

2.1

NEMA Contactors and Starters

Freedom Series

2

Special Modifications

For Catalog Numbers AN19, AN16, AN59, AN59, AN56, CE15, CN15, CN35, CN55

Addition or Special Feature	Starter Size —NEMA									
	00	0	1/—	2	3	4	5	6	7	8
Control Circuit										
Extra auxiliary circuit, factory installed NO or NC—each contact ^{①②}	Consult sales office for pricing adders.									
Transient suppressor ^①	Consult sales office for pricing adders.									
Power Circuit										
Contactor/starter for ring lug capability—add Mod Code T16 to catalog number ^③ (Power terminals only, control terminals as standard) Standalone overload relays can not accept ring lugs on line side	Consult sales office for pricing adders.									
Factory Installed Dust Covers										
Factory installed C320DSTCVR—add Mod Code -53 to catalog number ^①						NA	NA	NA	NA	NA

Renewal Parts

For a complete listing of parts, refer to the Renewal Parts Publication Number referenced below.

For Catalog Numbers AN19, AN16, AN30, AN40, AN59, AN56, AN70, AN80, AN800, CN15, CN35 ^④ and CN55 Contactors and Starters (Size 00, 0)

Description	NEMA Size 00		NEMA Size 0	
	Series B1 Part No.	Series C1 Part No.	Series B1 Part No.	Series C1 Part No.
Renewal Parts Publication Number	22177	22177	22177	22177
Contact Kits				
Two-pole	⑤	⑤	⑤	⑤
Three-pole	⑤	⑤	⑤	⑤
Four-pole	⑤	⑤	⑤	⑤
Five-pole	⑤	⑤	⑤	⑤
Magnet Coils				
	Coil Suffix			
120V 60 Hz or 110V 50 Hz	A	9-2875-1	9-2875-1	9-2876-1
240V 60 Hz or 220V 50 Hz	B	9-2875-2	9-2875-2	9-2876-2
480V 60 Hz or 440V 50 Hz	C	9-2875-3	9-2875-3	9-2876-3
600V 60 Hz or 550V 50 Hz	D	9-2875-4	9-2875-4	9-2876-4
208V 60 Hz	E	9-2875-5	9-2875-5	9-2876-5
277V 60 Hz	H	9-2875-12	9-2875-12	9-2876-12
208/240V 60 Hz	J	9-2875-37	9-2875-37	9-2876-37
240V 50 Hz	K	9-2875-11	9-2875-11	9-2876-11
380–415V 50 Hz	L	9-2875-6	9-2875-6	9-2876-6
380V 50 Hz	L	—	—	—
415V 50 Hz	M	—	—	—
550V 50 Hz	N	—	—	—
24V 60 Hz—24V 50 Hz	T	9-2875-36	9-2875-36	9-2876-36
24V 60 Hz	T	—	—	—
24V 50 Hz	U	9-2875-36	9-2875-36	9-2876-36
32V 50 Hz	V	9-2875-16	9-2875-16	9-2876-16
48V 60 Hz	W	9-2875-8	9-2875-8	9-2876-8
48V 50 Hz	Y	9-2875-9	9-2875-9	9-2876-9
Magnet Frame Armature				
Lower magnet frame	⑤	⑤	⑤	⑤
Upper magnet frame	⑤	⑤	⑤	⑤

Notes

- ① These modifications are generally available in kit form at lower cost. See specific product sections for kit listings.
- ② Terminal extensions provided on Size 2 and up; not required for Size 1.
- ③ The T16 modifications are only available on C306 overloads and the following three-pole devices: CN15, CN55, AN16, AN56 and AN700 (separate winding only).
The 45 mm and 65 mm frames (NEMA Size 0–2) reversing devices (CN55B, CN55D, CN55G, AN56B, AN56D, AN56G, AN700 and AN700G) with the T16 modification are supplied without crossover wires.
- ④ CN35A = Size 00, CN35B and CN35D = Size 0, CN35G = Size 2, CN35K = Size 3, CN35N = Size 4, and CN35S = Size 5.
- ⑤ Replace with complete contactor.

