

Overload Relay Heater Tables

Full Load Motor Amps, Single Phase, Trip Class 20 – Tables 213, 216

Selection

Table 213 for Class 14, 22 (1-Phase)

Full Load Amps			Heater Catalog No	List Price \$
Size 00, 0, 1	Size 1P	Size 2, 2½		
0.37–0.40	—	—	E3	
0.41–0.44	0.41–0.44	—	E4	
0.45–0.47	0.45–0.47	—	E5	
0.48–0.52	0.48–0.52	—	E6	
0.53–0.57	0.53–0.57	—	E7	
0.58–0.62	0.58–0.62	—	E8	
0.63–0.69	0.63–0.69	—	E9	
0.70–0.74	0.70–0.74	—	E11	
0.75–0.81	0.75–0.81	—	E12	
0.82–0.85	0.82–0.85	—	E13	
0.86–0.93	0.86–0.93	—	E14	
0.94–1.03	0.94–1.03	—	E16	
1.04–1.11	1.04–1.11	—	E17	
1.12–1.22	1.12–1.22	—	E18	
1.23–1.34	1.23–1.34	—	E23	
1.35–1.53	1.35–1.53	—	E24	
1.54–1.71	1.54–1.71	—	E26	
1.72–1.92	1.72–1.92	—	E27	
1.93–2.12	1.93–2.12	—	E28	
2.13–2.24	2.13–2.24	—	E29	
2.25–2.43	2.25–2.43	—	E31	
2.44–2.57	2.44–2.57	—	E32	
2.58–2.86	2.58–2.86	—	E33	
2.87–3.16	2.87–3.16	—	E34	
3.17–3.35	3.17–3.35	—	E36	
3.36–3.58	3.36–3.58	—	E37	
3.59–3.90	3.59–3.90	—	E38	
3.91–4.25	3.91–4.25	—	E39	
4.26–4.77	4.26–4.77	—	E41	
4.78–5.35	4.78–5.35	—	E42	
5.36–5.76	5.36–5.76	—	E44	
5.77–6.33	5.77–6.33	—	E46	
6.34–6.98	6.34–6.98	—	E47	
6.99–7.37	6.99–7.37	—	E48	
7.38–7.71	7.38–7.71	—	E49	
7.72–8.51	7.72–8.51	—	E50	
8.52–9.31	8.52–9.31	—	E51	
9.32–10.1	9.32–10.1	—	E52	
10.2–10.9	10.2–10.9	—	E53	
11.0–12.2	11.0–12.2	—	E54	
12.3–13.5	12.3–13.5	—	E55	
13.6–15.7	13.6–15.7	—	E56	
15.8–17.3	15.8–17.3	19.4–22.0	E57	
17.4–19.9	17.4–19.9	22.1–23.5	E60	
20.0–21.7	20.0–21.7	23.6–25.0	E61	
21.8–23.4	21.8–23.4	25.1–27.0	E62	
23.5–24.0	23.5–23.7	27.1–28.9	E65	
—	23.8–25.1	29.0–31.0	E66	
—	25.2–27.9	31.1–34.8	E67	
—	28.0–32.2	34.9–36.9	E69	
—	32.3–34.0	37.0–43.9	E70	
—	—	44.0–46.0	E72	
—	—	46.1–48.3	E73	
—	—	48.4–55.0	E74	
—	—	55.1–60.0	E76	

