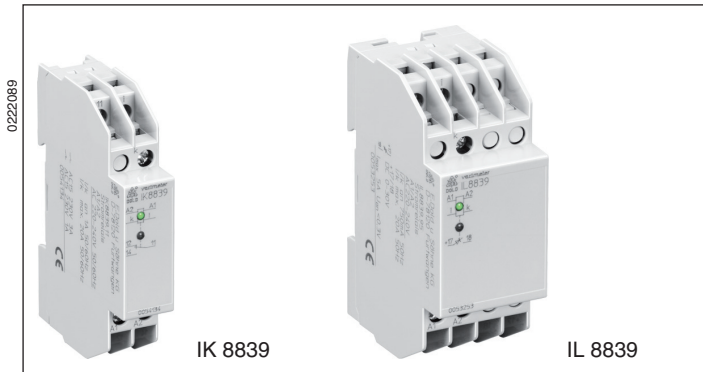
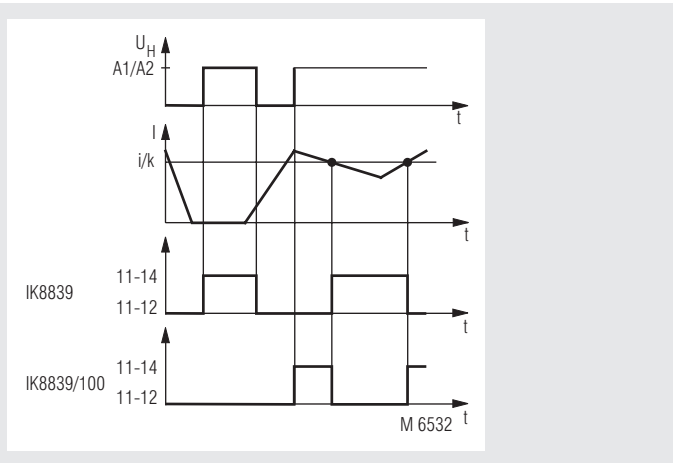


VARIMETER Current Monitor IK 8839, IL 8839



- 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

Function Diagram



Approvals and Markings



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:

	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

0.8 ... 1.1 U_N

Voltage range:

Nominal consumption at AC 230 V:

apparent power: 50 / 60 Hz

active power: 2.2 VA

Nominal frequency: 0.5 W

Nominal consumption: 50 Hz

± 5 %

Output

Contacts

IK 8839.11: 1 changeover contact

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 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:

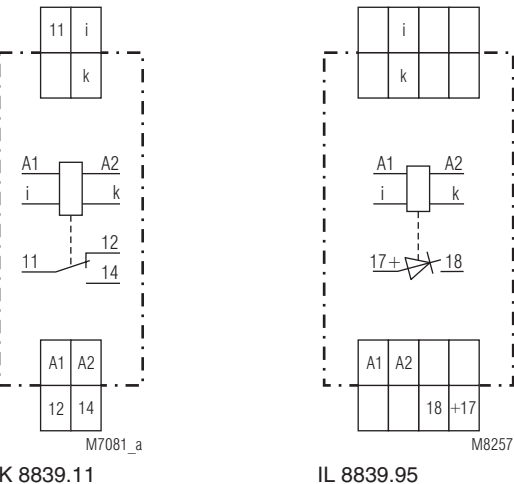
3000 / h

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

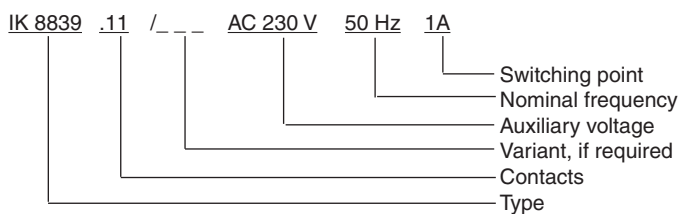
IL 8839.95

Technical Data		
General Data		
Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60°C	
Clearance and creepage distances		
rated impulse voltage / pollution degree:	4 kV / 2	IEC 60 664-1
Semiconductor Output		
Output	Transistor	
IL 8839.95:	DC 24 V (0 ... 30 V)	
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 mm ² solid or 2 x 1.5 mm ² 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:	0054134	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	with High current terminals max. 16 mm ² solid max. 6 mm ² stranded wire with sleeve DIN 46 228-1/-2/-3/-4	
IK 8839.01/250, IK 8839.05/250:	with a fixed switching point AC 1.0 A, permanent maximum load: 40 A, 1 NO contact	
IK 8839.01/150:	same as IK 8839.01/150, but with 1 NC contact	
IK 8839.05/150:	same as IK 8839.01/150, but with an inverted output	
IK 8839.01/250:	same as IK 8839.01/150, but with an inverted output	
IK 8839.05/250:	same as IK 8839.05/150, but with an inverted output	

Ordering example for variants



Specification for Tender for IK 8839

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