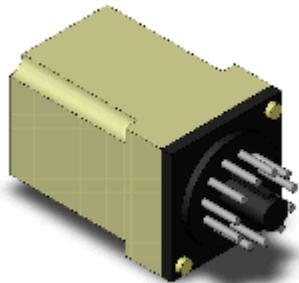




latching relay

MK2KP AC12



Image

Reference type/Bistable, Single, Plug-in terminal, Operation indication
Mechanical indicator, DC24V 3A, AC220V 5A, Output 2c (DC24V 3A)

Coil rating (set coil)	AC12V 60Hz 128mA
Coil rating (reset coil)	AC12V 60Hz 14.4mA
Operation display	mechanical indicator
Contact configuration	2c
contact mechanism	single
Contact material	Ag
Contact rated load	AC220V 5A (resistive load) AC220V 2A (inductive load ($\cos \phi=0.4$)) DC24V 3A (resistive load) DC24V 2.5A (inductive load (L/R=7ms))
Terminal structure	plug-in terminal

Rating/Performance

Information update : 2020/07/16

Rating

Operation display		mechanical indicator	
protection structure		Closed type (with case)	
Terminal structure		plug-in terminal	
coil	Coil rating	set coil	AC12V 60Hz 128mA
		reset coil	AC12V 60Hz 14.4mA
	coil resistance		Set Coil: 25 Ω Reset Coil: 325 Ω
	Operating voltage (set voltage)		80% or less
	Recovery voltage (reset voltage)		80% or less
	Maximum allowable voltage		110%
	power consumption	set coil	About 1.5 to 2VA 60Hz
		reset	About 0.1 to 0.7VA 60Hz
contact	Rated load		AC220V 5A (resistive load) AC220V 2A (inductive load ($\cos \phi=0.4$)) DC24V 3A (resistive load) DC24V 2.5A (inductive load (L/R=7ms))
	Maximum contact voltage		AC250V DC250V
	Maximum contact current		AC: 5A DC: 5A
	Maximum switching capacity		1100VA (resistive load) 440VA (inductive load ($\cos \phi=0.4$)) 72W (resistive load) 60W (inductive load (L/R=7ms))
	Contact configuration		2c
	contact mechanism		single
	Contact material		Ag

Performance

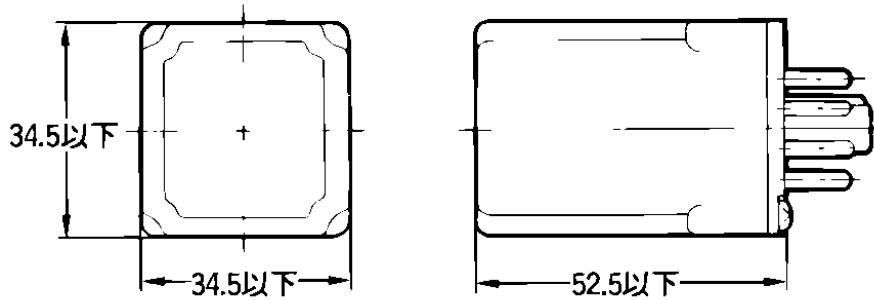
contact resistance	50mΩ or less (DC5V 1A voltage drop method)
Set, reset minimum pulse width	60ms
Operating time	30 ms or less (when rated operating voltage is applied, not including contact bounce)
recovery time	30 ms or less (when rated operating voltage is applied, not including contact bounce)
Maximum switching frequency	Mechanical: 1800 times/hour Rated load: 1800 times/hour
insulation resistance	Between coil and contacts: 100MΩ or more (at DC500V insulation resistance tester) Between contacts of different polarity: 100MΩ or more (at DC500V insulation resistance tester) Between contacts of the same polarity: 100MΩ or more (at DC500V insulation resistance tester) set coil and reset coil Between: 100MΩ or more (at DC500V insulation resistance tester)
Withstand voltage	Between coil and contacts: AC2000V 50/60Hz for 1min Between contacts of different polarity: AC2000V 50/60Hz for 1min Between contacts of the same polarity: AC1000V 50/60Hz for 1min Between set coil and reset coil: AC1000V 50/60Hz for 1min
Vibration resistance (durability)	10~55~10Hz Single amplitude 0.75mm (Double amplitude 1.5mm)
Vibration resistance (malfunction)	10~55~10Hz Single amplitude 0.5mm (Double amplitude 1mm)
Shock resistance (durability)	500m/ s ²
Shock resistance (malfunction)	100m/ s ²
Durability (mechanical)	5 million times or more (opening/closing frequency 1,800 times/h)
Durability (electrical)	500,000 times or more (23° C, rated load, switching frequency 1,800 times/h)
failure rate	DC1V 10mA (P level, reference value) (Switching frequency 60 times/min)
Operating temperature limit	-10 to 40° C (with no freezing or condensation)
Operating humidity range	5 to 85% RH
mass	about 85g
Mounting method	socket

