




# 3RH11 Control Relays

Selection

## Control Relays & Accessories/Screw & Cage Clamp Terminals

Description	Ordering Information	Coil Voltage Codes††				
		ACV 60Hz	ACV 50Hz	Code	DCV	Code
3RH11 Control Relays are rated NEMA A600/P600 for control circuit switching.  4-Pole base units accept front mount contact blocks for a total of 8-poles.  Relays are available in both screw terminal and Cage Clamp versions.	<ul style="list-style-type: none"> <li>▶ Replace the †† in the relay catalog number with a coil code from the table.</li> <li>▶ General Information see page 581.</li> <li>▶ Technical Data see pages 592–594.</li> <li>▶ Dimensions see page 599.</li> </ul>	24	24	B0	12	A4
		120	110	K6	24	B4
		208	208	M2	48	W4
		240	220	P6	110	F4
		277	—	U6	230	P4
		480	—	V6	—	—
		600	—	T6	—	—

### Control relays and auxiliary contact blocks

Illustration	Contacts				Versions with screw terminals		Versions with Cage Clamp terminals	
	NO	NC	Early Make NO	Late Break NC	Catalog No	Price \$	Catalog No	Price \$
 <p><b>3RH11</b></p>	<b>Control relays with AC coil</b>							
	4	—	—	—	3RH1140-1A††0	72.	3RH1140-2A††0	77.
	3	1	—	—	3RH1131-1A††0	72.	3RH1131-2A††0	77.
	2	2	—	—	3RH1122-1A††0	72.	3RH1122-2A††0	77.
	<b>Control relays with DC coil</b>							
	4	—	—	—	3RH1140-1B††0	89.	3RH1140-2B††0	94.
	3	1	—	—	3RH1131-1B††0	89.	3RH1131-2B††0	94.
	2	2	—	—	3RH1122-1B††0	89.	3RH1122-2B††0	94.
	<b>4-pole auxiliary contact blocks, front mounted, according to EN50011<sup>①</sup></b>							
	4	—	—	—	3RH1911-1GA40	28.	3RH1911-2GA40	32.
	3	1	—	—	3RH1911-1GA31	28.	3RH1911-2GA31	32.
	2	2	—	—	3RH1911-1GA22	28.	3RH1911-2GA22	32.
1	3	—	—	3RH1911-1GA13	28.	3RH1911-2GA13	32.	
—	4	—	—	3RH1911-1GA04	28.	3RH1911-2GA04	32.	
<b>4-pole auxiliary contact blocks, front mounted, according to EN50005<sup>②</sup></b>								
4	—	—	—	3RH1911-1FA40	28.	3RH1911-2FA40	32.	
3	1	—	—	3RH1911-1FA31	28.	3RH1911-2FA31	32.	
2	2	—	—	3RH1911-1FA22	28.	3RH1911-2FA22	32.	
—	—	2	2	3RH1911-1FC22	42.	3RH1911-2FC22	46.	
<b>2-pole auxiliary contact blocks, front mounted</b>								
2	—	—	—	3RH1911-1FA20	14.	3RH1911-2FA20	16.	
1	1	—	—	3RH1911-1FA11	14.	3RH1911-2FA11	16.	
—	2	—	—	3RH1911-1FA02	14.	3RH1911-2FA02	16.	
—	—	1	1	3RH1911-1FB11	28.	3RH1911-2FB11	30.	
<b>1- or 2-pole auxiliary contact blocks, cable entry from above, front mounted<sup>③</sup></b>								
1	—	—	—	3RH1911-1AA10	10.	—	—	
—	1	—	—	3RH1911-1AA01	10.	—	—	
1	1	—	—	3RH1911-1LA11	14.	—	—	
2	—	—	—	3RH1911-1LA20	14.	—	—	
<b>1- or 2-pole auxiliary contact blocks, cable entry from below, front mounted<sup>③</sup></b>								
1	—	—	—	3RH1911-1BA10	10.	—	—	
—	1	—	—	3RH1911-1BA01	10.	—	—	
1	1	—	—	3RH1911-1MA11	14.	—	—	
2	—	—	—	3RH1911-1MA20	14.	—	—	
<b>Electronics compatible auxiliary contact blocks</b>								
1 <sup>③</sup>	1 <sup>③</sup>	—	—	3RH1911-1NF11	63.	3RH1911-2NF11	65.	
2 <sup>③</sup>	—	—	—	3RH1911-1NF20	63.	3RH1911-2NF20	65.	
—	2 <sup>③</sup>	—	—	3RH1911-1NF02	63.	3RH1911-2NF02	65.	
<b>Mechanical Latch relays with AC coil</b>								
4	—	—	—	3RH1440-1A††0	176.	—	—	
3	1	—	—	3RH1431-1A††0	176.	—	—	
2	2	—	—	3RH1422-1A††0	176.	—	—	
<b>Mechanical Latch relays with DC coil</b>								
4	—	—	—	3RH1440-1B††0	192.	—	—	
3	1	—	—	3RH1431-1B††0	192.	—	—	
2	2	—	—	3RH1422-1B††0	192.	—	—	

①Mount to 3RH1140 and 3RH1440 only.


②Mount to 3RH1140, 3RH1131, and 3RH1122 only.

③For use in dusty atmosphere and electronic circuits with rated operational currents  $I_{op}$ /AC-14 and DC-13 from 1 to 300 mA at 3 to 60V. Hard gold-plated contacts. No positively driven contacts.


