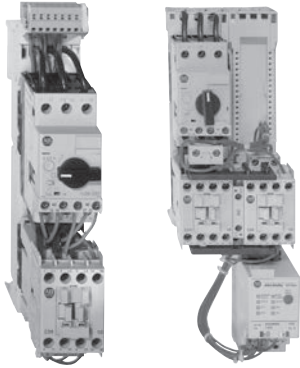


Open Type Starters

Product Overview

2



Bulletin 103S/107S and 103T/107T Combination Starters

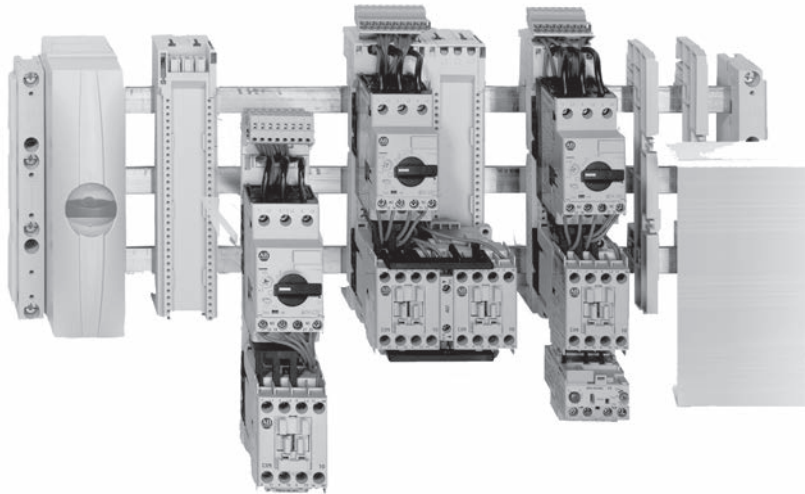
- Bulletin 103S/107S Combination Starters are 2-Component Starters
 - Bulletin 140M Motor Protection Circuit Breakers (MPCBs)
 - Bulletin 100-C/104-C Contactors
- Bulletin 103T/107T Combination Starters are 3-Component Starters
 - Bulletin 140M Motor Circuit Protectors (MCPs)
 - Bulletin 100-C/104-C Contactors
 - Bulletin 193-E Electronic Overload Relays
- Current range 0.1...90 A
- cULus Listed for control and protection of motor loads
- Factory-installed options include:
 - Lockable handles
 - Control plugs (pull-apart terminal blocks)
 - Auxiliary and trip indication contacts
 - Surge suppressors

Standards Compliance

UL 508
 CSA 22.2, No. 14
 IEC 60947 -2, -4

Certifications

cULus Listed (File No. E125316, Guide NKJH, NKJH7)
 CE Marked



	Standard Busbar Mount		ISO Busbar Mount		Panel Mount	
	103S/107S	103T/107T	103S/107S	103T/107T	103S/107S	103T/107T
AC Coils	✓	✓	✓	✓	✓	✓
DC Coils	✓	✓	✓	✓	✓	✓
cULus	✓	✓	✓	✓	✓	✓
IEC/CE	✓	✓	✓	✓	✓	✓
Components						
140M (MPCB)	✓	—	✓	—	✓	—
140M (MCP)	—	✓	—	✓	—	✓
100-C Contactor	✓	✓	✓	✓	✓	✓
193 Overload Relay	—	✓	—	✓	—	✓
Max Current	90 A	45 A	45 A	45 A	45 A	45 A
Control Plug	Optional	Optional	Standard	Standard	Optional	Optional
Overload Protection						
140M (MPCB)	✓	—	✓	—	✓	—
193-E1 Plus/E3	—	✓	—	✓	—	✓
Busbar mount						
5/10 mm busbars	✓	✓	✓	✓	—	—
Panel Mount						
(2) Hat (DIN) Rail mount	—	—	—	—	✓	✓
(4) Screw mount	—	—	—	—	✓	✓

Coordination Ratings for Bulletin 103S and 103T Starters

Bulletin 103S starters consist of a Bulletin 140M Motor Protection Circuit Breaker (MPCB) and a Bulletin 100C Contactor. These starters are referred to as 2-Component Starters.

Bulletin 103T starters consist of a Bulletin 140M Motor Circuit Protector (MCP), a Bulletin 100C Contactor and a Bulletin 193 Overload Relay. These starters are referred to as 3-Component Starters.

All of these combination starters may provide the branch-circuit, short-circuit protection, overload protection and magnetic control for each individual motor circuit. Additional short-circuit protection is not required for the protection of the individual motor circuits. Additionally, these starters are available with Type 1 or Type 2 coordination, as Type F Combination Motor Controllers (CMCs), or as Type E Self-Protected Combination Motor Controllers. These different coordination levels between the Bulletin 140M circuit breakers and the Bulletin 100C contactors are illustrated below, along with the IEC and UL/CSA approvals for each type of starter.

IEC Type 1 coordination

- * The contactor or starter may be inoperative and require replacement in the event of a short-circuit.

IEC Type 2 coordination

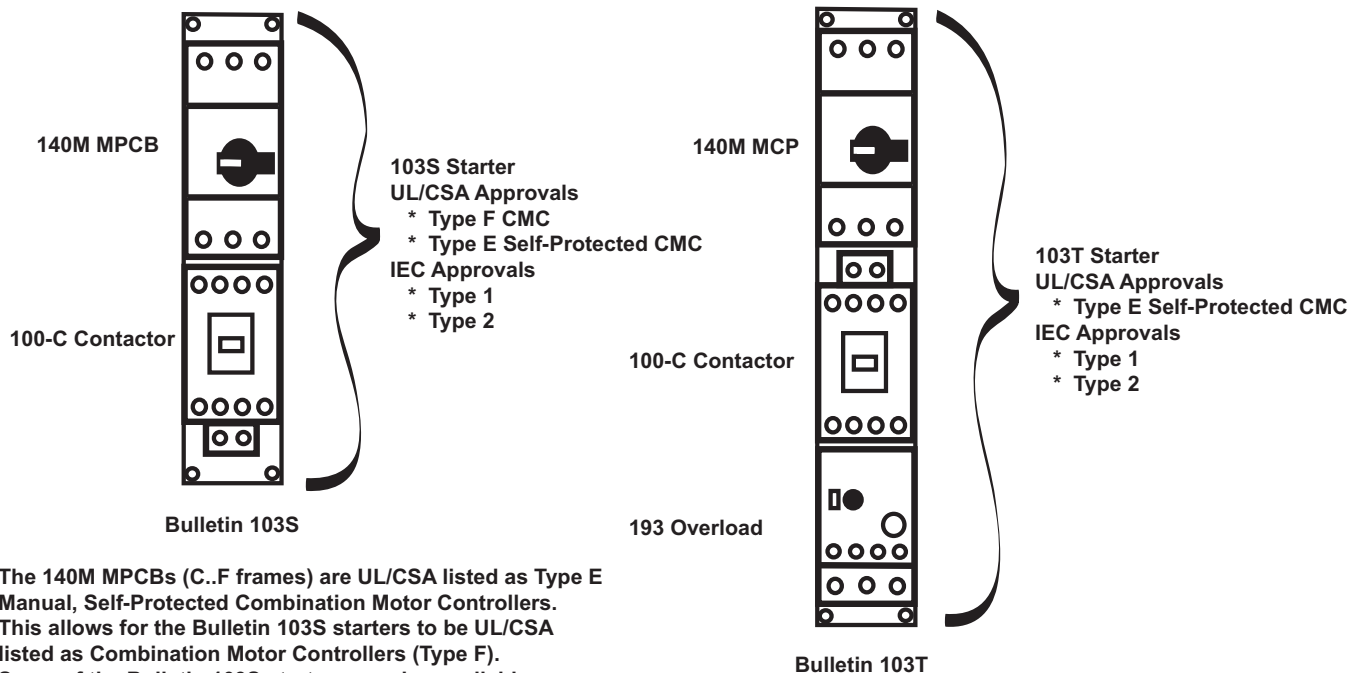
- * No damage to the overload relay or other parts may occur in the event of a short-circuit, except welding of the contactor is permitted, as long as the contacts can be easily separated without significant deformation (such as with a screwdriver).

UL Type F Combination Motor Controller

- * No damage to the motor protection circuit breaker is allowed in the event of a short-circuit. The contactor may be inoperative and require replacement.

UL Type E Self-Protected Combination Motor Controller

- * No damage to the contactor, overload relay, or other parts may occur in the event of a short-circuit.

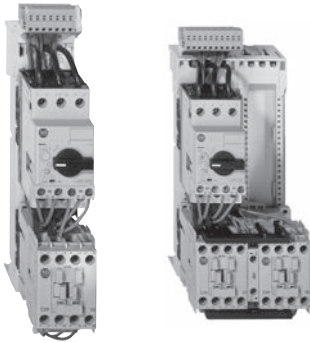


The 140M MPCBs (C..F frames) are UL/CSA listed as Type E Manual, Self-Protected Combination Motor Controllers. This allows for the Bulletin 103S starters to be UL/CSA listed as Combination Motor Controllers (Type F). Some of the Bulletin 103S starters are also available with Type 2 coordination between the 140M and the 100C.

Additionally, some of the Bulletin 103S starters have also been UL/CSA listed as Type E Self-Protected Combination Motor Controllers, providing an additional level of coordination between the 140M and the 100C.

The 140M MCPs (C..F frames) are UL/CSA listed as Manual Motor Controllers. This allows for the Bulletin 103T starters to be UL/CSA listed only as Type E Self-Protected Combination Motor Controllers.

This listing then allows for the Bulletin 103T starters to provide the short-circuit protection, overload protection and magnetic control for individual motor circuits and insures a high level of coordination between the 140M and the 100C.



Bulletin 103S/107S IEC Starters

- Non-reversing (Bul. 103S) and reversing (Bul. 107S) starters
- Current range 0.1...90 A
- cULus Listed Type F Combination Motor Controllers
 - Type 1 Coordination
 - Type 2 Coordination
- cULus Listed Type E Self-Protected Combination Motor Controllers
- Assemblies consist of Bulletin 140M MPCBs and Bulletin 100-C contactors mounted on Bulletin 141A busbar or panel mounting modules
- Installation and wiring of Control Plug for auxiliary contacts is standard on ISO Busbar Mount starters.
- Factory installed options include:
 - Installation of Lockable Twist Knob.
 - Installation of Spacing Adapter for Type E or Type F Starters.
 - Electronic Interface and Surge Suppressors for coil on 100-C.
 - Additional auxiliary contacts for 100-C.
 - Additional auxiliary or trip contacts on 140M.

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Standards Compliance

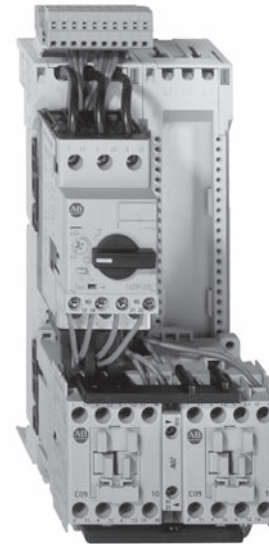
UL 508
 CSA 22.2, No. 14
 IEC 60947 -2, -4

Certifications

cULus Listed (File No.
 E125316, Guide NKJH, NKJH7)
 CE Marked



Bulletin 103S Panel Mount starter with front-mount auxiliary contacts and red/yellow lockable knob, as factory-installed options.



