

3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design

Relay couplers

Application

AC and DC operation

EN 60947, EN 60664-1 and EN 50005.






In the coupling links in double-decker design, the connections are arranged on two levels; the units are extremely compact. Connection method: screw or spring-type terminals. For test purposes, versions are available with manual-0-automatic switches.

The input and output coupling links differ with regard to the positioning of the terminals and the LEDs. For equipment identification purposes, each coupling link has a blank labeling plate.

In accordance with the technical specifications of electronic systems, the coupling links have a lower power consumption.

Selection and ordering data

AC and DC operation · for snap-on mounting onto TH 35 standard mounting rail

	Rated control supply voltage U_s at AC 50/60 Hz	Contacts Version		Width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	V	NO	CO	mm							kg
3TX7 002 relay coupling links with screw terminals											
	Output coupling links					Screw terminals 					
	24 AC/DC	1	--	11,5	▶	3TX7 002-1AB00		1	1 unit	101	0,035
	24 AC/DC	1 ¹⁾	--	11,5	▶	3TX7 002-1AB02		1	1 unit	101	0,035
	24 AC/DC	--	1	17,5	▶	3TX7 002-1BB00		1	1 unit	101	0,045
	230 AC/DC	--	1	17,5	▶	3TX7 002-1BF00		1	1 unit	101	0,045
	24 AC/DC	2 ²⁾	--	22,5	▶	3TX7 002-1CB00		1	1 unit	101	0,061
	24 AC/DC	--	2 ^{1) 2)}	22,5	▶	3TX7 002-1FB02		1	1 unit	101	0,061
	Input coupling links										
	24 AC/DC	1	--	11,5	▶	3TX7 002-2AB00		1	1 unit	101	0,035
	110 AC/DC	1	--	11,5	▶	3TX7 002-2AE00		1	1 unit	101	0,035
	230 AC/DC ²⁾	1	--	11,5	▶	3TX7 002-2AF00		1	1 unit	101	0,035
	230 AC/DC ²⁾	1	--	11,5	▶	3TX7 002-2AF05		1	1 unit	101	0,035
	230 AC/DC	--	1 ^{1) 3)}	17,5	▶	3TX7 002-2BF02		1	1 unit	101	0,045
3TX7 003 relay coupling links with spring-type terminals											
	Output coupling links					Spring-type terminals 					
	24 AC/DC	1	--	11,5	▶	3TX7 003-1AB00		1	1 unit	101	0,035
	24 AC/DC	--	1	17,5	▶	3TX7 003-1BB00		1	1 unit	101	0,045
	24 AC/DC	2 ²⁾	--	22,5	▶	3TX7 003-1CB00		1	1 unit	101	0,055
	Input coupling links										
230 AC/DC	1	--	11,5	A	3TX7 003-2AF00		1	1 unit	101	0,035	

Note:

For coil voltages which are not listed, see SITOP power DC Power Supplies, e. g. 6EP1 331-2BA10 and 6EP1 731-2BA00, in "Power Supplies".

¹⁾ Hard gold-plated contacts.



²⁾ The same potential must be applied to the output contacts of the 2 NO/2 CO relays.



³⁾ Observe max. permissible cable length, (see Technical specifications, page 3/1).

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3TX7 Coupling Relays, Narrow Design

Relay couplers

Rated control supply voltage U_s at AC 50/60 Hz	Contacts Version	Manual-0-automatic switch for testing purposes	Width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
V	NO	CO	mm							kg	
3TX7 004 relay couplers with screw terminals											
Output coupling links					Screw terminals 						
 3TX7 004-1LB0.	24 AC/DC	--	1	Without	6,2	▶	3TX7 004-1LB00	1	1 unit	101	0,035
	24 AC/DC	--	1 ²⁾	Without	6,2	▶	3TX7 004-1LB02	1	1 unit	101	0,035
	24 AC/DC	--	1	with	12,5	▶	3TX7 004-1BB10	1	1 unit	101	0,052
	230 AC/DC	--	1	Without	6,2	▶	3TX7 004-1LF00	1	1 unit	101	0,035
	230 AC/DC	--	1	Without	12,5 ¹⁾	▶	3TX7 004-1BF05	1	1 unit	101	0,051
	24 AC/DC	1	--	Without	6,2	▶	3TX7 004-1MB00	1	1 unit	101	0,035
	230 AC/DC	1	--	Without	6,2	▶	3TX7 004-1MF00	1	1 unit	101	0,035
	Input coupling links										
	24 AC/DC	1 ²⁾	--	Without	6,2	▶	3TX7 004-2MB02	1	1 unit	101	0,035
	110 AC/DC	1 ²⁾	--	Without	6,2	▶	3TX7 004-2ME02	1	1 unit	101	0,035
230 AC/DC	1 ²⁾	--	Without	6,2	▶	3TX7 004-2MF02	1	1 unit	101	0,035	

