TEMPERATURE GUARD - 3 x PT100 ELEMENT

KPM303x

- **3-channel Temperatur Guard for PT-100 element (RTD)**
- **2, 3 or 4-wire PT 100 connection via external converter**
- **Triple relay for more flexibility**
- **A wide range of scaling available**
- **One fast analogue output (<50mS), F-versions**

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 to +850 Degrees °C Can also be scaled in Fahrenheit: -238 to +1562°F	
Contact rating:	AC: 100VA -250V/2A max. DC: 50W -100V/1A max.	
Adjustments	Trip level	Delay
Trip Warning:	0-100% of FSD	0-30 secs
Trip Alarm:	0-100% of FSD	0-30 secs
Analogue outputs: F-Versions	Up to 20mA, max 500ohm Up to 10V, min 100kohm	
Temperature:	-20 to +70ºC	
Weight:	0.6kgs	
Front protection:	IP54 (IP65 optional)	

Application

The KPM303x 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. KPM303x can be scaled for a wide variation of ranges between -150 and up to 850 Degrees Celsius or to a 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

KPM303C 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.

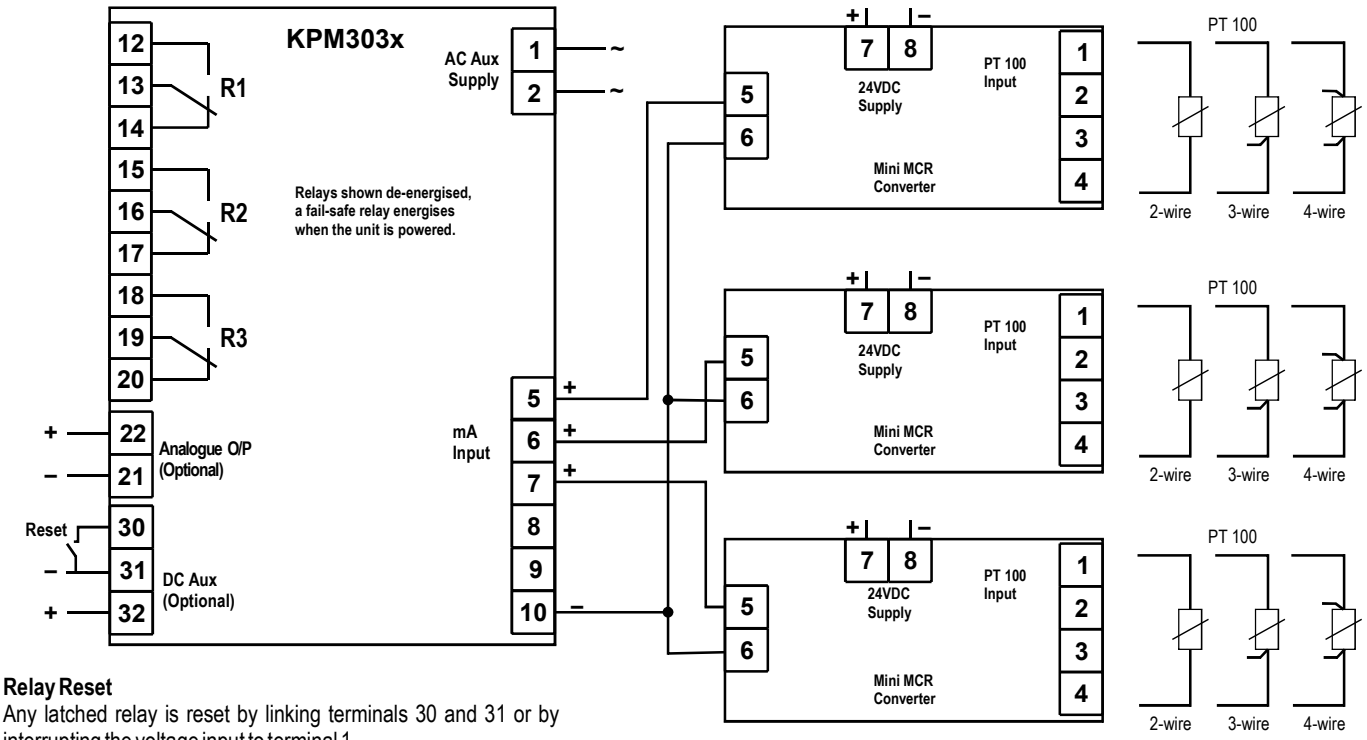
Relay trip lamps (Red LED) flash instantly (approx. 1 flash per second) when the trip level is passed, the relay trips after elapsed delay. The lamp changes state and the trip relay operates after the pre-set delay. If a trip condition ends during the delay interval, the timer will automatically reset.

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

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.

KPM303x

Connection diagram



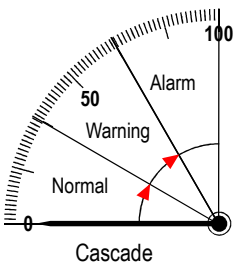
Relay Reset
Any latched relay is reset by linking terminals 30 and 31 or by interrupting the voltage input to terminal 1.

Relay Operation

Relay Configuration: Cascade

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

Models	Latch	Output
KPM303C	-	-
KPM303CF	-	X
KPM303G*	X	-
KPM303GF*	X	X



Customer setting
PT 100 type must be sett by custmer

DIP S1

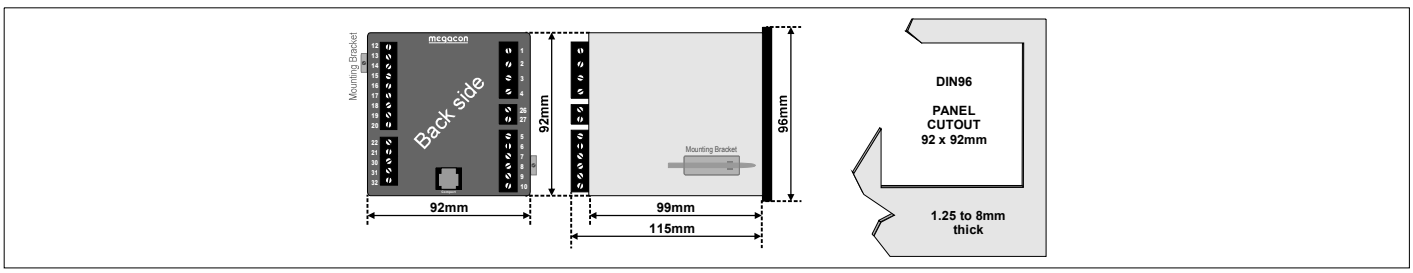
	1	2	Connection System
			2-conductor
	●		2-conductor
ON		●	3-conductor
OFF	●	●	4-conductor

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



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

ORDERING INFORMATION

Product type	:
Auxiliary supply	:
Temp range	:
Output signal	:
Example	: KPM303C, 230VAC, 0-300 Degrees C

IS range