Bulletin 107S Standard Busbar Mount starter with front-mount auxiliary contacts and control plug, as factory-installed options.

Group Motor, Type E, and Type F Combination Motor Controllers (UL/CSA)

The Bulletin 103S/107S motor controllers can be used in a variety of applications. These starters can be used in group motor applications or as a stand-alone product without any additional short-circuit protection in the motor branch circuits.

Most of the Bul. 140M-C/D motor protection circuit breakers, used in the Bul. 103S/107S starters, are cULus Listed as a **Type E** manual self-protected combination motor controller. Although there are many tests involved, one of the critical tests provide a self-protected combination motor controller that must pass to perform 6000 electrical operations and an additional 4000 mechanical operations after a short circuit.

By definition, a **Type F** combination motor controller consists of a Type E manual self-protected combination motor controller and a magnetic or solid-state motor controller (such as a Bul. 100-C contactor or an SMC). As with a manual Type E self-protected combination motor controller, additional short-circuit protection for the individual motor circuits is not required.

A combination of a Bul. 140M manual self-protected combination motor controller and a 100-C contactor can be listed as a Type E self-protected combination motor controller. In this case, the 140M and 100-C must pass the additional 6000 electrical and 4000 mechanical operations test. In some cases, this may require oversizing either component to achieve weld-free performance and meet the additional life requirements.

Multiple Motor Installation with Bul. 103S Combination Starters

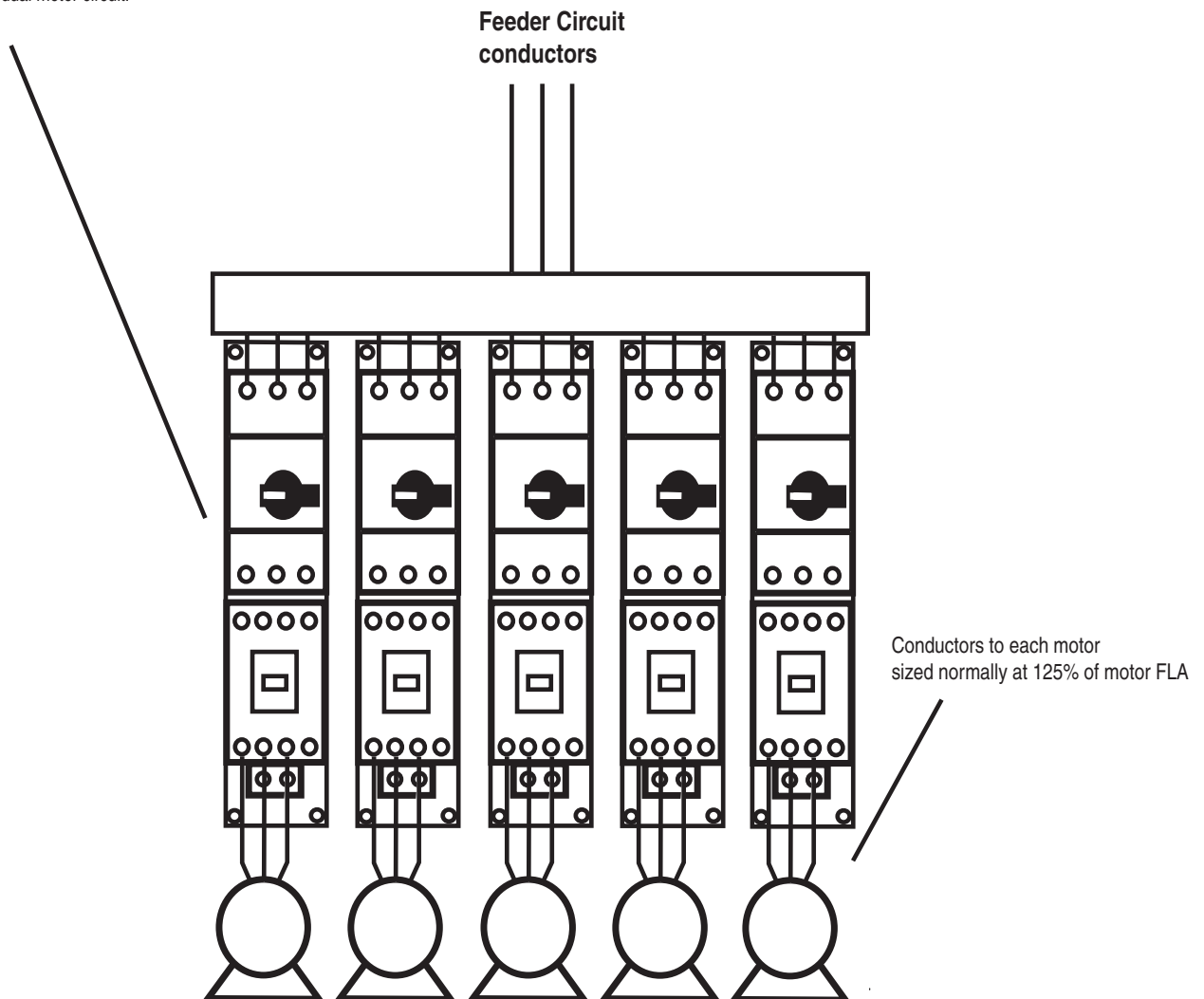
Bulletin 103S Combination Starters provide Individual Branch Circuit Protection for each motor.

They consist of a Bulletin 140M Motor Protection Circuit Breaker and a 100-C Contactor.

These combination starters may provide the branch circuit, short-circuit protection, overload protection, and magnetic control for each individual motor circuit. Additional short-circuit protection is not required for the protection of the individual motor circuits, leaving only the requirement for protection of the feeder circuit conductors by an upstream protective device.

Below is an example that illustrates installations involving multiple motors using Bulletin 103S Combination Starters.

Bulletin 103S Combination Starters are UL/CSA listed as Type F Combination Motor Controllers or as Type E Self-Protected Combination Motor Controllers. These starters may provide the branch-circuit protection for each individual motor circuit.



Open Type Starters

Catalog Number Explanation

Examples given in this section are for reference purposes. This basic explanation should not be used for product selection; not all combinations will produce a valid catalog number.

103S - A T D 2 - C A16 C - KN

a b c d e f g h i

2

a

Bulletin Number	
Code	Description
103S	DOL Starter with MPCB
107S	Rev. Starter with MPCB

b

Contactor Size	
Code	Description
A	100-C09
B	100-C12
C	100-C16
D	100-C23
E	100-C30
F	100-C37
G	100-C43
H	100-C60
J	100-C72
K	100-C85

c

Style	
Code	Description
S	On 141A ISO Busbar Module(s)
T	On 141A Standard Busbar Module(s)
W	On 141A Panel Mounting Module(s)

d

AC Coil Voltage	
Code	Description
Q	12V AC, 60 Hz
R	12V AC, 50 Hz
J	24V AC, 60 Hz
K	24V AC, 50 Hz
KJ	24V AC, 50/60 Hz
V	32V AC, 50 Hz / 36V AC, 60 Hz
W	36V AC, 50 Hz
X	42V AC, 50 Hz / 48V AC, 60 Hz
Y	48V AC, 50 Hz
KY	48V AC, 50/60 Hz
KP	100V AC, 50 Hz / 100...110V AC, 60 Hz
D	110V AC, 50 Hz / 120V AC, 60 Hz
KD	100V AC, 50/60 Hz
P	120V AC, 50 Hz
KL	200...230V AC, 50/60 Hz
H	208V AC, 60 Hz
L	208...240V AC, 60 Hz
A	220V AC, 50 Hz / 240V AC, 60 Hz
F	220...230V AC, 50 Hz
KF	230V AC, 50/60 Hz
VA	230...240V AC, 50 Hz
T	240V AC, 50 Hz / 277V AC, 60 Hz
E	380V AC, 60 Hz
N	380...400V AC, 50 Hz / 440V AC, 60 Hz
KN	400V AC, 50/60 Hz
G	400...415V AC, 50 Hz
B	440V AC, 50 Hz / 480V AC, 60 Hz
M	500V AC, 50 Hz
C	550V AC, 50 Hz / 600V AC, 60 Hz

d, Continued

DC Coil Voltage		
Code	Description	
ZR	DR	6...12V DC
ZQ	DQ	12V DC
ZJ	DJ	24V DC
DJ	DJ	24V DC with Diode
EJ	—	24V DC Electronic
ZW	DW	36V DC
ZY	DY	48V DC
ZZ	DZ	60V DC
ZB	DB	64V DC
ZG	DG	72V DC
ZE	DE	80V DC
ZD	DD	110V DC
ZP	DP	115V DC
ZS	DS	125V DC
ZA	DA	220V DC
ZF	DF	230V DC
ZT	DT	250V DC

e

Contactor Aux. Contacts	
Code	Description
2	1 N.O.
3	1 N.O. + 1 N.C.

f

Circuit Breaker Frame Size	
Code	Description
C	C Frame
D	D Frame
F	F Frame
G	CMN Frame

g

Circuit Breaker Current Range	
Code	Description
A16	0.1...0.16 A
A25	0.16...0.25 A
A40	0.25...0.4 A
A63	0.4...0.63 A
B10	0.63...1.0 A
B16	1.0...1.6 A
B25	1.6...2.5 A
B40	2.5...4.0 A
B63	4.0...6.3 A
C10	6.3...10 A
C16	10...16 A
C20	16...20 A
C25	20...25 A
C32	25...32 A
C45	32...45 A
C63	45...63 A
C90	63...90 A

h

Circuit Breaker Aux. and Trip Contacts for 140M	
Select only one from each group	
Bottom Front	
Code	Description
X	Without Aux. Trip Contacts
A	1 N.C. Aux. Contact
B	1 N.O. Aux. Contact
C	1 N.O. + 1 N.C. Aux. Contact
D	2 N.O. Aux. Contacts
E	2 N.C. Aux. Contacts
R	1 N.O. (SC+OL) + 1 N.C. Aux. Contact
S	1 N.O. (SC+OL) + 1 N.O. Aux. Contact
Right Side	
Code	Description
K	1 N.C. (SC+OL) + 1 N.C. (SC)
L	1 N.O. (SC+OL) + 1 N.O. (SC)
M	1 N.C. (SC+OL) + 1 N.O. (SC)
N	1 N.O. (SC+OL) + 1 N.C. (SC)
Q	1 N.O. (SC) + 1 N.C. (SC)

h

Circuit Breaker Aux. and Trip Contacts for 140-CMN	
Select only one from each group	
Bottom Front	
Code	Description
X	Without Aux. and Trip Contacts
C	1 N.O. + 1 N.C. Aux. Contact
D	2 N.O. Aux. Contact
E	2 N.C. Aux. Contact
Top Front	
Code	Description
K	1 N.C. (OL) + 1 N.C. (SC)
L	1 N.O. (OL) + 1 N.O. (SC)
M	1 N.C. (OL) + 1 N.O. (SC)
N	1 N.O. (OL) + 1 N.C. (SC)

i

Modifications, Accessories	
Circuit Breaker Accessories	
Code	Description
TE	Type E Adder Module
KN	Lockable Twist Knob, Black
KY	Lockable Twist Knob, Red/Yellow
Coil Accessories	
Code	Description
JE	Electronic Interface(s)
D	Surge Suppressor Diode
R	Surge Suppressor RC
V	Surge Suppressor Varistor
Additional Contactor Auxiliaries (Side Mount)	
Code	Description
S01	1 N.C.
S10	1 N.O.
S11	1 N.O. + 1 N.C.
S20	2 N.O.
Additional Contactor Auxiliaries (Front Mount)	
Code	Description
F11	1 N.O. + 1 N.C.
F20	2 N.O.
F22	2 N.O. + 2 N.C.
Mounting System Accessories	
Code	Description
MS	Micro Switch (ISO Modules only)
SP	Top Mount Control Plug (pull-apart terminal block with spring clamp terminals) for control circuit * (Standard Busbar and Panel Mounting Modules only)

* Standard for starters on ISO Modules; no code required.



