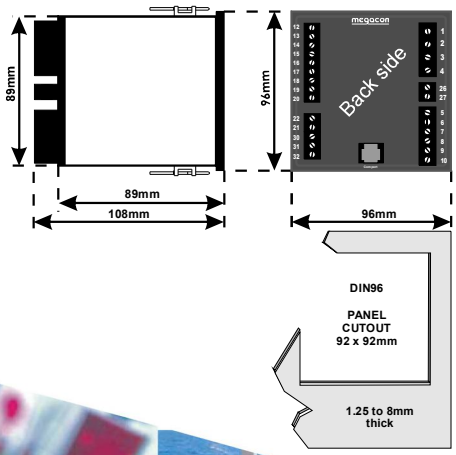
THREE PHASE - 4-WIRE FREQUENCY AND VOLTAGE GUARD

KPFV54x

- **Under and Over Voltage and Frequency Protection**
- **Adjustable Voltage and Frequency Deviation Set points**
- **"Pathfinder" function**
- **Optional very fast analogue output (<50mS), (F-versions)**

Specifications

Auxiliary Supply:	100-120, 200-240, 380-415 or 440-460VAC, 40-70Hz (Fuse 0.5A)	
Optional Auxiliary Supply:	24VDC (Fuse 2A)	
Contact Rating:	AC: 100VA - 250V/2A max. DC: 50W - 100V/1A max.	
Adjustments:	Trip level:	Trip delay:
U/V: O/V:	0/-20% of V nom 0/+20% of V nom	0,1-30secs
U/Hz: O/Hz:	45-65Hz 45-65Hz	0,1-30secs
	(C-version have 0,1-3secs trip delays)	
Hysteresis:	Fixed to 1%	
Analogue Output: (only on F-versions)	Up to 20mA, max 500R Up to 10V, min 100kohm (other on request)	
Scale:	45-55Hz, 55-65Hz or 45-65Hz	
Temperature:	-20 to +70°C	
Weight:	0.6kgs	
Front protection:	IP54 (IP65 optional)	



Description

KPFV54x is for use on three phase, four wire systems. KPFV54x provides precision monitoring of frequency and line voltage on any generator system. When trip delays are set to zero (0,1sec) operation corresponds with G59 requirements.

True RMS measurement not affected by heavily distorted waveforms provides highest up precision (1.0%) protection. Less than 50mS short circuit detection. R1 (under & over frequency) and R2 (under & over voltage) activates when set level is exceeded and time delay has elapsed. R3 activates when R1 or R2 is activated and can be used as a common alarm.

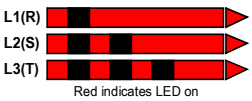
User settable trip levels and delays. Colour of LEDs indicates alarm status. LEDs flash during count-down. The "Pathfinder" indicates the phase causing the trip by flashing pattern of the relevant LED.

The F-versions have an fast response mA output signal proportional to the Hz range.

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.

Pathfinder Function

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



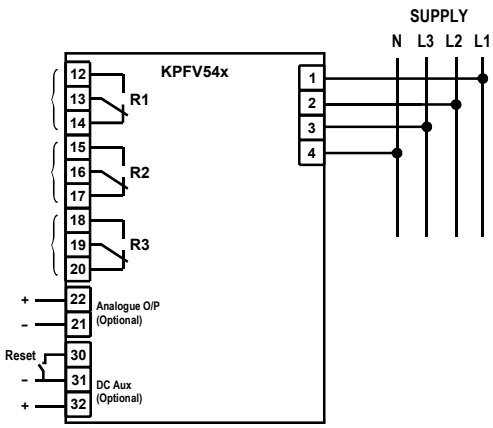
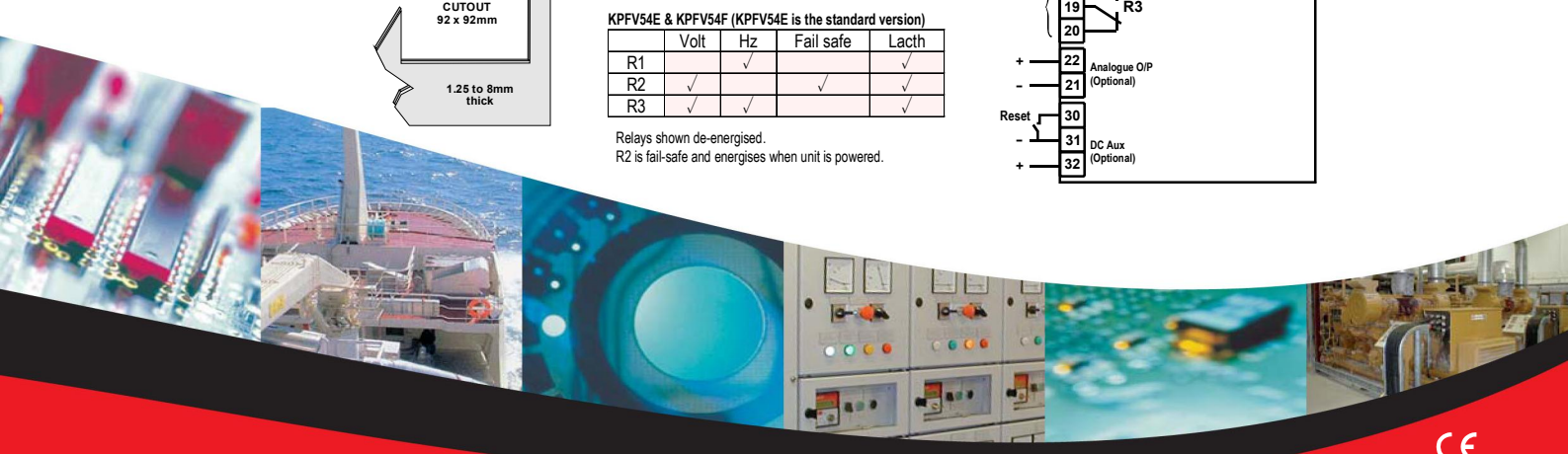
KPFV54C & KPFV54CF

	Volt	Hz	Fail safe	Lacth
R1		√		√
R2	√		√	√
R3	√	√		√

KPFV54D & KPFV54DF

	Volt	Hz	Fail safe	Lacth
R1		√		
R2	√		√	
R3	√	√		

KPFV54E & KPFV54F (KPFV54E is the standard version)

	Volt	Hz	Fail safe	Lacth
R1		√		√
R2	√		√	√
R3	√	√		√

Relays shown de-energised.
R2 is fail-safe and energises when unit is powered.