



- Island Mode and synchronised to Mains Mode operation, Two Functions - One Solution
- Over/under Frequency
- Over/under Voltage
- Phase Imbalance
- Triple relay operation
- Trip indication outputs
- Adjustable Supervision delay

Specifications

Auxiliary Voltage:	100-120, 200-240, 380-415 or 440-460VAC, 40-70Hz
Optional Auxiliary Voltage:	24 VDC
Monitored Voltage Input:	100-120, 200-240, 380-450V
Contact Rating:	
AC:	100VA – 250V/2A max.
DC:	50W – 100V/1A max.
Adjustments:	Supervision Delay: 1-10 seconds All other adjustments are made via the hand held controller HHP1
Temperature:	-20 to +70°C
Weight:	0.5kgs
Front protection:	IP41

Description

The KCVF595 (3-wire) and KCVF596 (4-wire) meet the protection requirements for short term paralleling of private generation to mains supply such as defined in G59 recommendations.

It combines under/over frequency, 3-phase under/over voltage and phase imbalance all in one single unit.

Trip points and other adjustments are made either via a hand held controller or via a computer.

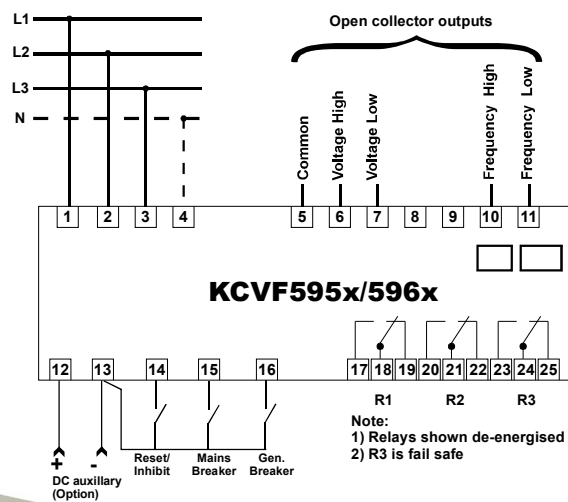
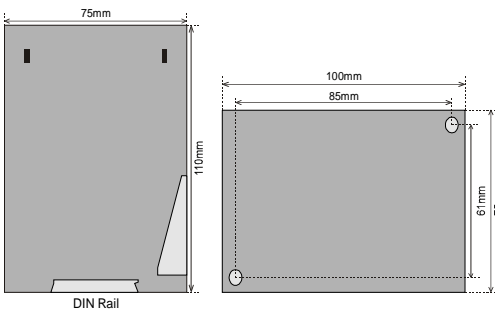
Operational mode is controlled by two inputs from the generator and mains breakers. A different set of parameters can be set to allow for protection in both island operation and connected to mains.

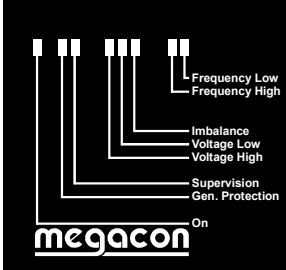
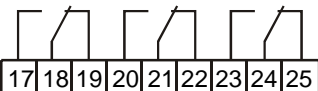
An adjustable Supervision delay is fitted to overcome spurious tripping that may occur when synchronising with the mains.


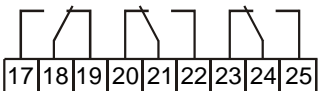
Auxiliary supply and monitored inputs can be from the same source, as shown, or independent (DC).



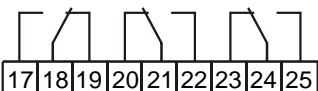

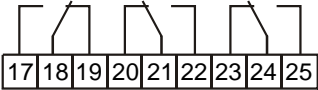
Trip status is indicated by LED's and open collector outputs.


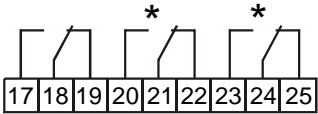
The unit meets IEC60092-504 and the relevant environmental and EMC tests specified in IEC60068/60092 and IEC61000/60533 respectively, to comply with the requirements of the major Classification Societies.


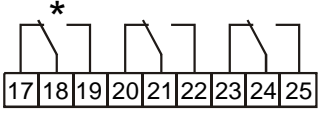


	<p>Auxiliary supply off All LED's off</p>		<p>R1 R2 R3</p> 
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	<p>Aux. Supply on, unit inhibited</p>	 <p>Steady Green LED 1</p>	<p>R1 R2 R3</p> 
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Generator and mains breaker closed			
	<p>During supervision delay 1-10 seconds</p>  <p>Flashing Green LED 4</p>	<p>R1 R2 R3</p> 	
	<p>After delay</p>  <p>Steady Green LED's</p>	<p>R1 R2 R3</p> 	

Any trip assuming generator continues to run			
	 <p>Red LED will illuminate depending upon the trip parameter</p>	<p>R1 R2 R3</p> 	
<p>If auxiliary supply is maintained, R1 and R3 latch and are reset by connecting terminals 12 and 13</p>			

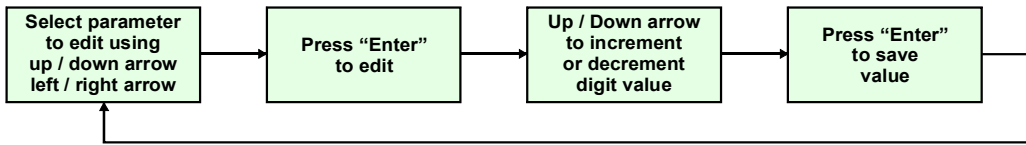
Any generator parameter trip			
	 <p>Red LED will illuminate depending upon the trip parameter</p>	<p>R1 R2 R3</p> 	
<p>If auxiliary supply is maintained, R1 and R3 latch and are reset by connecting terminals 12 and 13</p>			

* indicates relay changing state

Programming

Programming of KCVF595x/596x can be achieved using Megacon's universal Programmer HHP1. The ID-protected programmer is powered directly from the unit and is used to program the parameters of any unit within the IS range. When plugged to the unit, the parameters unique to the unit will be displayed. This removes the need for expensive laptop computers. The HHP1 will comfortably fit into a pocket.

Editing Procedure



Typical parameter ranges for a nominal 400V/50Hz KCVF595 unit shown:

