

Definite Purpose Contactors and Starters



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Product Overview

Eaton offers the most complete line of Definite Purpose (DP) contactors in the industry. Designed for heating, ventilation, air conditioning and refrigeration (HVACR) applications, Eaton's DP contactors are designed to handle the most challenging installations.

Application Description

These ampere and horsepower rated devices from Eaton's electrical sector are designed for service in applications such as refrigeration, air conditioning and resistance heating and are manufactured to traditional standards for quality and reliability. They are subjected to stringent quality assurance inspections and testing procedures. The life expectancy, both electrical and mechanical, will meet or exceed industry performance requirements for Definite Purpose devices.

If more detailed technical information is required—specifications, ratings, and so on—contact your local Eaton distributor or sales office.

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Features

- Completely encased design impervious to dust and other environmental elements
- 15–360A contactor ratings
- Single-, two-, three- and four-pole configurations
- Contactors and starters (up to 60A)
- Open components and enclosed designs

Catalog Number Selection

Definite Purpose Control—Contactors and Starters

C 25 D N A 2 15 A A 161 - 84

Model
C = Contactor
A = Three-phase starter
B = Single-phase starter

Type
25 = Non-reversing contactors and starters (C306)
27 = Non-reversing starters (XTOB)
30 = Non-reversing starters (C440 EOL)
65 = Reversing contactors

Contactor Frame Size
A = Compact, single-pole
B = Compact, two-pole
C = Compact, single-pole w/shunt
D = 15–50A, two- and three-pole
E = 25–40A, four-pole
F = 60–75A, two- and three-pole
G = 90A, two- and three-pole
H = 120A, two- and three-pole
K = 200 and 300A, three-pole
L = 360A, three-pole
For Starters Only
C = Common control wiring
S = Separate control wiring

Enclosure Type
N = Open with metal mounting plate
R = Open with DIN rail mounting adapter (two- and three-pole, 15–50A contactors only)
G = NEMA Type 1 Enclosed

Power Terminals
A = Binding head screw
B = Binding head screw and quick connect terminals (side-by-side)
C = Screw/pressure plate ①
D = Screw/pressure plate and quick connect terminals (side-by-side) ①
E = Box lugs (posidrive setscrew)
F = Box lugs (posidrive setscrew) and quick connect terminals (side-by-side)
G = Binding head screw and quick connect terminals (vertical in-line)
H = Screw/pressure plate and quick connect terminals (vertical in-line) ①
J = Box lugs (posidrive setscrew) and quick connect terminals (vertical in-line)
K = Box lugs (hex socket allen head setscrew)
L = Box lugs (hex socket allen head setscrew) and quick connect terminals (side-by-side)
M = Box lugs (hex socket allen head setscrew) and quick connect terminals (vertical in-line)

Bulk Packaging
Blank = Individual pkg.
-84 = 20 pc./pkg. (C25D_)
50 pc./pkg. (C25A_, C25B_, C25C_)
-86 = Rotate coil terminals 180° for 15A–50A contactors

Fuse Blocks
161 = Class M, 600V, 30A
237 = Class G, 300V, 15A
238 = Class G, 300V, 20A
231 = Class G, 300V, 30A
232 = Class G, 300V, 60A
361 = Class J, 600V, 30A
362 = Class J, 600V, 60A
431 = Class T, 300V, 30A
432 = Class T, 300V, 60A
461 = Class T, 600V, 30A
462 = Class T, 600V, 60A
521 = Class H, 250V, 30A
522 = Class H, 250V, 60A
621 = Class R, 250V, 30A
622 = Class R, 250V, 60A

Auxiliary Contacts (Side Mount)
A = 1NO pressure plate
B = 1NC pressure plate
C = 1NO-1NC pressure plate
D = 2NO pressure plate
E = 2NC pressure plate
F = 1NO pressure plate and QC
G = 1NC pressure plate and QC
H = 1NO-1NC pressure plate and QC
J = 2NO pressure plate and QC
K = 2NC pressure plate and QC
L = 1NO-1NC snap switch QC only
M = 2NO-2NC snap switch QC only

Coil Selection	
A = 110–120 Vac, 50/60 Hz	R = 12 Vac, 50/60 Hz
B = 208–240 Vac, 50/60 Hz	T = 24 Vac, 50/60 Hz
C = 440–480 Vac, 50/60 Hz	1R = 12 Vdc
D = 550–600 Vac, 50/50 Hz	1T = 24 Vdc
H = 277 Vac, 60 Hz	1W = 48 Vdc
J = 220–240 Vac, 50/60 Hz	1A = 120 Vdc
L = 380–415 Vac, 50 Hz	

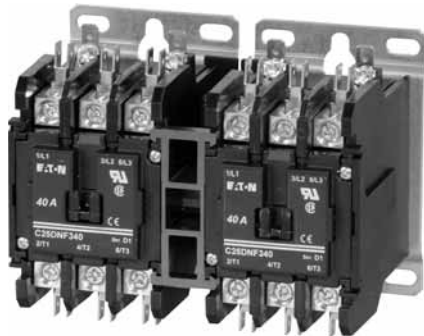
Number of Poles
1 = Single-pole
2 = Two-pole
3 = Three-pole
4 = Four-pole

Current Rating	
15 = 15A	75 = 75A
25 = 25A	90 = 90A
30 = 30A	120 = 120A
40 = 40A	200 = 200A
50 = 50A	300 = 300A
60 = 60A	360 = 360A

Note

① Not available on 50A devices.

