

## General purpose relays



- Electromechanical and SSR (solid state relay) versions
- AC or DC coils
- Sockets with screw or spring terminals
- Relays with LED state indicator and mechanical actuator
- Parallel busbars and noise filters.

### General purpose relays

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**HR10**

- Slim relay with socket width of just 6.2mm
- 1 changeover contact
- Electromechanical version
- In 6A
- Sockets with built-in LED
- Sockets with screw or spring terminals
- Control voltage from 12 to 230VAC/DC
- Parallel busbars.



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**HR20**

- Slim relay with socket width of just 6.2mm
- 1 solid-state (SSR) output
- Output current 2A in AC and 4A in DC
- Sockets with built-in LED
- Sockets with screw or spring terminals
- Control voltage 24VDC
- Parallel busbars.



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**HR30**

- Miniature relay
- 1 or 2 changeover contacts
- In 10A (16A on PCB)
- Versions with AC or DC control
- Sockets with screw or spring terminals
- Parallel busbars.



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**HR50**

- Miniature relay
- 1 or 2 changeover contacts
- In 10A
- LED and mechanical state indicator
- Mechanical test actuator with latch option
- Versions with AC or DC control
- Sockets with screw or spring terminals
- Parallel busbars.



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**HR60**

- Industrial relay
- 2 or 4 changeover contacts
- In 7A or 5A
- LED and mechanical state indicator
- Mechanical test actuator with latch option
- Versions with AC or DC control.



Page 20-8

**HR70**

- 8-pin and 11-pin industrial relay
- 2 or 3 changeover contacts
- In 10A
- LED and mechanical state indicator
- Mechanical test actuator with latch option
- Versions with AC or DC control.

Relays	Code	Contacts	Rated current	Control voltage	Sockets				
SLIM RELAYS		HRA10 1C E024	1 C/O	6A	24VAC/DC	Version with relay assembled on socket			
		HRA10 1C E024S	1 C/O	6A	24VAC/DC				
		HR10 1C E012	1 C/O	6A	12VAC/DC				
		HR10 1C E024	1 C/O	6A	24VAC/DC				
		HR10 1C E060	1 C/O	6A	110...125VAC/DC 220...240VAC/DC				
		HR20 1A S024	1 SSR	2A (AC)	24VDC				
		HR20 1D S024	1 SSR	4A (DC)	24VDC				
	MINIATURE RELAYS		HR30 1C D012	1 C/O	16A	12VDC	Max 10A		
			HR30 1C D024	1 C/O	16A	24VDC			
			HR30 1C A024	1 C/O	16A	24VAC			
HR30 1C A110			1 C/O	16A	110VAC				
HR30 1C A230			1 C/O	16A	230VAC				
HR30 2C D012			2 C/O	8A	12VDC				
HR30 2C D024			2 C/O	8A	24VDC				
HR30 2C A024			2 C/O	8A	24VAC				
HR30 2C A110			2 C/O	8A	110VAC				
HR30 2C A230			2 C/O	8A	230VAC				
MINIATURE RELAYS WITH LED STATE INDICATOR AND MECHANICAL ACTUATOR				HR50 1C D012	1 C/O	16A		12VDC	
				HR50 1C D024	1 C/O	16A		24VDC	
				HR50 1C D048	1 C/O	16A		48VDC	
				HR50 1C D110	1 C/O	16A		110VDC	
	HR50 1C A024	1 C/O		16A	24VAC				
	HR50 1C A110	1 C/O		16A	110VAC				
	HR50 1C A230	1 C/O		16A	230VAC				
	HR50 2C D012	2 C/O		8A	12VDC				
	HR50 2C D024	2 C/O		8A	24VDC				
	HR50 2C D048	2 C/O		8A	48VDC				
	HR50 2C D110	2 C/O		8A	110VDC				
	HR50 2C A024	2 C/O		8A	24VAC				
	HR50 2C A110	2 C/O		8A	110VAC				
	HR50 2C A230	2 C/O		8A	230VAC				
INDUSTRIAL RELAYS WITH LED STATE INDICATOR AND MECHANICAL ACTUATOR		HR60 2C D012	2 C/O	7A	12VDC				
		HR60 2C D024	2 C/O	7A	24VDC				
		HR60 2C A024	2 C/O	7A	24VAC				
		HR60 2C A110	2 C/O	7A	110VAC				
		HR60 2C A230	2 C/O	7A	230VAC				
		HR60 4C D012	4 C/O	5A	12VDC				
		HR60 4C D024	4 C/O	5A	24VDC				
		HR60 4C A024	4 C/O	5A	24VAC				
		HR60 4C A110	4 C/O	5A	110VAC				
		HR60 4C A230	4 C/O	5A	230VAC				
8-PIN AND 11-PIN INDUSTRIAL RELAYS WITH LED STATE INDICATOR AND MECHANICAL ACTUATOR		HR70 2C D024	2 C/O	10A	24VDC	8-pin			
		HR70 2C D110	2 C/O	10A	110VDC				
		HR70 2C A024	2 C/O	10A	24VAC				
		HR70 2C A110	2 C/O	10A	110VAC				
		HR70 2C A230	2 C/O	10A	230VAC				
		HR7X S1	HR7X S1	Screw terminals.					
			11-pin	HR70 3C D024	3 C/O	10A	24VDC		
				HR70 3C D110	3 C/O	10A	110VDC		
				HR70 3C A024	3 C/O	10A	24VAC		
				HR70 3C A110	3 C/O	10A	110VAC		
HR70 3C A230	3 C/O	10A		230VAC					
HR7X S2	HR7X S2	Screw terminals.							

