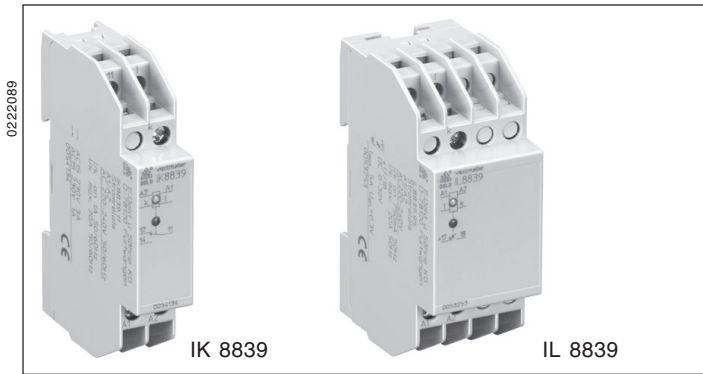


Current monitor IK 8839, IL 8839 varimeter

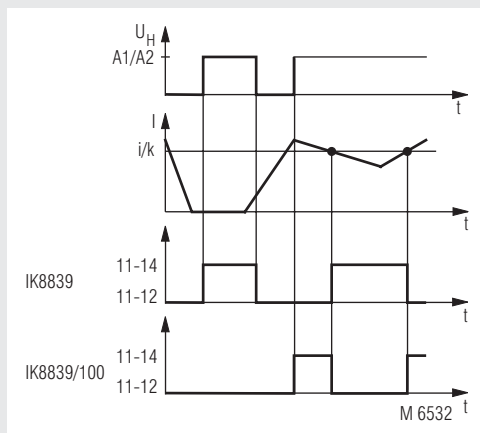


- According to IEC/EN 60 255, DIN VDE 0435-303
- Measuring range 0.175 ... 1 A
- Fixed switching point setting
- High maximum load
- As option with semiconductor output
- Width
IK 8839: 17.5 mm
IL 8839: 35 mm

Approvals and marking



Function diagram



Application

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.

Technical data

Input

Switching point, fixed:	Permanent maximum load	2 s
AC 0,175 A:	AC 5 A	AC 16 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	
	0.8 ... 1.1 U_N	

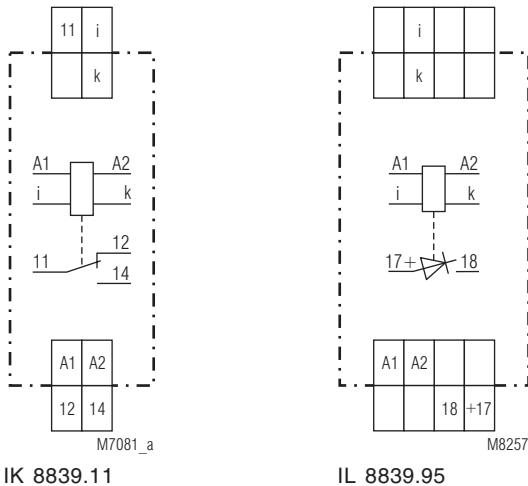
Voltage range:

Nominal consumption at AC 230 V:	50 / 60 Hz
apparent power:	2.2 VA
active power:	0.5 W
Nominal frequency:	50 Hz
Nominal consumption:	± 5 %

Output

Contacts	1 changeover contact
IK 8839.11:	approx. 60 ms
Operate time:	5 A
Thermal current I_{th}:	
Switching capacity to AC 15	
NO contact:	3 A / AC 230 V IEC/EN 60 947-5-1
NC contact:	1 A / AC 230 V IEC/EN 60 947-5-1
Electrical life	IEC/EN 60 947-5-1
to AC 15 at 5 A, AC 230 V:	approx. 10^5 switching cycles
to AC 15 at 8 A, AC 230 V:	approx. 5×10^4 switching cycles
Permissible switching frequency:	3000 / h
Short circuit strength max. fuse rating:	4 AgL IEC/EN 60 947-5-1
Mechanical life:	20×10^6 switching cycles

