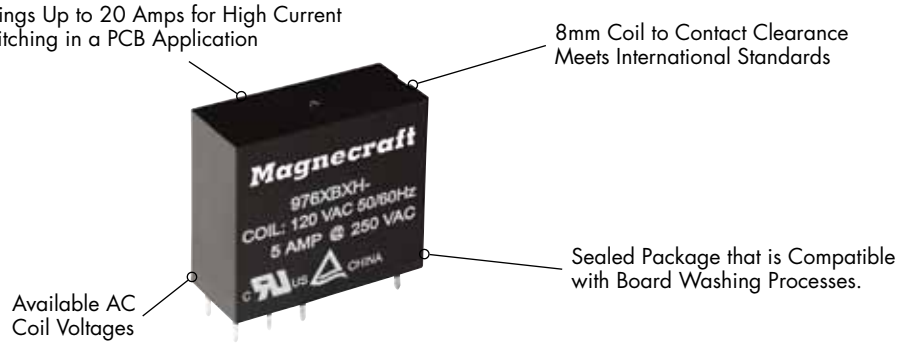
976 Relay Slim-Line PCB Mount Relay/One and Two Pole 5 - 20 Amp Rated (DC and AC)

UL Recognized
File No. E191122



General Specifications (UL 508)

Contact Characteristics			Units	976AXXH 976XAXH 976XXAH 12 Amp	976AXX97H 976XAX97H 976XXA97H 20 Amp	976XXBH 976XBXH 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	~	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

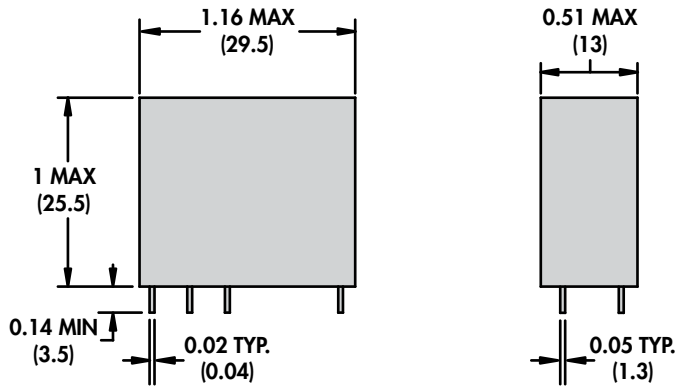
Part Number Builder

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	Supercedes	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

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

Figure A

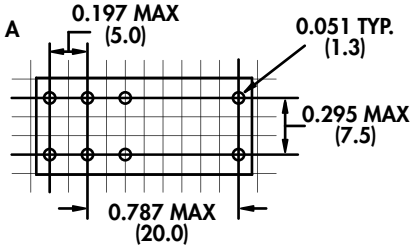


Figure B

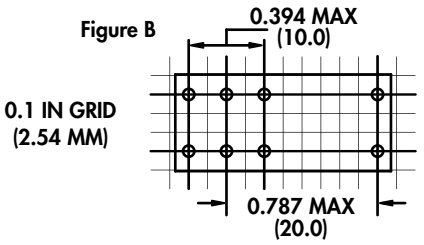
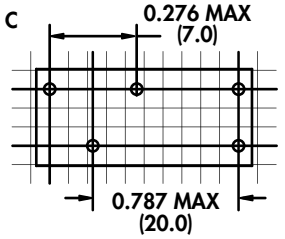


Figure C



WIRING DIAGRAMS
TOP VIEW