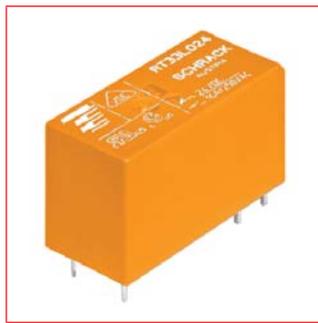


## Print Relays Schrack, Series RT



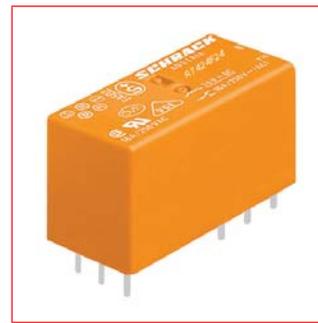
RT1



RT1 Inrush



RT2



RT2 Bistabil

### Schrack-Info

#### RT1

- 1 pole 12/16 A, AC or DC coil
- 1 CO or 1 NO
- Sensitive coil 400 mW/0.75 VA
- 5 kV, 10 mm coil/contact
- Appliance class II (VDE 0700)
- Safe disconnection compliant with VDE 0160 in combination with socket YRT78626
- Ambient temperature 85°C (DC coil)
- Low component height 15.7 mm
- Gold plated contacts available
- Print and screw type sockets
- For boiler controls, timer relays, garage door controls, vending machines, interface modules

#### RT1 Inrush and High Inrush

- 1 pole 16 A, for high peak inrush current
- 1 NO
- RTS3T024 (= High Inrush) with Tungsten early-make contact
- Sensitive coil 400 mW
- 5 kV, 10 mm coil/contact
- Appliance class II (VDE 0700)
- Ambient temperature 85°C
- Low component height 15.7 mm
- Print and screw type sockets
- For household appliances, heating controls, light controls, building automation

#### RT2

- 2 poles 8 A, AC or DC coil
- 2 CO
- Sensitive coil 400 mW
- 5 kV, 10 mm coil/contact
- Appliance class II (VDE 0700)
- Safe disconnection compliant with VDE 0160 in combination with socket YRT78626
- Low component height 15.7 mm
- Print and screw type sockets
- For household appliances, heating controls, emergency lighting, modems

#### RT2 Bistable

- 2 poles 8 A
- 2 CO
- Bistable version with one (= RT424A24) or two coils (RT424F12 or RT424F24)
- Reinforced insulation
- For battery powered devices or memory storage applications

