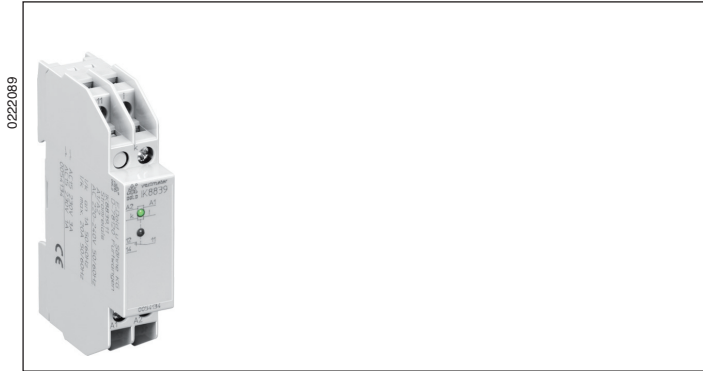


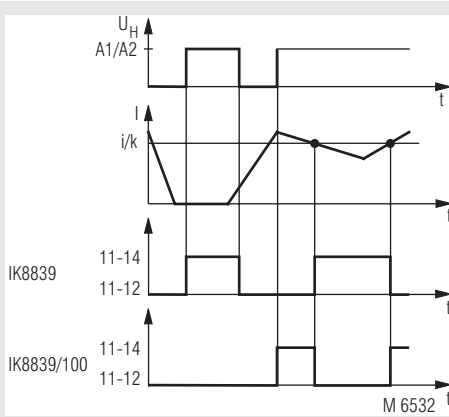
VARIMETER Current Monitor IK 8839

Translation
of the original instructions



- According to IEC/EN 60255-1
- Measuring range 0.175 ... 1 A
- Fixed switching point setting
- High maximum load
- 1 changeover contact
- LED indication for operation and output status
- Width 17.5 mm

Function Diagram



Approvals and Markings



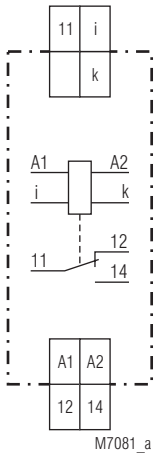
Applications

For monitoring the operation of consumers that are primarily electrothermal in nature, e.g. heating spirals, supplementary tubular heaters. The current monitor checks whether the operating current is flowing when the consumer is switched on.

Indicators

- Upper LED: On, when auxiliary supply connected
- Lower LED: On, when output relay active

Circuit Diagram



Connection Terminals

Terminal designation	Signal description
A1, A2	Voltage supply AC/DC
i, k	Current measuring inputs
11, 12, 14	Changeover contact (output relay)

Technical Data	
Input	
Switching point, fixed:	Maximum load Permanent 2 s
AC 0.175 A:	AC 20 A AC 150 A
AC 0.6 A:	AC 20 A AC 150 A
AC 0.75 A:	AC 20 A AC 150 A
AC 1.0 A:	AC 20 A AC 150 A
Switching tolerance:	± 15 %
Frequency influence:	48 ... 52 Hz / - 8 % ... + 3 %
Auxiliary voltage U_H:	AC/DC 24 V, AC/DC 48 V AC 110 ... 127 V, AC 220 ... 230 V
Voltage range	
AC:	0.8 ... 1.1 U_N
DC:	0.8 ... 1.25 U_N
Nominal consumption at AC 230 V:	
Apparent power:	50 / 60 Hz 2.2 VA
Active power:	0.5 W
Nominal frequency:	50 Hz
Nominal consumption:	± 5 %

Output	
Contacts	1 changeover contact
Contact material:	AgNi10 + 0.2 µm Au
Measured nominal voltage:	AC 250 V
Operate time:	Approx. 60 ms
Thermal current I_{th}:	5 A
Switching capacity	
To AC 15	
NO contact:	3 A / AC 230 V IEC/EN 60947-5-1
NC contact:	1 A / AC 230 V IEC/EN 60947-5-1
Electrical life	
To AC 15 at 5 A, AC 230 V:	Approx. 10 ⁵ switching cycles
To AC 15 at 8 A, AC 230 V:	Approx. 5 x 10 ⁴ switching cycles
Permissible switching frequency:	
	3000 / h
Short circuit strength	
max. fuse rating:	4 A gG / gL IEC/EN 60947-5-1
Mechanical life:	
	20 x 10 ⁶ switching cycles

General Data

Operating mode:	Continuous operation	
Temperature range		
Operation:	- 20 ... + 60 °C	
Storage:	- 25 ... + 60 °C	
Relative air humidity:	93 % at 40°C	
Altitude:	< 2000 m	
Clearance and creepage distances		
Rated impulse voltage / pollution degree:	4 kV / 2	IEC 60664-1
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation:	10 V / m	IEC/EN 61000-4-3
Fast transients:	4 kV	IEC/EN 61000-4-4
Surge voltages		
Between		
wires for power supply:	1 kV	IEC/EN 61000-4-5
HF wired guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011
Degree of protection		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
Housing:		
	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:		
	Amplitude 0.35 mm	IEC/EN 60068-2-6
	Frequency 10 ... 55 Hz	
Climate resistance:		
	20 / 060 / 04	IEC/EN 60068-1

Technical Data	
Terminal designation:	EN 50005
Wire connection:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded ferruled DIN 46228-1/-2/-3/-4
Stripping length:	10 mm
Wire fixing:	Terminals with self-lifting clamping piece IEC/EN 60999-1
Fixing torque:	0.8 Nm
Mounting:	DIN rail IEC/EN 60715
Weight:	62 g
Dimensions	
Width x height x depth:	17.5 x 89 x 58 mm
Standard Type	
IK 8839.11 AC 230 V 50 Hz 1 A	
Article number:	0054134
• Output:	1 changeover contact
• Auxiliary voltage U_H :	AC 230 V
• Switching point:	1 A
• Width:	17.5 mm

Variants	
IK 8839.11/100:	With an inverted output
IK 8839.11/001:	With a fixed operate delay 180 ... 300 ms

Ordering example for variants

