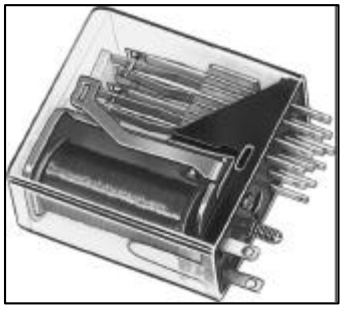
Cradle relay - Data Sheet

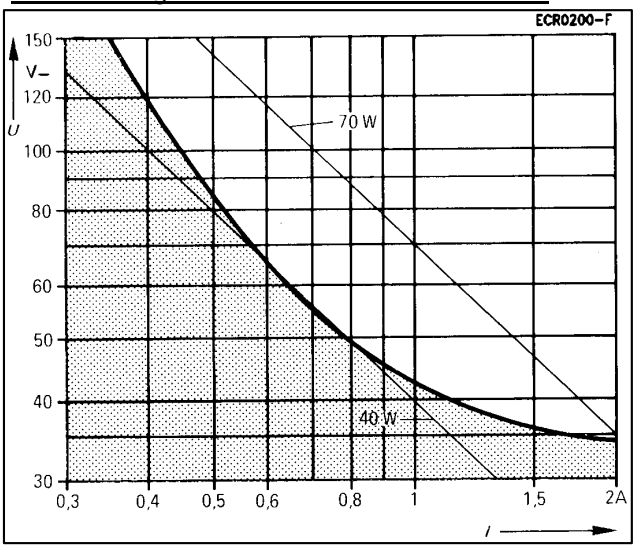
Versions
Size I, II or III cradle style relays
2, 4 or 6 c/o designs
Single or Twin contacts
Plug-in or pcb types
Dust protected (hermetic sealed version available on request)
Bistable (polarised) & ac coils on request



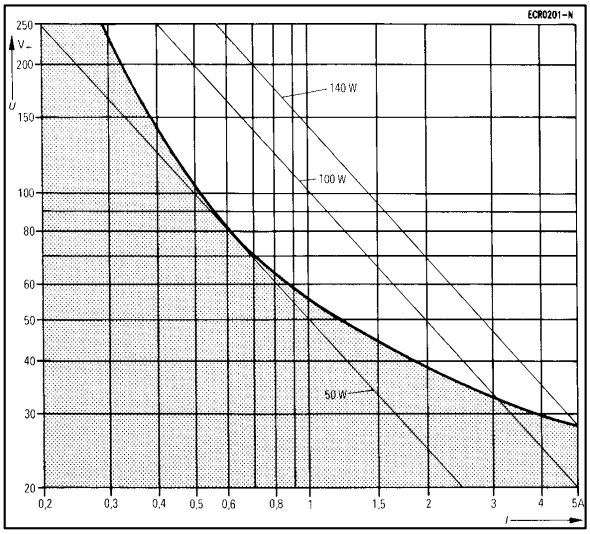
Characteristics

General coil data						
Operate voltages	V dc	5 to 125				
Power consumption	W	0.8 to 1.0				
Contact data						
Ordering code (block 3)		B1	B6	C1	C4	F1
Type of contact		single	single	bifurcated	birurcated	single
Contact material		Ag + Au fl.	Gold F	Ag + Au fl.	Gold F	Ag + Au fl.
Max switching voltage	V dc	150	36	150	36	250
	V ac	125	30	125	30	250
Max switching current	A	2	0.2	2	0.2	5
Max power rating (dc)	W	35 to 70	5	35 to 70	5	50 to 140
(ac)	VA	50	5	50	5	500
Max continuous current	A	2	2	2	2	5
General data						
Ambient Temperature range	deg C	-40 to + 70				
Operate time (approx)	ms	7.5 (16 for 6 pole relay)				
Release time (approx)	ms	3 (2 for 6 pole relay)				
Max switching rate	ops / s	50				10
Test voltage - coil/frame	V ac rms	500				500
- contact/contact	V ac rms	500				1000
- contact/frame	V ac rms	500				1000
Mechanical life	ops	100 M				10 M