## Print Relays Schrack, Series RT

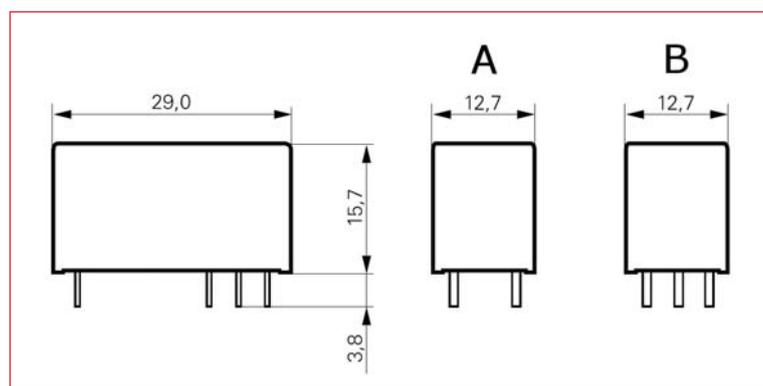
### RT Overview

Relais	Number of contacts and type	Rated current [A]	Coil		Pinning [mm]	Contact material	RT1	RT1 Inrush	RT1 High Inrush	RT2	RT2 Bistable
			DC	V							
RT114012	1 CO	12	DC	12 V	3.5	AgNi90/10	X				
RT114024	1 CO	12	DC	24 V	3.5	AgNi90/10	X				
RT114524	1 CO	12	AC	24 V	3.5	AgNi90/10	X				
RT214012	1 CO	12	DC	12 V	5	AgNi90/10	X				
RT214024	1 CO	12	DC	24 V	5	AgNi90/10	X				
RT214730	1 CO	12	AC	230 V	5	AgNi90/10	X				
RT314005	1 CO	16	DC	5 V	5	AgNi90/10	X				
RT314012	1 CO	16	DC	12 V	5	AgNi90/10	X				
RT314024	1 CO	16	DC	24 V	5	AgNi90/10	X				
RT334024	1 NO	16	DC	24 V	5	AgNi90/10	X				
RT314110	1 CO	16	DC	110 V	5	AgNi90/10	X				
RT314524	1 CO	16	AC	24 V	5	AgNi90/10	X				
RT314730	1 CO	16	AC	230 V	5	AgNi90/10	X				
RT315730	1 CO	16	AC	230 V	5	AgNi90/10 hgp*	X				
RT33K012	1 NO	16	DC	12 V	5	AgNi90/10		X			
RT33K024	1 NO	16	DC	24 V	5	AgNi90/10		X			
RT31L024	1 CO	16	DC	24 V	5	AgSnO <sub>2</sub>		X			
RT53T024	1 NO	16	DC	24 V	5	T** + AgSnO <sub>2</sub>			X		
RT424006	2 CO	8	DC	6 V	5	AgNi90/10				X	
RT424012	2 CO	8	DC	12 V	5	AgNi90/10				X	
RT424024	2 CO	8	DC	24 V	5	AgNi90/10				X	
RT425024	2 CO	8	DC	24 V	5	AgNi90/10 hgp*				X	
RTE24024	2 CO	8	DC	24 V	5	AgNi90/10				X	
RT424048	2 CO	8	DC	48 V	5	AgNi90/10				X	
RT424060	2 CO	8	DC	60 V	5	AgNi90/10				X	
RT424110	2 CO	8	DC	110 V	5	AgNi90/10				X	
RT424524	2 CO	8	AC	24 V	5	AgNi90/10				X	
RT424548	2 CO	8	AC	48 V	5	AgNi90/10				X	
RT424615	2 CO	8	AC	115 V	5	AgNi90/10				X	
RT425615	2 CO	8	AC	115 V	5	AgNi90/10 hgp*				X	
RT424730	2 CO	8	AC	230 V	5	AgNi90/10				X	
RT425730	2 CO	8	AC	230 V	5	AgNi90/10 hgp*				X	
RT424A24	2 CO	8	DC	24 V	5	AgNi90/10					X
RT424F12	2 CO	8	DC	12 V	5	AgNi90/10					X
RT424F24	2 CO	8	DC	24 V	5	AgNi90/10					X

