

#### 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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| Reference Data .....                              | <b>V5-T1-236</b> |

#### 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 <sub>r</sub> | 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 <sub>r</sub> | 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 <sub>r</sub> | 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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Catalog Number Selection

XT IEC Overload Relays



## Frame D

## Overload Relay, Direct Mount—Frame D



| Overload Releases, I <sub>r</sub> | 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     |
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| 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 <sub>r</sub> | 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     |
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## Frames F–G

## Overload Relay, Separate Mount—Frames F–G



| Overload Releases, I <sub>r</sub> | 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    |
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| 70–100                            |                  | 1NO-1NC               | 80–170A                          | 315                             | 200                             | 400                     | 400          | XTOB100GC1S    |
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| 145–175                           |                  | 1NO-1NC               | 150–170A                         | 315                             | 250                             | 600                     | 600          | XTOB175GC1S    |