



Klixon® | 15AM MOTOR PROTECTOR/THERMAL CUT-OUT

KEY BENEFITS

- Sensata Technologies Engineering knowledge base
- Provides mounting flexibility
- European supply
- Competitive price
- Local Engineering

As world market leader in appliance motor protection Sensata Technologies builds the 15AM motor protector to meet almost any application in this field. The 15AM is designed to provide locked rotor and overload protection in a wide variety of motors for industrial and domestic appliances. The 15AM is a leader in the European AC motor protection market.

Design & operating principles

In the 15AM design the nickel plated shell holds and protects the inner components against varnish penetration and mechanical forces. The heart of the device is the calibrated Klixon® bimetal disc, responding to current and temperature changes. It is supported by a slug and a contact welded on the disc. The fixed contact is placed on the opposite nickelzinc coated plated steel shell, separated by a coated gasket for insulating and sealing. The 15AM can be supplied as a basic device with leads and other integrated quick connectors or automated connection systems. Customized lead configurations are available on request. The 15AM can be fitted in the best possible mounting location in com-

ination with the optimum assembly operation. As the 15AM is a metal device it may be necessary to insulate the device from other conductive parts. An insulating sleeve is available on request.

The operating principle of the 15AM is both simple and effective. A current flows through the resistive Klixon® bimetal disc. When a fault condition occurs, the increased current and shell temperature heats up the bimetal disc which snaps and opens the contacts. As the device cools down to a safe temperature, the contacts will automatically reset.

Applications

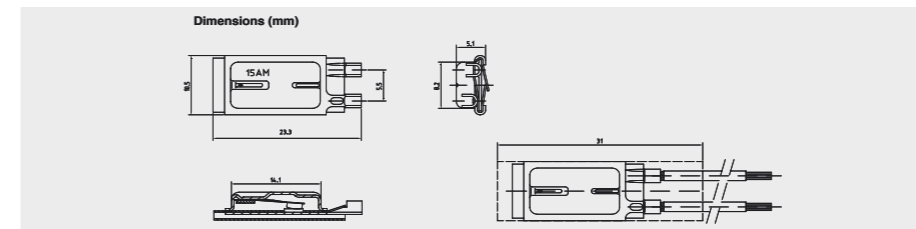
The 15AM operates as an incorporated thermal sensitive protector in electric motors for pumps, washing machines, dish washers, dryers, vacuum cleaners, fans, battery chargers and microwave ovens.

Specifications

Standard operating temperature range	from 65°C - 170°C
Tolerance on open temperature	± 5K
Maximum Ambient temperature	180°C
Maximum terminal temperature	185°C

Certifications

Agency	File number	Standard	Rating
ENEC	2014531.04	EN60730-2-9 Thermal Cut-Out	13 (5) A 250Vac / 10.000 cycles
		EN60730-2-2 Thermal Motor Protector	
UL / C-UL	E 15962	UL2111/CSA C22.2 No.77	



Coding System	345		A		034		A	
	Sealing		Standard Lead coding		Sleeve coding			
15AM	Code	Type	Length (mm)	Code	Code	Type	Standard	
	A	Standard	55	031	A		No sleeve	
	B	Hotmelt sealed	60	032				
			65	033				
			70	034				
			75	035				
			80	036				
			90	037				
			100	038				
			110	039				
			125	040				
			140	041				
			160	042				
			180	043				
			210	044				
			240	045				
			Others on request					

Specific Bimetal resistivity	Standard opening temperature											
	30		70		100		250		500		850	
Nominal differential**	20 K	45 K	20 K	45 K	20 K	45 K	20 K	45 K	20 K	45 K	20 K	45 K
Opening Temp*	65°C	006	305	007	008	009	009	009	050			
	70°C	011	310	012	013	014	014	014				
	75°C	016	315	017	018	019	019	019				
	80°C	021	320	022	023	024	024	024				
	85°C	026	325	027	028	029	029	029				
	90°C	036	335	037	038	039	039	039				
	95°C	046	345	047	048	049	049	049	050			
	100°C	056	061 355 360	057 062	058 063	059 064	059 064	059 064	060 065			
	105°C	071	076 370 375	072 077	073 078	074 079	074 079	074 079	075 080			
	110°C	086	091 385 390	087 092	088 093	089 094	089 094	089 094	090 095			
	115°C		106 405	107	108	109	109	109	110			
	120°C		121 420	122	123	124	124	124	125			
	125°C		136 435	137	138	139	139	139	140			
	130°C		151 450	152	153	154	154	154	155			
	135°C		166 465	167	168	169	169	169	170			
	140°C		181 480	182	183	184	184	184	185			
	145°C		196 495	197	198	199	199	199	200			
	150°C		211 510	212	213	214	214	214	215			
	155°C		520	222	223	224	224	224				
	160°C		530	232	233	234	234	234				
	165°C		540	242	243	244	244	244				
	170°C		550	252	253	254	254	254				

Declarations to EN60730-2-9		Declarations to EN60730-2-2	
Purpose of the control	Thermal Cut-Out	Purpose of the control	Thermal Motorprotector
Construction	Incorporated, non-electronic		
Degree of protection	IP00		
Terminals for ext. conductors	For internal conductors only		
Temperature limits of the switchhead	180°C		
PTI of insulation materials	PTI 175	PTI of insulation materials	PTI 175
Method of mounting	Inserting, clamping, bracketing or the like	Method of mounting	Inserting, clamping, bracketing or the like
Operating time	For continuous operation		
Type of action	Type 2C (T-open) Type 1C (T - close)	Type of action	Type 3C
Reset characteristic	Automatic	Reset characteristic	Automatic
Extent of sensing element	Whole control		
Control pollution degree	Degree 2	Control pollution degree	Degree 2