\*hgp = hard gold-plated

\*\*Tungsten pre-contact

### Dimensions (mm)

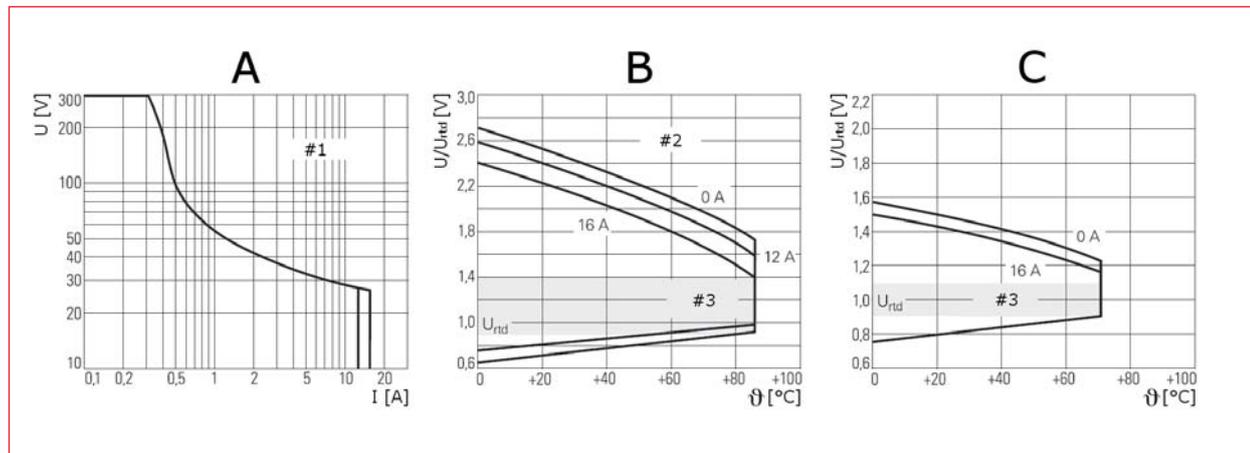


### Dimensions

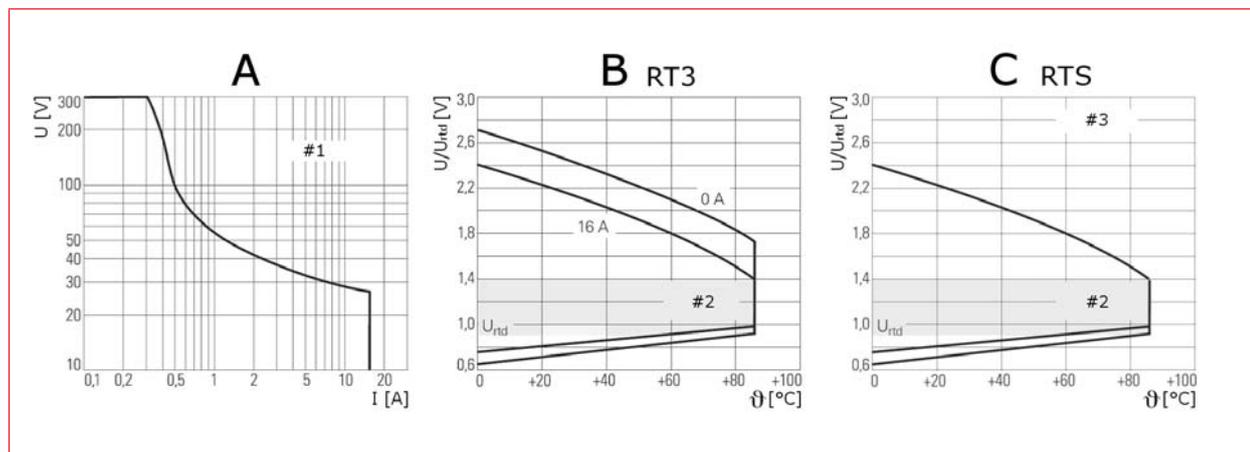
A	RT1, RT1 Inrush, RT1 High Inrush, RT2 und RT2 Bistable 1 coil (RT424A24)
B	RT2 Bistable 2 coils (RT424F12 bzw. RT424F24)

## Print Relays Schrack, Series RT

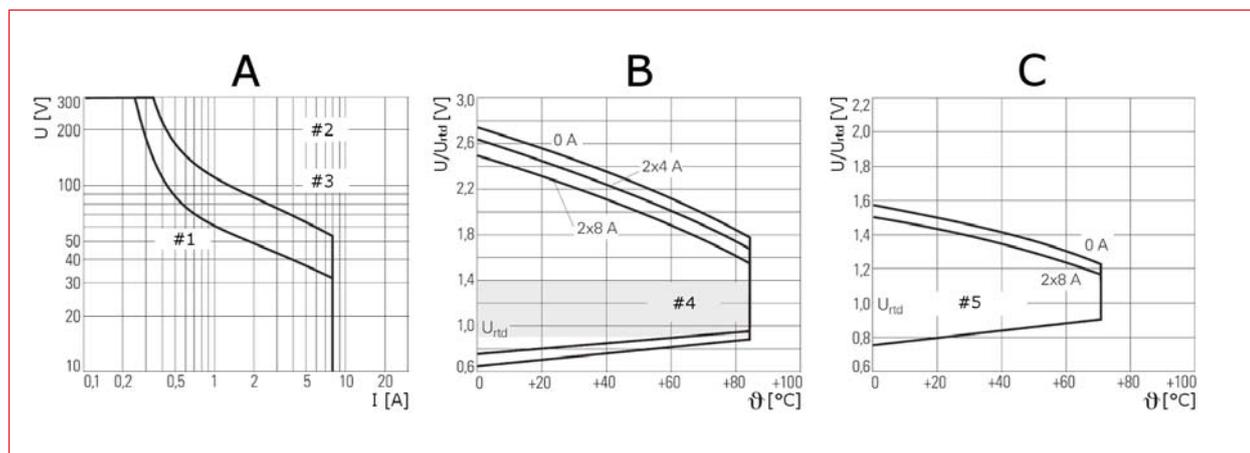
### Rated Breaking Capacity & Coil Operating Voltage Range RT1



### Inrush and High Inrush Rated Breaking Capacity & Coil Operating Voltage Range RT1



### Rated Breaking Capacity & Coil Operating Voltage Range RT2



## Print Relays Schrack, Series RT

### Rated Breaking Capacity & Coil Operating Voltage Ranges

RT1	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Coil operating range DC
<b>C</b>	Coil operating range AC
<b>#1</b>	Resistive load
<b>#2</b>	16 A version
<b>#3</b>	Recommended voltage range in [V]
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>θ</b>	Ambient temperature in [°C]

