

CH
series

Power relay series pursuing reliability and safety



CH1U 16A
(High-capacity, 1 pole, 16A type)



CH2U
(2 poles, standard type)

■ Currently it is used for such purposes

- Audio, Various household appliances
- Control panel, Power supply equipment, Molding equipment, Machine tools, Welding machines, Machinery for agriculture
- Commercial equipment, Vending machines, Telecommunications equipment, Disaster prevention equipment, Copiers, Measuring instruments, Medical devices
- Earth Leakage Circuit Breaker (ELCB)

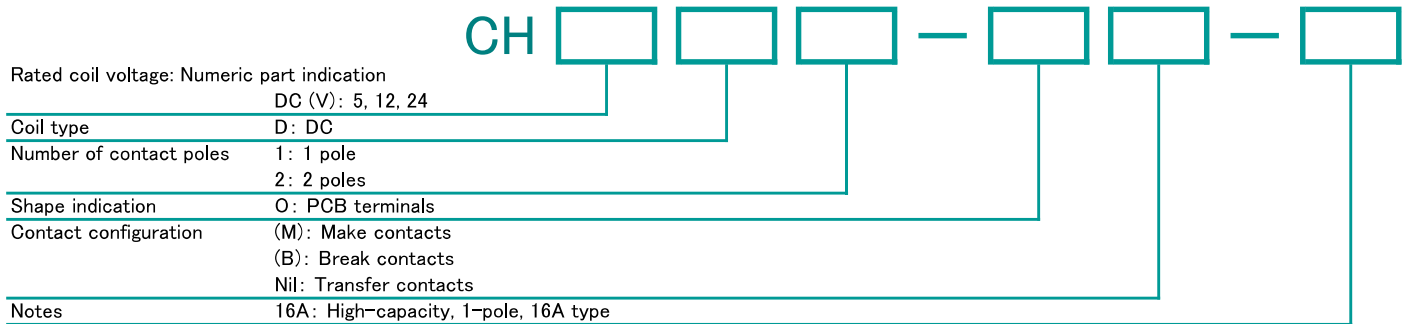
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■ Features

- Low-profile general-purpose power relays of 1-pole 16A, 2-poles 5A boasting high reliability and achievement.
- PCB type, easy to use 1-pole and 2-poles relay.

■ Model numbering system



■ Safety standards

	Contact rating (1-pole)	Contact rating (2-poles)
	CH1U 16A	CH2U
UL (C-UL)	16A 240V AC	8A 250V AC
TUV	16A 240V AC	8A 250V AC
CQC	16A 240V AC	8A 250V AC
Electrical Appliances and Materials Safety Act	Conformable	

■ Coil ratings

AC/DC	Item Voltage	Rated current (mA)	Coil resistance (Ω)	Operate voltage (V)	Release voltage (V)	Maximum voltage (V)	Power consumption (W)
				Ratio to rated voltage			
DC	5	108	46	80% max.	5% min.	110%	0.54
	12	45	270				
	24	22.5	1050				

- Notes: 1. Rated current and coil resistance are values at coil temperature of 20°C, tolerance is $\pm 10\%$.
- 2. Operate voltage and release voltage are values at coil temperature of 20°C.
- 3. Maximum voltage is the maximum value of the allowable voltage fluctuation range of the relay coil operating power supply with the ambient temperature at 20°C.