Table 216 for Class 48

Full Load Amps			Heater Catalog No	List Price \$
48DA, 48GA	48HA	48JA		
0.34–0.36	—	—	E3	
0.37–0.40	—	—	E4	
0.41–0.43	—	—	E5	
0.44–0.47	—	—	E6	
0.48–0.51	—	—	E7	
0.52–0.56	—	—	E8	
0.57–0.62	—	—	E9	
0.63–0.67	—	—	E11	
0.68–0.73	—	—	E12	
0.74–0.77	—	—	E13	
0.78–0.84	—	—	E14	
0.85–0.93	—	—	E16	
0.94–1.00	—	—	E17	
1.01–1.10	—	—	E18	
—	—	—	E19	
1.11–1.21	—	—	E23	
1.22–1.38	—	—	E24	
1.39–1.54	—	—	E26	
1.55–1.73	—	—	E27	
1.74–1.91	—	—	E28	
1.92–2.02	—	—	E29	
2.03–2.19	—	—	E31	
2.20–2.32	—	—	E32	
2.33–2.58	—	—	E33	
2.59–2.85	—	—	E34	
2.86–3.02	—	—	E36	
3.03–3.23	—	—	E37	
3.24–3.52	—	—	E38	
3.53–3.83	—	—	E39	
3.84–4.30	—	—	E41	
4.31–4.82	—	—	E42	
4.83–5.19	—	—	E44	
5.20–5.71	—	—	E46	
5.72–6.29	—	—	E47	
6.30–6.64	—	—	E48	
6.65–6.95	—	—	E49	
6.96–7.67	—	—	E50	
7.68–8.39	—	—	E51	
8.40–9.19	—	—	E52	
9.20–9.94	—	—	E53	
9.95–10.9	—	—	E54	
11.0–12.2	—	—	E55	
12.3–14.2	—	—	E56	
14.3–15.6	—	—	E57	
—	—	—	E59	
15.7–17.9	—	—	E60	
18.0–19.6	—	—	E61	
19.7–22.3	—	—	E62	
22.4–24.0	—	—	E65	
24.1–25.9	—	—	E66	
26.0–29.5	27.1–30.0	—	E67	
29.6–32.5	30.1–33.2	—	E69	
32.6–33.5	33.3–35.7	—	E70	
33.6–36.9	35.8–39.4	—	E71	
37.0–39.2	39.5–43.4	—	E72	
39.3–43.1	43.5–46.9	—	E73	
43.2–47.4	47.0–51.5	—	E74	
47.5–50.0	51.6–57.0	—	E76	
50.1–55.2	57.1–62.8	—	E77	
55.3–60.0	62.9–69.1	—	E78	
—	69.2–75.0	—	E79	
—	75.1–83.3	—	E80	
—	—	50.0–55.9	E88	
—	—	56.0–60.9	E89	
—	—	61.0–65.9	E91	
—	—	66.0–69.9	E92	
—	—	70.0–75.9	E93	
—	—	76.0–81.9	E94	
—	83.4–86.9	82.0–86.9	E96	
—	87.0–92.9	87.0–92.9	E97	
—	93.0–100.0	93.0–97.9	E98	
—	—	98.0–107.9	E99	
—	—	108.0–113.9	E101	
—	—	114.0–125.0	E102	
—	—	126.0–138.0	E103	
—	—	139.0–153.0	E104	
—	—	154.0–163.0	E106	
—	—	164.0–180.0	E107	

Overload Relay Heater Tables

Full Load Motor Amps, 3-Phase, Trip Class 20 – Tables 233, 238

Selection

Table 233 for Class 14, 17, 18, 22, 25, 26, 30, 32, 83, 84, 87 (3-Phase)

Full Load Amps					Heater Catalog No	List Price \$
Size 00, 0, 1	Size 1 1/4	Size 2, 2 1/2	Size 3, 3 1/2	Size 4		
0.38–0.40	—	—	—	—	E6	
0.41–0.43	—	—	—	—	E7	
0.44–0.48	—	—	—	—	E8	
0.49–0.53	—	—	—	—	E9	
0.54–0.57	—	—	—	—	E11	
0.58–0.62	—	—	—	—	E12	
0.63–0.66	—	—	—	—	E13	
0.67–0.72	—	—	—	—	E14	
0.73–0.80	—	—	—	—	E16	
0.81–0.85	—	—	—	—	E17	
0.86–0.92	—	—	—	—	E18	
0.93–0.99	—	—	—	—	E19	
1.00–1.08	—	—	—	—	E23	
1.09–1.23	—	—	—	—	E24	
1.24–1.37	—	—	—	—	E26	
1.38–1.54	—	—	—	—	E27	
1.55–1.69	—	—	—	—	E28	
1.70–1.80	—	—	—	—	E29	
1.81–1.94	—	—	—	—	E31	
1.95–2.07	—	—	—	—	E32	
2.08–2.26	—	—	—	—	E33	
2.27–2.54	2.27–2.54	—	—	—	E34	
2.55–2.69	2.55–2.69	—	—	—	E36	
2.70–2.88	2.70–2.88	—	—	—	E37	
2.89–3.14	2.89–3.14	—	—	—	E38	
3.15–3.40	3.15–3.40	—	—	—	E39	
3.41–3.81	3.41–3.81	—	—	—	E41	
3.82–4.26	3.82–4.25	—	—	—	E42	
4.27–4.62	4.26–4.62	—	—	—	E44	
4.63–5.09	4.63–5.09	—	—	—	E46	
5.10–5.61	5.10–5.61	—	—	—	E47	
5.62–5.91	5.62–5.91	—	—	—	E48	
5.92–6.15	5.92–6.15	—	—	—	E49	
6.16–6.70	6.16–6.70	—	—	—	E50	
6.71–7.54	6.71–7.54	—	—	—	E51	
7.55–8.29	7.55–8.29	—	—	—	E52	
8.30–8.99	8.30–8.99	—	—	—	E53	
9.00–9.85	9.00–9.85	—	—	—	E54	
9.86–10.4	9.86–10.4	—	—	—	E55	
10.5–12.0	10.5–12.0	10.5–12.0	—	—	E56	
12.1–13.6	12.1–13.6	12.1–13.6	—	—	E57	
13.7–15.6	13.7–15.6	13.7–15.6	—	—	E60	
15.7–17.0	15.7–17.0	15.7–17.1	—	—	E61	
17.1–18.4	17.1–19.4	17.2–19.4	—	—	E62	
18.5–19.4	19.5–20.9	19.5–20.9	—	—	E65	
19.5–21.3	21.0–22.2	21.0–22.2	—	—	E66	
21.4–24.4	22.3–25.3	22.3–25.3	—	—	E67	
24.5–25.9	25.4–26.9	25.4–26.9	30.0–33.5	—	E69	
26.0–27.0	27.0–30.2	27.0–30.2	33.6–36.4	—	E70	
—	—	—	36.5–39.6	—	E71	
—	30.3–33.3	30.3–33.3	—	—	E72	
—	33.4–36.0	33.4–35.3	39.7–43.6	—	E73	
—	—	—	43.7–46.5	—	E73A	
—	—	35.4–41.5	46.6–51.6	—	E74	
—	—	41.6–45.0	51.7–54.4	—	E76	
—	—	45.1–52.3	54.5–58.0	—	E77	
—	—	52.4–55.7	58.1–63.0	—	E78	
—	—	55.8–60.0	63.1–67.7	—	E79	
—	—	—	67.8–72.4	—	E80	
—	—	—	—	—	E88	
—	—	—	—	56.9–60.9	E89	
—	—	—	—	61.0–63.9	E91	
—	—	—	—	64.0–67.7	E92	
—	—	—	—	67.8–72.4	E93	
—	—	—	72.5–77.7	—	E94	
—	—	—	80.1–88.1	77.8–85.9	E96	
—	—	—	88.2–91.5	86.0–91.9	E97	
—	—	—	91.6–96.8	92.0–96.7	E98	
—	—	—	96.9–99.0	96.8–105	E99	
—	—	—	99.1–108.0	—	E101	
—	—	—	—	106–115	E102	
—	—	—	—	116–130	E103	
—	—	—	—	—	E104	

