

YCA SERIES RELAY - NONLATCH - AC COIL 3 PDT, LOW LEVEL TO 10 AMP



Applicable sockets: SO-1065-10392/10393

Application Notes: 102 007

All welded construction	
Contact arrangement	3 PDT
Meets the standards and requirements of	MIL-PRF-83536

PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at	Low level, 28 Vdc and 115/200 Vac 400Hz, 3Ø, case grounded	
• Weight	0.066 lb max	
• Dimensions	0.81 in x 0.81 in x 0.64 in	
Special models available upon request		
Hermetically sealed, corrosion resistant metal can		

CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole		Load current in Amps	
and load type [1]	28 Vdc	115 Vac, 400 Hz, 1Ø	115/200 Vac, 400 Hz, 3Ø
Resistive	10	10	10
Inductive [2]	6	8	8
Motor	4	4	4
Lamp	2	2	-
Overload	30	60	60
Rupture	40	80	80
Low level [3]	-	-	-
Time current characteristics [4]	-	-	-



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COIL CHARACTERISTICS (Vdc)

	Vac 400 Hz	Vac 50 thru 400 Hz
CODE	F	K
Nominal operating voltage	115	115
Maximum operating voltage	122	122
- Cold coil at +85° C	90	95
- During high temp test at +85° C	95.4	100
- During continuous current test at +85° C	103.5	105
Maximum drop-out voltage	30	30
Coil current maximum milliAmperes at +25° C	40	28

GENERAL CHARACTERISTICS

Temperature range	-70°C to + 85°C
Minimum operating cycles (life) at rated load	50,000 [2]
Minimum operating cycles (life) at 25% rated load	200,000
Dielectric strength at sea level	
- All circuits to ground and circuit to circuit	1,250 Vrms
- Coil to ground	1,000 Vrms
Dielectric strength at altitude 80,000 ft	500 Vrms [5]
Insulation resistance	
- Initial (500 Vdc)	100 M Ω min
- After environmental tests (500 Vdc)	50 M Ω min
Sinusoidal vibration (A and D mounting)	0.12 d.a. / 10 to 70 Hz 30G / 70 to 3000 Hz
Sinusoidal vibration (G and J mounting)	0.12 d.a. / 10 to 57 Hz 20G /57 to 3000 Hz
	200701 10 0000112
Random vibration	
Random vibration - Applicable specification	MIL-STD-202
- Applicable specification	MIL-STD-202
- Applicable specification - Method	MIL-STD-202 214
- Applicable specification - Method - Test condition - A and D mounting	MIL-STD-202 214 1G (0.4G ² /Hz, 50 to 2000 Hz)
- Applicable specification - Method - Test condition - A and D mounting - Test condition - E, J and G mounting (E in track)	MIL-STD-202 214 1G (0.4G ² /Hz, 50 to 2000 Hz) 1E (0.2G ² /Hz, 50 to 2000 Hz)
- Applicable specification - Method - Test condition - A and D mounting - Test condition - E, J and G mounting (E in track) - Duration	MIL-STD-202 214 1G (0.4G²/Hz, 50 to 2000 Hz) 1E (0.2G²/Hz, 50 to 2000 Hz) 15 minutes each plane
- Applicable specification - Method - Test condition - A and D mounting - Test condition - E, J and G mounting (E in track) - Duration Shock (A and D mounting)	MIL-STD-202 214 1G (0.4G²/Hz, 50 to 2000 Hz) 1E (0.2G²/Hz, 50 to 2000 Hz) 15 minutes each plane 200G / 6 ms
- Applicable specification - Method - Test condition - A and D mounting - Test condition - E, J and G mounting (E in track) - Duration Shock (A and D mounting) Shock (G and J mounting)	MIL-STD-202 214 1G (0.4G²/Hz, 50 to 2000 Hz) 1E (0.2G²/Hz, 50 to 2000 Hz) 15 minutes each plane 200G / 6 ms 100G / 6 ms
- Applicable specification - Method - Test condition - A and D mounting - Test condition - E, J and G mounting (E in track) - Duration Shock (A and D mounting) Shock (G and J mounting) Maximum contact opening time under vibration and shock	MIL-STD-202 214 1G (0.4G²/Hz, 50 to 2000 Hz) 1E (0.2G²/Hz, 50 to 2000 Hz) 15 minutes each plane 200G / 6 ms 100G / 6 ms 10 μs
- Applicable specification - Method - Test condition - A and D mounting - Test condition - E, J and G mounting (E in track) - Duration Shock (A and D mounting) Shock (G and J mounting) Maximum contact opening time under vibration and shock Operate time at nominal voltage @ 25°C	MIL-STD-202 214 1G (0.4G²/Hz, 50 to 2000 Hz) 1E (0.2G²/Hz, 50 to 2000 Hz) 15 minutes each plane 200G / 6 ms 100G / 6 ms 10 μs 15 ms max

Unless otherwise noted, the specified temperature range applies to all relay characteristics.