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Dimensions

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Dimensions



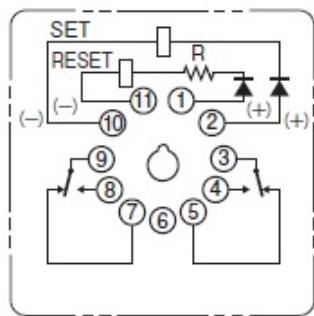
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Terminal layout/internal connection

Information update : 2020/07/16

Terminal layout/internal connection

端子配置/内部接続図 (BOTTOM VIEW)



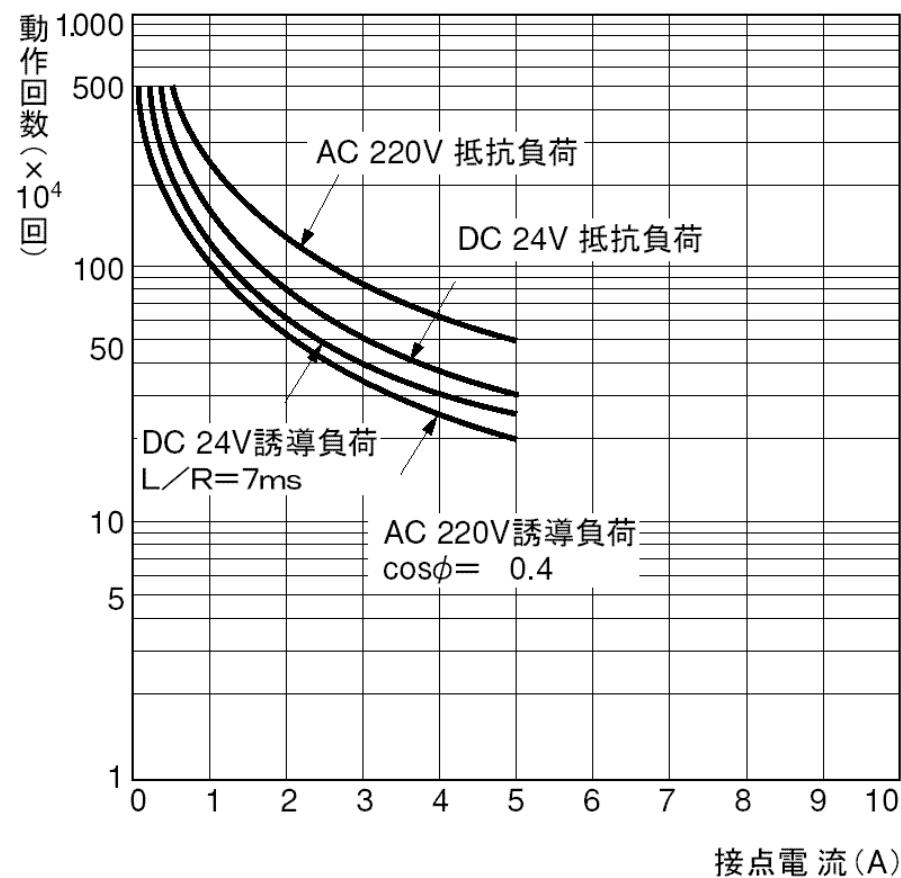
- 注1. R はアンペアターン補正用抵抗器です。AC50V、DC48V以上の仕様に内蔵されています。
- 注2. DC 仕様の場合は、セット・コイル、リセット・コイルともコイル極性をご確認の上、正しく配線してください。誤接続されると、誤動作の原因となります。
- 注3. AC 仕様は、セット・コイル、リセット・コイルともコイル極性はありません。
- 注4. 左図は初期状態、およびリセット状態を示しています。

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Characteristic chart

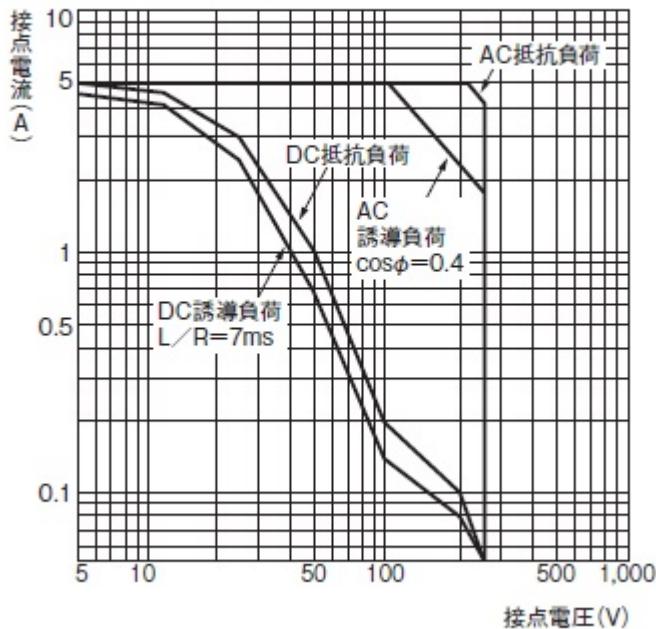
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electrical life curve



Switching capacity

●開閉容量の最大値



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