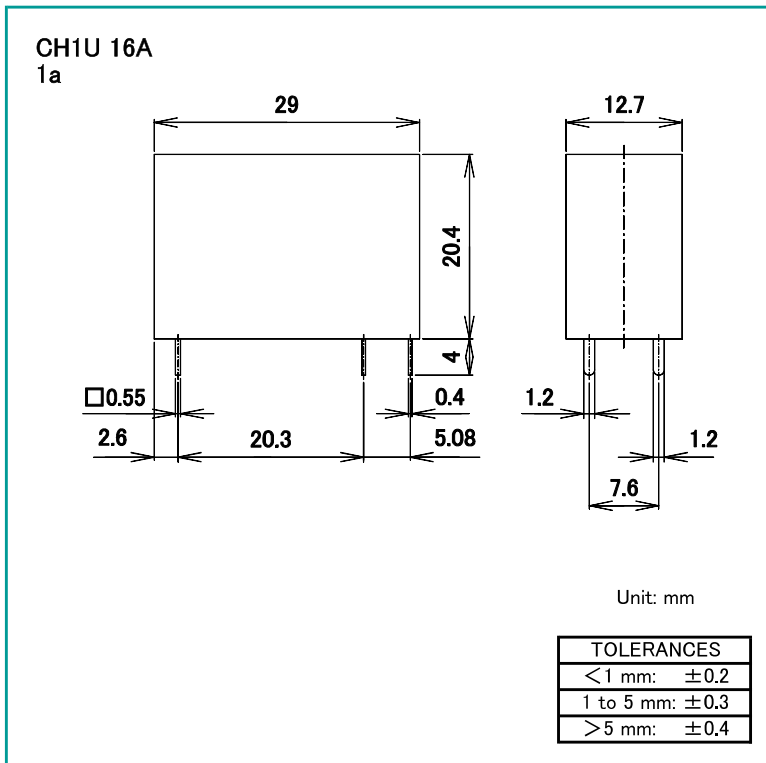
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■ Ratings*Performance

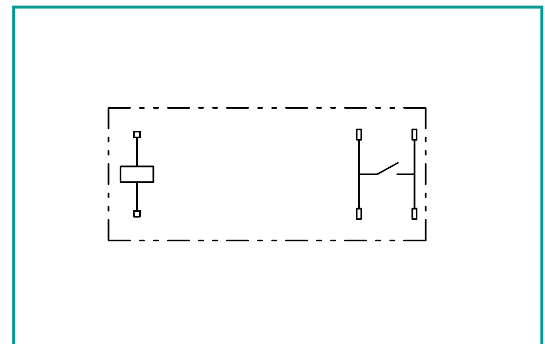
Specifications	Item	Performance (1-pole type)	Performance (2-poles type)	
		CH1U 16A	CH2U	
Contact specification	Contact configuration	1a	2a, 2b, 2c	
	Contact resistance	100mΩ max. (at DC6V 1A)		
	Contact material	Ag alloy		
Ratings	Rated load (resistive load)	AC240V 16A	AC250V 5A	
	Max. switching capacity (resistive load)	3840VA	1250VA	
	Max. switching voltage	AC250V		
	Max. switching current	16A	5A	
Electrical capability	Insulation resistance	100MΩ min. (at DC500V)		
	Dielectric strength	Between coil and contacts	AC4000V 1 min	
		Between open contacts	AC1000V 1 min	
		Between opposite polarity contacts	—	AC1000V 1 min
	Operate time (at rated voltage on, at 20°C)	20ms max. (excluding contact bounce time)		
Release time (at rated voltage off, at 20°C)	10ms max. (excluding contact bounce time)			
Mechanical capability	Vibration resistance	Malfunction	10 to 55 to 10Hz (double amplitude 1.0mm)	
		Destruction	10 to 55 to 10Hz (double amplitude 1.0mm)	
	Shock resistance	Malfunction	100m/s ²	
		Destruction	1000m/s ²	
Life	Mechanical endurance (at 30 times/min)	1 000 000 times min.		
	Electrical endurance (resistive load) (at 12 times/min)	100 000 times min. (at rated load)		
Conditions for operation	Ambient temperature	-40°C to +70°C (no freezing and condensing at low temperature)	-40°C to +60°C (no freezing and condensing at low temperature)	
	Ambient humidity	5% to 85%RH		
Mass		approx. 13g	approx. 14g	

● Notes: The above is the initial value.

