

Factory Modifications

C306 Thermal Overload Relays with Mounting Adapter

Consists of a thermal overload relay mounted to a terminal base adapter — permits fast and easy installation.

Table 33-159. Product Selection

Description	Catalog Number	Price U.S. \$
C306DN3B + C306TB1 C306GN3B + C306TB2B	C306DT3B C306GT3B	

Accessories

DIN Rail and Panel Mounting Adapter

These adapters are required when component overload relays are to be separately mounted. The terminal base adapter includes line terminals and connects with the overload relays on Page 33-107.



Cat. No. C306TB1

Table 33-160. Product Selection

Description	Catalog Number	Price U.S. \$
For 32A Overload Relay For 75A Overload Relay	C306TB1 C306TB2B ①	

① This Series B adapter will accept Series A or B overload relays (C306GN3 or C306GN3B), C306TB2 can only be used with C306GN3.

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.



Overload Relay Cover

Table 33-161. Product Selection

Description	Min. Order Qty. (Std. Pkg.)	Catalog Number	Price U.S. \$
Clear cover, no accessibility	50	C320PC3	
Gray cover, no accessibility w/Auto only nib	50	C320PC4	
Gray cover, no accessibility, w/Manual only nib	50	C320PC5	
Gray cover with FLA dial accessibility, A, B, C, D positions and Auto only nib	50	C320PC6	
Gray cover with FLA dial accessibility, A, B, C, D positions and Manual only nib	50	C320PC7	

Replacement Parts

Heater Pack Replacement

The heater pack series is determined by the 6th character of the Catalog Number. Series A or prior heater packs (identified by either "A" or "-" as the 6th character) have built-in load lugs. Series B or later heater packs do not (load lugs are on overload relay). Replacement of Series A or earlier heater packs with Series B or later heater packs, requires the one time addition of Lug Adapter Kit C3606KAL1-3B to the Series A1 overload relay.



Superseded
Series A
Heater Pack



Series B
Heater Pack

Table 33-162. Heater Pack Replacement Requirements

Existing Heater Pack Catalog Numbers	Replacement Product Required
H2001-3 – H2013-3 H2001A-3 – H2013A-3	Lug Adapter Kit C3606KAL1-3B and Series B Heater Pack
H2001B-3 – H2013B-3	Series B Heater Pack
H2014-3 H2014A-3	When inventory is exhausted, replace with Lug Adapter Kit C3606KAL1-3B and Series B Heater Pack
H2014B-3	Series B Heater Pack
H2015-3 – H2017-3	When inventory is exhausted, replace with heater pack chosen from Table 33-163
H2015A-3 – H2017A-3	When inventory is exhausted, replace with Lug Adapter Kit C3606KAL1-3B and Series B Heater Pack
H2015B-3 – H2017B-3	Series B Heater Pack

Table 33-163. Heater Pack Ratings

Motor Full Load Ampere Rating				Order Heater Pack Catalog Number	Price U.S. \$
Dial Position					
A	B	C	D		
29.0	32.5	36.0	39.5	H2015B-3	
39.6	44.3	49.1	53.8	H2016B-3	
53.9	60.4	66.8	74.9	H2017B-3	

Relays — Thermal Overload

Table 33-169. Standard Trip — Class 20 Heater Selection

Overload Relay Size	Motor Full Load Ampere Rating				Catalog Number (Includes 3 Heater Packs) ①	Price U.S. \$
	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	.254	.306	.359	.411	H2001B-3	
	.375	.452	.530	.607	H2002B-3	
	.560	.676	.791	.907	H2003B-3	
	.814	.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	

For Use with NEMA Sizes 3 – 4, IEC Sizes L – N Only — Series A

105A or 144A	8.0	9.2	10.3	11.5	H2025-3	
	11.4	12.8	14.3	15.7	H2026-3	
	14.3	15.7	17.4	19.0	H2027-3	
	18.0	20.2	22.3	24.5	H2018-3	
	24.6	27.6	30.5	33.4	H2019-3	
	33.5	37.5	41.5	45.6	H2020-3	
	45.7	51.2	56.7	62.1	H2021-3	
	62.2	69.7	77.1	84.6	H2022-3	
	84.7	95.0	105.0	115.0	H2023-3	
	106.0	118.0	131.0	144.0	H2024-3	

