Relays and Timers

Contents

Relays and Timers

Product Description

Eaton's new line of ***XT*** relays and timers includes mini and standard frame control relays and auxiliary contacts, mini electronic on-delay and multi-function timers and an electronic star-delta (wye-delta) timer for use in star-delta (wye-delta) combinations. Because ***XT*** meets UL®, CSA® and CE standards, it is the perfect product solution for IEC applications all over the world. The compact, space saving and easy to install ***XT*** line of IEC contactors and starters is the efficient and effective solution for customer applications.

Features

- For use with mini and standard frame size contactors and starters
- Control relays
  - AC control from 12V to 550V 50 Hz, 600V 60 Hz
  - DC control from 12V to 220V
- On-delay and multi-function timers
  - 24–240 Vac/Vdc control
- Available with screw or spring cage terminals
- Four-pole configurations
- IP20 finger and back-of-hand proof
- Large ambient temperature range: –25° to 50°C [–13° to 122°F]
- The XTRE control relays have positively driven contacts between the relay and the auxiliary contact modules as well as within the auxiliary contact modules

Standards and Certifications

- IEC EN 60947
- CE approved
- UL
- CSA

Instructional Leaflets

Pub51219	XTRM Mini Control Relays
Pub51210	XTRE Control Relays
Pub51244	XTTR Electronic Star-Delta (Wye-Delta) Timer
Pub51245	XTMT Mini Electronic On-Delay and Multi-Function Timers

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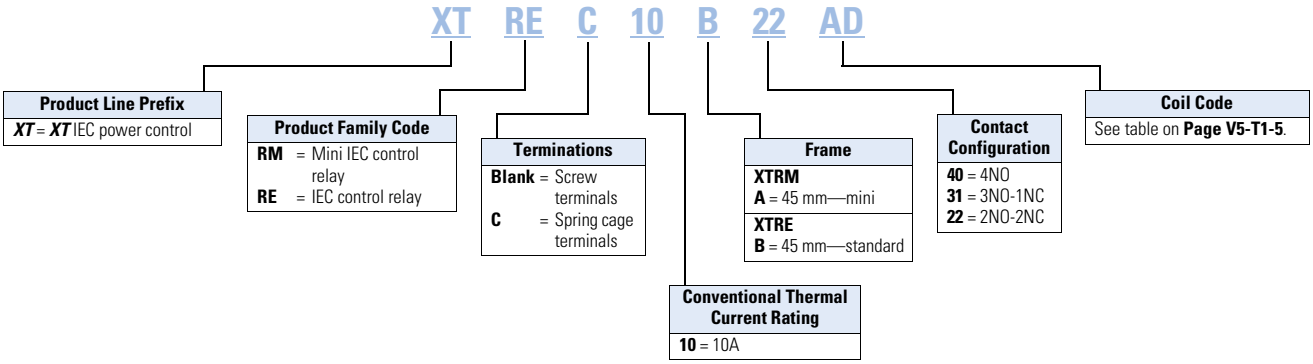
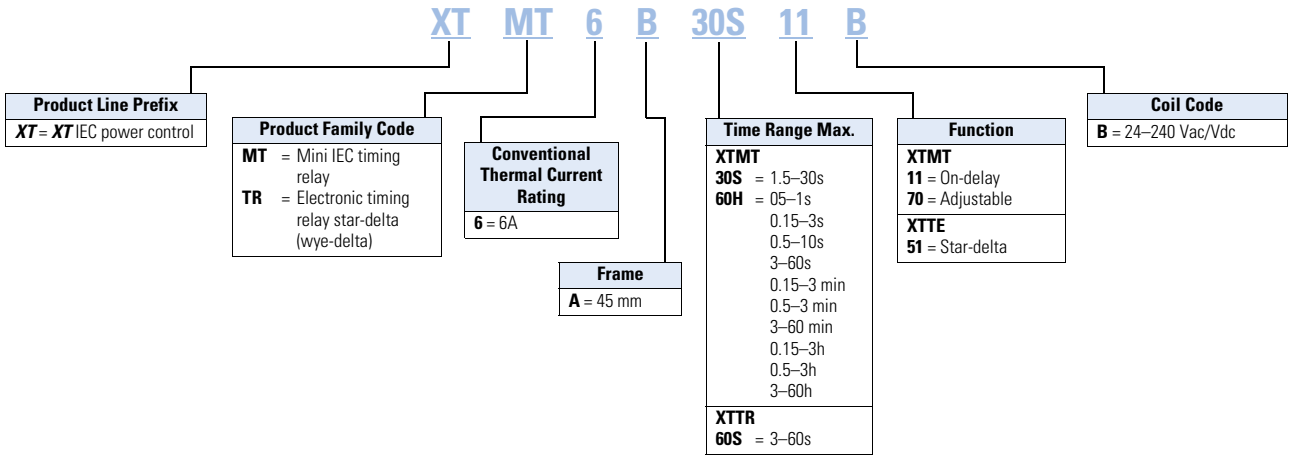
Catalog Number Selection

