



67



219

**MANUFACTURED UNDER
ISO 9002 QS 9000**



750H

PRODUCT

L X W X H (INCHES)

1.20 x 0.735 x 0.978 to 1.592

2.59 x 1.468 x 2.625 / 3.062

1.281 x 0.910 x 1.156

FEATURES

- ✦ 0.100 SOLDER PLUG-IN OR PRINTED CIRCUIT TERMINALS
- ✦ UP TO 6 POLES SWITCHING PLUG-IN STYLES HAVE 3-48 UNC
- ✦ GROUND STUDS
- ✦ OPTIONAL L 3 AMP BIFURCATED CONTACTS FOR LOW LEVEL

- ✦ 12 OR 14 PIN WITH LOCKING CLIP
- ✦ WIDE RANGE OF CONTACT CONFIGURATIONS TO 6PST
- ✦ WIDE CHOICE OF OPTIONS
- ✦ OPTIONAL 5 AMP BIFURCATED CONTACTS FOR LOW LEVEL
- ✦ UL LISTED WHEN USED WITH 27390D OR 33377D SOCKET
- ✦ NUCLEAR QUALIFIED VERSIONS AVAILABLE

- ✦ 8 & 11 PIN OCTAL BASE
- ✦ HERMETICALLY SEALED DRY NITROGEN FILLED
- ✦ GRAY LACQUER FINISH OVER STEEL ENCLOSURE
- ✦ MEETS UL STANDARD FOR CLASS 1 DIVISION 2 HAZARDOUS LOCATIONS
- ✦ UL LISTED WHEN USED WITH 70-464-1 OR 70-465-1 SOCKETS

COIL		UNITS		
Standard Voltage AC:		110 / 120	6, 12, 24, 110 / 120, 220 / 240	12, 24, 110 / 120
DC:		5, 12, 24, 48, 110 / 125	6, 12, 24, 48, 110 / 125	12, 24, 110 / 125
Coil Power AC (60 Hz):	VA	2.75	1.2	2.0
Coil Power DC:	W	0.45	0.9	1.2
Insulation System Per UL Standard 1446:		Class B (130°C)	Class B (130°C)	Class B (130°C)
CONTACTS				
Contact Configuration:		DPST to 6PDT	to 6PDT	DPDT, 3PDT
Contact Material:		Silver alloy, gold plated	Silver alloy, gold diffused	Silver alloy, gold flashed
Contact Resistance (Initial):	m Ohms	50	75	100
Contact Rating AC Amperes (AC1):	A	5 / 3	10 / 5	2 Pole-12, 3 Pole-10
Contact Rating AC Voltage:	V	120 / 120	120 / 120	120 / 240
Contact Rating DC Amperes (DC1):	A	5/3	10/5	10
Contact Rating DC Voltage:	V	28 / 28	28 / 28	30
Horse Power (AC):	Hp	-	See Table	1/3 @ 120 V
Horse Power (AC):	Hp	-	See Table	1/2 @ 240 V
TIMING				
Operate Time:	ms	25	25	10
Release Time:	ms	20	20	30
DIELECTRIC STRENGTH				
Coil to Contacts:	V rms	1500	1500	1250
Insulation Resistance:	megohms minimum @ VDC	1000 @ 500	1000 @ 500	1000 @ 500
TEMPERATURE				
Operating, AC Lower:	°C	-40	-40	-45
Operating, AC Upper:	°C	+60	+80	+55
Operating, DC Lower:	°C	-40	-40	-45
Operating, DC Upper:	°C	+60	+80	+70
Storage, Lower:	°C	-40	-40	-45
Storage, Upper:	°C	+130	+130	+105
LIFE EXPECTANCY				
Electrical @ Rated Load (AC1):	operations	100,000	100,000	100,000
Mechanical @ no Load :	operations	10,000,000	10,000,000	5,000,000
MISCELLANEOUS				
Cover Protection Category:	IP	40	40	67
Weight:	grams	22 to 40	241	130

