



- Temperatur Guard for PT-100 element (RTD)
- 2, 3 or 4-wire PT 100 connection via mini MCR Converter
- Triple relay for more flexibility
- A wide range of scaling available
- Very fast analogue output (<50mS), (F-version)

**Specifications**

Auxiliary Voltage:	100-120, 200-240, 380-415V, 440-460 or 480VAC 40-70Hz (Fuse 0,5A)
Optional Auxiliary Voltage:	24, 48 or 110VDC (Fuse 2A)
DC Input signal:	0-10, 0-20 or 4-20mA
Scale Range:	Variation of ranges between: -150 °C to +850 °C Can also be scaled in Fahrenheit: -238 °F to +1562 °F
Contact rating:	AC: 100VA -250V/2A max. DC: 50W -100V/1A max.
Supply tolerance:	± 10%
Power rating:	1,5VA
<b>Adjustments</b>	<b>Trip level</b> <b>Delay</b>
Trip Warning:	0-100% of FSD    0-30 secs
Trip Alarm:	0-100% of FSD    0-30 secs
Analogue outputs:	Up to 20mA, max 500ohm
F-Versions	Up to 10V, min 100kohm
Temperature:	-20 to +70°C
Weight:	0.6kgs
Front protection:	IP52 (IP65 optional)

**Application**

The KPM30x is a digitally controlled temperature guard/controller for monitoring of temperature of machine bearings, windings etc.

The warning relay can be used to trip non-essential load or start a cooling fan and the alarm relay may be used to trip the total load.

KPM30x can be scaled for a wide variation of ranges between -150 and up to +850 Degrees Celsius or to Fahrenheit scale.

An AC or DC auxiliary voltage is required for the unit. A green LED indicates POWER on. Start of monitoring function is delayed when power is switched on (default 2 secs delay). In this way false tripping during power up is avoided.

The precision DIN96 moving coil meter reads the monitored parameter, and has low-reflection glass to ease reading at a distance.

The triple-zone status LEDs at a glance gives the clear safety message:

- ALARM
- WARNING
- NORMAL

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.

KPM30C is the standard version with no analogue output. The optional F-versions has an isolated analogue output signal proportional to meter deflection.

**Temperature Measuring Transducer  
Mini MCR Converter**

See page 2 for connection and setting.

