

Overload selection

Table 2. Modification codes—solid-state overload for NEMA (Freedom) starters

For solid-state overload, add R63 or R64 modification code after the base catalog number (example, **ECN0501AAA-R63/B**).

NEMA [®] size	Full load current adjustment range (A)	Selectable class 10/20/30	
		Three-phase without ground fault auto/manual reset overload	Three-phase with ground fault auto/manual reset overload
00	1–5	R63/B	R64/B
	4–20	R63/C	R64/C
0 & 1	1–5	R63/B	R64/B
	4–20	R63/C	R64/C
	9–45	R63/D	R64/D
2	9–45	R63/D	R64/D
3	20–100	R63/E	R64/E
4	28–140	R63/F	R64/F
N/A	35–175	R63/F	R64/F
5	60–300	R63/G	R64/G
6	120–600	R63/H	R64/H

Table 3. Standard trip—class 20 heater selection

Overload relay size	Motor full load ampere rating				Catalog number (includes three heater packs)
	Dial position				
	A	B	C	D	
For use with NEMA sizes 00–0 Series C, 20 NEMA sizes 1–2 Series B					
32 A or 75 A	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 Series B					
75 A	29.0	29.0	29.0	29.0	H2015B-3
	39.6	39.6	39.6	39.6	H2016B-3
	53.9	53.9	53.9	53.9	H2017B-3
For use with NEMA sizes 3–4 Series A					
105 A	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

Modifications

Table 4. Auxiliary contacts

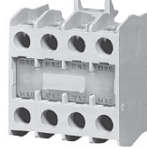
	Description	Catalog number
	Side mount	
	1NO	C320KGS1
	1NC	C320KGS2
	1NO-1NC	C320KGS3
	2NO	C320KGS4
	2NC	C320KGS5
	Top mount	
	1NO-1NC	C320KGT3
	2NO	C320KGT4
	2NC	C320KGT5
	3NO-1NC	C320KGT9
	2NO-2NC	C320KGT10
	1NO-3NC	C320KGT11

Table 5. Cover control kits

These kits may be used on combination and non-combination starters. There are provisions in both the non-combination and combination enclosures to allow for the addition of cover controls. The kits come with the pilot devices, nameplate, precut wires, and instructions for quick and easy installation. The kits are UL[®] Listed for field installation.

	Description	Catalog number
	Non-combination cover control (Box 1 and Box 2 only)	
	START/STOP pushbuttons with Red RUN pilot light (120 Vac) with Red RUN/Green OFF lights (120 Vac)	C600M1 C600M101A C600M102A
	HAND/OFF/AUTO selector switch with Red RUN pilot light (120 Vac) with Red RUN/Green OFF lights (120 Vac)	C600M12 C600M121A C600M122A
	Red RUN pilot light (120 Vac)	C600M9A
	Green OFF pilot light (120 Vac)	C600M10A
	Non-combination cover control (Box 3 and larger enclosures)	
	START/STOP pushbuttons with Red RUN pilot light (120 Vac) with Red RUN/Green OFF lights (120 Vac)	C400GK1 C400GK12A C400GK16A
	HAND/OFF/AUTO selector switch with Red RUN pilot light (120 Vac) with Red RUN/Green OFF lights (120 Vac)	C400GK3 C400GK32A C400GK36A
	Red RUN pilot light (120 Vac)	C400GK42A
	Green OFF pilot light (120 Vac)	C400GK41A
	Combination cover controls (NEMA 1, 3R, 4X & 12)	
	START/STOP pushbuttons	C400T1
	ON/OFF selector switch	C400T14
	HAND/OFF/AUTO selector switch	C400T12
	START pushbutton	C400T3
	OFF pushbutton	C400T5
	Red RUN pilot light (120 Vac)	C400T9A
	Green OFF pilot light (120 Vac)	C400T10A