MATING SOCKETS
SEE SECTION 7

70-303-1, 70-305-1, 70-307-1
70-304-1, 70-306-1, 70-308-1

27390D, 33377D

70-464-1, 70-465-1
70-750D8-1, 70-750D11-1

AGENCY APPROVALS



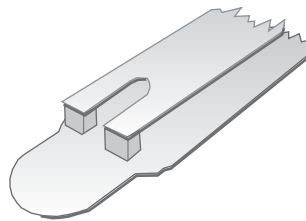
UL CONTACT LOAD RATINGS TABLE



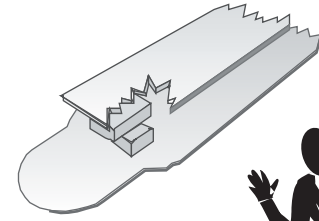
CONTACT CONFIGURATION	CURRENT OR HORSE POWER	LOAD VOLTAGE	LOAD VOLTAGE FREQUENCY	TYPE OF LOAD
1 POLE THRU 6 POLES	5 AMP	120 VAC	50/60 Hz	RESISTIVE
	5 AMP	28 VDC	DC	RESISTIVE
	3 AMP	120 VAC	50/60 Hz	RESISTIVE
	3 AMP	28 VDC	DC	RESISTIVE



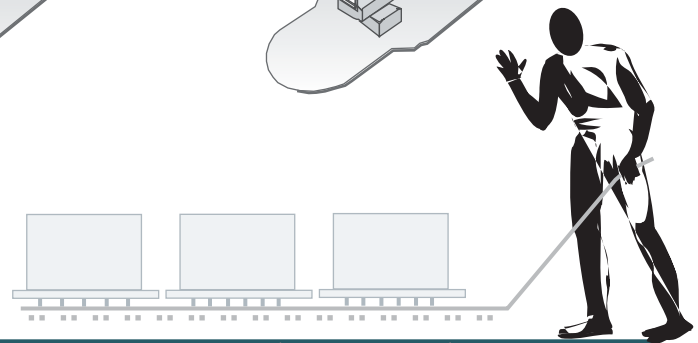
BIFURCATED CONTACTS (LOW LEVEL APPLICATIONS)



STANDARD CONTACTS (5 AMP CROSS BAR)



STANDARD CLASS 67 MINIATURE INDUSTRIAL RELAYS ARE DESIGNED FOR APPLICATIONS REQUIRING DPDT TO 6PDT CONTACTS WHERE SPACE AND WEIGHT ARE OF PRIME IMPORTANCE. SHATTER RESISTANT, SEE-THRU PLASTIC COVERS ARE UTILIZED TO PROTECT AGAINST DUST, TAMPERING AND ELECTRICAL SHOCK. THE 67T MODELS HAVE BIFURCATED CONTACTS AND ARE DESIGNED FOR LOW LEVEL SWITCHING APPLICATIONS.



GENERAL SPECIFICATIONS (@ 25°C)

	UNITS	
COIL		
Pull-in Voltage AC (50/60 Hz):≤	% of nominal	80
Pull-in Voltage DC:≤	% of nominal	75
Dropout Voltage AC (50/60 Hz):≥	% of nominal	10
Dropout Voltage DC:≥	% of nominal	10
Maximum Voltage:	% of nominal	120
Resistance:	% ±	10
Coil Power AC (60 Hz):	VA	2.75
Coil Power DC:	W	0.45
Insulation System Per UL Standard 1446:		Class B (130 °C)
Duty:		Continuous
CONTACTS		
Contact Material:		Silver alloy
Contact Rating AC Amperes (AC1):		5/3
Contact Rating AC Voltage:	A	120 / 120
Contact Rating DC Amperes (DC1):	V	5/3
Contact Rating DC Voltage:	A	28 / 28
Minimum Recommended Load:	V	100 @ 5 VDC or 0.5 W
	ma	
TIMING		
Operate Time:	ms	25
Release Time:	ms	20