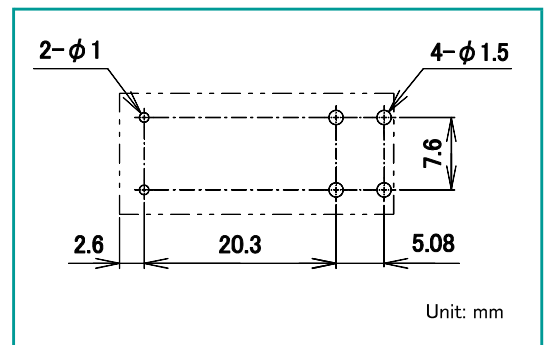
■ Dimensions



■ Schematics



■ PCB mounting holes (tolerances ±0.1)

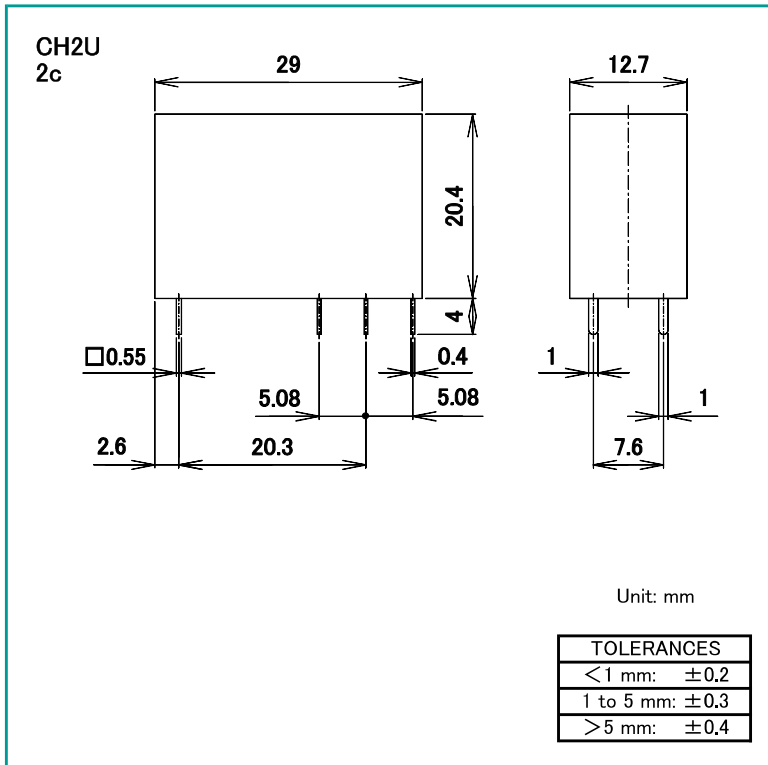


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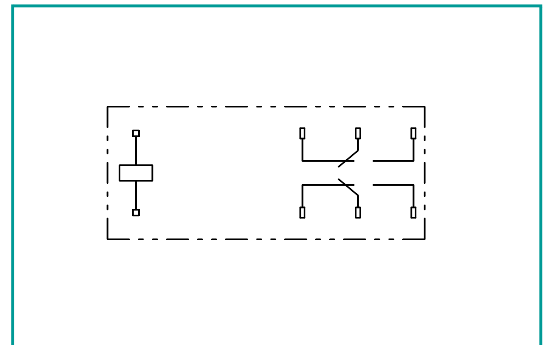
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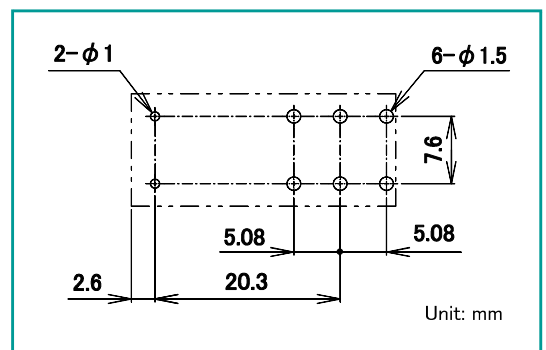
