Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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FW SERIES
PHASE CONTROL RELAY

UL cUL listed CSA recognized

- **Monitors and Protects Against**
  - Phase Loss of One or More Phases
  - Phase Reversal
  - Undervoltage
- **Rugged Construction for Over Voltage and Transient Protection**

CE

GENERAL FEATURES:

The unit has two front dial settings. The upper dial is used for the three phase nominal voltage settings that exists in the application. The lower dial setting is for an adjustable time delay to prevent nuisance tripping of the unit. The FW has a space saving 45mm wide DIN-rail mount/surface mount enclosure and LED power-on and relay status indication.

SPECIFICATIONS:

Model No.	84873010	84873011	84873015	84873016
Input Power	3 x 230VAC	3 x 380VAC	3 x 480VAC	3 x 600VAC
Threshold Adjustment	184 - 264VAC	310 - 337VAC	384 - 552VAC	460 - 661VAC
Maximum Voltage	264VAC	337VAC	552VAC	661VAC
Minimum Voltage	184VAC	304VAC	384VAC	460VAC
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz

Max. Power Consumption . . . . . 6 VA [Powered from L1 & L2]
Immunity from micro power cuts . . . . . 10 ms
Delay on pick-up . . . . . 500 ms
Isolation coordination . . . . . Category III
Degree of pollution 2
acc. to IEC 664-1
VDE 0110 : 4 KV/2
Measurement input resistance . . . . . 1 kΩ x input power
Regeneration rate . . . . . max 70% of present threshold
Undervoltage detection (symmetrical drop) . . ~15% of front dial settings
Threshold display accuracy . . . . . ±10%
Output relay . . . . . DPDT (Ag CdO)
Breaking capacity . . . . . 2000 VA/AC 80 W/DC
Maximum breaking current . . . . . 8 A
Minimum breaking current . . . . . 100 mA
Maximum breaking voltage . . . . . 250 V AC resistive
Electrical Life . . . . . AC12: 2000 VA - 10^5 operations
AC15: cos φ = 0.3 - 6000 operations
DC13: L/R = 300 ms - 6000 operations
Mechanical Life . . . . . 5 x 10^5 operations
Maximum rate (at full load) . . . . . 360 operations / hr
Time delay in the event of a fault . . . . . 0.2 to 10 s (0 • +50 %) [Only for loss of L3]
Display **Voltage presense** . . . . . green LED
Relay . . . . . yellow LED
Casing . . . . . Self-extinguishing
Terminals **Without ferrule** . . . . . 2 x 2.5mm²
With ferrule . . . . . 2 x 1.5mm²
Tightening . . . . . 0.6 mN max.
Temperature **Use** . . . . . -20°C to +60°C
Limits **Stored** . . . . . -30°C to +70°C
Relative humidity . . . . . 93% without condensation
Vibration **Amplitude** 0.35mm
Frequency . . . . . 10 - 55 Hz
Isolation resistance . . . . . >100 mΩ at 500 V
Dielectric strength . . . . . 3 kV at 1 mA for 1 minute / 50 Hz
Weight . . . . . 350 g

ORDERING INFORMATION:

Voltage	Part Number
3 x 230 VAC	84873010
3 x 380 VAC	84873011
3 x 480 VAC	84873015
3 x 600 VAC	84873016

OPERATING PRINCIPLE:

In a 3-phase network, the FW simultaneously monitors phase sequencing, loss of phase with a maximum regeneration rate of 70% of the displayed by a potentiometer on the front face, and the voltage drop on the 3 phases of less than 15% of the preset value. When the 3 phases suceed one another, the output relay is activated and indicated via a yellow LED. The output relay de-energizes (LED off) after a time delay T, adjustable between 0.2 and 10 seconds on the front face, if one of the following faults is present :
- reversed direction of phase rotation
- absence of one or more phases
- voltage drop

CONFORMITY:

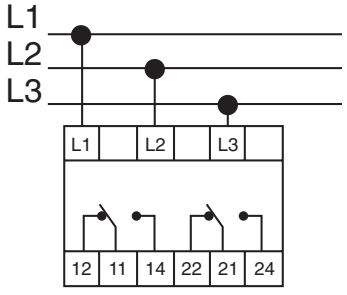
Immunity to interference and noise (EMC)

IEC 1000.4.5 Surge immunity: Level 3
IEC 1000.4.2 Electrostatic discharges: Level 3
IEC 255.5 Damped oscillated waves: Level 3
IEC 1000.4.3 Radiated disturbance Level 3
IEC 1000.4.4 Fast transient Level 3
IEC 1000.4.6 Conducted RF: Level 3 (ENV 50141)

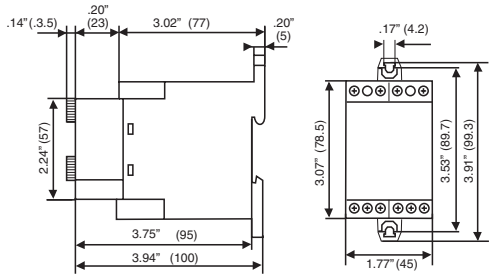
RF Emissions (EMC)

CENELAC EN 55022; Class A

WIRING:



DIMENSIONS: Inches (mm)



Products and specifications subject to change without notice.
Consult factory for application assistance.