3TX7 005 relay couplers with spring-type terminals											
Output coupling links					Spring-type terminals 						
 3TX7 005-2MB02	24 AC/DC	--	1	Without	6,2	▶	3TX7 005-1LB00	1	1 unit	101	0,035
	24 AC/DC	--	1 ²⁾	Without	6,2	▶	3TX7 005-1LB02	1	1 unit	101	0,035
	24 AC/DC ³⁾	--	1	Without	6,2	B	3TX7 005-1LN00	1	1 unit	101	0,035
	230 AC/DC	--	1	Without	6,2	▶	3TX7 005-1LF00	1	1 unit	101	0,035
	24 AC/DC	1	--	Without	6,2	▶	3TX7 005-1MB00	1	1 unit	101	0,035
	230 AC/DC	1	--	Without	6,2	▶	3TX7 005-1MF00	1	1 unit	101	0,035
	Input coupling links										
24 AC/DC	1 ²⁾	--	Without	6,2	C	3TX7 005-2MB02	1	1 unit	101	0,035	
230 AC/DC	1 ²⁾	--	Without	6,2	B	3TX7 005-2MF02	1	1 unit	101	0,035	

Note:

For replacement products, see 3RS18 coupling links with industrial housing or other 3TX7 0 products.

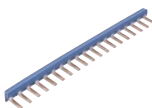

For coil voltages which are not listed, see SITOP power DC Power Supplies, e. g. 6EP1 331-2BA10 and 6EP1 731-2BA00, in "Power Supplies".

¹⁾ For long cables.

²⁾ Hard gold-plated contacts.

³⁾ Extended operating range 0.7 ... 1.25 x U_s .

Accessories

For coupling links	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
Type								kg
Connecting comb, blue								
 3TX7 004-8AA00	3TX7 004	For linking the same potentials 24 terminals, current carrying capacity for infeed max. 26 A Width 6,2 mm	▶	3TX7 004-8AA00	1	1 unit	101	0,017
	Connecting cable, blue							
 3TX7 004-8BA00	3TX7 002 and 3TX7 004 with screw terminals 3TX7 003 and 3TX7 005 with spring-type terminals	with infeed, blue 24 terminals, current carrying capacity for infeed max. 12 A length of cable between 2 terminals approx. 11 cm in each case	A	3TX7 004-8BA00	1	1 unit	101	0,040

3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design



Relay couplers with plug-in connection

Benefits

Advantages

- Plug-in base couplers with spring-type terminals and 6.2 mm width
- Fast exchange with permanent wiring (plug-in relay)
- The wire inlet and terminals can be reached from the front. This results in faster wiring time and wiring errors are prevented.
- Tested complete units → short mounting time
- Single relays available as components
- Linking of control supply voltage and control signals with 16-pole connecting comb
- Galvanic isolation plate for isolating different voltages for neighboring units
- Device variants with hard gold-plated contacts, hence high contact reliability
- 24 V DC version also available as variant with NO contact
- Integrated reverse polarity protection and EMC arc-suppression diode
- Clearly visible functional state of the relay coupler by yellow LED
- Protective separation according to EN 50178
- 230 V AC/DC versions available

