

# **SCHRACK RELAY SNR**

GENERAL PURPOSE RELAYS







SCHRACK SLIMLINE RELAY SNR SCHRACK RELAY PACKAGE SNR

**ACCESSORIES SLIM INTERFACE RELAY SNR** 



# **SCHRACK SLIMLINE RELAY SNR**

## **GENERAL PURPOSE RELAYS**

## **INTRODUCTION**

TE Connectivity (TE)'s Slimline Relay SNR with a width of 5 mm. Suitable for DIN rail socket (stronger coil terminal) available. One CO contact for 6A.

#### **FEATURES**

- 1 pole 6A
- · Only 5mm wide
- Sensitive coil 170mW
- Reinforced insulation (protection class II)
- Strong coil pins for DIN-rail socket
- · Allows high function/ packaging density
- Cadmium-free contacts, AgNi 90/10 for AC-loads

## **APPLICATIONS**

- Interface technology
- Programmable Logic Controllers (PLC's)
- Timers
- Centralized and decentralized heating control `

#### **APPROVALS**

- VDE Cert. No. 40010063
- UL E214025

Technical data of approved types on request.



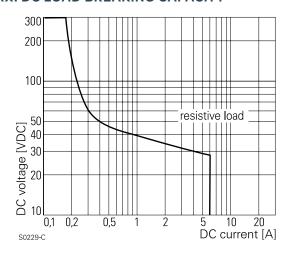




## **CONTACT DATA**

Contact arrangement	1 form	C (CO)
Rated voltage	250	VAC
Max. switching voltage	400	VAC
Rated current	6	SA
Limiting making current, max 4s, df 10%	10	)A
Breaking capacity max.	150	OVA
Contact material	AgSnO₂	AgSnO <sub>2</sub> gold plated
Min. recommended contact load	100mA, 12V	50mW
Frequency of operation, with/ without load	with/ 6/1200min <sup>-1</sup>	
Operate/release time max.	12/	5ms
Bounce time max., form A/form B	3/8	Bms

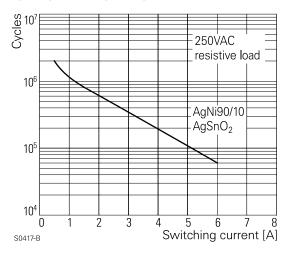
## MAX. DC LOAD BREAKING CAPACITY



#### **CONTACT RATINGS**

Туре	Contact	Load	Cycles
EC 61810			
V23092-****-A301	C (CO)	6A, 250VAC, cosφ=1, 85°C	5x10³
UL 61810-1 (UL508)			
V23092-****-A301	A/B	6A, 250VAC, general purpose, 85°C	6x10 <sup>3</sup>
V23092-****-A301	A/B (NO)	B300, 85°C	6x10 <sup>3</sup>
V23092-****-A301	A/B	R300, 85°C	6x10 <sup>3</sup>
EN60730-1			
V23092-***-A302	A (NO)	3A (1.5A), 250VAC, 85°C	100x10 <sup>3</sup>
V23092-***-A302	A (NO)	5A (1.5A), 250VAC, 85°C	10x10 <sup>3</sup>
Mechanical endurance, DC coil		10x10 <sup>6</sup> opera	tions

## **ELECTRICAL ENDURANCE**



## **SCHRACK Slimline Relay SNR**

General Purpose Relays

## **COIL DATA**

Coil voltage range	12 VDC to 60 VDC
Operative range, IEC 61810	2

## **COIL VERSIONS, DC COIL**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10% <sup>1)</sup>	Rated coil power mW
012	12	8.4	0.6	848	170
024	24	16.8	1.2	3390	170
048	48	33.6	2.4	106001)	217
060	60	42.0	3.0	205001)	176

<sup>1)</sup> Coil resistance ±15%.

All figures are given for coil without pre-energization, at ambient temperature  $\pm 23$  °C.

Other coil voltages on request.

