

976 Relay Slim-Line PCB Mount Relay/One and Two Pole 5 - 20 Amp Rated (DC and AC)



Ratings Up to 20 Amps for High Current Switching in a PCB Application

8mm Coil to Contact Clearance Meets International Standards

Available AC Coil Voltages

Sealed Package that is Compatible with Board Washing Processes.



General Specifications

(UL 508)

				976AXXH 976XAXH 976XXAH	976AXX97H 976XAX97H 976XXA97H	976XXBH 976XBXH
Contact Characteristics		Units	12 Amp	20 Amp	5 Amp	
Number and type of Contacts			SPDT	SPDT	DPDT	
Contact materials			Silver Alloy	Silver Alloy	Silver Alloy	
Thermal (Carrying) Current	A		12	20	5	
Maximum Switching Voltage	V		300	300	300	
Switching Current @ Voltage	~	Resistive	12A @ 240 50/60Hz (NO) 10A @ 240 50/60Hz (NO)	20A @ 125 50/60 Hz 16A @ 240 50/60 Hz	5A @ 240 50/60 Hz	
	≡	Resistive	12A @ 30V (NO) 10A @ 30V (NC)	20A @ 30 V 10A @ 48 V	5 @ 30 V	
Coil Characteristics						
Voltage Range	~	V	6...240	6...240	6...240	
	≡	V	3...110	3...110	3...110	
Operating Range	% of Nominal	~	85% to 110%	85% to 110%	85% to 110%	
		≡	85% to 110%	85% to 110%	85% to 110%	
Average consumption	~	VA	1.2	1.2	1.2	
	≡	W	0.53	0.53	0.53	
Drop-out voltage threshold	~		30%	30%	30%	
	≡		10%	10%	10%	
Performance Characteristics						
Electrical Life	Operations @ Rated Current (Resistive)		100,000	100,000	100,000	
Mechanical Life	Unpowered		10,000,000	10,000,000	10,000,000	
Operating time (response time)		ms	15	15	15	
Dielectric	Between coil and contact	~	5000	5000	5000	
	Between contacts	~	1000	1000	1000	
Environment						
Product certifications	Standard version		UL, TUV	UL, TUV	UL, TUV	
Ambient air temperature around the device	Storage	°C	-40...+85	-40...+85	-40...+85	
	Operation	°C	-40...+55	-40...+55	-40...+55	
Vibration resistance	Operational	g-n	3, 10 - 55 Hz	3, 10 - 55 Hz	3, 10 - 55 Hz	
Shock resistance		g-n	10	10	10	
Weight		grams	17	17	17	

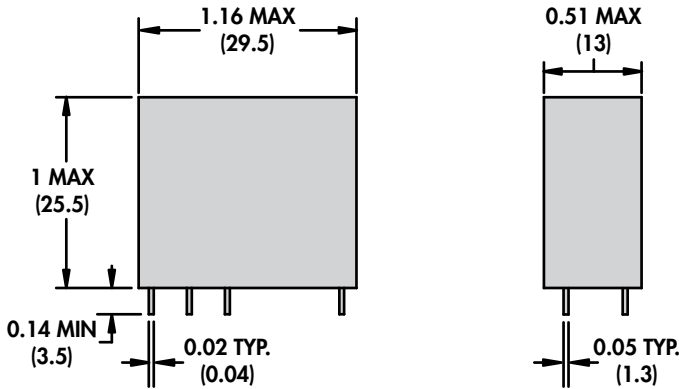
Part Number Builder

976	XBX	97	H	-24	A
Series	Contact Configuration	Construction	Type of Seal	Coil Voltage	Current Type
976	AXX = SPST - NO	97 = 20A Single Pole Relay	H = Epoxy Sealed	5 = 5 VDC	D = DC Coil
	XAX = SPDT	Blank = Not 20A Construction		6 = 6 VDC	A = AC Coil
	XBX = DPDT			12 = 12 VDC	
				24 = 24 VDC	
				24 = 24 VAC	
				120 = 120 VAC	
				240 = 240 VAC	

Standard Part Numbers

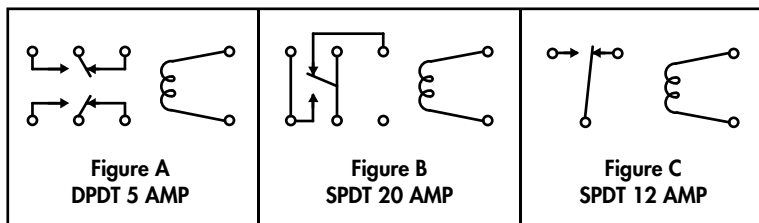
BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Input Voltage	Nominal Coil Resistance (Ω)	Part Number	Supersedes	Contact Configuration	Figure
5 Amp, DC Operated Coil					
5 VDC	47 Ω	976XBXH-5D	76EURCPCX-61	DPDT	A
6 VDC	68 Ω	976XBXH-6D	76EURCPCX-62	DPDT	A
12 VDC	270 Ω	976XBXH-12D	76EURCPCX-63	DPDT	A
24 VDC	1100 Ω	976XBXH-24D	76EURCPCX-64	DPDT	A
20 Amp, DC Operated Coil					
5 VDC	47 Ω	976XAX97H-5D	76EURCPCX-146	SPDT	B
6 VDC	68 Ω	976XAX97H-6D	76EURCPCX-147	SPDT	B
12 VDC	270 Ω	976XAX97H-12D	76EURCPCX-148	SPDT	B
24 VDC	1100 Ω	976XAX97H-24D	76EURCPCX-149	SPDT	B
12 Amp, DC Operated Coil					
5 VDC	47 Ω	976XAXH-5D	76EURCPCX-14	SPDT	C
6 VDC	68 Ω	976XAXH-6D	76EURCPCX-15	SPDT	C
12 VDC	270 Ω	976XAXH-12D	76EURCPCX-16	SPDT	C
24 VDC	1100 Ω	976XAXH-24D	76EURCPCX-17	SPDT	C
5 Amp, AC Operated Coil					
24 VAC 50/60 Hz	250 Ω	976XBXH-24A		DPDT	A
120 VAC 50/60 Hz	5600 Ω	976XBXH-120A		DPDT	A
240 VAC 50/60 Hz	22000 Ω	976XBXH-240A		DPDT	A
20 Amp, AC Operated Coil					
24 VAC 50/60 Hz	250 Ω	976XAX97H-24A		SPDT	B
120 VAC 50/60 Hz	5600 Ω	976XAX97H-120A		SPDT	B
240 VAC 50/60 Hz	22000 Ω	976XAX97H-240A		SPDT	B
12 Amp, AC Operated Coil					
24 VAC 50/60 Hz	250 Ω	976XAXH-24A		SPDT	C
120 VAC 50/60 Hz	5600 Ω	976XAXH-120A		SPDT	C
240 VAC 50/60 Hz	22000 Ω	976XAXH-240A		SPDT	C



DRAWING AND PIN SPACINGS SHOWN AT 100% OF ACTUAL SIZE

WIRING DIAGRAMS
TOP VIEW



CIRCUIT BOARD PIN SPACING
VIEWED FROM COMPONENT SIDE
(TOP VIEW)

