



KLIXON® | 2EP Series

1 to 35 Amps, UL Listed Commercial Circuit Breakers

FEATURES

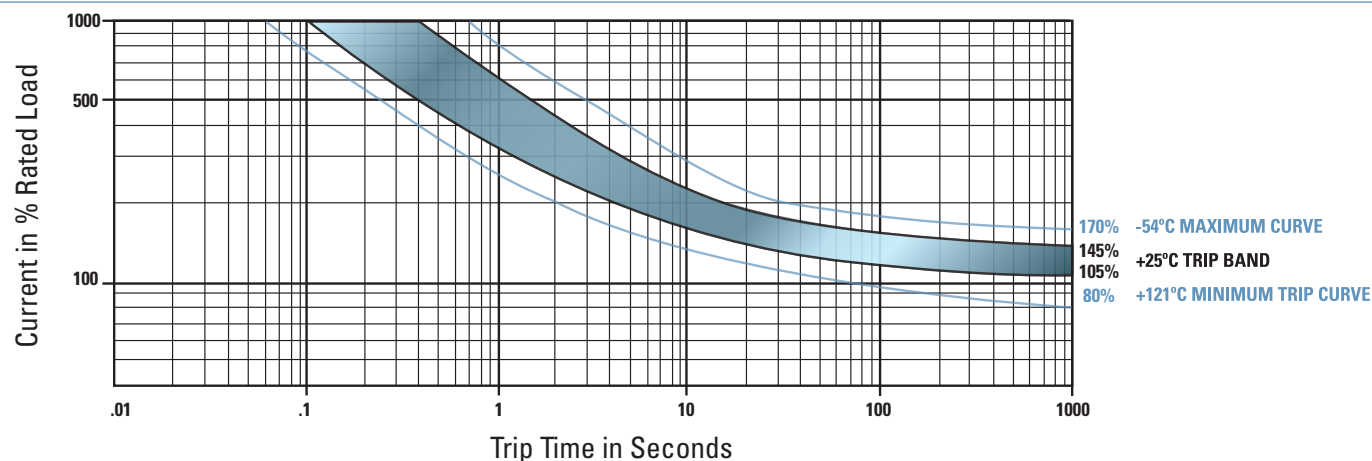
- Explosion-proof device
- UL Listed
- 1 to 35 amps ratings, high interrupt capacity
- Miniature size, lightweight
- Ambient compensated
- Rated to 75VDC and 250VAC, 60Hz

INTRODUCTION

The Klixon® single pole 2EP series of commercial circuit breakers offers a unique combination of miniature size and weight (less than 22 g) with high shock and vibration resistance. This thermal circuit breaker design can minimize nuisance tripping while offering a high short circuit capacity, and low voltage drop levels. The design offers trip-free operation so that it can not be held closed against an overload. The push-pull actuation minimizes accidental tripping while a white band offers visual trip indication. These features combine to make this solution especially well suited for industrial equipment, radars, medical and dental equipment, electronic control systems, telecom equipment, power supplies and test equipment.

SPECIFICATIONS

| | |
|-----------------------------------|---|
| Interrupt Current Capacity | 1 to 35 amps : 3,500 amps @ 75 VDC 1 to 35 amps : 1,000 amps @ 250 VAC, 60 Hz |
| Vibration Resistance | 10G minimum, 50 - 500 Hz |
| Mechanical Shock | Exceeds 50G's |
| Explosion Proof | While interrupting rupture currents |
| Endurance | 250 VAC / 75 VDC 6,000 cycles resistive load 120VAC 400Hz 2,500 cycles inductive and 6,000 resistive load 30VDC 2,500 cycles inductive load and 6,000 resistive load 10,000 cycles mechanical no load |
| Potting Material | Minimum 100 cycles @ 200% rated current |
| Potting Material | Exceeds 10G's |
| Potting Material | 22.0 gm max (including mounting hardware) |

TRIP CURVE - Approximate Time, Current Characteristics at 77°F (25°C)**MAX VOLTAGE DROP @ NOMINAL RATED CURRENT**

| Amp Rating | Max Drop |
|------------|----------------|
| 1 amps | 1.10 volts max |
| 2 amps | 0.70 volts max |
| 2.5 amps | 0.50 volts max |
| 3 amps | 0.40 volts max |
| 4 amps | 0.45 volts max |
| 5 amps | 0.35 volts max |
| 7.5 amps | 0.30 volts max |
| 10 amps | 0.28 volts max |
| 15 amps | 0.25 volts max |
| 20 amps | 0.25 volts max |
| 25 amps | 0.20 volts max |
| 30 amps | 0.15 volts max |
| 35 amps | 0.15 volts max |