Code	Retaining clips	Code	Marker tags	Code	Parallel busbars	Code	Noise filters
	Included in the socket	<b>HR1X 30</b> 		<b>HR1X 9020</b> (black) 	20 poles		
		<b>HR1X 3016</b> (strip with 16 plates) 		<b>HR1X 9120</b> (red) 	20 poles		

<b>HR3X 88</b> 							
		<b>HR5X 30</b> 		<b>HR5X 9008</b> (black) ⑤ 	8 poles	Resistor - Capacitor <b>HR6X 77024</b> (6...24VAC/DC) <b>HR6X 77230</b> (110...230VAC/DC)	
<b>HR5X 87</b> 						Diode + LED <b>HR6X 78024</b> (6...24VDC)	

<b>HR6X 88</b> 		<b>HR6X 30</b> 					
		<b>HR5X 30</b> (only for sockets with spring terminals) 					

<b>HR7X 87</b> 							
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- ① Final S in code indicates spring terminals.
- ② Voltage dependent on selected relay socket.
- ③ AC voltage only if linked to socket.
- ④ Rated current if the relay is soldered directly onto the board; with socket the maximum current is 10A.
- ⑤ Not suitable for sockets with spring terminals.

## Slim relays



HRA10...



HR10...



HR20...

Order code	Control voltage	Contacts	Rated current	Description	Qty per pkg
			[A]		no.

Slim electromechanical relays assembled on the socket.

**new**

<b>HRA10 1C E024</b>	24VAC/DC	1 C/O	6	Screw terminals	10
<b>HRA10 1C E024S</b>	24VAC/DC	1 C/O	6	Spring terminals	10

Slim electromechanical relays.

**new**

<b>HR10 1C E012</b>	12VDC	1 C/O	6	12VAC/DC control when on HR1XS024 or HR1XS024S socket	20
<b>HR10 1C E024</b>	24VDC	1 C/O	6	24VAC/DC control when on HR1XS024 or HR1XS024S socket	20

<b>HR10 1C E060</b>	60VDC	1 C/O	6	110...125VAC/DC control when on HR1XS110 or HR1XS110S socket. 220...240VAC/DC control when on HR1XS230 or HR1XS230S socket	20
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Slim SSR (solid state relay) relays.

**new**

<b>HR20 1A S024</b>	24VDC	1 SSR	2	Output 24...280VAC	10
<b>HR20 1D S024</b>	24VDC	1 SSR	4	Output 3...28VDC	10

### General characteristics

Slim-type relays have a reduced width that permits considerable optimisation of space. All sockets are equipped with supply indicator LED and retain/release clips. The availability of electromechanical and solid-state (SSR) versions permits the installation of the most technically suitable solution in accordance with system requirements. The socket terminals can be screw or spring type.

The parallel busbars make for quick wiring.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Relay control voltage: 12, 24, 60VDC
- Relay control voltage + socket: 12, 24, 110...125, 220...240VAC/DC
- Max controllable power in AC-1: 1500W
- Max controllable power in AC-15: 360VA.

### Certifications and compliance

Certifications obtained: cURus, EAC, VDE for electromechanical relay, cURus, TÜV for SSR relay. Compliant with standards: IEC/EN61810 for electromechanical relays, IEC/EN62314 for SSR.

## Sockets



HR1X S...



Order code	Control voltage	Terminals	Description	Qty per pkg
	AC/DC			no.

Sockets for relays.

**new**

<b>HR1X S024</b>	12...24V	Screw	Use with relay HR1010E012, HR1010E024 and HR20...	10
<b>HR1X S110</b>	110...125V	Screw	Use with relay HR1010E060	10
<b>HR1X S230</b>	220...240V	Screw	Use with relay HR1010E060	10
<b>HR1X S024S</b>	12...24V	Spring	Use with relay HR1010E012, HR1010E024 and HR20...	10
<b>HR1X S110S</b>	110...125V	Spring	Use with relay HR1010E060	10
<b>HR1X S230S</b>	220...240V	Spring	Use with relay HR1010E060	10

### General characteristics

HR1X.. sockets are equipped with supply indicator LED and retain/release clips. The socket terminals can be screw or spring type. Parallel busbars can be fitted to the sockets, for quick wiring. These busbars plug in, on both the screw and spring sockets, leaving the cable entry terminals free.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Relay control voltage: 12, 24, 60VDC
- Relay control voltage + socket: 12, 24, 110...125, 220...240VAC/DC
- Green indication LED
- Fitting on DIN rail.