XT—Relays



XT—Timers



Product Selection

When Ordering

- Orders must be placed in multiples of the package quantity listed
- DC operated control relays have a built-in suppressor circuit
- Contact terminal numbers to EN50011
- Coil terminal numbers to EN50005

XTRM10A_

Mini Control Relays

Conventional Thermal Current I_{th} (A)	Contact Configuration	Rated Operational Current AC-15 I_e (A) 220–240V	380–415V	500V	Circuit Symbol	Screw Terminal Catalog Number ①
10	4NO	6	3	1.5	A1 13 23 33 43 A2 14 24 34 44	**XTRM10A40_**
10	3NO-1NC	6	3	1.5	A1 13 21 33 43 A2 14 22 34 44	**XTRM10A31_**
10	2NO-2NC	6	3	1.5	A1 13 21 31 43 A2 14 22 32 44	**XTRM10A22_** ②

XTREC10_

Control Relays

Conventional Thermal Current Open at 60°C I_{th} (A)	Contact Configuration	Rated Operational Current AC-15 I_e (A) 220–240V	380–415V	500V	Circuit Symbol	Screw Terminal Catalog Number ①	Spring Cage Terminal Catalog Number ①
16	4NO	6	4	1.5	A1 13 23 33 43 A2 14 24 34 44	**XTRE10B40_**	**XTREC10B40_**
16	3NO-1NC	6	4	1.5	A1 13 21 33 43 A2 14 22 34 44	**XTRE10B31_**	**XTREC10B31_**
16	2NO-2NC	6	4	1.5	A1 13 21 31 43 A2 14 22 32 44	**XTRE10B22_** ③	**XTREC10B22_** ③

Coil Voltage Suffix

Coil Voltage	Suffix Code	Coil Voltage	Suffix Code	Coil Voltage	Suffix Code	Coil Voltage	Suffix Code
110V 50 Hz, 120V 60 Hz	**A**	415V 50 Hz, 480V 60 Hz	**C**	380V 50 Hz, 440V 60 Hz	**L**	120 Vdc	**AD**
220V 50 Hz, 240V 60 Hz	**B**	550V 50 Hz, 600V 60 Hz	**D**	380V 60 Hz	**P**	220 Vdc	**BD**
230V 50 Hz	**F**	208V 60 Hz	**E**	12V 50/60 Hz	**R**	12 Vdc	**RD**
24V 50/60 Hz	**T**	190V 50 Hz, 220V 60 Hz	**G**	42V 50 Hz, 48V 60 Hz	**W**	48 Vdc	**WD**
24 Vdc	**TD**	240V 50 Hz, 277V 60 Hz	**H**	48V 50 Hz	**Y**		

Notes

① Underscore (_) indicates magnet coil suffix required. See Coil Voltage Suffix table above.
② DC operated control relays XTRM(C)10A22_ cannot be used with front mount auxiliary contacts.
③ DC operated control relays XTRE(C)10B22_ can only be combined with two-pole auxiliary contacts.

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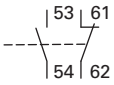
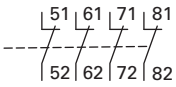
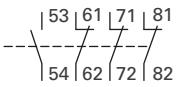
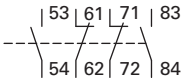
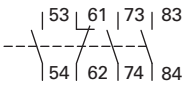
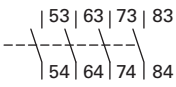
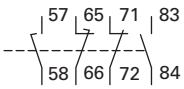
Accessories

Auxiliary Contacts

XTMCXF_

Front-Mount Auxiliary Contacts for Use with XTRM Mini Control Relays

Conventional Thermal Current, I_{th} Open (A)	Rated Operational Current AC-15 I_e (A) 220V 230V 240V	380V 400V 415V	500V	Contact Configuration	Contact Sequence	Pkg. Qty. ①	Screw Terminal Catalog Number
10	4	2	1.5	2NC		5	**XTMCXFA02**
10	4	2	1.5	1NO-1NC		5	**XTMCXFA11**
10	4	2	1.5	2NO		5	**XTMCXFA20**
10	4	2	1.5	4NC		5	**XTMCXFA04**
10	4	2	1.5	1NO-3NC		5	**XTMCXFA13**
10	4	2	1.5	2NO-2NC		5	**XTMCXFA22**
10	4	2	1.5	3NO-1NC		5	**XTMCXFA31**
10	4	2	1.5	4NO		5	**XTMCXFA40**
10	4	2	1.5	1NO-1NC $1NO_E$-$1NC_L$		5	**XTMCXFAL22** ②

Notes

① Orders must be placed in multiples of package quantity listed.

