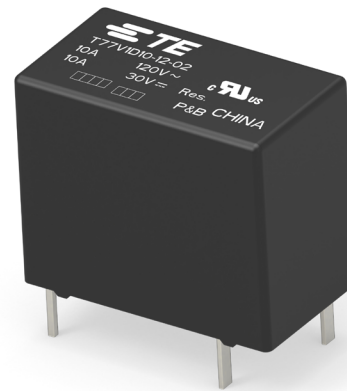


POTTER & BRUMFIELD MINIATURE PCB RELAY T77

GENERAL PURPOSE RELAYS
PCB RELAYS

FEATURES

- 3 to 10A rating
- Small size
- Creepage spacings of 6.5mm between coil and contacts
- 4,000Vrms coil to contact dielectric strength
- UL Class F approved insulation system



APPLICATIONS

- Appliances
- HVAC
- Industrial control
- PLC's

APPROVALS

- VDE 40010327
- UL E29244



Technical data of approved types on request.

Potter & Brumfield Miniature PCB Relay T77

General Purpose Relays | PCB Relays

CONTACT DATA

Contact Data	1 form A, 1 NO	
Contact arrangement	30VDC, 250VAC	
Rated voltage	30VDC, 277VAC	
Max. switching voltage	3 to 10A	
Rated current	3A type: AgNi	
Contact material	10A type: AgCdO	
Min. recommended contact load	100mA at 5VDC	
Frequency of operation	360 ops./h	
Operate/release time max.	10ms/4ms	
Electrical endurance		
3A type	3A, 250VAC res., -30°C to +55°C	100x10 ³ ops.
5A type	5A, 250VAC res., -30°C to +40°C	100x10 ³ ops.
	5A, 250VAC res., -30°C to +85°C	10x10 ³ ops.
10A type	10A, 250VAC res., -30°C to +55°C	100x10 ³ ops.
	10A, 250VAC res., -30°C to +85°C	10x10 ³ ops.
Contact ratings	3A type: 3A 250VAC 5A type: 5A 250VAC 10A type: 10A 250VAC	
Mechanical endurance, DC coil	10x10 ⁶ operations	

COIL DATA

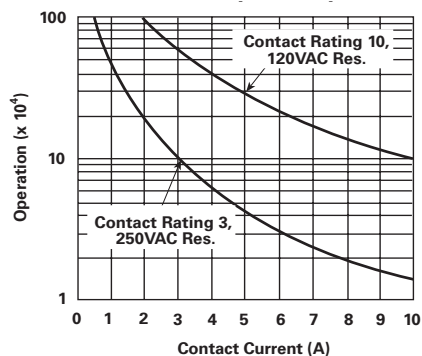
Coil voltage range	5 to 48VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class E, F

COIL VERSIONS, DC-COIL

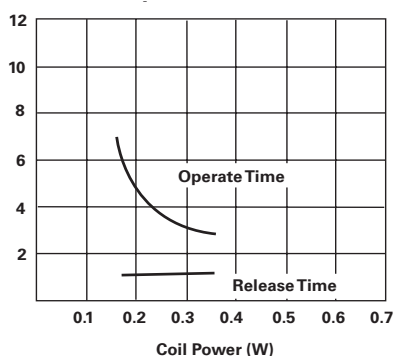
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω ±10%	Rated coil power mW
Sensitive type, 200mW					
003	3	2.25	0.15	45	200
005	5	3.75	0.25	125	200
006	6	4.5	0.3	180	200
009	9	6.75	0.45	405	200
012	12	9	0.6	720	200
024	24	18	1.2	2880	200
048	48	36	2.4	11520	200
Standard type, 450mW					
003	3	2.1	0.15	20	450
005	5	3.5	0.25	55.6	450
006	6	4.2	0.3	80	450
009	9	6.3	0.45	180	450
012	12	8.4	0.6	320	450
024	24	16.8	1.2	1280	450
048	48	33.6	2.4	5120	450

All figures are given for coil without pre-energization, at ambient temperature +23 °C. Other coil voltages on request.

