

Motor Protector Relay - 41AA series

压缩机电机保护模块 - 41AA 系列



APPLICATION:

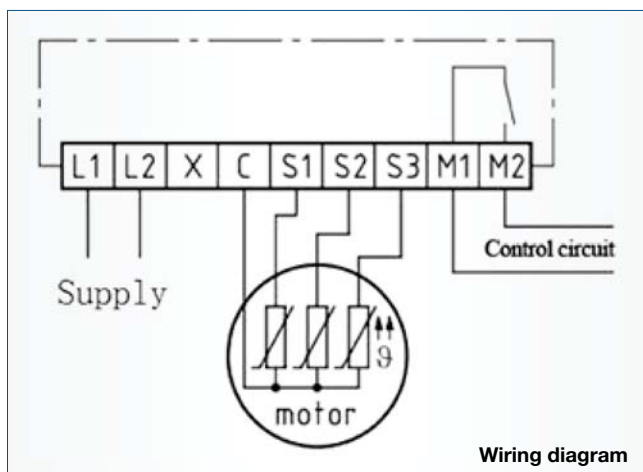
Used for compressors such as Dunham-Bush, Copeland, etc. The 41AA series protection relay is designed to protect against excessive motor winding temperatures by monitoring the resistance of positive temperature coefficient (PTC) thermistors embedded in the windings.

FUNCTIONAL DESCRIPTION:

* As the winding temperature approaches the design response temperature of the PTC thermistor, the increase in the 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 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 when the supply voltage is disconnected. The minimum off-time can be bypassed by connecting terminal "X" and "C", provided that the fault condition has been corrected. The sensor and main circuit are galvanically insulated.



SPECIFICATIONS:

Item	Description
Supply voltage	AC 50/60Hz 115/230V -15%...+10% 3VA AC 50/60Hz 24V -15%...+10% 3VA
Ambient temp.	-30°C ... +70°C
Temperature sensor	PTC to DIN 44081/082
Number of sensors	3
R _{trip}	13KΩ ± 3 KΩ
R _{reset}	3.25KΩ ± 0.5 KΩ
Time delay	120s ± 20s (min., off time)
Low voltage limits	85 (AC115V) \ 170 (AC230V) \ 16.5 (AC24V)
Relay	AC 240V, 2.5A, C300
Service life	Approx. 1 million switching cycles
Protection class	IP00
Connection	6.3mm connectors
Housing	PA66, GF25
Mounting	Screw-mounted
Dimensions	76.5 x 81.5 x 34.5mm
Weight	Approx. 200gr.