### Certifications and compliance

Certifications obtained: cURus, CSA, EAC. Compliant with standards: IEC/EN61810.

## Accessories



HR1X 30...



HR1X 9020



HR1X 9120

Order code	Description	Qty per pkg
		no.
<b>HR1X 30</b>	Marker tags	100
<b>HR1X 3016</b>	Marker tags - strip with 16 plates	20
<b>HR1X 9020</b>	20-pole parallel busbar - black	10
<b>HR1X 9120</b>	20-pole parallel busbar - red	10

**new**

## Miniature relays



HR30...

**new**

Order code	Control voltage	Contacts	Rated current	Description	Qty per pkg
			[A]		no.
Miniature relays.					
HR30 1C D012	12VDC	1 C/O	16	Fitting on socket HR5XS2... (max 10A)	20
HR30 1C D024	24VDC	1 C/O	16	Fitting on socket HR5XS2... (max 10A)	20
HR30 1C A024	24VAC	1 C/O	16	Fitting on socket HR5XS2... (max 10A)	20
HR30 1C A110	110/120VAC	1 C/O	16	Fitting on socket HR5XS2... (max 10A)	20
HR30 1C A230	230VAC	1 C/O	16	Fitting on socket HR5XS2... (max 10A)	20
HR30 2C D012	12VDC	2 C/O	8	Fitting on socket HR5XS2...	20
HR30 2C D024	24VDC	2 C/O	8	Fitting on socket HR5XS2...	20
HR30 2C A024	24VAC	2 C/O	8	Fitting on socket HR5XS2...	20
HR30 2C A110	110VAC	2 C/O	8	Fitting on socket HR5XS2...	20
HR30 2C A230	230VAC	2 C/O	8	Fitting on socket HR5XS2...	20

① Rated current if the relay is soldered directly onto the board; with socket the maximum current is 10A.

### General characteristics

Miniature relays have compact dimensions but high functional performance. It's the ideal device for those looking for a cost-effective solution without compromising performance.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Relay control voltage: 12 and 24VDC - 24, 110 and 230VAC, 50/60Hz
- Max controllable power in AC-1 (1C/2C): 4000/2000W
- Max controllable power in AC-15 (1C/2C): 300/150VA
- Maximum current (1C/2C): 16A/10A.

### Certifications and compliance

Certifications obtained: cURus, EAC, VDE.  
Compliant with standards: IEC/EN61810.

## Sockets

**new**



HR5X S21 HR5X S22 HR5X S21S

Order code	Description	Qty per pkg
		no.

Sockets for relays (supplied without retain/release clip) for fitting on DIN rail or with screws.  
Terminal layout see page 20-10.

HR5X S21	Screw terminals, contact terminals all on upper side	10
HR5X S22	Screw terminals	10
HR5X S21S	Spring terminals	10

### General characteristics

HR5X... series sockets can have screw terminals or spring terminals for quick wiring. Screw terminals are available in 2 versions: with contact terminals separated from the coil terminals or with NC contact terminals near the coil terminals. Noise filters, parallel busbars and plates for wiring can be snap-fitted to the sockets.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Maximum current: 10A
- Terminal layout see page 20-10.

### Certifications and compliance

Certifications obtained: cURus, CSA, EAC.  
Compliant with standards: IEC/EN61810.

## Accessories

**new**



HR3X 88



HR5X 30



HR6X 78 024



HR5X 9008

Order code	Description	Qty per pkg
		no.
HR3X 88	Retain/release clip	20
HR5X 30	Marker tags	100
HR6X 78 024	Plug-in noise filters. 6...24VDC with LED	10
HR6X 77 024	Plug-in noise filters. 6...24VAC/DC	10
HR6X 77 230	Plug-in noise filters. 110...230VAC/DC	10
HR5X 9008	8-pole parallel busbar - black - for sockets with screw terminals	10

## Miniature relays with LED state indicator and mechanical actuator



HR50...