② One early-make contact (NO_E), one late-break contact (NC_L).

Front-Mount Auxiliary Contacts for Use with XTRE Control Relays ①

	Conventional Thermal Current, I_{th} (A), Open at 60°C	Poles	Rated Operational Current AC-15 I_e (A) 220V 230V 240V	380V 400V 415V	500V	Contact Configuration	Circuit Symbol	Pkg. Qty. ②	Screw Terminal Catalog Number
Two-Pole 	16	2	6	3	1.5	2NO		5	**XTCEXFAC20**
	16	2	6	3	1.5	1NO-1NC		5	**XTCEXFAC11** ③
	16	2	6	3	1.5	2NC		5	**XTCEXFAC02**
	16	2	6	3	1.5	$1NO_E$-$1NC_L$		5	**XTCEXFALC11** ④
Four-Pole 	16	4	6	3	1.5	4NO		5	**XTCEXFAC40** ③
	16	4	6	3	1.5	3NO-1NC		5	**XTCEXFAC31** ③
	16	4	6	3	1.5	2NO-2NC		5	**XTCEXFAC22** ③
	16	4	6	3	1.5	1NO-3NC		5	**XTCEXFAC13**
	16	4	6	3	1.5	4NC		5	**XTCEXFAC04**
	16	4	6	3	1.5	1NO-1NC $1NO_E$-$1NC_L$		5	**XTCEXFCLC22** ④

Notes

① Interlocked opposing contacts, to IEC/EN 60947-5-1 Annex L (positively driven), within the auxiliary contact modules (not NO_E and NC_L contacts) and between the auxiliary contacts and built-in contacts of the XTRE control relays.

② Orders must be placed in multiples of package quantity listed.

③ Catalog number is shown with screw type terminal. For spring cage, add a "**C**" before the last 2 digits. For example, to order a spring cage version of the XTCEXFAC22, change the catalog number to XTCEXFAC**C**22.

④ One early-make contact (NO_E), one late-break contact (NC_L).

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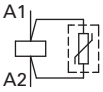
Suppressors

For AC operated contactors 50–60 Hz. On DC operated contactor relays and on XTRE10B, the suppressor circuit is built-in. Note dropout delay.

Varistor Suppressor ①②

XTCEXVSB_

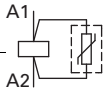
Varistor Suppressor for XTRE

Voltage	For Use with…	Contact Sequence	Pkg. Qty. ③	Catalog Number
24–48	XTRE(C)10B		10	**XTCEXVSBW**
48–130			10	**XTCEXVSBA**
130–240			10	**XTCEXVSBB**
240–500			10	**XTCEXVSBC**

XTMCXVS_

XTRM Relay with Installed Suppressor

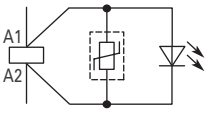
Varistor Suppressor for XTRM

Voltage	For Use with…	Circuit Symbol	Pkg. Qty. ③	Catalog Number
24–48	XTRM6A_, XTRM9A_		10	**XTMCXVSW**
48–130	XTRM6A_, XTRM9A_		10	**XTMCXVSA**
110–250	XTRM6A_, XTRM9A_		10	**XTMCXVSB**
380–415	XTRM6A_, XTRM9A_		10	**XTMCXVSN**

Varistor Suppressor with Integrated LED ①②

XTCEXVSLB_

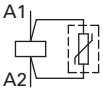
Varistor Suppressor for XTRE

Voltage	For Use with…	Contact Sequence	Pkg. Qty. ③	Catalog Number
24–48	XTRE(C)10B		10	**XTCEXVSLBW**
130–240			10	**XTCEXVSLBB**

RC Suppressor ①②

XTCEXRSB_

RC Suppressor for XTRE

Voltage	For Use with…	Contact Sequence	Pkg. Qty. ③	Catalog Number
24–48	XTRE(C)10B		10	**XTCEXRSBW**
48–130			10	**XTCEXRSBA**
110–240			10	**XTCEXRSBB**
240–500			10	**XTCEXRSBC**

Notes

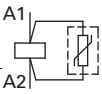
① Note dropout delay.
② For AC operated contactors, 50/60 Hz. DC operated contactors have an integrated suppressor.
③ Orders must be placed in multiples of package quantity listed.

