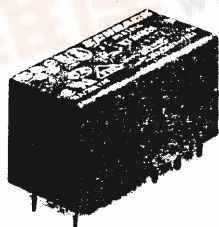


RTB + RTD

Power PCB Relay RT1

1 pole 12/16 A, DC- or AC-coil



- 1 C/O or 1 N/O contact
- Sensitive coil 400 mW
- 5 kV / 10 mm coil-contact, Protection class II (VDE 0700)
- Ambient temperature 85°C (DC-coil)
- Height 15.7 mm
- Sockets with PCB-type or screw-type terminals
- Gold plated contacts available

Applications

Boiler control, timers, garage door control, POS automation, interface modules



Technical data of approved types on request

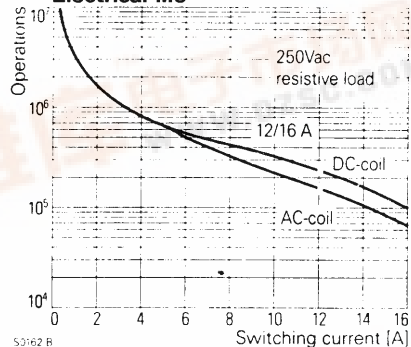
Contact data

Configuration	1 C/O contact or 1 N/O contact	
Type of contact	single contact	
Rated current	12 A	16 A
Rated voltage / max. breaking voltage	250 Vac / 440 Vac	
Rated breaking capacity	3000 VA	4000 VA
Make current (max. 4 s at duty cycle 10%)	25 A	30 A
Contact material	AgNi 90/10, AgNi 90/10 gold plated	

Contact life

Type	Load	Operations
RT314	1000 W, 250 Vac, incandescent lamps	1.2×10^3

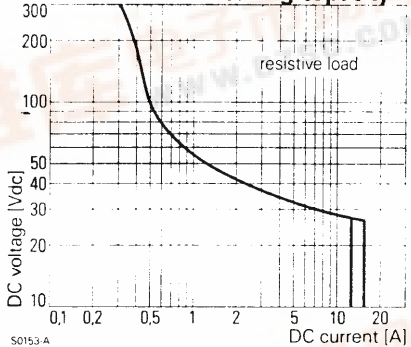
Electrical life



Coil data

Nominal voltage	DC coil	5...110 Vdc
	AC coil	24...230 Vac
Nominal coil power	DC coil	400 mW
	AC coil	0.75 VA
Operate category	2 / b	

Max. DC load breaking capacity

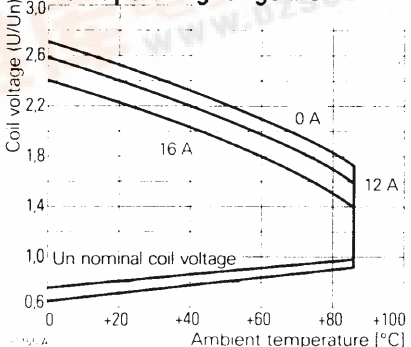


Coil versions, DC-coil

Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Maximum voltage Vdc	Coil resistance Ω	Coil current mA
005	5	3.5	0.5	12.7	$62 \pm 10\%$	80.0
006	6	4.2	0.6	15.3	$90 \pm 10\%$	66.7
012	12	8.4	1.2	30.6	$360 \pm 10\%$	33.3
024	24	16.8	2.4	61.2	$1440 \pm 10\%$	16.7
048	48	33.6	4.8	122.4	$5520 \pm 10\%$	8.7
060	60	42.0	6.0	153.0	$7340 \pm 12\%$	8.1
110	110	77.0	11.0	280.5	$26600 \pm 12\%$	4.1

All figures are given for coil without preenergization, at ambient temperature +20°C
Other coil voltages on request

