

3RH, 3TH Contactor Relays

3RH11 coupling relays for switching auxiliary circuits, 4-pole

Application

DC operation

IEC 60947 and EN 60947 (VDE 0660)

The 3RH11 coupling relays for switching auxiliary circuits are tailored to the special requirements of working with electronic controls.




Function




No auxiliary switch blocks can be snapped onto 3RH11 coupling relays.

Coupling relays have a low power consumption, an extended magnetic coil operating range and an integrated surge suppressor for damping opening surges (exceptions: 3RH11 ...HB40 and 3RH11 ...MB4...OKT0).

Technical specifications

All technical specifications not mentioned in the table below are identical to those of the 3RH11 contactor relays (see page 3/132).
The size S00 coupling relays (3RH11) cannot be extended with auxiliary switch blocks.

Contactor type		3RH11 ...-HB40	3RH11 ...-JB40	3RH11 ...-KB40
Size		S00	S00	S00
Magnetic coil operating range		0.7 ... 1.25 x U_s		
Power consumption of the magnetic coil (for cold coil)				
Closing = closed				
at U_s = 17 V	W	1.2		
at U_s = 24 V	W	2.3		
at U_s = 30 V	W	3.6		
Permissible residual current of the electronics for 0 signal		< 10 mA x (24 V/ U_s)		
Overvoltage configuration of the magnetic coil		No overvoltage damping 	With diode 	With varistor 
Operating times				
• Closing at 17 V				
- ON-delay NO	ms	40 ... 120		
- OFF-delay NC	ms	30 ... 70		
• At 24 V				
- ON-delay NO	ms	30 ... 60		
- OFF-delay NC	ms	20 ... 40		
• At 30 V				
- ON-delay NO	ms	20 ... 50		
- OFF-delay NC	ms	15 ... 30		
• Closing at 17 ... 30 V				
- OFF-delay NO	ms	7 ... 17	40 ... 60	7 ... 17
- ON-delay NC	ms	22 ... 30	60 ... 70	22 ... 30
Upright mounting position		Request required		

Contactor type		3RH11 ...-MB40-0KT0	3RH11 ...-VB40	3RH11 ...-WB40
Size		S00	S00	S00
Magnetic coil operating range		0.85 ... 1.85 x U_s		
Power consumption of the magnetic coil (for cold coil)	W	1.4		
Closing = Closed at U_s = 24 V				
Permissible residual current of the electronics for 0 signal		< 8 mA x (24 V/ U_s)		
Overvoltage configuration of the magnetic coil		Diode, varistor or RC element, attachable 	Built-in diode 	Built-in varistor 
Operating times of the coupling relays				
• Closing at 20.5 V				
- OFF-delay	ms	110 ... 20		
- ON-delay	ms	120 ... 30		
• At 24 V				
- ON-delay NO	ms	25 ... 90		
- OFF-delay NC	ms	15 ... 80		
• At 44 V				
- OFF-delay	ms	50 ... 10		
- ON-delay	ms	60 ... 15		
• Closing at 17 ... 30 V				
- OFF-delay NO	ms	5 ... 20	20 ... 80	5 ... 20
- ON-delay NC	ms	10 ... 30	30 ... 90	10 ... 30
Upright mounting position		Request required		