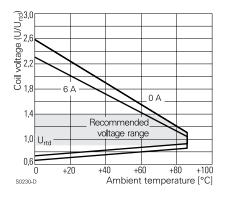
## **INSULATION DATA**

Initial dielectric strength	
between open contacts	1000V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Clearance/creepage	
between contact and coil	≥6/8mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI250

## **ACCESSORIES**

For details see datasheet Page 9

## **COIL OPERATING RANGE DC**

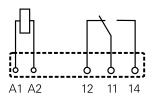


## **OTHER DATA**

Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/ rohssupportcenter	
Ambient temperature	-40 °C to +85 °C	
Category of environmen	tal protection	
IEC 61810	RTIII - wash tight	
Vibration resistance (fun	ctional)	
form A (NO) / form B (NC)	10/5 g	
Shock resistance (functional)		
form A (NO) / form B (NC)	10/5 g	
Shock resistance (destructive)	30 g	
Terminal type	THT, plug-in	
Mounting	Socket	
Weight	6 g	
Packaging unit	tube/20 pcs., box/1000 pcs.	
2) for flat pack version selective s	coldering is recommended	

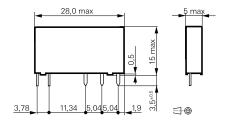
## **TERMINAL ASSIGNMENT**

1 form C contact (1 CO)

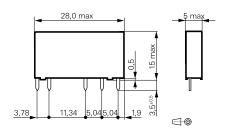


## **DIMENSIONS (Unit: mm)**

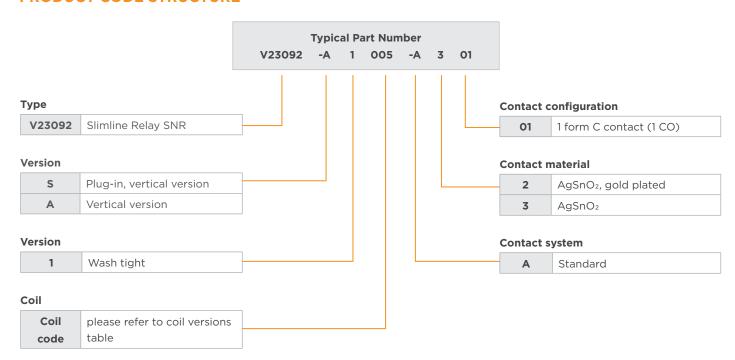
#### **Vertical version**



#### Version for DIN-rail socket



## PRODUCT CODE STRUCTURE



## **SCHRACK Slimline Relay SNR**

General Purpose Relays

## **PRODUCT INFORMATION**

Product code	Version	Contact arrangement	Contact material	Coil	Part number
V23092-S1012-A201			AgSnO <sub>2</sub> , gold plated	10) / D.C	1956024-1
V23092-S1012-A301			AgSnO <sub>2</sub>	12VDC	1956024-2
V23092-S1024-A201			AgSnO <sub>2</sub> , gold plated	0.4) /D.0	1956024-3
V23092-S1024-A301	Plug-in vertical		AgSnO <sub>2</sub>	24VDC	1956024-4
V23092-S1048-A201	version		AgSnO <sub>2</sub> , gold plated	40) (D.0	1956024-5
V23092-S1048-A301			AgSnO <sub>2</sub>	48VDC	1956024-6
V23092-S1060-A201			AgSnO <sub>2</sub> , gold plated	601/12.0	1956024-7
V23092-S1060-A301		1 form C	AgSnO <sub>2</sub>	60VDC	1956024-8
V23092-A1012-A201		(CO) contact	AgSnO <sub>2</sub> , gold plated	10) (5.0	1393236-4
V23092-A1012-A301			AgSnO <sub>2</sub>	12VDC	1393236-7
V23092-A1024-A201			AgSnO <sub>2</sub> , gold plated	0.4) /D.0	2-1393236-1
V23092-A1024-A301			AgSnO <sub>2</sub>	24VDC	2-1393236-4
V23092-A1048-A201	Vertical version		AgSnO <sub>2</sub> , gold plated	40.45.0	3-1393236-5
V23092-A1048-A301			AgSnO <sub>2</sub>	48VDC	3-1393236-7
V23092-A1060-A201			AgSnO <sub>2</sub> , gold plated	60) (D.O.	4-1393236-2
V23092-A1060-A301			AgSnO <sub>2</sub>	60VDC	4-1393236-3



# **SCHRACK RELAY PACKAGE SNR**

GENERAL PURPOSE RELAYS PRODUCT SETS

## **INTRODUCTION**

TE Connectivity (TE)'s Relay Package SNR consists of DIN rail sockets and relays, module width offering in 6.2mm, 1CO with 6A rated current. Highly reliable for increased package density on the DIN rail.

