

- According to DIN EN 61810-1, DIN EN 61810-3 (Type A)
- With forcibly guided contacts
- Energy efficient; Low energy consumption, because of impulse control, no holding consumption
- Bistable
Mechanical latching of contact position
- Safe separation between all current circuits
- Both coils non-polarised, neutral
- Defined position when both coils are operated simultaneously
- Impulse operation, duty cycle possible (under fault condition)
- Wide temperature range
- As option with manual operation (mechanical indication)
- Washproof (only without manual operation)
- Height 15.8 mm

Applications

- Railway and signalling applications
- Automation
- Medical devices
- Radio- and telecontrol applications
- Fuel applications
- Process applications

Approvals and Markings



Technical Data

Relay type		OB 5623	OB 5623
1.0 Coil		interlocking	unlocking
1.1 Nominal voltage	DC V	6, 12, 24, 48, 60, 110 (others on request)	6; 12; 24; 48; 60, 110 ³⁾ (others on request)
1.2 Nominal consumption	W	approx. 1.2	approx. 0.7
1.4 Pulse length	ms		≥ 200
1.11 Voltage range	U _N		0.85 ... 1,2
2.0 Contacts			
2.1 Contact arrangement		4 NO / 4 NC (other on request)	
2.2 Contact material		AgSnO ₂ + 0.2 μm Au; AgNi + 0.2 μm Au, AgNi + 5 μm Au	
2.3 Rated insulation voltage	AC V	250	
Switching voltage min./max	V	AC/DC 10 / DC 250, AC 400 (AC/DC 2 V / 60 V) ⁷⁾	
2.4 Limiting continuous current I _{th}	A	7 x 8 ⁸⁾ (see Operating voltage limit curve)	
Switching current min./max	A	10 mA ⁶⁾ / 8 (2 mA / 0,3 A) ⁷⁾	
2.5 Switching power min./max	VA	0.1 ⁶⁾ / 2000 (10 mVA / 12 VA) ⁷⁾	
Switching power min./max	W	0.1 ⁶⁾ / 200 (10 mW / 12 W) ⁷⁾	
2.6 Switching capacity to IEC/EN 60947-5-1			
AC 15 ⁹⁾	AC V/A	NC: 230 / 3	NO: 230 / 2
AC 15 ²⁾	AC V/A	NC: 230 / 5	NO: 230 / 2
DC 13 ⁹⁾	DC V/A	NC: 24 / 2	NO: 24 / 2
to UL 508		B300 / R300	
2.7 Electrical life		at 1 s On, 4 s Off (see contacts service life)	
at AC 230 V, 8 A, cos φ = 1	switching cycles	> 10 ⁵ AgNi	
at DC 24 V 8 A ohmic	switching cycles	> 0.75 x 10 ⁵ AgNi	
2.8 Switching frequency max	switching cycles/s	2	
2.9 Response time ⁴⁾ / Release time ⁵⁾	ms	typically 20 / typically 12	
2.10 Contact force	cN	≥ 8	
2.14 Contact gap	mm	1.0 (> 0.5 ¹⁾)	
3.0 Other			
3.1 Mechanical life	switching cycles	10 x 10 ⁶	
3.2 Temperature range	°C	- 40 ... + 75	
3.3 Degree of protection, housing		Solder line proof RT II as option wash proof RT III (without manual operation)	
3.4 Test procedure		A (group mounting)	
3.5 Vibration resistance		10 ... 85 Hz; 0.35 mm amplitude; 4 g max. IEC/EN 60068-2-6	
3.6 Climate resistance		40 / 075 / 04; A / B / D IEC/EN 60068-1	
3.7 Short circuit strength		1 kA / AC 250 V IEC/EN 60947-5-1 ^{2) 9)}	
SCPD / Fuse		NO contact: 10 A gG/gL / NC contact: 6 A gG/gL IEC/EN 60269-1 ^{2) 9)}	

¹⁾ Over entire service life, even when under fault and at 1.1 x U_N
⁴⁾ Interlocking
⁷⁾ Typical values for AgNi-contacts + 5 μm Au