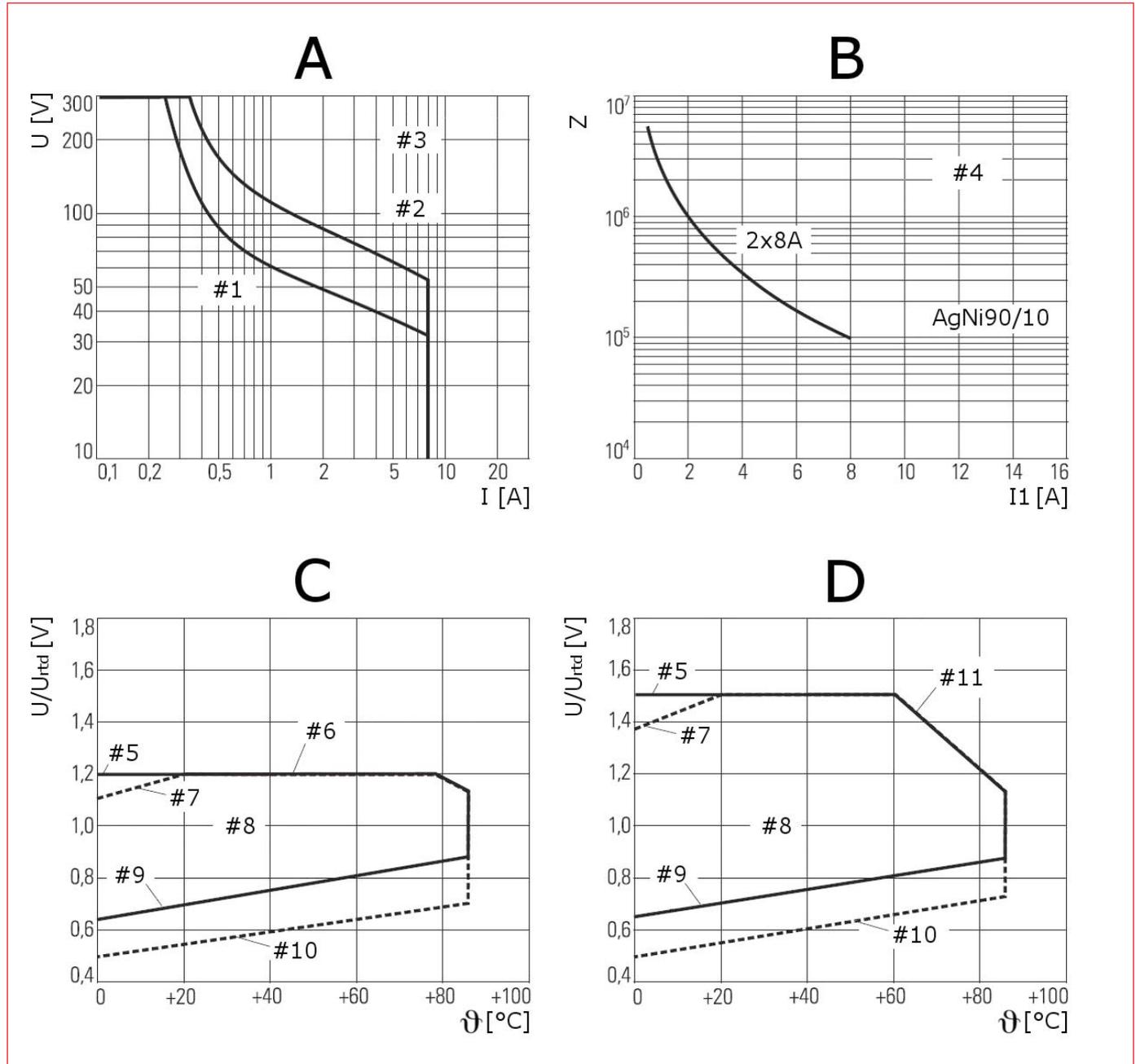
RT2	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Coil operating range DC
<b>C</b>	Coil operating range AC
<b>#1</b>	1 contact
<b>#2</b>	2-pole resistive load
<b>#3</b>	2 contacts in series
<b>#4</b>	Recommended voltage range in [V]
<b>#5</b>	Rated coil voltage in [V]
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>θ</b>	Ambient temperature in [°C]