#### **FEATURES**

- Clear white printing
- Relay snaps in the socket
- Flexible snap on mount
- Insert funnel for pins
- Packing in compact 10pc. cardboard box

#### **APPLICATIONS**

- Interface technology
- Panel board
- · Mechanical engineering
- Plant control

#### **APPROVALS**

- Relay: VDE Cert. No. 40010063, cULus E214025
- Socket: cULus E224918

#### Note:

- 1. Technical data of approved types on request
- 2. For contact ratings see datasheet Slim interface Relay SNR







## **CONTACT DATA**

Contact configuration	1 (	CO
Contact set	single	contact
Type of interruption	Micro disc	connection
Rated voltage/ max. switching voltage AC	240/4	00VAC
Rated current	6	А
Maximum breaking capacity AC	1500 VA	
Limiting breaking capacity, max. 4 s, duty factor 10%	10A	
Contact material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub> gold plated
Minimum contact load	100mA, 12V	50mW
Rated frequency of operation with/without load	6/1200 min-1	
Operate/release time	max 12	2/5 ms
Bounce time NO/NC contact	max 3/8 ms	

#### **CONTACT RATINGS**

For contact ratings see datasheet Page 2

## **INSULATION**

Dielectric strength			
Coil-contact circuit	4000Vrms		
Open contact circuit	1000Vrms		
Clearance /creepage coil-contact circuit	≥ 6 / 8 mm		
Material group of insulation parts	IIIa		
Insulation to IEC 60664-1			
Type of insulation			
Coil-contact circuit	reinforced		
Open contact circuit	Micro disconnection		
Rated insulation voltage	250 V		
Pollution degree	3	2	
Rated voltage system	240 V	230 / 400 V	
Overvoltage category	III		

## **INPUT DATA**

Rated input voltage DC	12, 24 VDC, 230 VAC/VDC*
Operative range to IEC 61810	2

<sup>\*</sup> Version 230 VAC/VDC equipped with 60 VDC relay

## **COIL VERSIONS, AC COIL 50 Hz**

Coil code	Rated voltage VAC	Operate voltage 50Hz VAC	Release voltage 50Hz VAC	Coil resistance $\Omega$	Rated coil power 50Hz mVA
TPO	230	160.0	15.0	N/A	736

Other coil voltages on request.

## **OTHER DATA**

Mechanical endurance	10 x 10 <sup>6</sup> cycles
Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www. te.com/customersupport/ rohssupportcenter
Environment	
Ambient temperature	-40°C to +55°C

range	-40°C to +55°C	
Processing		
Terminals	screw	

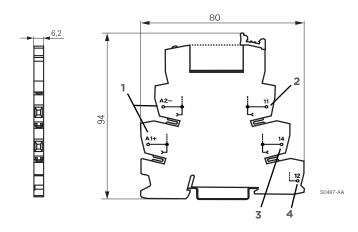
0.5 Nm		
0.6 Nm		
Wire cross section		
0.14 mm <sup>2</sup> to 2.5 mm <sup>2</sup>		
0.14 mm <sup>2</sup> to 2.5 mm <sup>2</sup>		
0.14 mm <sup>2</sup> to 2.5 mm <sup>2</sup>		

Insertion cycles	A (10)
Max. Insertion Force total	100 N
Mounting distance	≥ 0 mm, dense packing of sockets
Weight	32 g
Packaging unit	10 pcs

## **ACCESSORIES**

For details see datasheet Page 9

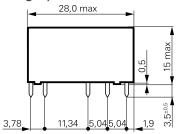
## **DIMENSIONS (Unit: mm)**



# Version with screw terminals

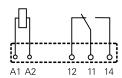
- 1. Coil terminal with polarity definition A1+, A2-, screw terminal.
- 2. NC terminal, screw terminal.
- 3. CO terminal, screw terminal.
- 4. NO terminal, screw terminal.

#### **Plug-in, Vertical Version**

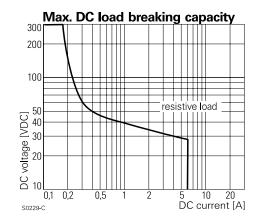


## **TERMINAL ASSIGNMENT**

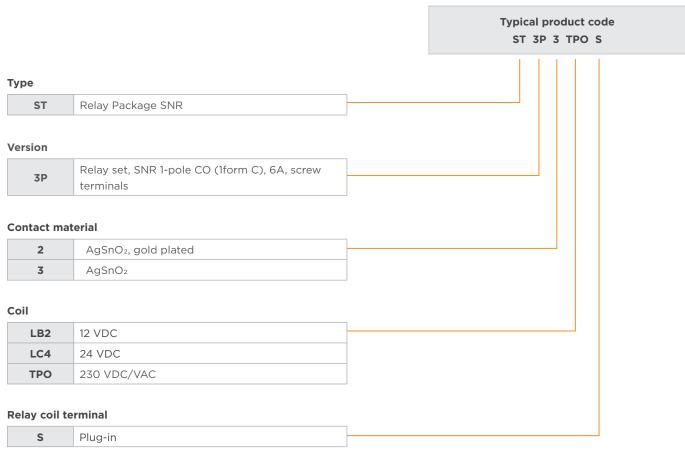
1 form C contact (1 CO)