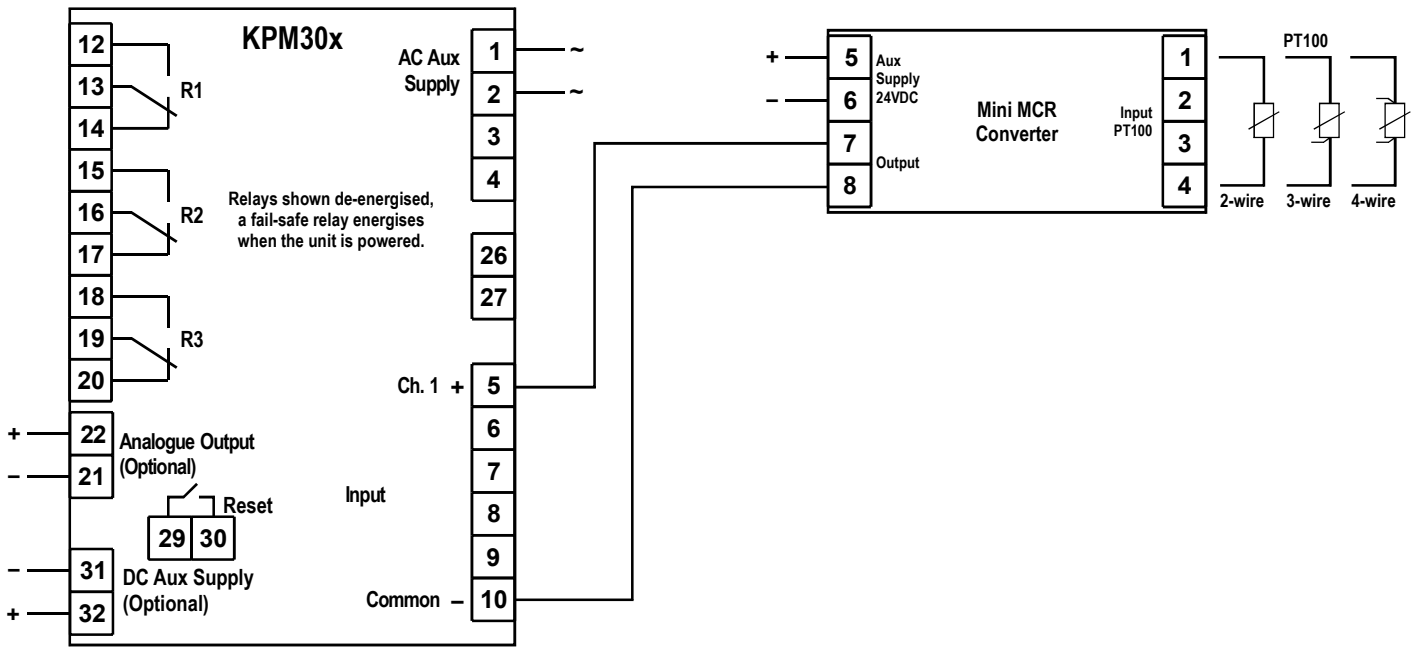


The units three C/O relay outputs and trip levels and trip delays are user settable on unit rear to suit most applications.

Relay trip lamps (Red LED) flash instantly (approx. 1 flash per second) when the trip level is passed, the relay trips after elapsed delay. The lamp changes state and the trip relay operates after the pre-set delay. If a trip condition ends during the delay interval, the timer will automatically reset.

As standard the unit is supplied for automatic reset. Manual reset (latching relays) is optional (All G-versions).

## Connection diagram



### Relay Reset

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

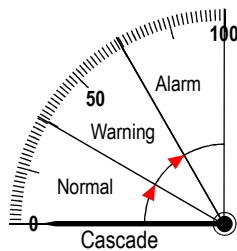
### Relay Operation

Relay Configuration: Cascade

	Warning	Alarm	Fail Safe	Latch
R1		✓	✓	*✓
R2	✓			*✓
R3	✓		✓	*✓

Models	Latch	Output
KPM30C	-	-
KPM30CF	-	X
KPM30G*	X	-
KPM30GF*	X	X

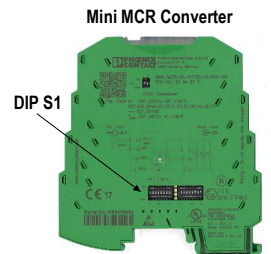
The relay operation is delayed in the arrow direction, the reset is instantaneous. Both trip levels can, independently, individually set over the scale range (0-100% FSD).



### Customer setting

PT 100 type must be set by customer.

DIP S1		Connection System
1	2	
ON	OFF	2-wire
OFF	ON	2-wire
ON	ON	3-wire
OFF	OFF	3-wire
ON	OFF	4-wire
OFF	ON	4-wire



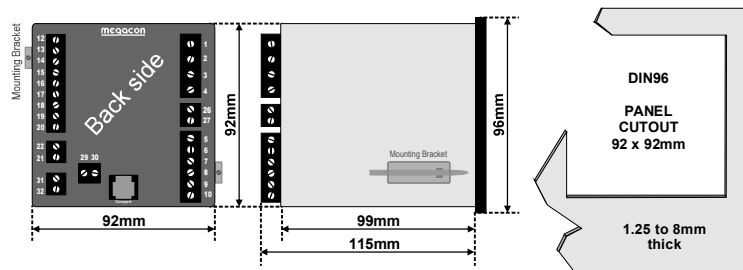
### Analogue Output

All F-versions have an analogue output proportional to meter reading. The signal is specifically intended as input to a control system or for remote monitoring of the measured parameter. Other outputs available on request.

Add suffix from table below to type designation to specify output required:

O/P1	0-10mA	O/P6	N/A
O/P2	0-20mA	O/P7	N/A
O/P3	4-20mA	O/P8	0-10V
O/P4	N/A	O/P9	0,2-10V
O/P5	N/A	O/P10	4,3-20mA

## Dimensions



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

### ORDERING INFORMATION

Product type	: KPM30C
Auxiliary supply	: 230VAC
Temp range	: 0-300 Degrees C
Output signal	: 4-20mA
Example	: KPM30C, 230VAC, 0-300 Degrees C

**IS**  
range