RT1 Inrush und High Inrush	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Coil operating range DC (RT3)
<b>C</b>	Coil operating range DC (RTS)
<b>#1</b>	Resistive load
<b>#2</b>	Recommended voltage range in [V]
<b>#3</b>	Monostable version
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>θ</b>	Ambient temperature in [°C]

RT2 Bistable	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Electrical endurance
<b>C</b>	Coil operating range, 1 coil
<b>D</b>	Coil operating range, 2 coils
<b>#1</b>	1 contact
<b>#2</b>	2 contacts in series
<b>#3</b>	2-pole resistive load
<b>#4</b>	250 V AC resistive load
<b>#5</b>	Max. SET
<b>#6</b>	Max. SET and RESET 16 A, 2 x 8 A
<b>#7</b>	Max. RESET
<b>#8</b>	U <sub>nd</sub> Rated coil voltage
<b>#9</b>	SET
<b>#10</b>	RESET
<b>#11</b>	Max. SET and RESET
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>I1</b>	Switching current in [A]
<b>Z</b>	Cycles
<b>θ</b>	Ambient temperature in [°C]

## Print Relays Schrack, Series RT

### Rated Breaking Capacity, Electrical Service Life & Coil Operating Voltage Range RT2 Bistable



## Print Relays Schrack, Series RT

### Rated Breaking Capacity & Coil Operating Voltage Ranges

RT1	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Coil operating range DC
<b>C</b>	Coil operating range AC
<b>#1</b>	Resistive load
<b>#2</b>	16 A version
<b>#3</b>	Recommended voltage range in [V]
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>θ</b>	Ambient temperature in [°C]

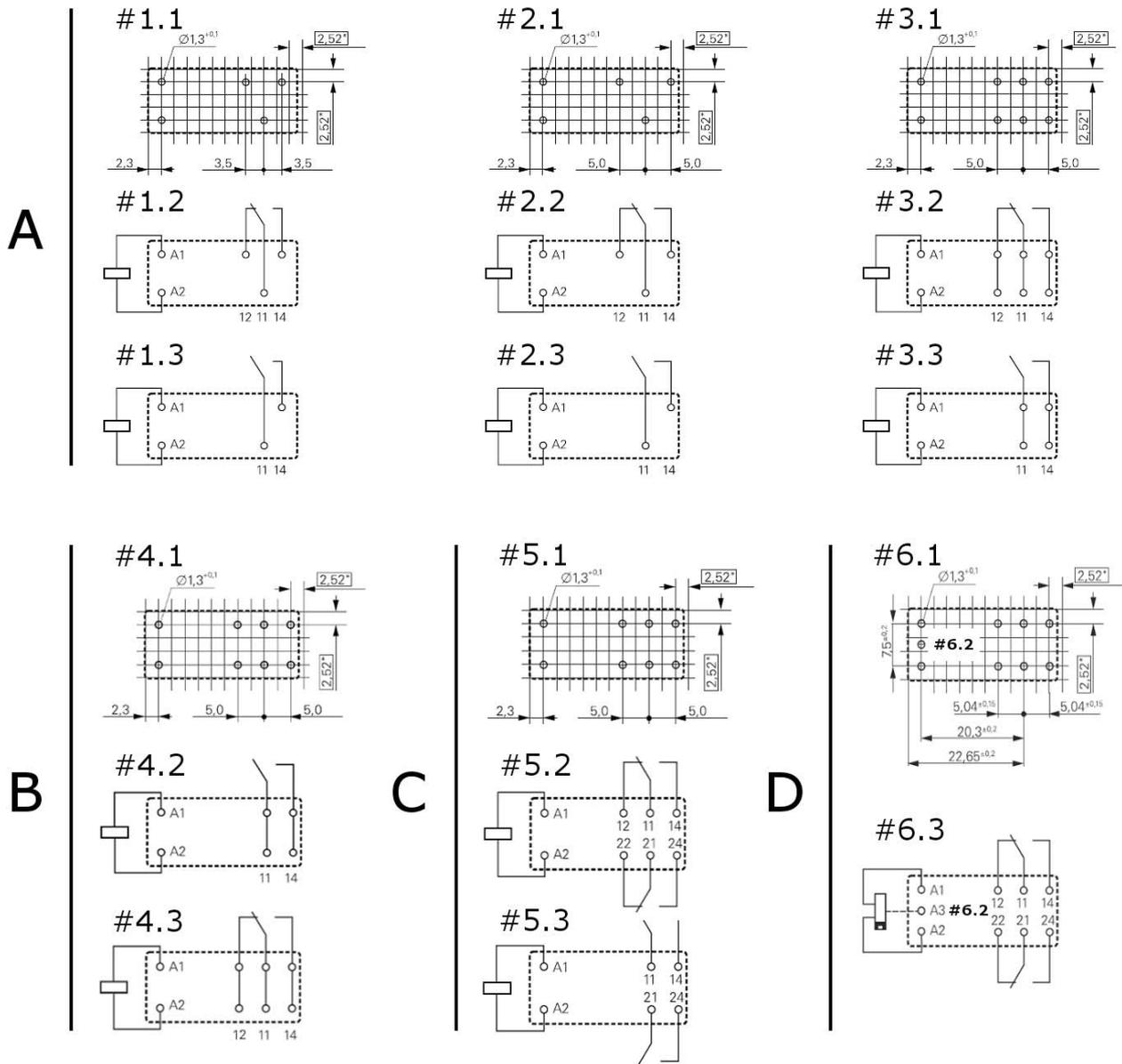
RT2	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Coil operating range DC
<b>C</b>	Coil operating range AC
<b>#1</b>	1 contact
<b>#2</b>	2-pole resistive load
<b>#3</b>	2 contacts in series
<b>#4</b>	Recommended voltage range in [V]
<b>#5</b>	Rated coil voltage in [V]
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>θ</b>	Ambient temperature in [°C]

