

# FOTEK

## PR series / Three Phase Detector

# 三相欠逆相偵測器



## RoHS

- Slim compact outline 17.8mm
- High resistance to inverter noise
- PR-K1 & PR-KA for phase loss or reversed detection
- PR-K2 for phase loss or reversed or voltage abnormal detection
- Conformity with IEC/EN 50178 & IEC/EN 61000-6-2 & IEC/EN 61000-6-3

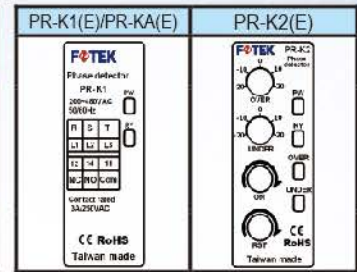
- 堅固超薄外形17.8mm
- 超高抗變頻器高頻干擾
- PR-K1 & PR-KA 可偵測欠相及反相
- PR-K2可偵測欠相及反相及電壓異常
- 符合IEC/EN 50178 & IEC/EN 61000-6-2 & IEC/EN 61000-6-3





## Model guiding / 型號索引

EX. <b>PR-K1 E</b>	
1 2 3	
1 Series(系列名稱)	「PR」: Phase detector (相位&電壓偵測器)
2 Model(形式)	「K1」: Phase detector / Power 200~480VAC (相位偵測 / 電源 200~480VAC) 「KA」: Phase detector / Power 200~550VAC (相位偵測 / 電源 200~550VAC) 「K2」: Phase & Voltage detector / Power 200~550VAC (相位&電壓偵測/電源 200~550VAC)
3 Output rated current (輸出接點額定電流)	「E」: 10A/250 VAC SPDT 「non」: 3A/250 VAC SPDT



## Specification / 規格

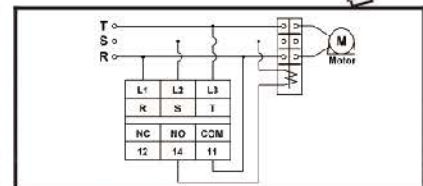
Product	產品	Phase Detector				Phase & Voltage Detector	
Detecting function	偵測功能	Phase reversed & loss				Phase reversed & loss & Hi/Lo voltage	
Model	型號	PR-K1	PR-K1E	PR-KA	PR-KAE	PR-K2	PR-K2E
Contact Rated	接點容量	3A/250VAC	10A/250VAC	3A/250VAC	10A/250VAC	3A/250VAC	10A/250VAC
Power Supply	工作電壓	200~ 480VAC / 50/60Hz		200~ 550VAC / 50/60Hz (Switching power)			
Over voltage detecting	高電壓偵測	Non				±20% of operating voltage(adjustable)	
Under voltage detection	低電壓偵測	non				±20% of operating voltage(adjustable)	
ON Delay Time	動作延遲時間	100ms max.(fixed)				0.1~ 10s (adjustable)	
OFF Delay Time	復歸延遲時間	100ms max.(fixed)				0.1~ 10s(adjustable)	
Power ON delay time	送電延遲時間					300ms max	
Wattage	消耗功率					2VA max.	
Output Method	輸出方式					Relay	
Output Status	輸出狀態					Normal ON <RY>	
Dielectric Strength	電介強度					2.5KV / 1 min.	
Insulation Strength	絕緣強度					100 MΩ / 500VDC	
Life of Relay	接點壽命					20 X 10 <sup>6</sup> Times	
Circumstance	工作環境					- 25°C ~ + 80°C ; 35% ~ 85% RH	
Weight	重量					68g approximated	

## Operating voltage selection for PR-K2 (E) / PR-K2 (E) 工作電壓選擇

Rotary switch	Operating voltage 工作電壓	Rotary switch	Operating voltage 工作電壓	Rotary switch	Operating voltage 工作電壓
「0」	200VAC 50/60 Hz	「3」	240VAC 50/60 Hz	「6」	415VAC 50/60 Hz
「1」	220VAC 50/60 Hz	「4」	380VAC 50/60 Hz	「7」	440VAC 50/60 Hz
「2」	230VAC 50/60 Hz	「5」	400VAC 50/60 Hz	「8」	480VAC 50/60 Hz

Note: 選擇開關出廠設定位置: 「1」; 「9」 = 220VAC 50/60 Hz

## Connection diagram/接線圖

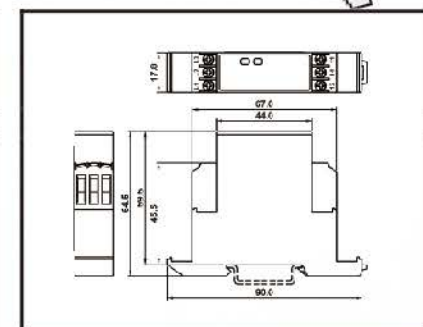


## Operating Status / 動作燈號

Product	PR-K1(E) / PR-KA(E)			PR-K2(E)				
	Normal	Phase loss	Phase reversed	Normal	Phase loss	Phase reversed	Over Voltage	Under voltage
LED								
PW	ON	*	ON	ON	*	ON	ON	ON
RY	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
Over	x	x	x	OFF	OFF	OFF	**	OFF
Under	x	x	x	OFF	**	Flicked	OFF	**

Note: \* Loss phase R → PW pilot ON, Loss phase S or T → PW pilot OFF  
欠 R 相 → PW 指示燈 ON, 欠 S 或 T 相 → PW 指示燈 OFF  
\*\* On abnormal status, Over or Under pilot will be flicked till delay time up. Then to be turned on.  
在異常狀態, Over 或 Under 指示燈會先閃爍直到延遲時間到才會持續 ON 著。

## Outline dimension/外形尺寸



## Notice of use / 使用注意事項

- Power line is 「L2 (phase R)」 & 「L3 (phase T)」, If lost either one, the power pilot will be turned off.  
「L2 (R 相)」 & 「L3 (T 相)」 是偵測器的電源, 欠任何一相時電源燈(PW)就會不亮!
- May use either a solid wire of 2.5 mm<sup>2</sup> maximum or a ferrule insulating sleeve pin for the terminal connection.  
The length of the exposed lead wire inserted into the terminal must be less than 8 mm to get dielectric strength enough after connection.  
可以用線頭吃錫線 (2.5 mm<sup>2</sup> 內) 或針型端子附絕緣套鎖在偵測器的端子座上, 長度不要超過 8mm 才有足夠的電介強度!
- Tightening torque: 0.6 N-m max.  
端子鎖緊力度: 0.6 N-m max.



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