

MINI IEC CONTACTORS AND OVERLOAD RELAYS

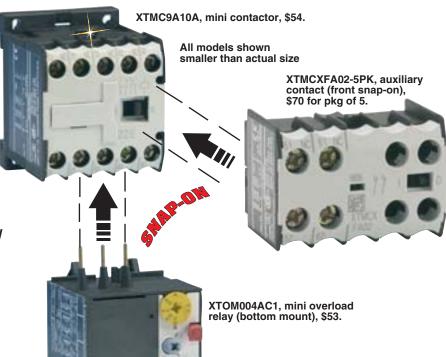




- FVNR (Full Voltage Non-Reversing) Contactors
- Panel or Din Rail Mounting
- Overload Relays Mount Directly to Mini Contactors
- **Test/Off Button and Trip Free** Release on Overload Relays

XT Miniature Controls includes nonreversing contactors, auxiliary contacts and mini overload relays. A wide range of applications is possible including small electrical motors from fractional to 5 hp (460 Vac) or up to 4 kW (400 Vac). Due to its compact size, the XT line of mini controls is best suited to be applied in light duty loads such as hoisting, packaging, material handling, heating, lighting and automation systems. XT mini contactors are a particularly compact, economic and environmentally friendly solution wherever control of small motors or loads is required. Front mounted snap-on auxiliary contacts for mini contactors are available with screw terminals in a variety of contact configurations. Auxiliary contact modules are standard with interlocked opposing contacts, except in the case of early make or late-break contacts.

The XTOM overload relays are three-pole electromechanical motor circuit-breakers using bimetallic elements. They are suitable for monitoring both DC and AC currents. Type XTOM overload relays have been designed to be fitted directly on to XTMC contactors. In the event of overload tripping, the auxiliary contacts change over and disconnect the control voltage circuit from the corresponding contactor relay, and thus indirectly switch off the current to the motor being monitored. The XTOM relays are adjusted by means of a setting wheel to suit the motor current rating.



SPECIFICATIONS

PHYSICAL AND ELECTRICAL

Weight: 0.2 kg (0.44 lb) Mechanical Life—Operations: 10,000,000

Mechanical Life—Coil @ 50 Hz: 7 Maximum Mechanical Operating Frequency (ops/hr): 9000 Insulation Voltage (Ui) Vac: 690 Impulse Withstand Voltage

(Uimp) Vac: 6000

Operational Voltage (Ue) Vac: 690 Safe Isolation to VDE 0106 Part 101 and Part 101/A1:

Between Coil and Contacts (Vac): 300

Between Contacts (Vac): 300 Making Capacity (Amps): 110

Breaking Capacity (Amps):

220/230V: 90 380/400V: 90 **500V**: 64 660/690V: 54

Short-Circuit Protection Rating Maximum Fuse (gL/gG):

Type 2 Coordination (A): 10 Type 1 Coordination (A): 20 Degree of Protection: NEMA 1 (IP20)

Protection Against Direct Contact when Actuated from Front (IEC 536): Finger- and back-of-hand proof

Terminal Capacity of Main and Auxiliary Contacts Solid (mm²): $1 \times (0.75 - 2.5); 2 \times (0.75 - 2.5)$ Flexible with Ferrule (mm²): $1 \times (0.75 - 1.5)$; $2 \times (0.75 - 1.5)$ Solid or Stranded (AWG): 18 to 14 **Terminal Screw: M3.5** Pozidriv Screwdriver: Size 2 Standard Screwdriver: 0.8 x 5.5 mm (1 x 6") **Max Tightening Torque:**

Nm: 1.2 Lb-in: 10.6

Mounting Position: As required, except vertical with terminals A1/A2 at the bottom

ENVIRONMENTAL

Ambient Temperature: -25 TO 50°C

(-13 TO 122°F)

Mechanical Shock Resistance (IEC/EN

60068-2-27):

Half-Sinusoidal Shock 10 ms

Contactor Without

Auxiliary Contact Module:

Main Contact—Make Contact: 10 g

Main Contact—Break/Make **Contact:** 10/8 g

Contactor with Auxiliary **Contact Module:**

Main Contact—Make Contact: 10 g Main Contact—Make/Break Contact: 20/20 g

Climatic Proofing: Damp heat, constant, to IEC 60 068-2-78; Damp heat, cyclic, to IEC 60 068-2-30