Coil operating range DC



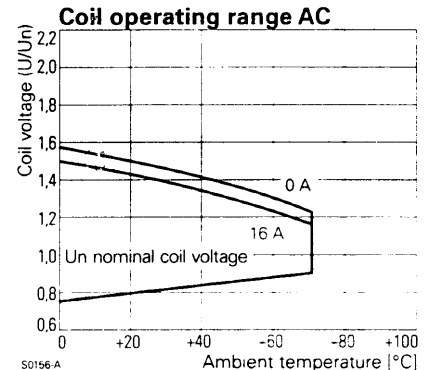
Power PCB Relay RT1

1 pole 12 / 16 A, DC- or AC-coil

Coil versions, AC-coil

Coil code	Nominal voltage Vac	Pull-in voltage Vac	Release voltage Vac	Maximum voltage Vac	Coil resistance Ω	Coil current mA
524	24	18.0	3.6	36.0	350 \pm 10%	31.6
615	115	86.3	17.3	172.5	8100 \pm 15%	6.6
730	230	172.5	34.5	345.0	32500 \pm 15%	3.2

All figures are given for coil without preenergization, at ambient temperature +20°C



Insulation

Dielectric strength	coil-contacts	5000 V _{rms}
	open contact circuit	1000 V _{rms}
Clearance / creepage		10 / 10 mm
Insulation to IEC 664/VDE 0110 (1/89)		
	Voltage rating	250
	Pollution degree	3
	Overvoltage category	III
Insulation to VDE 0110b (2/79)		
	Insulation category / reference voltage	C / 250, B / 400
Tracking resistance		CTI 250

Other data

Flammability class UL		V-0
Ambient temperature	DC-coil	-40...+85 °C
	AC-coil	-40...+70 °C
Mechanical life	DC-coil	>30x10 ⁶ operations
	AC-coil	>10x10 ⁶ operations
Max. switching rate at rated- / minimum load		6 min ⁻¹ / 1200 min ⁻¹
Operate- / release time DC-coil		typ. 7 / 3 ms
Bounce time N/O contact/N/C contact		typ. 1 / 3 ms
Vibration resistance N/O / N/C contact		20 / 5 g, 30...500 Hz
Shock resistance (destruction)		100 g
Protection category		IP40 (IP67 on request)
Relay weight		14 g
Packaging unit		20 / 500 pcs.
Accessories		see accessories RT, page 60, 101

