# **SERIES 700**

# A MINIATURE BREAKER WITH HIGH INTERRUPTING CAPACITY



(Bushing Mounting) High/Random Vibration (Flush Mounting)

#### PERFORMANCE DATA

# **Single-Pole High** Performance

### Qualified

To MS25244, MS25244-P and MS25244-PT of MIL-C-5809 (MS25244PT is a substitute for MS25017).

# Lightweight

Circuit breaker weighs only 43 grams.

## **High Interrupting Capacity**

Interrupts a 6,000A circuit at 30V, DC; 3,500A circuit at 120V, 400 Hz. AC.

#### **Performance Rated Circuit** Breaker

Exceeds military specification requirements for durability, vibration, mechanical shock, and acceleration. The 700 is a miniature push-pull breaker offering fast trip and high interrupting capacity. Its trip-free design prevents the breaker from being held closed manually on overloads.

A feature of the breaker is separate overload and mechanical latches. Separated in this way, the mechanical latch assures maximum endurance for the thousands of cycles of manual on-off operation, while the thermal latch combines both precise operation and durability.

## **Bushing and Flush Mounting** Options

Interrupting Capacity	6,000A at 30V, DC. 3,500A at 120V, 400 Hz., AC
Endurance	At 120V, 400 Hz., AC or 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	At sea level, 25°C 1,500V, AC. At 65,000 ft., 70°C 500V, AC. 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 (Random Optional)
Shock	Exceeds 30G's, 11 Millisec (half-sine pulse) MIL-STD-202, Method 213 Test J
Acceleration	Exceeds 10G's
Weight	700-001: 43 grams (.1 lbs.). 700-089: 48 grams (.11 lbs.)
Altitude Maximum	65,000 ft.

#### **OVERLOAD CALIBRATION DATA**

Specification Table	@ 25°C		@ +71°C				@ -40°C				
			0.5 – 7 1/2A		10 – 50A		0.5 – 7 1/2A		10 – 50A		Test Time
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	Parameters
Must Hold	115	_	60	_	70	_	156	_	148	_	% For 1 Hour
Must Trip	_	138	_	108	_	114	_	178	_	178	% Within 1 Hou
200% Overload	15	55.0	_	_	_	_	_	_	_	_	Seconds
400% Overload	2	7.0	_	_	_	_	_	_	_	_	Seconds
600% Overload	1	3.5	_	_	_	_	_	_	_	_	Seconds

Trip curve available.

#### ORDERING INFORMATION

MS APPROVAL STATUS		VOLTAGE DROP MAX. *	ADAPTER FLUSH MOUNTING PLATE							
	AMPERE RATING		STAND	DARD	BASE & TE CONFIGURATIO		ALTERNATE BASE & TERMINAL CONFIGURATION STYLE "PT"			
			MS P/N	SAFRAN MP P/N	MS P/N	SAFRAN MP P/N	MS P/N	SAFRAN MP P/N		
MS Approved	5	0.25	MS25244-5	700-001-5	MS25244-P5	700-089-5	MS25244-PT5	700-092-5		
MS Approved	7 1/2	0.25	MS25244-7 1/2	700-001-705	MS25244-P7 1/2	700-089-705	MS25244-PT7 1/2	700-092-705		
MS Approved	10	0.25	MS25244-10	700-001-10	MS25244-P10	700-089-10	MS25244-PT10	700-092-10		
MS Approved	15	0.25	MS25244-15	700-001-15	MS25244-P15	700-089-15	MS25244-PT15	700-092-15		
MS Approved	20	0.25	MS25244-20	700-001-20	MS25244-P20	700-089-20	MS25244-PT20	700-092-20		
MS Approved	25	0.25	MS25244-25	700-001-25	MS25244-P25	700-089-25	MS25244-PT25	700-092-25		
MS Approved	30	0.25	MS25244-30	700-001-30	MS25244-P30	700-089-30	MS25244-PT30	700-092-30		
MS Approved	35	0.25	MS25244-35	700-001-35	MS25244-P35	700-089-35	MS25244-PT35	700-092-35		
Non MS Approved	40	0.25		700-001-40		700-089-40		700-092-40		
Non MS Approved	50	0.25		700-001-50		700-089-50		700-092-50		

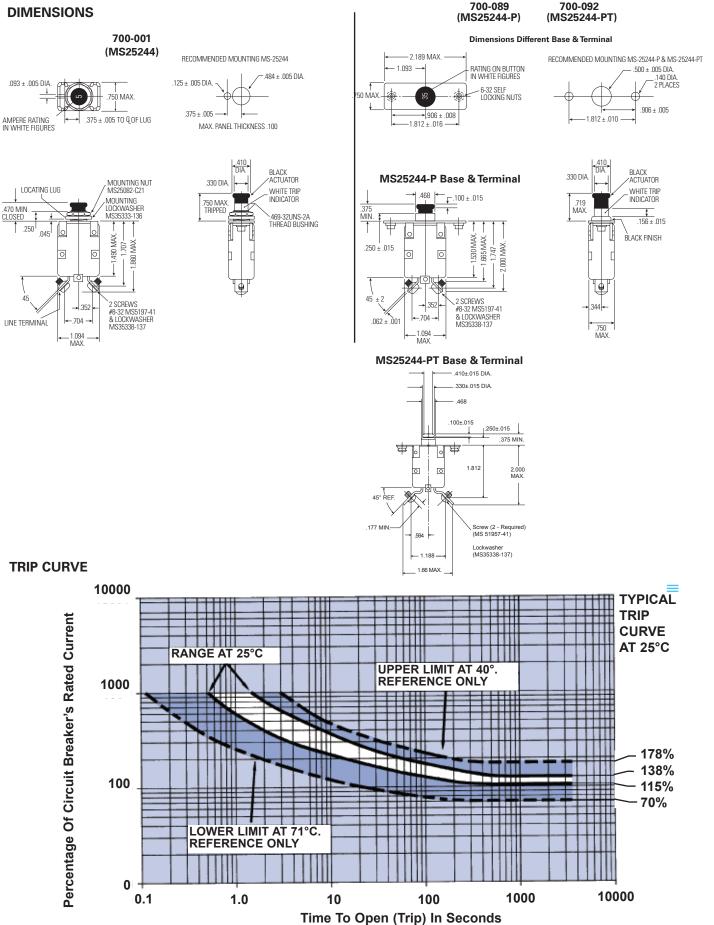
\* AT BATED NOMINAL CUBBENT

Three phase variants are available as a 930 Series.

SAFRAN ELECTRICAL & POWER For other amperage ratings and configurations, consult the Business Unit.

"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

# DIMENSIONS



"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.

SAFRAN

**SAFRAN ELECTRICAL & POWER** 

17