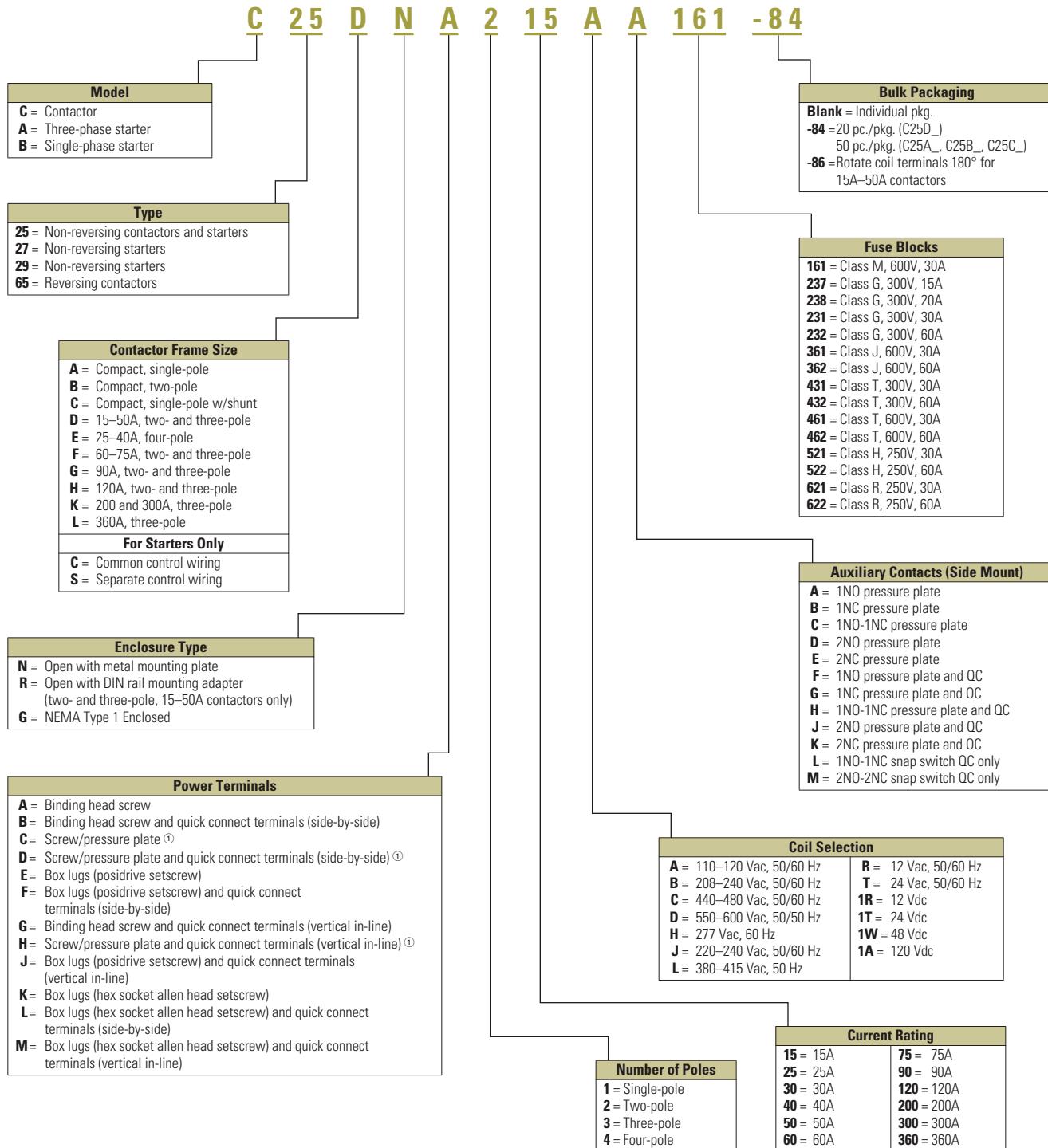


Catalog Number Selection

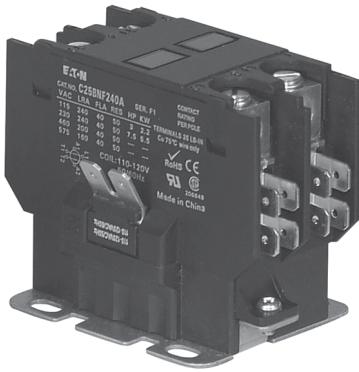
Definite Purpose Control—Contactors and Starters



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



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Description

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Catalog Number Selection**20-40A, Compact Single- and Two-Pole—C25****When Ordering Specify**

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

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Product Selection**Compact Contactors—Open Type**

| Single-Pole | Ampere Rating ^① | | | Locked Rotor | | | Maximum Motor (hp) | | Maximum Motor (kW) | | Catalog Number ^{②③} |
|-------------------------------|----------------------------|-----------|----------|--------------|------|-------|--------------------|------|--------------------|-------------------|------------------------------|
| | Inductive Full Load | Resistive | 240-277V | 480V | 600V | 115V | 230V | 115V | 230V | | |
| 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 | | | | | | | | | | | |
| | 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 | | | | | | | | | | | |
| | 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: C25BNF240A.