Selection and ordering data

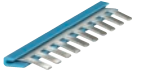

Rated control supply voltage U_s at AC 50/60 Hz	Contacts Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
V	NO CO							kg
Plug-in base couplers, 6.2 mm, complete with relay								
			Screw terminals 					
24 DC	1 --	A	3TX7 014-1AM00		1	5 units	101	0,035
24 DC	-- 1	A	3TX7 014-1BM00		1	5 units	101	0,035
24 AC/DC	-- 1	A	3TX7 014-1BB00		1	5 units	101	0,035
115 AC/DC	-- 1	A	3TX7 014-1BE00		1	5 units	101	0,045
230 AC/DC	-- 1	A	3TX7 014-1BF00		1	5 units	101	0,041
Plug-in base couplers, 6.2 mm, complete with relay and hard gold-plating¹⁾								
24 DC	-- 1	A	3TX7 014-1BM02		1	5 units	101	0,035
24 AC/DC	-- 1	A	3TX7 014-1BB02		1	5 units	101	0,035
115 AC/DC	-- 1	A	3TX7 014-1BE02		1	5 units	101	0,041
230 AC/DC	-- 1	A	3TX7 014-1BF02		1	5 units	101	0,035
Plug-in base couplers, 6.2 mm, complete with relay								
			Spring-type terminals 					
24 DC	1 --	A	3TX7 015-1AM00		1	5 units	101	0,045
24 DC	-- 1	A	3TX7 015-1BM00		1	5 units	101	0,045
24 AC/DC	-- 1	A	3TX7 015-1BB00		1	5 units	101	0,045
115 AC/DC	-- 1	A	3TX7 015-1BE00		1	5 units	101	0,045
230 AC/DC	-- 1	A	3TX7 015-1BF00		1	5 units	101	0,045
Plug-in base couplers, 6.2 mm, complete with relay and hard gold-plating¹⁾								
24 DC	-- 1	A	3TX7 015-1BM02		1	5 units	101	0,045
24 AC/DC	-- 1	A	3TX7 015-1BB02		1	5 units	101	0,040
115 AC/DC	-- 1	A	3TX7 015-1BE02		1	5 units	101	0,045
230 AC/DC	-- 1	A	3TX7 015-1BF02		1	5 units	101	0,045

¹⁾ The versions with hard gold-plated contacts feature high contact reliability (also for low currents) and are therefore especially suitable for steady-state inputs of programmable logic controllers.

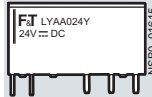
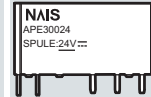
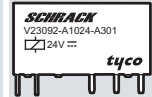
3TX7, 3RS18 Coupling Relays


3TX7 Coupling Relays, Narrow Design


Relay couplers with plug-in connection

For coupling links	Rated control supply voltage U_s AC 50/60 Hz V	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Replacement relay modules¹⁾, 6.2 mm, 1 changeover contact									
3TX7 014	12 DC	For complete unit		A	3TX7 014-7BQ00		1 20 units	101	0,035
		• 24 V AC/DC • 24 V DC, hard gold-plating	A	3TX7 014-7BQ02	1 20 units		101	0,035	
3TX7 014	24 DC	• 24 V DC	A	3TX7 014-7BM00		1 20 units	101	0,035	
		• 24 V DC, hard gold-plating	A	3TX7 014-7BM02		1 20 units	101	0,035	
3TX7 014	60 DC	• 115 V or 230 V AC/DC	A	3TX7 014-7BP00		1 20 units	101	0,035	
		• 115 V or 230 V AC/DC, hard gold-plated	A	3TX7 014-7BP02		1 20 units	101	0,035	
Connecting comb, blue									
 3TX7 014-7AA00	3TX7 014	--	For linking the same potentials 16 terminals, current carrying capacity for infeed max. 6 A	A	3TX7 014-7AA00		1 5 units	101	0,035
Galvanic isolation plates									
 3TX7 014-7CE00	3TX7 014 and 3TX7 015	--	--	A	3TX7 014-7CE00		1 10 units	101	0,035

¹⁾ The versions with hard gold-plated contacts feature high contact reliability (also for low currents) and are therefore especially suitable for steady-state inputs of programmable logic controllers.

3TX7 014-..	3TX7 015-..	NO (13/14)	CO (11/12/14)	3TX7 014-..	 FTR-LY..	 APE..	 V23092-..
..-1AM00 ¹⁾	24 V DC	NO		..-7BM00 ¹⁾	..CA024Y	..30024	..A1024-A301
..-1BM00 ¹⁾	24 V DC	CO		..-7BM00 ¹⁾	..CA024Y	..30024	..A1024-A301
..-1BB00 ¹⁾	24 V AC/DC	CO		..-7BQ00 ¹⁾	..CA012Y	..30012	..A1012-A301
..-1BE00 ¹⁾	115 V AC/DC	CO		..-7BP00 ¹⁾	--	..30060	..A1060-A301
..-1BF00 ¹⁾	230 V AC/DC	CO		..-7BP00 ¹⁾	--	..30060	..A1060-A301
..-1BM02 ²⁾	24 V DC	CO		..-7BM02 ²⁾	..CA024V	..30124	..A1024-A201
..-1BB02 ²⁾	24 V AC/DC	CO		..-7BQ02 ²⁾	..CA012V	..30112	..A1012-A201
..-1BE02 ²⁾	115 V AC/DC	CO		..-7BP02 ²⁾	--	..30160	..A1060-A201
..-1BF02 ²⁾	230 V AC/DC	CO		..-7BP02 ²⁾	--	..30160	..A1060-A201

¹⁾  = AgSn0

²⁾  = AgSn0+Au

3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design

Semiconductor couplers

Overview

AC and DC operation

EN 60664-1, EN 60947 and EN 50005; optocouplers: EN 60747-5, IEC 61131-2 (programmable controllers).