Pollution Degree: III/3



XTMC9A10 (SCREW TERMINAL CONNECTIONS, 3 POLE, 1 NO AUX. CONTACT) SPECIFICATIONS

| Operational Current AC-3 Amp Rating 380/400V | Conventional Free Air Thermal Current AC-1 at 50°C (122°F) | Max kW Ratings AC-3 | | | | Maximum 3-Phase Motor Rating | | | | | | |
|--|--|-------------------------------|-------------------|------|----------------------------------|------------------------------|----------------------------------|------|------|------|------|------|
| | | 3-Phase Motors 50 to 60 Hz | | | 1-Phase Horsepower Ratings | | 3-Phase Horsepower Ratings | | | | | |
| | | 220 to 240V | 380 to 400V | 550V | 660/ 690V | 115V | 200V | 230V | 200V | 230V | 460V | 575V |
| 8.8 | 20 | 2.2 | 4 | 4 | 4 | 1/2 | 1 | 1½ | 2 | 3 | 5 | 5 |

MINI OVERLOAD SPECIFICATIONS

| MODEL NO. | OVERLOAD RELEASE IT | TRIP CLASS | CONTACT CONFIG. | TYPE 1 COORD. gG/gl | TYPE 2 COORD. gG/gl | CIRCUIT BREAKER | CEC/NEC FUSE |
|------------|------------------------|---------------|--------------------|---------------------------|---------------------------|--------------------|--------------|
| XTOM1P6AC1 | 1 to 1.6 A | | | 20 | 6 | 15 | 6 |
| XTOM2P4AC1 | 1.6 to 2.4 A | 10 A | 1 NO to 1 NC | 20 | 6 | 15 | 6 |
| XTOM004AC1 | 2.4 to 4 A | | | 20 | 10 | 15 | 15 |
| XTOM006AC1 | 4 to 6 A | | | 20 | 10 | 15 | 20 |
| XTOM009AC1 | 6 to 9 A | | | 20 | 10 | 15 | 35 |
| XTOM012AC1 | 9 to 12 A | | | _ | _ | _ | 45 |

Notes: Short-circuit protection, observe the maximum permissible fuse of the contractor with direct device mounting. 5 mm is required between overload relays.

IEC MINI CONTACTORS

| To Order (Specify Model Number) | | | AVAILABLE FOR FAST DELIVERY! | | |
|---------------------------------|-------|---|------------------------------|--|--|
| MODEL NO. | PRICE | DESCRIPTION | | | |
| XTMC9A10A | \$54 | Mini contactor 3P FVNR 8.8 A frame A 1 NO 110/50 120/60 AC coil | | | |
| XTMC9A10T | 54 | Mini contactor 3P FVNR 8.8 A frame A 1 NO 24/50 24/60 AC coil | | | |

ACCESSORIES

| MODEOGOTTIEG | | | | | | |
|--------------------------|-------|--|--|--|--|--|
| AUXILIARY CONTACTS | | | | | | |
| MODEL NO. | PRICE | DESCRIPTION | | | | |
| XTMCXFA02-5PK | \$70 | 5 pack of front mounted snap-on auxiliary contacts Seq. A, Frame A, 2 NC, 10 A | | | | |
| XTMCXFA11-5PK | 70 | 5 pack of front mounted snap-on auxiliary contacts Seq. A, Frame A, 1 NO, 1 NC, 10 A | | | | |
| XTMCXFA22-5PK | 24 | 5 pack of front mounted snap-on auxiliary contacts Seq. A, Frame A, 2 NO, 2 NC, 10 A | | | | |
| XTMCXFA40-5PK | 24 | 5 pack of front mounted snap-on auxiliary contacts Seq. A, Frame A, 4 NO, 10 A | | | | |
| IEC MINI OVERLOAD RELAYS | | | | | | |
| XTOM1P6AC1 | \$53 | Mini OVLR Frame A, class 10, 1 to 1.6 A | | | | |
| XTOM2P4AC1 | 53 | Mini OVLR Frame A, class 10, 1.6 to 2.4 A | | | | |
| XTOM004AC1 | 53 | Mini OVLR Frame A, class 10, 2.4 to 4 A | | | | |
| XTOM006AC1 | 53 | Mini OVLR Frame A, class 10, 4 to 6 A | | | | |
| XTOM009AC1 | 53 | Mini OVLR Frame A, class 10, 6 to 9 A | | | | |
| XTOM012AC1 | 53 | Mini OVLR Frame A, class 10, 9 to12 A | | | | |

Comes with complete operator's manuals.

Ordering Example: XTMC9A10A, mini contactor, XTMCXFA02-5PK, auxiliary contacts, XTOM004AC1, mini overload relay, 2.4 to 4 A, \$54 + 70 + 53 = \$177.

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