RC Suppressor ①②

XTMCXRS_

XTRM Relay with Installed Suppressor

RC Suppressor for XTRM ③

Voltage	For Use with…	Circuit Symbol	Pkg. Qty. ④	Catalog Number
24–48	XTRM6A_, XTRM9A_		10	**XTMCXRSW**
48–130	XTRM6A_, XTRM9A_		10	**XTMCXRSA**
110–250	XTRM6A_, XTRM9A_		10	**XTMCXRSB**

Free-Wheel Diode Suppressor

In addition to the built-in suppressor circuit for DC actuated contactors. Prevents negative breaking voltage when contactors are used in combination with a safety PLC.

XTCEXVSLBB

Free-Wheel Diode Suppressor for XTRE

Voltage	For Use with…	Pkg. Qty. ④	Catalog Number
130–240	XTRE10B	10	**XTCEXVSLBB**

Connector ⑤

Connector

XTCEXCNC

XTMCXCN

For Use with…	Pkg. Qty. ④	Catalog Number
XTRE(C)10B	50	**XTCEXCNC**
XTRM10A	50	**XTMCXCN**

Mechanical Interlock ⑥

Mechanical Interlock

XTCEXMLB

XTMCXML

For Use with…	Pkg. Qty. ④	Catalog Number
XTRE10B_	5	**XTCEXMLB**
XTRM10A_	5	**XTMCXML**

Notes

① Note dropout delay.
② For AC operated contactors, 50/60 Hz. DC operated contactors have an integrated suppressor.
③ For AC operated contactors, 50/60 Hz. Note dropout delay.
④ Orders must be placed in multiples of package quantity listed.
⑤ For mechanically arranging contactors in combinations. Distance between contactors is 0 mm.
⑥ For two contactors with AC or DC operated magnet system that are horizontally or vertically mounted. For Frame B, mechanical lifespan is 2.5 x 10^6 operations and the distance between contactors is 0 mm.

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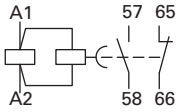
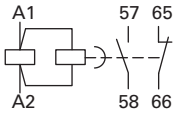
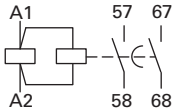
Electronic Timer Modules

Front- (top-) mounted timer modules for use with XTRE10B control relays. Can not be combined with top-mount auxiliary contacts, XTCEXF_.

XTCEXT_

Electronic Timer Modules for XTRE

Voltage	Contact Sequence	Timing Range	For Use with…	Pkg. Qty. ①	Catalog Number
On-Delay					
24 Vac/Vdc		0.05–1s 0.5–10s 15–100s	XTRE10B_	1	**XTCEXTEEC11T**
100–130 Vac					**XTCEXTEEC11A**
200–240 Vac					**XTCEXTEEC11B**
Off-Delay					
24 Vac/Vdc		0.05–1s	XTRE10B_	1	**XTCEXTED1C11T**
100–130 Vac					**XTCEXTED1C11A**
200–240 Vac					**XTCEXTED1C11B**
24 Vac/Vdc		0.5–10s	XTRE10B_	1	**XTCEXTED10C11T**
100–130 Vac					**XTCEXTED10C11A**
200–240 Vac					**XTCEXTED10C11B**
24 Vac/Vdc		5–100s	XTRE10B_	1	**XTCEXTED100C11T**
100–130 Vac					**XTCEXTED100C11A**
200–240 Vac					**XTCEXTED100C11B**
Star-Delta					
24 Vac/Vdc		1–30s	XTRE10B_	1	**XTCEXTEYC20T**
100–130 Vac					**XTCEXTEYC20A**
200–240 Vac					**XTCEXTEYC20B**
Sealable Shroud					
	Transparent sealable shroud used to protect electronic timer modules from unwanted access.		XTCEXTEE, XTCEXTED, XTCEXTEY	1	**XTCEXTESHRD**

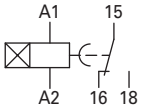
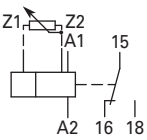
Note

① Orders must be placed in multiples of package quantity listed.