## Interface Relays, Surge Suppressors/Screw and Cage Clamp Terminals

Description	Ordering Information
<p>Interface Control Relays can be directly operated by a 24V DC signal with only 2.4W of power. They are available in both screw terminal and cage clamp versions, with or without a coil surge suppressor built in.</p> <p>Surge suppressors snap onto the front of a control relay automatically making a connection with the relay coil.</p>	<ul style="list-style-type: none"> <li>▶ General Information see page 581.</li> <li>▶ Technical Data see pages 592–594.</li> <li>▶ Dimensions see page 599.</li> </ul>

### Interface Relays

Illustration	Auxiliary contacts		Type of built-in surge suppressor	Relays with screw terminals		Relays with Cage Clamp terminals	
	NO	NC		Catalog No	Price \$	Catalog No	Price \$
	<b>3RH11 with 24V DC low consumption coil</b>						
	4	—	none	3RH1140-1HB40	96.	3RH1140-2HB40	101.
	3	1	none	3RH1131-1HB40	96.	3RH1131-2HB40	101.
	2	2	none	3RH1122-1HB40	96.	3RH1122-2HB40	101.
	4	—	diode	3RH1140-1JB40	106.	3RH1140-2JB40	111.
	3	1	diode	3RH1131-1JB40	106.	3RH1131-2JB40	111.
	2	2	diode	3RH1122-1JB40	106.	3RH1122-2JB40	111.
	4	—	varistor	3RH1140-1KB40	106.	3RH1140-2KB40	111.
	3	1	varistor	3RH1131-1KB40	106.	3RH1131-2KB40	111.
	2	2	varistor	3RH1122-1KB40	106.	3RH1122-2KB40	111.

### Surge Suppressors for 3RH11 relays

Illustration	Type of Device	Rated Voltage $U_s$ (other voltages available)		Power Consumption of LED at $U_s$ mW	Catalog No	Price \$
		AC volts	DC volts			
	<b>Surge suppressors without LED</b>					
	Varistor	24–48	24–70	—	3RT1916-1BB00	10.
		48–127	—	—	3RT1916-1BC00	10.
		127–240	150–250	—	3RT1916-1BD00	10.
		240–400	—	—	3RT1916-1BE00	10.
	RC-element	24–48	24–70	—	3RT1916-1CB00	10.
		48–127	—	—	3RT1916-1CC00	10.
		127–240	150–250	—	3RT1916-1CD00	10.
	Suppression diode	—	12–250	—	3RT1916-1DG00	10.
	Diode assembly (diode & Zener-diode) for DC operation, short break time	—	24–250	—	3RT1916-1EH00	12.
	<b>Surge suppressors with LED</b>					
	Varistor	24–48	12–24	10–120	3RT1916-1JJ00	12.
		48–127	24–70	20–470	3RT1916-1JK00	12.
		127–240	—	50–700	3RT1916-1JL00	12.
		—	150–250	160–950	3RT1916-1JP00	12.
	Suppression diode	—	24–70	20–470	3RT1916-1LM00	12.
—		70–150	50–700	3RT1916-1LN00	12.	
—		150–250	160–950	3RT1916-1LP00	12.	




# 3RH11 Control Relays

Selection



## Relay Mountable Timing Relays & Relay Timing Modules/Screw Connection

Description	Ordering Information
<p>Both relay mountable timing relays and relay timing modules snap onto the front of a control relay automatically making a connection with the relay coil.</p> <p>For a detailed description of their functions see pages 243–244.</p>	<ul style="list-style-type: none"> <li>▶ General Information see page 581.</li> <li>▶ Technical Data see page 592.</li> <li>▶ Dimensions see page 599.</li> </ul>

### Relay mountable timing relays for 3RH11 relays

Illustration	Auxiliary contacts	Rated voltage $U_s$	Time setting range seconds	Catalog No	Price \$
	<b>ON-delay, built-in varistor</b>				
	1 NO + 1 NC timed	24V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2EJ11 3RT1916-2EJ21 3RT1916-2EJ31	95. 95. 95.
		100–127V AC	0.05–1 0.5–10 5–100	3RT1916-2EC11 3RT1916-2EC21 3RT1916-2EC31	95. 95. 95.
		200–240V AC	0.05–1 0.5–10 5–100	3RT1916-2ED11 3RT1916-2ED21 3RT1916-2ED31	95. 95. 95.
	<b>OFF-delay, built-in varistor, does not require auxiliary voltage supply</b>				
	1 NO + 1 NC timed	24V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2FJ11 3RT1916-2FJ21 3RT1916-2FJ31	100. 100. 100.
		100–127V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2FK11 3RT1916-2FK21 3RT1916-2FK31	100. 100. 100.
		200–240V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2FL11 3RT1916-2FL21 3RT1916-2FL31	100. 100. 100.

### Relay timing modules for 3RH11 relays

Illustration	Rated voltage $U_s$	Time setting range seconds	Catalog No	Price \$	
 <p>3RT1916-2C†††</p>  <p>3RT1916-2D†††</p>	<b>ON-delay, built-in varistor</b>				
	24–66V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2CG11 3RT1916-2CG21 3RT1916-2CG31	79. 79. 79.	
		90–240V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2CH11 3RT1916-2CH21 3RT1916-2CH31	79. 79. 79.
			<b>OFF-delay, built-in varistor, requires auxiliary voltage supply</b>		
	24–66V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2DG11 3RT1916-2DG21 3RT1916-2DG31	90. 90. 90.	
		90–240V AC/DC	0.05–1 0.5–10 5–100	3RT1916-2DH11 3RT1916-2DH21 3RT1916-2DH31	90. 90. 90.