

Cradle N Relay V23154/V23162

- Multi purpose relay
- Highly reliable
- Great variety of contact arrangements and materials to meet specific applications
- Contacts for signal loads and currents up to 5 A
- DC coil, operating voltage 1.5VDC to 125VDC; AC, latching and non-latching coils on request
- Sockets for easy and quick mounting of relays

Typical applications

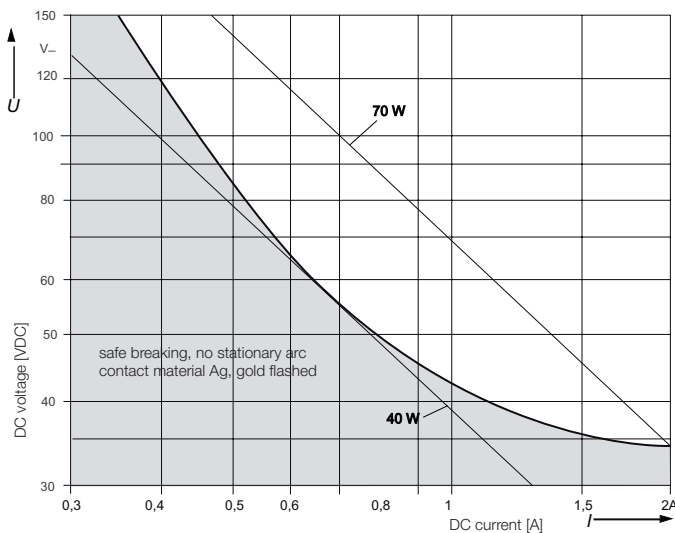
Measurement and control equipment, control equipment in nuclear powerplant, press controls with high safety requirements (force-guided springs), telecommunications



Contact Data

Product code block 3	B104/B110/B112	B604/B610/B612	C104/C110/C112	C404/C410	F104 to F107
Contact arrangement	max. 4 form C (4 CO) contacts, 2 form B (2 NC) contacts or 6 form A (6 NO) contacts (see product code table)				
Max. switching voltage	150VDC 125VAC	36VDC 30VAC	150VDC 125VAC	36VDC 30VAC	250VDC 250VAC
Rated current	2A	0.2A	2A	0.2A	5A
Limiting continuous current at max. ambient temperature	2A	2A	2A	2A	5A
Breaking capacity max. see DC load breaking capacity curve below	35 to 70W 50VA	5W, 5VA -	35 to 70W 50VA	5W, 5VA -	50 to 140W 500VA
Contact material	silver, gold-flashed	gold F	silver, gold-flashed	gold F	silver, gold-flashed
Contact style	single contact	single contact	bifurcated contacts	bifurcated contacts	single contact
Frequency of operation, without load, max.	50 ops./s	50 ops./s	50 ops./s	50 ops./s	10 ops./s
Operate / release time typ.	7.5/3ms	7.5/3ms	7.5/3ms	7.5/3ms	7.5/3ms
Mechanical endurance	app. 10 ⁷ ops.	app. 10 ⁷ ops.	app. 10 ⁷ ops.	app. 10 ⁷ ops.	app. 10 ⁷ ops.

Max. DC breaking capacity, contact sets B1xx, C1xx



Max. DC breaking capacity, contact sets F1xx



Cradle N Relay V23154/V23162 (Continued)

Coil Data

Magnetic system	neutral
Coil voltage range	1.1 to 125 VDC, typ. 800mW power consumption
Max. coil temperature	100 °C
Thermal resistance	< 50K/W

Coil versions, DC coil, monostable

Coil code	Rated voltage VDC	Operate/Limiting voltage ¹⁾ VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
702	1.1	-	2	807
711	5	-	28	893
712	7	-	58	845
715	9	-	110	736
716	10	-	150	667
717	12	-	220	655
719	15	-	325	692
720	20	-	550	727
721	24	-	890	647
722	32	-	1700	602
726	48	-	3200	720
734	60	-	4700	766
704	72	-	7600	682
735	110	-	15000	807
703	125	-	20900	748

1) refer to 'Part code table'.

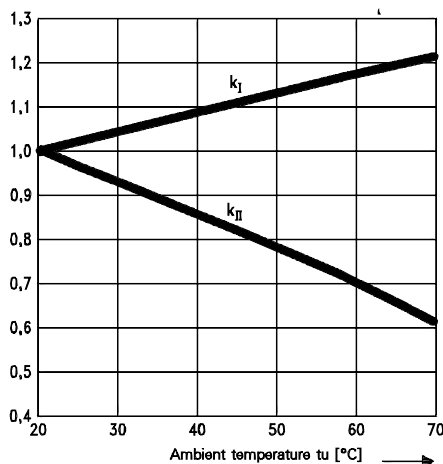
All figures are given for coil without pre-energization, at ambient temperature +20°C.

Coil versions, DC coil, monostable

Coil code	Rated voltage VDC	Operate/Limiting voltage ¹⁾ VDC	Coil resistance $\Omega \pm 15\%$	Rated coil power mW
430	10	-	140	714
418	12	-	230	626
471	12	-	220	655
479	16	-	390	656
421	24	-	700	823
472	24	-	890	647
496	25	-	730	856
473	60	-	4700	766
404	72	-	5800	894

1) refer to 'Part code table'.

All figures are given for coil without pre-energization, at ambient temperature +20°C.



Coil data (continued)

Terminals:

- coil with 1 winding: start 4, end 1
- coil with 2 windings (upon request):
start 3, end 2 for winding I, start 4, end 1 for winding II

The minimum voltage U_I depends on the contact set and the ambient temperature, the maximum voltage U_{II} only depends on the ambient temperature.

Between minimum voltage $U_{I \text{ tamb}}$ and operating voltage U a safety margin of approx. 20% is recommended.

$U_{I \text{ tamb}}$ (1.2)	$< U_I \leq U_{II \text{ tamb}}$
$U_{I \text{ tamb}}$	$U_I \cdot U_{20^\circ\text{C}} \cdot k_{I \text{ tamb}}$
$U_{II \text{ tamb}}$	$U_{II \text{ } 20^\circ\text{C}} \cdot k_{II \text{ tamb}}$
tamb	Ambient temperature
U	Operating voltage
$U_{I \text{ tamb}}$	Minimum voltage at ambient temperature, tamb
$U_{II \text{ tamb}}$	Maximum voltage at ambient temperature, tamb
k_I and k_{II}	Factors

Insulation Data

Product code, block 3	B1xx, B6xx, C1xx, C4xx	F1xx
Initial dielectric strength		
between coil / frame	500V _{rms}	500V _{rms}
between contact / contact	500V _{rms}	1000V _{rms}
between contact / frame	500V _{rms}	1000V _{rms}
between contact / coil	1000V _{rms}	1500V _{rms}
Initial insulation resistance, at 500VDC	> 106Ω	

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

Ambient temperature	-40 to +70°C
Category of environmental protection	
IEC 61810	RT - I dust protected, RT V - hermetically sealed
Degree of protection, IEC 60529	dust-protected IP 30, hermetically sealed IP 67
Terminal type	PCB, plug-in, solder terminals
Weight	
V23154-C0/-MO Size I	approx. 20g
V23154-D0/-NO Size II	approx. 25g
V23162-A0xxx Size I	approx. 30g
V23162-B0xxx Size II	approx. 35g
Washing	not recommended
Ultrasonic cleaning	not recommended
Packaging unit	5 pcs.

Accessories

For details see datasheet Cradle Relay, Accessories and Mounting