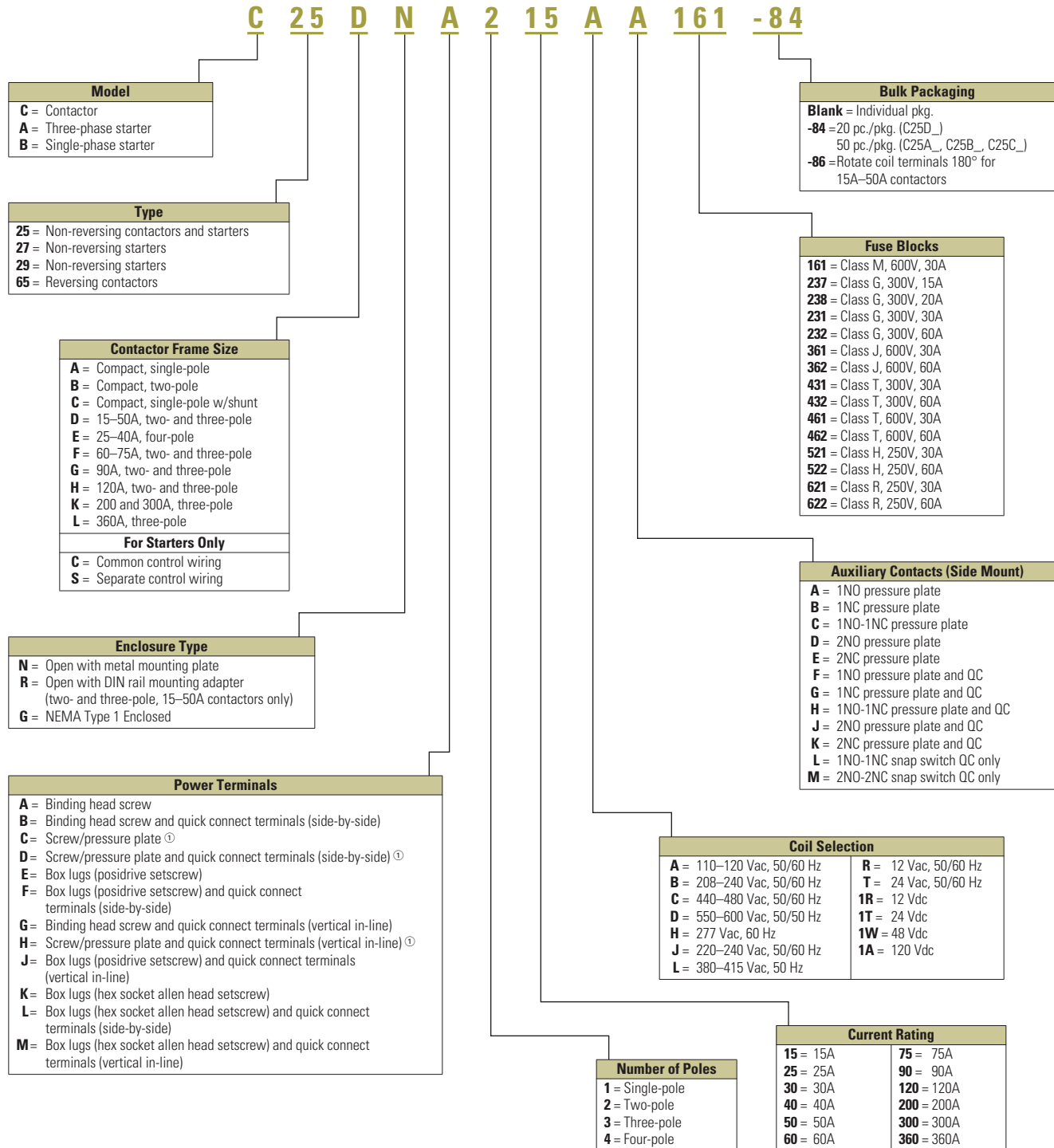


Catalog Number Selection

Definite Purpose Control—Contactors and Starters



Note

① Not available on 50A devices.

20–40A, Compact Single- and Two-Pole—C25



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20–40A, Compact Single- and Two-Pole—C25

Product Description

Eaton’s 20–40A, single- and two-pole, Type C25 contactors from Eaton’s electrical sector feature a compact, efficient design with a low VA coil and straight-through wiring. New contactor housing design effectively limits dust and other contaminants from magnet structure—reduces or eliminates noise. These economically priced, UL recognized/CSA certified, ampere rated devices are well suited for use in heating/air conditioning, refrigeration, data processing and food service applications.

