

32A Overload—C306DN3B

2



Relays—Thermal Overload

Product Description

C306 Overload Relays are designed for use with CE or CN non-reversing and reversing contactors. Four sizes are available for overload protection up to 144A.

Features

- Selectable manual or automatic reset operation
- Interchangeable heater packs adjustable $\pm 24\%$ to match motor FLA and calibrated for use with 1.0 and 1.15 service factor motors. Heater packs for 32A overload relay will mount in 75A overload relay—useful in derating applications such as jogging
- Class 10 or 20 heater packs
- Load lugs built into relay base
- Bimetallic, ambient compensated operated. Trip free mechanism
- Electrically isolated NO-NC contacts (pull RESET button to test). (Electrical ratings see table on **Page V5-T2-46**)
- Overload trip indication
- Shrouded or fingerproof terminals to reduce possibility of electrical shock

Contents

Description

<i>Description</i>	<i>Page</i>
Contactors—Non-Reversing and Reversing	V5-T2-4
Starters—Three-Phase Non-Reversing and Reversing, Full Voltage	V5-T2-10
Starters—Single-Phase Non-Reversing, Full Voltage, Bi-Metallic Overload	V5-T2-15
Accessories	V5-T2-21
Renewal Parts	V5-T2-30
Technical Data and Specifications	V5-T2-34
Relays—Thermal Overload	
Product Selection	V5-T2-39
Accessories	V5-T2-43
Modifications	V5-T2-43
Replacement Parts	V5-T2-44
Technical Data and Specifications	V5-T2-45
Dimensions	V5-T2-47
C440/ <i>XT</i> Electronic Overload Relay	V5-T2-48

Standards and Certifications

- Meets UL 508 single-phasing requirements
- UL listed, CSA certified and NEMA compliance



2.1

NEMA Contactors and Starters

Freedom Series

2

Heater Pack Selection

Heater packs H2001B to H2017B and H2101B to H2117B are to be used only with Series B overload relays Catalog Numbers C306DN3B (Part No. 10-7016) and C306GN3B (Part No. 10-7020). The load lugs are built into the overload relay

base to allow load wiring prior to heater pack installation. The previous heater design had integral load lugs. The Series B heater packs are electrically equivalent to the previous heater design. Heaters H2018-3 to H2024-3 have not changed.

Starters with Series B Overload Relays ①

NEMA—AN Type Size	Series	IEC—AE Type Size	Series
00-0	C	A-F	C
1-2	B	G-K	B
5	B	G-K	B
6	C	G-K	B
7-8	B	G-K	B

Heater Pack
H2001B–H2017B



Standard Trip—Class 20 Heater

Overload Relay Size	Motor Full Load Ampere Rating				Catalog Number ②
	Dial Position				
	A	B	C	D	
For Use with NEMA Sizes 00-0 Series C, NEMA Sizes 1-2 Series B; IEC Sizes A-F Series C, IEC Sizes G-K Series B					
32A or 75A	0.254	0.306	0.359	0.411	H2001B-3
	0.375	0.452	0.530	0.607	H2002B-3
	0.560	0.676	0.791	0.907	H2003B-3
	0.814	0.983	1.15	1.32	H2004B-3
	1.20	1.45	1.71	1.96	H2005B-3
	1.79	2.16	2.53	2.90	H2006B-3
	2.15	2.60	3.04	3.49	H2007B-3
	3.23	3.90	4.56	5.23	H2008B-3
	4.55	5.50	6.45	7.40	H2009B-3
	6.75	8.17	9.58	11.0	H2010B-3
	9.14	10.8	12.4	14.0	H2011B-3
	14.0	16.9	19.9	22.8	H2012B-3
	18.7	22.7	26.7	30.7	H2013B-3
23.5	28.5	33.5	38.5	H2014B-3	
For Use with NEMA Size 2, IEC Sizes G-K Only, Series B					
75A	29.0	34.0	39.1	44.1	H2015B-3
	39.6	45.5	51.5	57.4	H2016B-3
	53.9	60.9	67.9	74.9	H2017B-3

Notes

- ① The series of a starter is the last digit of the listed catalog number. Example: AN16DN0AB.
- ② Heater packs are shipped three to a carton. catalog numbers are for three heater packs.