In the coupling links in double-decker design, the connections are arranged on two levels; the units are extremely compact. Connection method: screw or spring-type terminals. For test purposes, versions are available with manual-0-automatic switches.

The input and output coupling links differ with regard to the positioning of the terminals and the LEDs. For equipment identification purposes, each coupling link has a blank labeling plate.

In accordance with the technical specifications of electronic systems, the coupling links have a lower power consumption.

Selection and ordering data

AC and DC operation · for snap-on mounting onto TH 35 standard mounting rail

Rated control supply voltage U_s at AC 50/60 Hz	Switching voltage	Switching current	Width	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
V	Contacts V	A	mm		Order No.	Price per PU			kg
3TX7 002 semiconductor couplers with screw terminals, 1 transistor									
Output coupling links									
24 DC	48 ... 264 AC	1,8	12,5	▶	3TX7 002-3AB00	1	1 unit	101	0,033
	< 60 DC	1,5	11,5	▶	3TX7 002-3AB01	1	1 unit	101	0,035
Input coupling links									
24 AC/DC	< 30 DC	0,1	12,5	▶	3TX7 002-4AB00	1	1 unit	101	0,031
110 ... 240 AC	< 30 DC	0,1	12,5	▶	3TX7 002-4AG00	1	1 unit	101	0,035



3TX7 002

Rated control supply voltage U_s at AC 50/60 Hz	Switching voltage	Switching current	Manual-0-automatic switch for testing purposes	Width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
V	V	A		mm							kg
3TX7 004 semiconductor couplers with screw terminals											
Output coupling links											
24 DC	≤ 48 DC	0,5	Without	6,2	▶	3TX7 004-3AB04		1	1 unit	101	0,034
24 DC	11 ... 30 DC	1,5	Without	6,2	▶	3TX7 004-3PB54		1	1 unit	101	0,029
24 DC	≤ 30 DC	3	Without	6,2	▶	3TX7 004-3PB74		1	1 unit	101	0,032
110 ... 230 AC/DC	≤ 30 DC	3	Without	6,2	A	3TX7 004-3PG74		1	1 unit	101	0,033
24 DC	≤ 30 DC	5	Without	12,5	▶	3TX7 004-3AC04		1	1 unit	101	0,052
24 DC	≤ 30 DC	5	With	12,5	B	3TX7 004-3AC14		1	1 unit	101	0,061
24 DC	24 ... 250 AC	2	Without	12,5	▶	3TX7 004-3AC03		1	1 unit	101	0,060
Input coupling links											
110 ... 230 AC/DC	≤ 30 DC	0,1	Without	6,2	▶	3TX7 004-4PG24		1	1 unit	101	0,034



3TX7 004-3AB04

Rated control supply voltage U_s at AC 50/60 Hz	Switching voltage	Switching current	Manual-0-automatic switch for testing purposes	Width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
V	V	A		mm							kg
3TX7 005 semiconductor couplers with spring-type terminals											
Output coupling links											
24 DC	≤ 48 DC	0,5	Without	6,2	▶	3TX7 005-3AB04		1	1 unit	101	0,031
24 DC	11 ... 30 DC	1,5	Without	6,2	▶	3TX7 005-3PB54		1	1 unit	101	0,025
24 DC	≤ 30 DC	3	Without	6,2	A	3TX7 005-3PB74		1	1 unit	101	0,027
110 ... 230 AC/DC	≤ 30 DC	3	Without	6,2	A	3TX7 005-3PG74		1	1 unit	101	0,027
24 DC	≤ 30 DC	5	Without	12,5	▶	3TX7 005-3AC04		1	1 unit	101	0,047
24 DC	≤ 30 DC	5	With	12,5	C	3TX7 005-3AC14		1	1 unit	101	0,051
24 DC	24 ... 250 AC	2	Without	12,5	C	3TX7 005-3AC03		1	1 unit	101	0,056
Input coupling links											
110 ... 230 AC/DC	≤ 30 DC	0,1	Without	6,2	▶	3TX7 005-4PG24		1	1 unit	101	0,031

Note:

For replacement products, see 3RS18 coupling links with industrial housing or other 3TX7 0 products. For coil voltages which are not listed, see SITOP power DC Power Supplies, e. g. 6EP1 331-2BA10 and 6EP1 731-2BA00, in "Power Supplies".

