ACMP SERIES

Single-Phase and Three-Phase Aircraft Motor Protectors

Introduction

Klixon[®] motor protection for aircraft prevents hazards beyond the control of the manufacturer — hazards such as sustained overload and excessive temperatures. Since the aircraft motor protector (ACMP) is sensitive to both temperature and current, they inherently protect against a variety of abnormal conditions while allowing maximum motor output before shutdown. Motor life is extended by limiting the damaging temperatures to a designed level.



The ACMP is a bimetallic thermostat with a built–in heating element. It is installed in series with the motor winding. The actuating element is a Klixon[®] snap–acting thermal disc. The built–in heaters simulate winding temperatures caused by increases in current. The ACMP provides crisp, positive switching when the specified trip current is sustained for a specific duration at room temperature. The device will also actuate when an excessive ambient temperature condition occurs, providing protection against overheat conditions other than overload. Separately, the disc protects against excessive ambient temperature and the heaters protect against excessive current increases (as experienced during locked motor conditions). Together, the heaters and disc protect against any combination of overload and ambient conditions.

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Features

- Single- and three-phase protection
- Locked rotor protection
- Thermal protection
- Neutral tap
- Meets thermal protection requirements of MIL-M-7969, direct acting



PERFORMANCE CHARACTERISTICS

Maximum Current Ratings

Standard ratings are available in approximately 5% current steps at ultimate trip for motors with maximum allowable temperatures of 120°C, 150°C, 175°C, and 200°C.

	28 VDC	120 VAC
SKA	16 amps	16 amps
МКА	50 amps	50 amps
SJE	30 amps	30 amps
MJE	60 amps	60 amps
BJE	120 amps	120 amps

Ratings are for device series. Specific devices may vary.



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Inherent protection means that a protector is built into a motor and becomes an integral part of the system. For this reason, Klixon[®] protectors should only be applied by the motor manufacturer after detailed application tests to determine the heating characteristics of the motor under a full range of load and ambient conditions to verify the selected rating will meet the specific application requirements. Consult the factory for test samples.



Single Phase Motor Protectors

Open Type



	SKA	МКА
Approx. Weight (Ounces)	.125	.250
Maximum Rapturing Capacity	16 amps	50 amps
A (max dia)	.688	.937
B (dia)	.638	.876
C	.344	.420
D	.093	.093
E (max)	.500	.625
F (radius)	.035	.035

Three Phase Motor Protectors





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Three Phase Motor Protectors (Continued)









RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



- HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH
- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

Revised 3/30/18

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