#### General

FK-X1/X2/X1P and FKV-X1/X2/X1P phase failure relays are designed to avoid failures of three phase motors caused from network

# Usage of Device and Working Principle

Make the connections according to the diagram. When power is on and phases in normal values, relay pulls and relay led is switched on. In this case, contact out is (NO)3 pole. Any of the phases increases or decreases than normal values, relay releases and led switches off. In this case contact out is (NC)1 pole. PTC type phase failure relays are sensitive to thermal changes of motor. If the motor temperature is higher than optimum, relay releases, led switches off, when motor temperature is back to nominal,

relay pulls and led switches on relay, releases when PTC resistance value 1600R-2000R and pulls again when resistance value 1000R-1400R

Note: Connect PTC to the surface of motor. If PTC not used type FK-X1P and FKV-X1P, make short-circuit PTC poles.

### Maintenance

Switch off the device and release from connections. Clean the trunk of device with a swab. Don't use any conductor or chemical might damage the device. Make sure device works after cleaning.

## Warnings

Please use the device according to the manual.

Don't use the device in wet.

Include a switch and circuit breaker in the assembly.

Put the switch and circuit breaker nearby the device, operator can reach easily.

Mark the switch and circuit breaker as releasing connection for device.

# Tecnical Specifications:

Operating Voltage(Un)..: 3 x 380V AC and neutral

Operating Frequency....: 50/60 Hz.

Operating Power....: <4VA

Operating Temperature .: -20°C ..... +55°C

Tolerance : ~%30 and ~%40(FK-X2)

Display..... On led and Out led

Connection Type......: Terminal connection

Weight......Max. 110gr.

Contact..... 5A/250V AC

(Resistive Load) Mounting....: Vertical assembled in

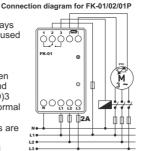
the panel or assembled

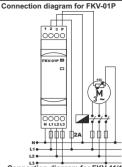
on the din rail

Operating Altitude.....: <2000meter

Cable Diameter.....2,5mm²

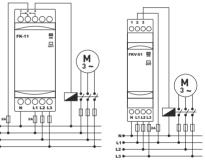
1.5mm2(FKV-X1/X1P)

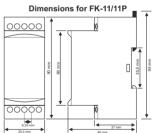


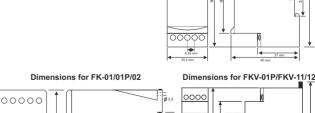


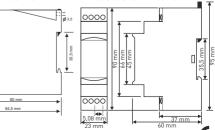
Connection diagram for FK-11/12

Connection diagram for FKV-11/12









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