

Definite Purpose Contactors and Starters



4

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.

Contents

Description

Page

Contactors

20–40A, Compact Single- and Two-Pole—C25	V5-T4-4
15–360A, Two-, Three- and Four-Pole—C25 ...	V5-T4-8
15–40A, Three-Pole Fuse Block	V5-T4-17
15–75A, Reversing and Two-Speed—C65	V5-T4-20

Starters

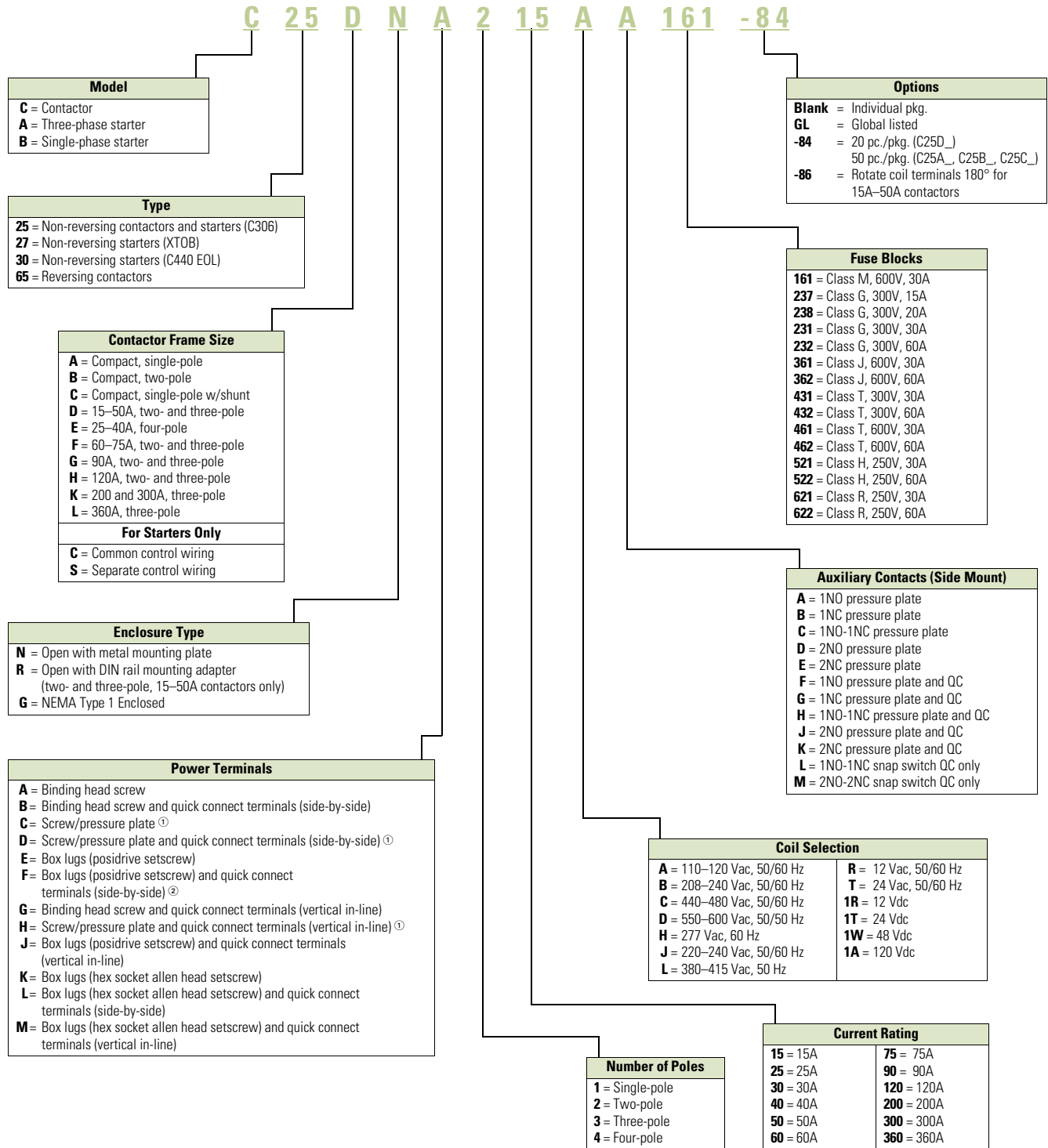
25–60A, Single- and Three-Phase—A25, B25	V5-T4-23
15–45A, Single- and Three-Phase—A27, B27	V5-T4-30
15–75A, Single- and Three-Phase—A30, B30 and C440/XT Electronic Overload Relay	V5-T4-38

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



Notes

- ① Not available on 50A devices.
- ② Vertical in-line quick connect terminals on 60A and 75A F frame.

