

## Crompton Protector Trip Relays

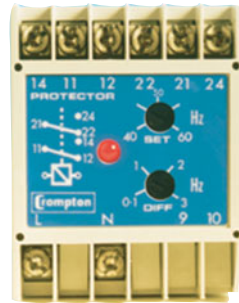
- Phase Loss, Reversal or Sequence
- Under and Over Current or Voltage Protection
- Load Detection
- Monitoring of Systems

The Crompton Protectors provide continuous surveillance of the monitored circuit. When the current moves outside the set point limit, the relay operates. An illuminated LED indicates when the relay is energized. For 3 phase systems, the sequence of connection is not important.

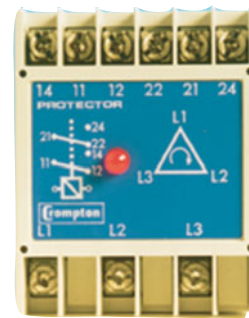
Standard overcurrent relays will energize on trip when the nominal input current plus the user adjustable “over nominal value” is exceeded, after the preset additional delay period if set. The relay will automatically reset to de-energize when the input current is lowered past the setpoint minus the hysteresis (differential) value.

Standard undercurrent relays will de-energize on trip when the input current is below the nominal value minus the user adjustable “under nominal value” after the preset additional delay period if set. The relay will automatically reset to energize when the input current is raised past the setpoint plus the hysteresis value.

On request, any product can be manufactured with the energize/de-energize functions reversed.



▲ **252-PHU**



▲ **252-PVR**

### ORDERING INFORMATION

System	Input	Aux. Power	Protection	Catalog Number
<b>AC Current (Adjustable time delay 0-10 sec., fixed hysteresis 1%)</b>				
Single Phase	5A	120V	Under current 40-120%	252-PAUU-LSBX-C6-DG-D1-EB
Single Phase	5A	120V	Over current 40-120%	252-PAOU-LSBX-C6-DG-D1-EA
Single Phase	5A	120V	Under & over current	253-PADU-LSBX-C6-DG-D1-EC
3 Phase 3 or 4 Wire	5A	120V	Under current	253-PAVU-LSBX-C6-DG-D1-EB
3 Phase 3 or 4 Wire	5A	120V	Over current	253-PAPU-LSBX-C6-DG-D1-EA
<b>AC Voltage (Adjustable hysteresis 1-15%)</b>				
Single Phase L-N			Under Voltage 75-100%	252-PVUU-PQBX-C6-EB
			Over Voltage 100-125%	252-PVOU-PQBX-C6-EA
			Over and Under Voltage	253-PVBU-PQBX-C6-EC
3 Phase, 3 Wire L-L			Under Voltage 75-100%	252-PVKU-PQBX-C6-EB
			Over Voltage 100-12%	252-PVAU-PQBX-C6-EA
			Over and Under Voltage	253-PVMU-PQBX-C6-EC
3 Phase, 4 Wire L-N			Under Voltage 75-100%	252-PVVU-PQBX-C6-EB
			Over Voltage 100-12%	252-PVPU-PQBX-C6-EA
			Over and Under Voltage	253-PVEU-PQBX-C6-EC
<b>AC Voltage (Adjustable time delay 0-10 sec., fixed hysteresis 1%)</b>				
Single Phase L-N			Under Voltage 75-100%	252-PVZU-PQBX-C6-EB-T1
Single Phase L-N			Over Voltage 100-12%	252-PVHU-PQBX-C6-EA-T1
3 Phase, 3 Wire L-L			Under Voltage 75-100%	252-PVJU-PQBX-C6-EB-T1
3 Phase, 3 Wire L-L			Over Voltage 100-12%	252-PVCU-PQBX-C6-EA-T1
3 Phase, 4 Wire L-N			Under Voltage 75-100%	252-PVXU-PQBX-C6-EB-T1
3 Phase, 4 Wire L-N			Over Voltage 100-12%	252-PVSU-PQBX-C6-EA-T1
<b>Frequency (Adjustable hysteresis 0.1-3.0Hz)</b>				
Single Phase	120 VAC		Under Frequency 55-65 Hz	252-PHUU-PQBX-C6-EB
Single Phase	120 VAC		Over Frequency 55-65 Hz	252-PHOU-PQBX-C6-EA
Single Phase	120 VAC		Under & Over (2 output relays)	253-PHDU-PQBX-C6-EC
<b>Combined Under/Over Voltage and Under/Over Frequency</b>				
Single Phase	120V / 60 Hz		Over & Under Voltage Over & Under Frequency (50-70 Hz) (4 Independent Double Pole change over relays)	256-PHUV-PQBX-C6



