



CR123C, CR123R Manual Motor Starter Heaters

Manual Starters—Single-Phase and Polyphase

How To Select Heaters

Select proper Maximum Motor Full-Load Motor Ampere table per size, pole arrangement, and number of overload relays. One heater is required for each overload relay. If motor full-load amperes falls between two ratings, select heater for the higher rating.

The tables below give a proper size heater to trip the switch on approximately 125 percent motor current.

Listed values are for motors with 1.15-1.25 service factor. For motors with 1.0 service factor continuously, multiply full-load current of motor by 0.9 and use this value to select heater.

Contact nearest GE Industrial Systems—Electrical Distribution and Control Representative for recommendation for heaters to be used with definite-purpose motors.

For 1.35 service factor motors, multiply full-load current of motor by 1.15 and use this value to select heater(s).

Heaters for CR1062R, CR1062S Starters

NEMA Sizes M-0, M-1
Single-Phase, One Overload

Max. Motor Full-Load Amperes	General-Use Heater Catalog Number	Group Fusing Size M-0 Only [Ⓢ]	
		Heater Catalog Number	Max. Fuse Rating 115-230 V
0.34	CR123C036A	CR123R036A	60A
.37	CR123C039A	CR123R039A	60A
.42	CR123C043A	CR123R043A	60A
.47	CR123C048A	CR123R048A	60A
.52	CR123C054A	CR123R054A	60A
.57	CR123C060A	CR123R060A	60A
.63	CR123C066A	CR123R066A	60A
.69	CR123C071A	CR123R071A	60A
.77	CR123C078A	CR123R078A	60A
.87	CR123C087A	CR123R087A	60A
.97	CR123C097A	CR123R097A	60A
1.06	CR123C109A	CR123R109A	60A
1.18	CR123C118A	CR123R118A	60A
1.33	CR123C131A	CR123R131A	60A
1.47	CR123C148A	CR123R148A	60A
1.66	CR123C163A	CR123R163A	60A
1.78	CR123C184A	CR123R184A	60A
2.00	CR123C196A	CR123R196A	60A
2.18	CR123C220A	CR123R220A	60A
2.45	CR123C239A	CR123R239A	60A
2.76	CR123C268A	CR123R268A	60A
3.00	CR123C301A	CR123R301A	60A
3.27	CR123C326A	CR123R326A	60A
3.49	CR123C356A	CR123R356A	100A
3.86	CR123C379A	CR123R379A	100A
4.30	CR123C419A	CR123R419A	100A
4.88	CR123C466A	CR123R466A	100A
5.49	CR123C526A	CR123R526A	100A
5.85	CR123C592A	CR123R592A	100A
6.45	CR123C630A	CR123R630A	100A
7.22	CR123C695A	CR123R695A	100A
8.05	CR123C778A	CR123R778A	100A
8.88	CR123C867A	CR123R867A	100A
9.66	CR123C955A	CR123R955A	100A
10.5	CR123C104B	CR123C104B	100A
11.6	CR123C113B	CR123C113B	100A
12.7	CR123C125B	CR123C125B	100A
13.2	CR123C137B	CR123C137B	100A
15.1	CR123C151B	CR123C151B	100A
16.6	CR123C163B	CR123C163B	100A
17.6	CR123C180B	CR123C180B	100A
19.8 [Ⓢ]	CR123C198B	—	—
21.1 [Ⓢ]	CR123C214B	—	—
23.1 [Ⓢ]	CR123C228B	—	—
25.2 [Ⓢ]	CR123C250B	—	—

① Size M-1 only.
② Does not apply to NEMA Type 7 forms.