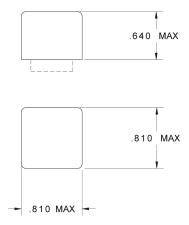


YCA SERIES RELAY - NONLATCH - AC COIL

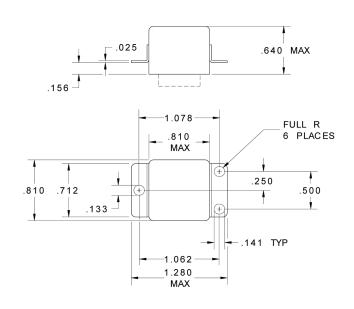
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MOUNTING STYLES

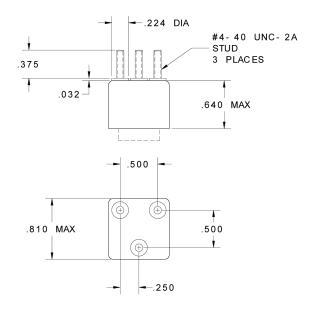
Dimensions in inches Tolerances, unless otherwise specified .XX \pm 0.03 in .XXX \pm 0.10 in



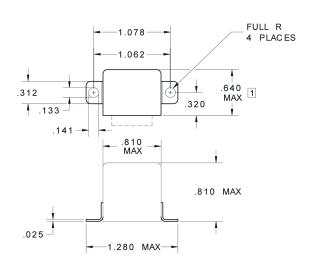
MOUNTING STYLE A



MOUNTING STYLE D



MOUNTING STYLE G



1 RELAY HEIGHT MAY BE INCREASED .100 INCH FOR "N" SUPPRESSED COILS

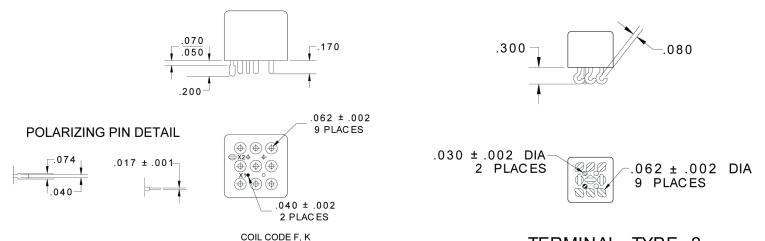
MOUNTING STYLE J



YCA SERIES

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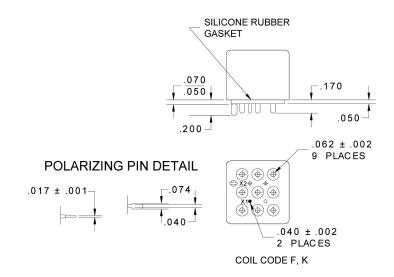
TERMINAL TYPES



TERMINAL TYPE 1

FINISH: BODY-LEACH BLUE TERMINALS-TIN/LEAD

TERMINAL TYPE 2 FINISH: BODY-LEACH BLUE TERMINALS-TIN/LEAD



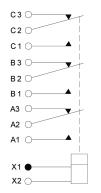
TERMINAL TYPE 4 FINISH: BODY-LEACH BLUE TERMINALS-GOLD PLATED



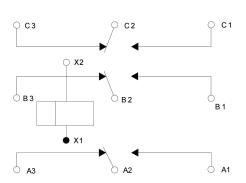
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DIAGRAM(S)

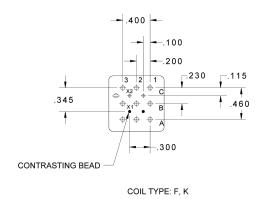
SCHEMATIC DIAGRAM



WIRING DIAGRAM COIL POLARITY NOT APPLICABLE

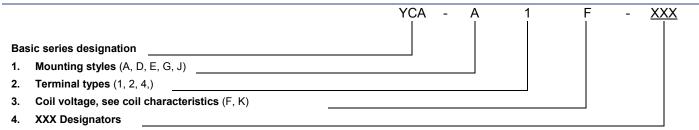


STANDARD TERMINAL LAYOUT



TOL: .XX ±.03; .XXX ±.010

NUMBERING SYSTEM



NOTES

- Standard Intermediate current test applicable, relay can also switch low level load while switching any of the other rated loads on adjacent contacts.
- 2. Inductive load life, 10,000 cycles.
- 3. Low level endurance test: contact load of 10 to 50 millivolt, 10 to 50 microamp, 100 Ohm max. contact resistance.
- 4. Refer to MIL-PRF-83536 for details.
- 5. 500 V with silicone gasket compressed, 250 V all other conditions.

For any inquiries, please contact your local sales representative: leachcorp.com