

# DEFINITE PURPOSE CONTACTORS



C25 Series Starts at \$24



- Open Style with Metal Mounting Plate
- 1-, 2- and 3-Pole Models
- 25 to 75 A Capacity
- Kits for Side Auxiliary Contact
- NEMA 1 Enclosure Available

Cutler-Hammer® definite purpose (DP) contactors are designed to improve control of refrigeration, air conditioning, ventilation and resistance heating applications. The complete line offers everything from compact DP to the smallest 50 ampere DP contactor in the world an average of 20% smaller than the competition. Always looking for new ways to improve the customer experience, the 50 mm (2") DP contactor with an innovative sealed housing is designed to keep out contaminants and lower noise. Building on that success, the new series of Compact DP are now available in a sleek new sealed design. Continuing to innovate and upgrade products, Eaton offers the perfect definite purpose solution for your HVACR applications.

## New Compact Models Definite Purpose Contactors

The new 30 ampere, single- and double-pole, Type C25 compact DP contactors feature a compact, efficient design with a low VA coil and straight through wiring. These devices are economically priced, UL recognized/CSA certified, are current rated and hp/kW rated with magnet coils rated Class F, 155°C (311°F) [most are Class B, 130°C (266°F)] and designed with low VA current ratings for less energy consumption. With the ability to be mounted vertically, horizontally or tabletop, the new series of compact DP will meet all your definite purpose application needs.