RT1 Inrush und High Inrush	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Coil operating range DC (RT3)
<b>C</b>	Coil operating range DC (RTS)
<b>#1</b>	Resistive load
<b>#2</b>	Recommended voltage range in [V]
<b>#3</b>	Monostable version
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>θ</b>	Ambient temperature in [°C]

RT2 Bistable	
<b>A</b>	Max. DC rated breaking capacity
<b>B</b>	Electrical endurance
<b>C</b>	Coil operating range, 1 coil
<b>D</b>	Coil operating range, 2 coils
<b>#1</b>	1 contact
<b>#2</b>	2 contacts in series
<b>#3</b>	2-pole resistive load
<b>#4</b>	250 V AC resistive load
<b>#5</b>	Max. SET
<b>#6</b>	Max. SET and RESET 16 A, 2 x 8 A
<b>#7</b>	Max. RESET
<b>#8</b>	U <sub>nd</sub> Rated coil voltage
<b>#9</b>	SET
<b>#10</b>	RESET
<b>#11</b>	Max. SET and RESET
<b>U</b>	DC voltage in [V]
<b>U/U<sub>nd</sub></b>	Coil voltage in [V]
<b>I</b>	DC current in [A]
<b>I1</b>	Switching current in [A]
<b>Z</b>	Cycles
<b>θ</b>	Ambient temperature in [°C]

## Print Relays Schrack, Series RT

### Wiring Diagrams



### Circuit Diagrams

<b>A</b>	RT1	<b>#3.2</b>	1 CO
<b>B</b>	RT1 Inrush and High Inrush	<b>#3.3</b>	1 NO
<b>C</b>	RT2	<b>#4.1</b>	16 A, pinning 5 mm
<b>D</b>	RT2 Bistable	<b>#4.2</b>	1 NO
<b>#1.1</b>	12 A, pinning 3.5 mm	<b>#4.3</b>	1 CO
<b>#1.2</b>	1 CO	<b>#5.1</b>	8 A, pinning 5 mm
<b>#1.3</b>	1 NO	<b>#5.2</b>	2 CO
<b>#2.1</b>	12 A, pinning 5 mm	<b>#5.3</b>	2 NO
<b>#2.2</b>	1 CO	<b>#6.1</b>	8 A, pinning 5 mm
<b>#2.3</b>	1 NO	<b>#6.2</b>	For 2 coil version only
<b>#3.1</b>	16 A, pinning 5 mm	<b>#6.3</b>	2 CO

**General Info**  
View of the terminals, dimensions in mm  
Equipping with indicated hole diameter also possible in 2.5 mm or 2.54 mm contact spacing

