

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

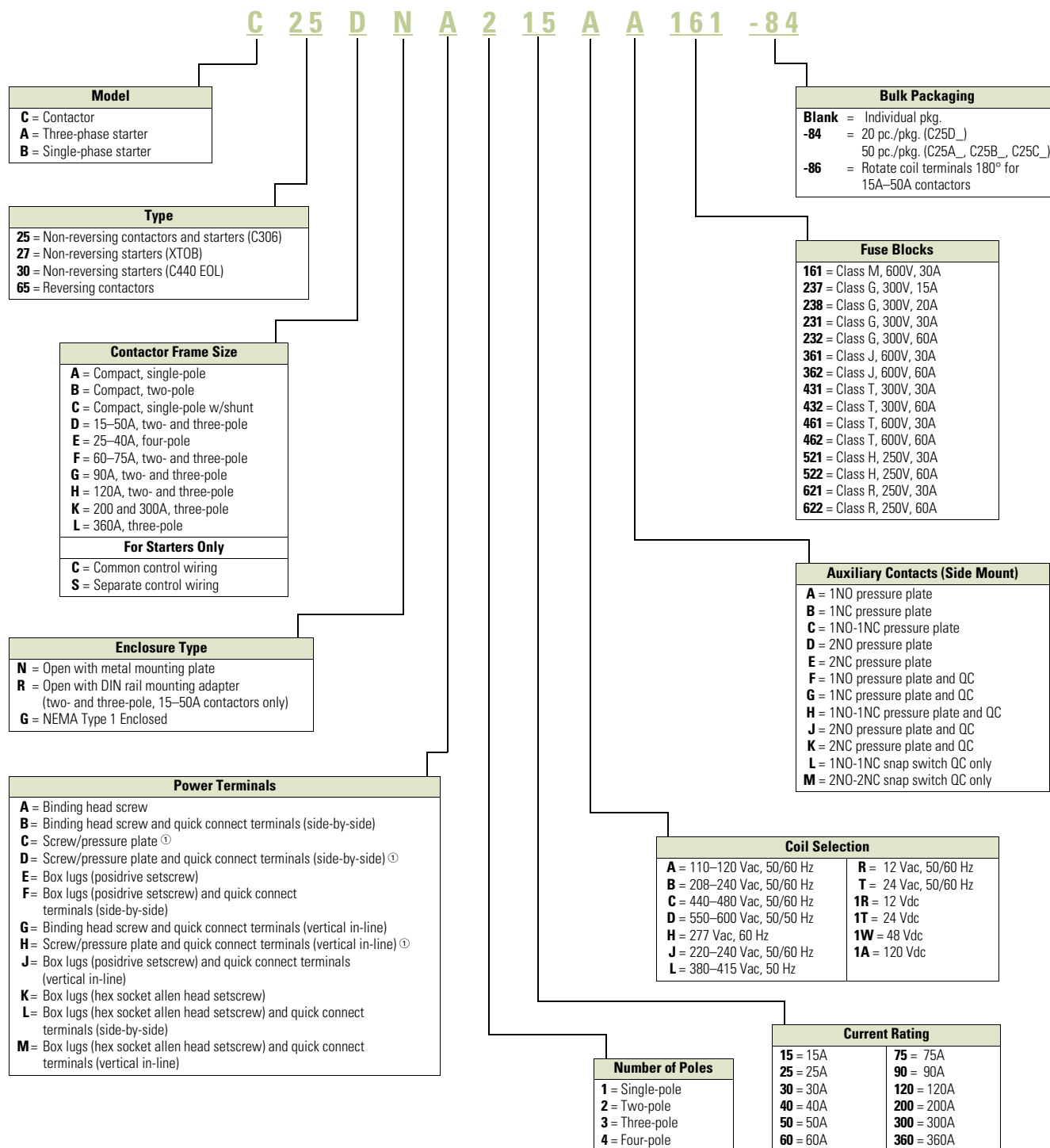
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Features

- 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.

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

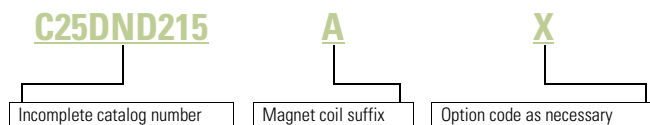
Standards and Certifications

- 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 and 90A)



Catalog Number Selection

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



When Ordering Specify

- Catalog number plus magnet coil suffix, see **Page V5-T4-10**
- Catalog numbers of accessory kits required, see Accessories, **Page V5-T4-11**
- Modify catalog number for any options required, see Options, **Page V5-T4-13**

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 ①②③	Open Type with DIN Rail Adapter Catalog Number ①②③
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 V5-T4-10**.
- ② Carton quantities including 20 individually packaged units are available for two- and three-pole units through 60A inductive.
- ③ Quick connects for 50–90A are vertical-in-line.

DP Contactor



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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 Catalog Number ^{①②③}
Inductive Full Load	Resistive per Pole			Single-Phase	Three-Phase	Single-Phase	Three-Phase		
90	120	115	540	7-1/2	—	5.5	—	2	C25GNF290_
		230	540	15	30	11	22	3	C25GNF390_
		460	450	—	50	—	37	—	C25GNF390_
		575	360	—	50	—	37	—	C25GNF390_
120	140	230	720	—	—	—	—	3	C25HNE3120_
		460	720	—	—	—	—	—	C25HNE3120_
		575	570	—	—	—	—	—	C25HNE3120_
200	200	240	1200	—	—	—	—	3	C25KNE3200_
		480	1200	—	—	—	—	—	C25KNE3200_
		600	1000	—	—	—	—	—	C25KNE3200_
300	300	240	1800	—	—	—	—	3	C25KNE3300_
		480	1800	—	—	—	—	—	C25KNE3300_
		600	1500	—	—	—	—	—	C25KNE3300_
360	360	240	2320	—	—	—	—	3	C25LNE3360_
		480	2320	—	—	—	—	—	C25LNE3360_
		600	1900	—	—	—	—	—	C25LNE3360_

Magnet Coil Suffix

Voltage 60 Hertz	50 Hertz	Coil Suffix
AC ^④		
12 ^⑤	12	R
24 ^⑥	24	T
110–120 ^⑦	110–120 ^⑦	A
208 ^⑧	—	E
208–240 ^⑧	208–240	B
240 ^⑧	220	J
277	—	H
—	380–415	L
440–480	440–480	C
550–600 ^⑨	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 Quick connects for 50–90A are vertical-in-line.
- ④ Class H AC coils available as option for 15A–50A contactor. Add 2 before AC coil suffix letter.
- ⑤ Available through 75A.
- ⑥ Available through 120A.
- ⑦ 104–120V 50/60 Hz for 60A, 75A and all four-pole contactors (25A–40A).
- ⑧ Available 120–360A.
- ⑨ Available 15–90A, others 240V.
- ⑩ Available through 50A.
- ⑪ 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.
- ⑫ Available only for 15A through 75A contactors and four-pole contactors.
- ⑬ Not available for 90A.

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)								
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
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
380/415	50	75	35	17	3.5	L	Class F, 155°C	9-3125-8