

#### 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)

### Contents

#### Description

	<i>Page</i>
Relays and Timers .....	<b>V5-T1-3</b>
Miniature Controls .....	<b>V5-T1-18</b>
Contactors and Starters .....	<b>V5-T1-35</b>
XTSE Contactors .....	<b>V5-T1-128</b>
Thermal Overload Relays	
Catalog Number Selection .....	<b>V5-T1-131</b>
Product Selection .....	<b>V5-T1-132</b>
Accessories .....	<b>V5-T1-135</b>
Technical Data and Specifications .....	<b>V5-T1-138</b>
Dimensions .....	<b>V5-T1-140</b>
C440/ <b>XT</b> Electronic Overload Relay .....	<b>V5-T1-143</b>
Manual Motor Protectors .....	<b>V5-T1-159</b>
Combination Motor Controllers .....	<b>V5-T1-193</b>
<b>XT</b> Electronic Manual Motor Protector .....	<b>V5-T1-219</b>
EMS—Electronic Motor Starter .....	<b>V5-T1-232</b>
<b>XT</b> DC Contactors .....	<b>V5-T1-234</b>
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

#### 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)

### Contents

#### Description

	<i>Page</i>
Relays and Timers .....	<b>V5-T1-3</b>
Miniature Controls .....	<b>V5-T1-18</b>
Contactors and Starters .....	<b>V5-T1-35</b>
XTSE Contactors .....	<b>V5-T1-128</b>
Thermal Overload Relays	
Catalog Number Selection .....	<b>V5-T1-131</b>
Product Selection .....	<b>V5-T1-132</b>
Accessories .....	<b>V5-T1-135</b>
Technical Data and Specifications .....	<b>V5-T1-138</b>
Dimensions .....	<b>V5-T1-140</b>
C440/ <b>XT</b> Electronic Overload Relay .....	<b>V5-T1-143</b>
Manual Motor Protectors .....	<b>V5-T1-159</b>
Combination Motor Controllers .....	<b>V5-T1-193</b>
<b>XT</b> Electronic Manual Motor Protector .....	<b>V5-T1-219</b>
EMS—Electronic Motor Starter .....	<b>V5-T1-232</b>
<b>XT</b> DC Contactors .....	<b>V5-T1-234</b>
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