Mini Electronic Timers

XTMT6A_

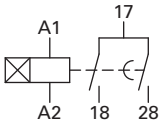
Mini Electronic On-Delay Timers

Conventional Thermal Current I_e (A)	Rated Operational Current I_e AC-11 Amps 220/230/240V	380/400/440V	Time Range	Function	Terminal Marking According to EN 50042	Catalog Number
6	3	3	1.5–30 sec	Fixed, on-delay		**XTMT6A30S11B**
6	3	3	0.05–1 sec 0.15–3 sec 0.5–10 sec 3–60 sec 0.15–3 min 0.5–10 min 3–60 min 0.15–3h 0.5–10h 3–60h	Adjustable: on-delay; fleeting contact on energization; flashing; pulse generating; ON-OFF		**XTMT6A60H70B**

Electronic Star-Delta (Wye-Delta) Timers

XTTR6A60S51

Electronic Star-Delta (Wye-Delta) Timers

Conventional Thermal Current I_e (A)	Rated Operational Current I_e AC-11 Amps 230V	400V	Time Range	Function	Terminal Marking According to EN 50042	Catalog Number
6	3	3	3–60 sec	Fixed, star-delta		**XTTR6A60S51B**

Actuating Voltage
24–240 50/60 Hz
24–240 Vdc

Admissible Cable Length
Cable unscreened, with cable cross-section 0.5–1.5 mm^2
Two-core cable
Two-core cable in the same cable duct with the main cable, 50/60 Hz

Connection to
Y1/Y2, Z1/Z2
M250
M50

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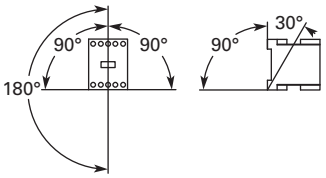
Technical Data and Specifications

Relays and Timers

Description	XTRE	XTCEXFAC_	XTCEXTE_	XTRM	XTMCXFA_
General					
Standards	IEC/EN 60947, VDE 0660, UL, CSA	IEC/EN 60947, VDE 0660, UL, CSA	DIN EN 61812, IEC/EN 60947, VDE 060, UL, CSA	IEC/EN 60947, VDE 0660, UL, CSA	IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical—operations					
AC operated	20,000,000	10,000,000	3,000,000	10,000,000	10,000,000
DC operated	20,000,000	10,000,000	3,000,000	20,000,000	20,000,000
Maximum operating frequency (ops/hr)	9000	9000	—	9000	9000
Climatic proofing	①	①	①	①	①
Ambient temperature					
Open (°C, min./max.)	–25/60	–25/60	–40/80	–25/50	–25/50
Enclosed (°C, min./max.)	–25/40	–25/40	–25–60	–25/40	–25/40
Ambient temperature for storage (°C, min./max.)	–40/80	–40/80	–25–40	—	—
Mounting position			As required, not suspended	As required, except vertically A1/A2 at the bottom	As required, except vertically A1/A2 at the bottom
Mechanical shock resistance (IEC/EN 60068-2-27) Half-sinusoidal shock 10 ms Base unit with auxiliary contact module					
Make contact	7g	7g	6g	10g	10g
Break contact	5g	5g	6g	8g	8g
Degree of protection	IP20	IP20	IP20	IP20	IP20
Protection against direct contact from the front when actuated by a perpendicular test finger (IEC 536)	Finger and back-of-hand proof	Finger and back-of-hand proof	Finger and back-of-hand proof	Finger and back-of-hand proof	Finger and back-of-hand proof
Weight					
AC operated (kg)	0.23	0.05	0.08	0.17	—
DC operated (kg)	0.28	0.05	0.08	0.20	—
Terminal capacity					
Screw terminals					
Solid (mm^2)	1 x (0.75–4) 2 x (0.75–2.5)	1 x (0.75–4) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–1.5)	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–2.5)
Flexible with ferrule (mm^2)	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–1.5) 2 x (0.75–1.5)	1 x (0.75–1.5) 2 x (0.75–1.5)	1 x (0.75–1.5) 2 x (0.75–1.5)
Solid or stranded (AWG)	18–14		18–14	18–14	
Terminal screw	M3.5	M3.5	M3.5	M3.5	M3.5
Pozidriv screwdriver	Size 2	Size 2	Size 2	Size 2	Size 2
Standard screwdriver (mm)	0.8 x 5.5 1 x 6	0.8 x 5.5 1 x 6	0.8 x 5.5 1 x 6	0.8 x 5.5 1 x 6	0.8 x 5.5 1 x 6
Max. tightening torque (Nm)	1.2	1.2	1.2	1.2	1.2
Spring cage terminals					
Solid (mm^2)	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–2.5)	— —	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–2.5)
Flexible with or without ferrule DIN 46228 (mm^2)	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–2.5)	— —	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.75–2.5) 2 x (0.75–2.5)
Solid or stranded (AWG)	18–14	18–14	—	18–14	18–14
Standard screwdriver (mm)	0.6 x 3.5	0.6 x 3.5	—	0.6 x 3.5	0.6 x 3.5

Note

① Damp heat, constant, to IEC 60068-2-78; damp heat, cyclical, to IEC 60068-2-30.

