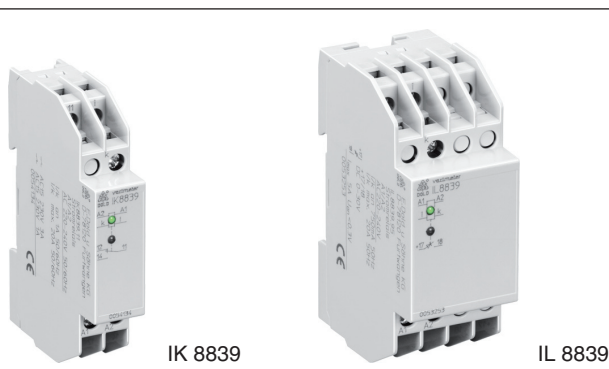


VARIMETER Current Monitor IK 8839, IL 8839

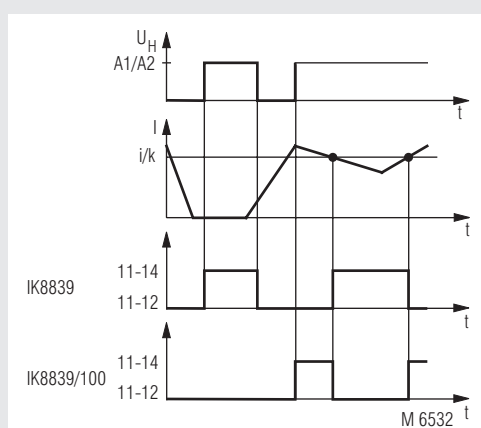


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- According to IEC/EN 60 255, DIN VDE 0435-303
- Measuring range 0.175 ... 1 A
- Fixed switching point setting
- High maximum load
- As option with semiconductor output
- Width
IK 8839: 17.5 mm
IL 8839: 35 mm

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

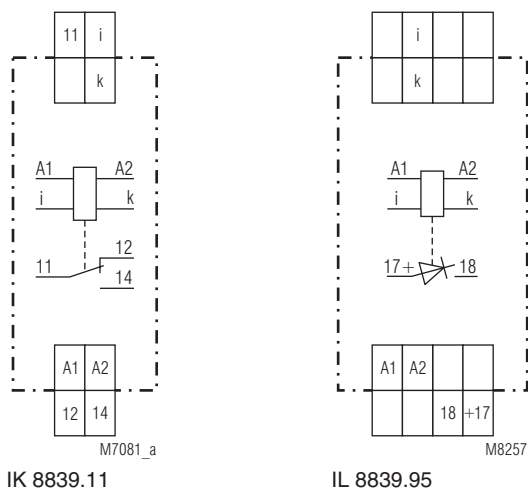
Input

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	
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 x 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 x 10 ⁶ switching cycles

Circuit Diagram



IK 8839.11

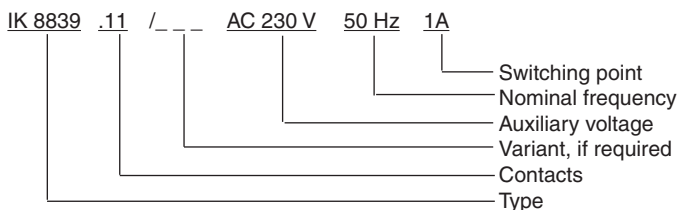
IL 8839.95

Technical Data		
General Data		
Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60°C	
Clearance and creepage distances		
rated 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:	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	
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