C25CNB130A, \$24



C25DND330A, \$36



C25FNF375B, \$120



C25DNJ350A, \$76



C25BNB230A, \$29



# COMPACT SERIES

## SPECIFICATIONS

### COMPACT MODELS

**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

**RoHS:** Compliant

**Insulation Voltage:** 690V

**Current Rated and hp/kW Rated**

**Contacts:** Double break

**Magnet Coil:** Class F, 155°C (311°F)

**Contact Arc Covers:** Standard on all contactors

**Contactors are Marked with Line and Load Terminal Designations**

**Operating Temperature Range:** -13 to 158°F (-25 to 70°C)

### TERMINAL WIRE RANGE

**Hex Washer Head Screws:** 16-10 AWG, 30 lb-in torque rating

### Box Lugs:

**16-10 AWG:** 35 lb-in torque rating

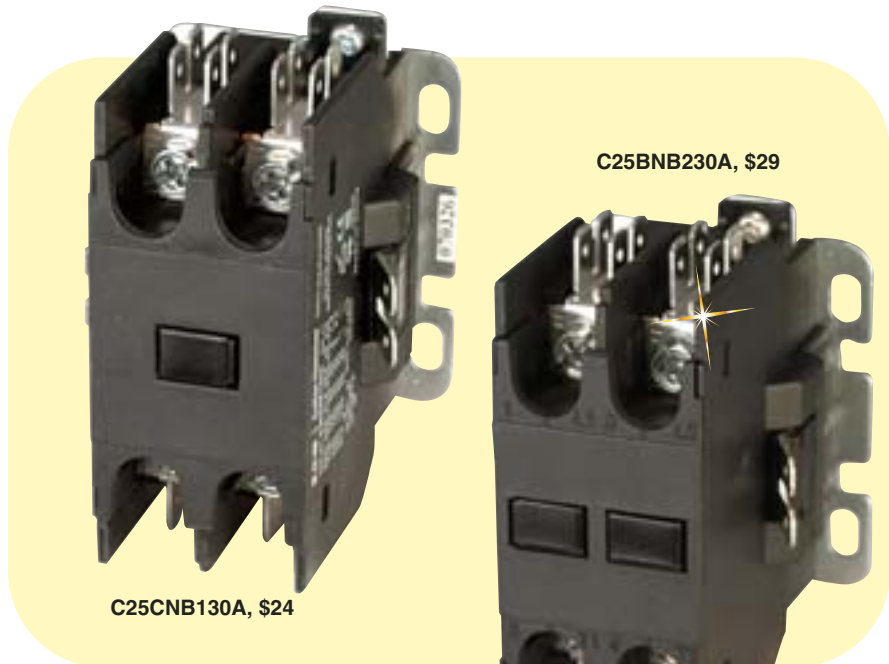
**8 AWG:** 40 lb-in torque rating

**6-4 AWG:** 45 lb-in torque rating

**Mounting Position:** Vertical, horizontal or tabletop

### AMPERE RATINGS

INDUCTIVE FULL LOAD	RESISTIVE	LOCKED ROTOR			MAX. MOTOR HORSEPOWER		MAX. MOTOR KILOWATTS	
		240-277V	480V	600V	115V	230V	115V	230V
<b>SINGLE-POLE WITH SHUNT</b>								
30	40	150	75	50	2	5	1.5	3.7
<b>DOUBLE-POLE</b>								
30	40	150	125	100	2	5	1.5	3.7
40	50	240	200	160	3	7.5	2.2	5.5



### COIL CHARACTERISTICS

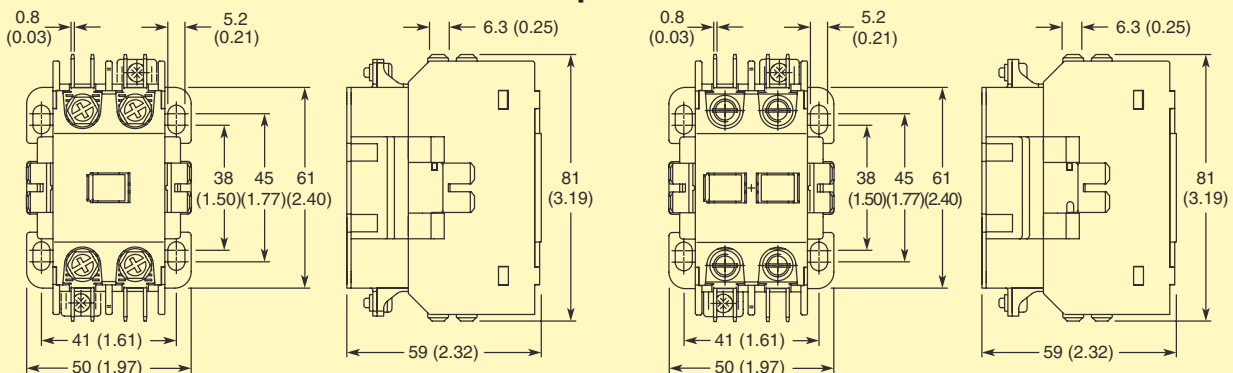
AC COIL VOLTAGE 50/60 HZ	MAX INRUSH VA	MAX SEALED VA	MAX SEALED WATTS
<b>1-POLE</b>			
24	33	6	2
120	33	6	2
<b>2-POLE</b>			
24	41	6.5	3
120	41	6.5	3
208/240	41	6.5	3

### LIGHTING DUTY RATINGS (25 TO 50 A ONLY)

C25D INDUCTIVE RATING	TUNGSTEN AND BALLAST (480V)
25 A	30 A
30 A	40 A
50 A	60 A

### Dimensions: mm (in)

### Compact Series



1-Pole and 1-Pole +Shunt  
Ship. Wt.: 0.2 kg (0.5 lb)

2-Pole  
Ship. Wt.: 0.3 kg (0.7 lb)

# STANDARD SERIES



C25DNJ350A, \$76



C25FNF375A, \$120



C25DND330A, \$36

## STANDARD SERIES

### UL Recognized Components:

UL File #E-1491, Guide NLDX2

### CSA Certified Components:

File #LR353, Class 3211 04, 481301 and 122201

IEC: 60947-4-1

EN: 60947-4-1

RoHS Compliance: 25 to 50 A only

### Magnet Coil

**Class B:** (C25E, F, G, H and K), 130°C (266°F)

**Class F:** (C25D and L), 155°C (311°F)

**Class H:** (C25D), 180°C (356°F)

(Available as factory installed option)