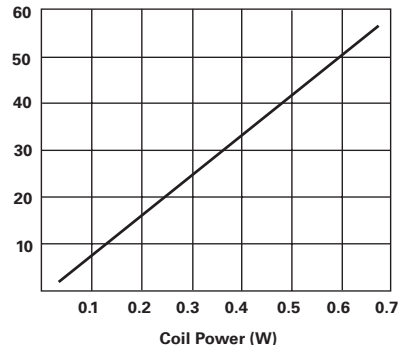
ELECTRICAL ENDURANCE



OPERATE TIME



COIL TEMPERATURE RISE



Potter & Brumfield Miniature PCB Relay T77

General Purpose Relays | PCB Relays

INSULATION DATA

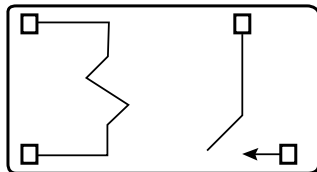
Initial dielectric strength	
between open contacts	750Vrms
between contact and coil	4000Vrms
Clearance/creepage	
between contact and coil	>3.2/6.4mm

OTHER DATA

Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter
Ambient temperature	3A type: -30°C to +105°C 5A and 10A type: -30°C to +85°C
Category of environmental protection	
IEC 61810	RTII - dust protected RT III - wash tight
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Weight	9g
Resistance to soldering heat THT	
IEC 60068-2-20	RTII: 270°C/10s RTIII: 260°C/5s
Packaging/unit	Tray/100, carton box/1000