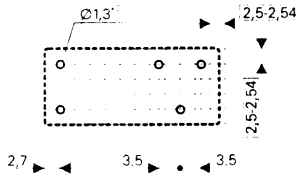
Power PCB Relay RT1

1 pole 12 / 16 A, DC- or AC-coil

PCB layout / terminal assignment

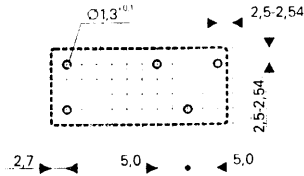
View on solder pins
Dimensions in mm

12 A, pinning 3.5 mm



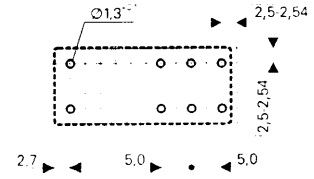
S0163 BB

12 A, pinning 5 mm



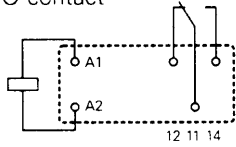
S0163 BC

16 A, pinning 5 mm



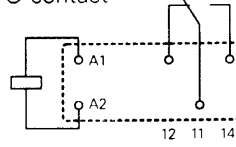
S0163 BD

1 C/O contact



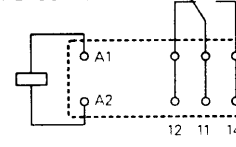
S0163 BG

1 C/O contact



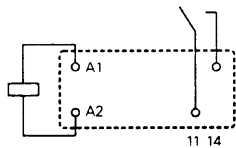
S0163 BE

1 C/O contact



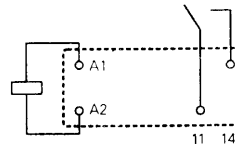
S0163 BF

1 N/O contact



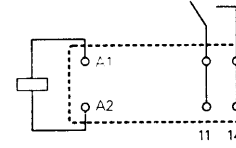
S0163 BH

1 N/O contact



S0163 BE

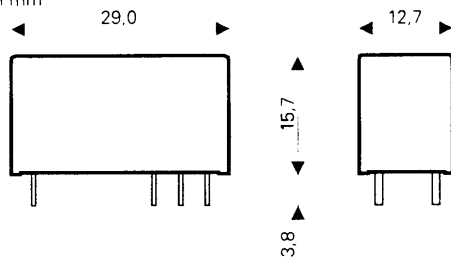
1 N/O contact



S0163 BF

Dimensions

Dimensions in mm



S0172 AB

RT B = washable version of RT1
RT D = " " " " RT3.

Ordering key



Type

Version

- 1 12 A, pinning 3.5 mm, flux-tight *)**
- 2 12 A, pinning 5 mm, flux-tight *)**
- 3 16 A, pinning 5 mm, flux-tight *)**

Contacts

- 1 1 C/O contact**
- 3 1 N/O contact (for type RT1.. and RT3..)**

Contact material

- 4 AgNi 90/10**
- 5 AgNi90/10 gold plated (for type RT31.)**

Coil

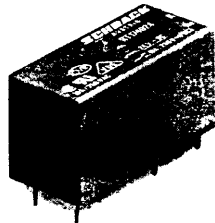
Coil code: please refer to coil versions table

Preferred types in bold print

*) Washable version on request

Power PCB Relay RT1 sensitive

1 pole 10 A, highly sensitive version



- 1 C/O or 1 N/O contact
- Sensitive coil 250 mW
- 5 kV / 10 mm coil-contact
- Protection class II (VDE 0700)
- Ambient temperature 85°C at rated load
- Height 15.7 mm
- Sockets with PCB-type or screw-type terminals

Applications
Domestic appliances, heating control



Technical data of approved types on request

Contact data

Configuration	1 C/O contact or 1 N/O contact
Type of contact	single contact
Rated current	10 A
Rated voltage / max. breaking voltage	250 Vac / 440 Vac
Rated breaking capacity	2500 VA
Make current (max. 4 s at duty cycle 10%)	15 A
Contact material	AgNi 90/10

Contact life

Type	Load	Operations
RT174	8 A, 250 Vac	4.3x10 ⁵

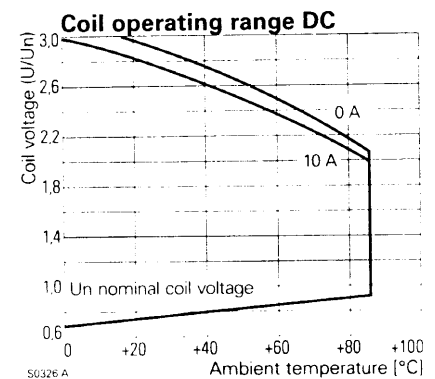
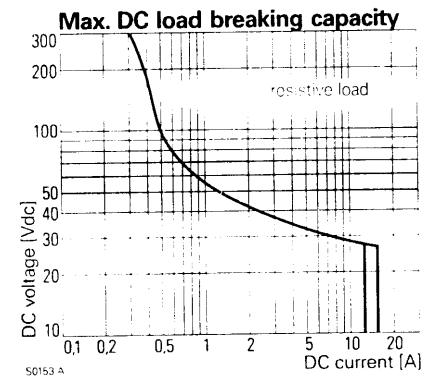
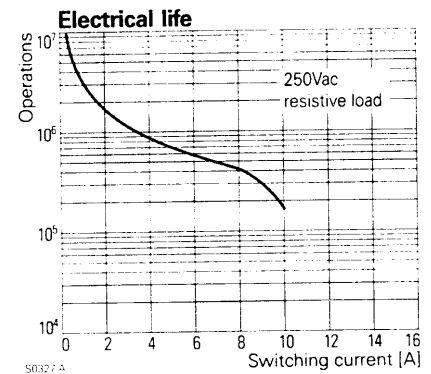
Coil data