Order code	Control voltage	Contacts	Rated current	Description	Qty per pkg
			[A]		no.
Miniature relays with LED state indicator and mechanical actuator.					
HR50 1C D012	12VDC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
HR50 1C D024	24VDC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
HR50 1C D048	48VDC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
HR50 1C D110	110VDC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
HR50 1C A024	24VAC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
HR50 1C A110	110/120VAC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
<b>new</b> HR50 1C A230	230VAC	1 C/O	16 <sup>①</sup>	Fitting on socket HR5XS2... (max 10A)	10
HR50 2C D012	12VDC	2 C/O	8	Fitting on socket HR5XS2...	10
HR50 2C D024	24VDC	2 C/O	8	Fitting on socket HR5XS2...	10
HR50 2C D048	48VDC	2 C/O	8	Fitting on socket HR5XS2...	10
HR50 2C D0110	110VDC	2 C/O	8	Fitting on socket HR5XS2...	10
HR50 2C A024	24VAC	2 C/O	8	Fitting on socket HR5XS2...	10
HR50 2C A110	110/120VAC	2 C/O	8	Fitting on socket HR5XS2...	10
HR50 2C A230	230VAC	2 C/O	8	Fitting on socket HR5XS2...	10

① Rated current if the relay is soldered directly onto the board; with socket the maximum current is 10A.

### General characteristics

HR50 miniature relays have reduced dimensions and, in addition to the high electrical performance, are equipped with the following functions: LED to indicate voltage on the coil, mechanical contact state indicator and mechanical test actuator. The mechanical actuator is particularly useful for performing functional tests; it can also keep the relay closed continuously.

### Operational characteristics

- Rated insulation voltage: 250V (400V with pollution degree 2)
- Rated impulse withstand voltage: 10kV
- Relay control voltage: 12 and 24VDC - 24, 110 and 230VAC, 50/60Hz
- Max controllable power in AC-1 (1C/2C): 4000/2000W
- Max controllable power in AC-15: 150VA
- Maximum current (1C/2C): 16A/8A.

### Certifications and compliance

Certifications obtained: cURus, EAC, VDE.  
Compliant with standards: IEC/EN61810.

## Sockets

**new**



HR5X S21 HR5X S22 HR5X S21S

Order code	Description	Qty per pkg
		no.

Sockets for relays (supplied without retain/release clip), for fitting on DIN rail or with screws.  
Terminal layout see page 20-10.

HR5X S21	Screw terminals, contact terminals all on upper side	10
HR5X S22	Screw terminals	10
HR5X S21S	Spring terminals	10

### General characteristics

HR5X.. series sockets can have screw terminals or spring terminals for quick wiring. Screw terminals are available in 2 versions: with contact terminals separated from the coil terminals or with NC contact terminals near the coil terminals. Noise filters, parallel busbars and plates for wiring can be snap-fitted to the sockets.

### Operational characteristics

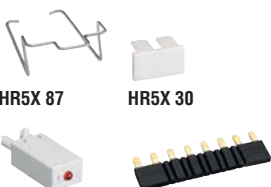
- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Maximum current: 10A
- Terminal layout see page 20-10.

### Certifications and compliance

Certifications obtained: cURus, GSA, EAC.  
Compliant with standards: IEC/EN61810.

## Accessories

**new**



HR5X 87 HR5X 30

HR6X 78 024 HR5X 9008

Order code	Description	Qty per pkg
		no.
HR5X 87	Retain clip	20
HR5X 30	Marker tags	100
HR6X 78 024	Plug-in noise filters. 6...24VDC with LED	10
HR6X 77 024	Plug-in noise filters. 6...24VAC/DC (RC)	10
HR6X 77 230	Plug-in noise filters. 110...230VAC/DC (RC)	10
HR5X 9008	8-pole parallel busbar - black	10



## Industrial relays with LED state indicator and mechanical actuator



HR60...

**new**

Order code	Control voltage	Contacts	Rated current	Description	Qty per pkg
			[A]		no.
Industrial relays with LED state indicator and mechanical actuator.					
HR60 2C D012	12VDC	2 C/O	7	Fitting on socket HR6XS2...	10
HR60 2C D024	24VDC	2 C/O	7	Fitting on socket HR6XS2...	10
HR60 2C A024	24VAC	2 C/O	7	Fitting on socket HR6XS2...	10
HR60 2C A110	110/120VAC	2 C/O	7	Fitting on socket HR6XS2...	10
HR60 2C A230	230VAC	2 C/O	7	Fitting on socket HR6XS2...	10
HR60 4C D012	12VDC	4 C/O	5	Fitting on socket HR6XS4...	10
HR60 4C D024	24VDC	4 C/O	5	Fitting on socket HR6XS4...	10
HR60 4C A024	24VAC	4 C/O	5	Fitting on socket HR6XS4...	10
HR60 4C A110	110VAC	4 C/O	5	Fitting on socket HR6XS4...	10
HR60 4C A230	230VAC	4 C/O	5	Fitting on socket HR6XS4...	10

### General characteristics

HR60-type industrial relays are available in 2/4-changeover-contact versions. They are equipped with LEDs that indicate control voltage, a mechanical contact state indicator and a mechanical actuator. The actuator is particularly useful for performing functional tests; it can also keep the relay closed continuously.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Relay control voltage: 12 or 24VDC- 24, 110 and 230VAC, 50/60Hz
- Max controllable current in AC-1 (2C/4C): 7/5A
- Maximum current (2C/4C): 7A/5A.

