

D15 Series — Freedom 600V Multipole

DC/AC Interface Module (Continued)

Table 49-70. Controller Coil Voltage Ranges

Controller Catalog Number Prefix	Controller Size or Rating	Coil Range Volts AC
AE16, AE17, AE56, AE57, CE15, CE55	A – F G – K L – N	24 – 240 48 – 240 110 – 240
AN16, AN56, CN15, CN55	00 – 0 1 – 2 3	24 – 240 48 – 240 110 – 240
CN35	10 – 30A 60A 100A	24 – 240 48 – 240 110 – 240

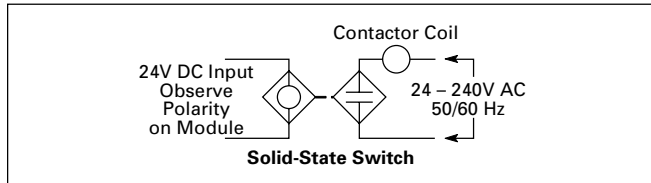


Figure 49-62. Typical Application

Dimensions

Table 49-71. Approximate Dimensions in Inches (mm) and Shipping Weights.

Description	Dimension C in Inches (mm)	Shipping Weights Lbs. (kg)
Relay Only	3.30 (83.8)	1.3 (0.6)
Relay with Timer Attachment	5.55 (141.0)	1.5 (0.7)
Relay with Front Contact Pole Deck	4.66 (118.4)	1.7 (0.8)

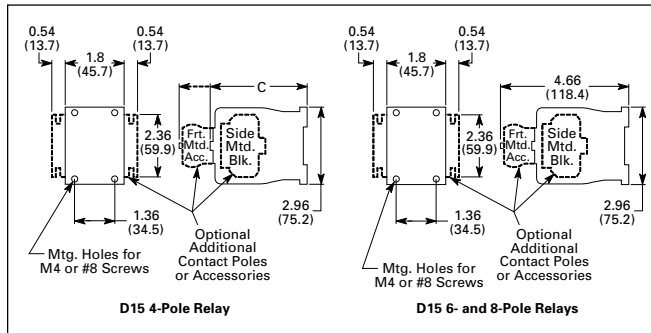
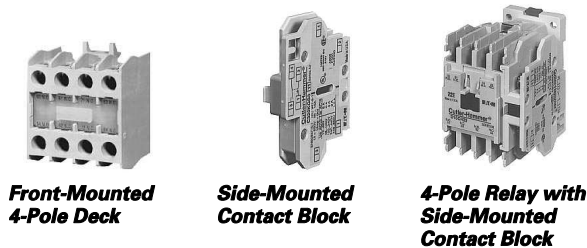


Figure 49-63. Approximate Dimensions in Inches (mm)

49



Product Selection

When Ordering Specify

- Catalog Number and Magnet Coil Code Letter. Example For a 4-pole relay having 4NO contacts with a 120V 60 Hz coil, order Catalog Number D15CR40AB.

Table 49-72. Factory Assembled Multipole Relays

Number of Poles	Type of Contacts		Open Type	
	NO	NC	Catalog Number ^①	Price U.S. \$
4	4	0	D15CR40_B	80.50
	3	1	D15CR31_B	80.50
	2	2	D15CR22_B	80.50
	1	3	D15CR13_B	80.50
	0	4	D15CR04_B	80.50
6 (4-Pole Relay with 2-Pole Front-Mounted Deck)	6	0	D15CR60_B	109.00
	5	1	D15CR51_B	109.00
	4	2	D15CR42_B	109.00
	3	3	D15CR33_B	109.00
	2	4	D15CR24_B	109.00
	1	5	D15CR15_B ②	109.00
	0	6	D15CR06_B ②	109.00
8 (4-Pole Relay with 4-Pole Front-Mounted Deck)	8	0	D15CR80_B	134.00
	7	1	D15CR71_B	134.00
	6	2	D15CR62_B	134.00
	5	3	D15CT53_B	134.00
	4	4	D15CR44_B	134.00
	3	5	D15CR35_B ②	134.00
	2	6	D15CR26_B ②	134.00

- ① Underscore indicates missing code suffix for magnet coil — see Selection Table below.
- ② Not all Suffix Codes available: consult Customer Support Center.

Table 49-73. Additional Contact Poles

Description	Catalog Number	Price U.S. \$
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Front Contact Pole Deck

1NO-1NC	C320KGT3	27.00
2NO	C320KGT4	27.00
2NC	C320KGT5	27.00
1NO (E.C.) – 1NC (L.O.)	C320KGT7	27.00
4NO	C320KGT13	54.50
3NO-1NC	C320KGT14	54.50
2NO-2NC	C320KGT15	54.50
1NO-3NC	C320KGT16	54.50
4NC	C320KGT17	54.50

