

XTOB, XTOT Overload Relays



Thermal Overload Relays

Product Description

The **XT** line of IEC motor thermal overload relays provides an efficient motor protection solution, available up to 630A. XTOB units can be directly mounted to the contactor or mounted separately.

Features and Benefits

- Direct connect up to 250A
- Stand alone and CT type up to 630A
- Large thermal overcurrent range
- Test button
- Manual/automatic selectable reset
- NO-NC auxiliary as standard
- Class 10A (to 250A)
- Class 30 (CT type)

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Standards and Certifications

- IEC EN 60947
- CE approved
- UL
- CSA
- ATEX
- RoHS



Notes

Short-circuit protection: Observe the maximum permissible fuse of the contactor with direct device mounting. See MN03402001E for more information on overload relays for Frames B–G. Trip Class: 10A
Suitable for protection of EEx e-motors. EC prototype test certificate available upon request. See manuals MN03402001E and MN03407001E, **Page V5-T1-135**.

Instructional Leaflets

- | | |
|----------|---|
| Pub51221 | XTOB, D Frame overload relays (inside of packaging) |
| Pub51222 | XTOB, B–C Frame overload relays (inside of packaging) |

Catalog Number Selection

XT IEC Overload Relays



Frame D

Overload Relay, Direct Mount—Frame D



| Overload Releases, I _r | Contact Sequence | Contact Configuration | For Use with Contactor Amp Range | Short-Circuit Protection (A) | | | CEC/NEC Fuse | Catalog Number |
|-----------------------------------|------------------|-----------------------|----------------------------------|---------------------------------|---------------------------------|-------------------------|--------------|----------------|
| | | | | Fuse Type 1 Coordination, gG/gL | Fuse Type 2 Coordination, gG/gL | Maximum Circuit Breaker | | |
| 6–10 | | 1NO-1NC | 40–72A | 50 | 25 | 25 | 25 | XTOB010DC1 |
| 10–16 | | 1NO-1NC | 40–72A | 63 | 35 | 25 | 25 | XTOB016DC1 |
| 16–24 | | 1NO-1NC | 40–72A | 63 | 50 | 30 | 25 | XTOB024DC1 |
| 24–40 | | 1NO-1NC | 40–72A | 125 | 63 | 125 | 125 | XTOB040DC1 |
| 40–57 | | 1NO-1NC | 50–72A | 160 | 80 | 150 | 150 | XTOB057DC1 |
| 50–65 | | 1NO-1NC | 65–72A | 160 | 100 | 150 | 200 | XTOB065DC1 |
| 65–75 | | 1NO-1NC | 72A | 200 | 125 | 150 | 200 | XTOB075DC1 |

Frames F–G

Overload Relay, Direct Mount—Frames F–G



| Overload Releases, I _r | Contact Sequence | Contact Configuration | For Use with Contactor Amp Range | Short-Circuit Protection (A) | | | CEC/NEC Fuse | Catalog Number |
|-----------------------------------|------------------|-----------------------|----------------------------------|---------------------------------|---------------------------------|-------------------------|--------------|----------------|
| | | | | Fuse Type 1 Coordination, gG/gL | Fuse Type 2 Coordination, gG/gL | Maximum Circuit Breaker | | |
| 25–35 | | 1NO-1NC | 80–170A | 125 | 100 | 125 | 125 | XTOB035GC1 |
| 35–50 | | 1NO-1NC | 80–170A | 160 | 125 | 150 | 200 | XTOB050GC1 |
| 50–70 | | 1NO-1NC | 80–170A | 250 | 160 | 150 | 200 | XTOB070GC1 |
| 70–100 | | 1NO-1NC | 80–170A | 315 | 200 | 400 | 400 | XTOB100GC1 |
| 95–125 | | 1NO-1NC | 80–170A | 315 | 200 | 500 | 400 | XTOB125GC1 |
| 120–150 | | 1NO-1NC | 80–170A | 315 | 200 | 600 | 600 | XTOB150GC1 |
| 145–175 | | 1NO-1NC | 150–170A | 315 | 200 | 600 | 600 | XTOB175GC1 |

Frames F–G

Overload Relay, Separate Mount—Frames F–G



| Overload Releases, I _r | Contact Sequence | Contact Configuration | For Use with Contactor Amp Range | Short-Circuit Protection (A) | | | CEC/NEC Fuse | Catalog Number |
|-----------------------------------|------------------|-----------------------|----------------------------------|---------------------------------|---------------------------------|-------------------------|--------------|----------------|
| | | | | Fuse Type 1 Coordination, gG/gL | Fuse Type 2 Coordination, gG/gL | Maximum Circuit Breaker | | |
| 25–35 | | 1NO-1NC | 80–170A | 125 | 100 | 125 | 125 | XTOB035GC1S |
| 35–50 | | 1NO-1NC | 80–170A | 160 | 125 | 150 | 200 | XTOB050GC1S |
| 50–70 | | 1NO-1NC | 80–170A | 250 | 160 | 150 | 200 | XTOB070GC1S |
| 70–100 | | 1NO-1NC | 80–170A | 315 | 200 | 400 | 400 | XTOB100GC1S |
| 95–125 | | 1NO-1NC | 80–170A | 315 | 250 | 500 | 400 | XTOB125GC1S |
| 120–150 | | 1NO-1NC | 80–170A | 315 | 250 | 600 | 600 | XTOB150GC1S |
| 145–175 | | 1NO-1NC | 150–170A | 315 | 250 | 600 | 600 | XTOB175GC1S |

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| XT DC Contactors | V5-T1-234 |
| Reference Data | V5-T1-236 |

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- IEC EN 60947
- CE approved
- UL
- CSA
- ATEX
- RoHS



Notes

Short-circuit protection: Observe the maximum permissible fuse of the contactor with direct device mounting. See MN03402001E for more information on overload relays for Frames B–G. Trip Class: 10A
 Suitable for protection of EEx e-motors. EC prototype test certificate available upon request. See manuals MN03402001E and MN03407001E, **Page V5-T1-135**.