Bulletin 103S/107S Combination Starters
UL/CSA in Group Motor Installation

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)									DOL Starters		Reversing Starters	
	Hp Ratings as a UL 508 Motor Controller in Group Motor Installations*				Max. Fuse or Circuit Breaker per NEC [A]	Max. Short-Circuit Current [kA]				Cat. No.	Cat. No.		
	200V AC	230V AC	460V AC	575V AC		Type 1 Coordination		Type 2 Coordination					
					480V AC	600V AC	480V AC	600V AC					
C-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules													
0.10...0.16	—	—	—	—	450	65	47	65	47	103S-AT02-CA16C	107S-AT03-CA16C		
0.16...0.25	—	—	—	—	450	65	47	65	47	103S-AT02-CA25C	107S-AT03-CA25C		
0.25...0.40	—	—	—	—	450	65	47	65	47	103S-AT02-CA40C	107S-AT03-CA40C		
0.40...0.63	—	—	—	—	450	65	47	65	47	103S-AT02-CA63C	107S-AT03-CA63C		
0.63...1.00	—	—	1/2	3/4	450	65	47	65	47	103S-AT02-CB10C	107S-AT03-CB10C		
1.00...1.60	—	—	1/2...1	3/4...1	450	65	47	65	47	103S-AT02-CB16C	107S-AT03-CB16C		
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	10	103S-AT02-CB25C	107S-AT03-CB25C		
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	50	—	103S-AT02-CB40C	107S-AT03-CB40C		
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	50	—	103S-AT02-CB63C	107S-AT03-CB63C		
6.30...9.00	1-1/2...2	2	5	7-1/2	450	65	30	50	—	103S-AT02-CC10C	107S-AT03-CC10C		
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	50	—	103S-BT02-CC10C	107S-BT03-CC10C		
10.0...12.0	3	3	7-1/2	10	450	30	30	—	—	103S-BT02-CC16C	107S-BT03-CC16C		
10.0...16.0	3...5	5	7-1/2...10	10	450	30	30	—	—	103S-CT02-CC16C	107S-CT03-CC16C		
10.0...16.0	3...5	5	7-1/2...10	10...15	450	30	30	—	—	103S-DT02-CC16C	107S-DT03-CC16C		
14.5...20.0	5	5...7-1/2	15	15	450	30	30	—	—	103S-DT02-CC20C	107S-DT03-CC20C		
18.0...23.0	5	7-1/2	15	15	450	30	30	—	—	103S-DT02-CC25C	107S-DT03-CC25C		
D-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules													
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	10	103S-AT02-DB25C	107S-AT03-DB25C		
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	30	103S-DT02-DB25C	107S-DT03-DB25C		
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	65	—	103S-AT02-DB40C	107S-AT03-DB40C		
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	65	30	103S-DT02-DB40C	107S-DT03-DB40C		
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	65	—	103S-AT02-DB63C	107S-AT03-DB63C		
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	65	30	103S-ET03-DB63C	107S-ET03-DB63C		
6.30...9.00	1-1/2...2	2	5	7-1/2	450	65	30	65	—	103S-AT02-DC10C	107S-AT03-DC10C		
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	—	103S-BT02-DC10C	107S-BT03-DC10C		
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	—	103S-CT02-DC10C	107S-CT03-DC10C		
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	30	103S-ET03-DC10C	107S-ET03-DC10C		
10.0...12.0	3	3	7-1/2	10	450	65	30	65	—	103S-BT02-DC16C	107S-BT03-DC16C		
10.0...16.0	3...5	5	7-1/2...10	10	450	65	30	65	—	103S-CT02-DC16C	107S-CT03-DC16C		
10.0...16.0	3...5	5	7-1/2...10	10...15	450	65	30	65	—	103S-DT02-DC16C	107S-DT03-DC16C		
10.0...16.0	3...5	5	7-1/2...10	10...15	450	65	30	65	30	103S-ET03-DC16C	107S-ET03-DC16C		
14.5...20.0	5	5...7-1/2	15	15	450	65	30	65	—	103S-DT02-DC20C	107S-DT03-DC20C		
14.5...20.0	5	5...7-1/2	15	20	450	65	30	65	—	103S-ET03-DC20C	107S-ET03-DC20C		
18.0...23.0	5	7-1/2	15	15	450	65	30	65	—	103S-DT02-DC25C	107S-DT03-DC25C		
18.0...25.0	7-1/2	7-1/2...10	15...20	20	450	65	30	65	—	103S-ET03-DC25C	107S-ET03-DC25C		
F-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules													
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	600	65	30	65	30	103S-ET03-FC10C	107S-ET03-FC10C		
10.0...16.0	3...5	5	7-1/2...10	10...15	600	65	30	65	30	103S-ET03-FC16C	107S-ET03-FC16C		
14.5...20.0	5	5...7-1/2	15	15...20	600	65	30	65	30	103S-ET03-FC20C	107S-ET03-FC20C		
18.0...25.0	7-1/2	7-1/2...10	15...20	20	600	65	30	65	30	103S-ET03-FC25C	107S-ET03-FC25C		
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	600	65	30	65	30	103S-GT03-FC25C	107S-GT03-FC25C		
23.0...30.0	7-1/2	10	20	25	600	65	30	65	30	103S-ET03-FC32C	107S-ET03-FC32C		
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-FT03-FC32C	107S-FT03-FC32C		
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-GT03-FC32C	107S-GT03-FC32C		
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-HT03-FC32C	107S-HT03-FC32C		
32.0...37.0	10	10	25	30	600	65	18	65	10	103S-FT03-FC45C	107S-FT03-FC45C		
32.0...43.0	10	15	30	30	600	65	18	65	10	103S-GT03-FC45C	107S-GT03-FC45C		
32.0...45.0	10	15	30	30...40	600	65	18	65	10	103S-HT03-FC45C	107S-HT03-FC45C		
32.0...45.0	10	15	30	30...40	600	65	18	65	10	103S-JT03-FC45C	107S-JT03-FC45C		
CMN-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules													
40.0...60.0	15	15...20	30...40	40...50	1000	42	18	42	18	103S-HT03-GC63C	107S-HT03-GC63C		
40.0...63.0	15...20	15...20	30...40	40...60	1000	42	18	42	18	103S-JT03-GC63C	107S-JT03-GC63C		
40.0...63.0	15...20	15...20	30...40	40...60	1000	42	18	42	18	103S-KT03-GC63C	107S-KT03-GC63C		
63.0...72.0	20	25	50	60	1000	35	10	35	10	103S-JT03-GC90C	107S-JT03-GC90C		
63.0...85.0	25	30	50...60	60	1000	35	10	35	10	103S-KT03-GC90C	107S-KT03-GC90C		

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊗ Coil voltage code—see page 2-315



Open Type Starters

Product Selection & Coordination Ratings

UL/CSA in Group Motor Installation, Continued

2

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)									DOL Starters	Reversing Starters
	Hp Ratings as a UL 508 Motor Controller in Group Motor Installations*				Max. Fuse or Circuit Breaker per NEC [A]	Max. Short-Circuit Current [kA]					
	200V AC	230V AC	460V AC	575V AC		Type 1 Coordination		Type 2 Coordination			
						480V AC	600V AC	480V AC	600V AC	Cat. No.	Cat. No.
C-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules											
0.10...0.16	—	—	—	—	450	65	47	65	47	103S-AS02-CA16C	107S-AS03-CA16C
0.16...0.25	—	—	—	—	450	65	47	65	47	103S-AS02-CA25C	107S-AS03-CA25C
0.25...0.40	—	—	—	—	450	65	47	65	47	103S-AS02-CA40C	107S-AS03-CA40C
0.40...0.63	—	—	—	—	450	65	47	65	47	103S-AS02-CA63C	107S-AS03-CA63C
0.63...1.00	—	—	1/2	3/4	450	65	47	65	47	103S-AS02-CB10C	107S-AS03-CB10C
1.00...1.60	—	—	1/2...1	3/4...1	450	65	47	65	47	103S-AS02-CB16C	107S-AS03-CB16C
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	10	103S-AS02-CB25C	107S-AS03-CB25C
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	50	—	103S-AS02-CB40C	107S-AS03-CB40C
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	50	—	103S-AS02-CB63C	107S-AS03-CB63C
6.30...9.00	1-1/2...2	2	5	7-1/2	450	65	30	50	—	103S-AS02-CC10C	107S-AS03-CC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	50	—	103S-BS02-CC10C	107S-BS03-CC10C
10.0...12.0	3	3	7-1/2	10	450	30	30	—	—	103S-BS02-CC16C	107S-BS03-CC16C
10.0...16.0	3...5	5	7-1/2...10	10	450	30	30	—	—	103S-CS02-CC16C	107S-CS03-CC16C
10.0...16.0	3...5	5	7-1/2...10	10...15	450	30	30	—	—	103S-DS02-CC16C	107S-DS03-CC16C
14.5...20.0	5	5...7-1/2	15	15	450	30	30	—	—	103S-DS02-CC20C	107S-DS03-CC20C
18.0...23.0	5	7-1/2	15	15	450	30	30	—	—	103S-DS02-CC25C	107S-DS03-CC25C
D-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules											
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	10	103S-AS02-DB25C	107S-AS03-DB25C
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	30	103S-DS02-DB25C	107S-DS03-DB25C
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	65	—	103S-AS02-DB40C	107S-AS03-DB40C
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	65	30	103S-DS02-DB40C	107S-DS03-DB40C
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	65	—	103S-AS02-DB63C	107S-AS03-DB63C
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	65	30	103S-ES03-DB63C	107S-ES03-DB63C
6.30...9.00	1-1/2...2	2	5	7-1/2	450	65	30	65	—	103S-AS02-DC10C	107S-AS03-DC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	—	103S-BS02-DC10C	107S-BS03-DC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	—	103S-CS02-DC10C	107S-CS03-DC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	30	103S-ES03-DC10C	107S-ES03-DC10C
10.0...12.0	3	3	7-1/2	10	450	65	30	65	—	103S-BS02-DC16C	107S-BS03-DC16C
10.0...16.0	3...5	5	7-1/2...10	10	450	65	30	65	—	103S-CS02-DC16C	107S-CS03-DC16C
10.0...16.0	3...5	5	7-1/2...10	10...15	450	65	30	65	—	103S-DS02-DC16C	107S-DS03-DC16C
10.0...16.0	3...5	5	7-1/2...10	10...15	450	65	30	65	30	103S-ES03-DC16C	107S-ES03-DC16C
14.5...20.0	5	5...7-1/2	15	15	450	65	30	65	—	103S-DS02-DC20C	107S-DS03-DC20C
14.5...20.0	5	5...7-1/2	15	20	450	65	30	65	—	103S-ES03-DC20C	107S-ES03-DC20C
18.0...23.0	5	7-1/2	15	15	450	65	30	65	—	103S-DS02-DC25C	107S-DS03-DC25C
18.0...25.0	7-1/2	7-1/2...10	15...20	20	450	65	30	65	—	103S-ES03-DC25C	107S-ES03-DC25C
F-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules											
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	600	65	30	65	30	103S-ES03-FC10C	107S-ES03-FC10C
10.0...16.0	3...5	5	7-1/2...10	10...15	600	65	30	65	30	103S-ES03-FC16C	107S-ES03-FC16C
14.5...20.0	5	5...7-1/2	15	15...20	600	65	30	65	30	103S-ES03-FC20C	107S-ES03-FC20C
18.0...25.0	7-1/2	7-1/2...10	15...20	20	600	65	30	65	30	103S-ES03-FC25C	107S-ES03-FC25C
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	600	65	30	65	30	103S-GS03-FC25C	107S-GS03-FC25C
23.0...30.0	7-1/2	10	20	25	600	65	30	65	30	103S-ES03-FC32C	107S-ES03-FC32C
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-FS03-FC32C	107S-FS03-FC32C
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-GS03-FC32C	107S-GS03-FC32C
32.0...37.0	10	10	25	30	600	65	18	65	10	103S-FS03-FC45C	107S-FS03-FC45C
32.0...43.0	10	15	30	30	600	65	18	65	10	103S-GS03-FC45C	107S-GS03-FC45C

