

Cat. No. C80FJ421N00
Size 4 — NC Contactor

Product Description

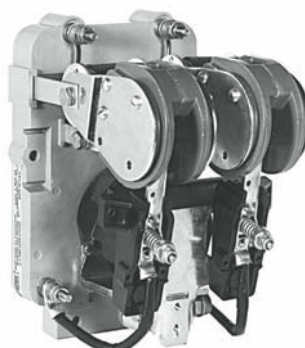
These dc mill type contactors are designed for heavy industry service and are suitable for use on moving machinery. The contactors listed in this section are for surface mounting on steel panels and front-of-panel wiring. The power stud assembly is mounted on the side of the contactor, rather than as part of a separate mounting kit.

These contactors utilize dc coils. If control power is 120 Vac, the rectifier module listed on **Page 44** should be used in conjunction with a 100 V coil contactor.

Auxiliary contacts and mechanical interlocks for use with these contactors are listed on the following pages.

The contactors feature forged steel armature levers and magnet frames for superior physical strength. Self-lubricating bearings eliminate the need for lubricating the contactor. Hot-molded arc chute assemblies contain no asbestos and have better arc extinction characteristics for longer contact life. The short stroke armature results in a mechanical life of more than 20 million operations.

The arc chutes and magnetic blowout structures are designed to quickly absorb and dissipate the heat caused by arcing. In addition to increasing contact life, the molded arc chute



Cat. No. C80DG221N00
Size 2 — 2 Pole Contactor

offers advantages of improved mechanical life and cooling characteristics plus superior arc-tracking resistance. The arc chutes are hinged to provide front accessibility, easy inspection or replacement of contacts without removing any other contactor parts.

Construction of the pivot pin assembly provides positive pin locking so that the bearing pin remains stationary with respect to the operating movement of the forged armature.

A leaf spring attached to the unit base and the arc chute holds the chute in the "down" or functioning position. The addition of this assembly resists the violent vibrations encountered on open hearth charging machines and on a wide variety of crane applications.

Pre-drilled mounting holes are provided on the unit base to accommodate interlock mounting brackets. An interlock is merely attached to a bracket and the assembly is then bolted in the desired operating position on the contactor.

DC Drive Service Contactors

Eaton's Cutler-Hammer industrial type contactors modified for dc drive service are provided with silver faced contact tips, to provide optimum contact structure and minimum maintenance under continuous duty service. These contactors are designed for steel panel surface mounting.

Power studs are a part of the contact or assembly.

Standards and Certifications

- CMAA 5.6.6-2.
- NEMA ICS3-441, 442, 443.
- NEMA ICS2-331.23.
- NEMA ICS2-110.05.02.
- NEMA ICS2-125.21.02.

Technical Data and Specifications

- Current Range: 5 to 1800 amperes.
- Voltage: 600 Vdc.
- Operation: Magnetic.
- Mounting: Steel Panel.
- Mechanical Life: 20 million operations.
- Electrical Life: 500,000 operations.
- Interlock Ratings:
 - 10 amperes continuous
 - 2.2 amperes inductive breaking at 115 V
 - 1.1 amperes inductive breaking at 230 V
- Duty:
 - Continuous (for intermittent ratings consult factory)

Table 75. Coil Ampere Data

NEMA Size	No. of Poles	100 Vdc Coil	115 Vdc Coil	230 Vdc Coil
2	1NO	.288	.263	.125
	2NO	.339	.274	.140
3	1NO	.268	.235	.112
	1NC	.339	.274	.140
4	1NO	.268	.235	.112
	1NC	.339	.274	.140
5	1NO	.433	.391	.187
	1NC	.424	.329	.164
6	1NO	.450	.365	.200
	1NC	1.832/.597 ①	1.337/.485 ①	.714/.267 ①
6A	1NO	.450	.365	.200
8	1NO	.787 ②	.757 ②	.438 ②

① Inrush/sealed current.

② Coil used with series resistor.

Options

Other Options Available

■ Silver Faced Contact Tips:

- Can be supplied in place of standard contact tips

Note: Use silver tips for non-arcing or long (8 hour) extended continuous current applications.

■ Special Voltage Coils:

- Coils with dc voltage ratings other than those listed are available

■ 1800 Ampere Contactors:

- Size 8 A (not a NEMA size) contactors are also available

■ Consult factory for pricing.

Accessories

Auxiliary Contacts

Table 76. Mounting Kits for Auxiliary Contacts

Separate for Field Installation						Factory Installed	
For Size and Type of Contactor		Location of Auxiliary Contacts on Contactor and Number of Units Kit Will Mount		Maximum Number of Units Acceptable per Contactor	Mounting Kit Catalog Number	* Suffix Code Letter for Factory Installation	* Adder
NEMA Size	Contactor Power Pole Configuration	Location	No. of Units				
2	1NO	Bottom — Right and Left	2	2	10923H11	B	
	1NO or 1NO Ltl	Side — Right or Left	1	1	10923H12	A	
	2NO	Bottom — Right and Left	1	2	10923H14	B	
		Side — Left	1	2	10923H15	A	
		Side — Right	1	2	10923H16	A	
3, 4 and 5	1NO	Side — Left	1	2	10923H15	A	
		Side — Right	1	2	10923H16	A	
		Bottom — Right and Left	2	2	10923H19	B	
	1NO Ltl or 1NC	Bottom — Left Only	1	1	10923H38	B	
		Bottom — Right	1	1	10923H20	B	
6, 6A, 8 and 8A	1NO	Bottom — Right and Left	2	2	10923H19	B	
		Bottom — Left Only	1	1	10923H38	B	
		Bottom — Right	1	1	10923H20	B	
	1NO Ltl	Bottom — Right	1	1	10923H20	B	
	1NC	Bottom — Right	1	1	①	—	

① 10923H19 supplied with contactor as standard. No charge.

Table 77. Auxiliary Contacts — without Mounting Kit All Sizes Bottom Mounted

Separate for Field Installation			Factory Installed			
Contact Configuration	Catalog Number	*	Suffix Code LH Position	Adder *	Suffix Code RH Position	Adder *
None	—		0		0	
1NO	10923H1		1		1	
2NO	10923H2		2		2	
1NO-1NC	10923H3		3		3	
1NC	10923H4		4		4	
2NC	10923H5		5		5	

Table 78. Auxiliary Contacts — without Mounting Kit Size 2 Side Mount Only

Separate for Field Installation			Factory Installed			
Contact Configuration	Catalog Number	*	Suffix Code LH Position	Adder *	Suffix Code RH Position	Adder *
None	—		0		0	
1NO	10923H6		1		1	
2NO	10923H7		2		2	
1NO-1NC	10923H8		3		3	
1NC	10923H9		4		4	

Rectifiers

Table 79. Rectifier Module

Description	Contactor Size	Catalog Number	*
120 Vac Input 100 Vdc Output 3.5 Amps	All	C81EB	

Discount Symbol 18CD-4

* Consult Sales Office for Pricing