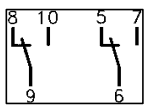
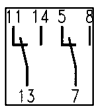
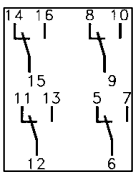
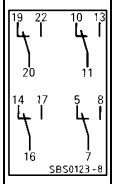
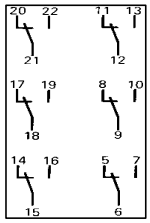
DC switching limit curve for B1 & C1 contacts



DC switching limit curve for F1 contacts



Coil & Contact codes

Contact design	2 c/o			4 c/o			6c/o				
Case size	I	I	II	II	II	III	III	III			
Contact Material											
Contact type	single	twin	single	single	twin	single	single	twin			
Ag + Au flash	B104	C104	F104	B110	C110	F110	B133	C133			
Gold F	B604	C404	n/a	B610	C410	n/a	B633	C433			
Pin designations											
Coil nom. volts	minimim operate voltages								Max Coil V	Coil Ohms	Coil CODE
5	1.8	2.5	2.5	2.5	3.7				7.2	28 +/- 3	711
6	2.7	3.7	3.7	3.7	5.5				10.5	58 +/- 6	712
6						3.5	2.9	4.5	9	33 +/- 3.3	11
6	2.6	3.5	3.5	3.5	5.3				9.4	52 +/- 5.2	412
10	4.5	6	6	6	9				16.5	150 +/- 15	716
11	5.2	7	7	7	10.5				17	185 +/- 18.5	417
12	5.3	7.1	7.1	7.1	10.5				20	220 +/- 22	717
12						7	5.8	8.8	18	130 +/- 13	15
12	6.3	8.5	8.5	8.5	12.5				19.5	230 +/- 23	418
18	8.4	11	11	11	16.5				26.5	430 +/- 43	420
20	8.9	11.9	11.9	11.9	17.7				32	550 +/- 55	720
24	11	14.5	14.5	14.5	22				40	890 +/- 89	721
24						15.5	13	20	39	630 +/- 63	20
24	11	14.5	14.5	14.5	22				33.5	700 +/- 70	421
32	15.5	21	21	21	31				44	1250 +/- 187.5	422
48	23	30	30	30	45				75	3200 +/- 480	726
48	22	28.5	28.5	28.5	43				62	2500 +/- 375	426
60	27	36	36	36	53				92	4700 +/- 705	734
60						43	36	55	94	3800 +/- 570	26
110	49	65	65	65	98				164	15000 +/- 1500	735
110						66	53.5	85	154	9200 +/- 1380	4
125	61	81	81	81	122				190	20900 +/- 3140	703
125						88	73	112	190	15500 +/- 2320	13
220						118	98	151	240	25000 +/- 3750	3

All coil data quoted at an ambient temperature of 20 deg C
An operate voltage in application of 20% over the minimum voltage is recommended.

Multipication factors for higher ambient temperatures:

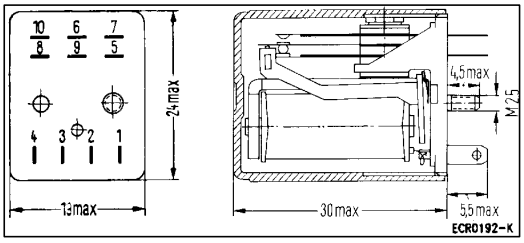
Temperature (deg C)	20	30	40	50	60	70
Min. Voltage multiplier	1	1.05	1.09	1.13	1.17	1.215
Max. Voltage multiplier	1	0.93	0.86	0.79	0.705	0.615

Accessories

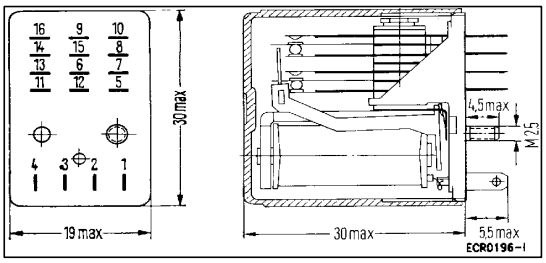
PCB terminal sockets	Size I	V23154-Z1001	**Hold down clips**	
	Size II	V23154-Z1002		
	Size III	V23154-Z1028	Size I	V23154-Z1021
Solder terminal sockets	Size I	V23154-Z1005	Size II	V23154-Z1022
	Size II	V23154-Z1006	Size III	V23154-Z1034
	Size III	V23154-Z1015		

