



- Generator stator earth fault protection
- Winding insulation protection
- "Pathfinder" function eases faultfinding
- For use with 1A or 5A current transformers
- Very fast analogue output (<50mS), (F version)
- Total processing time less than 50mS

**Specifications**

Standard Auxiliary Voltage:	24, 48 or 110VDC (Fuse 2A)
Optional Auxiliary Voltage:	100-120V, 200-240V, 380-415V, 440-460 or 480VAC 40-70Hz (Fuse 0,5A)
Supply tolerance:	± 10%
Power rating:	1,5VA
Current Input:	1A CT or 5A CT, <0,1VA (class 0,5 or better)
Contact rating:	AC: 100VA -250V/2A max. DC: 50W -100V/1A max.
Adjustments:	
Trip level Warning:	0-100% of alarm trip level
Trip delay Warning:	0-30 secs
Trip level Alarm:	0-40% of I nom.
Trip delay Alarm:	0-3 secs
Analogue outputs:	Up to 20mA, max 500ohm (other on request) Up to 10V, min 100kohm
Temperature:	-20 to +70°C
Weight:	0.64kgs
Front protection:	IP52 (IP65 optional)

**Description**

KPC112x protects against phase-, earth- and winding faults within the protected area (the stator) of large AC generators. It detects even minute insulation punctures, flash-over carbon deposits and contamination. The unit measures highest up differential current from antiparalleled CTs in a Merz-Price configuration, by comparing current levels at the end of each phase winding.

R1 is used for early warning. R2 or R3 (fail safe) is to be used for generator breaker trip, the "other" alarm relay can be used for local indication input to PMS, alarm system etc.

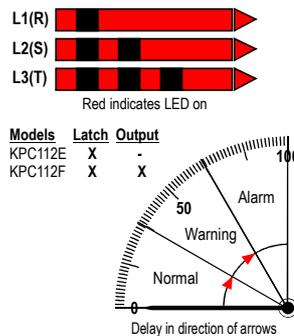
Alarm trip must be set sufficiently high to ensure that generator magnetisation current does not cause tripping. The alarm delay is to be set so that the initial inrush current have returned to normal level before the delay period elapses. The warning trip level and delay can be set as required to give early warning.

User settable trip levels and delays. Colour of LEDs indicates alarm status. LEDs flash during count-down. The meter and the triple-zone status LEDs at a glance gives the clear safety message: NORMAL / WARNING / ALARM.

Fast response analogue output signal proportional to highest up current (KPC112F).

**Pathfinder Function**

The "Pathfinder" indicates the phase causing the trip by flashing pattern of the relevant LED. When either short circuit or over current trips have operated the relevant LED will flash in the following pattern to indicate the phase producing the trip.

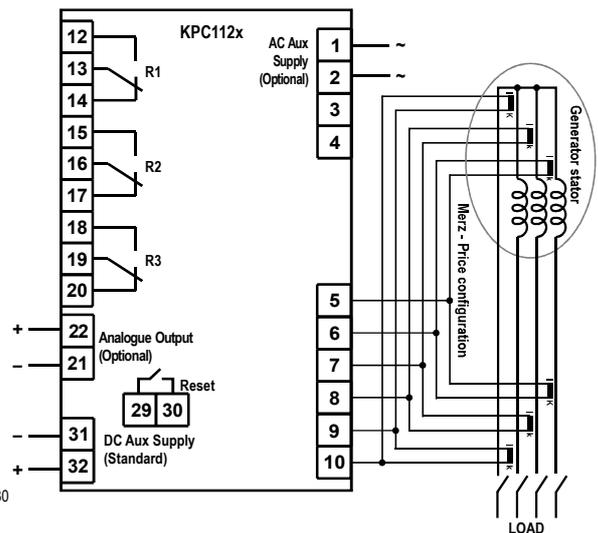


Models	Latch	Output
KPC112E	X	-
KPC112F	X	X

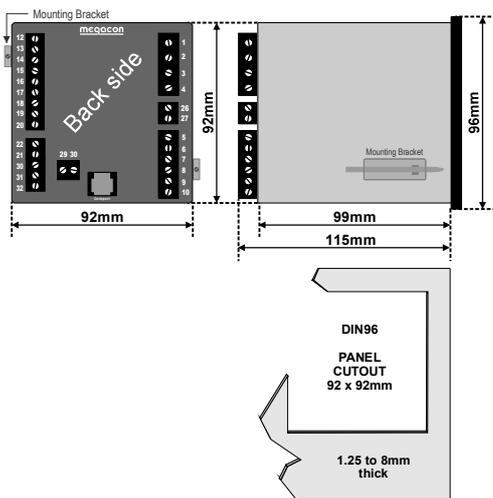
	Warning	Alarm	Fail safe	Latch
R1		✓		
R2		✓	✓	✓
R3		✓	✓	✓

Relays shown de-energised. R3 are fail-safe and energises when unit is powered.

**Relay Reset**  
Any latched relay is reset by linking terminals 29 and 30 or by interrupting the voltage input to terminal 32 or 1.



**Dimensions**



The unit meets EN 61010-1 Cat. III, Pollution degree 2 and the relevant environmental and EMC tests specified in EN 61326-2-4 to comply with the requirements of the major Classification Societies.

The MEGAICON policy is one of continuous improvement, consequently equipment supplied may vary in detail from this publication.

**ORDERING EXAMPLE:**  
 Type: KPC112F  
 Aux. Supply: 24VDC  
 Input Current: 4000/5A  
 I nominal (100%): 2995A  
 Analogue O/P: 4-20mA