## Print Relays Schrack, Series RT

### Technical Data (Part 1)

		RT1	
		12 A	16 A
<b>CONTACT DATA</b>			
Number of contacts and type		1 CO or 1 NO contact	
Contact style		Single contact	
Rated current		12 A	16 A
Rated voltage/ max. switching voltage AC		250 / 400 V~	
Limiting continuous current		12 A	16 A, UL: 20 A
Max. rated breaking capacity AC		3000 VA	4000 VA
Limiting making current (max. 4 s at 10 % DF)		25 A	30 A
Contact material		AgNi 90/10, AgNi 90/10 hard gold plated	
<b>COIL DATA</b>			
Rated voltage	DC coil	5...110 V	
	AC coil	24...230 V~	
Rated power	DC coil	400 mW	
	AC coil	0.74 VA	
Operative range, IEC 61810		2	
Coil insulation system according to UL1446		Class F	
Operation-/ release voltage/ coil resistance at ambient temperature 23 °C	24 V DC coil	16.8 V / 2.4 V / 1440 Ω ± 10 %	
	230 V AC coil	172.5 V / 34.5 V / 32500 Ω ± 10 %	

### RT1 Inrush and High Inrush

		RT3	RTS
<b>CONTACT DATA</b>			
Number of contacts and type		1 CO oder 1 NO	1 NO
Contact style		Single contact	
Rated current		16 A	
Rated voltage / max. switching voltage AC		250 / 400 V~	
Limiting continuous current		16 A	
Max. rated breaking capacity AC		4000 VA	
Limiting making current		30 A (max. 4 s at 10 % DF)	165 A (max. 20 ms incandescent lamps) 800 A (max. 200 μs fluorescent lamps)
Contact material		AgNi 90/10, AgSnO <sub>2</sub>	W (lead contact) + AgSnO <sub>2</sub>
<b>COIL DATA</b>			
Rated voltage		5...110 V DC	
Rated power		400 mW	
Operative range, IEC 61810		2	
Coil insulation system according to UL1446		Class F	
Operation-/ release voltage/ coil resistance at ambient temperature 23 °C	24 V DC coil	16.8 V / 2.4 V / 1440 Ω ± 10 %	
	230 V AC coil	-	172.5 V / 34.5 V / 32500 Ω ± 10 %

## Print Relays Schrack, Series RT

### Technical Data (Part 2)

		<b>RT2</b>	
<b>CONTACT DATA</b>		<b>8 A</b>	
Number of contacts and type		2 CO	
Contact style		Single contact	
Rated current		8 A	
Rated voltage/ max. switching voltage AC		250 V / 400 V~	
Limiting continuous current		8 A, UL: 10 A	
Max. rated breaking capacity AC		2000 VA	
Limiting making current (max. 4 s at 10 % DF)		15 A	
Contact material		AgNi 90/10, AgNi 90/10 hard gold plated	
<b>COIL DATA</b>			
Rated voltage	DC coil	5...110 V	
	AC coil	24...230 V~	
Rated power	DC coil	400 mW	
	AC coil	0.74 VA	
Operative range, IEC 61810		2	
Coil insulation system according to UL1446		Class F	
Operation-/ release voltage/ coil resistance at ambient temperature 23 °C	24 V DC coil	16.8 V / 2.4 V / 1440 Ω ± 10 %	
	230 V AC coil	172.5 V / 34.5 V / 32500 Ω ± 10 %	

		<b>RT2 Bistable</b>	
<b>CONTACT DATA</b>		<b>8 A</b>	
Number of contacts and type		2 CO	
Rated current		8 A, UL: 10 A	
Rated voltage/ max. switching voltage AC		250 / 400 V~	
Limiting continuous current		8 A, UL: 10 A	
Max. rated breaking capacity AC		2000 VA	
Limiting making current (max. 4 s at 10 % DF)		15 A	
Contact material		AgNi 90/10	
Frequency of operation	With Load	900 h <sup>-1</sup>	
	Without Load	72000 h <sup>-1</sup>	
Operate/ release time max.		10 / 5 ms	
Bounce time		4 / 9 ms	

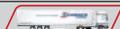
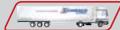
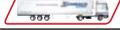
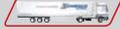
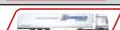
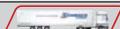
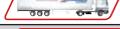
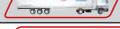
<b>COIL DATA</b>		<b>1 COIL</b>	
Magnetic system		Bistable	
Operative range, IEC 61810		2	
Coil voltage range DC		24 V	
Limiting voltage, % of rating voltage		120 %	
Energization duration at < 10 % duty factor	Min.	30 ms	
	Max.	1 min.	
Coil insulation system according to UL1446		Class F	
<b>BISTABLE COIL - OPERATION*</b>		<b>1 COIL</b>	
Coil terminals		A1	A2
Operate		+	-
Reset		-	+

