

MINI IEC CONTACTORS AND OVERLOAD RELAYS

XTMC Series



- **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 non-reversing 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 whenever 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.



XTMC9A10A, mini contactor.

All models shown smaller than actual size

XTMCXA02, auxiliary contact (front snap-on).



XTOM004AC1, mini overload relay (bottom mount).

SNAP-ON

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 x (0.75 – 2.5); 2 x (0.75 – 2.5)

Flexible with Ferrule (mm²):

1 x (0.75 – 1.5); 2 x (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

Contactors Without

Auxiliary Contact Module:

Main Contact—Make Contact: 10 g

Main Contact—Break/Make

Contact: 10/8 g

Contactors 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	½	1	1½	2	3	5	5	

MINI OVERLOAD SPECIFICATIONS

MODEL NO.	OVERLOAD RELEASE IT	TRIP CLASS	CONTACT CONFIG.	TYPE 1 COORD. gG/gI	TYPE 2 COORD. gG/gI	CIRCUIT BREAKER	CEC/NEC FUSE
XTOM1P6AC1	1 to 1.6 A	10 A	1 NO to 1 NC	20	6	15	6
XTOM2P4AC1	1.6 to 2.4 A			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	
MODEL NO.	DESCRIPTION
XTMC9A10A	Mini contactor 3P FVNR 8.8 A frame A 1 NO 110/50 120/60 AC coil
XTMC9A10T	Mini contactor 3P FVNR 8.8 A frame A 1 NO 24/50 24/60 AC coil

ACCESSORIES

AUXILIARY CONTACTS	
MODEL NO.	DESCRIPTION
XTMCXFA02	Front mounted snap-on auxiliary contacts Seq. A, Frame A, 2 NC, 10 A
XTMCXFA11	Front mounted snap-on auxiliary contacts Seq. A, Frame A, 1 NO, 1 NC, 10 A
XTMCXFA22	Front mounted snap-on auxiliary contacts Seq. A, Frame A, 2 NO, 2 NC, 10 A
XTMCXFA40	Front mounted snap-on auxiliary contacts Seq. A, Frame A, 4 NO, 10 A
IEC MINI OVERLOAD RELAYS	
XTOM1P6AC1	Mini OVLR Frame A, class 10, 1 to 1.6 A
XTOM2P4AC1	Mini OVLR Frame A, class 10, 1.6 to 2.4 A
XTOM004AC1	Mini OVLR Frame A, class 10, 2.4 to 4 A
XTOM006AC1	Mini OVLR Frame A, class 10, 4 to 6 A
XTOM009AC1	Mini OVLR Frame A, class 10, 6 to 9 A
XTOM012AC1	Mini OVLR Frame A, class 10, 9 to 12 A

Comes complete with operator's manuals.

Ordering Example: XTMC9A10A, mini contactor, XTMCXFA02, auxiliary contact, XTOM004AC1, mini overload relay, 2.4 to 4 A.