²⁾ Values for AgSnO₂-contacts
⁵⁾ Unlocking
⁸⁾ See notes

³⁾ Only impulse operation
⁶⁾ Typical values
⁹⁾ Values for AgNi-contacts

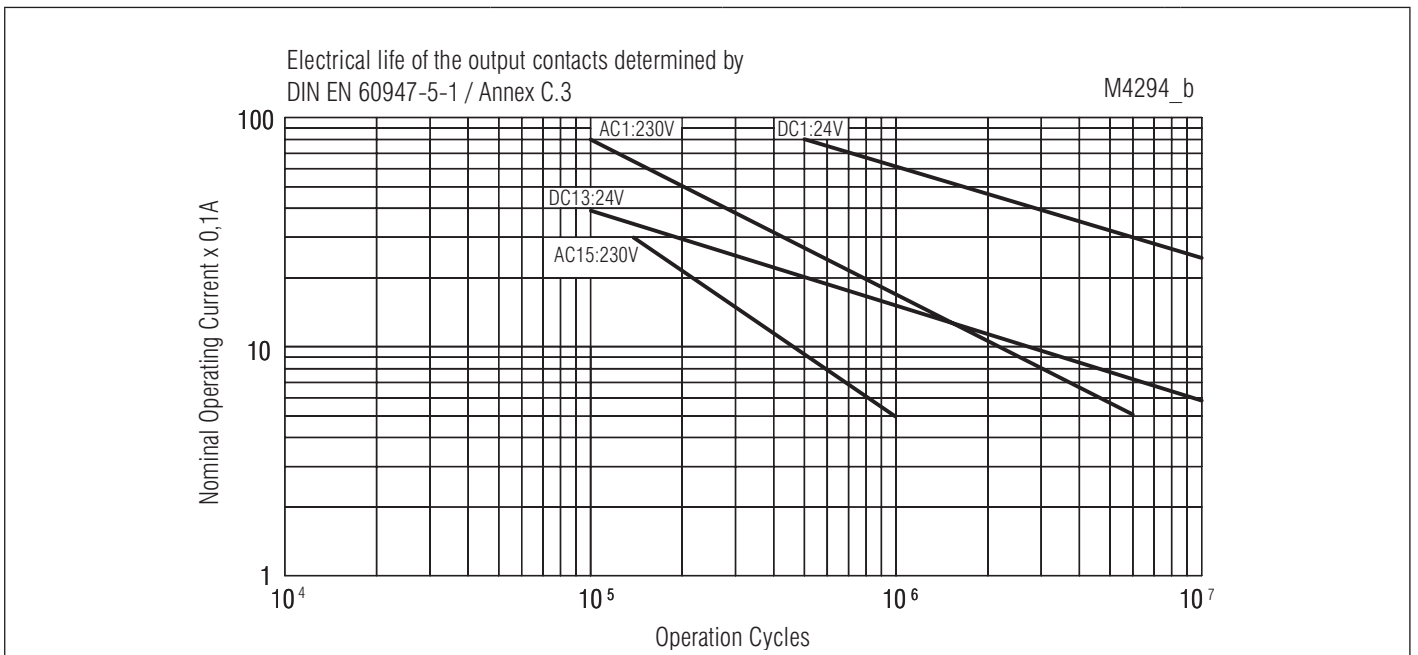
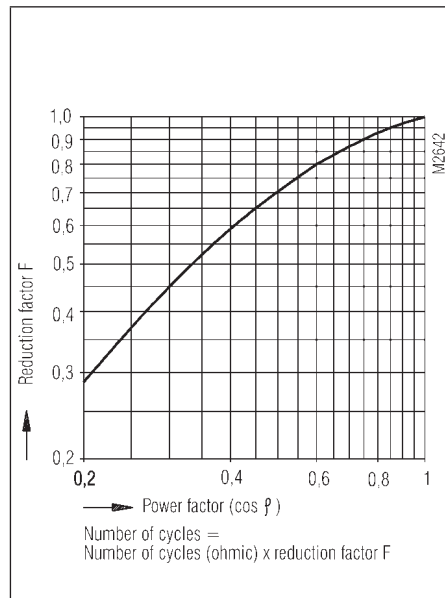
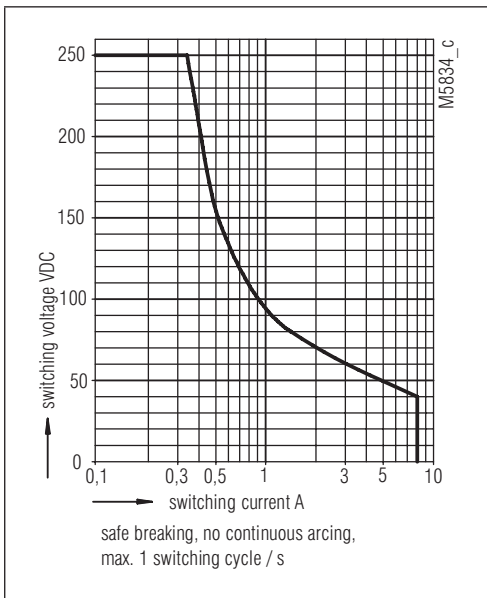
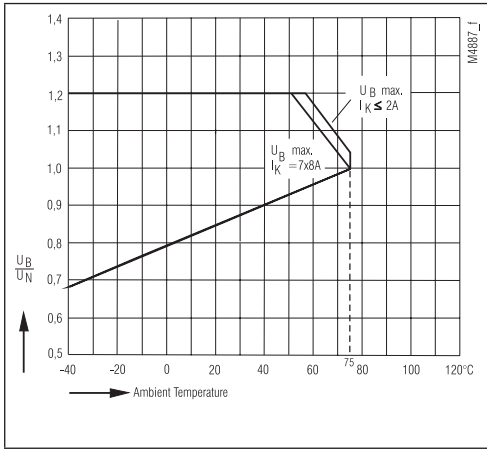
OB 5623 with manual operation				
		interlocking	unlocking	OB 5623
U_N (DCV)	Voltage range (DC V)	R_{Coil} at 20° C $\Omega \pm 10\%$	R_{Coil} at 20° C $\Omega \pm 10\%$.57
				4NO, 4NC
AgNi-contacts + 0.2 μ m Au				
6	5.1 ... 7.2	31	52	6001L
12	10.2 ... 14.4	120	200	6002L
24	20.4 ... 28.8	500	750	6003L
48	40.8 ... 57.6	2000	3600	6004L
60	51.0 ... 72.0	2880	4350	6005L
110 ³⁾	93.5 ... 132.0	10100	9216	6006L
AgNi-contacts + 5 μ m Au (gold plated contacts)				
6	5.1 ... 7.2	31	52	6041L
12	10.2 ... 14.4	120	200	6042L
24	20.4 ... 28.8	500	750	6043L
48	40.8 ... 57.6	2000	3600	6044L
60	51.0 ... 72.0	2880	4350	6045L
110 ³⁾	93.5 ... 132.0	10100	9216	6046L
AgSnO ₂ -contacts +0.2 μ m Au				
6	5.1 ... 7.2	31	52	6081L
12	10.2 ... 14.4	120	200	6082L
24	20.4 ... 28.8	500	750	6083L
48	40.8 ... 57.6	2000	3600	6084L
60	51.0 ... 72.0	2880	4350	6085L
110 ³⁾	93.5 ... 132.0	10100	9216	6086L