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊗ Coil voltage code—see page 2-315



UL/CSA in Group Motor Installation, Continued

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)									DOL Starters	Reversing Starters
	Hp Ratings as a UL 508 Motor Controller in Group Motor Installations*				Max. Fuse or Circuit Breaker per NEC	Max. Short-Circuit Current [kA]					
	Type 1 Coordination		Type 2 Coordination			Type 1 Coordination		Type 2 Coordination			
	200V AC	230V AC	460V AC	575V AC		480V AC	600V AC	480V AC	600V AC	Cat. No.	Cat. No.
C-Frame with 100-C/104-C Contactors on Panel Mounting Modules											
0.10...0.16	—	—	—	—	450	65	47	65	47	103S-AW02-CA16C	107S-AW03-CA16C
0.16...0.25	—	—	—	—	450	65	47	65	47	103S-AW02-CA25C	107S-AW03-CA25C
0.25...0.40	—	—	—	—	450	65	47	65	47	103S-AW02-CA40C	107S-AW03-CA40C
0.40...0.63	—	—	—	—	450	65	47	65	47	103S-AW02-CA63C	107S-AW03-CA63C
0.63...1.00	—	—	1/2	3/4	450	65	47	65	47	103S-AW02-CB10C	107S-AW03-CB10C
1.00...1.60	—	—	1/2...1	3/4...1	450	65	47	65	47	103S-AW02-CB16C	107S-AW03-CB16C
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	10	103S-AW02-CB25C	107S-AW03-CB25C
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	50	—	103S-AW02-CB40C	107S-AW03-CB40C
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	50	—	103S-AW02-CB63C	107S-AW03-CB63C
6.30...9.00	1-1/2...2	2	5	7-1/2	450	65	30	50	—	103S-AW02-CC10C	107S-AW03-CC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	50	—	103S-BW02-CC10C	107S-BW03-CC10C
10.0...12.0	3	3	7-1/2	10	450	30	30	—	—	103S-CW02-CC16C	107S-CW03-CC16C
10.0...16.0	3...5	5	7-1/2...10	10	450	30	30	—	—	103S-CW02-CC16C	107S-CW03-CC16C
10.0...16.0	3...5	5	7-1/2...10	10...15	450	30	30	—	—	103S-DW02-CC16C	107S-DW03-CC16C
14.5...20.0	5	5...7-1/2	15	15	450	30	30	—	—	103S-DW02-CC20C	107S-DW03-CC20C
18.0...23.0	5	7-1/2	15	15	450	30	30	—	—	103S-DW02-CC25C	107S-DW03-CC25C
D-Frame with 100-C/104-C Contactors on Panel Mounting Modules											
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	10	103S-AW02-DB25C	107S-AW03-DB25C
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	450	65	30	65	30	103S-DW02-DB25C	107S-DW03-DB25C
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	65	—	103S-AW02-DB40C	107S-AW03-DB40C
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	450	65	30	65	30	103S-DW02-DB40C	107S-DW03-DB40C
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	65	—	103S-AW02-DB63C	107S-AW03-DB63C
4.00...6.30	1...1-1/2	1...2	3...5	5	450	65	30	65	30	103S-EW03-DB63C	107S-EW03-DB63C
6.30...9.00	1-1/2...2	2	5	7-1/2	450	65	30	65	—	103S-AW02-DC10C	107S-AW03-DC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	—	103S-BW02-DC10C	107S-BW03-DC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	—	103S-CW02-DC10C	107S-CW03-DC10C
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	450	65	30	65	30	103S-EW03-DC10C	107S-EW03-DC10C
10.0...12.0	3	3	7-1/2	10	450	65	30	65	—	103S-BW02-DC16C	107S-BW03-DC16C
10.0...16.0	3...5	5	7-1/2...10	10	450	65	30	65	—	103S-CW02-DC16C	107S-CW03-DC16C
10.0...16.0	3...5	5	7-1/2...10	10...15	450	65	30	65	—	103S-DW02-DC16C	107S-DW03-DC16C
10.0...16.0	3...5	5	7-1/2...10	10...15	450	65	30	65	30	103S-EW03-DC16C	107S-EW03-DC16C
14.5...20.0	5	5...7-1/2	15	15	450	65	30	65	—	103S-DW02-DC20C	107S-DW03-DC20C
14.5...20.0	5	5...7-1/2	15	20	450	65	30	65	—	103S-EW03-DC20C	107S-EW03-DC20C
18.0...23.0	5	7-1/2	15	15	450	65	30	65	—	103S-DW02-DC25C	107S-DW03-DC25C
18.0...25.0	7-1/2	7-1/2...10	15...20	20	450	65	30	65	—	103S-EW03-DC25C	107S-EW03-DC25C
F-Frame with 100-C/104-C Contactors on Panel Mounting Modules											
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	600	65	30	65	30	103S-EW03-FC10C	107S-EW03-FC10C
10.0...16.0	3...5	5	7-1/2...10	10...15	600	65	30	65	30	103S-EW03-FC16C	107S-EW03-FC16C
14.5...20.0	5	5...7-1/2	15	15...20	600	65	30	65	30	103S-EW03-FC20C	107S-EW03-FC20C
18.0...25.0	7-1/2	7-1/2...10	15...20	20	600	65	30	65	30	103S-EW03-FC25C	107S-EW03-FC25C
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	600	65	30	65	30	103S-GW03-FC25C	107S-GW03-FC25C
23.0...30.0	7-1/2	10	20	25	600	65	30	65	30	103S-EW03-FC32C	107S-EW03-FC32C
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-FW03-FC32C	107S-FW03-FC32C
23.0...32.0	7-1/2...10	10	20...25	30	600	65	30	65	30	103S-GW03-FC32C	107S-GW03-FC32C
32.0...37.0	10	10	25	30	600	65	18	65	10	103S-FW03-FC45C	107S-FW03-FC45C
32.0...43.0	10	15	30	30	600	65	18	65	10	103S-GW03-FC45C	107S-GW03-FC45C

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊗ Coil voltage code—see page 2-315



Open Type Starters

Product Selection & Coordination Ratings

UL/CSA as a UL508 Type F Combination Motor Controller

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Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)								DOL Starters	Reversing Starters
	Hp Ratings as a UL 508 Type F Combination Motor Controller*				Max. Short-Circuit Current [kA]					
					Type 1 Coordination		Type 2 Coordination		Cat. No.	Cat. No.
	200V AC	230V AC	460V AC	575V AC	480Y/277V AC	600Y/347V AC	480Y/277V AC	600Y/347V AC		
C-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules										
0.10...0.16	—	—	—	—	65	47	65	47	103S-AT02-CA16C-TE	107S-AT03-CA16C-TE
0.16...0.25	—	—	—	—	65	47	65	47	103S-AT02-CA25C-TE	107S-AT03-CA25C-TE
0.25...0.40	—	—	—	—	65	47	65	47	103S-AT02-CA40C-TE	107S-AT03-CA40C-TE
0.40...0.63	—	—	—	—	65	47	65	47	103S-AT02-CA63C-TE	107S-AT03-CA63C-TE
0.63...1.00	—	—	1/2	3/4	65	47	65	47	103S-AT02-CB10C-TE	107S-AT03-CB10C-TE
1.00...1.60	—	—	1/2...1	3/4...1	65	47	65	47	103S-AT02-CB16C-TE	107S-AT03-CB16C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	10	103S-AT02-CB25C-TE	107S-AT03-CB25C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	—	—	103S-AT02-CB40C-TE	107S-AT03-CB40C-TE
4.00...6.30	1...1-1/2	1...2	3...5	—	65	⚡	—	⚡	103S-AT02-CB63C-TE	107S-AT03-CB63C-TE
6.30...9.00	1-1/2...2	2	5	—	65	⚡	—	⚡	103S-AT02-CC10C-TE	107S-AT03-CC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	—	65	⚡	50	⚡	103S-BT02-CC10C-TE	107S-BT03-CC10C-TE
10.0...12.0	3	3	7-1/2	—	30	⚡	—	⚡	103S-DT02-CC16C-TE	107S-DT03-CC16C-TE
10.0...16.0	3...5	5	7-1/2...10	—	30	⚡	—	⚡	103S-CT02-CC16C-TE	107S-CT03-CC16C-TE
10.0...16.0	3...5	5	7-1/2...10	—	30	⚡	—	⚡	103S-DT02-CC16C-TE	107S-DT03-CC16C-TE
14.5...20.0	5	5...7-1/2	15	—	10	⚡	—	⚡	103S-DT02-CC20C-TE	107S-DT03-CC20C-TE
18.0...23.0	—	—	—	—	⚡	⚡	⚡	⚡	103S-DT02-CC25C-TE	107S-DT03-CC25C-TE
D-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules										
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	10	103S-AT02-DB25C-TE	107S-AT03-DB25C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	30	103S-DT02-DB25C-TE	107S-DT03-DB25C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	65	—	103S-AT02-DB40C-TE	107S-AT03-DB40C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	65	30	103S-DT02-DB40C-TE	107S-DT03-DB40C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	65	—	103S-AT02-DB63C-TE	107S-AT03-DB63C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	65	30	103S-ET03-DB63C-TE	107S-ET03-DB63C-TE
6.30...9.00	1-1/2...2	2	5	7-1/2	65	30	65	—	103S-AT02-DC10C-TE	107S-AT03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	—	103S-BT02-DC10C-TE	107S-BT03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	—	103S-CT02-DC10C-TE	107S-CT03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	30	103S-ET03-DC10C-TE	107S-ET03-DC10C-TE
10.0...12.0	3	3	7-1/2	10	65	30	65	—	103S-BT02-DC16C-TE	107S-BT03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10	65	30	65	—	103S-CT02-DC16C-TE	107S-CT03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	—	103S-DT02-DC16C-TE	107S-DT03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	30	103S-ET03-DC16C-TE	107S-ET03-DC16C-TE
14.5...20.0	5	5...7-1/2	15	—	65	⚡	65	⚡	103S-DT02-DC20C-TE	107S-DT03-DC20C-TE
14.5...20.0	5	5...7-1/2	15	—	65	⚡	65	⚡	103S-ET03-DC20C-TE	107S-ET03-DC20C-TE
18.0...23.0	5	7-1/2	15	—	65	⚡	65	⚡	103S-DT02-DC25C-TE	107S-DT03-DC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	—	65	⚡	65	⚡	103S-ET03-DC25C-TE	107S-ET03-DC25C-TE
F-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules										
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	30	103S-ET03-FC10C-TE	107S-ET03-FC10C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	30	103S-ET03-FC16C-TE	107S-ET03-FC16C-TE
14.5...20.0	5	5...7-1/2	15	15...20	65	30	65	30	103S-ET03-FC20C-TE	107S-ET03-FC20C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20	65	30	65	30	103S-ET03-FC25C-TE	107S-ET03-FC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	65	30	65	30	103S-GT03-FC25C-TE	107S-GT03-FC25C-TE
23.0...30.0	7-1/2	10	20	25	65	30	65	30	103S-ET03-FC32C-TE	107S-ET03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-FT03-FC32C-TE	107S-FT03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-GT03-FC32C-TE	107S-GT03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-HT03-FC32C-TE	107S-HT03-FC32C-TE
32.0...37.0	10	10	25	—	65	⚡	65	⚡	103S-FT03-FC45C-TE	107S-FT03-FC45C-TE
32.0...43.0	10	15	30	—	65	⚡	65	⚡	103S-GT03-FC45C-TE	107S-GT03-FC45C-TE
32.0...45.0	10	15	30	—	65	⚡	65	⚡	103S-HT03-FC45C-TE	107S-HT03-FC45C-TE
32.0...45.0	10	15	30	—	65	⚡	65	⚡	103S-JT03-FC45C-TE	107S-JT03-FC45C-TE

