AC GENERATOR CURRENT DIFFERENTIAL GUARD



- Generator stator earth fault protection
- Winding insulation protection

comparing current levels at the end of each phase winding.

The warning trip level and delay can be set as required to give early warning.

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

used for local indication input to PMS, alarm system etc.

Pathfinder Function

50

Norma

Latch

Х

x

Warning Alarm Fail Latch

Warnin

Delay in direction of arrow

Output

х

R3 are fail-safe and energises when unit is powered.

safe

Red indicates LED on

100

Alarm

L1(R)

Models KPC112E

KPC112F

L2(S)

L3(T)

- "Pathfinder" function eases faultfinding
- For use with 1A or 5A current transformers

KPC112E protects against phase-, earth- and winding faults within the protected area (the stator) of large AC

The unit measures highest up differential current from antiparallelled CTs in a Merz-Price configuration, by

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

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.

User settable trip levels and delays. Colour of LEDs indicates alarm status. LEDs flash during count-down. The meter

R1

R2

R3

Analoque O/F

(Optional)

DC Aux

KPC112x

Relavs shown

de-energised, a fail-safe relay

energises when

unit is powered

Any latched relay

is reset by linking

ninals 30 & 31

1

2

3

4

5

6

7

8

9

10

AC Aux

(optional)

Merz-

- Price

000

and the triple-zone status LEDs at a glance gives the clear safety message: ALARM / WARNING / NORMAL

The "Pathfinder" function identifies the phase(s) causing the trip by the flashing pattern of the relevant LED(s).

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generators. It detects even minute insulation punctures, flash-over carbon deposits and contamination.

- Fast analogue mA output (F version)
- Total processing time less than 50mS

Specifications

Standard Auxiliary Voltage:	24, 48 or 110VDC (Fuse 0,5A)
Optional Auxiliary	100-120V, 200-240V,
Voltage:	380-415V, 440-460 or 480VAC
•	40-70Hz (Fuse 2A)
Current Input: (class 0,5 or better)	1A CT or 5A CT, <0,1VA
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:	0.6kgs
Front protection:	IP52 (IP65 optional)

Dimensions



The unit meets IEC60092-504 and the relevant environmental and EMC tests specified in IEC60068/60092 and IEC61000/60533 respectively, to comply with the requirements of the major Classification Societies

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

Description

ORDERING EXAMPLE:	
Type:	
Aux. Supply:	
Input Current:	
I nominal (100%):	
Analogue O/P:	

Reset

KPC112F 24VDC 4000/5A 2995A 4-20mA



F

Norway Denmark **United Kingdom**

egacon



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