Relays and Timers, continued

Description	XTRE	XTCEXFAC_	XTCEXTE_	XTRM	XTMCXFA_
Contacts					
Interlocked opposing contacts to ZH 1/457, including auxiliary contact module	Yes	Yes	No	Yes	Yes
Rated impulse withstand voltage (U_{imp}) Vac	6000	6000	6000	6000	6000
Overvoltage category/pollution degree	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage (U_i) Vac	690	690	600	690	690
Rated operational voltage (U_e) Vac	690	500	400	600	600
Safe isolation to VDE 0106 Part 101 and Part 101/A1					
Between coil and auxiliary contacts (Vac)	400	400	250	300	300
Between the auxiliary contacts (Vac)	400	400	250	300	300
Rated operational current					
AC-15 220/240V I_e	6	6	Please inquire	6	4
380/415V I_e	4	3	Please inquire	3	2
500V I_e	1.5	—	—	1.5	1.5
DC-13 ①					
DC13 L/R ≤15 ms					
Contacts in series—voltage:					
1—24V	10	10	—	2.5	2.5
1—60V	6	6	—	—	—
2—60V	10	10	—	2.5	2.5
1—110V	3	3	—	—	—
3—110V	6	6	—	1.5	1.5
1—220V	1	1	—	—	—
3—220V	5	5	—	0.5	0.5
DC13 L/R ≤50 ms					
Contacts in series—voltage:					
3—24V	4	—	—	—	—
3—60V	4	—	—	—	—
3—110V	2	—	—	—	—
3—220V	1	—	—	—	—
Control circuit reliability (at U_e = 24 Vdc, U_{min} = 17, I_{min} = 5.4 mA)	Failure rate = $<10^{-8}$, <1 failure in 100 million operations		—	Failure rate = $<10^{-8}$, <1 failure in 100 million operations	
Conventional thermal current (I_{th})	16	16	6	10	10
Short-circuit rating without welding					
Maximum overcurrent protective device					
220/240V–XTPR Frame B	4	—	—	4	4
380/415V–XTPR Frame B	4	—	—	4	4
Short-circuit protection, max. fuse					
500V (A gG/gL)	10	10	6	6	6
500V (A fast)	—	—	—	10	10
Current heat losses at load of I_{th}					
AC operated (W)	0.3	0.3	—	0.2	0.2
DC operated (W)	0.3	0.3	—	0.3	0.3

Note

① Making and breaking conditions to DC13, time constant as stated.

