	63 Ω ± 6 Ω
Nom. power consumption	P_N	2,3 W
Operate time (typ.)	t_{OP}	8,5 ms

¹⁾ At 23 °C coil temperature.

Dimensional drawing



Figure



Connection diagram

