

# 2.1

## NEMA Contactors and Starters

### Freedom Series

2

#### Solid-State Timers

##### **Solid-State ON DELAY Timer—Side Mounted on Freedom Series NEMA 00–2, IEC A–K and C25D, C25E and C25F Frame**

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.

#### Solid-State Timer



#### Mounted Timer Product Selection

Timing Range	Catalog Number <sup>①②③</sup>
0.1–1.0 seconds	<b>C320TDN1_</b>
1–30 seconds	<b>C320TDN30_</b>
30–300 seconds	<b>C320TDN300_</b>
5–30 minutes	<b>C320TDN3000_ <sup>④</sup></b>

#### Shorting Bar Kits

These kits provide phase-to-phase power connections of contactors for field assembly. The kits include bus

connections and mounting hardware. The shorting bars connect all three phases of a single contactor.

#### Shorting Bar Kits

Description	Catalog Number
NEMA Size 3, IEC Sizes L–N	<b>C321SB18</b>
NEMA Size 4, IEC Sizes A–S	<b>C321SB19</b>
NEMA Size 6, IEC Sizes T and U	<b>C321SB22</b>

#### Pneumatic Timers—Top Mounted

Attachment mounts on top of any NEMA Size 00–2 or IEC Size A–K Freedom Series starter or contactor (top mounted auxiliary contacts cannot be installed on device when timer is used). Timer

unit has 1NO-1NC isolated timed contacts—circuits in each pole must be the same polarity. Units are convertible from OFF to ON DELAY or vice-versa.

#### Pneumatic Timers



#### Pneumatic Timers

Timing Range	Catalog Number
0.1 to 30 seconds	<b>C320TP1</b>
10 to 180 seconds	<b>C320TP2</b>

#### Maximum Ampere Ratings

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

#### Locking Cover for Overload Relay—C306 Only

Snap-on transparent or opaque plastic panel for covering access port to the overload relay trip setting

dial—helps prevent accidental or unauthorized changes to trip and reset setting.

#### Locking Cover for Overlay Relay



#### Locking Cover for Overlay Relay

Description	Min. Ordering Quantity (Std. Pkg.)	Catalog Number
Clear cover, no accessibility	50	<b>C320PC3</b>
Gray cover, no accessibility, with Auto only nib	50	<b>C320PC4</b>
Gray cover, no accessibility, with Manual only nib	50	<b>C320PC5</b>
Gray cover with FLA dial accessibility, A, B, C, D positions and Auto only nib	50	<b>C320PC6</b>
Gray cover with FLA dial accessibility, A, B, C, D positions and Manual only nib	50	<b>C320PC7</b>

#### Notes

- ① Add operating voltage suffix to catalog number.  
**A** = 120V, **B** = 240V, **E** = 208V
- ② Rated 0.5 ampere pilot duty—not to be used on larger contactors.
- ③ Terminal connections are quick connects only. Two per side.
- ④ 240V operating voltage not available for C320TDN3000\_.