Nominal voltage	5...60 Vdc
Nominal coil power	250 mW
Operate category	2 / b

Coil versions, sensitive DC-coil

Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Maximum voltage Vdc	Coil resistance Ω	Coil current mA
005	5	3.7	0.5	15.0	100±10%	50.0
006	6	4.5	0.6	18.0	144±10%	41.7
012	12	9.0	1.2	36.0	576±10%	20.8
024	24	18.0	2.4	72.0	2304±10%	10.4
048	48	36.0	4.8	144.0	9216±10%	5.4
060	60	45.0	6.0	180.0	12857±12%	4.7

All figures are given for coil without preenergization, at ambient temperature +20°C
Other coil voltages on request



Power PCB Relay RT1 sensitive

1 pole 10 A, highly sensitive version

Insulation

Dielectric strength	coil-contacts	5000 V _{rms}
	open contact circuit	1000 V _{rms}
Clearance / creepage		10 / 10 mm
Insulation to IEC 664/VDE 0110 (1/89)		
	Voltage rating	250
	Pollution degree	3
	Overvoltage category	III
Insulation to VDE 0110b (2/79)		
	Insulation category / reference voltage	C / 250, B / 400

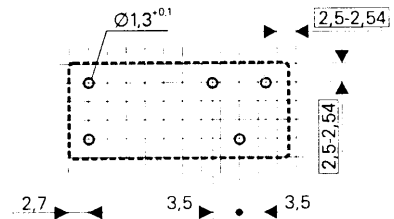
Other data

Flammability class UL	V-0
Ambient temperature	-40...+85 °C
Mechanical life	30x10 ⁶ operations
Max. switching rate at rated- / minimum load	50 min ⁻¹ / 1200 min ⁻¹
Operate- / release time	typ. 7 / 3 ms
Bounce time N/O contact/N/C contact	typ. 2 / 4 ms
Vibration resistance	5 g, 30...150 Hz
Shock resistance (destruction)	100 g
Protection category	IP 40 (IP67 on request)
Relay weight	14 g
Packaging unit	20 / 500 pcs.
Accessories	see accessories RT, page 60, 101

PCB layout / terminal assignment

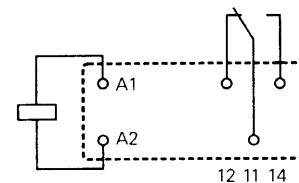
View on solder pins
Dimensions in mm

10 A, pinning 3.5 mm



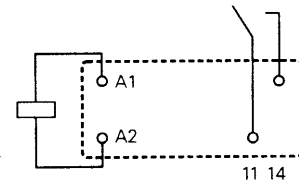
S0163 BB

1 C/O contact



S0163 BG

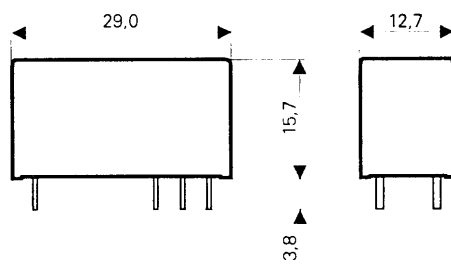
1 N/O contact



S0163 BH

Dimensions

Dimensions in mm



S0272 AB

Ordering key



Type

Version

1 10 A, pinning 3.5 mm, flux-tight *)