For Use with Size 5 Starters — Series B and IEC P, R and S with 300/5 CT

32A ②	49	59	69	79	H2004B-3	
	72	87	103	118	H2005B-3	
	107	130	152	174	H2006B-3	
	129	156	182	209	H2007B-3	
	194	234	274	—	H2008B-3	

For Use with Size 6 Starters Only — Series B and IEC T – V with 600/5 CT

32A ②	144	174	205	235	H2005B-3	
	215	259	304	348	H2006B-3	
	258	312	365	419	H2007B-3	
	388	468	547	627	H2008B-3	

For Use with Size 7 Starters Only — Series B and IEC W – X with 1000/5 CT

32A ②	163	197	230	264	H2004B-3	
	240	290	342	392	H2005B-3	
	358	432	506	580	H2006B-3	
	430	520	608	698	H2007B-3	
	646	780	912	—	H2008B-3	

For Use with Size 8 Starters Only — Series B and IEC Z with 1500/5 CT

32A ②	244	295	345	396	H2004B-3	
	360	435	513	588	H2005B-3	
	537	648	759	870	H2006B-3	
	645	780	912	1047	H2007B-3	
	969	1170	1368	—	H2008B-3	

① Heater packs are shipped 3 to a carton. Catalog Numbers are for 3 heater packs.

② Sizes 5 – 8 and IEC P – Z use the 32A overload relay with current transformers.

Table 33-170. Fast Trip — Class 10 Heater Selection

Overload Relay Size	Motor Full Load Ampere Rating				Catalog Number (Includes 3 Heater Packs) ③	Price U.S. \$
	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	.260	.313	.367	.420	H2101B-3	
	.384	.464	.543	.623	H2102B-3	
	.570	.688	.806	.924	H2103B-3	
	.846	1.02	1.20	1.37	H2104B-3	
	1.28	1.55	1.83	2.10	H2105B-3	
	1.92	2.33	2.74	3.15	H2106B-3	
	2.30	2.79	3.28	3.77	H2107B-3	
	3.38	4.10	4.82	5.54	H2108B-3	
	4.96	6.03	7.09	8.16	H2109B-3	
	7.07	8.58	10.1	11.6	H2110B-3	
	9.60	11.2	12.8	14.4	H2111B-3	
	14.4	17.5	20.7	23.8	H2112B-3	
	18.7	21.8	25.0	28.1	H2113B-3	
	23.5	27.3	31.0	34.8	H2114B-3	

For Use with NEMA Size 2, IEC Sizes G – K Only — Series B

75A	28.3	32.6	37.0	41.3	H2115B-3	
	36.6	42.3	48.1	53.8	H2116B-3	
	53.8	60.8	67.9	74.9	H2117B-3	

For Use with Size 5 Starters Only — Series B and IEC P, R and S with 300/5 CT

32A ④	51	61	72	82	H2104B-3	
	77	93	110	126	H2105B-3	
	115	140	164	189	H2106B-3	
	138	167	197	226	H2107B-3	
	203	246	289	—	H2108B-3	

For Use with Size 6 Starters Only — Series B and IEC T – V with 600/5 CT

32A ④	154	186	220	252	H2105B-3	
	230	280	329	378	H2106B-3	
	276	335	394	452	H2107B-3	
	406	492	578	—	H2108B-3	

For Use with Size 7 Starters Only — Series B and IEC W – X with 1000/5 CT

32A ④	169	204	240	274	H2104B-3	
	256	310	366	420	H2105B-3	
	384	466	543	630	H2106B-3	
	460	558	656	754	H2107B-3	
	676	820	—	—	H2108B-3	

For Use with Size 8 Starters Only — Series B and IEC Z with 1500/5 CT

32A ④	254	306	360	411	H2104B-3	
	384	465	549	630	H2105B-3	
	576	699	822	945	H2106B-3	
	690	837	984	1131	H2107B-3	
	1014	1230	—	—	H2108B-3	

③ Heater packs are shipped 3 to a carton. Catalog Numbers are for 3 heater packs.

④ Sizes 5 – 8 and IEC P – Z use the 32A overload relay with current transformers.