Dimensions

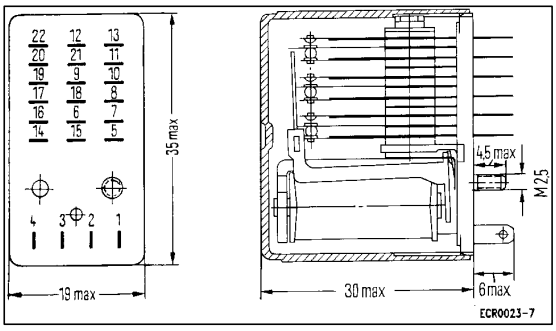
Plug-in types



Size I case - 2 changeover
V23154-C

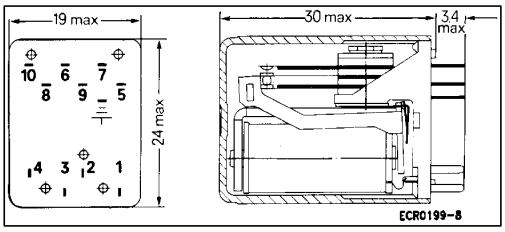


Size II case - 4 Changeover
& 2 Changeover heavy duty
V23154-D

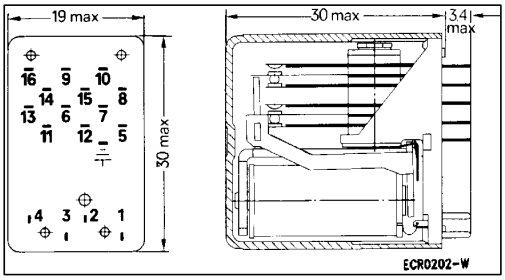


Size III case - 6 Changeover
& 4 Changeover heavy duty
V23054-E

PCB types

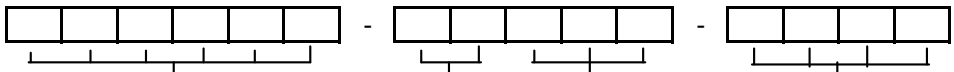


Size I case - 2 changeover
V23154-M



Size II case - 4 Changeover
& 2 Changeover heavy duty
V23154-N

Ordering Key



Basic type
V23154 = case size I or II
V23054 = case size III

Version
C0 = case size I, plug-in
D0 = case size II, plug-in
E0 = case size III, plug-in
M0 = case size I, pcb
M4 = case size I, pcb, without Earth pin
N0 = case size II, pcb
N4 = case size II, pcb, without Earth pin

Coil number
see table on page 2

Contacts

	material	duty	design	case size	poles
B104 =	Silver gold flashed	standard	single	I	2 c/o
B604 =	Gold F (AuAg8)	standard	single	I	2 c/o
C104 =	Silver gold flashed	standard	bifurcated	I	2 c/o
C404 =	Gold F (AuAg8)	standard	bifurcated	I	2 c/o
F104 =	Silver gold flashed	heavy duty	single	II	2 c/o
B110 =	Silver gold flashed	standard	single	II	4 c/o
B610 =	Gold F (AuAg8)	standard	single	II	4 c/o
C110 =	Silver gold flashed	standard	bifurcated	II	4 c/o
C410 =	Gold F (AuAg8)	standard	bifurcated	II	4 c/o
F110 =	Silver gold flashed	heavy duty	single	III	4 c/o
B133 =	Silver gold flashed	standard	single	III	6 c/o
B633 =	Gold F (AuAg8)	standard	single	III	6 c/o
C133 =	Silver gold flashed	standard	bifurcated	III	6 c/o
C433 =	Gold F (AuAg8)	standard	bifurcated	III	6 c/o

Ordering example: V23154-D0421-B110
Cradle relay size II, 4 c/o with a 700 Ohm 24Vdc coil and single silver gold flashed contacts

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