

DEFINITE PURPOSE CONTACTORS

C25 Series



- 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

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's 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's are now available in a sleek new sealed design. Continuing to innovate and upgrade products, we offer 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's will meet all your definite purpose application needs.



C25CNB130A



C25DND330A



C25FNF375B



C25DNJ350A



C25BNB230A

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

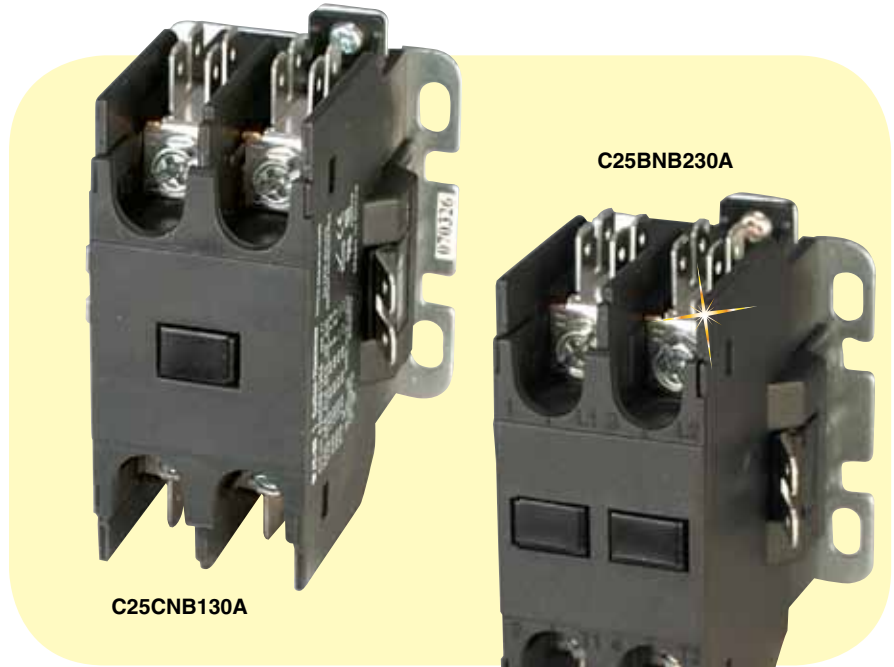
8 AWG: 40 lb-in torque rating

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
SINGLE-POLE WITH SHUNT								
30	40	150	75	50	2	5	1.5	3.7
DOUBLE-POLE								
30	40	150	125	100	2	5	1.5	3.7
40	50	240	200	160	3	7.5	2.2	5.5



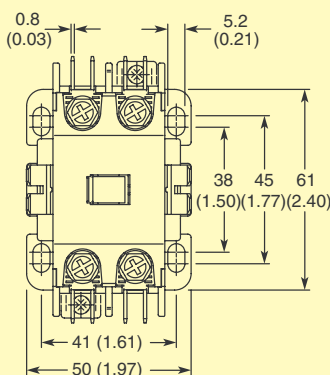
COIL CHARACTERISTICS

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

LIGHTING DUTY RATINGS (25 TO 50 A ONLY)

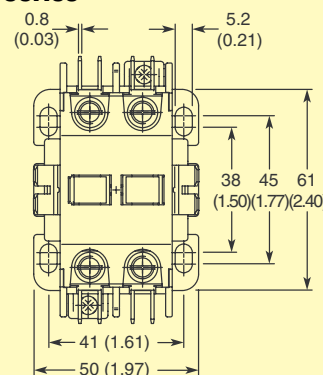
C25D INDUCTIVE RATING	TUNGSTEN AND BALLAST (480V)
25 A	30 A
30 A	40 A
50 A	60 A

Dimensions: mm (inch)



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

Compact Series



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

STANDARD SERIES

C25DNJ350A



C25FNF375A



C25DND330A



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	FLA	HP	IE
240 Vdc 3 Poles in Series	4.0	3/4	4.0	5.0	1.0	5.0
120 Vdc 3 Poles in Series	8.0	3/4	8.0	10.0	1.0	10.0
120 Vdc 2 Poles in Series	5.5	1/2	5.5	8.0	3/4	8.0
120 Vdc per Pole	2.0	1/10	2.0	3.5	1/4	3.5
24 Vdc per Pole	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-inch
		12-14 AWG	15 lb-inch
	Box Lug	10 AWG	25 lb-inch
		8 AWG	40 lb-inch
		4-6 AWG	45 lb-inch
75 A	Box Lug	10-14 AWG	40 lb-inch
		8 AWG	45 lb-inch
		3-6 AWG	50 lb-inch

