

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

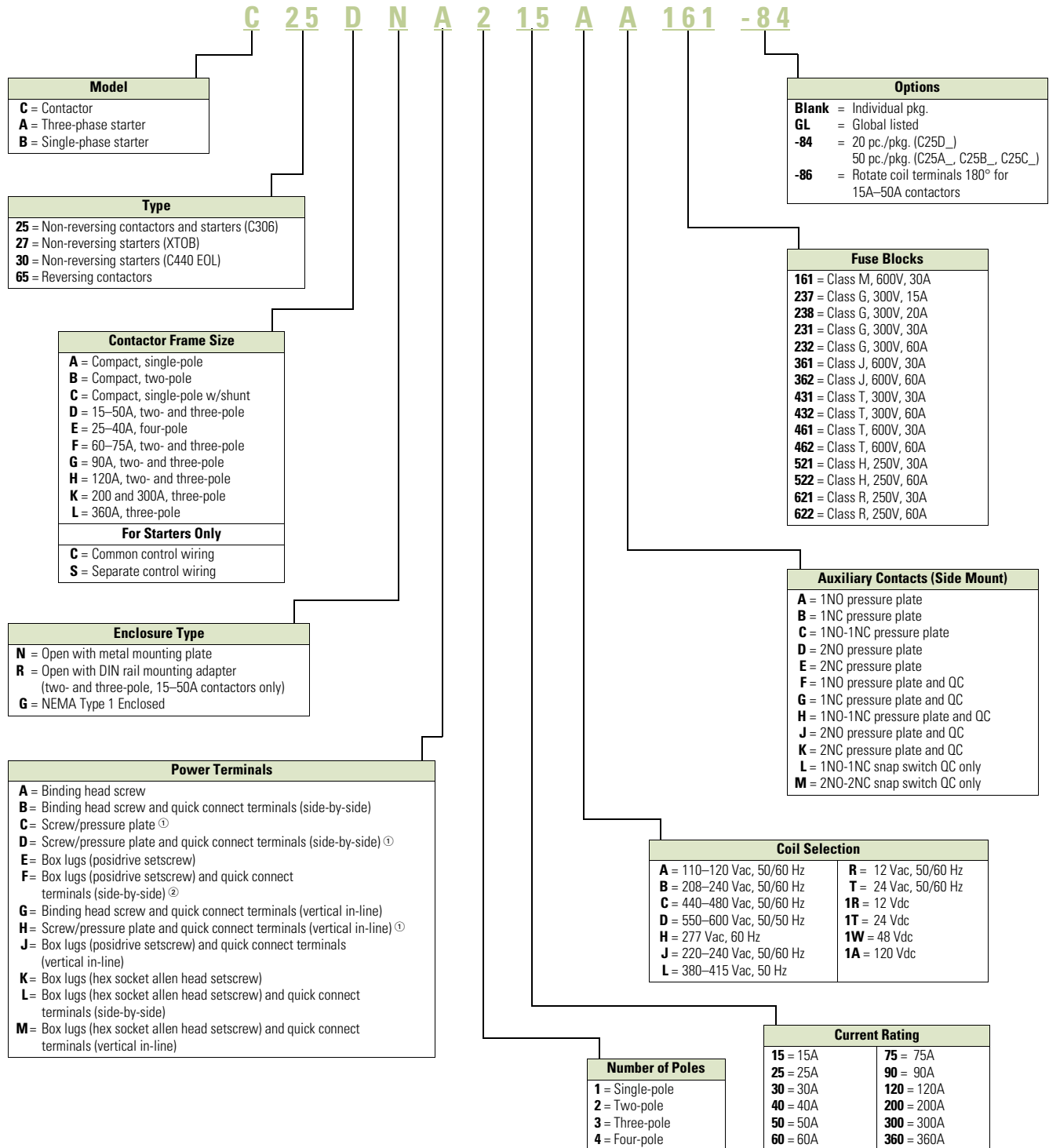
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Features

- 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



Notes

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

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



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

Product Description

Eaton offers the most comprehensive line of definite purpose contactors in the industry. Initially designed as an HVAC and refrigeration product, the C25 line is now the market leader and the product of choice for many OEMs and contractors serving diverse markets. Featuring current ratings between 15A and 360A, the contactors are dual-rated for inductive and resistive ratings as well as for horsepower and kilowatt ratings.

Other terminal configurations are available, see **Page V5-T4-13**. 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 between 15A and 50A are offered as two different lines—Standard and Global Listed.

