

## **| 7AM SERIES**

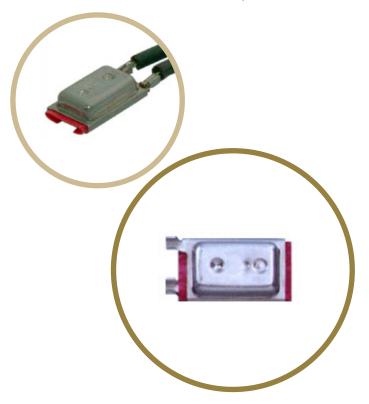
### LIGHTING, ELECTRICAL, THERMAL, BATTERY, MOTOR PROTECTION

### Introduction

The Klixon® 7AM delivers the maximum protection in the smallest package at an excellent price. It's the most reliable on the market, backed by the leading innovators in protection technology.

Each 7AM temperature rating has a bimetal disc specifically manufactured for that rating. Each device is then calibrated and checked for opening temperature. This results in optimum snap—acting open and reset characteristics necessary to achieve consistent performance over the required cycle life.

The Klixon® bimetal disc welded in a steel can provides excellent thermal sensitivity and maximum protection properties.



#### **Features**

- Over 3 billion sold
- Compact, miniature size
- UL, C-UL, DEKRA (ENEC) approvals
- Individually temperature checked on modern, custom-designed equipment
- Positive make and break with Klixon® snap—action disc
- Repeatable temperature performance over life
- Gasketed steel case suitable for most impregnation processes
- Current and temperature sensitivity for maximum design flexibility and application
- Wide selection of leads and insulating sleeves





Rated Voltage	125 Vac / 250 Vac		
Dimensions	20.2 x 10.8 x 4.9 mm (including terminals)		
Life	10,000 cycles / 8 A / 250 Vac (see approvals sheets)		
Maximum Contact Ratings @ 10K cycles	16 VDC at 20 amps 120 VAC at 22 amps 277 VAC at 8 amps 600 VAC at 4 amps		
Open Temperature	70°C to 175°C in increments of 5°C		
Temperature Tolerance	±5°C		
Differential Temperature	19°C to 54°C, depending on open temperature		
Seal	High-seal and low-seal gasket material available		
Maximum Ambient Temperature	Continuous: open-temperature +10°C Overshoot: 5 minutes at 200°C		
Vibration	Military standard 202F, Method 204D, Test Condition D (20g peak)		
Corrosion Resistance	48 hours at 35°C in 5% salt environment (ASTM B117)		
Humidity	95% relative humidity, 40°C: 7 days		
Thermal Shock	-20°C / +150°C, each for 30 minutes / 5 cycles		



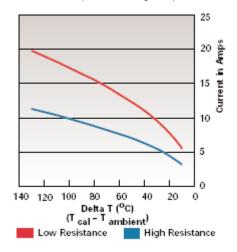
# **MAXIMUM CONTACT RATINGS (10,000 CYCLES)**

Voltage	Current	
16 VDC	20 amperes	
120 VAC	22 amperes	
277 VAC	8 amperes	
600 VAC 4 amperes		

# (3)

# ULTIMATE TRIP CURRENT VS. DELTA TEMPERATURE

Approximation, to be used only for selecting samples for verification tests.



Note: Delta T is the difference between the zero current calibrated opening temperature ( $T_{cal}$ ) and ambient temperature ( $T_{ambient}$ ) at the protector location.





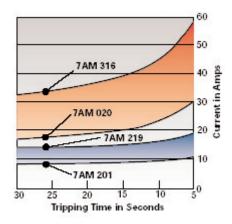
Family		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
	_		
Standard Operating			
Operating Temp. °C	Low Resistance Bimetal Disc	High Resistance Bimetal Disc	
	Code		
55	020	-	
70	021	201	
75	022	202	
30	023	203	
35	024	204	
90	025	205	
95	026	206	
100	027	207	
105	028	208	
110	029	209	
115	030	210	
120	031	211	
125	032	212	
130	033	213	
135	034	214	
140	035	215	
145	036	216	
150	037	217	
155	038	218	
160	039	219	
165	040		
170	336		
175	316	-	
Terminal Configura	tion		
A = Same end B = Opposite end			
Temperature Tolera	ince		
= ±5°C			
Physical Character			
e. Wire leads, insulating s	alagua		

Some ratings may not have UL listing. Please consult agency file listings.





### AVERAGE FIRST CYCLE TRIPPING TIME VS. CURRENT (25°C AMBIENT)



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## **AGENCY APPROVALS & CERTIFICATIONS**

Agency	File Number	Standard	Note
UL/Canadian-UL	E15962	UL2111, C22.2, #77	Motor protection
UL/Canadian-UL	E34618	UL873, C22.2, #74	Limit and regulating controls
DEKRA (ENEC)	2014531.03	EN 60730-2-22	Motor protection
DEKRA (ENEC)	2014531.03	EN 60730-2-3	Ballast protection
DEKRA (ENEC)	2014531.03	EN60730-2-9	Thermal cut-out

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