Circuit diagram



IK 8839.11

IL 8839.95

Technical data

Semiconductor Output

Output

IL 8839.95: Transistor
Output voltage: DC 24 V (0 ... 30 V)
Min. output voltage U_{ON} : < 0.3 V

Clearance and creepage distances

4 kV / 2
 I_{max} 5 A

EMC

Electrostatic discharge: 8 kV (air) IEC/EN 61 000-4-2
HF irradiation: 10 V / m IEC/EN 61 000-4-3
Fast transients: 2 kV IEC/EN 61 000-4-4

Surge voltages between

wires for power supply: 1 kV IEC/EN 61 000-4-5
between wire and ground: 2 kV IEC/EN 61 000-4-5
Interference suppression: Limit value class B EN 55 011

Degree of protection:

Housing: IP 40 IEC/EN 60 529
Terminals: IP 20 IEC/EN 60 529

Housing:

Thermoplastic with V0 behaviour according to UL subject 94

Vibration resistance:

Amplitude 0.35 mm IEC/EN 60 068-2-6
Frequency 10 ... 55 Hz

Climate resistance:

20 / 060 / 04 IEC/EN 60 068-1

Terminal designation:

EN 50 005

Wire connection:

2 x 2.5 mm² solid or
2 x 1.5 mm² stranded ferruled
DIN 46 228-1/-2/-3/-4

Wire fixing:

Terminals with self-lifting clamping piece IEC/EN 60 999-1

Mounting:

DIN rail IEC/EN 60 715

Weight:

70 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: 0010172 stock item
• 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

IK 8839.01/150, IK 8839.05/150
IK 8839.01/250, IK 8839.05/250: with High current terminals
max. 16 mm² solid
max. 6 mm² stranded wire with sleeve
DIN 46 228-1/-2/-3/-4

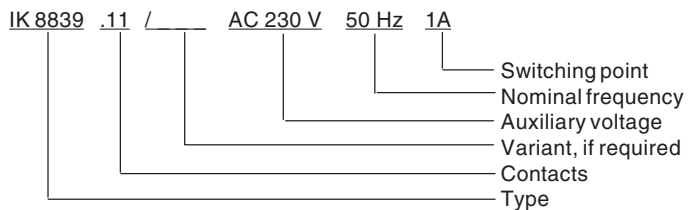
IK 8839.01/150: with a fixed switching point AC 1.0 A, permanent maximum load: 40 A, 1 NO contact

IK 8839.05/150: same as IK 8839.01/150, except with 1 NC contact

IK 8839.01/250: same as IK 8839.01/150, except with an inverted output

IK 8839.05/250: same as IK 8839.05/150, except with an inverted output

Ordering example for variants



Specification for tender for IK 8739

Current monitor according to IEC/EN 60 255, DIN VDE 0435-303 to be built in consumer units. Switching point AC 0.175 A ... 5 A permanent, can be overloaded for a short time for 2 s ... 16 A. 1 changeover contact.

Width 17.5 mm

Type IK 8839

Manufactured by E. DOLD & SÖHNE KG

Current monitor according to IEC/EN 60 255, DIN VDE 0435-303 to be built in consumer units. Switching point AC 0.175 A ... 20 A permanent, can be overloaded for a short time for 2 s ... 150 A. 1 changeover contact.

Width 17.5 mm

Type IK 8839

Manufactured by E. DOLD & SÖHNE KG

Current monitor according to IEC/EN 60 255, DIN VDE 0435-303 to be built in consumer units. Switching point AC 1.0 A ... 20 A permanent, can be overloaded for a short time for 2 s ... 150 A. 1 changeover contact.

Width 17.5 mm

Type IK 8839

Manufactured by E. DOLD & SÖHNE KG