

Product Overview

Contactors Selection Guide

59



Definite Purpose Contactors

Page 65



X7IEC Miniature Contactors

Page 69



X7IEC Contactors

Page 71

Description	Definite Purpose Contactors	X7IEC Miniature Contactors	X7IEC Contactors
	Page 65	Page 69	Page 71
Type	Definite purpose	IEC	IEC
Approvals	UL [®] Recognized, CSA [®] , CE, ARI, RoHS	UL, IEC EN 60947, CE, CSA, RoHS	UL, IEC EN 60947, CE, CSA, RoHS
Technical Data			
Pole configurations	1P, 2P, 3P, 4P	3P, 4P	3P, 4P
Inductive Amp ratings	To 360A	To 8.8A (AC-3)	To 1600A (AC-3)
Resistive Amp ratings	To 360A	To 20A (AC-1)	To 2450A (AC-1)
Typical electrical operations	To 300,000	To 750,000	To 1,400,000

For our complete product offering, see Volume 5—Motor Control and Protection, CA08100006E.

Compact Definite Purpose Contactors



Features

- Insulation voltage: 690V
- Current rated and hp/kW rated
- Magnet coil: Class F, 155°C
- Contact arc covers are standard on all contactors

Product Selection

Compact Definite Purpose Contactors—Open Type

Ampere Ratings ①

Inductive Full Load	Resistive	Locked Rotor 240–277V	Catalog Number ②
Single-Pole			
30	40	150	C25ANB130_
40	50	240	C25ANB140_
Single-Pole with Shunt			
30	40	150	C25CNB130_
40	50	240	C25CNB140_
Two-Pole			
25	35	150	C25BNB225_
30	40	150	C25BNB230_
40	50	240	C25BNB240_

Magnet Coil Selection

AC Coil Voltage 50/60 Hz	Coil Suffix
24	T
110–120	A
208–240	B

Notes

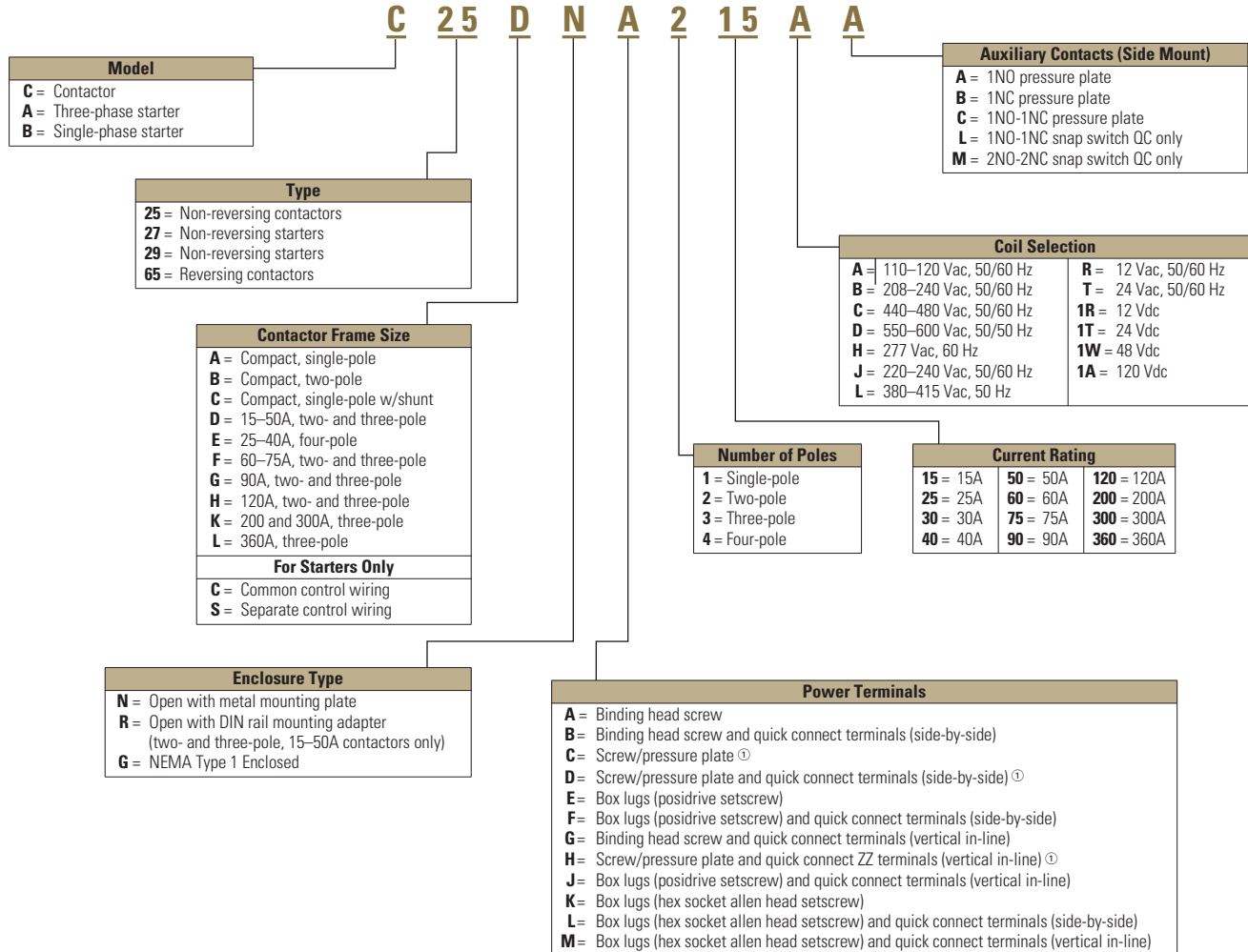
- ① Rating per pole.
- ② Replace underscore (_) in catalog number with coil suffix letter from table at left.