6.1

Lighting Contactors

Open Control

6

Pneumatic Timers—Top Mounted

Attachment mounts on top of 10–60A lighting contactors (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.

Pneumatic Timer



Pneumatic Timers

Timing Range	Catalog Number
0.1 to 30 seconds	C320TP1
10 to 180 seconds	C320TP2

Solid-State Timers

Solid-State ON DELAY Timer—Side Mounted on CN35 Freedom Series Lighting Contactors through 60A

This timer is designed to be **wired in SERIES with the load** (typically a coil). When the START button is pushed (power applied to timer), the ON DELAY timing function starts. At the completion of the set timing period, timer and series wired load will both be energized.

Mounted Timer



Mounted Timer

Timing Range	Catalog Number ^{①②③}
0.1–1.0 seconds	C320TDN1_
1–30 seconds	C320TDN30_
30–300 seconds	C320TDN300_
5–30 minutes	C320TDN3000_

Maximum Ampere Ratings

Description	Volts AC			
	120	240	480	600
Make	30.0	15.0	7.5	6.0
Break	3.0	1.5	0.75	0.6

Renewal Parts

CN35 Lighting Contactors

Description	10A Series C1 Part No.	20A, 30A Series C1 Part No.	60A Series B1 Part No.	100A Part No.	200A Part No.	300A Series B1 Part No.
Contact Kits						
Two-pole	④	④	6-65-7	6-43-5	6-44	6-45
Three-pole	④	④	6-65-8	6-43-6	6-44-2	6-45-2
Four-pole	④	④	6-65-15	—	—	—
Five-pole	④	④	6-65-16	—	—	—
Magnet Coils						
	Coil Suffix					
120V 60 Hz or 110V 50 Hz	A	9-2875-1	9-2876-1	9-2703-1	9-2756-1	9-1891-1
240V 60 Hz or 220V 50 Hz	B	9-2875-2	9-2876-2	9-2703-2	9-2756-2	9-1891-2
480V 60 Hz or 440V 50 Hz	C	9-2875-3	9-2876-3	9-2703-3	9-2756-3	9-1891-3
600V 60 Hz or 550V 50 Hz	D	9-2875-4	9-2876-4	9-2703-4	9-2756-4	9-1891-4
208V 60 Hz	E	9-2875-5	9-2876-5	9-2703-9	9-2756-5	9-1891-13
277V 60 Hz	H	9-2875-12	9-2876-12	9-2703-7	9-2756-9	9-1891-26
208/240V 60Hz	J	9-2875-37	9-2876-37	—	—	—
240V 50 Hz	K	9-2875-11	9-2876-11	9-2703-14	9-2756-13	9-1891-20
380–415V 50 Hz	L	9-2875-6	9-2876-6	9-2703-8	—	—
380V 50 Hz	L	—	—	—	9-2756-12	9-1891-14
415V 50 Hz	M	—	—	—	9-2756-8	9-1891-21
550V 50 Hz	N	—	—	—	9-2756-14	9-1891-8
24V 60 Hz–24V 50 Hz	T	9-2875-36	9-2876-36	—	—	—
24V 60 Hz	T	—	—	9-2703-6	9-2756-6	9-1891-15
24V 50 Hz	U	9-2875-36	9-2876-13	9-2703-12	9-2756-11	9-1891-16
32V 50 Hz	V	9-2875-16	9-2876-16	9-2703-10	9-2756-10	—
48V 60 Hz	W	9-2875-8	9-2876-8	9-2703-11	9-2756-15	—
48V 50 Hz	Y	9-2875-9	9-2876-9	9-2703-13	9-2756-7	9-1891-18

Notes

- ① Add operating voltage suffix to catalog number. **A** = 120V, **B** = 240V, **E** = 208V
- ② Rated 0.5A pilot duty—not to be used on larger contactors.

- ③ Terminal connections are quick connects only. Two per side.
- ④ Replace with complete contactor.