Standard DP Contactors (15–50A, Two- and Three-Pole)

The standard line of C25 DP contactor features:

- Pressure plates and quick connects are standard on 15–30A contactors
- Lugs and quick connects are standard on 40A and 50A contactors
- Highest electrical life in its class—minimum 250,000 operations
- Universal baseplate allows for easy retrofit of competitive units (optional DIN rail mounting)
- UL recognized design in U.S. and Canada “cURus” (CSA approval pending)
- Accessories including auxiliary contacts, mechanical interlocks and fuse blocks
- RoHS (Reduction of Hazardous Substances) compliant

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Standards and Certifications

- UL Recognized Components UL File #E-1491, Guide NLDX2
- CSA Certified Components (excluding 90A) File #LR353, Class 3211 04, 481301 and 122201
- CE mark (Global line only) EN 60947-4-1
- RoHS Compliance (15A to 50A and 90A)



Global Listed Contactors (15–50A, Two- and Three-Pole)

In addition to all the features of the standard DP line, the Global Listed line also features:

- Exact footprint and mounting dimensions as the standard line—ideal for retrofits
- CE (Conformité Européen), CCC (China) and DEMKO (Denmark) certifications
- Higher electrical life—minimum 300,000 operations

Magnet Coil Suffix

AC ①			DC ⑤	
60 Hertz	50 Hertz	Coil Suffix	60 Hertz	Coil Suffix
12 ②	12	R	12	1R
24 ③	24	T	24	1T
110–120 ④	110–120 ④	A	48	1W
208 ⑥	—	E	120	1A ⑧
208–240 ⑥	208–240	B		
240 ⑦	220	J		
277	—	H		
—	380–415	L		
440–480	440–480	C		
550–600 ⑥	550–600	D		

Notes

- ① Class H AC coils available as option for 15A–50A contactor. Add 2 before AC coil suffix letter.
- ② Available through 75A.
- ③ Available through 120A.
- ④ 104–120V 50/60 Hz for 60A, 75A and all four-pole contactors (25A–40A).
- ⑤ Available 120–360A.
- ⑥ Available 15–90A, others 240V.
- ⑦ Available through 50A.
- ⑧ Not available for 90A.
- ⑨ Contactors with DC coils (only available up to 75A) include an early break NC auxiliary contact, C320KGD1. See **Page V5-T4-62** for more details.
- ⑩ Available only for 15A through 75A contactors and four-pole contactors.

Renewal Parts

Renewal Contact Kits for C25 Definite Purpose Contactors

- Replace complete contactor for:
 - C25A_
 - C25B_
 - C25C_
 - C25D_

Renewal Contact Kits for C25 Definite Purpose Contactors

Catalog Number	Single-Pole Kit Part Number	Two-Pole Kit Part Number	Three-Pole Kit Part Number
C25FNF250	—	6-65-5	—
C25FNF350	—	—	6-65-6
C25FNF260	—	6-65-7	—
C25FNF360	—	—	6-65-8
C25FNF275	—	6-65-20	—
C25FNF375	—	—	6-65-19
C25GNF290	—	—	—
C25GNF390	—	—	—
C25HNE3120	—	—	6-43-6
C25KNE3200	—	—	6-288
C25KNE3300	—	—	6-286
C25LNE3360	—	—	6-45-2

Product Selection

AC Coils

AC Coil Voltage	Frequency	Inrush (Maximum)		Sealed (Maximum)		Coil Suffix	Class	Part Number
		VA	Watts	VA	Watts			
15, 25, 30 and 40A – Two- and Three-Pole (Series D1 and E1)								
12	60	74.85	46.1	5.53	1.68	R	Class F, 155°C	9-3185-5
24		81.35	49.7	5.83	1.74	T		9-3185-6
110/120		74.69	51.6	5.79	1.81	A		9-3185-1
208/240		82.64	59.1	6.96	2.38	B		9-3185-2
220/240	60	74.03	51.8	5.85	1.99	J	Class F, 155°C	9-3185-10
440/480		73.39	52.1	6.09	2.58	C		9-3185-3
550/600		79.47	51.7	6.56	3.05	D		9-3185-4
277		72.88	52.4	6.09	2.58	H		9-3185-7
380/415	50	64.5	50.6	6.08	2.43	L	Class F, 155°C	9-3185-8
15, 25, 30 and 40A – Two- and Three-Pole (Series C1)								
12	60	65	30	11	2.5	R	Class F, 155°C	9-3125-5
24		65	30	11	2.5	T		9-3125-6
104/120		65	30	11	2.5	A		9-3125-1
208/240	50	75	35	17	3.5	B	Class F, 155°C	9-3125-2
440/480		75	35	17	3.5	C		9-3125-3
550/600		75	35	17	3.5	D		9-3125-4
277	60	65	30	11	2.5	H	Class F, 155°C	9-3125-8
380/415	50	75	35	17	3.5	L	Class F, 155°C	9-3125-8