

IEC Miniature Thermal Overload Relays

Overview/Product Selection

**Bulletin 193-K — Miniature Bimetallic Overload Relays**

- Standard motor protection for AC and DC motors
- Overload protection Trip Class 10A
- Auxiliary switch (1 N.O. and 1 N.C.)
- Phase loss sensitivity
- Manual/Auto reset button
- Test release
- Stop button
- Trip indicator

Bulletin 193-K bimetallic overload relays are designed for use with Bulletin 100-K contactors and Bulletin 104-K Reversing Contactors. These class 10A ambient temperature-compensated thermal overload relays include a differential mechanism for sensitivity to phase-loss conditions.

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Conformity to Standards

IEC/EN 60947-1,-4-1,-5-1
 UL 508
 CSA 22.2. No. 14

Approvals

CE marked
 cULus listed (File No. E33916,
 Guide No. NKCR)

Miniature Bimetallic Overload Relays

| Mounts to Contactor | Setting Range [A] ** | Max. Current Rating Backup gG Fuse [A] IEC Coordination Type | | Cat. No. |
|---------------------|----------------------|---|----------|----------|
| | | Type 1 | Type 2 | |
| 100-K05...100-K12 | 0.10...0.16 | 35 | — | 193-KA16 |
| | 0.16...0.25 | 35 | — | 193-KA25 |
| | 0.25...0.40 | 35 | 2 | 193-KA40 |
| | 0.35...0.50 | 35 | 2 | 193-KA50 |
| | 0.45...0.63 | 35 | 2 | 193-KA63 |
| | 0.55...0.80 | 35 | 4 | 193-KA80 |
| | 0.75...1.0 | 35 | 4 | 193-KB10 |
| | 0.9...1.3 | 35 | 6 | 193-KB13 |
| | 1.1...1.6 | 35 | 6 | 193-KB16 |
| | 1.4...2.0 | 35 | 10 | 193-KB20 |
| | 1.8...2.5 | 35 | 20 | 193-KB25 |
| | 2.3...3.2 | 35 | 20 | 193-KB32 |
| | 2.9...4.0 | 35 | 20 | 193-KB40 |
| | 3.5...4.8 | 35 | 20 | 193-KB48 |
| 4.5...6.3 | 35 | 20 | 193-KB63 | |
| 100-K09...100-K12 | 5.5...7.5 | 35 | 20 | 193-KB75 |
| | 7.2...10.0 | 35 | 20 | 193-KC10 |
| 100-K12 | 9.0...12.5 | 35 | 20 | 193-KC12 |

* To select the setting range for use in Y-Δ Starters, multiply the rated operating current of the motor by a factor of 0.58.

** For motors with Service Factor of 1.15 or greater, use motor nameplate full load current. For motors with service factor of 1.0, use 90% of the motor nameplate full load current.