

DCW / DCW15

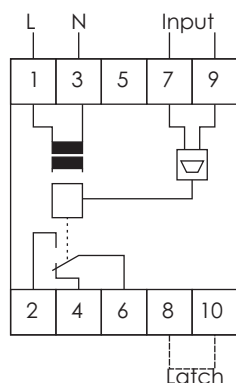
Current Window Comparator



Description

Current Window Comparator for monitoring current between two levels. The unit can be ordered in a wide range of AC and DC currents making it ideal for all current monitoring applications. Over and under current can be set via front panel dials. The latch facility prevents unmonitored fault conditions. Hysteresis is fixed at 5%.

Wiring Diagram



FEATURES

- High resolution analogue microprocessor
- Front face adjustable over and under current levels
- 4 Front face selectable delays
- Optional latch facility
- Modular 35.5mm DIN rail mountable
- 15A SPDT output relay
- LED indication for over and under current
- LED indication for power supply ON

Input Specifications

Input	Pin 7 & 9
Measuring Ranges	0 - 5 A / 0 - 15 A
Internal Resistance	0.1 ohm
Maximum	
Overload current	15 A (30 sec) / 20 A (30sec)
Hysteresis	5 - 50 %
Repeat Accuracy	≤ 1 %
Latch	Pin 8 & 10

Output Specifications

Output Specifications	SPDT
Rated Isolation	6000 VAC
Voltage	(contact / electric) 1000 VAC (contact / contact)
Nominal Rate in AC1	2500 VA (Ag-Ni)
Rated Current	15A
Rated Voltage	250V
Mechanical Life	10x10 ⁶ cycles
Electrical Life	110x10 ³ cycles (at max load)
Operation Frequency	≤ 1800 cycles/h

Supply Specifications

Power Supply AC Type	110, 230, 400V
(Galvanic)	525V ± 10%
	50 / 60 Hz ± 5Hz
Isolation	4kV
Consumption	± 3VA
	± 6VA 525 V
Power Supply DC Types	12,24,48 V ± 10%
(Non-galvanic)	
Isolation	None
Consumption	± 100 mA

General Specifications

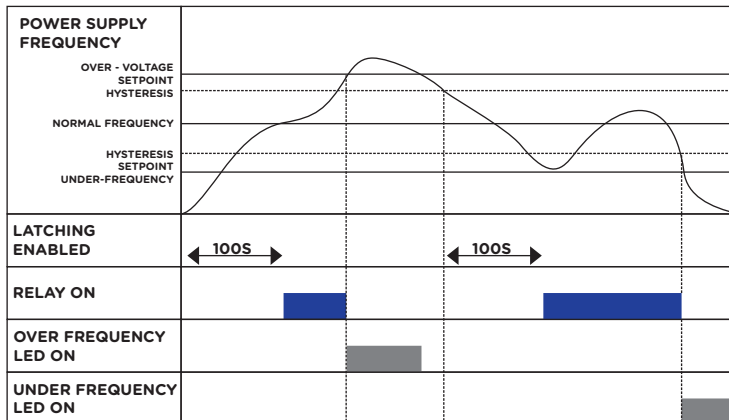
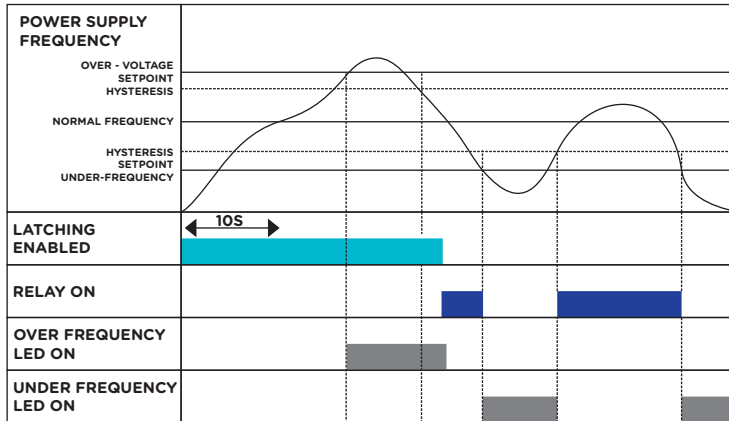
Power ON Delay	≤ 300 ms
Power OFF Delay	≤ 200 ms
Indication for	
Power Supply ON	LED green
Output ON	LED red
Fan	LED red
Environment	
Degree Of Protection	IP 20
Operating Temperature	-10 to + 50°C
Storage Temperature	-50 to + 85°C
Weight	200g

Current Window Comparator

Mode of Operations

The relay will release if the current exceeds the set upper limit or fall below the set lower limit. If the current moves to within the set values the relay will operate. Refer to the delay settings for operation delays.

Operations Diagram



Delay Functions

1) No Delay

Measurement start immediately and relay responds directly normal acquisition delay apply)

2) 10s start up

Relay operates immediately and power LED flashes when power supply is applied. Measurement starts after 10 sec and power LED stops flashing.

3) 180s recovery delay

When power is applied relay does not operate and power LED flashes. After 180sec measurement starts and power LED stops flashing. If relay releases, time delay start, power LED flashes and relay will only operate again after 180sec.

4) 10s response delay

Relay operates immediately and power LED flashes when power supply is applied. Measurement starts after 10 sec and power LED stops flashing. The relay will only release after a fault condition has been present for 10 sec.