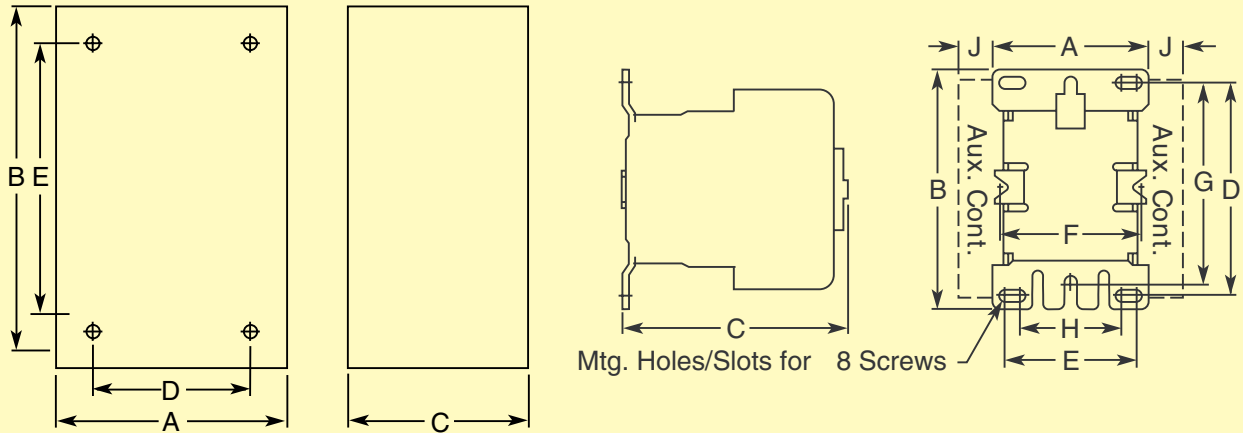
DIMENSIONS: STANDARD SERIES mm (inch)

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)
NEMA 1 ENCLOSURE											
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



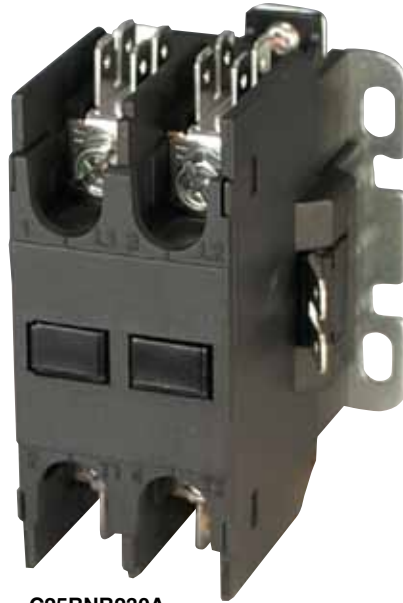
To Order Visit omega.com/c25 for Pricing and Details

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



C25DNJ350A



C25BNB230A



C25DND330A

To Order Visit omega.com/c25 for Pricing and Details

MODEL NO.

STANDARD MODELS	DESCRIPTION	TERMINATION
C25DND325A	3-pole 25 A contactor 120 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND325B	3-pole 25 A contactor 240 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND330A	3-pole 30 A contactor 120 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND330B	3-pole 30 A contactor 240 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DND330T	3-pole 30 A contactor 24 Vac coil	Screw/pressure plate and quick connect terminals (side by side)
C25DNF340A	3-pole 40 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNF340B	3-pole 40 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNF340T	3-pole 40 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNJ350A	3-pole 50 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNJ350B	3-pole 50 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25DNJ350T	3-pole 50 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25FNF375A	3-pole 75 A contactor 120 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25FNF375B	3-pole 75 A contactor 240 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)
C25FNF375T	3-pole 75 A contactor 24 Vac coil	Box lugs (Posidrive Setscrew) and quick connect terminals (side by side)

ACCESSORIES

C320KG1	1 NO side auxiliary contact kit
C320KG3	1 NO-1NC side auxiliary contact kit
C799B18	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.