

GE Heater Selection Information

To prevent overloading the starter, do not select heater(s) for a motor of larger rating than the maximum given on the nameplate for the starter. For continuous rated motors, with a service factor of 1.15 to 1.25, select the heater with maximum motor amperes equal to or immediately greater than the motor full-load current (provides a maximum of 125 percent protection). For continuous rated motors with no service factor, multiply the full-load current of the motor by 0.90 and use this value to select the heater.

How to Select Heaters

The table below should be used to determine which column of motor full load amperes applies for heater selection. Select in order, the base catalog number, the NEMA type of enclosure, and the column to be used in the proper table by NEMA size. If full-load amperes of the motor falls between two ratings, select heaters for the higher rating.

Base Catalog Number Starter/Overload Relay	Description	NEMA Type Enclosure	Quantity Heaters Required	Heater Table Column (See tables)
CR306	Single phase, 2 pole, Size 00-2-----	Open	1	A
	Single phase, 2 pole, Size 00-2-----	1,3R, 4, 12	1	B
	Single phase, 2 pole, Size 3-----	Open	2	A
	Single phase, 2 pole, Size 3-----	1 3R, R, 12	2	B
CR306	3 Phase, 3 pole, 3-leg protection standard, size 00-5-----	0	0	C
	ambient compensated, size 00,0,1,2 &5	open	3	C
	ambient compensated, size 3-----	open	3	D
	ambient compensated, size4-----	open	3	E
CR306,CR307,CR308,CR387	3 Phase, 3 pole, 3-leg protection standard, size 00-5	0	0	D
	ambient compensated, size 00,0,1,2 &5	1,3R,4,12	3	C
	ambient compensated, size 3	1,3R,4,12	3	D
	ambient compensated, size4	1,3R,4,12	3	E
CR309	3 Phase, 3 pole, 3-leg protection standard, size 00-5	open	3-Reverser 6-Two-speed	C
	ambient compensated, size 00,0,1,2 &5	open		C
	ambient compensated, size 3	open		D
	ambient compensated, size4	open		E
CR309,CR310,CR311,CR390	3 Phase, 3 pole, 3-leg protection standard, size 00-5	0	3-Reverser 6-Two-speed	D
	ambient compensated, size 00,0,1,2 &5	1,3R,4,12		C
	ambient compensated, size 3	1,3R,4,12		D
	ambient compensated, size 3	1,3R,4,12		E

	ambient compensated, size4			
CR324	Panel mounted	See Tables		
All NEMA Sizes 6-9	3 phase, 3-leg protection, standard	See Tables		
CR124	Single element, panel mounted	See Tables		
CR124	Single element, ambient compensated, standard and quick trip	See Tables		

CR123C, CR123F Motor Starter Heaters

NEMA SIZES 00, 0 and 1

Catalog Number	Maximum Motor - Full Load Amps			
	A	B	C	D
CR123C054A	0.48	0.46	0.45	0.43
CR123C060A	0.55	0.50	0.49	0.48
CR123C066A	0.57	0.57	0.53	0.53
CR123C071A	0.65	0.62	0.59	0.58
CR123C078A	0.69	0.68	0.65	0.64
CR123C087A	0.83	0.80	0.76	0.74
CR123C097A	0.97	0.91	0.84	0.84
CR123C109A	1.03	0.99	0.93	0.92
CR123C118A	1.12	1.09	1.04	1.02
CR123C131A	1.26	1.22	1.15	1.10
CR123C148A	1.40	1.31	1.27	1.23
CR123C163A	1.46	1.46	1.39	1.38
CR123C184A	1.63	1.59	1.55	1.49
CR123C196A	1.79	1.74	1.73	1.67
CR123C220A	1.97	1.93	1.89	1.79
CR123C239A	2.25	2.13	2.05	1.98
CR123C268A	2.43	2.37	2.28	2.24
CR123C301A	2.60	2.52	2.47	2.43
CR123C326A	2.96	2.87	2.79	2.75
CR123C356A	3.57	3.39	3.31	3.25
CR123C379A	3.86	3.59	3.70	3.43
CR123C419A	4.43	4.31	4.06	4.03
CR123C466A	4.87	4.57	4.47	4.43
CR123C526A	5.37	5.31	4.95	4.94
CR123C592A	5.99	5.86	5.49	5.36
CR123C630A	6.39	6.19	5.91	5.77
CR123C695A	6.87	6.61	6.47	6.35
CR123C778A	7.71	7.61	7.20	6.92
CR123C867A	8.72	8.46	8.22	7.99
CR123C955A	9.50	9.35	8.72	8.47

