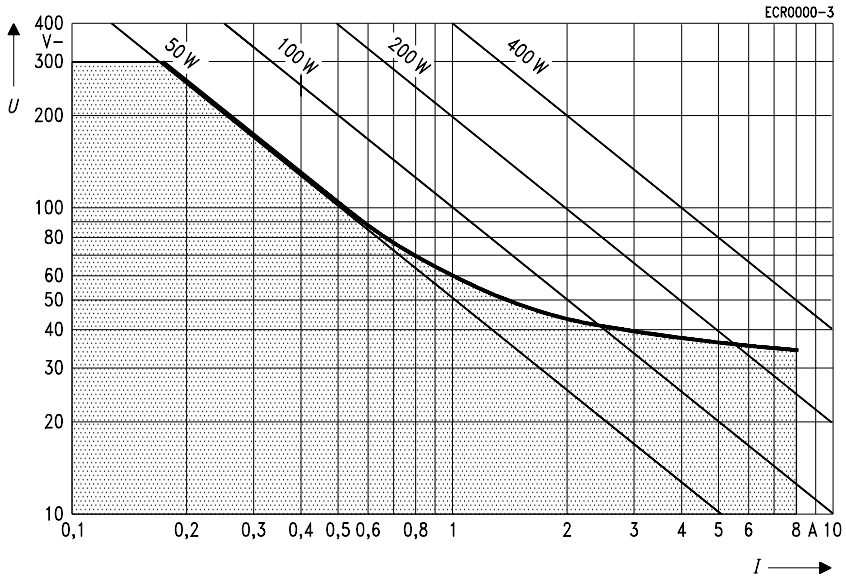
Contact data

Contact category III according to VDE 0435 Part 120/10.81, Appendix B				
Ordering code, block 3	A301/A302	A401/A402	A501/A502	A601/A602
Number of contacts and type	1 changeover contact or 1 make contact			
Contact assembly	Single contacts			
Contact material	$AgSnO_2$	AgCdO	AgNi 0,15 gold-flashed	AgCdO gold-plated
Max. continuous current at max. ambient temperature	8 A			
Inrush current (max. 4 s at 10% duty cycle)	15 A			
Maximum switching voltage	440 V~ 300 V–			
Maximum switching capacity AC voltage DC voltage	 2000 VA See load limit curve			
Recommended for loads >	500 mA, 12 V~/V–	500 mA, 12 V~	1 mA, 6 V–	µW
Contact resistance (initial value)/measuring current/driver voltage	≤ 100 mΩ/1 A/24 V	≤ 100 mΩ/1 A/24 V	≤ 100 mΩ/100 mA/6 V	≤ 30 mΩ/100 mA/6 V

Note: Inrush currents up to 80 A possible on request.

Load limit curve



I = switching current
U = switching voltage

Definition of the load limit curve:
In 1000 operations there must be no arc with a burning time > 10 ms.

Coil data

Nominal voltages	From 3 V– to 60 V– Special voltages on request
Nominal power consumption, typ., at 20 °C	210 ... 270 mW
Pull-in power, at 20 °C	100 ... 120 mW
Operating range/class of energizing voltage according to DIN IEC 255 Part 1-00 or VDE 0435 Part 201	2/b
Minimum release voltage	10 % of nominal voltage

Coil versions

Nominal voltage U_{nom} V–	Operate voltage at 20 °C $U_{op\ cold}$ V–	Operating voltage range at 20 °C		Resistance at 20 °C Ω	Number of coil, ordering code, block 2
		Oper. voltage U_I V–	Max. voltage U_{II} V–		
3	2.1	2.1	7.5	40 ± 4	001
5	3.4	3.6	12.5	118 ± 12	002
6	4.1	4.3	15.0	165 ± 17	003
9	6.1	6.4	22.0	365 ± 37	004
12	8.2	8.5	30.0	650 ± 65	005
18	12.2	12.8	45.0	1455 ± 145	006
24	16.3	17.2	56.0	2270 ± 230	007
36	24.5	25.4	88.0	5640 ± 565	008
48	32.6	34.5	110.0	8790 ± 880	009
60	40.8	42.8	142.0	15265 ± 2290	010

Other coil versions available on request

$U_{op\ cold}$ = Operate voltage at 20 °C without pre-energizing the coil

U_I = Operate voltage at 20 °C after pre-energizing with U_{nom} without contact current

U_{II} = Maximum continuous voltage at 20 °C for $T_{c\ max}$ = 115 °C without contact load

Operating voltage limits U_I and U_{II} depend on temperature and can be calculated by:

$U_{I\ tamb} = k_I \cdot U_{I\ 20\ °C}$ and $U_{II\ ta} = k_{II} \cdot U_{II\ 20\ °C}$

t_{amb} = Ambient temperature
$U_{I\ tamb}$ = Minimum voltage at ambient temperature t_{amb}
$U_{II\ tamb}$ = Maximum voltage at ambient temperature t_{amb}
k_I a. k_{II} = Factors (dependent on temperature), see diagram
$T_{c\ max}$ = Maximum coil temperature