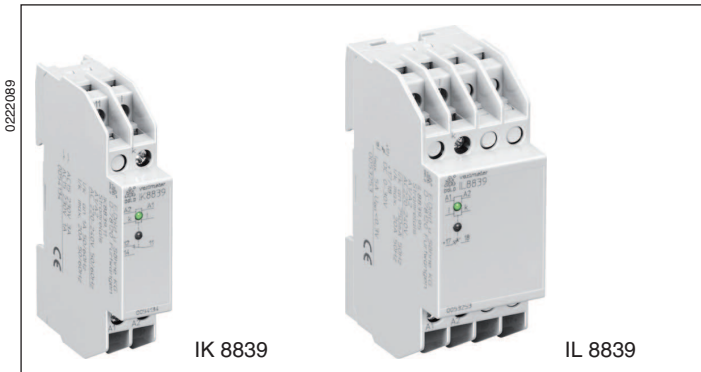
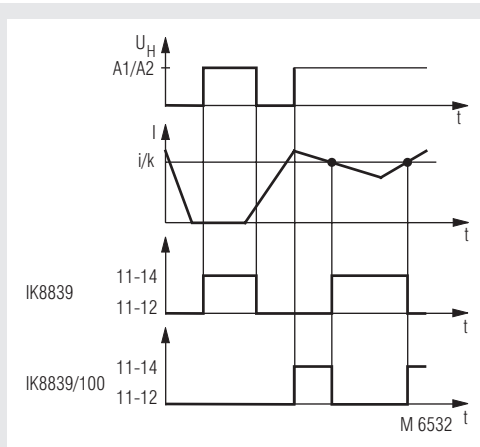


VARIMETER Current Monitor IK 8839, IL 8839



- 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 Marking



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	
Voltage range:	0.8 ... 1.1 U_N	

Voltage range:

Nominal consumption

at AC 230 V:

apparent power: 2.2 VA

active power: 0.5 W

Nominal frequency: 50 Hz

Nominal consumption: ± 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

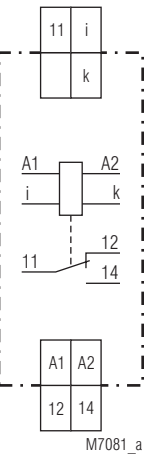
frequency: 3000 / h

Short circuit strength

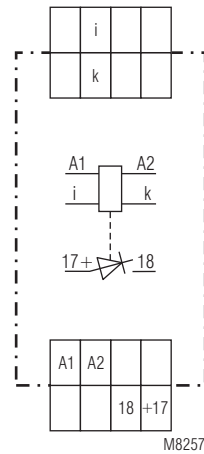
max. fuse rating: 4 AgL

Mechanical life: 20 x 10^6 switching cycles IEC/EN 60 947-5-1

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 impuls 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:	< 0.3 V	
Min. output voltage U_{ON}:		
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	IEC/EN 60 068-1

Climate resistance:	20 / 060 / 04	IEC/EN 60 068-1
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Terminal designation:	EN 50 005	
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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	
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Dimensions

Width x height x depth:	17.5 x 89 x 58 mm
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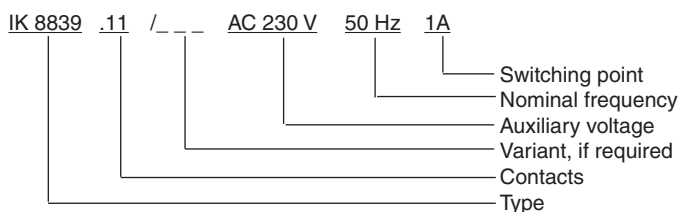
Standard Type

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	
IK 8839.01/250, IK 8839.05/250:	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 8839.01/150:	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, but with 1 NC contact
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