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⚡ This starter is not valid for application at this horsepower and voltage.

⊗ Coil voltage code—see page 2-315



UL/CSA as a UL508 Type F Combination Motor Controller, Continued

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)								DOL Starters	Reversing Starters
	Hp Ratings as a UL 508 Type F Combination Motor Controller*					Max. Short-Circuit Current [kA]				
						Type 1 Coordination	Type 2 Coordination		Cat. No.	Cat. No.
	200V AC	230V AC	460V AC	575V AC	480Y/277V AC	600Y/347V AC	480Y/277V AC	600Y/347V AC		
C-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules										
0.10...0.16	—	—	—	—	65	47	65	47	103S-AS02-CA16C-TE	107S-AS03-CA16C-TE
0.16...0.25	—	—	—	—	65	47	65	47	103S-AS02-CA25C-TE	107S-AS03-CA25C-TE
0.25...0.40	—	—	—	—	65	47	65	47	103S-AS02-CA40C-TE	107S-AS03-CA40C-TE
0.40...0.63	—	—	—	—	65	47	65	47	103S-AS02-CA63C-TE	107S-AS03-CA63C-TE
0.63...1.00	—	—	1/2	3/4	65	47	65	47	103S-AS02-CB10C-TE	107S-AS03-CB10C-TE
1.00...1.60	—	—	1/2...1	3/4...1	65	47	65	47	103S-AS02-CB16C-TE	107S-AS03-CB16C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	10	103S-AS02-CB25C-TE	107S-AS03-CB25C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	—	—	103S-AS02-CB40C-TE	107S-AS03-CB40C-TE
4.00...6.30	1...1-1/2	1...2	3...5	—	65	❖	—	❖	103S-AS02-CB63C-TE	107S-AS03-CB63C-TE
6.30...9.00	1-1/2...2	2	5	—	65	❖	—	❖	103S-AS02-CC10C-TE	107S-AS03-CC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	—	65	❖	50	❖	103S-BS02-CC10C-TE	107S-BS03-CC10C-TE
10.0...12.0	3	3	7-1/2	—	30	❖	—	❖	103S-BS02-CC16C-TE	107S-BS03-CC16C-TE
10.0...16.0	3...5	5	7-1/2...10	—	30	❖	—	❖	103S-CS02-CC16C-TE	107S-CS03-CC16C-TE
10.0...16.0	3...5	5	7-1/2...10	—	30	❖	—	❖	103S-DS02-CC16C-TE	107S-DS03-CC16C-TE
14.5...20.0	5	5...7-1/2	15	—	10	❖	—	❖	103S-DS02-CC20C-TE	107S-DS03-CC20C-TE
18.0...23.0	—	—	—	—	❖	❖	❖	❖	103S-DS02-CC25C-TE	107S-DS03-CC25C-TE
D-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules										
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	10	103S-AS02-DB25C-TE	107S-AS03-DB25C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	30	103S-DS02-DB25C-TE	107S-DS03-DB25C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	65	—	103S-AS02-DB40C-TE	107S-AS03-DB40C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	65	30	103S-DS02-DB40C-TE	107S-DS03-DB40C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	65	—	103S-AS02-DB63C-TE	107S-AS03-DB63C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	65	30	103S-ES03-DB63C-TE	107S-ES03-DB63C-TE
6.30...9.00	1-1/2...2	2	5	7-1/2	65	30	65	—	103S-AS02-DC10C-TE	107S-AS03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	—	103S-BS02-DC10C-TE	107S-BS03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	—	103S-CS02-DC10C-TE	107S-CS03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	30	103S-ES03-DC10C-TE	107S-ES03-DC10C-TE
10.0...12.0	3	3	7-1/2	10	65	30	65	—	103S-BS02-DC16C-TE	107S-BS03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10	65	30	65	—	103S-CS02-DC16C-TE	107S-CS03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	—	103S-DS02-DC16C-TE	107S-DS03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	30	103S-ES03-DC16C-TE	107S-ES03-DC16C-TE
14.5...20.0	5	5...7-1/2	15	—	65	❖	65	❖	103S-DS02-DC20C-TE	107S-DS03-DC20C-TE
14.5...20.0	5	5...7-1/2	15	—	65	❖	65	❖	103S-ES03-DC20C-TE	107S-ES03-DC20C-TE
18.0...23.0	5	7-1/2	15	—	65	❖	65	❖	103S-DS02-DC25C-TE	107S-DS03-DC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	—	65	❖	65	❖	103S-ES03-DC25C-TE	107S-ES03-DC25C-TE
F-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules										
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	30	103S-ES03-FC10C-TE	107S-ES03-FC10C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	30	103S-ES03-FC16C-TE	107S-ES03-FC16C-TE
14.5...20.0	5	5...7-1/2	15	15...20	65	30	65	30	103S-ES03-FC20C-TE	107S-ES03-FC20C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20	65	30	65	30	103S-ES03-FC25C-TE	107S-ES03-FC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	65	30	65	30	103S-GS03-FC25C-TE	107S-GS03-FC25C-TE
23.0...30.0	7-1/2	10	20	25	65	30	65	30	103S-ES03-FC32C-TE	107S-ES03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-FS03-FC32C-TE	107S-FS03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-GS03-FC32C-TE	107S-GS03-FC32C-TE
32.0...37.0	10	10	25	—	65	❖	65	❖	103S-FS03-FC45C-TE	107S-FS03-FC45C-TE
32.0...43.0	10	15	30	—	65	❖	65	❖	103S-GS03-FC45C-TE	107S-GS03-FC45C-TE

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.
 ❖ This starter is not valid for application at this horsepower and voltage.

⊗ Coil voltage code—see page 2-315



Open Type Starters

Product Selection & Coordination Ratings

UL/CSA as a UL508 Type F Combination Motor Controller, Continued

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)								DOL Starters	Reversing Starters
	Hp Ratings as a UL 508 Type F Combination Motor Controller*				Max. Short-Circuit Current [kA]					
	200V AC	230V AC	460V AC	575V AC	Type 1 Coordination 480Y/277V AC	Type 2 Coordination 600Y/347V AC	Type 1 Coordination 480Y/277V AC	Type 2 Coordination 600Y/347V AC	Cat. No.	Cat. No.
C-Frame with 100-C/104-C Contactors on Panel Mounting Modules										
0.10...0.16	—	—	—	—	65	47	65	47	103S-AW02-CA16C-TE	107S-AW03-CA16C-TE
0.16...0.25	—	—	—	—	65	47	65	47	103S-AW02-CA25C-TE	107S-AW03-CA25C-TE
0.25...0.40	—	—	—	—	65	47	65	47	103S-AW02-CA40C-TE	107S-AW03-CA40C-TE
0.40...0.63	—	—	—	—	65	47	65	47	103S-AW02-CA63C-TE	107S-AW03-CA63C-TE
0.63...1.00	—	—	1/2	3/4	65	47	65	47	103S-AW02-CB10C-TE	107S-AW03-CB10C-TE
1.00...1.60	—	—	1/2...1	3/4...1	65	47	65	47	103S-AW02-CB16C-TE	107S-AW03-CB16C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	10	103S-AW02-CB25C-TE	107S-AW03-CB25C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	—	—	103S-AW02-CB40C-TE	107S-AW03-CB40C-TE
4.00...6.30	1...1-1/2	1...2	3...5	—	65	⚡	—	⚡	103S-AW02-CB63C-TE	107S-AW03-CB63C-TE
6.30...9.00	1-1/2...2	2	5	—	65	⚡	—	⚡	103S-AW02-CC10C-TE	107S-AW03-CC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	—	65	⚡	50	⚡	103S-BW02-CC10C-TE	107S-BW03-CC10C-TE
10.0...12.0	3	3	7-1/2	—	30	⚡	—	⚡	103S-BW02-CC16C-TE	107S-BW03-CC16C-TE
10.0...16.0	3...5	5	7-1/2...10	—	30	⚡	—	⚡	103S-CW02-CC16C-TE	107S-CW03-CC16C-TE
10.0...16.0	3...5	5	7-1/2...10	—	30	⚡	—	⚡	103S-DW02-CC16C-TE	107S-DW03-CC16C-TE
14.5...20.0	5	5...7-1/2	15	—	10	⚡	—	⚡	103S-DW02-CC20C-TE	107S-DW03-CC20C-TE
18.0...23.0	—	—	—	—	—	⚡	—	⚡	103S-DW02-CC25C-TE	107S-DW03-CC25C-TE
D-Frame with 100-C/104-C Contactors on Panel Mounting Modules										
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	10	103S-AW02-DB25C-TE	107S-AW03-DB25C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	65	30	103S-DW02-DB25C-TE	107S-DW03-DB25C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	65	—	103S-AW02-DB40C-TE	107S-AW03-DB40C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	65	30	103S-DW02-DB40C-TE	107S-DW03-DB40C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	65	—	103S-AW02-DB63C-TE	107S-AW03-DB63C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	65	30	103S-EW03-DB63C-TE	107S-EW03-DB63C-TE
6.30...9.00	1-1/2...2	2	5	7-1/2	65	30	65	—	103S-AW02-DC10C-TE	107S-AW03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	—	103S-BW02-DC10C-TE	107S-BW03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	—	103S-CW02-DC10C-TE	107S-CW03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	30	103S-EW03-DC10C-TE	107S-EW03-DC10C-TE
10.0...12.0	3	3	7-1/2	10	65	30	65	—	103S-BW02-DC16C-TE	107S-BW03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10	65	30	65	—	103S-CW02-DC16C-TE	107S-CW03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	—	103S-DW02-DC16C-TE	107S-DW03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	30	103S-EW03-DC16C-TE	107S-EW03-DC16C-TE
14.5...20.0	5	5...7-1/2	15	—	65	⚡	65	⚡	103S-DW02-DC20C-TE	107S-DW03-DC20C-TE
14.5...20.0	5	5...7-1/2	15	—	65	⚡	65	⚡	103S-EW03-DC20C-TE	107S-EW03-DC20C-TE
18.0...23.0	5	7-1/2	15	—	65	⚡	65	⚡	103S-DW02-DC25C-TE	107S-DW03-DC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	—	65	⚡	65	⚡	103S-EW03-DC25C-TE	107S-EW03-DC25C-TE
F-Frame with 100-C/104-C Contactors on Panel Mounting Modules										
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	65	30	103S-EW03-FC10C-TE	107S-EW03-FC10C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	65	30	103S-EW03-FC16C-TE	107S-EW03-FC16C-TE
14.5...20.0	5	5...7-1/2	15	15...20	65	30	65	30	103S-EW03-FC20C-TE	107S-EW03-FC20C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20	65	30	65	30	103S-EW03-FC25C-TE	107S-EW03-FC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	65	30	65	30	103S-GW03-FC25C-TE	107S-GW03-FC25C-TE
23.0...30.0	7-1/2	10	20	25	65	30	65	30	103S-EW03-FC32C-TE	107S-EW03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-FW03-FC32C-TE	107S-FW03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	65	30	103S-GW03-FC32C-TE	107S-GW03-FC32C-TE
32.0...37.0	10	10	25	—	65	⚡	65	⚡	103S-FW03-FC45C-TE	107S-FW03-FC45C-TE
32.0...43.0	10	15	30	—	65	⚡	65	⚡	103S-GW03-FC45C-TE	107S-GW03-FC45C-TE