Compact Factory Installed Options**Description**

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

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Technical Data and Specifications**20–40A, Compact Single- and Two-Pole—C25**

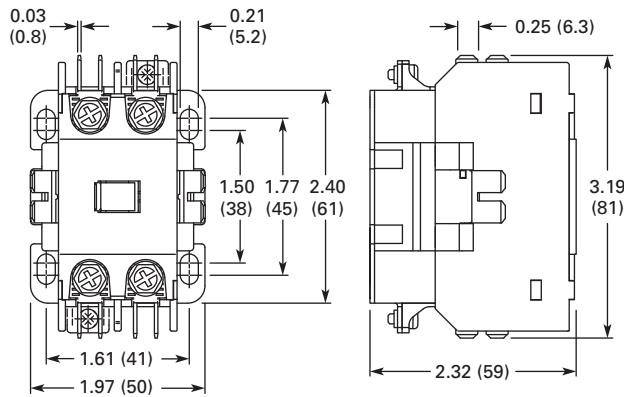
| Description | Specification |
|--|---|
| Insulation voltage | 690V |
| Current rated and hp/kw rated contacts | Double break |
| Magnet coil | Class F, 155°C |
| Contact arc covers | Standard on all contactors |
| Standard power terminals | 5/16 in hex washer head screws Quad (4) quick connect terminals 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

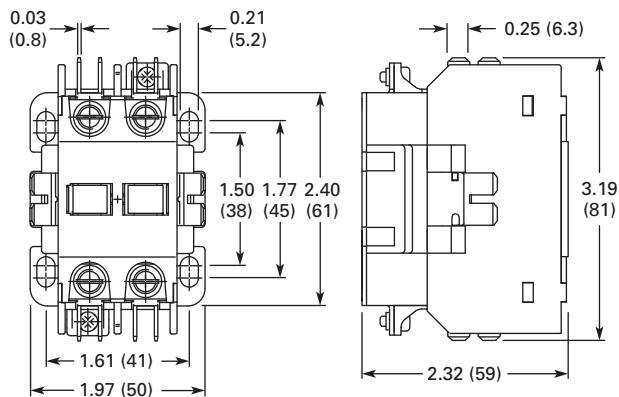
| AC Coil Voltage 50/60 Hz | Maximum Inrush VA | Maximum Sealed VA | Maximum Sealed Watts |
|--------------------------|-------------------|-------------------|----------------------|
| Single-Pole | | | |
| 24 | 33 | 6 | 2 |
| 120 | 33 | 6 | 2 |
| 208/240 | 33 | 6 | 2 |
| 277 | 33 | 6 | 2 |
| Two-Pole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

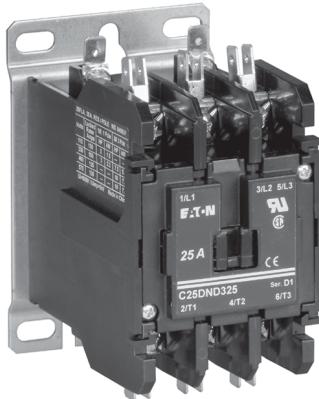
20-40A, Compact Single- and Two-Pole—C25**Single-Pole and Single-Pole + Shunt****Approximate Shipping Weight**

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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| 15–75A, Reversing and Two-Speed—C65 | 20 |

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.

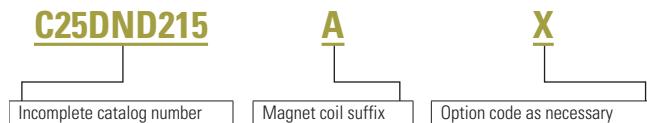
Standards and Certifications

- 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 | Inductive Full Load | Resistive per Pole | 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 |
| | | | | | Single-Phase | Three-Phase | Single-Phase | Three-Phase | | | |
| 15 | 20 | 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 | 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 | 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 | 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 | 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 | 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 | 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

- Incomplete catalog number. Replace underscore (_) in catalog number with magnet coil suffix from table on **Page 10**.
- 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 | | | | 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 | Line Voltage | Locked Rotor | Single-Phase | Three-Phase | Single-Phase | Three-Phase | | | |
| 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 | Voltage 60 Hertz | Coil Suffix |
|------------------------|----------------------|-------------|------------------------|------------------------|
| AC ^③ | | | DC ^⑩ | |
| 12 ^④ | 12 | R | 12 | 1R |
| 24 ^⑤ | 24 | T | 24 | 1T |
| 110–120 ^⑥ | 110–120 ^⑥ | A | 48 | 1W |
| 208 ^⑦ | — | E | 120 | 1A ^⑪ |
| 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 | | |

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****Circuit Catalog Number****For 15 through 75A ①**

| | |
|---------|------------------|
| 1NO | C320KGT1 |
| 1NC | C320KGT2 |
| 1NO-1NC | C320KGT3 |
| 2NO | C320KGT4 |
| 2NC | C320KGT5 |
| 3NO | C320KGT9 |
| 2NO-1NC | C320KGT10 |

With Standard Pressure Plate Terminals**Circuit Catalog Number**

| | |
|---------|------------------|
| 1NO-2NC | C320KGT11 |
| 3NC | C320KGT12 |
| 4NO | C320KGT13 |
| 3NO-1NC | C320KGT14 |
| 2NO-2NC | C320KGT15 |
| 1NO-3NC | C320KGT16 |
| 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.