Contacts

7 1 C/O contact

8 1 N/O contact

Contact material

4 AgNi 90/10

Coil

Coil code: please refer to coil versions table

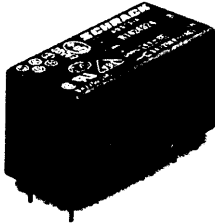
Preferred types in bold print

*) Washable version on request

RT B = Washable version of RT1

Power PCB Relay RT2

2 pole 8 A, DC and AC-coil



- 2 C/O or 2 N/O contacts
- Sensitive coil 400 mW
- DC- or AC-coil
- 5 kV / 10 mm coil-contact
- Protection class II (VDE 0700)
- Height 15.7 mm
- Sockets with PCB-type or screw-type terminals

Applications

Domestic appliances, heating control, emergency lighting, modems

F0149 A

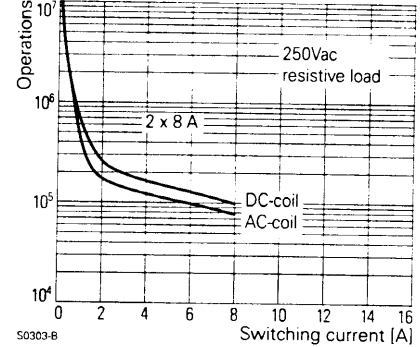


Technical data of approved types on request

Contact data

Configuration	2 C/O contacts or 2 N/O contacts
Type of contact	single contact
Rated current	8 A
Rated voltage / max. breaking voltage	250 Vac / 440 Vac
Rated breaking capacity	2000 VA
Make current (max. 4 s at duty cycle 10%)	15 A
Contact material	AgNi 90/10, AgNi 90/10 gold plated

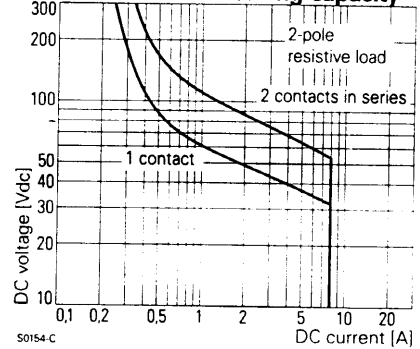
Electrical life



Contact life

Type	Load	Operations	Standard
RT 424	4 A, 230 Vac, $\cos\phi=0.6$	1.5×10^5	
RT 424	6 (2) A, 250 Vac, on the N/O- N/C contact		VDE 0631
RT 424	1/2 hp / 240 Vac, 1/4 hp / 120 Vac	6×10^3	UL 508

Max. DC load breaking capacity



Coil data

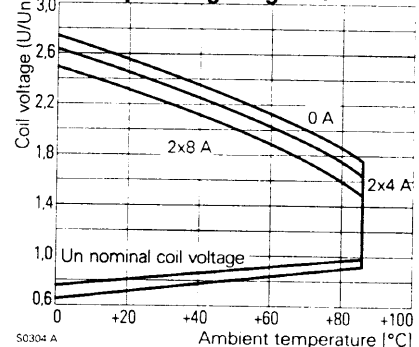
Nominal voltage	DC coil	5...110 Vdc
	AC coil	24...230 Vac
Nominal coil power	DC coil	400 mW
	AC coil	0.75 VA
Operate category		2 / b

Coil versions, DC-coil

Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Maximum voltage Vdc	Coil resistance Ω	Coil current mA
005	5	3.5	0.5	12.7	$62 \pm 10\%$	80.0
006	6	4.2	0.6	15.3	$90 \pm 10\%$	66.7
012	12	8.4	1.2	30.6	$360 \pm 10\%$	33.3
024	24	16.8	2.4	61.2	$1440 \pm 10\%$	16.7
048	48	33.6	4.8	122.4	$5520 \pm 10\%$	8.7
060	60	42.0	6.0	153.0	$7340 \pm 12\%$	8.1
110	110	77.0	11.0	280.5	$26600 \pm 12\%$	4.1

All figures are given for coil without preenergization, at ambient temperature +20°C
Other coil voltages on request