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



Contents

<i>Description</i>	<i>Page</i>
20–40A, Compact Single- and Two-Pole—C25	
Catalog Number Selection	V5-T4-5
Product Selection	V5-T4-5
Options	V5-T4-6
Technical Data and Specifications	V5-T4-6
Dimensions	V5-T4-7
15–360A, Two-, Three- and Four-Pole—C25	V5-T4-8
15–40A, Three-Pole Fuse Block	V5-T4-17
15–75A, Reversing and Two-Speed—C65	V5-T4-20

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.

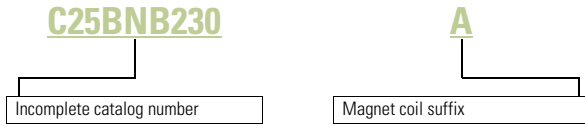
Standards and Certifications

- 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

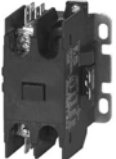
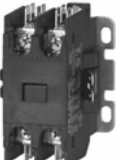



When Ordering Specify

- 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					Maximum Motor (hp)		Maximum Motor (kW)		Catalog Number ^{②③}
	Inductive Full Load	Resistive	Locked Rotor							
			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

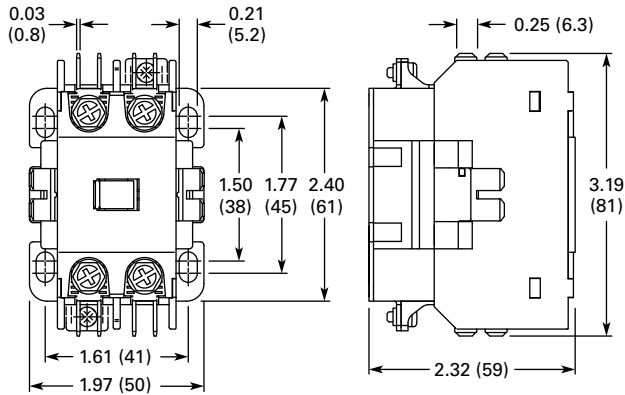
AC Coil Voltage 50/60 Hz	Maximum Inrush VA		Maximum Sealed VA		Sealed Watts
	50 Hz	60 Hz	50 Hz	60 Hz	60 Hz
Single-Pole (with shunt)					
24	55	40	10.0	7.5	3.0
120	55	40	10.0	7.5	3.0
208/240	55	40	10.0	7.5	3.0
277	55	40	10.0	7.5	3.0
Two-Pole					
24	55	45	10.5	8.0	3.5
120	55	45	10.5	8.0	3.5
208/240	55	45	10.5	8.0	3.5
277	55	45	10.5	8.0	3.5
480	55	45	10.5	8.0	3.5

Dimensions

Approximate Dimensions in Inches (mm)

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

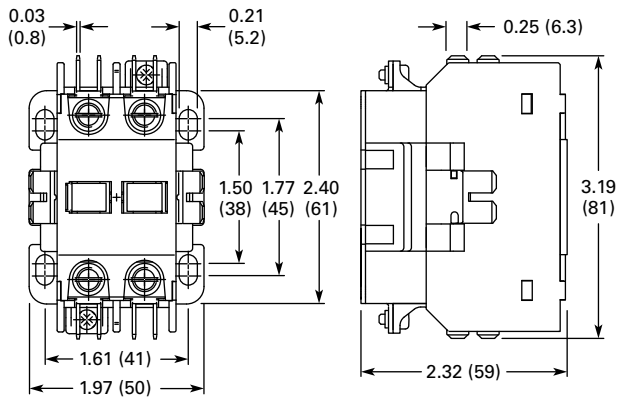
Single-Pole and Single-Pole + Shunt



Approximate Shipping Weight

0.5 lb (0.2 kg)

Two-Pole



Approximate Shipping Weight

0.7 lb (0.3 kg)