



- 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 | | | | | | |
| Adjustments | <table border="1"> <thead> <tr> <th>Trip level</th><th>Delay</th></tr> </thead> <tbody> <tr> <td>Trip Warning:</td><td>0-100% of FSD 0-30 secs</td></tr> <tr> <td>Trip Alarm:</td><td>0-100% of FSD 0-30 secs</td></tr> </tbody> </table> | Trip level | Delay | Trip Warning: | 0-100% of FSD 0-30 secs | Trip Alarm: | 0-100% of FSD 0-30 secs |
| Trip level | Delay | | | | | | |
| 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) | | | | | | |

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.

Temperature Measuring Transducer Mini MCR Converter

See page 2 for connection and setting.



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

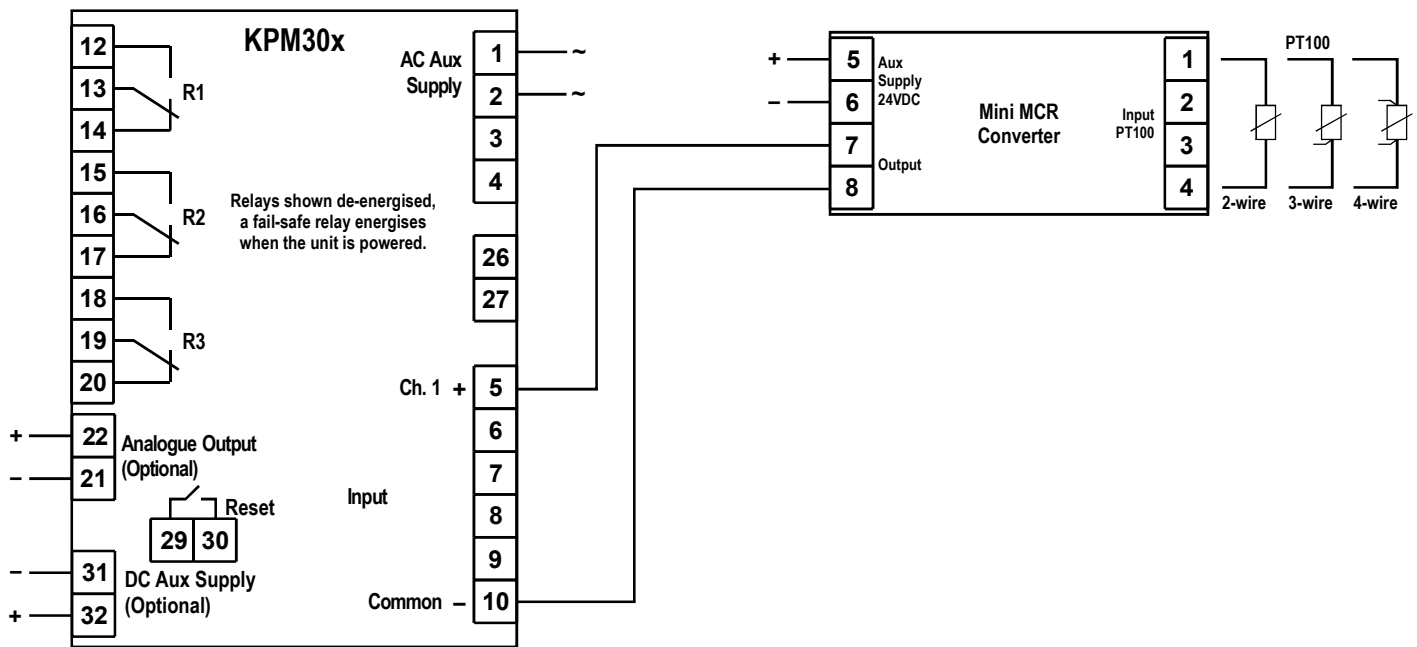
KPM30C is the standard version with no analogue output. The optional F-versions has an isolated analogue output signal proportional to meter deflection.

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-

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

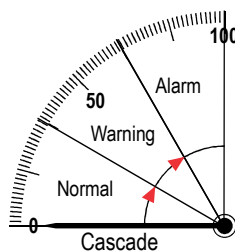
Relay Configuration: Cascade

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

Models

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

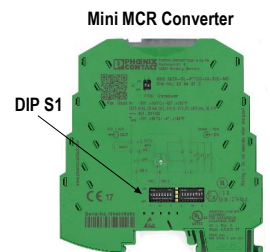
The relay operation is delayed in the arrow direction, the reset is instantaneous. Both trip levels can, independently, individually set over the scale range (0-100% FSD).



Customer setting

PT 100 type must be set by customer.

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



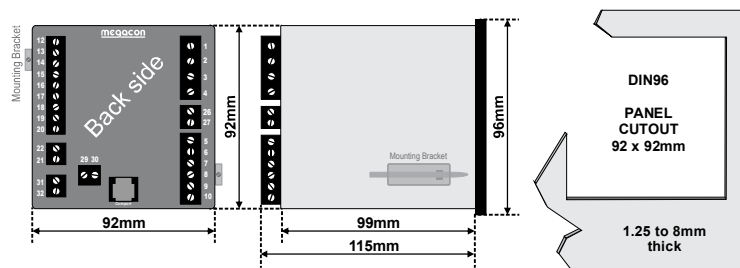
Analogue Output

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 MEGAcon 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 |