**Contacts:** Double break

**Coil Terminals:** 10-14 AWG

### Ambient Temperature:

65°C (150°F) maximum

**Approvals:** UL recognized, CSA certified and conform to ARI 780 CE mark

### Terminal Wire Range

#### #8-32 Screw/Pressure Plate:

**1-Conductor:** 14-8 AWG

**2-Conductors:** 14-8 AWG

**Box Lugs—15 to 50 A:** #2 posidrive screw or 5/16 hex socket screw

**Upper Level:** 14-4 AWG (1-conductor)

**Lower Level:** 14-6 AWG (1-conductor)

**Box Lugs—75 A**

**Upper Level:** 14-2 AWG

**Lower Level:** 14-6 AWG

**Note:** The box lugs on the 25-75A device can accept two conductors per pole.

## LIGHTING DUTY RATINGS (25A TO 50A ONLY)

C25D INDUCTIVE RATING	TUNGSTEN AND BALLAST (480V)
25 A	30 A
30 A	40 A
50 A	60 A

## IEC/CE RATINGS (IEC 60947-4-1, EN 60947-4-1) FOR 25 TO 50 A C25D CONTACTORS

C25D INDUCTIVE RATING	AC-1 (IC)		AC-3 (IE)		AC-4 (IE)		AC-8A	
	480V	600V	480V	600V	480V	600V	480V	600V
25 A	30 A	30 A	25 A	25 A	25 A	—	25 A	25 A
30 A	40 A	40 A	30 A	30 A	30 A	—	30 A	30 A
50 A	65 A	65 A	50 A	50 A	50 A	—	50 A	50 A

## DC RATINGS (25 TO 50 A ONLY)

VOLTAGE	3-POLE, 15 TO 30 A INDUCTIVE				3-POLE, 40 A INDUCTIVE			
	UL/CSA		DC-3/DC-5		UL/CSA		DC-3/DC-5	
	FLA	HP	IE	IE	FLA	HP	IE	
240 Vdc 3 Poles in Series	4.0	3/4	4.0	4.0	5.0	1.0	5.0	
120 Vdc 3 Poles in Series	8.0	3/4	8.0	8.0	10.0	1.0	10.0	
120 Vdc 2 Poles in Series	5.5	1/2	5.5	5.5	8.0	3/4	8.0	
120 Vdc per Pole	2.0	1/10	2.0	2.0	3.5	1/4	3.5	
24 Vdc per Pole	15.0	—	15.0	15.0	20.0	—	20.0	

## CONTACTOR TORQUE RATINGS

CONTACTOR SIZE	TERMINAL	WIRE RANGE	TIGHTENING TORQUE
25 to 50 A	Screw/Pressure Plate	8-14 AWG	15 lb-in
		12-14 AWG	15 lb-in
	Box Lug	10 AWG	25 lb-in
		8 AWG	40 lb-in
75 A	Box Lug	4-6 AWG	45 lb-in
		10-14 AWG	40 lb-in
		8 AWG	45 lb-in
		3-6 AWG	50 lb-in



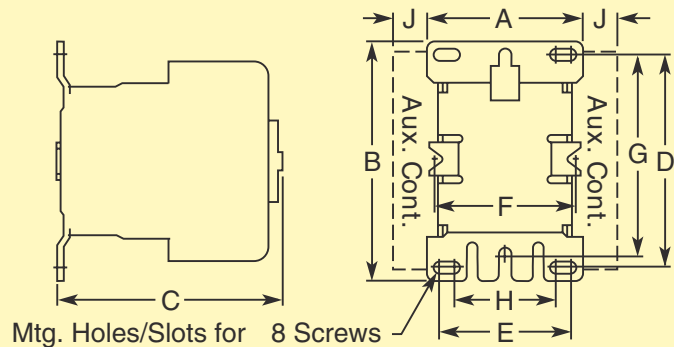
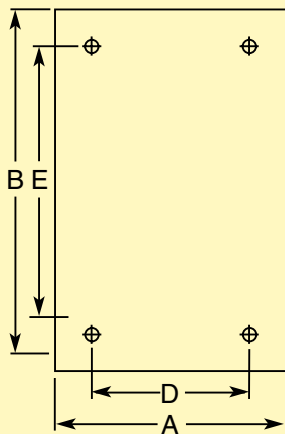
### DIMENSIONS: STANDARD SERIES mm (in)