Standards and Certifications

- UL Recognized Components: UL File Number E1491, Guides NLDX2 and NLDX8
- CSA Certified Components: CSA C22.2 No. 14-05, File Number 238083 Class 3211 84
- IEC 60947-4-1
- EN 60947-4-1
- ARI 780/790 Standard
- CE
- RoHS Compliance



Catalog Number Selection

20–40A, Compact Single- and Two-Pole—C25

C25BNB230

Incomplete catalog number

A

Magnet coil suffix

When Ordering Specify

- Catalog number plus magnet coil suffix, see below
- Modify catalog number for any options required, see Options, **Page 6**

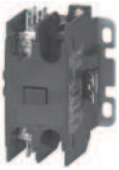
Product Selection

Compact Contactors—Open Type

Ampere Rating ^①

Inductive Full Load	Resistive	Locked Rotor			Maximum Motor (hp)		Maximum Motor (kW)		Catalog Number ^{②③}
		240–277V	480V	600V	115V	230V	115V	230V	

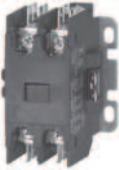
Single-Pole



Single-Pole

25	30	150	50	40	2	3	1.5	2.2	C25ANB125_
30	40	150	75	50	2	5	1.5	3.7	C25ANB130_
40	50	240	200	160	3	7-1/2	2.2	5.5	C25ANB140_

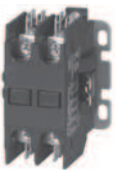
Single-Pole with Shunt



Single-Pole with Shunt

25	30	150	50	40	2	3	1.5	2.2	C25CNB125_
30	40	150	75	50	2	5	1.5	3.7	C25CNB130_
40	50	240	200	160	3	7-1/2	2.2	5.5	C25CNB140_

Two-Pole



Two-Pole

20	30	120	100	80	1-1/2	3	1.1	2.2	C25BNB220_
25	35	150	125	100	2	3	1.5	2.2	C25BNB225_
30	40	150	125	100	2	5	1.5	3.7	C25BNB230_
40	50	240	200	160	3	7-1/2	2.2	5.5	C25BNB240_

Magnet Coil Suffix

AC Coil Voltage
50/60 Hz

Coil Suffix

24	T
110–120	A
208–240	B
277	H
380–415 (50 Hz), 440–480 (60 Hz)	C

Notes

- ^① Rating per pole.
- ^② Incomplete catalog number. Replace underscore (_) in catalog number with coil suffix letter from the table above.
- ^③ Bulk pack quantities are available in quantities of 50, contact local sales office.

Options

When Ordering Specify

To order replace letter in the **6th** position of catalog number with letter **F**. Example: C25BN**F**240A.

Compact Factory Installed Options

Description
Box lugs with quick connects for 20–40A contactors
Single-pole
Single-pole with shunt
Two-pole

Technical Data and Specifications

20–40A, Compact Single- and Two-Pole—C25

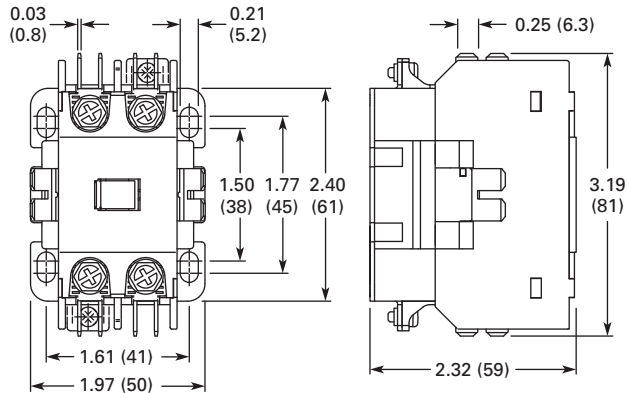
Description	Specification
Insulation voltage	690V
Current rated and hp/kw rated contacts	Double break
Magnet coil	Class F, 155°C
Contact arc covers	Standard on all contactors
Standard power terminals	5/16 in hex washer head screws Quad (4) quick connect terminals on all line and load terminals Box lugs available as option
Line and load terminal designations	Marked on contactors
Operating temperature range	–13° to 158°F (–25° to 70°C)
Terminal wire range	
Hex washer head screws	6–10 AWG, 30 lb-in torque rating
Box lugs	6–10 AWG, 35 lb-in torque rating 8 AWG, 40 lb-in torque rating 6–4 AWG, 45 lb-in torque rating
Mounting position	Vertical, horizontal or tabletop