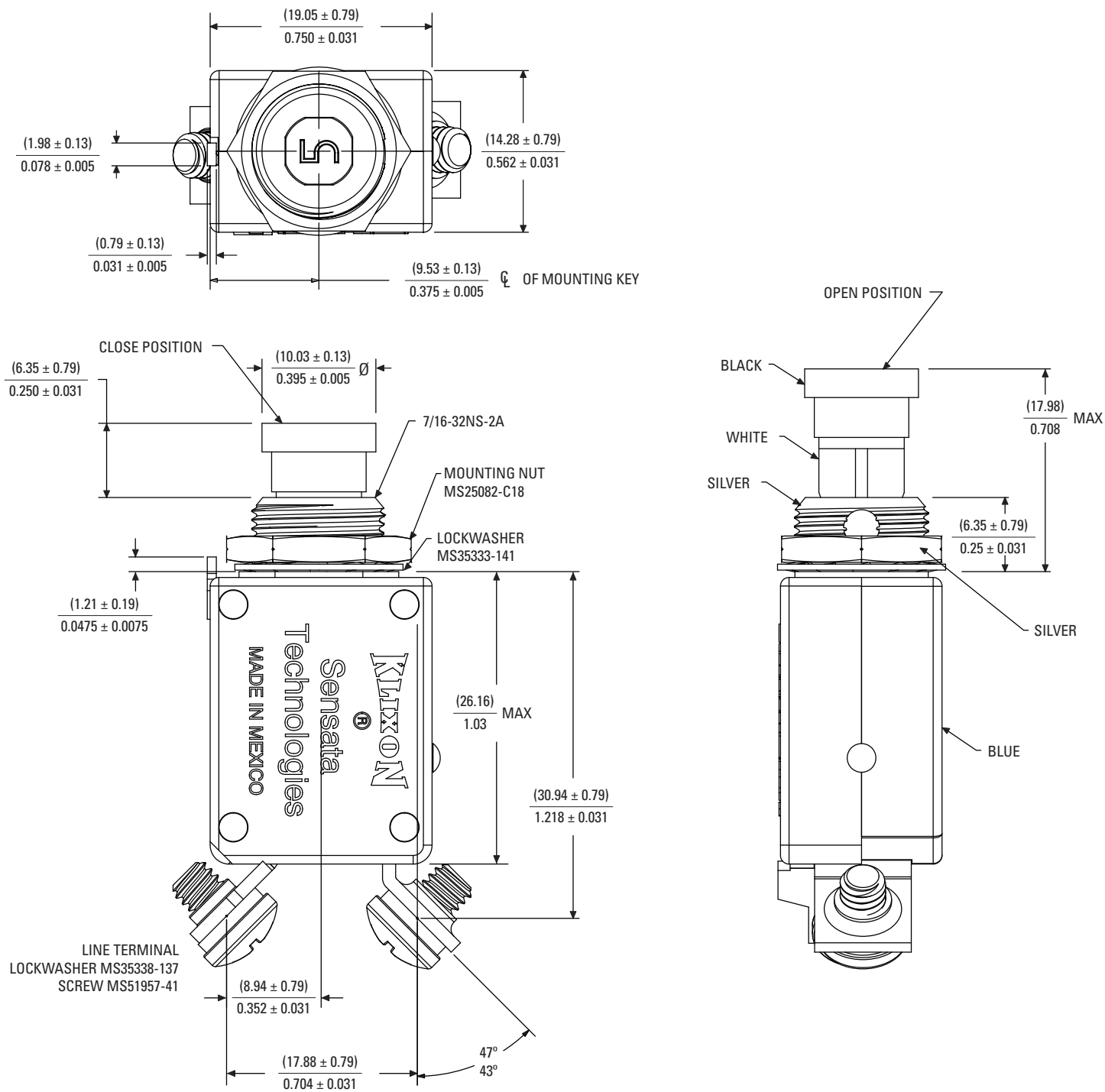
CALIBRATION

| TEMP °C / °F | MIN ULT TRIP | MAX ULT TRIP | Trip Time in Seconds | | |
|-----------------|-----------------|-----------------|----------------------|------------|------------|
| | | | 200% | 500% | 1000% |
| +25 / +77 | 105% | 145% | 4 to 16 | .4 to 1.6 | .10 to .40 |
| -54 / -65 | 105% | 170% | 7 to 35 | .6 to 3.0 | .15 to .70 |
| +121 / 250 | 80% | 150% | 2 to 13 | .25 to 1.0 | .06 to .25 |

RUPTURE

| Amp Rating | Voltage Rating | Rupture Rating |
|---------------|-----------------|----------------|
| 1 to 15 amps | 120 VAC, 400 Hz | 2,500 amps |
| 1 to 20 amps | 28 VDC | 6,000 amps |
| 20 amps | 120 VAC, 400 Hz | 2,000 amps |
| 25 to 35 amps | 28 VDC | 1,625 amps |
| 25 to 35 amps | 120 VAC, 400Hz | 1,800 amps |

DIMENSIONAL DRAWINGS: 2EP20



STANDARD PART NUMBER BUILDER

2EP X - X

Style

20 = 7/16" bushing, 8-32 screw terminals
30 = 15/32" bushing, 8-32 screw terminals
40 = M12x1 bushing, M4 screw terminals

Amp Rating
(1, 2, 2 1/2, 3, 4, 5, 7 1/2, 10, 15, 20, 25, 30, 35)