

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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Starters

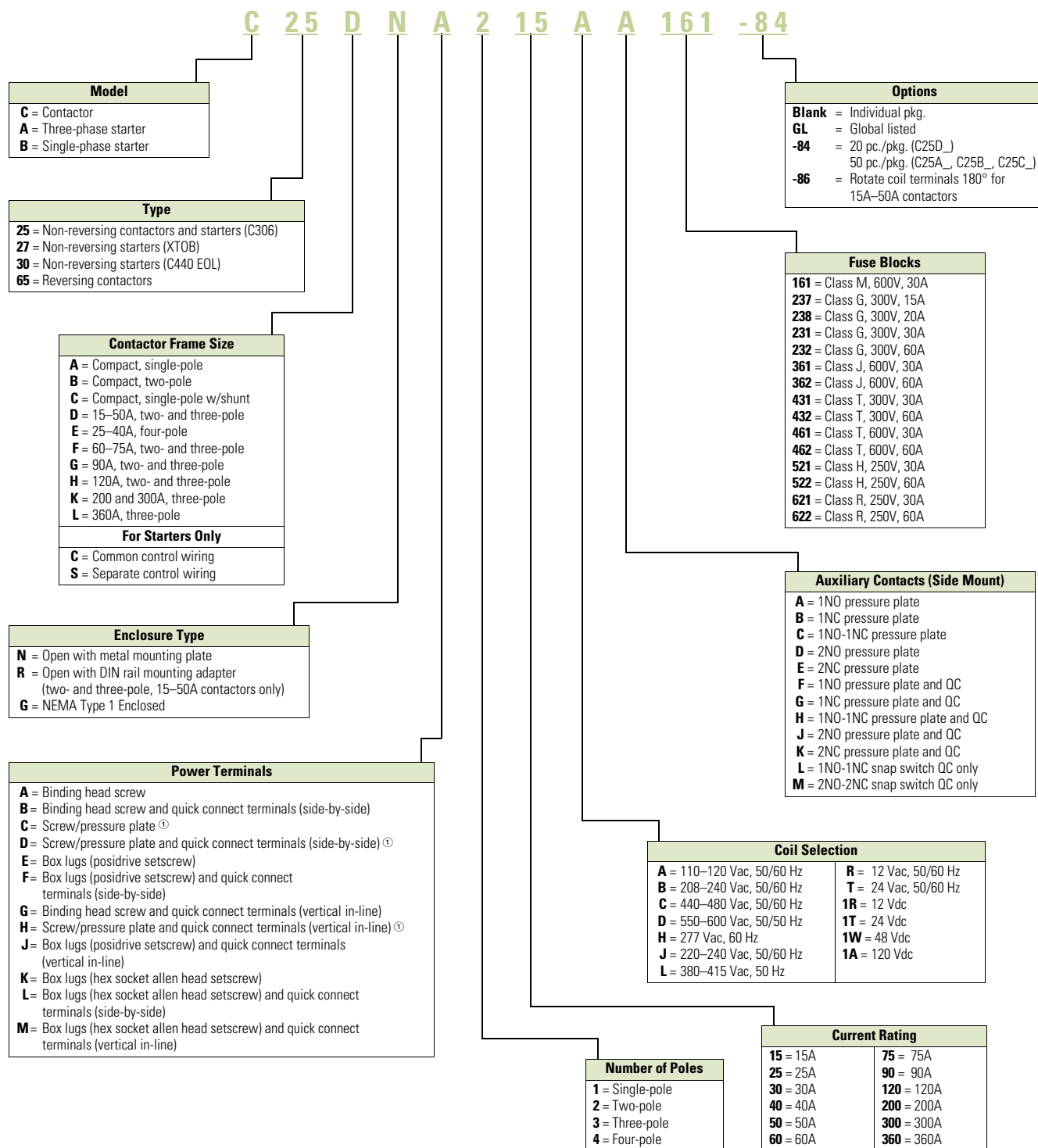
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Features

- 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



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 V5-T4-6**

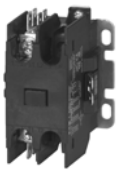
Product Selection

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	575V	115V	230V	115V	230V	

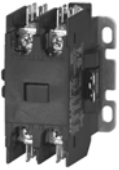
Single-Pole



Single-Pole

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

Single-Pole with Shunt



Single-Pole with Shunt

25	30	150	—	—	2	3	1.5	2.2	C25CNB125_
30	40	150	75	50	2	5	1.5	3.7	C25CNB130_
40	50	240	—	—	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**

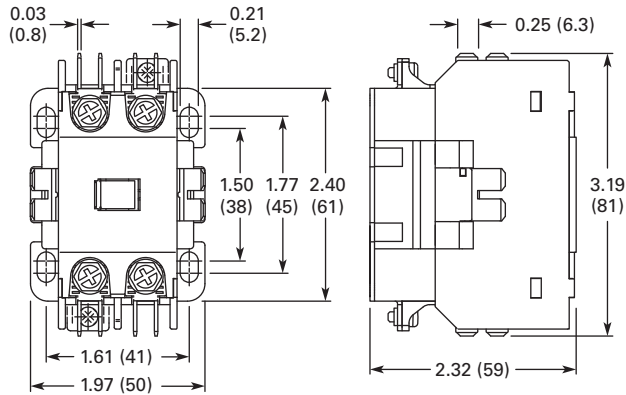
Description	Specification
Insulation voltage	690V
Current rated and hp/kw rated contacts	Double break
Magnet coil	Class F, 155°C
Contact arc covers	Standard on all contactors
Standard power terminals	5/16 in hex washer head screws Quad (4) quick connect terminals on all line and load terminals Box lugs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

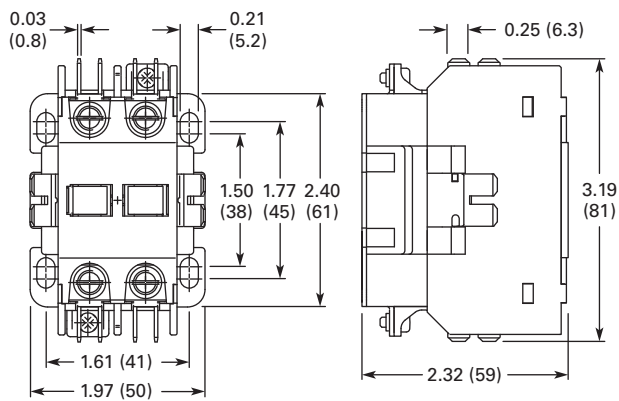
AC Coil Voltage 50/60 Hz	Maximum Inrush VA	Maximum Sealed VA	Maximum Sealed Watts
Single-Pole			
24	33	6	2
120	33	6	2
208/240	33	6	2
277	33	6	2
Two-Pole			
24	41	6.5	3
120	41	6.5	3
208/240	41	6.5	3
277	41	6.5	3
480	41	6.5	3

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)