NEMA SIZE 2

Catalog Number	Maximum Motor - Full Load Amps			
	A	B	C	D
CR123C592A	5.92	5.79	-	-
CR123C630A	6.23	6.12	5.85	5.72
CR123C695A	6.63	6.49	6.47	6.30
CR123C778A	7.72	7.59	7.35	7.04
CR123C867A	8.96	8.71	8.06	7.91
CR123C955A	9.92	9.19	9.03	8.80
CR123C104B	10.4	10.1	9.61	9.27
CR123C113B	11.7	11.2	10.5	9.99
CR123C125B	12.1	11.9	11.6	11.1
CR123C137B	13.5	12.6	12.5	12.1
CR123C151B	14.7	14.5	13.6	13.1
CR123C163B	18.3	17.7	16.7	15.5
CR123C180B	20.1	19.1	17.9	16.8
CR123C198B	22.3	21.4	18.7	18.0
CR123C214B	25.0	22.9	20.4	19.7
CR123C228B	27.7	24.7	22.7	21.6
CR123C250B	29.3	25.9	24.7	23.9
CR123C273B	30.7	27.1	26.3	25.5
CR123C303B	32.7	30.2	29.5	28.2
CR123C330B	35.6	34.8	32.5	31.6
CR123C366B	39.4	38.7	36.7	34.7
CR123C400B	45.0	45.0	41.9	37.8
CR123C440B	-	-	43.2	40.6
CR123C460B	-	-	45.0	45.0

NEMA SIZE 3

Catalog Number	Maximum Motor - Full Load Amps			
	A	B	C	D
CR123F199B	20.2	19.4	-	-
CR123F218B	21.0	20.1	-	-
CR123F233B	21.8	21.1	19.3	18.4
CR123F243B	24.5	24.6	22.1	21.1

NEMA SIZE 4

Catalog Number	Maximum Motor - Full Load Amps		
	C	D	E
CR123F357B	32.2	32.0	32.0
CR123F395B	34.0	34.2	34.2
CR123F430B	36.8	36.7	36.7
CR123F487B	44.6	43.9	43.9
CR123F567B	48.4	46.6	46.6
CR123F614B	53.9	52.6	52.6
CR123F658B	57.4	55.6	55.6
CR123F719B	60.0	58.7	58.7
CR123F772B	69.5	67.1	67.1
CR123F848B	71.7	70.6	70.6
CR123F914B	79.9	76.3	76.3
CR123F104C	92.3	88.7	88.7
CR123F114C	97.0	93.4	93.4
CR123F118C	108	102	105
CR123F133C	118	110	114
CR123F149C	131	122	12
CR123F161C	135	131	131
CR123F174C	-	135	135

NEMA SIZE 5

Catalog Number	Maximum Motor - Full Load Amps	
	C	D
CR123C592A	118	115
CR123C630A	128	125
CR123C695A	138	135
CR123C778A	155	151
CR123C867A	168	164

CR123C104B	10.5	10.4	9.67	9.19
CR123C113B	11.7	11.3	10.4	10.0
CR123C125B	12.2	11.9	11.0	10.7
CR123C137B	13.5	13.0	12.4	12.0
CR123C151B	15.1	14.5	13.2	12.9
CR123C163B	17.5	17.4	15.4	15.1
CR123C180B	18.9	18.6	17.1	16.3
CR123C198B	20.8	20.5	18.1	17.9
CR123C214B	22.4	22.3	20.0	19.7
CR123C228B	25.5	25.7	22.5	21.2
CR123C250B	26.2	25.7	22.5	22.3
CR123C273B	27.0	27.0	23.9	22.3
CR123C303B	-	-	26.3	25.5
CR123C330B	-	-	27.0	27.0

NEMA SIZE 1P

Catalog Number	Maximum Motor - Full Load Amps	
	A	B
CR123C151B	14.2	14.2
CR123C163B	17.3	17.3
CR123C180B	18.7	18.7
CR123C198B	20.6	20.6
CR123C214B	22.5	22.5
CR123C228B	24.7	24.7
CR123C250B	25.5	25.5
CR123C273B	26.7	26.7
CR123C303B	27.9	27.9
CR123C330B	32.1	32.1
CR123C366B	36.0	36.0

