SERIES 1500





Single-Pole High Performance

Qualified

Designed to MS22074 for MIL-C-5809.

Fast Trip

Operates on a hot-wire principle, much faster than bimetal breakers.

Fail-Safe Operation

Fault cannot cause breaker to fuse closed.

Ambient-Compensated

No appreciable change in trip time from -40°C to +71°C.

Low Resistance

Silver alloy contacts maintain low resistance for life of circuit breaker.

Load Protection

The fast tripping circuit breaker is ideal for protecting sensitive loads such as avionics and fuel pumps where rapid detection and fault clearing are desired.

Performance Rated Circuit Breaker

It is the only thermal hot wire type available in ratings from one-half ampere.

The 1500 is a circuit breaker that features fast trip for quick response. Designed for the protection of both wiring and equipment, the unit provides trip indication, trip-free protection, and the convenience of manual onoff operation. Excellent temperature stability is assured by the hot-wire design. The breaker has a high resistance to shock and vibration. Its "Fail Safe" design eliminates the danger of the breaker fusing closed on overload.

ICU Application

This circuit breaker meets the requirements of MIL-C-83383 for use as a RCCB ICU (Indicator Control Unit). Its I2t function is per specification.

PERFORMANCE D	АТА						
Interrupting Capacity	1/2 to 1A: 600A at 120V AC, 400 Hz.; 6,000A at 30V DC						
	1 1/2 to 4A: 1,000A at 120V AC 400 Hz.; 6,000A at 30V DC						
	5 to 10A: 600A at 120V AC 400 Hz.; 6,000A at 30V DC						
Endurance	At 120VAC, 400 Hz., or at 30V DC; inductive load — 2,500 cycles; resistive load —						
	5,000 cycles; mechanical cycling, no load — 5,000 cycles						
Overload Cycling	100 operations at 200% rated current and rated voltage						
Dielectric Strength	1,500V, minimum						
Insulation Resistance	Not less than 100 megohms at 500V, DC	_					
Voltage Drop	Varies with rating (see "Ordering Information")						
Vibration	Exceeds MIL-STD-202, Method 204, Condition A						
Shock	Exceeds 30G's, 11 Millisec (half-sine pulse) MIL-STD-202, Method 213 Test J	_					
Acceleration	Exceeds 10G's						
Weight	45 grams (.099 lbs.)	_					

OVERLOAD CALIBRATION DATA

@ 25°C				@ +71°C		@ -40°C		
0.	5 – 3A	4.5	i – 10A					Test Time
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	Parameters
115	_	115	_	115	_	115	_	% For 1 Hour
_	138	_	138		138	_	138	% Within 1 Hour
.400	3.0	.800	3.60		_	_	_	Seconds
.090	0.6	.140	0.75		_	_	_	Seconds
.042	0.3	.055	0.35	_	_	_	_	Seconds
	0.9 MIN 115 .400 .090 .042	Image: marked state Image: marked state	Image: marked state	Image: marked with a state with a	@ 25°C @ 0.5 - 3A 4.5 - 10A MIN MAX MIN MAX MIN 115 115 115 138 138 .400 3.0 .800 3.60 .090 0.6 .140 0.75 .042 0.3 .055 0.35	@ 25°C @ +71°C 0.5 - 3A 4.5 - 10A MIN MAX MIN MAX MIN MAX 115 115 115 138 138 138 .400 3.0 .800 3.60 .090 0.6 .140 0.75 .042 0.3 .055 0.35	@ 25°C @ +71°C @ 0.5 - 3A 4.5 - 10A MIN MAX MIN MAX	@ 25°C @ +71°C @ -40°C 0.5 - 3A 4.5 - 10A MIN MAX MIN MAX

Trip curve available

ORDERING INFORMATION

Ampere Rating	Voltage Drop Max.*	Part Number
1/2	1.21	1500-052-05
3/4	1.21	1500-052-075
1	1.20	1500-052-1
1 1/2	1.10	1500-052-105
2	0.95	1500-052-2
2 1/2	0.85	1500-052-205
3	0.81	1500-052-3
4	0.72	1500-052-4
5	0.65	1500-052-5
10	0.55	1500-052-10

* At rated nominal current. For other amperage ratings and configurations, consult the Business Unit.

SAFRAN ELECTRICAL & POWER 18



"Safran Electrical & Power Proprietary Information. Information contained in this document is Safran Electrical & Power Proprietary Information and is disclosed in confidence. It is the property of Safran Electrical & Power and shall not be used, disclosed to others, or reproduced without the express written agreement of Safran Electrical & Power. If consent is given for reproduction in whole or in part, this notice set forth on each page of this document shall appear in any such reproduction in whole or in part. Unauthorized export or re-export is prohibited



1.137

TRIP CURVE



SAFRAN

SAFRAN ELECTRICAL & POWER

19

"Safran Electrical & Power Proprietary Information. Information contained in this document is Safran Electrical & Power Proprietary Information and is disclosed in confidence. It is the property of Safran Electrical & Power and shall not be used, disclosed to others, or reproduced without the express written agreement of Safran Electrical & Power. If consent is given for reproduction in whole or in part, this notice set forth on each page of this document shall appear in any such reproduction in whole or in part. Unauthorized export or re-export is prohibited."