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.
 ⚡ This starter is not valid for application at this horsepower and voltage.

⊗ Coil voltage code—see page 2-315

UL/CSA as a UL508 Self Protected Type E Combination Motor Controller

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)						DOL Starters Cat. No.	Reversing Starters Cat. No.
	Hp Ratings as a UL 508 Self Protected Type E Combination Motor Controller*				Max. Short-Circuit Current [kA]			
	200V AC	230V AC	460V AC	575V AC	480Y/277V AC	600Y/347V AC		
C-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules								
0.10...0.16	—	—	—	—	65	47	103S-AT02-CA16C-TE	107S-AT03-CA16C-TE
0.16...0.25	—	—	—	—	65	47	103S-AT02-CA25C-TE	107S-AT03-CA25C-TE
0.25...0.40	—	—	—	—	65	47	103S-AT02-CA40C-TE	107S-AT03-CA40C-TE
0.40...0.63	—	—	—	—	65	47	103S-AT02-CA63C-TE	107S-AT03-CA63C-TE
0.63...1.00	—	—	1/2	3/4	65	47	103S-AT02-CB10C-TE	107S-AT03-CB10C-TE
1.00...1.60	—	—	1/2...1	3/4...1	65	47	103S-AT02-CB16C-TE	107S-AT03-CB16C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	—	65	❖	103S-AT02-CB25C-TE	107S-AT03-CB25C-TE
2.50...4.00	—	—	—	—	❖	❖	103S-AT02-CB40C-TE	107S-AT03-CB40C-TE
4.00...6.30	—	—	—	—	❖	❖	103S-AT02-CB63C-TE	107S-AT03-CB63C-TE
6.30...9.00	—	—	—	—	❖	❖	103S-AT02-CC10C-TE	107S-AT03-CC10C-TE
6.30...10.0	—	—	—	—	❖	❖	103S-BT02-CC10C-TE	107S-BT03-CC10C-TE
10.0...12.0	—	—	—	—	❖	❖	103S-BT02-CC16C-TE	107S-BT03-CC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-CT02-CC16C-TE	107S-CT03-CC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-DT02-CC16C-TE	107S-DT03-CC16C-TE
14.5...20.0	—	—	—	—	❖	❖	103S-DT02-CC20C-TE	107S-DT03-CC20C-TE
18.0...23.0	—	—	—	—	❖	❖	103S-DT02-CC25C-TE	107S-DT03-CC25C-TE
D-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules								
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	—	65	❖	103S-AT02-DB25C-TE	107S-AT03-DB25C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	103S-DT02-DB25C-TE	107S-DT03-DB25C-TE
2.50...4.00	—	—	—	—	❖	❖	103S-AT02-DB40C-TE	107S-AT03-DB40C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	103S-DT02-DB40C-TE	107S-DT03-DB40C-TE
4.00...6.30	—	—	—	—	❖	❖	103S-AT02-DB63C-TE	107S-AT03-DB63C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	103S-ET03-DB63C-TE	107S-ET03-DB63C-TE
6.30...9.00	—	—	—	—	❖	❖	103S-AT02-DC10C-TE	107S-AT03-DC10C-TE
6.30...10.0	—	—	—	—	❖	❖	103S-BT02-DC10C-TE	107S-BT03-DC10C-TE
6.30...10.0	—	—	—	—	❖	❖	103S-CT02-DC10C-TE	107S-CT03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	103S-ET03-DC10C-TE	107S-ET03-DC10C-TE
10.0...12.0	—	—	—	—	❖	❖	103S-BT02-DC16C-TE	107S-BT03-DC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-CT02-DC16C-TE	107S-CT03-DC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-DT02-DC16C-TE	107S-DT03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	103S-ET03-DC16C-TE	107S-ET03-DC16C-TE
14.5...20.0	—	—	—	—	❖	❖	103S-DT02-DC20C-TE	107S-DT03-DC20C-TE
14.5...20.0	5	5...7-1/2	15	—	65	❖	103S-ET03-DC20C-TE	107S-ET03-DC20C-TE
18.0...23.0	—	—	—	—	❖	❖	103S-DT02-DC25C-TE	107S-DT03-DC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	—	65	❖	103S-ET03-DC25C-TE	107S-ET03-DC25C-TE
F-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules								
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	103S-ET03-FC10C-TE	107S-ET03-FC10C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	103S-ET03-FC16C-TE	107S-ET03-FC16C-TE
14.5...20.0	5	5...7-1/2	15	15...20	65	30	103S-ET03-FC20C-TE	107S-ET03-FC20C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20	65	30	103S-ET03-FC25C-TE	107S-ET03-FC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	65	30	103S-GT03-FC25C-TE	107S-GT03-FC25C-TE
23.0...30.0	7-1/2	10	20	25	65	30	103S-ET03-FC32C-TE	107S-ET03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-FT03-FC32C-TE	107S-FT03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-GT03-FC32C-TE	107S-GT03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-HT03-FC32C-TE	107S-HT03-FC32C-TE
32.0...37.0	10	10	25	—	65	❖	103S-FT03-FC45C-TE	107S-FT03-FC45C-TE
32.0...43.0	10	15	30	—	65	❖	103S-GT03-FC45C-TE	107S-GT03-FC45C-TE
32.0...45.0	10	15	30	—	65	❖	103S-HT03-FC45C-TE	107S-HT03-FC45C-TE
32.0...45.0	10	15	30	—	65	❖	103S-JT03-FC45C-TE	107S-JT03-FC45C-TE

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

❖ This starter is not valid for application at this horsepower and voltage.

⊗ Coil voltage code—see page 2-315



Open Type Starters

Product Selection & Coordination Ratings

UL/CSA as a UL508 Self Protected Type E Combination Motor Controller, Continued

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)						DOL Starters Cat. No.	Reversing Starters Cat. No.
	Hp Ratings as a UL 508 Self Protected Type E Combination Motor Controller*				Max. Short-Circuit Current [kA]			
	200V AC	230V AC	460V AC	575V AC	480Y/277V AC	600Y/347V AC		
C-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules								
0.10...0.16	—	—	—	—	65	47	103S-ASØ2-CA16C-TE	107S-ASØ3-CA16C-TE
0.16...0.25	—	—	—	—	65	47	103S-ASØ2-CA25C-TE	107S-ASØ3-CA25C-TE
0.25...0.40	—	—	—	—	65	47	103S-ASØ2-CA40C-TE	107S-ASØ3-CA40C-TE
0.40...0.63	—	—	—	—	65	47	103S-ASØ2-CA63C-TE	107S-ASØ3-CA63C-TE
0.63...1.00	—	—	1/2	3/4	65	47	103S-ASØ2-CB10C-TE	107S-ASØ3-CB10C-TE
1.00...1.60	—	—	1/2...1	3/4...1	65	47	103S-ASØ2-CB16C-TE	107S-ASØ3-CB16C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	—	65	47	103S-ASØ2-CB25C-TE	107S-ASØ3-CB25C-TE
2.50...4.00	—	—	—	—	⊕	⊕	103S-ASØ2-CB40C-TE	107S-ASØ3-CB40C-TE
4.00...6.30	—	—	—	—	⊕	⊕	103S-ASØ2-CB63C-TE	107S-ASØ3-CB63C-TE
6.30...9.00	—	—	—	—	⊕	⊕	103S-ASØ2-CC10C-TE	107S-ASØ3-CC10C-TE
6.30...10.0	—	—	—	—	⊕	⊕	103S-BSØ2-CC10C-TE	107S-BSØ3-CC10C-TE
10.0...12.0	—	—	—	—	⊕	⊕	103S-BSØ2-CC16C-TE	107S-BSØ3-CC16C-TE
10.0...16.0	—	—	—	—	⊕	⊕	103S-CSØ2-CC16C-TE	107S-CSØ3-CC16C-TE
10.0...16.0	—	—	—	—	⊕	⊕	103S-DSØ2-CC16C-TE	107S-DSØ3-CC16C-TE
14.5...20.0	—	—	—	—	⊕	⊕	103S-DSØ2-CC20C-TE	107S-DSØ3-CC20C-TE
18.0...23.0	—	—	—	—	⊕	⊕	103S-DSØ2-CC25C-TE	107S-DSØ3-CC25C-TE
D-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules								
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	—	65	⊕	103S-ASØ2-DB25C-TE	107S-ASØ3-DB25C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	103S-DSØ2-DB25C-TE	107S-DSØ3-DB25C-TE
2.50...4.00	—	—	—	—	⊕	⊕	103S-ASØ2-DB40C-TE	107S-ASØ3-DB40C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	103S-DSØ2-DB40C-TE	107S-DSØ3-DB40C-TE
4.00...6.30	—	—	—	—	⊕	⊕	103S-ASØ2-DB63C-TE	107S-ASØ3-DB63C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	103S-ESØ3-DB63C-TE	107S-ESØ3-DB63C-TE
6.30...9.00	—	—	—	—	⊕	⊕	103S-ASØ2-DC10C-TE	107S-ASØ3-DC10C-TE
6.30...10.0	—	—	—	—	⊕	⊕	103S-BSØ2-DC10C-TE	107S-BSØ3-DC10C-TE
6.30...10.0	—	—	—	—	⊕	⊕	103S-CSØ2-DC10C-TE	107S-CSØ3-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	103S-ESØ3-DC10C-TE	107S-ESØ3-DC10C-TE
10.0...12.0	—	—	—	—	⊕	⊕	103S-BSØ2-DC16C-TE	107S-BSØ3-DC16C-TE
10.0...16.0	—	—	—	—	⊕	⊕	103S-CSØ2-DC16C-TE	107S-CSØ3-DC16C-TE
10.0...16.0	—	—	—	—	⊕	⊕	103S-DSØ2-DC16C-TE	107S-DSØ3-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	103S-ESØ3-DC16C-TE	107S-ESØ3-DC16C-TE
14.5...20.0	—	—	—	—	⊕	⊕	103S-DSØ2-DC20C-TE	107S-DSØ3-DC20C-TE
14.5...20.0	5	5...7-1/2	15	—	65	⊕	103S-ESØ3-DC20C-TE	107S-ESØ3-DC20C-TE
18.0...23.0	—	—	—	—	⊕	⊕	103S-DSØ2-DC25C-TE	107S-DSØ3-DC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	—	65	⊕	103S-ESØ3-DC25C-TE	107S-ESØ3-DC25C-TE
F-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules								
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	103S-ESØ3-FC10C-TE	107S-ESØ3-FC10C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	103S-ESØ3-FC16C-TE	107S-ESØ3-FC16C-TE
14.5...20.0	5	5...7-1/2	15	15...20	65	30	103S-ESØ3-FC20C-TE	107S-ESØ3-FC20C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20	65	30	103S-ESØ3-FC25C-TE	107S-ESØ3-FC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	65	30	103S-GSØ3-FC25C-TE	107S-GSØ3-FC25C-TE
23.0...30.0	7-1/2	10	20	25	65	30	103S-ESØ3-FC32C-TE	107S-ESØ3-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-FSØ3-FC32C-TE	107S-FSØ3-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-GSØ3-FC32C-TE	107S-GSØ3-FC32C-TE
32.0...37.0	10	10	25	—	65	⊕	103S-FSØ3-FC45C-TE	107S-FSØ3-FC45C-TE
32.0...43.0	10	15	30	—	65	⊕	103S-GSØ3-FC45C-TE	107S-GSØ3-FC45C-TE

