

OUT69 Y Motor Protector

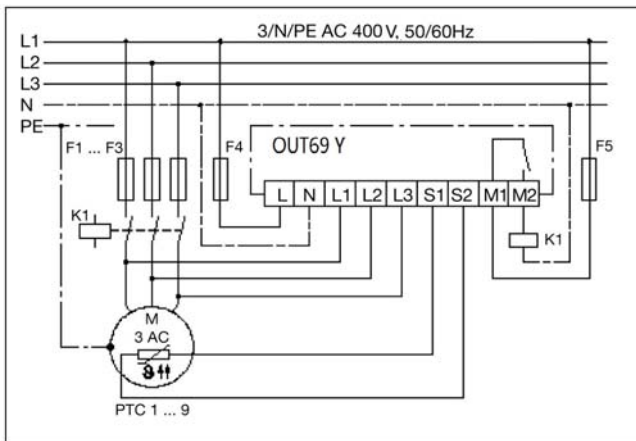


Application:

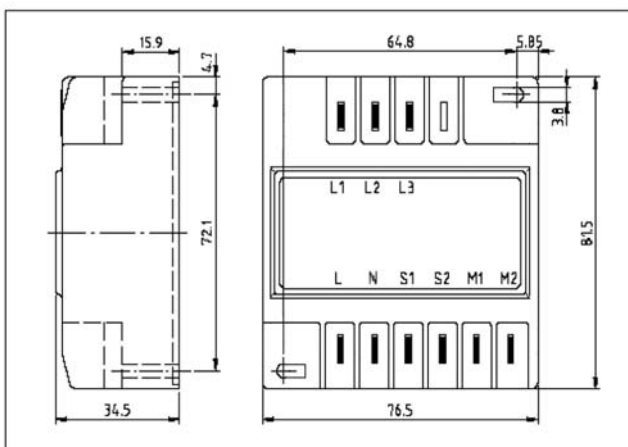
OUT69 Y is microcontroller-based and has been developed specifically for screw compressors. It monitors the following parameters: motor winding temperature, phase sequence, and phase failure.

Functional description:

- After the supply voltage has been connected, a three-second initialization period follows. Provided the PTC chain resistance is below the reset threshold(2.75KΩ), the relay trips after these 3 seconds have expired.
- Up to nine PTCs with different nominal response temperature may be connected serially to the PTC input.
- If one or more PTCs become highly resistive, the relay switches off. After cooling down below the reset threshold, a 5-minute delay period begins. When this period has expired, the relay trips again, provided all PTCs are below the reset threshold. If a second PTC error is detected within 24 hours of the first, the delay period is 60 minutes. If a third PTC error occurs within the 24-hour period, the relay switches off and locks. If a rotor seize is detected, the relay switches off and locks.
- The monitoring of the three-phase motor voltage becomes active 1 second after the motor has started, for a duration of 10 seconds. In case of a wrong phase sequence or a phase failure, the relay switches off and locks.
- The lock-out and delay may be lifted by cycling the power off for approx.5 seconds.
- After the compressor has switched off, the voltage monitoring is enabled only after a delay period of approx.20 seconds, in order to prevent unwanted shut down caused by the compressor rotating backwards for a short time.
- A dual LED(red/green) provides additional information about the motor protector and the compressor status(e.g., for diagnostic purposes).
- The relay output is designed potential-free and opens in case of fault or when the supply voltage fails.
- The sensor and supply circuits are galvanic ally isolated from each other.
- The OUT69Y is not suitable for use with frequency converters.



Connection diagram



Dimensions in mm



The unit must be connected by trained electrical personnel.

OUT69 Y Motor Protector

Flash code for OUT69 Y motor protector W/status LED

Application:

The flash code facilitates troubleshooting the connected system. It provides current status information about the motor protector.

Functional description:

Blink code output is via the combined red and green LED at the top of the housing.

The status display indicated the current operational state and the error state of the OUT69 Y. When the LED lights green continuously, no fault is present, and the device is ready for operation. When the LED flashes red, and error has been detected. The type of error can be identified from the blink code.

Blind code display:

The blink code consists of on/off periods of the red LED. The cycle is repeated continually.

1st flash pulse	Error category	2nd flash pulse	Error category
1	PTC	1 2 3	static not available time delay active ($PTC < R_{reset}$)
2	Phase monitoring	1	phase sequence
3	General	1	internal error

Technical specifications

Supply voltage -dual voltage	AC50/60Hz 115/230V -15...+10% 3VA AC50/60Hz 208-240V -15...+10% 3VA
Ambient temperature range	-30...70°C
Temperature monitoring -Number of sensors - $R_{25,total}$ - R_{trip} - R_{reset} -Max.lead length -Measurement voltage	PTC acc.to DIN44081/082 1...9 serial < 1.8 K Ω 4.50 K Ω ±20% 2.75 K Ω ±20% < 30m ≤2.5V(acc.to IEC 60034-1)
Time delay after cooldown -1st shutdown in 24h -2nd shutdown in 24h -3rd shutdown in 24h -seized rotor	5min±1min 60min±5min lock-out lock-out
Phase monitoring	3AC 50/60Hz,200...575V±10% active while $t_0+1S...T_0+11S$
Phase failure	lock-out
Relay contacts(NOC) -AgNi 90/10	max AC 240V, max 2.5A,C300 min > 24V AC/DC, > 20mA.
Mechanical service life	approx. 1 million switching cycles
Protection class acc. to En 60529	IP00
Connection	6.3mm faston connector
Housing	PA66
Mounting	Screw mounted
Dimensions in mm	76.5*81.5*34.5
Weight	Approx.200g
Supply voltage 115/230V 208-240V	Order No. 15G08 Y69 00 15G08 Y69 01