### Certifications and compliance

Certifications obtained: cURus, EAC, VDE.  
Compliant with standards: IEC/EN61810.

## Sockets



HR6X S21

HR6X S41

**new**

Order code	Description	Qty per pkg
		no.
Sockets for relays (supplied without retain/release clip) for fitting on DIN rail or with screws. Terminal layout see page 20-10. For relays with 2 changeover contacts.		
HR6X S21	Screw terminals, contact terminals all on upper side	10
HR6X S22	Screw terminals	10
HR6X S21S	Spring terminals	10
For relays with 4 changeover contacts.		
HR6X S41	Screw terminals, contact terminals all on upper side	10
HR6X S42	Screw terminals	10
HR6X S41S	Spring terminals	10

### General characteristics

HR6X.. series sockets have screw terminals and are supplied in two versions for relays with 2 or 4 contacts. Noise filters and plates for writing can be plugged in to the sockets.  
They can be fixed on DIN rails or with screws.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Maximum current: 10A
- Terminal layout see page 20-10.

### Certifications and compliance

Certifications obtained: cURus, CSA, EAC.  
Compliant with standards: IEC/EN61810.



HR6X S42

HR6X S41S

## Accessories



HR6X 88



HR6X 30



HR6X 78 024

**new**

Order code	Description	Qty per pkg
		no.
HR6X 88	Retain/release clip	20
HR6X 30	Marker tag for sockets with screw terminals	100
HR6X 30	Marker tag for sockets with spring terminals	100
HR6X 78 024	Plug-in noise filters. 6...24VDC with LED	10
HR6X 77 024	Plug-in noise filters. 6...24VAC/DC	10
HR6X 77 230	Plug-in noise filters. 110...230VAC/DC	10



## 8-pin and 11-pin industrial relays with LED state indicator and mechanical actuator



HR70...

**new**

Order code	Control voltage	Contacts	Rated current	Description	Qty per pkg
			[A]		no.

Industrial relays with LED state indicator and mechanical actuator. 8-pin type.

HR70 2C D024	24VDC	2 C/O	10	Fitting on socket HR7XS1	10
HR70 2C D110	110VDC	2 C/O	10	Fitting on socket HR7XS1	10
HR70 2C A024	24VAC	2 C/O	10	Fitting on socket HR7XS1	10
HR70 2C A110	110/120VAC	2 C/O	10	Fitting on socket HR7XS1	10
HR70 2C A230	230VAC	2 C/O	10	Fitting on socket HR7XS1	10

Industrial relays with LED state indicator and mechanical actuator. 11-pin type.

HR70 3C D024	24VDC	3 C/O	10	Fitting on socket HR7XS2	10
HR70 3C D110	110VDC	3 C/O	10	Fitting on socket HR7XS2	10
HR70 3C A024	24VAC	3 C/O	10	Fitting on socket HR7XS2	10
HR70 3C A110	110/120VAC	3 C/O	10	Fitting on socket HR7XS2	10
HR70 3C A230	230VAC	3 C/O	10	Fitting on socket HR7XS2	10

**new**

### General characteristics

HR70-type industrial relays are available in 2/3-changeover-contact versions. They are equipped with LEDs that indicate control voltage, mechanical contact state indicator and mechanical actuator. The actuator is particularly useful for performing functional tests; it can also keep the relay closed continuously.

HR70 has high electrical endurance performance and lends itself to the most heavy-duty applications.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Relay control voltage: 24VDC- 24, 110 and 230VAC, 50/60Hz
- Maximum current: 10A.

### Certifications and compliance

Certifications obtained: cURus, EAC.  
Compliant with standards: IEC/EN61810.

## Sockets



HR7X S1



HR7X S2

**new**

Order code	Description	Qty per pkg
		no.

Sockets for relays (supplied without retaining clip), for fitting on DIN rail or with screws.

Terminal layout see page 20-11.

HR7X S1	8-pin for HR70 2C... Screw terminals	10
HR7X S2	11-pin for HR70 3C... Screw terminals	10

### General characteristics

HR7X.. series sockets have screw terminals and are supplied in two versions for relays with 2 or 3 contacts (8-pin – 11-pin). They can be fixed on DIN rails or with screws.

### Operational characteristics

- Rated insulation voltage: 250V
- Rated impulse withstand voltage: 4kV
- Maximum current: 10A.

### Certifications and compliance

Certifications obtained: cURus, CSA, EAC.  
Compliant with standards: IEC/EN61810.