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊕ This starter is not valid for application at this horsepower and voltage.

⊗ Coil voltage code—see page 2-315



UL/CSA as a UL508 Self Protected Type E Combination Motor Controller, Continued

Motor Current Adjustment Range [A]	UL/CSA Hp and Coordination Ratings (60 Hz)						DOL Starters Cat. No.	Reversing Starters Cat. No.
	Hp Ratings as a UL 508 Self Protected Type E Combination Motor Controller*					Max. Short-Circuit Current [kA]		
	200V AC	230V AC	460V AC	575V AC	480Y/277V AC	600Y/347V AC		
C-Frame with 100-C/104-C Contactors on Panel Mounting Modules								
0.10...0.16	—	—	—	—	65	47	103S-AW02-CA16C-TE	107S-AW03-CA16C-TE
0.16...0.25	—	—	—	—	65	47	103S-AW02-CA25C-TE	107S-AW03-CA25C-TE
0.25...0.40	—	—	—	—	65	47	103S-AW02-CA40C-TE	107S-AW03-CA40C-TE
0.40...0.63	—	—	—	—	65	47	103S-AW02-CA63C-TE	107S-AW03-CA63C-TE
0.63...1.00	—	—	1/2	3/4	65	47	103S-AW02-CB10C-TE	107S-AW03-CB10C-TE
1.00...1.60	—	—	1/2...1	3/4...1	65	47	103S-AW02-CB16C-TE	107S-AW03-CB16C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	—	65	❖	103S-AW02-CB25C-TE	107S-AW03-CB25C-TE
2.50...4.00	—	—	—	—	❖	❖	103S-AW02-CB40C-TE	107S-AW03-CB40C-TE
4.00...6.30	—	—	—	—	❖	❖	103S-AW02-CB63C-TE	107S-AW03-CB63C-TE
6.30...9.00	—	—	—	—	❖	❖	103S-AW02-CC10C-TE	107S-AW03-CC10C-TE
6.30...10.0	—	—	—	—	❖	❖	103S-BW02-CC10C-TE	107S-BW03-CC10C-TE
10.0...12.0	—	—	—	—	❖	❖	103S-BW02-CC16C-TE	107S-BW03-CC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-CW02-CC16C-TE	107S-CW03-CC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-DW02-CC16C-TE	107S-DW03-CC16C-TE
14.5...20.0	—	—	—	—	❖	❖	103S-DW02-CC20C-TE	107S-DW03-CC20C-TE
18.0...23.0	—	—	—	—	❖	❖	103S-DW02-CC25C-TE	107S-DW03-CC25C-TE
D-Frame with 100-C/104-C Contactors on Panel Mounting Modules								
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	—	65	❖	103S-AW02-DB25C-TE	107S-AW03-DB25C-TE
1.60...2.50	1/2	1/2...3/4	3/4...1-1/2	1...2	65	30	103S-DW02-DB25C-TE	107S-DW03-DB25C-TE
2.50...4.00	—	—	—	—	❖	❖	103S-AW02-DB40C-TE	107S-AW03-DB40C-TE
2.50...4.00	1/2...1	3/4...1	1-1/2...3	2...3	65	30	103S-DW02-DB40C-TE	107S-DW03-DB40C-TE
4.00...6.30	—	—	—	—	❖	❖	103S-AW02-DB63C-TE	107S-AW03-DB63C-TE
4.00...6.30	1...1-1/2	1...2	3...5	5	65	30	103S-EW03-DB63C-TE	107S-EW03-DB63C-TE
6.30...9.00	—	—	—	—	❖	❖	103S-AW02-DC10C-TE	107S-AW03-DC10C-TE
6.30...10.0	—	—	—	—	❖	❖	103S-BW02-DC10C-TE	107S-BW03-DC10C-TE
6.30...10.0	—	—	—	—	❖	❖	103S-CW02-DC10C-TE	107S-CW03-DC10C-TE
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	103S-EW03-DC10C-TE	107S-EW03-DC10C-TE
10.0...12.0	—	—	—	—	❖	❖	103S-BW02-DC16C-TE	107S-BW03-DC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-CW02-DC16C-TE	107S-CW03-DC16C-TE
10.0...16.0	—	—	—	—	❖	❖	103S-DW02-DC16C-TE	107S-DW03-DC16C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	103S-EW03-DC16C-TE	107S-EW03-DC16C-TE
14.5...20.0	—	—	—	—	❖	❖	103S-DW02-DC20C-TE	107S-DW03-DC20C-TE
14.5...20.0	5	5...7-1/2	15	—	65	❖	103S-EW03-DC20C-TE	107S-EW03-DC20C-TE
18.0...23.0	—	—	—	—	❖	❖	103S-DW02-DC25C-TE	107S-DW03-DC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	—	65	❖	103S-EW03-DC25C-TE	107S-EW03-DC25C-TE
F-Frame with 100-C/104-C Contactors on Panel Mounting Modules								
6.30...10.0	1-1/2...3	2...3	5...7-1/2	7-1/2...10	65	30	103S-EW03-FC10C-TE	107S-EW03-FC10C-TE
10.0...16.0	3...5	5	7-1/2...10	10...15	65	30	103S-EW03-FC16C-TE	107S-EW03-FC16C-TE
14.5...20.0	5	5...7-1/2	15	15...20	65	30	103S-EW03-FC20C-TE	107S-EW03-FC20C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20	65	30	103S-EW03-FC25C-TE	107S-EW03-FC25C-TE
18.0...25.0	7-1/2	7-1/2...10	15...20	20...25	65	30	103S-GW03-FC25C-TE	107S-GW03-FC25C-TE
23.0...30.0	7-1/2	10	20	25	65	30	103S-EW03-FC32C-TE	107S-EW03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-FW03-FC32C-TE	107S-FW03-FC32C-TE
23.0...32.0	7-1/2...10	10	20...25	30	65	30	103S-GW03-FC32C-TE	107S-GW03-FC32C-TE
32.0...37.0	10	10	25	—	65	❖	103S-FW03-FC45C-TE	107S-FW03-FC45C-TE
32.0...43.0	10	15	30	—	65	❖	103S-GW03-FC45C-TE	107S-GW03-FC45C-TE

* Horsepower ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

❖ This starter is not valid for application at this horsepower and voltage.