					CR123C955A	184	179
CR123F270B	25.7	25.2	23.4	22.1	CR123C104B	200	195
CR123F300B	29.2	29.2	27.0	26.1	CR123C113B	221	215
CR123F327B	33.5	32.8	29.1	28.0	CR123C125B	237	231
CR123F357B	37.0	35.1	31.8	31.3	CR123C137B	262	255
CR123F395B	39.2	38.4	33.9	33.3	CR123C151B	270	270
CR123F430B	42.7	40.4	37.6	34.3			
CR123F487B	45.7	45.7	41.9	40.9			
CR123F567B	48.4	48.9	47.7	44.7			
CR123F614B	54.9	54.7	52.1	51.0			
CR123F658B	62.7	58.6	55.8	52.0			
CR123F719B	67.5	63.4	59.7	55.4			
CR123F772B	77.1	72.3	68.1	63.3			
CR123F848B	81.5	76.6	71.5	66.1			
CR123F914B	86.3	83.8	78.2	73.5			
CR123F104C	90.0	90.0	87.5	82.2			
CR123F114C	-	-	90.0	90.0			

NEMA SIZE 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	Heater Catalog	Maximum Motor	Heater Catalog	Maximum Motor	Heater Catalog Number	Maximum Motor	Heater Catalog

Amperes	Number	Amperes	Number	Amperes		Amperes	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						

CR123C, CR123F Panel-mounted Overload Relay Heaters

For CR324 Standard and Ambient Compensated Block Overloads - Panel Mounted

Three Heaters						Three Heaters					
Max Motor Full-load Amps	Heater Catalog Number	Max Fuse Rating	Max Motor Full-load Amps	Heater Catalog Number	Max Fuse Rating	Max Motor Full-load Amps	Heater Catalog Number	Max Fuse Rating	Max Motor Full-load Amps	Heater Catalog Number	Max 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	CR324E (Size 3)					
0.90	CR123C118A	3	8.39	CR123C104B	30	18.0	CR123F233B	70	44.4	CR123F567B	175
1.00	CR123C131A	3	9.11	CR123C113B	35	20.5	CR123F243B	80	48.4	CR123F614B	175
1.10	CR123C148A	3	9.67	CR123C125B	35	21.7	CR123F270B	80	52.4	CR123F658B	200
1.21	CR123C163A	3	11.0	CR123C137B	40	25.1	CR123F300B	90	57.0	CR123F719B	225
1.35	CR123C184A	3	11.9	CR123C151B	45	27.0	CR123F327B	100	64.5	CR123F772B	225
1.50	CR123C196A	6	14.3	CR123C163B	50	30.5	CR123F357B	110	68.8	CR123F848B	250
1.64	CR123C220A	6	16.1	CR123C180B	60	32.5	CR123F395B	125	75.7	CR123F914B	275
1.78	CR123C239A	6	17.2	CR123C198B	60	33.9	CR123F430B	125	86.2	CR123F104C	275
1.98	CR123C268A	6	19.2	CR123C214B*	70	38.9	CR123F487B	150	90.0	CR123F114C	300
2.15	CR123C301A	6	20.6	CR123C228B*	80	CR324F (Size 4)					

2.42	CR123C326A	6	21.8	CR123C250B*	80	30.5	CR123F357B	100	68.6	CR123F848B	250
2.88	CR123C356A	10	23.4	CR123C273B*	80	32.5	CR123F395B	125	75.7	CR123F914B	275
3.22	CR123C379A	12	26.1	CR123C303B*	90	33.9	CR123F430B	125	86.2	CR123F104C	275
3.53	CR123C419A	12	27.0	CR123C330B*	90	38.9	CR123F487B	150	93.0	CR123F114C	300
CR324D (Size 2)						44.4	CR123F567B	175	109.0	CR123F118C	350
5.14	CR123C630A	20				48.4	CR123F614B	175	123.0	CR123F133C	400
5.63	CR123C695A	20				52.4	CR123F658B	200	131.0	CR123F149C	400
6.26	CR123C778A	20				57.0	CR123F719B	225	135.0	CR123F161C	400
7.15	CR123C867A	25				64.5	CR123F772B	225			
7.58	CR123C955A	30									