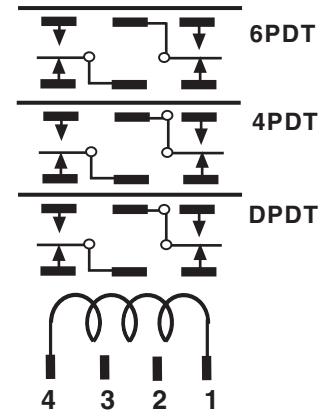
	UNITS	
DIELECTRIC STRENGTH		
Coil to Contacts:	V rms	1500
Across Open Contacts:	V rms	1000
Pole to Pole:	V rms	1000
Contacts to Frame:	V rms	1000
Insulation Resistance:	megohms minimum @VDC	1000 @ 500
VIBRATION RESISTANCE		
Functional:	g's	10
SHOCK RESISTANCE		
Functional:	g's	20
TEMPERATURE		
Operating, AC Lower:	°C	-40
Operating, AC Upper:	°C	+60
Operating, DC Lower:	°C	-40
Operating, DC Upper:	°C	+60
Storage, Lower:	°C	-40
Storage, Upper:	°C	+130
LIFE EXPECTANCY		
Electrical @ Rated Load (AC1):	operations	100,000
Mechanical @ no Load :	operations	10,000,000
MISCELLANEOUS		
Operating Position:		Any
Insulation Material:	94V-0	Molded plastic
Enclosure Material:	94V-0	Polycarbonate
Cover Protection Category:	IP	40
Terminals:	Inch (mm)	0.10, 0.04 x 0.01 (2.54, 1.01 x 0.25)
Weight:	grams	22 to 40

67 MINIATURE ENCLOSED INDUSTRIAL RELAY



DPDT THRU 6PDT 3 & 5 AMPS

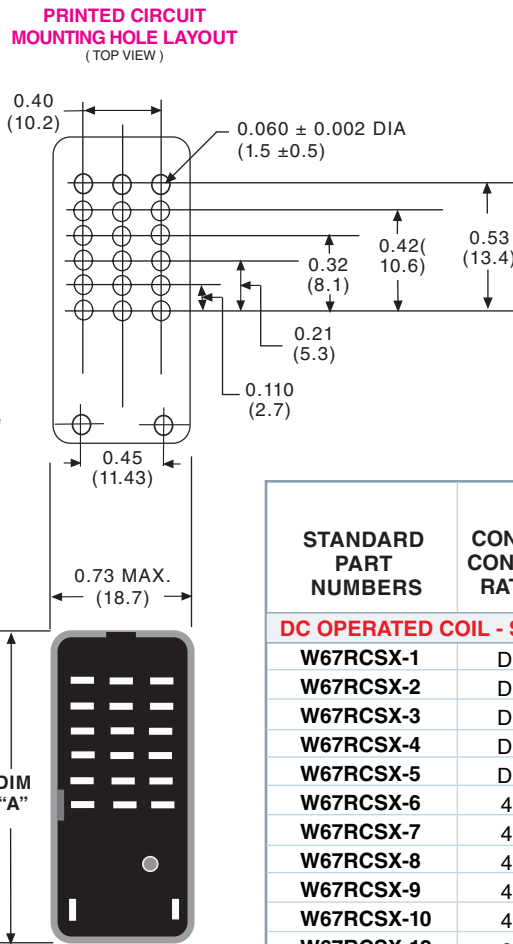
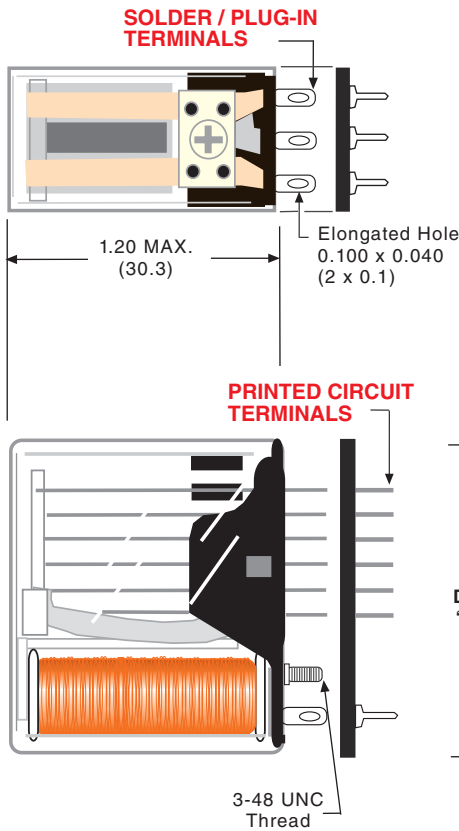
WIRING DIAGRAM