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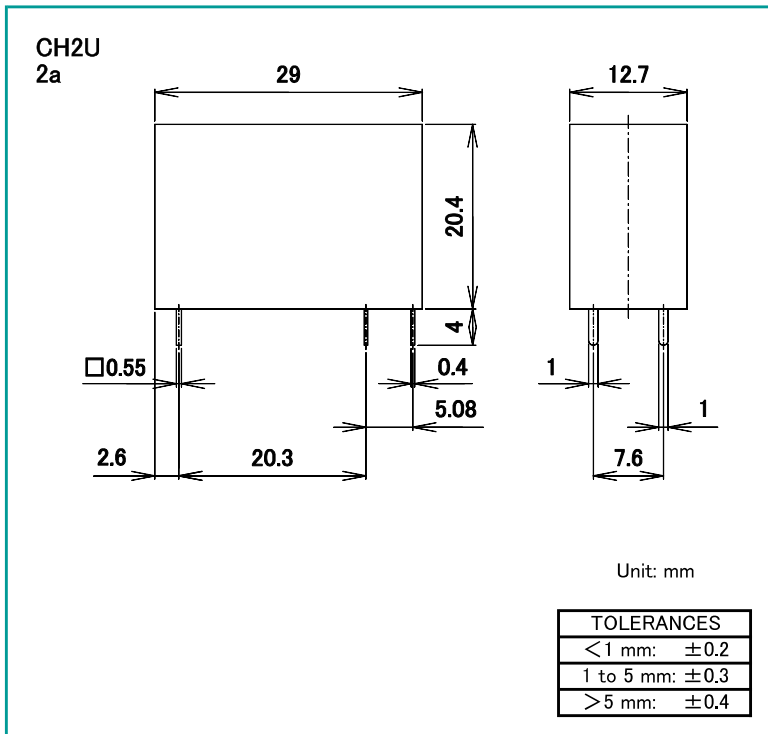
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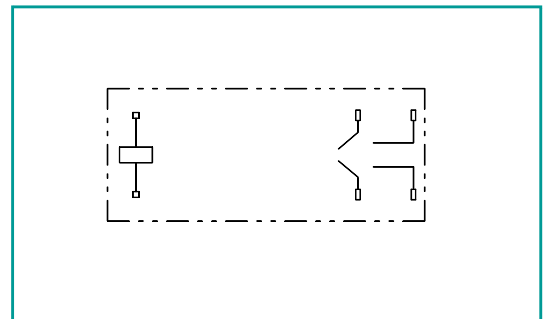
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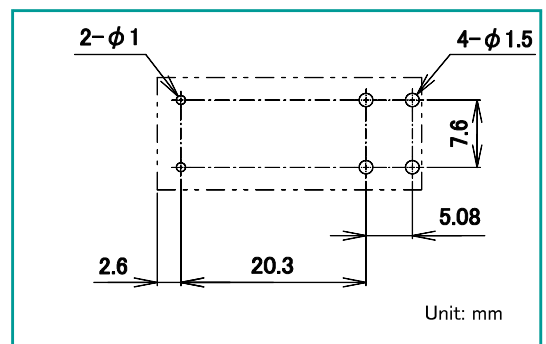
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■ Schematics