Coil operating range DC



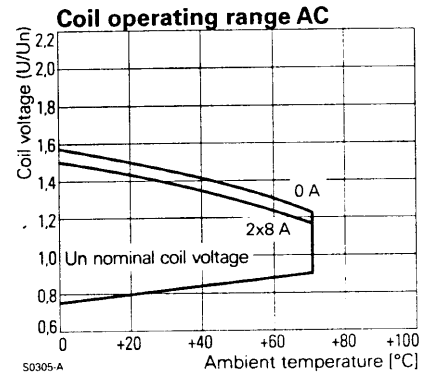
查询"0-1419108-7"供应商
Power PCB Relay RT2

2 pole 8 A, DC and AC-coil

Coil versions, AC-coil

Coil code	Nominal voltage Vac	Pull-in voltage Vac	Release voltage Vac	Maximum voltage Vac	Coil resistance Ω	Coil current mA
524	24	18.0	3.6	36.0	350±10%	31.6
615	115	86.3	17.3	172.5	8100±15%	6.6
730	230	172.5	34.5	345.0	32500±15%	3.2

All figures are given for coil without preenergization, at ambient temperature +20°C



Insulation

Dielectric strength	coil-contacts	5000 V _{rms}
	open contact circuit	1000 V _{rms}
	adjacent contacts	2500 V _{rms}
Clearance / creepage		10 / 10 mm
Insulation to IEC 664/VDE 0110 (1/89)		
	Voltage rating	250
	Pollution degree	3
	Overvoltage category	III
Insulation to VDE 0110b (2/79)		
	Insulation category / reference voltage	C / 250, B / 400

Other data

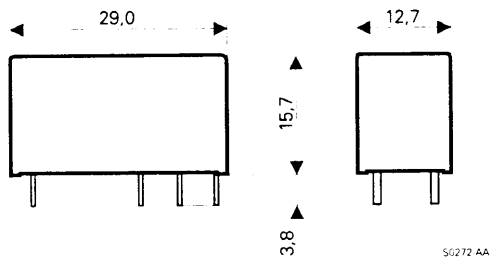
Ambient temperature		-40...+70 °C
Mechanical life	DC-coil	>30x10 ⁶ operations
	AC-coil	>5x10 ⁶ operations
Max. switching rate at rated- / minimum load		6 min ⁻¹ / 1200 min ⁻¹
Operate- / release time DC-coil		typ. 7 / 2 ms
Bounce time N/O contact/N/C contact		typ. 1 / 3 ms
Vibration resistance N/O / N/C contact		20 / 5 g, 30...300 Hz
Shock resistance (destruction)		100 g
Protection category		IP40 (IP67 on request)
Relay weight		13 g
Packaging unit		20 / 500 pcs.
Accessories		see accessories RT, page 74, 101

Power PCB Relay RT2

2 pole 8 A, DC and AC-coil

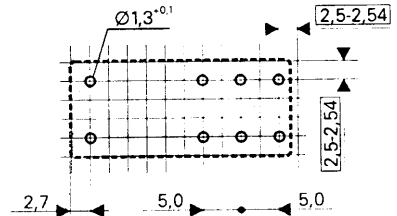
Dimensions

Dimensions in mm

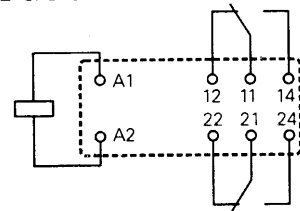


PCB layout / terminal assignment

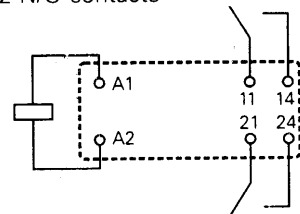
View on solder pins
Dimensions in mm



2 C/O contacts



2 N/O contacts



Ordering key

Type

Version

- 4 8 A, pinning 5 mm, flux-tight**
- E 8 A, pinning 5 mm, washable

Contacts

- 2 2 C/O contacts**
- 4 2 N/O contacts

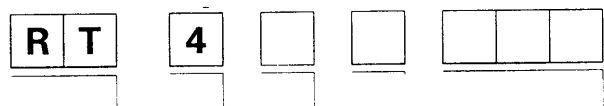
Contact material

- 4 AgNi 90/10**
- 5 AgNi 90/10 gold plated (for type RT42.)