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### ORDERING INFORMATION

System	Input	Protection	Catalog Number	
<b>Phase Sequence &amp; Phase Failure</b>				
3 Phase 3 or 4 Wire	120V L-L 60 Hz	Phase Sequence, Under Voltage	252-PVRU-PQBX-C6	
<b>Phase Balance</b>				
3 Phase 3 or 4 Wire	120V L-L 60 Hz	Phase Loss & Unbalance	252-PSFU-PQBX-C6	
3 Phase 3 or 4 Wire	480V L-L 60 Hz	Phase Loss & Unbalance	252-PSFU-SEBX-C6	
3 Phase 3 or 4 Wire	120V L-L 60 Hz	Phase Loss, Unbalance, Under Voltage	252-PSGU-PQBX-C6-T1-1A	
3 Phase 3 or 4 Wire	480V L-L 60 Hz	Phase Loss, Unbalance, Under Voltage	252-PSGU-SEBX-C6-T1-1A	
<b>Reverse Power</b>				
1 ph or 3 ph, 4w	5A, 120V, 60 Hz	Reverse Power 2-20%	256-PASU-LSBX-PQ-C6-EA	
3 Phase, 3 Wire	5A, 120V, 60 Hz	Reverse Power 2-20%	256-PATU-LSBX-PQ-C6-EA	
1 ph or 3 ph, 4w, Push	5A, 120V, 60 Hz	Reverse Power 2-20%	256-PAQU-LSBX-PQ-C6-EA	
3 ph 3w Push	5A, 120V, 60 Hz	Reverse Power 2-20%	256-PARU-LSBX-PQ-C6-EA	
System	Input	Protection	BUS	Catalog Number
<b>Synchro-Check (Paralleling)</b>				
1ph or 3ph, 3w or 4w	120V/60 Hz	Phase Angle & Voltage	Live BUS	256-PLLU-PQBX-C6
1ph or 3ph, 3w or 4w	120V/60 Hz	Phase Angle & Voltage	Dead BUS	256-PLDU-PQBX-C6
System	Input	Protection	Catalog Number	
<b>DC Voltage Relay</b>				
DC Relay	18-20V*	Under Voltage External Time Delay	252-PDUU-NABX-T1-EB	
DC Relay	18-20V*	Under Voltage Differential 1-15%	252-PDEU-NABX-EB	
DC Relay	24V	Over & Under Voltage (2 relays)	253-PDCU-BDBX-T1-EC-BD	
System	Input	Protection	Aux Power	Catalog Number
<b>DC Millivolts/Thermocouple</b>				
DC Millivolt	50 mV	High Trip	120V	252-PBTU-ECBX-DG-T1-EA
DC Millivolt	50 mV	Low Trip	120V	252-PBSU-ECBX-DG-T1-EA
DC Millivolt	100 mV	High Trip	120V	252-PBTU-GBBX-DG-T1-EA
DC Millivolt	100 mV	Low Trip	120V	252-PBSU-GBBX-DG-T1-EA
Thermocouple**	J,K,T,S,T	High Trip	120V	252-PTOU-T*BX-DB-T1-EA
Thermocouple**	J,K,T,S,T	Low Trip	120V	252-PTUU-T*BX-DB-T1-EB
<b>DC Transducer Trip</b>				
Transducer	1 mADC	Low Trip 0-80%	120V	252-PBAU-FABX-DG-T1-EB
Transducer	1 mADC	Hip Trip 40-120%	120V	252-PBBU-FABX-DG-T1-EA
Transducer	1 mADC	Low/High, 2 relays	120V	252-PBVU-FABX-DG-T1-EC
Transducer	4-20 mADC	Low Trip 0-80%	120V	252-PBAU-HGBX-DG-T1-EB
Transducer	4-20 mADC	Hip Trip 40-120%	120V	252-PBBU-HGBX-DG-T1-EA
Transducer	4-20 mADC	Low/High, 2 relays	120V	252-PBVU-HGBX-DG-T1-EC
Transducer	10 VDC	Low Trip 0-80%	120V	252-PBAU-MTBX-DG-T1-EB
Transducer	10 VDC	Hip Trip 40-120%	120V	252-PBBU-MTBX-DG-T1-EA
Transducer	10 VDC	Low/High, 2 relays	120V	252-PBVU-MTBX-DG-T1-EC
System	Protection	DC Aux. Power	Catalog Number	
<b>Speed Sensing</b>				
5V to 75V peak to peak	3 Trip Points	12 VDC	253-PH3U-BGBX-FS-V2	
	3 Trip Points	24 VDC	253-PH3U-BGBX-FS-V4	

\* 20-30V also available

\*\* Specify TC Type and Temperature Range

### SPECIFICATIONS

Relay Contacts:	DPDT, 5A@240VAC/24VDC (resistive)
Temperature:	0-60°C operating (0-40°C for UL)
Enclosure:	Flame retardant polycarbonate/ABS, IP50
Dimensions:	252: 2.2" x 2.8" x 4.4" (55 x 70 x 112 mm)
	253: 2.9" x 2.8" x 4.4" (75 x 70 x 112 mm)