# A MINIATURE BREAKER WITH HIGH INTERRUPTING CAPACITY



Standard (Bushing Mounting)



# Single-Pole High Performance

# Qualified

To MS25244, MS25244-P and MS25244-PT of MIL-C-5809 (MS25244-PT 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**

#### PERFORMANCE DATA

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**

	@ 25℃		@ +71°C				@ -40°C					
Specification			0.5 – 7 1/2A		10 – 50A		0.5 – 7 1/2A		10 – 50A		_ _ Test Time	
Table	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 Hour	
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	AMPERE RATING	VOLTAGE DROP MAX. *		I MOUNTING PLAT	_ATE			
			STANDARD		BASE & TE		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

<sup>\*</sup> AT RATED NOMINAL CURRENT

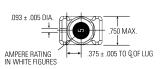
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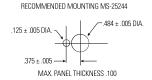
Three phase variants are available as a 930 Series

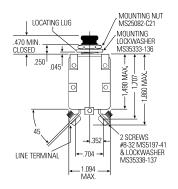
For other amperage ratings and configurations, consult the Business Unit.

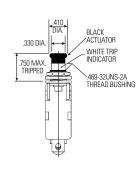
# **DIMENSIONS**

# 700-001 (MS25244)





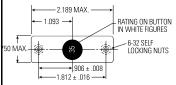


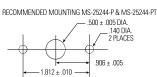


#### 700-089 (MS25244-P)

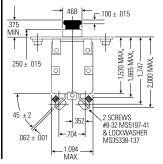
700-092 (MS25244-PT)

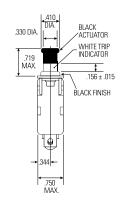
# Dimensions Different Base & Terminal



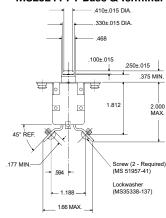


### MS25244-P Base & Terminal





# MS25244-PT Base & Terminal



# **TRIP CURVE**