Mating Sockets

70-303-1, 70-305-1, 70-307-1: **SOLDER**
70-304-1, 70-306-1, 70-308-1: **PRINTED CIRCUIT**
See section 7

OUTLINE DIMENSIONS
DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



DIMENSIONS



CONTACT CONFIGU	"A"
6PDT	1.374 (34.9)
4PDT	1.156 (29.4)
DPDT	0.978 (24.8)

STANDARD PART NUMBERS	CONTACT CONFIGURATION	COIL MEASURED @ 25 °C	
		NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
DC OPERATED COIL - SOLDER/PLUG-IN, 5 AMP			
W67RCSX-1	DPDT	5 VDC	52 Ω
W67RCSX-2	DPDT	12 VDC	185 Ω
W67RCSX-3	DPDT	24 VDC	700 Ω
W67RCSX-4	DPDT	48 VDC	2,500 Ω
W67RCSX-5	DPDT	110/125 VDC	15,000 Ω
W67RCSX-6	4PDT	5 VDC	52 Ω
W67RCSX-7	4PDT	12 VDC	185 Ω
W67RCSX-8	4PDT	24 VDC	700 Ω
W67RCSX-9	4PDT	48 VDC	2,500 Ω
W67RCSX-10	4PDT	110/125 VDC	15,000 Ω
W67RCSX-12	6PDT	12 VDC	90 Ω
W67RCSX-13	6PDT	24 VDC	430 Ω
DC OPERATED COIL-BIFURCATED CONTACTS, 3 AMP			
W67TRCSX-2	DPDT	12 VDC	185 Ω
W67TRCSX-3	DPDT	24 VDC	700 Ω
W67TRCSX-7	4PDT	12 VDC	185 Ω
W67TRCSX-8	4PDT	24 VDC	700 Ω
W67TRCSX-12	6PDT	12 VDC	90 Ω
W67TRCSX-13	6PDT	24 VDC	430 Ω
DC OPERATED PRINTED CIRCUIT, 5 AMP			
W67RPCX-2	DPDT	12 VDC	185 Ω
W67RPCX-3	DPDT	24 VDC	700 Ω
W67RPCX-7	4PDT	12 VDC	185 Ω
W67RPCX-8	4PDT	24 VDC	700 Ω
W67RPCX-12	6PDT	12 VDC	90 Ω
W67RPCX-13	6PDT	24 VDC	430 Ω
AC OPERATED COIL - SOLDER/PLUG-IN, 5 AMP			
W67ARCSX-5	DPDT	110/120 VAC, 50/60Hz	9000 Ω
W67ARCSX-10	4PDT	110/120 VAC, 50/60Hz	8000 Ω
W67ARCSX-15	6PDT	110/120 VAC, 50/60Hz	8000 Ω
DC OPERATED COIL ULTRA SENSITIVE - SOLDER/PLUG-IN, 3 AMP			
W67SCSX-1	DPDT	9.4 MADC	1,000 Ω
W67SCSX-2	DPDT	6.4 MADC	2,500 Ω
W67SCSX-3	DPDT	4.5 MADC	5,000 Ω
W67SCSX-6	4PDT	13.7 MADC	1,000 Ω
W67SCSX-7	4PDT	9.1 MADC	2,500 Ω
W67SCSX-8	4PDT	6.5 MADC	5,000 Ω

RETROFITS POTTER & BRUMFIELD R10.
SEE END OF SECTION 1 FOR CROSS REFERENCE

9/04