## Accessories

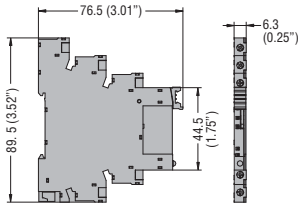


HR7X 87

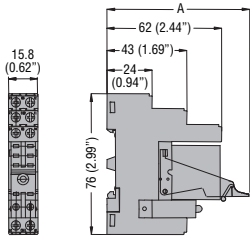
**new**

Order code	Description	Qty per pkg
		no.
HR7X 87	Metal retaining clip	20

### HRA10... - HR10... - HR20 with socket HR1XS...

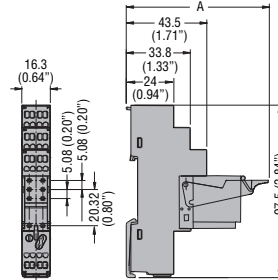


### HR30... - HR50... with socket HR5XS21



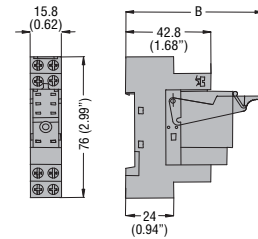
A: 65mm (2.56") con HR3X88  
75mm (2.95") con XR5X88

### HR30... - HR50... with socket HR5XS21S



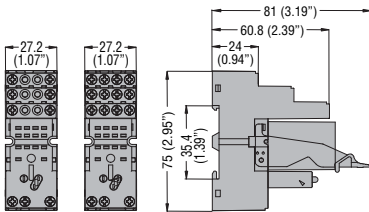
A: 65mm (2.56") con HR3X88  
75mm (2.95") con XR5X88

### HR30... - HR50... with socket HR5XS22

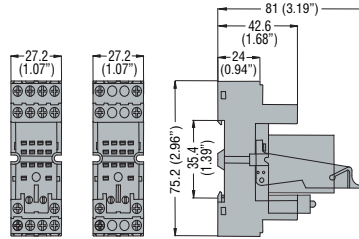


B: 72.5mm (2.85") con HR3X88  
82.5mm (3.25) con XR5X88

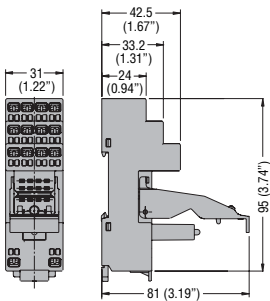
### HR60 4C... with socket HR6XS41 - HR6XS42



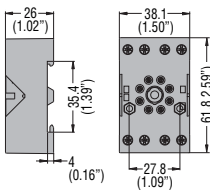
### HR60 2C... with socket HR6XS21 - HR6XS22



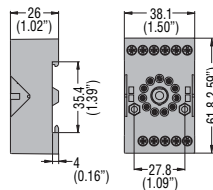
### HR60 2C... - HR60 4C... with socket HR6XS21S - HR6XS41S



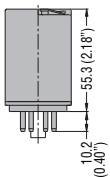
### HR7XS1



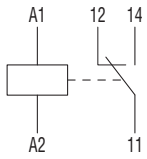
### HR7XS2



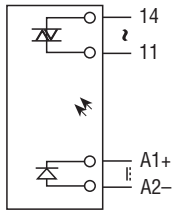
### HR70 2C... - HX70 3C...