* Size 1 only

Max Motor Full-load Amps	Heater Catalog Number	Max Motor Full-load Amps	Heater Catalog Number	Max Motor Full-load Amps	Heater Catalog Number	Max Motor Full-load Amps	Heater Catalog Number
For CR124C (Size 0,1)		For CR124C (Size 0,1)		For CR124D (Size 2) (Cont'd)		For CR124F (Size 4) (Cont'd)	
0.33	CR123C036A	6.83	CR123C695A	24.9	CR123C228B	22.9	CR123F233B
.37	CR123C039A	7.70	CR123C778A	27.3	CR123C250B	24.8	CR123F243B
.41	CR123C043A	8.48	CR123C867A	29.7	CR123C273B	27.2	CR123F270B
.46	CR123C048A	9.19	CR123C955A	33.2	CR123C303B	30.0	CR123F300B
.52	CR123C054A	9.92	CR123C104B	39.0	CR123C330B	33.0	CR123F327B
.57	CR123C060A	11.1	CR123C113B	45.0	CR123C366B	36.2	CR123F357B
.61	CR123C066A	12.2	CR123C125B	For CR124E (Size 3)		40.0	CR123F395B
.67	CR123C071A	13.5	CR123C137B	17.2	CR123F181B	44.0	CR123F430B
.75	CR123C078A	14.6	CR123C151B	19.0	CR123F199B	49.6	CR123F487B
.84	CR123C087A	16.1	CR123C163B	21.0	CR123F218B	56.5	CR123F567B
.94	CR123C097A	17.9	CR123C180B	22.9	CR123F233B	64.2	CR123F614B
1.03	CR123C109A	19.3	CR123C198B*	24.8	CR123F243B	71.8	CR123F658B
1.14	CR123C118A	20.6	CR123C214B*	27.2	CR123F270B	76.4	CR123F719B
1.30	CR123C131A	22.6	CR123C228B*	30.0	CR123F300B	86.6	CR123F772B
1.42	CR123C148A	24.8	CR123C250B*	33.0	CR123F327B	94.7	CR123F848B
1.61	CR123C163A	27.0	CR123C273B*	36.2	CR123F357B	103	CR123F914B
1.72	CR123C184A	For CR124D (Size 2)		40.0	CR123F395B	115	CR123F104C
1.93	CR123C196A	6.63	CR123C695A	44.0	CR123F430B	130	CR123F114C
2.10	CR123C220A	7.59	CR123C778A	48.4	CR123F487B	135	CR123F118C
2.34	CR123C239A	8.39	CR123C867A	53.3	CR123F567B	For CR124G (Size 5)**	
2.64	CR123C268A	9.20	CR123C955A	58.6	CR123F614B	89	CR123F395B
2.86	CR123C301A	9.93	CR123C104B	64.4	CR123F658B	93	CR123F430B

3.13	CR123C326A	11.2	CR123C113B	71.3	CR123F719B	100	CR123F487B
3.32	CR123C356A	12.5	CR123C125B	78.0	CR123F772B	110	CR123F567B
3.68	CR123C379A	14.1	CR123C137B	86.0	CR123F848B	120	CR123F614B
4.08	CR123C419A	15.5	CR123C151B	90.0	CR123F914B	132	CR123F658B
4.61	CR123C466A	17.4	CR123C163B	For CR124F (Size 4)		145	CR123F719B
5.21	CR123C526A	19.8	CR123C180B	17.2	CR123F181B	160	CR123F772B
5.62	CR123C592A	21.2	CR123C198B	19.0	CR123F199B	176	CR123F848B
6.12	CR123C630A	22.7	CR123C214B	21.0	CR123F218B	191	CR123F914B
						213	CR123F104C
						237	CR123F114C
						258	CR123F118C
						270	CR123F133C

* For use on Size 1 only

** Two heaters required

CR123K, CR123L Panel-mounted Overload Relay Heaters

Standard-trip Overload Heaters

Maximum Motor Full-load Amperes					Heater Catalog Number
CR124 K (Size 1)	CR1 24L (Size 2)	CR124 M (Size 3)	CR124 N (Size 4)	CR124 P (Size 5)	
1.07	-	-	-	-	CR123K123A
1.19	-	-	-	-	CR123K135A
1.31	-	-	-	-	CR123K150A
1.45	-	-	-	-	CR123K165A
1.59	-	-	-	-	CR123K182A
1.77	-	-	-	-	CR123K200A
1.98	-	-	-	-	CR123K222A
2.21	-	-	-	-	CR123K249A
2.40	-	-	-	-	CR123K277A
2.62	-	-	-	-	CR123K301A
2.89	-	-	-	-	CR123K329A
3.17	-	-	-	-	CR123K362A
3.49	-	-	-	69.4	CR123K398A
3.82	-	-	-	76.8	CR123K438A
4.21	-	-	-	84.7	CR123K479A
4.65	4.65	-	-	99.2	CR123K527A
5.13	5.13	-	-	108	CR123K582A
5.69	5.69	-	-	120	CR123K642A
6.32	6.32	-	-	133	CR123K713A
6.99	6.99	-	-	144	CR123K791A
7.69	7.69	-	-	156	CR123K875A
8.37	8.37	-	-	167	CR123K963A
9.13	9.13	-	-	177	CR123K105B
9.96	9.96	-	-	199	CR123K114B
10.8	10.8	-	-	219	CR123K125B
11.7	11.7	-	-	242	CR123K136B
12.9	12.9	-	-	267	CR123K148B
14.1	14.1	-	-	270	CR123K163B
15.4	15.4	-	-	-	CR123K178B