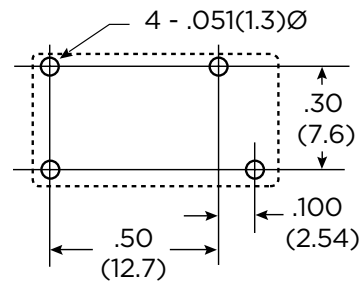
TERMINAL ASSIGNMENT

Bottom view on solder pins

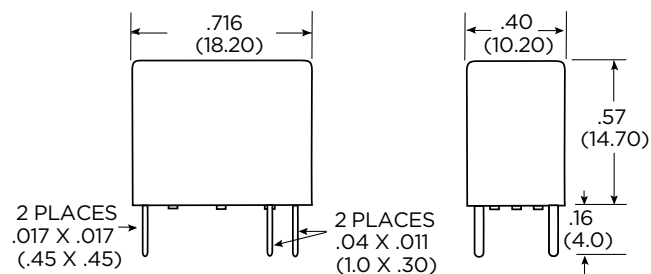


PCB LAYOUT

Bottom view on solder pins



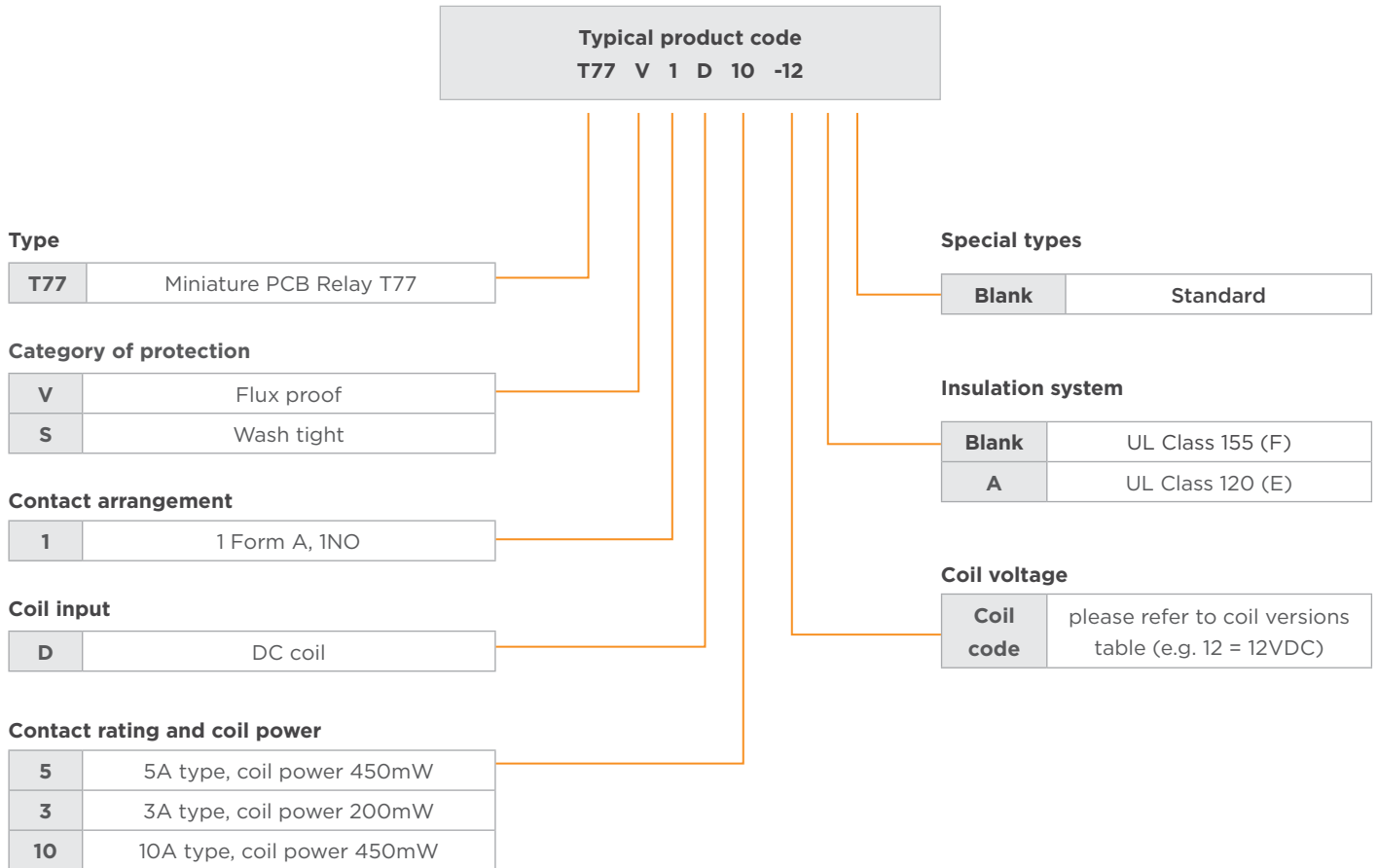
DIMENSIONS (Unit: mm)



Potter & Brumfield Miniature PCB Relay T77

General Purpose Relays | PCB Relays

PRODUCT CODE STRUCTURE



PRODUCT INFORMATION

Product code	Enclosure	Contact rating	Cont.material	Coil voltage	Coil power	Part number
T77S1D3-05	Wash tight	3A	AgNi	5VDC	200mW	1-1393194-3
T77V1D3-12	Flux proof	3A	AgNi	12VDC	200mW	2-1393194-6
T77S1D3-12	Wash tight	3A	AgNi	12VDC	200mW	1-1393194-5
T77V1D3-24	Flux proof	3A	AgNi	24VDC	200mW	2-1393194-7
T77S1D3-24	Wash tight	3A	AgNi	24VDC	200mW	1-1393194-6
T77V1D10-05	Flux proof	10A	AgCdO	5VDC	450mW	1-1393194-8
T77S1D10-05	Wash tight	10A	AgCdO	5VDC	450mW	1393194-7
T77V1D10-09	Flux proof	10A	AgCdO	9VDC	450mW	1440005-1
T77S1D10-03	Wash tight	10A	AgCdO	3VDC	450mW	1393194-6
T77V1D10-12	Flux proof	10A	AgCdO	12VDC	450mW	1-1393194-9
T77S1D10-12	Wash tight	10A	AgCdO	12VDC	450mW	1393194-9
T77V1D10-24	Flux proof	10A	AgCdO	24VDC	450mW	2-1393194-1
T77S1D10-24	Wash tight	10A	AgCdO	24VDC	450mW	1-1393194-0

Notes:

- Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.
- 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>.
- Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.
- For general information on Force-Guided-Relays and our portfolio, please visit <http://www.te.com/fgr>.
- For more detailed product-specific-information (such as B10d values, switching times, etc) please contact our Product Information Center (<https://www.te.com/usa-en/customer-support/customer-service.html>) and ask for the product-specification.

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