Table 238 for Class 48

Full Load Amps				Heater Catalog No	List Price \$
48DC	48GC	48HA	48JA		
0.30–0.32	—	—	—	E3	
0.33–0.35	—	—	—	E4	
0.36–0.38	—	—	—	E5	
0.39–0.41	—	—	—	E6	
0.42–0.44	—	—	—	E7	
0.45–0.49	—	—	—	E8	
0.50–0.54	—	—	—	E9	
0.55–0.58	—	—	—	E11	
0.59–0.63	—	—	—	E12	
0.64–0.67	—	—	—	E13	
0.68–0.73	—	—	—	E14	
0.74–0.81	—	—	—	E16	
0.82–0.87	—	—	—	E17	
0.88–0.94	—	—	—	E18	
0.95–1.00	—	—	—	E19	
1.01–1.10	—	—	—	E23	
1.11–1.26	—	—	—	E24	
1.27–1.40	—	—	—	E26	
1.41–1.58	—	—	—	E27	
1.59–1.74	—	—	—	E28	
1.75–1.85	—	—	—	E29	
1.86–1.99	—	—	—	E31	
2.00–2.11	—	—	—	E32	
2.12–2.31	—	—	—	E33	
2.32–2.59	—	—	—	E34	
2.60–2.75	—	—	—	E36	
2.76–2.95	—	—	—	E37	
2.96–3.21	—	—	—	E38	
3.22–3.48	—	—	—	E39	
3.49–3.89	—	—	—	E41	
3.90–4.35	—	—	—	E42	
4.36–4.73	—	—	—	E44	
4.74–5.21	—	—	—	E46	
5.22–5.74	—	—	—	E47	
5.75–6.05	—	—	—	E48	
6.06–6.46	—	—	—	E49	
6.47–6.95	—	—	—	E50	
6.96–8.09	—	—	—	E51	
8.10–9.29	—	—	—	E52	
9.30–10.4	—	—	—	E53	
—	—	—	—	E54	
10.5–10.9	—	—	—	E55	
11.0–12.0	—	—	—	E56	
12.1–14.5	—	—	—	E57	
14.6–16.8	—	—	—	E60	
16.9–18.4	16.9–18.4	—	—	E61	
18.5–20.9	18.5–20.9	—	—	E62	
21.0–22.5	21.0–22.5	—	—	E65	
22.6–24.3	22.6–24.7	—	—	E66	
24.4–27.2	24.8–27.2	27.1–30.0	—	E67	
27.3–29.2	27.3–29.2	30.1–33.2	—	E69	
29.3–30.0	29.3–32.0	33.3–35.7	—	E70	
—	32.1–34.9	35.8–39.4	—	E71	
—	—	39.5–43.4	—	E72	
—	35.0–37.8	43.5–46.9	—	E73	
—	37.9–41.7	—	—	E73A	
—	41.8–45.9	47.0–51.5	—	E74	
—	46.0–49.0	51.6–57.0	—	E76	
—	49.1–54.2	57.1–62.8	—	E77	
—	54.3–60.0	62.9–69.1	—	E78	
—	—	69.2–75.0	—	E79	
—	—	75.1–83.3	—	E80	
—	—	—	50.0–55.9	E88	
—	—	—	56.0–60.9	E89	
—	—	—	61.0–65.9	E91	
—	—	—	66.0–69.9	E92	
—	—	—	70.0–75.9	E93	
—	—	—	76.0–81.9	E94	
—	—	83.4–86.9	82.0–86.9	E96	
—	—	87.0–92.9	87.0–92.9	E97	
—	—	93.0–100.0	93.0–97.9	E98	
—	—	—	98.0–107.9	E99	
—	—	—	108–113.9	E101	
—	—	—	114–125.9	E102	
—	—	—	126–138.9	E103	
—	—	—	139–153.9	E104	
—	—	—	154–163.9	E106	
—	—	—	164–180.9	E107	