

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
		Units		12 Amp	20 Amp	5 Amp
Contact Characteristics				SPDT	SPDT	DPDT
Number and type of Contacts				Silver Alloy	Silver Alloy	Silver Alloy
Contact materials				12	20	5
Thermal (Carrying) Current		A		300	300	300
Maximum Switching Voltage		V		12A @ 240 50/60Hz (NO)	20A @ 125 50/60 Hz	5A @ 240 50/60 Hz
Switching Current @ Voltage		~ Resistive		10A @ 240 50/60Hz (NO)	20A @ 30 V	5 @ 30 V
		= Resistive		12A @ 30V (NO)	10A @ 48 V	
				10A @ 30V (NC)		
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		~ V 5000	5000	5000
		Between contacts		~ V 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

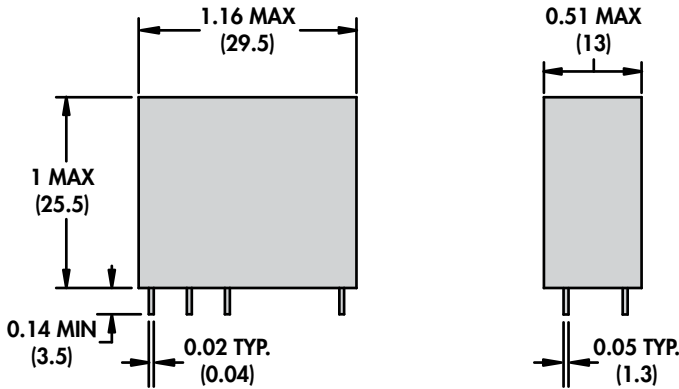
Part Number Builder

976	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

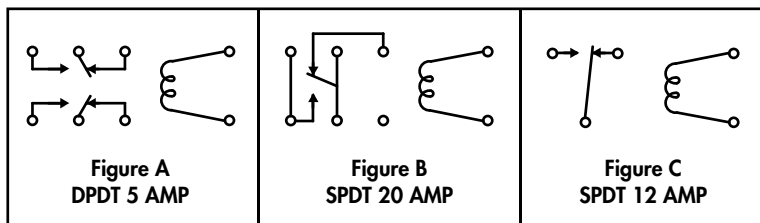
BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

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)