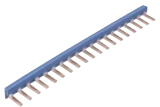

* You can order this quantity or a multiple thereof.

3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design

Semiconductor couplers

Accessories

For coupling links	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Type									
Connecting comb, blue									
 3TX7 004-8AA00	3TX7 004		For linking the same potentials ▶ 24 terminals, current carrying capacity for infeed max. 26 A Width 6,2 mm	3TX7 004-8AA00		1	1 unit	101	0,017
Connecting cable, blue									
 3TX7 004-8BA00	3TX7 002 and 3TX7 004 with screw terminals 3TX7 003 and 3TX7 005 with spring-type terminals	A	With infeed, blue 24 terminals, current carrying capacity for infeed max. 12 A length of cable between 2 terminals approx. 11 cm in each case	3TX7 004-8BA00		1	1 unit	101	0,040

* You can order this quantity or a multiple thereof.

3TX7, 3RS18 Coupling Relays

3RS18 Coupling Relays with Industrial Housing

Relay couplers

Overview




The new 3RS18 coupling relays are couplers in the well-proven standard 22.5 mm timing relay enclosure. The series comprises relays with 1, 2 and 3 changeover contacts with screw and spring-type connections for combined voltages and wide voltage ranges.

The relay coils are protected internally with noise suppression diodes.

Benefits

- Wide voltage range: One product for all voltages
- The industrial housing supports the same connection methods as the timing relay including spring-type connections, 2 wires can be clamped
- Versions with solid-state compatible outputs (hard gold-plating)
- Up to 3 changeover contacts with only 22.5 mm width.

Selection and ordering data

	Rated control supply voltage U_s at AC 50/60 Hz	Contacts Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
	V	CO							kg	
Coupling relays with industrial housing with screw terminals, 22.5 mm										
	Wide voltage range			Screw terminals 						
	24 ... 240 AC/DC	2	A	3RS18 00-1BW00		1	1 unit	101	0,143	
		3	A	3RS18 00-1HW00		1	1 unit	101	0,168	
		3 ¹⁾	A	3RS18 00-1HW01		1	1 unit	101	0,168	
	Combination voltage									
	24 AC/DC and 110 ... 120 AC	1	A	3RS18 00-1AQ00		1	1 unit	101	0,116	
		2	A	3RS18 00-1BQ00		1	1 unit	101	0,142	
		3	C	3RS18 00-1HQ00		1	1 unit	101	0,173	
		3 ¹⁾	C	3RS18 00-1HQ01		1	1 unit	101	0,173	
	24 AC/DC and 220 ... 240 AC	1	A	3RS18 00-1AP00		1	1 unit	101	0,112	
		2	A	3RS18 00-1BP00		1	1 unit	101	0,142	
		3	A	3RS18 00-1HP00		1	1 unit	101	0,166	
		3 ¹⁾	A	3RS18 00-1HP01		1	1 unit	101	0,170	
	Coupling relays with industrial housing with spring-type terminals, 22.5 mm									
	Wide voltage range			Spring-type terminals 						
24 ... 240 AC/DC	2	A	3RS18 00-2BW00		1	1 unit	101	0,128		
	3	A	3RS18 00-2HW00		1	1 unit	101	0,144		
	3 ¹⁾	C	3RS18 00-2HW01		1	1 unit	101	0,145		
Combination voltage										
24 AC/DC and 110 ... 120 AC	1	C	3RS18 00-2AQ00		1	1 unit	101	0,104		
	2	C	3RS18 00-2BQ00		1	1 unit	101	0,120		
	3	C	3RS18 00-2HQ00		1	1 unit	101	0,147		
	3 ¹⁾	C	3RS18 00-2HQ01		1	1 unit	101	0,147		
24 AC/DC and 220 ... 240 AC	1	A	3RS18 00-2AP00		1	1 unit	101	0,104		
	2	A	3RS18 00-2BP00		1	1 unit	101	0,122		
	3	A	3RS18 00-2HP00		1	1 unit	101	0,143		
	3 ¹⁾	C	3RS18 00-2HP01		1	1 unit	101	0,147		

¹⁾ Hard gold-plated contacts.