³⁾ only impulse operation

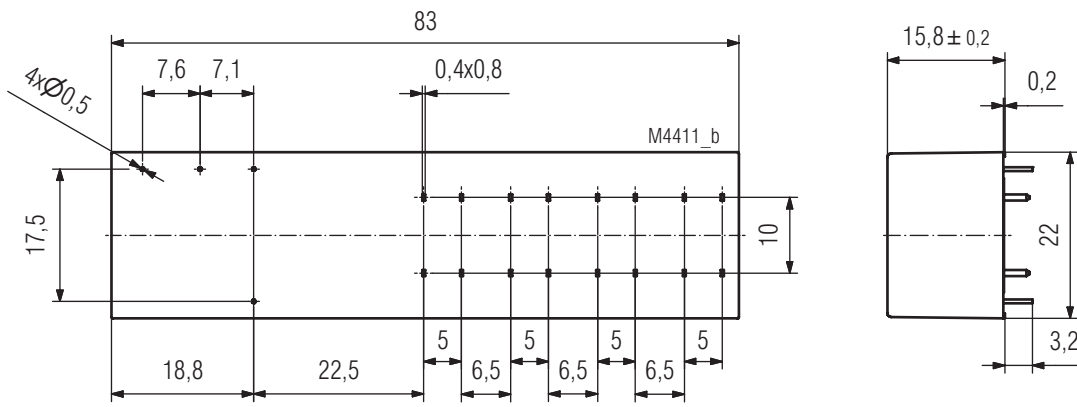
OB 5623 without manual operation				
		interlocking	unlocking	OB 5623
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				4NO, 4NC
AgNi-contacts + 0.2 μ m Au				
6	5.1 ... 7.2	31	52	6121W
12	10.2 ... 14.4	120	200	6122W
24	20.4 ... 28.8	500	750	6123W
48	40.8 ... 57.6	2000	3600	6124W
60	51.0 ... 72.0	2880	4350	6125W
110 ³⁾	93.5 ... 132.0	10100	9216	6126W
AgNi-contacts + 5 μ m Au (gold plated contacts)				
6	5.1 ... 7.2	31	52	6161W
12	10.2 ... 14.4	120	200	6162W
24	20.4 ... 28.8	500	750	6163W
48	40.8 ... 57.6	2000	3600	6164W
60	51.0 ... 72.0	2880	4350	6165W
110 ³⁾	93.5 ... 132.0	10100	9216	6166W
AgSnO ₂ -contacts + 0.2 μ m Au				
6	5.1 ... 7.2	31	52	6201W
12	10.2 ... 14.4	120	200	6202W
24	20.4 ... 28.8	500	750	6203W
48	40.8 ... 57.6	2000	3600	6204W
60	51.0 ... 72.0	2880	4350	6205W
110 ³⁾	93.5 ... 132.0	10100	9216	6206W

³⁾ only impulse operation

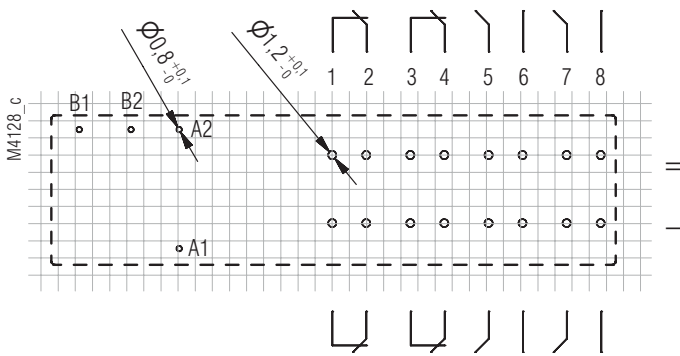
Characteristics



Pin configuration L1 / W1



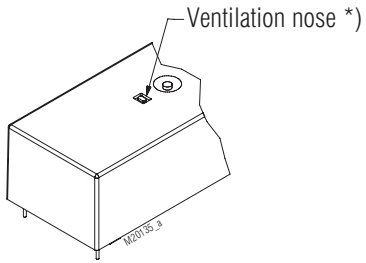
Pin configuration L1 / W1
Drilling plan (solder side)



A: interlocking; B: unlocking

OB5623.57/___L1 4S/4Ö
OB5623.57/___W1 4S/4Ö

Connection for basic grid dimensions 2.50 mm as well as 2.54 mm according to IEC/EN 60 097, IEC 60 326 average



*) When using the maximum switching capacity it is recommended to open the relay without manual operation at the indicated position.