Heaters for CR1062R, CR1062S Starters

NEMA Sizes M-0, M-1
Three-Phase, Three Overloads

Max. Motor Full-Load Amperes	General-Use Heater Catalog Number	Group Fusing Size M-0 Only [Ⓢ]		
		Heater Catalog Number	Max. Fuse Rating	
			115-230V	460-600V
0.29	CR123C036A	CR123R036A	60A	30A
.31	CR123C039A	CR123R039A	60A	30A
.34	CR123C043A	CR123R043A	60A	30A
.40	CR123C048A	CR123R048A	60A	30A
.44	CR123C054A	CR123R054A	60A	30A
.48	CR123C060A	CR123R060A	60A	30A
.52	CR123C066A	CR123R066A	60A	30A
.58	CR123C071A	CR123R071A	60A	30A
.64	CR123C078A	CR123R078A	60A	30A
.71	CR123C087A	CR123R087A	60A	30A
.81	CR123C097A	CR123R097A	60A	30A
.89	CR123C109A	CR123R109A	60A	30A
.98	CR123C118A	CR123R118A	60A	30A
1.12	CR123C131A	CR123R131A	60A	30A
1.22	CR123C148A	CR123R148A	60A	30A
1.38	CR123C163A	CR123R163A	60A	30A
1.48	CR123C184A	CR123R184A	60A	30A
1.66	CR123C196A	CR123R196A	60A	30A
1.80	CR123C220A	CR123R220A	60A	30A
2.03	CR123C239A	CR123R239A	60A	30A
2.28	CR123C268A	CR123R268A	60A	30A
2.47	CR123C301A	CR123R301A	60A	30A
2.71	CR123C326A	CR123R326A	60A	30A
2.87	CR123C356A	CR123R356A	60A	30A
3.18	CR123C379A	CR123R379A	60A	30A
3.54	CR123C419A	CR123R419A	100A	30A
3.89	CR123C466A	CR123R466A	100A	30A
4.51	CR123C526A	CR123R526A	100A	30A
4.90	CR123C592A	CR123R592A	100A	30A
5.30	CR123C630A	CR123R630A	100A	30A
5.94	CR123C695A	CR123R695A	100A	30A
6.70	CR123C778A	CR123R778A	100A	—
7.36	CR123C867A	CR123R867A	100A	—
7.98	CR123C955A	CR123R955A	100A	—
8.59	CR123C104B	CR123C104B	100A	—
9.46	CR123C113B	CR123C113B	100A	—
10.3	CR123C125B	CR123C125B	100A	—
11.7	CR123C137B	CR123C137B	100A	—
12.6	CR123C151B	CR123C151B	100A	—
13.8	CR123C163B	CR123C163B	100A	—
15.4	CR123C180B	CR123C180B	100A	—
16.6	CR123C198B	CR123C198B	100A	—
17.4	CR123C214B	CR123C214B	100A	—
19.4 [Ⓢ]	CR123C228B	—	—	—
20.6 [Ⓢ]	CR123C250B	—	—	—
22.0 [Ⓢ]	CR123C273B	—	—	—
25.3 [Ⓢ]	CR123C303B	—	—	—

Heaters for CR1062T Starters

NEMA Size M-1P
Single-Phase, One Overload

Maximum Motor Full-Load Amperes	Heater Catalog Number
8.56	CR123C778A
9.43	CR123C867A
10.3	CR123C955A
11.0	CR123C104B
12.1	CR123C113B
13.2	CR123C125B
15.0	CR123C137B
16.2	CR123C151B
17.7	CR123C163B
19.7	CR123C180B
21.2	CR123C198B
22.2	CR123C214B
24.9	CR123C228B
26.4	CR123C250B
30.0	CR123C273B
32.7	CR123C303B
34.0	CR123C330B

Reference:
Heater Selection Guide GET-2681

7 FULL VOLTAGE MANUAL STARTERS

CR123C, CR123F Motor Starter Heaters and Panel-Mounted Overload Relay Heaters

1 NEMA FULL VOLTAGE STARTERS

Heater Tables—NEMA Sizes 6-9

Information shown in tables for full voltage starters can be used by customer to select heaters for Size 6-9 combination starters also. However, for these combination forms, the factory will verify selection and install the required heaters based on available motor data.

Catalog Number	List Price Each, GO-10H
CR123C (All) CR123F (All)	\$9.00 9.00

All CR123C and 123F heaters are packaged three to a carton. Items of these heaters, being ordered for either customer's stock or any other purpose, are to be specified in multiples of three (such as 3, 6, 9, 12, 15, etc.). Minimum order quantity is three.

NEMA Sizes 6-9

CR306HH—Size 6 Three Heaters Required		CR386J—Size 7 Three Heaters Required		CR386K—Size 8 Three Heaters Required		CR386L—Size 9 Three Heaters Required	
Maximum Motor Amperes	Heater Catalog Number	Maximum Motor Amperes	Heater Catalog Number	Maximum Motor Amperes	Heater Catalog Number	Maximum Motor Amperes	Heater Catalog Number
197	CR123C220A	387	CR123C326A	516	CR123C301A	1075	CR123C301A
214	CR123C239A	461	CR123C356A	580	CR123C326A	1210	CR123C326A
238	CR123C268A	515	CR123C379A	690	CR123C356A	1440	CR123C356A
258	CR123C301A	565	CR123C419A	772	CR123C379A	1610	CR123C379A
290	CR123C326A	622	CR123C466A	846	CR123C419A	1765	CR123C419A
346	CR123C356A	688	CR123C526A	934	CR123C466A	1950	CR123C466A
387	CR123C379A	763	CR123C592A	1030	CR123C526A	2150	CR123C526A
424	CR123C419A	810	CR123C630A	1147	CR123C592A	2250	CR123C592A
467	CR123C466A			1215	CR123C630A		
516	CR123C526A						
540	CR123C592A						