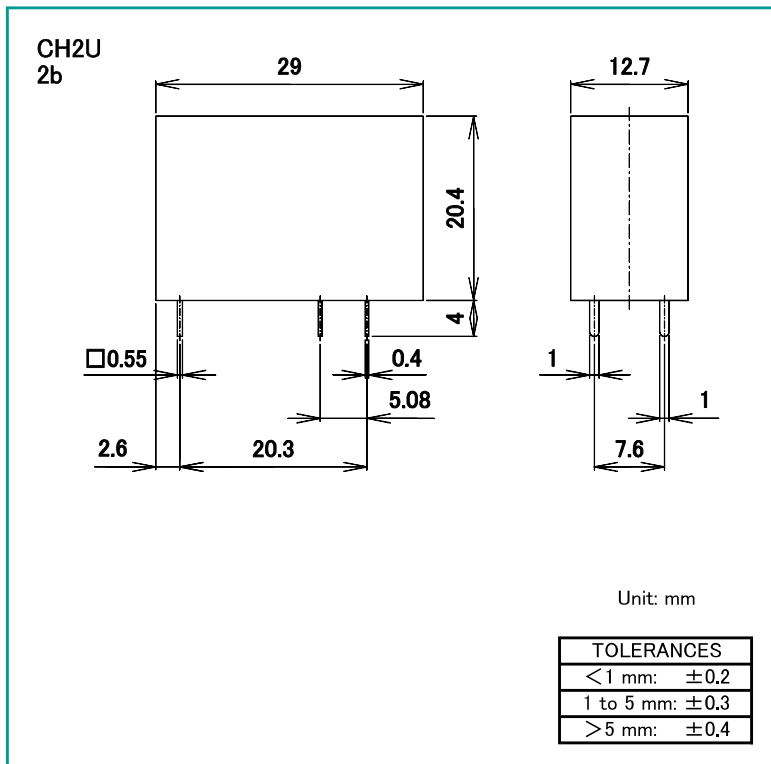


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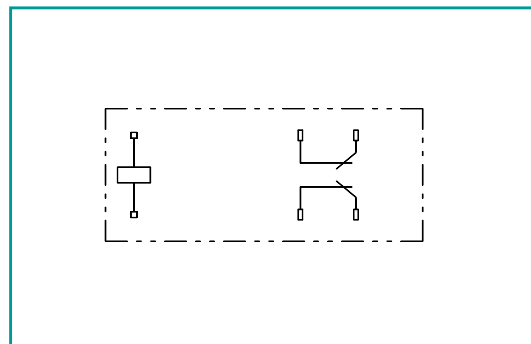