Coil Characteristics

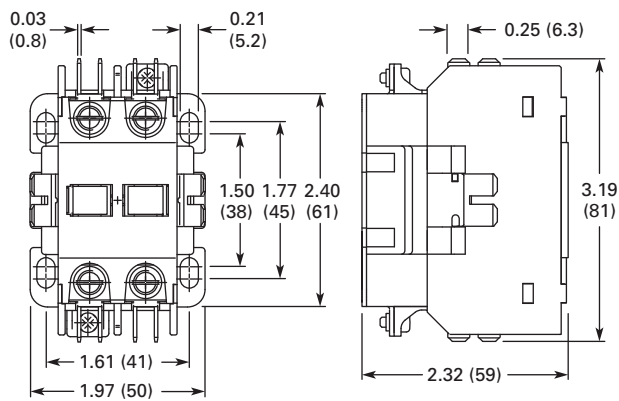
AC Coil Voltage 50/60 Hz	Maximum Inrush VA	Maximum Sealed VA	Maximum Sealed Watts
Single-Pole			
24	33	6	2
120	33	6	2
208/240	33	6	2
277	33	6	2
Two-Pole			
24	41	6.5	3
120	41	6.5	3
208/240	41	6.5	3
277	41	6.5	3
480	41	6.5	3

Dimensions

Approximate Dimensions in Inches (mm)

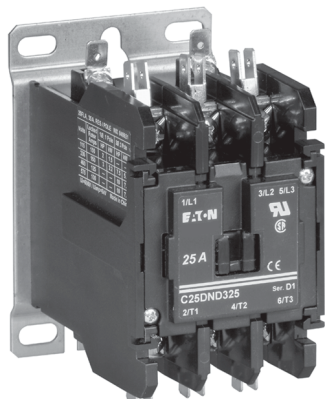
20–40A, Compact Single- and Two-Pole—C25**Single-Pole and Single-Pole + Shunt****Approximate Shipping Weight**

0.5 lb (0.2 kg)

Two-Pole**Approximate Shipping Weight**

0.7 lb (0.3 kg)

15–360A, Two-, Three- and Four-Pole—C25



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15–360A, Two-, Three- and Four-Pole—C25

Product Description

Type C25 Definite Purpose Contactors 15A through 360A, from Eaton's electrical sector incorporate most competitive contactor mounting dimensions into a single baseplate. Contactors are dual-rated with inductive and resistive ratings as well as horsepower and kilowatt ratings. C25 contactors 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 **Page 13**. Contactors will accept add-on auxiliary contacts—order factory assembled or as kits for field installation.

The separately available snap-on mechanical interlock permits interlocking two contactors for reversing or two-speed applications.

Contactors rated 15–50A only are available with DIN rail mount as a factory installed option.

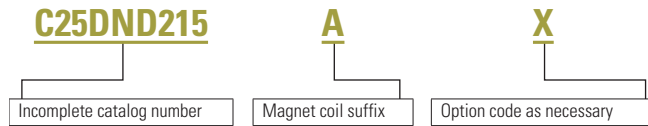
Standards and Certifications

- UL Recognized Components UL File #E-1491, Guide NLDX2
- UL recognized, CSA certified and conform to ARI 780
- CSA Certified Components File #LR353, Class 3211 04, 481301 and 122201
- IEC 60947-4-1
- EN 60947-4-1
- CE mark
- RoHS Compliance (15A to 50A Only)



Catalog Number Selection

15–360A, Two-, Three- and Four-Pole—C25



When Ordering Specify

- Catalog number plus magnet coil suffix, see **Page 10**
- Catalog numbers of accessory kits required, see Accessories, **Page 11**
- Modify catalog number for any options required, see Options, **Page 13**