## **GRAPH**



## PRODUCT CODE STRUCTURE



Other types on request

## **PRODUCT INFORMATION**

Product code	Socket	Terminals	Relay	Contacts	Coil	Part Number
ST3P2LC4S	ST3FLC4	Screw	V23092-S1024-A201	AgSnO2 gold pl.	24VDC	3-1416101-0
ST3P3LB2S	ST3FLC4	Screw	V23092-S1012-A301	AgSnO <sub>2</sub>	12VDC	3-1416101-1
ST3P3LC4S	ST3FLC4	Screw	V23092-S1024-A301	AgSnO <sub>2</sub>	24VDC	3-1416101-2
ST3P3TP0S	ST3FTP0	Screw	V23092-S1060-A301	AgSnO <sub>2</sub>	230VDC/VAC	3-1416101-4

#### Notes:

- 1. Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.
- 2. Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions.
- 3. Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.



# **ACCESSORIES SLIM INTERFACE RELAY SNR**

GENERAL PURPOSE RELAYS ACCESSORIES

## INTRODUCTION

TE Connectivity (TE)'s DIN rail socket with DC and AC version, screw terminals and LED indicator as standard. Accessories for the socket jumper bars with different color, marking tags.

#### **FEATURES**

- Jumper bars for interconnection
- Fully featured with LED and protection circuit
- Mounting on DIN-rail from top down
- Marking tags fit for use
- · Protection circuit

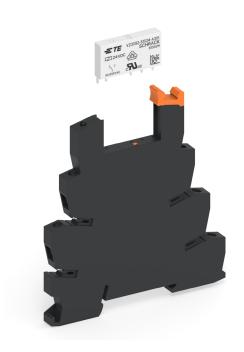
## **APPLICATIONS**

- Interface technology
- Panel board
- Mechanical engineering
- Plant control

### **APPROVALS**

cULus E224918





## **TECHNICAL DATA**

IECHNICAL DATA			
	ST	3F	
Rated voltage/Max. switching voltage AC	240/400 VAC		
Rated current	6	А	
Dielectric strength coil- contact circuit	4000 Vrms		
Clearance / creepage coil-contact circuit	≥ 6/8 mm		
Material group of insulation parts	II	IIIa	
Insulation to IEC 60664-1			
Type of insulation			
Coil-contact circuit	reinforced		
Open contact circuit	functional		
Rated insulation voltage	250 V		
Pollution degree	2		
Rated voltage system	230 / 400 V		
Overvoltage category	III		
Contact material	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	
Minimum contact load	100mA, 12V 50mW		
Rated frequency of operation with/without load	6/1200 min-1		
Operate/release time	max 12/5 ms		
Bounce time NO/NC contact	max 3/8 ms		
Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www. te.com/customersupport/ rohssupportcenter		
Ambient temperature range	-20°C to 55°C		
Terminals	screw		
Terminal screw torque acc. IEC 61984	0.5 Nm		
max.	0.6 Nm		

## **DIMENSIONS (Unit: mm)**

For Dimension see Page 7

## **SOCKETS**

Туре		Part Number
ST 3F LC4	DIN-rail socket 24VDC, for relays 12/24/48 VDC, with LED, protection and polarity diode, screw terminals	2-1416100-0
ST 3F TPO	DIN-rail socket 230VAC/ VDC with LED and protection circuit, screw terminals	2-1416100-2

## **ACCESSORIES**

Туре		Part Number
ST 36 040	Separation element	2-1416100-6
ST 37 001	Jumper bar, red, 500 mm	2-1416100-7
ST 37 002	Jumper bar, blue, 500 mm	2-1416100-8
ST 37 003	Jumper bar, grey, 500 mm	2-1416100-9
ST 37 040	Marking plate, consisting of 100 marking tabs	4-1416100-0





Marking plate

## **RELAY PACKAGES**

Complete packages consisting of a relay mounted on a socket see Page 5.

## **TERMINAL ASSIGNMENT**

For Dimension see Page 7

## Notes:

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