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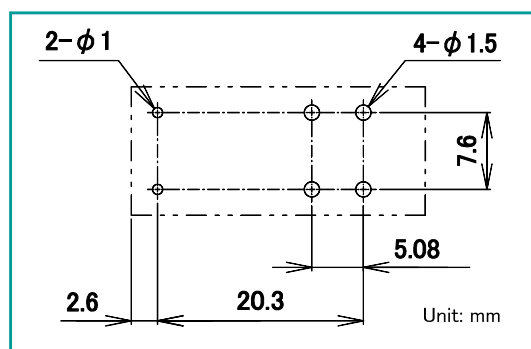
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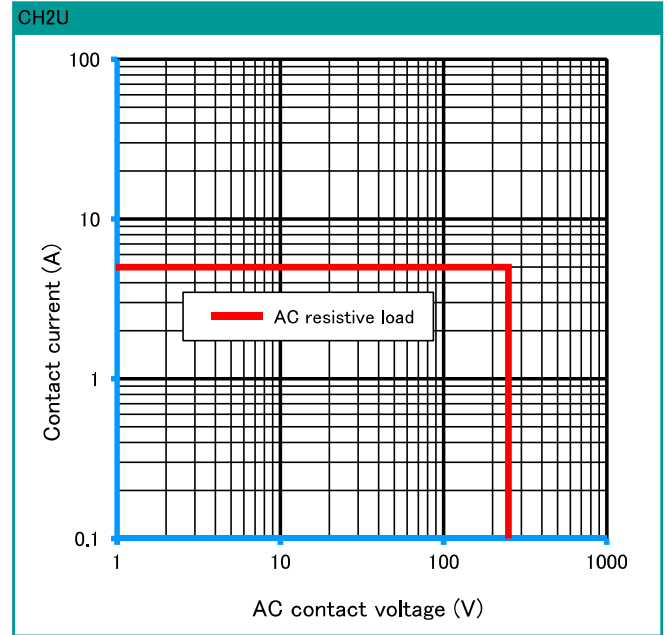
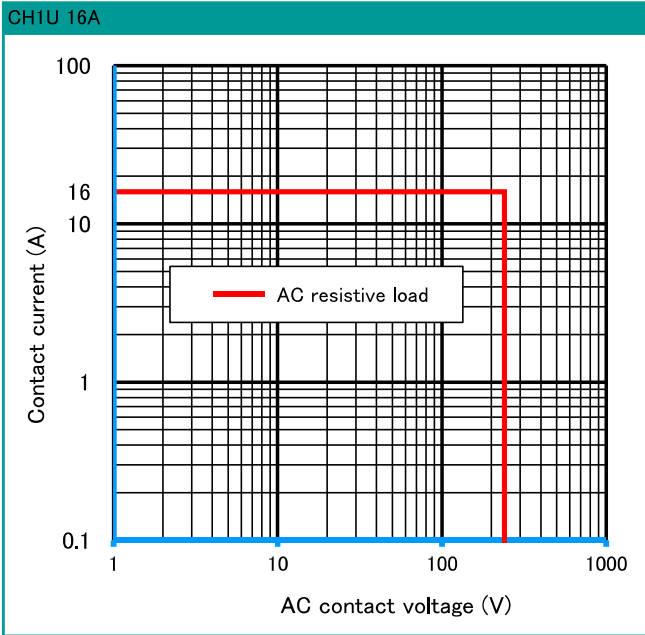
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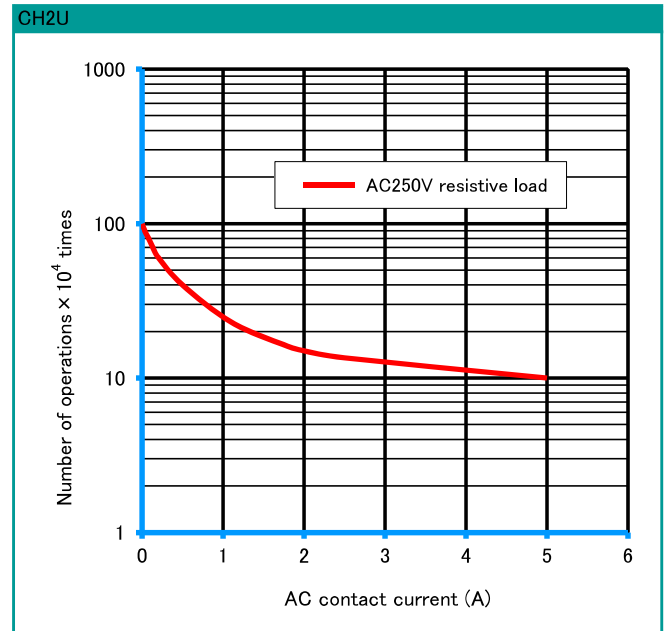
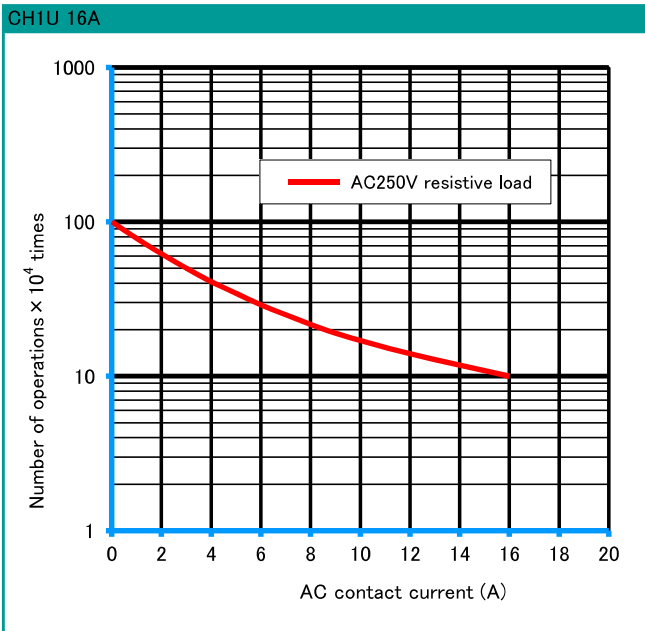
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Reference data

Maximum switching capacity



Durability curve



● Please understand that specifications may be changed without notice due to product improvement etc. ● Dimensions and specifications indicate only major points. Please contact our sales representatives for details.

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