15–75A, Reversing and Two-Speed—C65



15–75A, Reversing and Two-Speed—C65

Product Description

C65 Reversing Contactors from Eaton’s electrical sector are furnished with pressure plates and quick connect terminals as standard on 15, 25 and 30A devices and with box lugs and quick connect terminals on 40, 50, 60 and 75A.

Other terminal configurations are available—see Factory Installed Options on **Page V5-T4-13**. Reversing contactors will accept add-on auxiliary contacts on either side—order factory assembled or as kits for field installation. See **Page V5-T4-13**.

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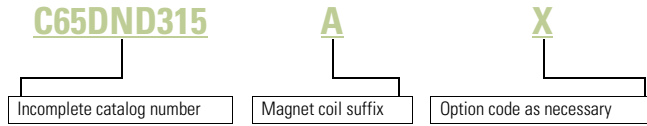
Standards and Certifications

- UL Recognized Components UL File #E-1491, Guide NLDX2
- CSA Certified Components File #LR353, Guide 380w-1.14 Class 3211 04
- CE



Catalog Number Selection

15–75A, Reversing and Two-Speed—C65



When Ordering Specify

- Catalog number plus magnet coil suffix, see **Page V5-T4-22**
- Catalog numbers of accessory kits required, see Accessories, **Page V5-T4-11**
- Modify catalog number for any options required, see Options, **Page V5-T4-13**

Product Selection

C65 Reversing Contactor



Open Type Contactors—Unwired, Mechanically Interlocked Only

Ampere Rating		Line Voltage	Locked Rotor	Maximum Motor (hp)		Maximum Motor (kW)		Number of Poles	Open Type with Metal Mounting Plate Catalog Number ^①	Open Type with DIN Rail Adapter Catalog Number ^①
Inductive Full Load	Resistive per Pole			Single-Phase	Three-Phase	Single-Phase	Three-Phase			
15	20	115	90	3/4	—	0.40	—	2	C65DND215_	C65DRD215_
		230	90	2	3	1.5	2.2	3	C65DND315_	C65DRD315_
		460	75	—	5	—	3.7	—	C65DND315_	C65DRD315_
		575	60	—	5	—	3.7	—	C65DND315_	C65DRD315_
25	35	115	150	2	—	1.5	—	2	C65DND225_	C65DRD225_
		230	150	3	7-1/2	2.2	5.5	3	C65DND325_	C65DRD325_
		460	125	—	10	—	7.5	—	C65DND325_	C65DRD325_
		575	100	—	10	—	7.5	—	C65DND325_	C65DRD325_
30	40	115	180	2	—	1.5	—	2	C65DND230_	C65DRD230_
		230	180	5	10	3.7	7.5	3	C65DND330_	C65DRD330_
		460	150	—	15	—	11	—	C65DND330_	C65DRD330_
		575	120	—	15	—	11	—	C65DND330_	C65DRD330_
40	50	115	240	3	—	2.2	—	2	C65DNF240_	C65DRF240_
		230	240	7-1/2	10	5.5	7.5	3	C65DNF340_	C65DRF340_
		460	200	—	20	—	15	—	C65DNF340_	C65DRF340_
		575	160	—	20	—	15	—	C65DNF340_	C65DRF340_
50	65	115	300	3	—	2.2	—	2	C65DNJ250_	C65DRJ250_
		230	300	10	15	7.5	11	3	C65DNJ350_	C65DRJ350_
		460	250	—	30	—	22	—	C65DNJ350_	C65DRJ350_
		575	200	—	30	—	22	—	C65DNJ350_	C65DRJ350_
60	75	115	360	5	—	3.7	—	2	C65FNF260_	N/A
		230	360	10	20	7.5	15	3	C65FNF360_	N/A
		460	300	—	40	—	30	—	C65FNF360_	N/A
		575	240	—	40	—	30	—	C65FNF360_	N/A
75	90	115	450	5	—	3.7	—	2	C65FNF275_	N/A
		230	450	15	20	11	18.5	3	C65FNF375_	N/A
		460	375	—	50	—	37	—	C65FNF375_	N/A
		575	300	—	50	—	37	—	C65FNF375_	N/A

Note

^① Incomplete catalog number. Replace underscore (_) with magnet coil suffix from **Page V5-T4-22**.

Magnet Coil Suffix

Volts 60 Hz	50 Hz	Coil Suffix ^①
12	12	R
24	24	T
110–120 ^②	110–120 ^②	A
208–240	208–240	B
240 ^③	220	J
277	—	H
—	380–415	L
440–480	440–480	C
550–600	550–600	D

Magnet Coil Options**Description**

Extra dual quick connect terminals (“U” shaped) for magnet coil terminals.
To order, add Suffix Number **9** to the complete catalog number.
Example: C65DND315A**9**.

Notes

- ① Class H AC coils available as option for 15A–50A contactor.
Add **2** before AC coil suffix letter.
- ② 104–120V 50/60 Hz for 60A, 75A.
- ③ Available through 50A.