Overload Relays

For CR324 Standard and Ambient Compensated Block Overloads — Panel-Mounted

Three Heaters						Three Heaters					
Maximum Motor Full-Load Amperes	Heater Catalog Number	Maximum Fuse Rating	Maximum Motor Full-Load Amperes	Heater Catalog Number	Maximum Fuse Rating	Maximum Motor Full-Load Amperes	Heater Catalog Number	Maximum Fuse Rating	Maximum Motor Full-Load Amperes	Heater Catalog Number	Maximum Fuse Rating
CR324C (Size 0, 1)						CR324D (Size 2) (Cont'd)					
0.39	CR123C054A	3	3.89	CR123C466A	15	14.4	CR123C163B	60	28.0	CR123C303B	100
0.42	CR123C060A	3	4.30	CR123C526A	15	16.3	CR123C180B	60	32.1	CR123C330B	110
0.45	CR123C066A	3	4.77	CR123C592A	15	17.3	CR123C198B	60	35.9	CR123C366B	125
0.51	CR123C071A	3	5.14	CR123C630A	20	19.3	CR123C214B	70	41.5	CR123C400B	150
0.56	CR123C078A	3	5.63	CR123C695A	20	20.9	CR123C228B	80	43.4	CR123C440B	150
0.65	CR123C087A	3	6.26	CR123C778A	25	22.9	CR123C250B	90	45.0	CR123C460B	150
0.73	CR123C097A	3	7.15	CR123C867A	25	24.7	CR123C273B	90			
0.81	CR123C109A	3	7.58	CR123C955A	30						
0.90	CR123C118A	3	8.39	CR123C104B	30						
1.00	CR123C131A	3	9.11	CR123C113B	35						
1.10	CR123C148A	3	9.67	CR123C125B	35						
1.21	CR123C163A	3	11.0	CR123C137B	40	18.0	CR123F233B	70	44.4	CR123F567B	175
1.35	CR123C184A	3	11.9	CR123C151B	45	20.5	CR123F243B	80	48.4	CR123F614B	175
1.50	CR123C196A	6	14.3	CR123C163B	50	21.7	CR123F270B	80	52.4	CR123F658B	200
1.64	CR123C220A	6	16.1	CR123C180B	60	25.1	CR123F300B	90	57.0	CR123F719B	225
1.78	CR123C239A	6	17.2	CR123C198B	60	27.0	CR123F327B	100	64.5	CR123F772B	225
1.98	CR123C268A	6	19.2	CR123C214B ①	70	30.5	CR123F357B	110	68.8	CR123F848B	250
2.15	CR123C301A	6	20.6	CR123C228B ①	80	32.5	CR123F395B	125	75.7	CR123F914B	275
2.42	CR123C326A	6	21.8	CR123C250B ①	80	33.9	CR123F430B	125	86.2	CR123F104C	275
2.88	CR123C356A	10	23.4	CR123C273B ①	80	38.9	CR123F487B	150	90.0	CR123F114C	300
3.22	CR123C379A	12	26.1	CR123C303B ①	90						
3.53	CR123C419A	12	27.0	CR123C330B ①	90						
CR324D (Size 2)						CR324E (Size 3)					
5.14	CR123C630A	20	8.39	CR123C104B	30	30.5	CR123F357B	100	68.6	CR123F848B	250
5.63	CR123C695A	20	9.11	CR123C113B	35	32.5	CR123F395B	125	75.7	CR123F914B	275
6.26	CR123C778A	20	9.67	CR123C125B	35	33.9	CR123F430B	125	86.2	CR123F104C	275
7.15	CR123C867A	25	11.0	CR123C137B	40	38.9	CR123F487B	150	93.0	CR123F114C	300
7.58	CR123C955A	30	12.0	CR123C151B	45	44.4	CR123F567B	175	109.0	CR123F118C	350
						48.4	CR123F614B	175	123.0	CR123F133C	400
						52.4	CR123F658B	200	131.0	CR123F149C	400
						57.0	CR123F719B	225	135.0	CR123F161C	400
						64.5	CR123F772B	225			
CR324F (Size 4)											

① Size 1 only.