Instructional Leaflets

- | | |
|----------|---|
| Pub51221 | XTOB, D Frame overload relays (inside of packaging) |
| Pub51222 | XTOB, B–C Frame overload relays (inside of packaging) |

Catalog Number Selection

XT IEC Overload Relays



Frame D

Overload Relay, Direct Mount—Frame D



| Overload Releases, I _r | Contact Sequence | Contact Configuration | For Use with Contactor Amp Range | Short-Circuit Protection (A) | | | CEC/NEC Fuse | Catalog Number |
|-----------------------------------|------------------|-----------------------|----------------------------------|---------------------------------|---------------------------------|-------------------------|--------------|----------------|
| | | | | Fuse Type 1 Coordination, gG/gL | Fuse Type 2 Coordination, gG/gL | Maximum Circuit Breaker | | |
| 6–10 | | 1NO-1NC | 40–72A | 50 | 25 | 25 | 25 | XTOB010DC1 |
| 10–16 | | 1NO-1NC | 40–72A | 63 | 35 | 25 | 25 | XTOB016DC1 |
| 16–24 | | 1NO-1NC | 40–72A | 63 | 50 | 30 | 25 | XTOB024DC1 |
| 24–40 | | 1NO-1NC | 40–72A | 125 | 63 | 125 | 125 | XTOB040DC1 |
| 40–57 | | 1NO-1NC | 50–72A | 160 | 80 | 150 | 150 | XTOB057DC1 |
| 50–65 | | 1NO-1NC | 65–72A | 160 | 100 | 150 | 200 | XTOB065DC1 |
| 65–75 | | 1NO-1NC | 72A | 200 | 125 | 150 | 200 | XTOB075DC1 |

Frames F–G

Overload Relay, Direct Mount—Frames F–G



| Overload Releases, I _r | Contact Sequence | Contact Configuration | For Use with Contactor Amp Range | Short-Circuit Protection (A) | | | CEC/NEC Fuse | Catalog Number |
|-----------------------------------|------------------|-----------------------|----------------------------------|---------------------------------|---------------------------------|-------------------------|--------------|----------------|
| | | | | Fuse Type 1 Coordination, gG/gL | Fuse Type 2 Coordination, gG/gL | Maximum Circuit Breaker | | |
| 25–35 | | 1NO-1NC | 80–170A | 125 | 100 | 125 | 125 | XTOB035GC1 |
| 35–50 | | 1NO-1NC | 80–170A | 160 | 125 | 150 | 200 | XTOB050GC1 |
| 50–70 | | 1NO-1NC | 80–170A | 250 | 160 | 150 | 200 | XTOB070GC1 |
| 70–100 | | 1NO-1NC | 80–170A | 315 | 200 | 400 | 400 | XTOB100GC1 |
| 95–125 | | 1NO-1NC | 80–170A | 315 | 200 | 500 | 400 | XTOB125GC1 |
| 120–150 | | 1NO-1NC | 80–170A | 315 | 200 | 600 | 600 | XTOB150GC1 |
| 145–175 | | 1NO-1NC | 150–170A | 315 | 200 | 600 | 600 | XTOB175GC1 |

Frames F–G

Overload Relay, Separate Mount—Frames F–G



| Overload Releases, I _r | Contact Sequence | Contact Configuration | For Use with Contactor Amp Range | Short-Circuit Protection (A) | | | CEC/NEC Fuse | Catalog Number |
|-----------------------------------|------------------|-----------------------|----------------------------------|---------------------------------|---------------------------------|-------------------------|--------------|----------------|
| | | | | Fuse Type 1 Coordination, gG/gL | Fuse Type 2 Coordination, gG/gL | Maximum Circuit Breaker | | |
| 25–35 | | 1NO-1NC | 80–170A | 125 | 100 | 125 | 125 | XTOB035GC1S |
| 35–50 | | 1NO-1NC | 80–170A | 160 | 125 | 150 | 200 | XTOB050GC1S |
| 50–70 | | 1NO-1NC | 80–170A | 250 | 160 | 150 | 200 | XTOB070GC1S |
| 70–100 | | 1NO-1NC | 80–170A | 315 | 200 | 400 | 400 | XTOB100GC1S |
| 95–125 | | 1NO-1NC | 80–170A | 315 | 250 | 500 | 400 | XTOB125GC1S |
| 120–150 | | 1NO-1NC | 80–170A | 315 | 250 | 600 | 600 | XTOB150GC1S |
| 145–175 | | 1NO-1NC | 150–170A | 315 | 250 | 600 | 600 | XTOB175GC1S |