Coil

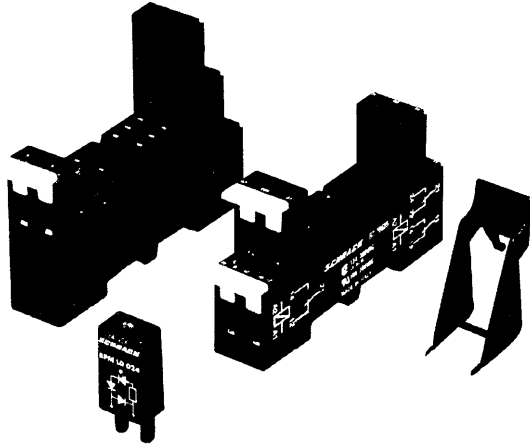
Coil code: please refer to coil versions table

Preferred types in bold print



Accessories Power PCB Relay RT1

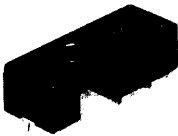
查询 0-1419108-7 供应高



- Socket with PCB- or screw terminals
- No reduction of protection class or creepage / clearance with plastic retainer
- Easy replacement of relays
- Socket can be used as connector for diagnosis function
- Not suitable for bistable relays with 2 coils

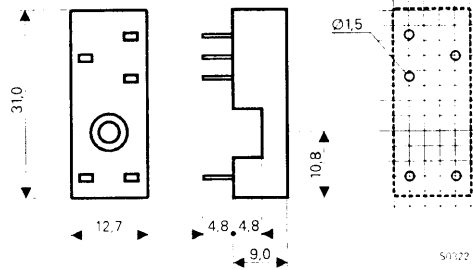
F0116 A

RP 78 601 Socket with PCB terminals, pinning 3.5 mm



F0117 A

Plastic retaining clip **RT 16 041**
Metal retaining clip **RT 28 516**

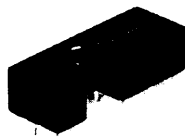


Technical data

Rated current	12 A
Rated voltage	300 Vac
Dielectric strength coil/cont.	>5000 V _{rms}
Insulation cat. (VDE 0110b)	C / 250 Vac
Ambient temperature	-40...+80 °C
Packaging unit	100 pcs.

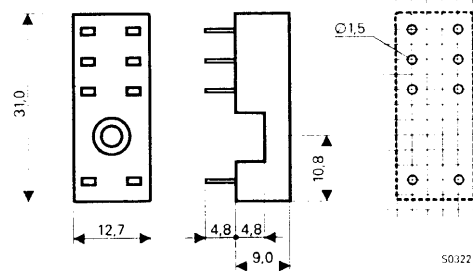
S0322 41

RP 78 602 Socket with PCB terminals, pinning 5 mm



F0117 A

Plastic retaining clip **RT 16 041**
Metal retaining clip **RT 28 516**



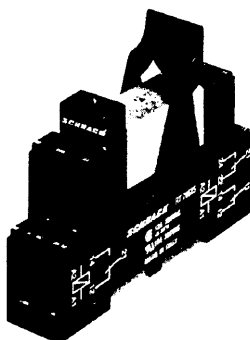
Technical data

Rated current	12 A
Rated voltage	300 Vac
Dielectric strength coil/cont.	>5000 V _{rms}
Insulation cat. (VDE 0110b)	C / 250 Vac
Ambient temperature	-40...+80 °C
Packaging unit	100 pcs.

S0322 40

Dimensions in mm
View on solder pins

F0136 A



Relay sockets with screw-type terminals, for DIN rail mounting:
see page 101