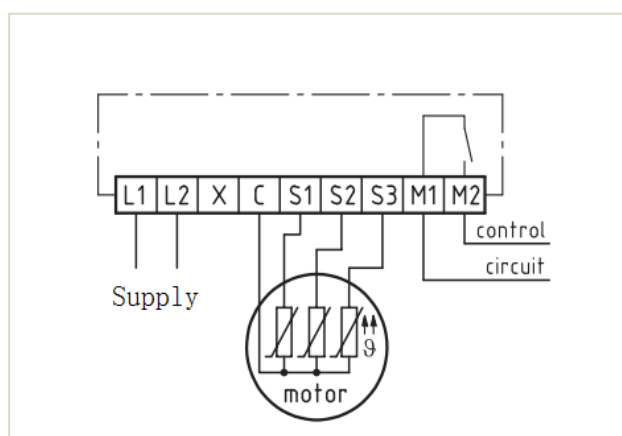
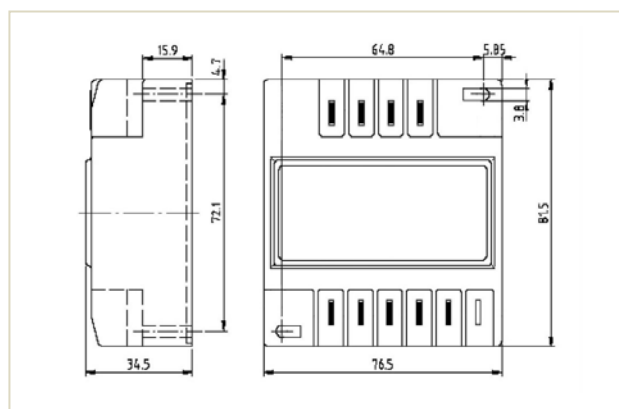


# 41AA Motor protector



Connection diagram



Dimensions in mm

## Application

Used for compressors, such as Dunham-bush, Copeland, etc. The protection module is designed to protect against:

- Excessive motor winding temperatures by monitoring the resistance of positive temperature coefficient (PTC) thermistors embedded in the windings.
- Low voltage operation.

## Functional description

As the winding temperature approaches the design response temperature of the PTC thermistor, the increase in thermistor resistance is sensed by the 41AA. The output relay drops out immediately and a time delay of 2 minutes (minimum off time) is activated when the response threshold is exceeded or a too fast temperature increase is detected (caused by locked rotor conditions). After these 2 minutes have elapsed and the resistance has dropped below the reset threshold, the output relay is reenergized and the motor may be restarted.

The device also trips out if the voltage drops below a preset level voltage drops below a preset level or if a phase is lost. The same 2 minute time delay is activated when the supply voltage recovers, thus preventing contactor chatter under low voltage conditions. This delay is also activated after disconnecting supply voltage. The minimum off time can be bypassed by connecting terminal "X" and "C", provided that the fault condition has been corrected. Sensor and mains circuit are galvanically insulated.



The unit must be connected by trained electrical personnel. All valid standards for connecting electrical equipment must be observed.

## Technical data

Supply	AC50/60Hz 115/230V -15%...+10% 3VA AC50/60Hz 24V -15%...+10% 3VA
Ambient temperature range	-30...70°C
Temperature sensor	PTC to DIN 44081/082
Number of sensors	3
$R_{trip}$	13K $\Omega$ $\pm$ 3K $\Omega$
$R_{reset}$	3.25K $\Omega$ $\pm$ 0.5K $\Omega$
Time delay(min,off time)	120S $\pm$ 20S
Low voltage limits	85 (AC115V) \ 170 (AC230V) 16.5 (AC24V)
Relay	AC 240V, 2.5A, C300
Mechanical service life	Approx. 1 million Switching cycles
Protection class	IP00
Connection	6.3mm connectors
Housing	PA66 GF25
Mounting	Screw-mounted
Dimensions	76.5x81.5x34.5mm
Weight	Approx. 200g
电压	订货号
-115-230VAC	16G08 41A 0E
-24VAC	16G08 41A 0A