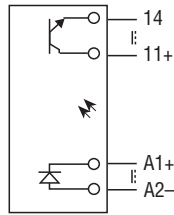
**HR101C..., HRA101C...**



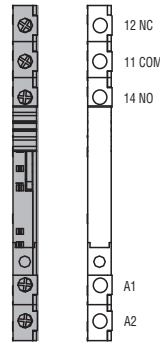
**HRA201A...**



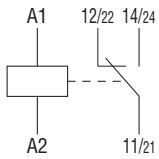
**HRA201D...**



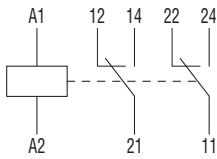
**HR1XS...**



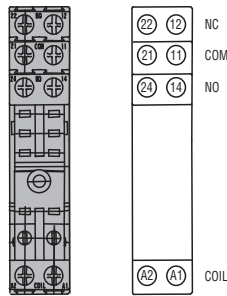
**HR301C...**



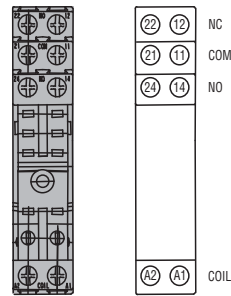
**HR302C...**



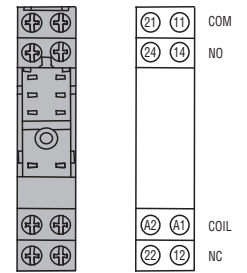
**HR5XS21**



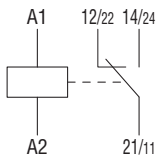
**HR5XS21S**



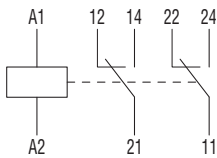
**HR5XS22**



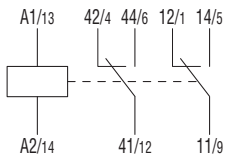
**HR501C...**



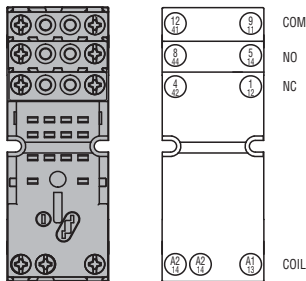
**HR502C...**



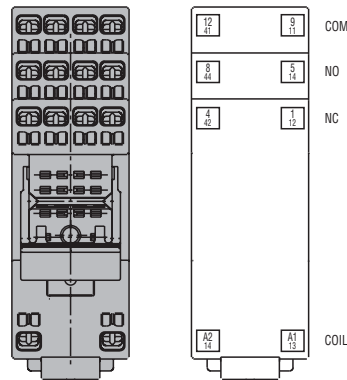
**HR602C...**



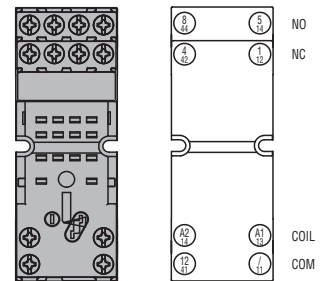
**HR6XS21**



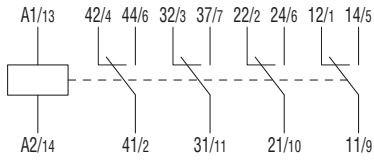
**HR6XS21S**



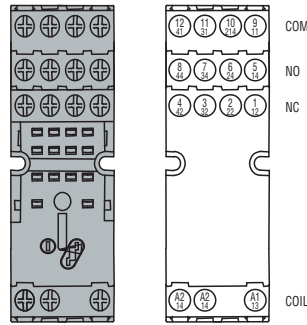
**HR6XS22**



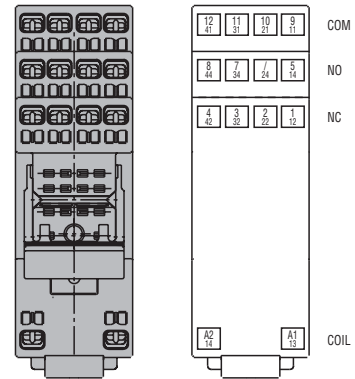
**HR604C...**



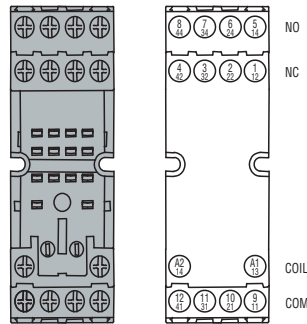
**HR6XS41**



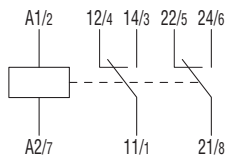
**HR6XS41S**



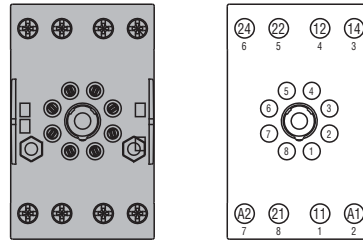
**HR6XS42**



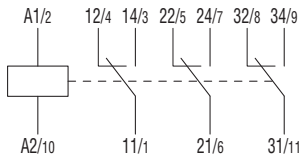
**HR702C...**



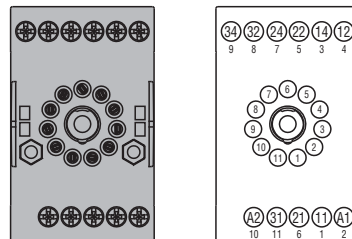
**HR7XS1**



**HR703C...**



**HR7XS2**



Type		HRA10... HR10...	HR20 1AS024	HR20 1DS024	HR30 1C..	HR30 2C..
<b>CHARACTERISTICS OF THE CONTACTS</b>						
Contact configuration		1 C/O	1 static	1 static	1 C/O	2 C/O
Rated insulation voltage $U_i$	VAC/DC	250	2500 (input/output)	2500 (input/output)	250	250
Rated impulse withstand voltage $U_{imp}$	kV	4	-	-	6	6
Conventional free air thermal current $I_{th}$	A	6	2	4	16 <sup>②</sup>	8
Maximum instantaneous current	A	20 (500ms)	80 (10ms)	48 (10ms)	60 <sup>①</sup>	20 <sup>①</sup>
Rated operating voltage AC1	VA	1500	④	⑤	4000	2000
Rated operating voltage AC15 (230 V AC)	VA	360	④	⑤	300 <sup>①</sup>	150 <sup>①</sup>
Single-phase motor control (230 V AC)	kW	0.186	④	⑤	0.4	0.2
Rated operating voltage DC1: 30/110/220 V	A	6 / 0.2 / 0.12	④	⑤	12 / 0.3 / 0.1	8 / 0.3 / 0.1
Minimum switching load	V / mA	5 / 100	24 / 0.1	3 / 0.02	5 / 100	
Contact impedance	mΩ	100	-	-	100	
Contact material		Ag/Ni	-	-	AgSnO2	
Max socket terminal tightening torque	Nm	0.5			0.6	
Socket screw tightening tool (cross / flat blade)		Phillips 0 / 3.5mm			Phillips 1 / 4.5mm <sup>③</sup>	
Wire section on sockets with screw terminals (min...max)	mm <sup>2</sup>	0.5...1.5			0.5...2.5	