Quick-trip Overload Heaters

Maximum Motor Full-load Amperes					Heater Catalog Number
CR124 K (Size 1)	CR1 24L (Size 2)	CR12 4M (Size 3)	CR124 N (Size 4)	CR124 P (Size 5)	
1.53	-	-	-	-	CR123L174A
1.68	-	-	-	-	CR123L193A
1.84	-	-	-	-	CR123L211A
2.03	-	-	-	-	CR123L232A
2.25	-	-	-	-	CR123L255A
2.47	-	-	-	-	CR123L282A
2.73	-	-	-	-	CR123L310A
3.03	-	-	-	-	CR123L343A
3.35	-	-	-	-	CR123L380A
3.69	-	-	-	73.9	CR123L420A
4.07	-	-	-	81.6	CR123L463A
4.48	-	-	-	89.6	CR123L510A
4.93	-	-	-	99.2	CR123L560A
5.43	5.43	-	-	108	CR123L618A
5.99	5.99	-	-	119	CR123L680A
6.59	6.59	-	-	131	CR123L750A
7.27	7.27	-	-	144	CR123L825A
7.99	7.99	-	-	159	CR123L910A
8.87	8.87	-	-	177	CR123L100B
9.76	9.76	-	-	194	CR123L111B
10.7	10.7	-	-	215	CR123L122B
11.6	11.6	-	-	237	CR123L135B
13.1	13.1	-	-	263	CR123L147B
14.4	14.4	-	-	270	CR123L165B
15.8	15.8	-	-	-	CR123L181B
17.5	17.5	-	-	-	CR123L199B
19.2	19.2	21.7	-	-	CR123L220B
21.1	21.1	23.7	-	-	CR123L241B
23.3	23.3	25.0	-	-	CR123L265B

16.9	16.9	-	-	-	CR123K194B
18.8	18.8	20.1	-	-	CR123K213B
20.7	20.7	22.5	-	-	CR123K236B
22.9	22.9	24.8	-	-	CR123K260B
25.5	25.5	27.3	-	-	CR123K288B
27.0	28.1	30.5	-	-	CR123K320B
-	30.9	32.2	-	-	CR123K352B
-	32.9	34.6	35.2	-	CR123K387B
-	36.2	40.9	42.7	-	CR123K425B
-	40.0	43.6	45.2	-	CR123K468B
-	45.0	45.3	48.2	-	CR123K515B
-	-	50.3	55.2	-	CR123K585B
-	-	55.8	57.2	-	CR123K650B
-	-	61.2	67.5	-	CR123K720B
-	-	67.0	69.0	-	CR123K790B
-	-	72.8	74.7	-	CR123K865B
-	-	81.4	82.4	-	CR123K940B
-	-	90.0	90.7	-	CR123K105C
-	-	-	103	-	CR123K118C
-	-	-	113	-	CR123K130C
-	-	-	125	-	CR123K143C
-	-	-	133	-	CR123K157C

25.7	25.7	29.1	-	-	CR123L293B
27.0	28.0	29.9	-	-	CR123L322B
-	31.1	32.8	-	-	CR123L352B
-	32.9	34.9	34.2	-	CR123L390B
-	35.9	37.3	38.6	-	CR123L426B
-	41.5	42.9	45.4	-	CR123L464B
-	45.0	45.9	48.3	-	CR123L520B
-	-	50.3	54.0	-	CR123L593B
-	-	55.0	57.5	-	CR123L650B
-	-	61.0	62.6	-	CR123L710B
-	-	67.1	68.3	-	CR123L787B
-	-	73.6	75.6	-	CR123L866B
-	-	82.9	88.8	-	CR123L950B
-	-	90.0	100	-	CR123L107C
-	-	-	113	-	CR123L126C
-	-	-	123	-	CR123L142C
-	-	-	133	-	CR123L155C