Features

- 40A switching capability
- 2.5kV dielectric strength (between coil and contacts)
- 1 Form A, 1 Form B and 1 Form C configurations
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Dimensions: 50.2 x 27 x 28 mm,

Application

- Air Conditioner / Air Compressor / Home appliances / Heating controller / Automotive application / Refrigerator / Fan, etc.

Contact Data

Contact Arrangement	1A, 1B, 1C	
Contact Material	Ag Alloy	
Contact Rating	40A Type:	40A 240VAC/277VAC/30VDC 1HP/1.5HP 240VAC TV-5 TV-15
	30A Type:	30A/20A 240VAC/277VAC/30VDC 1/2HP/1HP 240VAC TV-5
Max. Switching Power	11000VA / 1200W	
Max. Switching Voltage	277VAC / 30VDC	
Max. Switching Current	40A	
Contact Resistance	≦50mΩ (1A, 24VDC)	
Electrical Endurance	40A: $5x10^4$ 30A: $1x10^5$	
Mechanical Endurance	$1x10^7$	

Coil Parameter

Coil Voltage (VDC)		Coil Resistance (Ω±10%)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
5	6.5	28	3.75	0.5	0.90
6	7.8	40	4.50	0.6	
9	11.7	90	6.75	0.9	
12	15.6	160	9.00	1.2	
15	19.5	250	11.25	1.5	
18	23.4	360	13.50	1.8	
24	31.2	640	18.00	2.4	
48	62.4	2560(1±15%)	36.00	4.8	
110	143	13445(1±15%)	82.50	11.0	

Operation Condition

Insulation Resistance		1000MΩ min (at 500VDC)
Dielectric Strength	Between Contacts	1500VAC, 50/60Hz 1min
	Between Coil and Contact	2500VAC, 50/60Hz 1min
Shock Resistance	Functional	98m/s^2
	Endurance	980m/s^2
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-55 ~ +85℃
Operate Time		≦15ms
Release Time		≦10ms
Relative Humidity		5%~85%
Weight		Approx. 30g

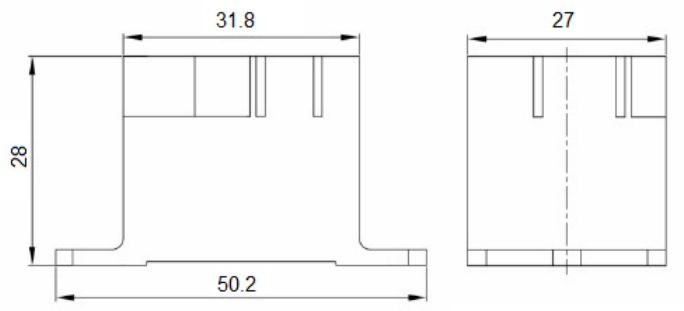
Ordering Information

		HA5	-12D	-A	30	-S	(XXX)
Model							
Coil Voltage	5, 6, 9, 12, 15, 18, 24, 48, 110VDC						
Contact Arrangement	**A**: 1 Form A **B**: 1 Form B **C**: 1 Form C						
Contact Current	**Nil**: 40A **30**: 30A						
Construction	**S**: Sealed						
Special Code	**Nil**: Standard **XXX**: Customer special requirement						

Notes: 1) We recommend flux tight types for a clean environment (free from contaminations like H2S, SO2, NO2, dust, etc.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H2S, SO2, NO2, dust, etc.).
2) Please inform us if water cleaning or surface treatment will involve after the relays installed on PCB.
3) Please inform us if dielectric strength between coil and contact exceed 2500VAC.
4) Avoid using relays under strong magnetic or shock conditions, or technical ratings will change.

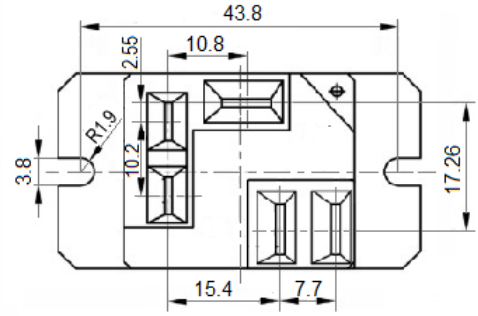
Dimensions (UNIT: mm)

Outline Dimensions

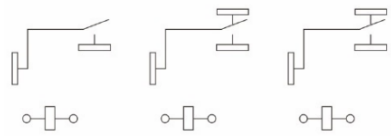


Dimensions (UNIT: mm)

Mounting (Bottom views)



Wiring Diagram (Bottom views)

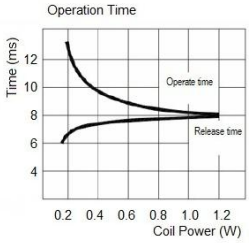


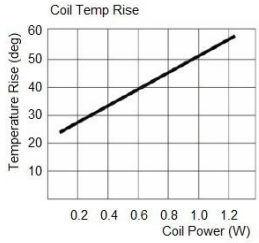
1 Form A　1 Form B　1 Form C

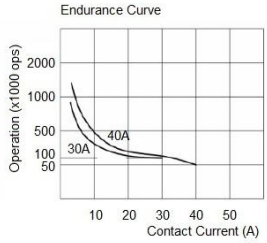
Notes: 1) In case of no tolerance shown in outline dimension: outline dimension ≦1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≦5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

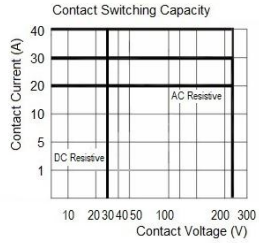
2) The tolerance without indicating for PCB layout is always ±0.1mm.

Engineering Data









Note: Specification and dimensions in this catalogue are for reference only and subject to change without notice.