	AWG	20...16			20...14	
<b>OPERATING TIMES</b>						
Closing	ms	≤8	10	0.3	10ms	
Opening	ms	≤4	10	0.3	5ms	
<b>ENDURANCE</b>						
Mechanical	Cycles	10,000,000	Theoretically infinite		10,000,000	
Electrical with load AC1	Cycles	30,000 <sup>①</sup>	Theoretically infinite		50,000 <sup>①</sup>	
<b>COIL CHARACTERISTICS</b>						
Average coil consumption AC at 20°C	VA	-	-	-	0.9	
Average coil consumption AC at 20°C	W	0.2/0.2	-	-	0.45	
Operating range:	closing	(% $U_n$ )	≥75	80...120	80...120	70...110 AC / 75...110 DC
	opening	(% $U_n$ )	≥5			20...55 AC / 10...30 DC
Maximum cycle frequency	cycles/h	10,000	>100,000	>100,000	3,600	
<b>AMBIENT CONDITIONS</b>						
Operating temperature	°C	-40...+70	-30...+80		-40...+85	
Storage temperature	°C	-40...+80	-30...+100		-40...+85	
Fitting position		Any				
<b>OTHER CHARACTERISTICS</b>						
Indicator LED		Yes (on the socket)			No	
Mechanical contact position indicator		No			No	
Mechanical test actuator		No			No	
Socket fixing		On 35mm DIN rail			On 35mm DIN rail and with screws	

- ① NO contact.
- ② Maximum socket current of 10A.
- ③ 2.5mm flat blade for versions with spring terminals.
- ④ 2A output 24...280VAC.
- ⑤ 4A output 3...28VDC.

# 20 General purpose relays

## Technical characteristics

	HR50 1C..	HR50 2C..	HR60 2C..	HR60 4C..	HR70 2C..	HR70 3C..
	1 C/O	2 C/O	2 C/O	4 C/O	2 C/O	3 C/O
	250		500		250	
	6		4		6	
	16Ⓣ	8	7	5	10	10
	20Ⓣ	10Ⓣ	-	-	-	-
	4000	2000	1750	1250	2500	2500
	150Ⓣ	150Ⓣ	150Ⓣ	150Ⓣ	500	500
	0.1	-	0.37	0.37	1.2	1.2
	12 / 0.3 / 0.1	8 / 0.3 / 0.1	12 / 0.3 / 0.1	8 / 0.3 / 0.1	10 / - / -	10 / - / -
	5 / 100		5 / 100		5 / 100	
	100		100		100	
	Ag/Ni		Ag/Ni		Ag/Ni	
	0.6		0.6		0.6	
	Phillips 1 / 4.5mmⓉ		Phillips 1 / 4.5mm		Phillips 1 / 4.5mm	
	0.5...2.5		0.5...2.5		0.5...2.5	
	20...14		20...14		20...14	
	15ms		25ms		30ms	
	15ms		25ms		30ms	
	10,000,000		20,000,000		5,000,000	
	50,000Ⓣ	20,000Ⓣ	100,000		100,000	
	1		1.7		3	
	0.4		1.1		1.5	
	70...110 AC / 75...110 DC		70...110 AC / 75...110 DC		70...110 AC / 75...110 DC	
	20...55 AC / 10...30 DC		20...55 AC / 10...30 DC		20...55 AC / 10...30 DC	
	3,600		3,600			
	-40...+85		-40...+70		-40...+55	
	-40...+85		-40...+80		-40...+70	
			Any			
	Yes		Yes		Yes	
	Yes		Yes		Yes	
	Yes		Yes		Yes	
	On 35mm DIN rail and with screws		On 35mm DIN rail and with screws		On 35mm DIN rail and with screws	



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