<b>COIL DATA</b>		<b>2 COILS</b>	
Magnetic system		Bistable	
Operative range, IEC 61810		2	
Coil voltage range DC		12 / 24 V	
Limiting voltage, % of rating voltage		150 %	
Energization duration at < 10 % duty factor	Min.	30 ms	
	Max.	1 min.	
Coil insulation system according to UL1446		Class F	
<b>BISTABLE COILS - OPERATION*</b>		<b>2 COILS</b>	
Coil terminals		A1	A3
Operate		+	-
Reset		-	+

<b>INSULATION DATA</b>		
Initial dielectric strength	Open contacts	1000 V <sub>rms</sub>
	Contact and coil	5000 V <sub>rms</sub>
	Adjacent contacts	2500 V <sub>rms</sub>
Clearance/ creepage	Contact and coil	> 10 / 10 mm
	Adjacent contacts	> 3 / 4 mm
Ambient temperature	Bistable 1 coil	-10...+85 °C
	Bistable 2 coils	-40...+85 °C

\*Contact position not defined at delivery

 Print Relays Schrack, Series RT

DESCRIPTION	AVAILABLE	ORDER NO.
<b>Print Relays RT1, 12A</b>		
12V-DC, 1 CO, 12A		<a href="#">RT114012</a>
24V-DC, 1 CO, 12A		<a href="#">RT114024</a>
24V-AC, 1 CO, 12A		<a href="#">RT114524</a>
12V-DC, 1 CO, 12A		<a href="#">RT214012</a>
24V-DC, 1 CO, 12A		<a href="#">RT214024</a>
230V-AC, 1 CO, 12A		<a href="#">RT214730</a>
<b>Print Relays RT1, 16A</b>		
5V-DC, 1 CO, 16A		<a href="#">RT314005</a>
12V-DC, 1 CO, 16A		<a href="#">RT314012</a>
24V-DC, 1 CO, 16A		<a href="#">RT314024</a>
24V-DC, 1 NO, 16A		<a href="#">RT334024</a>
24V-AC, 1 CO, 16A		<a href="#">RT314524</a>
230V-AC, 1 CO, 16A		<a href="#">RT314730</a>
230V-AC, 1 CO, 16A, gold plated		<a href="#">RT315730</a>
<b>Print Relays RT1 Inrush</b>		
12V-DC, 1 NO, 16A		<a href="#">RT33K012</a>
24V-DC, 1 NO, 16A		<a href="#">RT33K024</a>
24V-DC, 1 CO, 16A		<a href="#">RT31L024</a>
<b>Print Relays RT1 High Inrush</b>		
24V-DC, 1 NO, 16A		<a href="#">RTS3T024</a>
<b>Print Relays RT2</b>		
6V-DC, 2 CO, 8A		<a href="#">RT424006</a>
12V-DC, 2 CO, 8A		<a href="#">RT424012</a>
24V-DC, 2 CO, 8A		<a href="#">RT424024</a>
24V-DC, 2 CO, 8A, gold plated		<a href="#">RT425024</a>
24V-DC, 2 CO, 8A		<a href="#">RTE24024</a>
48V-DC, 2 CO, 8A		<a href="#">RT424048</a>
60V-DC, 2 CO, 8A		<a href="#">RT424060</a>
110V-DC, 2 CO, 8A		<a href="#">RT424110</a>
24V-AC, 2 CO, 8A		<a href="#">RT424524</a>
48V-AC, 2 CO, 8A		<a href="#">RT424548</a>
115V-AC, 2 CO, 8A		<a href="#">RT424615</a>
115V-AC, 2 CO, 8A, gold plated		<a href="#">RT425615</a>
230V-AC, 2 CO, 8A		<a href="#">RT424730</a>
230V-AC, 2 CO, 8A, gold plated		<a href="#">RT425730</a>
<b>Print Relays RT2 Bistable</b>		
24V-DC, 2 CO, 8A		<a href="#">RT424A24</a>
12V-DC, 2 CO, 8A		<a href="#">RT424F12</a>
24V-DC, 2 CO, 8A		<a href="#">RT424F24</a>