Catalog Number Selection

Definite Purpose Contactors

Definite Purpose Contactors

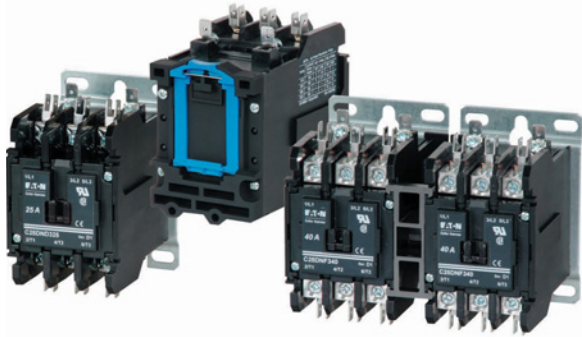
59



Note

① Not available on 50A devices.

50 mm C25 Definite Purpose Contactors



Features

- Contactors are dual-rated with inductive and resistive ratings, as well as horsepower and kilowatt ratings
- Contactors rated 15–50A are available with DIN rail mount as a factory installed option
- Magnet coil: Class B (C25E, F, G, H and K), 130°C
- Ambient temperature: 150°F (65°C) maximum

Product Selection

50 mm C25 Definite Purpose Contactors

C25 Contactors—Open Type

Rating, Amperes Inductive Full Load	Resistive per Pole	Line Voltage	Locked Rotor	Maximum Motor Horsepower		Open Type with Metal Mounting Plate Catalog Number ^{①②}	Open Type with DIN Rail Adapter Catalog Number ^{①②}
				Single-Phase	Three-Phase		
15	20	230	90	2	3	C25DND315_	C25DRD315_
		460	75	—	5		
		575	60	—	5		
25	35	230	150	3	7-1/2	C25DND325_	C25DRD325_
		460	125	—	10	C25END425_	
		575	100	—	10		
30	40	230	180	5	10	C25DND330_	C25DRD330_
		460	150	—	15	C25END430_	
		575	120	—	15		
40	50	230	240	7-1/2	10	C25DNF340_	C25DRF340_
		460	200	—	20	C25ENF440_	
		575	160	—	20		
50	65	230	300	10	15	C25DNJ350_	C25DRJ350_
		460	250	—	30		
		575	200	—	30		
60	75	230	360	10	20	C25FNF360_	—
		460	300	—	40		
		575	240	—	40		
75	90	230	450	15	20	C25FNF375_	—
		460	375	—	50		
		575	300	—	50		

Magnet Coil Selection

Voltage	Coil Suffix	
60 Hz	50 Hz	
AC ^③		
24 ^④	24	T
110–120 ^⑤	110–120 ^⑤	A
208–240 ^⑤	208–240	B
DC ^⑥		
24		1T

Notes

- ① Replace underscore (_) in catalog number with magnet coil suffix from table at left.
- ② Carton quantities including 20 individually packaged units are available for two- and three-pole units through 60A inductive.
- ③ Class H AC coils available as option for 15–50A contactor. Add 2 before AC coil suffix letter.
- ④ Available through 120A.
- ⑤ 104–120V 50/60 Hz for 60A, 75A and all four-pole contactors (25–40A).
- ⑥ Contactors with DC coils (only available up to 75A) include an early break NC auxiliary contact, C320KGD1.

Reversing and Two-Speed Contactors—Open Type—Unwired, Mechanically Interlocked Only

59

Rating, Amperes Inductive Full Load	Resistive per Pole	Line Voltage	Locked Rotor	Maximum Motor Horsepower		Open Type with Metal Mounting Plate Catalog Number ^①
				Single-Phase	Three-Phase	
15	20	230	90	2	3	C65DND315_
		460	75	—	5	
		575	60	—	5	
25	35	230	150	3	7-1/2	C65DND325_
		460	125	—	10	
		575	100	—	10	
30	40	230	180	5	10	C65DND330_
		460	150	—	15	
		575	120	—	15	
40	50	230	240	7-1/2	10	C65DNF340_
		460	200	—	20	
		575	160	—	20	
50	65	230	300	10	15	C65DNJ350_
		460	250	—	30	
		575	200	—	30	

Magnet Coil Selection

Voltage 60 Hz	50 Hz	Coil Suffix ^②
24	24	T
110–120 ^③	110–120 ^③	A
208–240 ^④	208–240	B

Notes

- ① Replace underscore (_) with magnet coil suffix from table at left.
- ② Class H AC coils available as option for 15–50A contactor. Add Z before AC coil suffix letter.
- ③ 104–120V 50/60 Hz for 60A, 75A.
- ④ Available through 50A.

