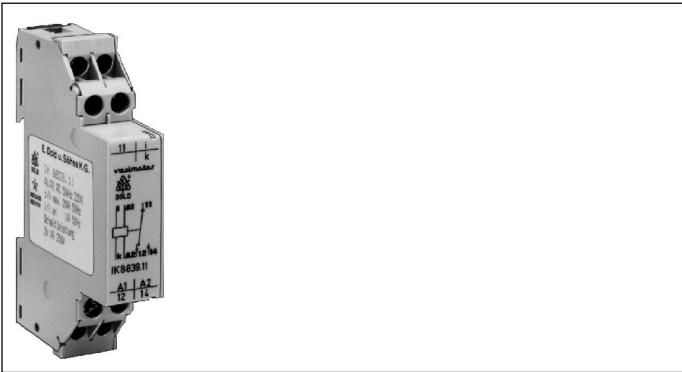


## Current monitor IK 8839 varimeter

0222 089

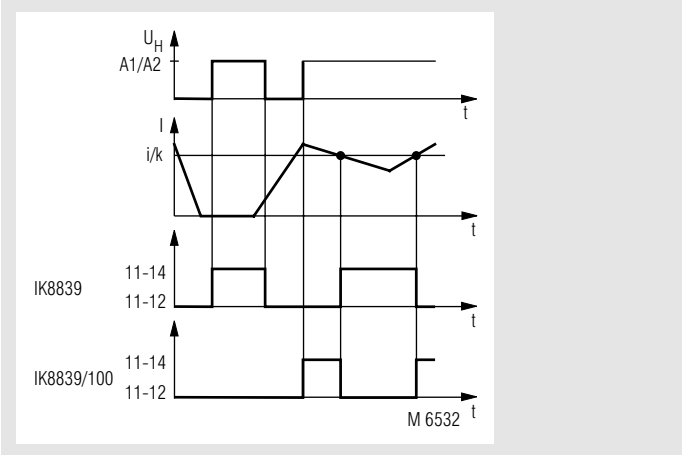


- According to IEC 255, EN 60 255, VDE 0435 part 303
- Measuring range 0,175 ... 1 A
- Fixed switching point setting
- High maximum load
- As option with semiconductor output
- Width 17,5 mm

### 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

<b>Switching point, fixed:</b>	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
<b>Switching tolerance:</b>	± 15 %	
<b>Frequency influence:</b>	48 ... 52 Hz / - 8 % ... + 3 %	
<b>Auxiliary voltage <math>U_H</math>:</b>	AC 110, 230 V	
<b>Voltage range:</b>	0,8 ... 1,1 $U_N$	
<b>Nominal consumption</b>		
apparent power:	2,2 VA	
active power:	0,2 W	
<b>Nominal frequency:</b>	50 Hz	
<b>Nominal consumption:</b>	± 5 %	

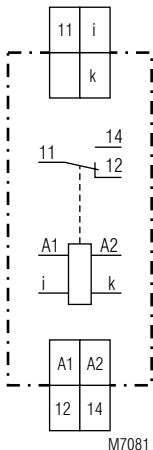
#### Output

<b>Contacts</b>	1 changeover contact	
IK 8839.11:	approx. 60 ms	
<b>Operate time:</b>	5 A	
<b>Thermal current <math>I_{th}</math>:</b>		
<b>Switching capacity</b>		
to AC 15		
NO contact:	3 A / AC 230 V	EN 60 947-5-1
NC contact:	1 A / AC 230 V	EN 60 947-5-1
<b>Electrical life</b>		
to AC 15 at 5 A, AC 230 V:	approx. $10^5$ switching cycles	
to AC 15 at 8 A, AC 230 V:	approx. $5 \times 10^4$ switching cycles	
<b>Permissible switching frequency:</b>	3 000 / h	
<b>Short circuit strength</b>		
<b>max. fuse rating:</b>	6 AgL	EN 60 947-5-1
<b>Mechanical life:</b>	20 x $10^6$ switching cycles	

### General data

<b>Operating mode:</b>	Continuous operation	
<b>Temperature range:</b>	- 20 ... + 60°C	
<b>Clearance and creepage distances</b>		
overvoltage category /		
contamination level:	4 kV / 2	IEC 60 664-1

### Circuit diagram



IK 8839.11

## Technical data

<b>EMC</b>		
Electrostatic discharge:	8 kV (air)	EN 61 000-4-2
HF irradiation:	10 V / m	EN 61 000-4-3
Fast transients:	2 kV	EN 61 000-4-4
Surge voltages between wires for power supply:	1 kV	EN 61 000-4-5
between wire and ground:	2 kV	EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011
<b>Degree of protection:</b>	Housing: IP 40	EN 60 529
	Terminals: IP 20	EN 60 529
<b>Housing:</b>	Thermoplastic with V0 behaviour according to UL subject 94	
<b>Vibration resistance:</b>	Amplitude 0,35 mm	EN 60 068-2-6
	Frequency 10 ... 55 Hz	
<b>Climate resistance:</b>	20 / 060 / 04	EN 60 068-1
<b>Terminal designation:</b>	EN 50 005	
<b>Wire connection:</b>	2 x 2,5 mm <sup>2</sup> solid or 2 x 1,5 mm <sup>2</sup> stranded ferruled	
	DIN 46 228-1/-2/-3	
<b>Wire fixing:</b>	Terminals with self-lifting clamping piece	
		EN 60 999
<b>Mounting:</b>	DIN rail	
		EN 50 022
<b>Weight:</b>	70 g	

## Dimensions

**Width x height x depth:** 17,5 x 89 x 58 mm

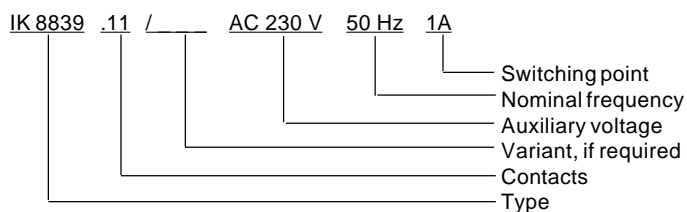
## Standard type

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:	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 255, VDE 0435 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 255, VDE 0435 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 255, VDE 0435 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