Relays and Timers, continued

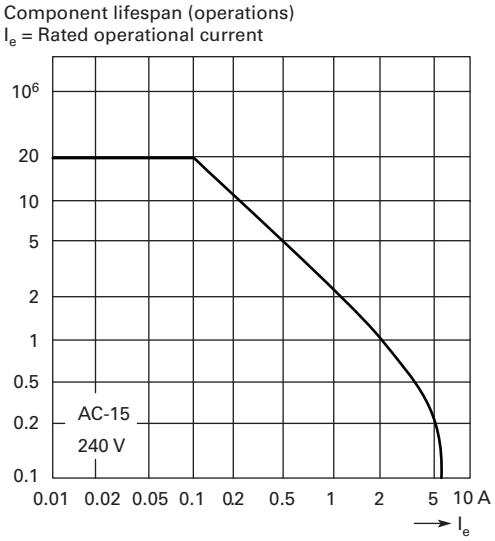
Description	XTRE	XTCEXFAC_	XTCEXTE_	XTRM	XTMCXFA_
Magnet Systems					
Pickup and dropout values					
AC operated					
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz (pickup x U_c)	0.8–1.1	—	0.85–11	0.8–1.1	—
Dual-frequency coil 50/60 Hz (pickup x U_c)	0.8–1.1	—	—	0.85–1.1	—
DC operated ①					
Pickup voltage (pickup x U_c)	0.8–1.1	—	0.7–1.2	0.85–1.3	—
At 24V: without auxiliary contact module (40°C) (pickup x U_c)	0.7–1.3	—	—	0.7–1.3	—
Power consumption					
Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz					
Pickup VA	24	—	—	25	—
Pickup W	19	—	—	22	—
Sealing VA	3.4	—	2	4.6	—
Sealing W	1.2	—	1.8	1.3	—
Dual-frequency coil 50/60 Hz at 50 Hz					
Pickup VA	27	—	—	30	—
Pickup W	22	—	—	26	—
Sealing VA	4.2	—	—	5.4	—
Sealing W	1.4	—	—	1.6	—
Dual-frequency coil 50/60 Hz at 60 Hz					
Pickup VA	25	—	—	29	—
Pickup W	21	—	—	24	—
Sealing VA	3.3	—	—	3.9	—
Sealing W	1.2	—	—	1.2	—
DC operated					
Pull-in = sealing (W)	3	—	—	2.6	—
Duty factor (% DF)	100	—	100	100	—
Switching times at 100% U_c (approximate values)					
AC operated closing delay (ms)	≤21	—	—	14–21	—
AC operated NO contact opening delay (ms)	≤18	—	—	8–18	—
AC operated with auxiliary contact module, max. closing delay (ms)	—	—	—	45	45
DC operated closing delay (ms)	≤31	—	—	26–35	—
DC operated NO contact opening delay (ms)	≤12	—	—	15–25	—
DC operated with auxiliary contact module, max. closing delay (ms)	—	—	—	70	70

Note

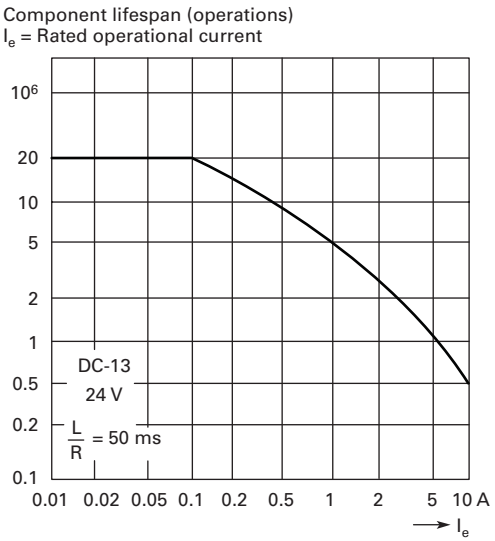
① Smoothed DC or three-phase bridge rectifier.

Control Relays—Characteristic Curves

XTRE (AC-15)



XTRE (DC-13) ①

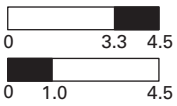


The diagrams show the closing and opening travel of the contact of the contactor relays and auxiliary contacts at no load. Tolerances are not taken into consideration.

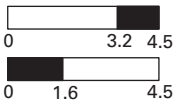
Contact Travel Diagrams

XTRE

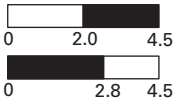
XTRE_ — AC Operation



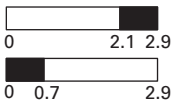
XTCEXFAC_ — AC Operation



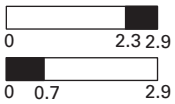
XTCEXFALC_ — AC Operation



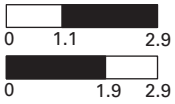
XTRE — DC Operation



XTCEXFAC_ — DC Operation



XTCEXFALC_ — DC Operation



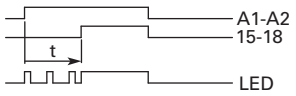
Note

① Making and breaking conditions to DC-13, time constant as stated.

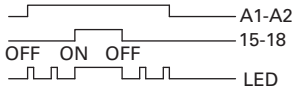
1

Flow Diagrams—Electronic Timers, XTMT Mini Timers

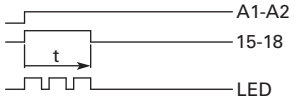
On-Delay



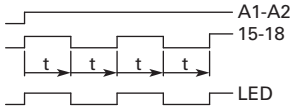
ON-OFF Function



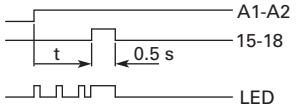
Fleeting Contact on Energization



Flashing, Pulse Initiating

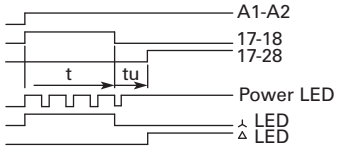


Pulse Generating



Star-Delta (Wye-Delta) Timer

Star-Delta



Rating Data

Rating Data for Approved Types

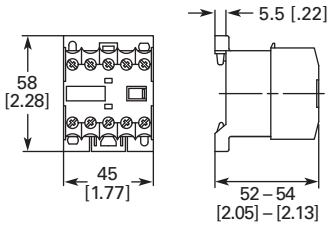
Pilot Duty	General Use
Control Relays—XTMR	
A600, P300	10A–600 Vac 0.5A–250 Vdc
Timers—XTMT, XTTR	
B300	6A–250 Vac