AMPERE SIZE	NUMBER OF POLES	WIDE A	HIGH B	DEEP C	MOUNTING D	E	F	G	H	SIDE AUXILIARY CONTACT ADDER	SHIPPING WEIGHT KG (LBS)
										J	
25-50	2 and 3	61.0 (2.40)	95.0 (3.75)	85.0 (3.35)	83.0 (3.25)	51.0 (2.00)	—	79.0 (3.13)	38.0 (1.50)	8.6 (0.34)	0.6 (1.3)
75	2 and 3	67.0 (2.63)	95.0 (3.75)	101.0 (3.97)	83.0 (3.25)	51.0 (2.00)	38.0 (1.5)	79.0 (3.13)	38.0 (1.5)	9.5 (0.37)	1.3 (2.8)
<b>NEMA 1 ENCLOSURE</b>											
25-50	2 and 3	104.0 (4.10)	171.0 (6.75)	89.0 (3.50)	70.0 (2.75)	124.0 (4.88)	—	—	—	—	1.5 (3.4)

### Standard Series

NEMA 1 enclosure, 25 to 50 A, 2- and 3-pole model C799B18

Non-reversing contactor: 25 to 75 A



### To Order (Specify Model Number)

### MOST POPULAR MODELS HIGHLIGHTED!

MODEL NO.			
COMPACT MODELS	PRICE	DESCRIPTION	TERMINATION
C25CNB130A	\$24	1-pole 30 A contactor w/shunt 120 Vac coil	Binding head screw and quick connect terminals (side by side)
C25CNB130T	24	1-pole 30 A contactor w/shunt 24 Vac coil	Binding head screw and quick connect terminals (side by side)
C25BNB230A	29	2-pole 30 A contactor 120 Vac coil	Binding head screw and quick connect terminals (side by side)
C25BNB230B	29	2-pole 30 A contactor 240 Vac coil	Binding head screw and quick connect terminals (side by side)
C25BNB230T	29	2-pole 30 A contactor 24 Vac coil	Binding head screw and quick connect terminals (side by side)
C25BNF240A	38	2-pole 40 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25BNF240B	38	2-pole 40 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25BNF240T	38	2-pole 40 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)

Ordering Example: C25BNB230A, 2-pole, 30 A contactor with 120 Vac coil, \$29.





C25DNJ350A, \$76



C25BNB230A, \$29



C25DND330A, \$36

**To Order** (Specify Model Number)

**MOST POPULAR MODELS HIGHLIGHTED!**

MODEL NO.			
STANDARD MODELS	PRICE	DESCRIPTION	TERMINATION
C25DND325A	\$33	3-pole 25 A contactor 120 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND325B	33	3-pole 25 A contactor 240 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND330A	36	3-pole 30 A contactor 120 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND330B	36	3-pole 30 A contactor 240 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND330T	36	3-pole 30 A contactor 24 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DNF340A	43	3-pole 40 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNF340B	43	3-pole 40 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNF340T	43	3-pole 40 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNJ350A	76	3-pole 50 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNJ350B	76	3-pole 50 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNJ350T	76	3-pole 50 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25FNF375A	120	3-pole 75 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25FNF375B	120	3-pole 75 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25FNF375T	120	3-pole 75 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
ACCESSORIES			
C320KG1	\$8	1 NO side auxiliary contact kit	
C320KG3	14	1 NO-1NC side auxiliary contact kit	
C799B18	30	NEMA 1 enclosure for 25 to 50 A, 2- and 3-pole models	

Ordering Example: C25FNF375B, 3-pole, 75 A contactor with 240 Vac coil, \$120.

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