

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)

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Contact Characteristics			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	Storage	°C	-40...+85	-40...+85	-40...+85
around the device	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

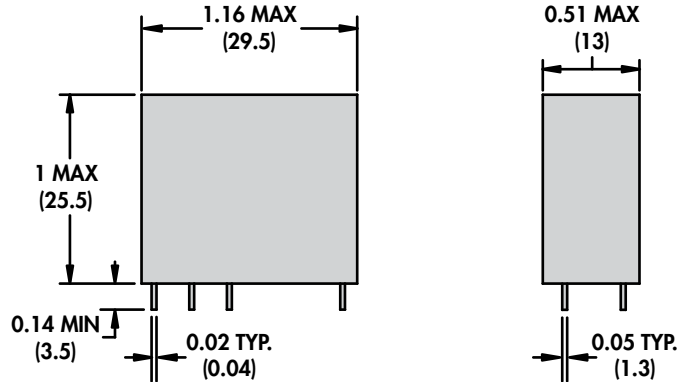
Part Number Builder

976	XBH	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
	XBH = DPDT			12 = 12 VDC	
				24 = 24 VDC	
				24 = 24 VAC	
				120 = 120 VAC	
				240 = 240 VAC	

Standard Part Numbers

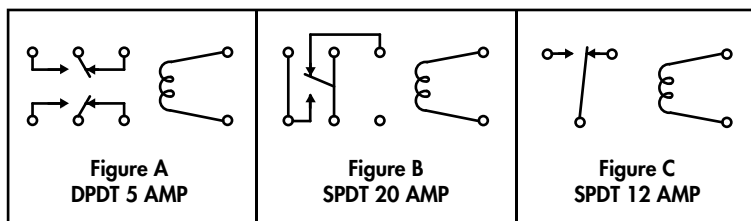
BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Input Voltage	Nominal Coil Resistance (Ω)	Part Number	Supercedes	Contact Configuration	Figure
5 Amp, DC Operated Coil					
5 VDC	47 Ω	976XBXH-5D	76EURPCPX-61	DPDT	A
6 VDC	68 Ω	976XBXH-6D	76EURPCPX-62	DPDT	A
12 VDC	270 Ω	976XBXH-12D	76EURPCPX-63	DPDT	A
24 VDC	1100 Ω	976XBXH-24D	76EURPCPX-64	DPDT	A
20 Amp, DC Operated Coil					
5 VDC	47 Ω	976XAX97H-5D	76EURPCPX-146	SPDT	B
6 VDC	68 Ω	976XAX97H-6D	76EURPCPX-147	SPDT	B
12 VDC	270 Ω	976XAX97H-12D	76EURPCPX-148	SPDT	B
24 VDC	1100 Ω	976XAX97H-24D	76EURPCPX-149	SPDT	B
12 Amp, DC Operated Coil					
5 VDC	47 Ω	976XAXH-5D	76EURPCPX-14	SPDT	C
6 VDC	68 Ω	976XAXH-6D	76EURPCPX-15	SPDT	C
12 VDC	270 Ω	976XAXH-12D	76EURPCPX-16	SPDT	C
24 VDC	1100 Ω	976XAXH-24D	76EURPCPX-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)

