



**Mini contactors B6/4 kW;  
B7/5.5 kW**

**Mini contactor relays K..**

**Compact reversing contactors VB..**

**Thermal overload relay T7DU**

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## Coil voltages for mini contactors

**B6, B7, VB6(A), VB7(A), BC6, BC7, VBC6(A), VBC7(A), K6, KC6.**

AC		DC	
40-450 Hz	Code number	DC	Code number
V ①	☆ .. ☆	V	☆ .. ☆
24	0 .. 1	12	0 .. 7
42	0 .. 2	24	0 .. 1
48	0 .. 3	42	0 .. 2
110 ... 127	8 .. 4	48	1 .. 6
220 ... 240	8 .. 0	60	0 .. 3
380 ... 415	8 .. 5	110 ... 125	0 .. 4
		220 ... 240	0 .. 5

① Coil voltage range: 0.85 ... 1.1 x U<sub>e</sub>

# Compact reversing contactors

## Ordering details

### Compact reversing contactors VB6, VB7 and VB6A, VB7A

The mechanical interlock between the two contactors mechanically prevents switch-on of one contactor for as long as the other contactor is still on and vice versa. If reversing contactors are switched over too quickly, this involves the risk of a phase-to-phase short-circuit. This will be the case if the arc of the contactor switching off has not yet been quenched when the contacts of the contactor switching on are already closed.

In order to avoid these risks, both contactor coils must be de-energised **for at least 50 ms** and must also be mutually interlocked electrically.

**The compact reversing contactors are offered with two different mechanical interlocks:**

- VB6 resp. VB7: normal interlock
- VB6A resp. VB7A: interlock with mechanical safety blocking function

The safety blocking function is triggered if the voltage is applied to the coil of the contactor to be switched on before the contactor to be switched off has dropped out.

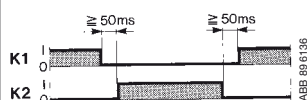
Safety blocking means that the contactor to be switched on is locked mechanically in OFF condition owing to the switch-on signal issued too early, and this state is retained until the blocking function is cancelled again as follows:

disconnect the voltage from the two contactor coils and then reconnect the voltage to the coil of the contactor to be switched on.

The contactor coils are designed for continuous operation when the contactor is de-energised, i.e. the coil is not damaged if the mechanical interlock prevents switch-on of the contactor with the coil voltage applied.



VB7-30-01



When the direction of rotation is changed, both contactor coils of VB6A, VB7A have to be deenergized for more than 50 ms.

Type	Order code See Page 3 for adding code suffixes to the order code	Auxiliary switches		Motor output AC2...3		Price per piece	Pack- ing unit piece	Weight per piece kg
		NO	NC	max. 220 V 240 V kW	380 V 440 V kW			

### Compact reversing contactors VB6, VBC6, with mechanical interlock

#### Reversing contactors, with screw connection, for AC operation, 3,5 VA

VB6-30-10	GJL 121 1901 R ☆ 10 ☆	1	0	2.2	4		5	0.340
VB6-30-01	GJL 121 1901 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with flat pin connection, for AC operation, 3,5 VA

VB6-30-10-F	GJL 121 1903 R ☆ 10 ☆	1	0	2.2	4		5	0.340
VB6-30-01-F	GJL 121 1903 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with soldering pins, for AC operation, 3,5 VA, I<sub>m</sub> < 8 A

VB6-30-10-P	GJL 121 1909 R ☆ 10 ☆	1	0	2.2	4		5	0.340
VB6-30-01-P	GJL 121 1909 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with screw connection, for DC operation, 3,5 W

VBC6-30-10	GJL 121 3901 R ☆ 10 ☆	1	0	2.2	4		5	0.340
VBC6-30-01	GJL 121 3901 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with flat pin connection, for DC operation, 3,5 W

VBC6-30-10-F	GJL 121 3903 R ☆ 10 ☆	1	0	2.2	4		5	0.340
VBC6-30-01-F	GJL 121 3903 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with soldering pins, for DC operation, 3,5 W, I<sub>m</sub> < 8 A

VBC6-30-10-P	GJL 121 3909 R ☆ 10 ☆	1	0	2.2	4		5	0.340
VBC6-30-01-P	GJL 121 3909 R ☆ 01 ☆	0	1				5	0.340

### Compact reversing contactors VB7, VBC7, with mechanical interlock

#### Reversing contactors, with screw connection, for AC operation, 3,5 VA

VB7-30-10	GJL 131 1901 R ☆ 10 ☆	1	0	3.0	5.5		5	0.340
VB7-30-01	GJL 131 1901 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with flat pin connection, for AC operation, 3,5 VA

VB7-30-10-F	GJL 131 1903 R ☆ 10 ☆	1	0	3.0	5.5		5	0.340
VB7-30-01-F	GJL 131 1903 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with soldering pins, for AC operation, 3,5 VA, I<sub>m</sub> < 8 A

VB7-30-10-P	GJL 131 1909 R ☆ 10 ☆	1	0	3.0	5.5		5	0.340
VB7-30-01-P	GJL 131 1909 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with screw connection, for DC operation, 3,5 W

VBC7-30-10	GJL 131 3901 R ☆ 10 ☆	1	0	3.0	5.5		5	0.340
VBC7-30-01	GJL 131 3901 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with flat pin connection, for DC operation, 3,5 W

VBC7-30-10-F	GJL 131 3903 R ☆ 10 ☆	1	0	3.0	5.5		5	0.340
VBC7-30-01-F	GJL 131 3903 R ☆ 01 ☆	0	1				5	0.340

#### Reversing contactors, with soldering pins, for DC operation, 3,5 W, I<sub>m</sub> < 8 A

VBC7-30-10-P	GJL 131 3909 R ☆ 10 ☆	1	0	3.0	5.5		5	0.340
VBC7-30-01-P	GJL 131 3909 R ☆ 01 ☆	0	1				5	0.340