Product Selection

DP Contactor



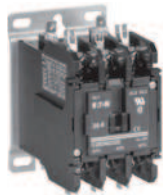
C25 Contactors—Open Type

Ampere Rating		Line Voltage	Locked Rotor	Maximum Motor (hp)		Maximum Motor (kW)		Number of Poles	Open Type with Metal Mounting Plate Catalog Number ^{①②}	Open Type with DIN Rail Adapter Catalog Number ^{①②}
Inductive Full Load	Resistive per Pole			Single-Phase	Three-Phase	Single-Phase	Three-Phase			
15	20	115	90	3/4	—	0.40	—	2	C25DND215_	C25DRD215_
		230	90	2	3	1.5	2.2	3	C25DND315_	C25DRD315_
		460	75	—	5	—	3.7		C25DND315_	C25DRD315_
		575	60	—	5	—	3.7		C25DND315_	C25DRD315_
25	35	115	150	2	—	1.5	—	2	C25DND225_	C25DRD225_
		230	150	3	7-1/2	2.2	5.5	3	C25DND325_	C25DRD325_
		460	125	—	10	—	7.5	4	C25END425_	C25DRD325_
		575	100	—	10	—	7.5		C25END425_	C25DRD325_
30	40	115	180	2	—	1.5	—	2	C25DND230_	C25DRD230_
		230	180	5	10	3.7	7.5	3	C25DND330_	C25DRD330_
		460	150	—	15	—	11	4	C25END430_	C25DRD330_
		575	120	—	15	—	11		C25END430_	C25DRD330_
40	50	115	240	3	—	2.2	—	2	C25DNF240_	C25DRF240_
		230	240	7-1/2	10	5.5	7.5	3	C25DNF340_	C25DRF340_
		460	200	—	20	—	15	4	C25ENF440_	C25DRF340_
		575	160	—	20	—	15		C25ENF440_	C25DRF340_
50	65	115	300	3	—	2.2	—	2	C25DNJ250_	C25DRJ250_
		230	300	10	15	7.5	11	3	C25DNJ350_	C25DRJ350_
		460	250	—	30	—	22		C25DNJ350_	C25DRJ350_
		575	200	—	30	—	22		C25DNJ350_	C25DRJ350_
60	75	115	360	5	—	3.7	—	2	C25FNF260_	N/A
		230	360	10	20	7.5	15	3	C25FNF360_	N/A
		460	300	—	40	—	30		C25FNF360_	N/A
		575	240	—	40	—	30		C25FNF360_	N/A
75	90	115	450	5	—	3.7	—	2	C25FNF275_	N/A
		230	450	15	20	11	18.5	3	C25FNF375_	N/A
		460	375	—	50	—	37		C25FNF375_	N/A
		575	300	—	50	—	37		C25FNF375_	N/A

Notes

- ① Incomplete catalog number. Replace underscore (_) in catalog number with magnet coil suffix from table on **Page 10**.
- ② Carton quantities including 20 individually packaged units are available for two- and three-pole units through 60A inductive.

DP Contactor



C25 Contactors—Open Type, continued

Ampere Rating		Line Voltage	Locked Rotor	Maximum Motor (hp)		Maximum Motor (kW)		Number of Poles	Open Type with Metal Mounting Plate	Open Type with DIN Rail Adapter
Inductive Full Load	Resistive per Pole			Single-Phase	Three-Phase	Single-Phase	Three-Phase		Catalog Number ^{①②}	Catalog Number ^{①②}
90	120	115	540	7-1/2	—	5.7	—	2	C25GNF290_	N/A
		230	540	20	30	15.1	22	3	C25GNF390_	N/A
		460	450	—	50	—	37		C25GNF390_	N/A
		575	360	—	50	—	37		C25GNF390_	N/A
120	140	230	720	—	—	—	—	3	C25HNE3120_	N/A
		460	720	—	—	—	—		C25HNE3120_	N/A
		575	570	—	—	—	—		C25HNE3120_	N/A
200	200	240	1200	—	—	—	—	3	C25KNE3200_	N/A
		480	1200	—	—	—	—		C25KNE3200_	N/A
		600	1000	—	—	—	—		C25KNE3200_	N/A
300	300	240	1800	—	—	—	—	3	C25KNE3300_	N/A
		480	1800	—	—	—	—		C25KNE3300_	N/A
		600	1500	—	—	—	—		C25KNE3300_	N/A
360	360	240	2320	—	—	—	—	3	C25LNE3360_	N/A
		480	2320	—	—	—	—		C25LNE3360_	N/A
		600	1900	—	—	—	—		C25LNE3360_	N/A

Magnet Coil Suffix

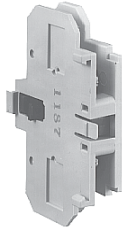
Voltage 60 Hertz	50 Hertz	Coil Suffix
AC ^③		
12 ^④	12	R
24 ^⑤	24	T
110–120 ^⑥	110–120 ^⑥	A
208 ^⑦	—	E
208–240 ^⑧	208–240	B
240 ^⑨	220	J
277	—	H
—	380–415	L
440–480	440–480	C
550–600	550–600	D