Side-Mounted Contact Blocks

1NO-1NC	C320KGS3	27.00
2NO	C320KGS4	27.00
2NC	C320KGS5	27.00
1NO (E.C.) – 1NC (L.O.)	C320KGS7	27.00

E.C. = Early Closing L.O. = Late Opening

Table 49-74. Magnet Coil Selection Table

AC Coils Volts and Hertz	Code Suffix	AC Coils Volts and Hertz	Code Suffix	DC Coils Volts	Code Suffix
120/60 or 110/50	A	208/60	E	12	R1
240/60 or 220/50	B	277/60	H	24	T1
480/60 or 440/50	C	208 – 240/60	J	48	W1
600/60 or 550/50	D	24/60	T	120	A1

Discount Symbol 1CD1

D15 Series — Freedom 600V Multipole

Contents

<i>Description</i>	<i>Page</i>
Machine Tool Relays	
Freedom 600V Multipole . . .	49-34
Fixed Contact	
Industrial Control	49-37
Convertible Contact	
Industrial Control	49-41
Type M — 600V AC	
Multipole with	
Convertible Contacts	49-45
Type M — DC	
Multipole with	
Convertible Contacts	49-48

D15 Series — Freedom 600V Multipole



4-Pole Relay



4-Pole Relay with Front Contact Pole Deck Assembled

Product Description

Contact poles on the D15 relay are of the fixed design and are not convertible. The basic 4-pole relay will accept a front-mounted contact pole deck and/or side-mounted contact blocks (one per side). In addition, a side-mounted solid-state timer or a front-mounted pneumatic timer can be added to the relay. Only one front-mounted attachment can be added to the basic relay.

Application Description

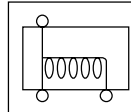
Side-mounted contact blocks can be used to provide additional poles in applications where a pneumatic timer is installed on the front of the relay. They can also be used where panel depth is restricted.

The maximum number of contacts recommended per relay is 8, 6 of which can be NC. When a pneumatic timer is used, the maximum recommended number of NC contacts is 3.

Relays with DC coils are supplied with a coil clearing NC contact mounted on the side of the relay.

Features

- 600V, 10A continuous thermal current
- State indicator visually shows relay ON or OFF status
- Relay base has mounting holes on 35 x 60 mm centers, permitting direct replacement of competitive relays
- Relay also mounts on 35 mm DIN rail as standard
- Magnet coil has three terminals, permitting either top or diagonal wiring — easy to replace European or U.S. relays without changing wiring layout
- Contact pole terminals have captive, backed-out, self-lifting pressure plates with ± screws — reduced wiring time
- All terminals are shrouded or “finger-proofed” to reduce possibility of electrical shock
- Designed to meet or exceed UL, NEMA, IEC, CSA, VDE, BS and other international standards



Standards and Certifications



Terminal Marking

Relay terminals are identified by a two digit number in accordance with International Standards approved by CENELEC (European Committee for Electrotechnical Standardization). The number is marked on the relay and is used to identify location and status of the contacts.

The first digit indicates the location of the contact on the relay. The numbering begins with 1 and continues without a break from left to right.

The second digit indicates the status of the contacts (NO or NC). Terminal marking 1 and 2 mean NC and 3 and 4 mean NO.

Example of marking with 2NO and 2NC contacts:

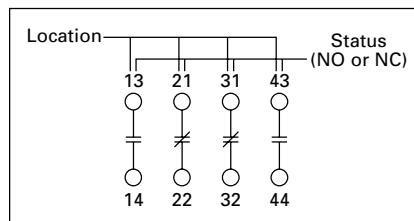


Figure 49-61. Terminal Marking

Technical Data

Table 49-59. Contact Ratings

NEMA A600		
Continuous Thermal Rating: 10A		
AC Volts	Make	Break
120	60	6.0
240	30	3.0
480	15	1.5
600	12	1.2

NEMA P300	
Continuous Thermal Rating: 5A	
DC Volts	Make/Break Amperes
125	1.1
250	0.55

Table 49-60. Magnet Coil Data

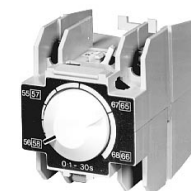
AC Voltage	Pick-Up		Sealed	
	VA	Watts	VA	Watts
12 – 600V	80	49	7.5	2.4

DC Voltage	Pick-Up		Sealed	
	Amps	Watts	VA	Watts
12	6.4	76.8	0.28	3.36
24	3.2	76.8	0.14	3.36
48	1.6	76.8	0.07	3.36
120	0.64	76.8	0.028	3.36

Accessories

Pneumatic Timer Attachment

Attachment mounts on top of any Freedom Series relay (top-mounted auxiliary contacts can not be installed on device when timer is used). Timer unit has DPST timed contacts — circuits in each pole must be the same polarity. Units are convertible from OFF to ON Delay or vice-versa.



C320 Pneumatic Timer Attachment

Table 49-61. Pneumatic Timer Attachment

Timing Range	Catalog Number	Price U.S. \$
0.1 to 30 Seconds	C320TP1	162.
10 to 180 Seconds	C320TP2	162.

Table 49-62. Maximum Ampere Ratings

Description	Volts AC			
	120	240	480	600
Make	30	15	7.5	6
Break	3	1.5	0.75	0.6

Discount Symbol 1CD1