Dimensions

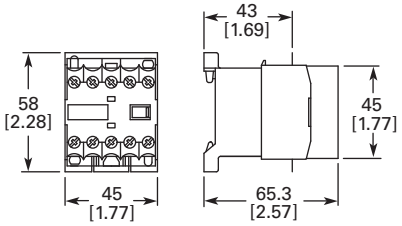
Approximate Dimensions in mm [in.]

Mini Contactor Relays

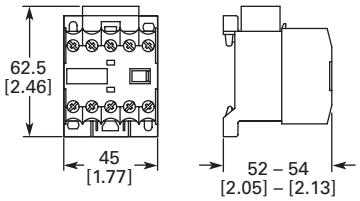
Mini Control Relay XTRM



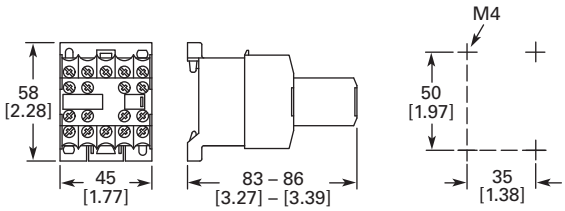
XTRM Mini Control Relay with IP40 XTMCX Shroud



XTRM Mini Control Relay with RC or Varistor Suppressor



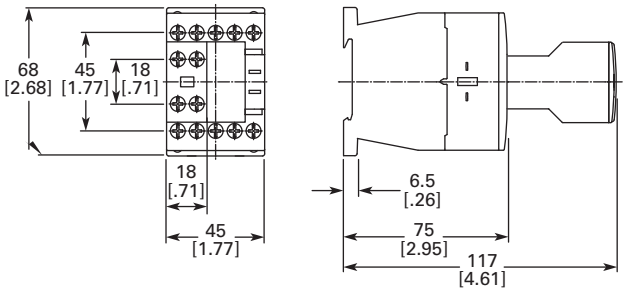
XTRM Mini Control Relay with XTMCXFA Auxiliary Contact



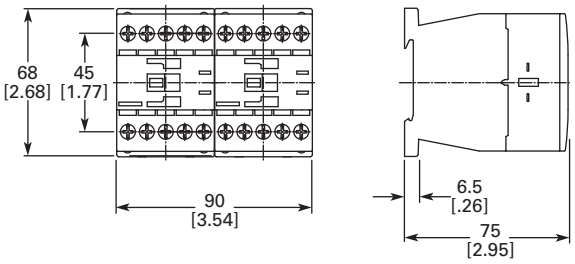
Approximate Dimensions in mm [in.]

Control Relays

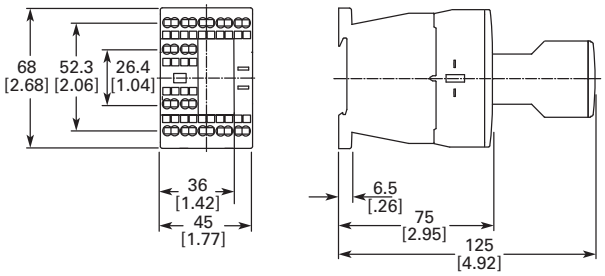
Control Relay XTRE with XTCEXFA Auxiliary Contact



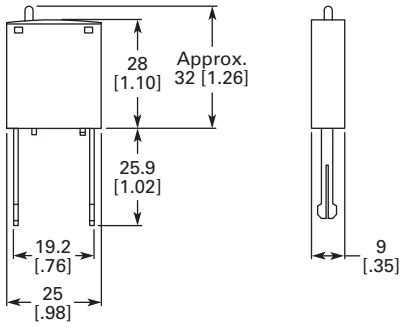
Control Relay XTRE with XTCEXMLB Mechanical Interlock



Control Relay with Spring Cage Terminals XTREC with XTCEXFA Auxiliary Contact



Coil Suppressors for Use with XTRE Control Relays



Electronic Timer Module XTCEXTE