Voltage 60 Hertz	Coil Suffix
DC ^⑩	
12	1R
24	1T
48	1W
120	1A ^⑪

Notes

- ① Incomplete catalog number. Replace underscore (_) in catalog number with magnet coil suffix from table above.
- 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 15A–50A contactor. Add 2 before AC coil suffix letter.
- ④ Available through 75A.
- ⑤ Available through 120A.
- ⑥ 104–120V 50/60 Hz for 60A, 75A and all four-pole contactors (25A–40A).
- ⑦ Available 120–360A.
- ⑧ Available 15–90A, others 240V.
- ⑨ Available through 50A.
- ⑩ Contactors with DC coils (only available up to 75A) include an early break NC auxiliary contact, C320KGD1. See **Page 61** for more details.
- ⑪ Available only for 15A through 75A contactors and four-pole contactors.

Accessories

Auxiliary Contact Kits (Side Mounted)**Side Mounted
Auxiliary Contact****Heavy-Duty Pilot Rated for 10A at 600 Vac**

Circuit	With Standard Pressure Plate Terminals Catalog Number	With Pressure Plate and Quick Connect Terminals Catalog Number
For 15 through 75A		
1NO	C320KG1	C320KG11
1NC	C320KG2	C320KG12
1NO-1NC	C320KG3	C320KG13
2NO	C320KG4	C320KG14
2NC	C320KG5	C320KG15
For 90A		
1NO	—	C320DPG10
1NC	—	C320DPG01
1NO-1NC	—	C320DPG11
2NO	—	C320DPG20
For 120 through 360A		
1NO	C320KGS20	—
1NC	C320KGS21	—
1NO-1NC	C320KGS22	—

**Side Mounted
Snap Switch****Snap Switch Design Side Mounted
Auxiliary Contacts**

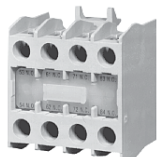
Circuit	Snap Switch Design with Quick Connect Terminals Catalog Number
1NO-1NC	C320SNP11
2NO-2NC	C320SNP22

Magnet Coil Quick Connect Terminal**Description**

Extra dual quick connect terminals (U-shaped)
for magnet coil terminals ^①

Note

^① To order, add suffix number **9** to the complete catalog number.
Example: C25DND215A**9**.

Auxiliary Contact Kits (Top Mounted)**Top Mounted
Auxiliary Contact****Heavy-Duty Pilot Rated for 10A at 600 Vac**

With Standard Pressure Plate Terminals		With Standard Pressure Plate Terminals	
Circuit	Catalog Number	Circuit	Catalog Number
For 15 through 75A ^①			
1NO	C320KGT1	1NO-2NC	C320KGT11
1NC	C320KGT2	3NC	C320KGT12
1NO-1NC	C320KGT3	4NO	C320KGT13
2NO	C320KGT4	3NO-1NC	C320KGT14
2NC	C320KGT5	2NO-2NC	C320KGT15
3NO	C320KGT9	1NO-3NC	C320KGT16
2NO-1NC	C320KGT10	4NC	C320KGT17

Mechanical Interlock**Mechanical Interlock Kit**

Description	Catalog Number
Mechanical interlock kit for 15 through 75A	C321KM60B

Solid-State ON DELAY Timer

Side mounted on C25D, C25E and C25F frame.

This timer is designed to be **wired in series with the load** (typically a coil). When the START button is pushed (power applied to timer), the ON DELAY timing function starts. At the completion of the set timing period, timer and series wired load will both be energized.

**Solid-State ON DELAY
Timer****Solid-State ON DELAY Timer**

Timing Range	Catalog Number ^{②③④}
0.1–1.0 seconds	C320TDN1_
1–30 seconds	C320TDN30_
30–300 seconds	C320TDN300_
5–30 minutes	C320TDN3000_

Separate Enclosures**NEMA 1 Enclosure****Separate Enclosures—NEMA 1**

Application	Catalog Number
15 through 50A, two- and three-pole	C799B18
60A, two- and three-pole or 25 through 40A, four-pole	C799B19

Notes

- ① Not available for four-pole contactors (15–40 Amp).
- ② Add operating voltage suffix to catalog number.
A = 120V, **B** = 240V, **E** = 208V
- ③ Rated 0.5 ampere pilot duty—not to be used on larger contactors.
- ④ Terminal connections are quick connects only. Two per side.