XT IEC Miniature Contactors



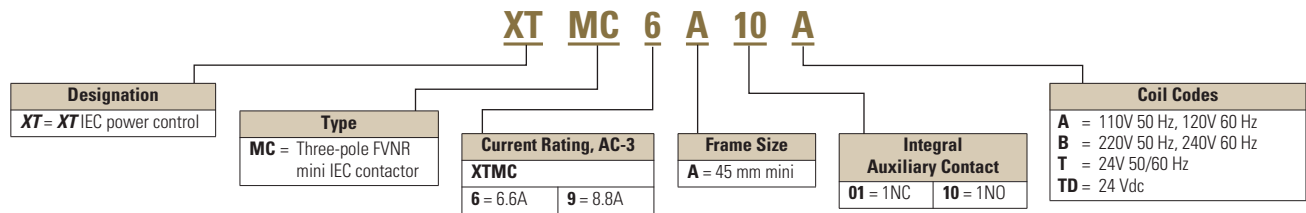
Features

- Reversing or non-reversing
- Three- and four-pole configurations
 - Three-pole XTMC
 - Four-pole XTMF
- Panel or DIN rail mounting
- IP20 finger and back-of-hand proof
- Direct mount with XTOM miniature overload relays

Catalog Number Selection

XT IEC Miniature Contactors

Miniature Contactors



Product Selection

Full Voltage Non-Reversing Miniature Contactors

Operational Current AC-3 Amp Rating 380/400V	Conventional Free Air Thermal Current AC-1 at 50°C	Maximum kW Ratings AC-3 Three-Phase Motors, 50–60 Hz				Maximum Three-Phase Motor Ratings				Number of Power Poles	Auxiliary Contacts	Catalog Number—Screw Terminals ①			
		220–240V	380–400V	550V	660/690V	Single-Phase hp Ratings	Three-Phase hp Ratings								
6.6	20	1.5	3	3	3	1/4	3/4	1	1-1/2	2	3	3	3	1NO	XTMC6A10_
6.6	20	1.5	3	3	3	1/4	3/4	1	1-1/2	2	3	3	3	1NC	XTMC6A01_
8.8	20	2.2	4	4	4	1/2	1	1-1/2	2	3	5	5	3	1NO	XTMC9A10_
8.8	20	2.2	4	4	4	1/2	1	1-1/2	2	3	5	5	3	1NC	XTMC9A01_
8.8	20	2.2	4	4	4	1/2	1	1-1/2	2	3	5	5	4	—	XTMF9A00_

Magnet Coil Suffix

Coil Voltage	Suffix Code
110V 50 Hz, 120V 60 Hz	A
220V 50 Hz, 240V 60 Hz	B
24V 50/60 Hz	T
24 Vdc	TD ②
415V 50 Hz, 480V 60 Hz	C
550V 50 Hz, 600V 60 Hz	D
208V 60 Hz	E

IEC Utilization Categories

- AC-1: Non-inductive or slightly inductive loads.
- AC-3: Squirrel cage motors—starting, switching of motors during running.
- AC-4: Squirrel cage motors—starting, plugging, inching.


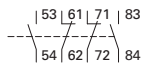
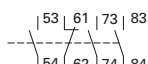
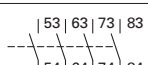
Notes

- ① Underscore (_) indicates magnet coil suffix required. See table at left.
- ② With DC operation: Integrated diode resistor combination, coil rating 2.6W.

Accessories

59

Front Mount Auxiliary Contacts ^①

Conventional Free Air Thermal Current, $I_{th} = I_p$, AC-1 in Amps	Contact Configuration	Contact Sequence	Package Qty.	Catalog Number—Screw Terminals
10	1NO-1NC		5	XTMCXFA11
10	2NO-2NC		5	XTMCXFA22
10	3NO-1NC		5	XTMCXFA31
10	4NO		5	XTMCXFA40

XT IEC Miniature Contactors

Description	Package Qty.	Catalog Number
Mechanical interlock	5	XTMCXML
Reversing link kit—main current wiring for reversing contactors and starters	1	XTMCXRL ^②
Connector—for mechanically arranging contactors and timing relays in combinations	50	XTMCXCN ^③

Notes

- ^① For two contactors with AC or DC operated magnet system that are horizontally or vertically mounted, the distance between contactors is 0 mm, and the mechanical lifespan is 2.5×10^6 operations. The following control cables are integrated as part of the electrical interlock:
K1M: A1—K2M: 21; K1M: 21—K2M: A1.
- ^② Reversing link kit does not include mechanical interlock.
- ^③ 0 mm distance between contactors.