⊗ Coil voltage code—see page 2-315

Open Type Starters

Product Selection & Coordination Ratings

IEC Type 1 and Type 2 Short-Circuit Coordination

2

Motor Current Adjustment Range [A]	IEC kW and Coordination Ratings (50 Hz)												DOL Starters Cat. No.	Reversing Starters Cat. No.
	kW Ratings*				Max. Short-Circuit Current [kA]									
					Type 1 Coordination				Type 2 Coordination					
	230V AC	400V AC	500V AC	690V AC	230V AC	400V AC	500V AC	690V AC	230V AC	400V AC	500V AC	690V AC		
C-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules														
0.10...0.16	—	—	0.06	0.06	65	65	65	50	65	65	65	50	103S-AT02-CA16C	107S-AT03-CA16C
0.16...0.25	0.02	0.06	0.06	0.12	65	65	65	50	65	65	65	50	103S-AT02-CA25C	107S-AT03-CA25C
0.25...0.40	0.06	0.09	0.12	0.18	65	65	65	50	65	65	65	50	103S-AT02-CA40C	107S-AT03-CA40C
0.40...0.63	0.09	0.18	0.18	0.37	65	65	65	50	65	65	65	50	103S-AT02-CA63C	107S-AT03-CA63C
0.63...1.00	0.12	0.25	0.37	0.55	65	65	65	50	65	65	65	50	103S-AT02-CB10C	107S-AT03-CB10C
1.00...1.60	0.25	0.55	0.75	1.1	65	65	65	50	65	65	65	50	103S-AT02-CB16C	107S-AT03-CB16C
1.60...2.50	0.55	0.75	1.1	1.8	65	65	50	8	65	50	50	8	103S-AT02-CB25C	107S-AT03-CB25C
2.50...4.00	0.75	1.5	2.2	3	65	50	50	8	50	50	—	—	103S-AT02-CB40C	107S-AT03-CB40C
4.00...6.30	1.5	2.2	3	4	65	50	50	4	50	50	—	—	103S-AT02-CB63C	107S-AT03-CB63C
6.30...9.00	2.2	4	4	—	65	65	50	—	50	50	—	—	103S-AT02-CC10C	107S-AT03-CC10C
6.30...10.0	2.2	4	5.5	5.5	65	65	50	4	50	50	50	—	103S-BT02-CC10C	107S-BT03-CC10C
6.30...10.0	2.2	4	5.5	7.5	65	65	50	4	50	50	50	—	103S-CT02-CC10C	107S-CT03-CC10C
10.0...12.0	4	5.5	—	—	65	65	—	—	50	50	—	—	103S-BT02-CC16C	107S-BT03-CC16C
10.0...16.0	4	7.5	7.5	—	65	50	10	—	50	—	—	—	103S-CT02-CC16C	107S-CT03-CC16C
10.0...16.0	4	7.5	10	10	65	50	10	3	50	50	—	—	103S-DT02-CC16C	107S-DT03-CC16C
14.5...20.0	4	10	11	—	50	15	6	—	15	—	—	—	103S-DT02-CC20C	107S-DT03-CC20C
18.0...23.0	6.3	11	13	—	50	15	6	—	15	—	—	—	103S-DT02-CC25C	107S-DT03-CC25C
D-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules														
1.60...2.50	0.55	0.75	1.1	1.8	65	65	50	10	65	65	50	10	103S-AT02-DB25C	107S-AT03-DB25C
1.60...2.50	0.55	0.75	1.1	1.8	65	65	50	10	65	65	50	10	103S-DT02-DB25C	107S-DT03-DB25C
2.50...4.00	0.75	1.5	2.2	3	65	65	50	10	65	65	50	—	103S-AT02-DB40C	107S-AT03-DB40C
2.50...4.00	0.75	1.5	2.2	3	65	65	50	50	65	65	50	50	103S-DT02-DB40C	107S-DT03-DB40C
4.00...6.30	1.5	2.2	3	4	65	65	50	50	65	65	50	—	103S-AT02-DB63C	107S-AT03-DB63C
4.00...6.30	1.5	2.2	3	4	65	65	50	50	65	65	50	50	103S-ET03-DB63C	107S-ET03-DB63C
6.30...9.00	2.2	4	4	—	65	65	50	—	65	65	—	—	103S-AT02-DC10C	107S-AT03-DC10C
6.30...10.0	2.2	4	5.5	5.5	65	65	50	50	65	65	65	—	103S-BT02-DC10C	107S-BT03-DC10C
6.30...10.0	2.2	4	5.5	7.5	65	65	50	50	65	65	65	50	103S-CT02-DC10C	107S-CT03-DC10C
6.30...10.0	2.2	4	5.5	7.5	65	65	50	50	65	65	65	50	103S-ET03-DC10C	107S-ET03-DC10C
10.0...12.0	4	5.5	—	—	65	65	—	—	65	65	—	—	103S-BT02-DC16C	107S-BT03-DC16C
10.0...16.0	4	7.5	7.5	—	65	65	50	—	65	65	50	—	103S-CT02-DC16C	107S-CT03-DC16C
10.0...16.0	4	7.5	10	10	65	65	50	6	65	65	50	—	103S-DT02-DC16C	107S-DT03-DC16C
10.0...16.0	4	7.5	10	13	65	65	50	6	65	65	50	—	103S-ET03-DC16C	107S-ET03-DC16C
14.5...20.0	4	10	11	—	65	65	25	—	65	65	25	—	103S-DT02-DC20C	107S-DT03-DC20C
14.5...20.0	4	10	11	15	65	65	25	6	65	65	25	—	103S-ET03-DC20C	107S-ET03-DC20C
18.0...23.0	6.3	11	13	—	65	50	25	—	65	50	25	—	103S-DT02-DC25C	107S-DT03-DC25C
18.0...25.0	6.3	11	15	—	65	50	25	—	65	50	25	—	103S-ET03-DC25C	107S-ET03-DC25C
F-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules														
6.30...10.0	2.2	4	5.5	7.5	65	65	50	50	65	65	50	50	103S-ET03-FC10C	107S-ET03-FC10C
10.0...16.0	4	7.5	10	13	65	65	50	50	65	65	50	50	103S-ET03-FC16C	107S-ET03-FC16C
14.5...20.0	4	10	11	15	65	65	50	50	65	65	50	50	103S-ET03-FC20C	107S-ET03-FC20C
18.0...25.0	6.3	11	15	—	65	65	50	—	65	65	50	—	103S-ET03-FC25C	107S-ET03-FC25C
18.0...25.0	6.3	11	15	22	65	65	50	50	65	65	50	50	103S-GT03-FC25C	107S-GT03-FC25C
23.0...30.0	7.5	15	15	—	65	65	50	—	65	65	50	—	103S-ET03-FC32C	107S-ET03-FC32C
23.0...32.0	7.5	15	20	—	65	65	50	—	65	65	50	—	103S-FT03-FC32C	107S-FT03-FC32C
23.0...32.0	7.5	15	20	22	65	65	50	50	65	65	50	50	103S-GT03-FC32C	107S-GT03-FC32C
23.0...32.0	7.5	15	20	25	65	65	50	50	65	65	50	50	103S-HT03-FC32C	107S-HT03-FC32C
32.0...37.0	11	18.5	—	—	65	65	—	—	65	65	—	—	103S-FT03-FC45C	107S-FT03-FC45C
32.0...43.0	13	22	25	—	65	65	50	—	65	65	50	—	103S-GT03-FC45C	107S-GT03-FC45C
32.0...45.0	13	22	30	—	65	65	50	—	65	65	50	—	103S-HT03-FC45C	107S-HT03-FC45C
32.0...45.0	13	22	30	—	65	65	50	—	65	65	50	—	103S-JT03-FC45C	107S-JT03-FC45C
CMN-Frame with 100-C/104-C Contactors on Standard Bus Bar Modules														
40.0...60.0	18.5	32	37	—	65	65	50	—	65	65	30	—	103S-HT03-GC63C	107S-HT03-GC63C
40.0...63.0	18.5	32	40	—	65	65	50	—	65	65	30	—	103S-JT03-GC63C	107S-JT03-GC63C
40.0...63.0	18.5	32	40	45	65	65	50	8	65	65	30	—	103S-KT03-GC63C	107S-KT03-GC63C
63.0...72.0	22	40	45	—	65	65	50	—	65	65	15	—	103S-JT03-GC90C	107S-JT03-GC90C
63.0...85.0	25	45	50	—	65	65	50	—	65	65	15	—	103S-KT03-GC90C	107S-KT03-GC90C

* kW ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊗ Coil voltage code—see page 2-315



IEC Type 1 and Type 2 Short-Circuit Coordination, Continued

Motor Current Adjustment Range [A]	IEC kW and Coordination Ratings (50 Hz)												DOL Starters Cat. No.	Reversing Starters Cat. No.
	kW Ratings*				Max. Short-Circuit Current [kA]									
					Type 1 Coordination				Type 2 Coordination					
	230V AC	400V AC	500V AC	690V AC	230V AC	400V AC	500V AC	690V AC	230V AC	400V AC	500V AC	690V AC		
C-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules														
0.10...0.16	—	—	0.06	0.06	65	65	65	50	65	65	65	50	103S-AS02-CA16C	107S-AS03-CA16C
0.16...0.25	0.02	0.06	0.06	0.12	65	65	65	50	65	65	65	50	103S-AS02-CA25C	107S-AS03-CA25C
0.25...0.40	0.06	0.09	0.12	0.18	65	65	65	50	65	65	65	50	103S-AS02-CA40C	107S-AS03-CA40C
0.40...0.63	0.09	0.18	0.18	0.37	65	65	65	50	65	65	65	50	103S-AS02-CA63C	107S-AS03-CA63C
0.63...1.00	0.12	0.25	0.37	0.55	65	65	65	50	65	65	65	50	103S-AS02-CB10C	107S-AS03-CB10C
1.00...1.60	0.25	0.55	0.75	1.1	65	65	65	50	65	65	65	50	103S-AS02-CB16C	107S-AS03-CB16C
1.60...2.50	0.55	0.75	1.1	1.8	65	65	50	8	65	50	50	8	103S-AS02-CB25C	107S-AS03-CB25C
2.50...4.00	0.75	1.5	2.2	3	65	50	50	8	50	50	—	—	103S-AS02-CB40C	107S-AS03-CB40C
4.00...6.30	1.5	2.2	3	4	65	50	50	4	50	50	—	—	103S-AS02-CB63C	107S-AS03-CB63C
6.30...9.00	2.2	4	4	—	65	65	50	—	50	50	—	—	103S-AS02-CC10C	107S-AS03-CC10C
6.30...10.0	2.2	4	5.5	5.5	65	65	50	4	50	50	50	—	103S-BS02-CC10C	107S-BS03-CC10C
6.30...10.0	2.2	4	5.5	7.5	65	65	50	4	50	50	50	—	103S-CS02-CC10C	107S-CS03-CC10C
10.0...12.0	4	5.5	—	—	65	65	—	—	50	50	—	—	103S-BS02-CC16C	107S-BS03-CC16C
10.0...16.0	4	7.5	7.5	—	65	50	10	—	50	—	—	—	103S-CS02-CC16C	107S-CS03-CC16C
10.0...16.0	4	7.5	10	10	65	50	10	3	50	50	—	—	103S-DS02-CC16C	107S-DS03-CC16C
14.5...20.0	4	10	11	—	50	15	6	—	15	—	—	—	103S-DS02-CC20C	107S-DS03-CC20C
18.0...23.0	6.3	11	13	—	50	15	6	—	15	—	—	—	103S-DS02-CC25C	107S-DS03-CC25C
D-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules														
1.60...2.50	0.55	0.75	1.1	1.8	65	65	50	10	65	65	50	10	103S-AS02-DB25C	107S-AS03-DB25C
1.60...2.50	0.55	0.75	1.1	1.8	65	65	50	10	65	65	50	10	103S-DS02-DB25C	107S-DS03-DB25C
2.50...4.00	0.75	1.5	2.2	3	65	65	50	10	65	65	50	—	103S-AS02-DB40C	107S-AS03-DB40C
2.50...4.00	0.75	1.5	2.2	3	65	65	50	50	65	65	50	50	103S-DS02-DB40C	107S-DS03-DB40C
4.00...6.30	1.5	2.2	3	4	65	65	50	50	65	65	50	—	103S-AS02-DB63C	107S-AS03-DB63C
4.00...6.30	1.5	2.2	3	4	65	65	50	50	65	65	50	50	103S-ES03-DB63C	107S-ES03-DB63C
6.30...9.00	2.2	4	4	—	65	65	50	—	65	65	—	—	103S-AS02-DC10C	107S-AS03-DC10C
6.30...10.0	2.2	4	5.5	5.5	65	65	50	50	65	65	65	—	103S-BS02-DC10C	107S-BS03-DC10C
6.30...10.0	2.2	4	5.5	7.5	65	65	65	50	65	65	65	50	103S-CS02-DC10C	107S-CS03-DC10C
6.30...10.0	2.2	4	5.5	7.5	65	65	65	50	65	65	65	50	103S-ES03-DC10C	107S-ES03-DC10C
10.0...12.0	4	5.5	—	—	65	65	—	—	65	65	—	—	103S-BS02-DC16C	107S-BS03-DC16C
10.0...16.0	4	7.5	7.5	—	65	65	50	—	65	65	50	—	103S-CS02-DC16C	107S-CS03-DC16C
10.0...16.0	4	7.5	10	10	65	65	50	6	65	65	50	—	103S-DS02-DC16C	107S-DS03-DC16C
10.0...16.0	4	7.5	10	13	65	65	50	6	65	65	50	—	103S-ES03-DC16C	107S-ES03-DC16C
14.5...20.0	4	10	11	—	65	65	25	—	65	65	25	—	103S-DS02-DC20C	107S-DS03-DC20C
14.5...20.0	4	10	11	15	65	65	25	6	65	65	25	—	103S-ES03-DC20C	107S-ES03-DC20C
18.0...23.0	6.3	11	13	—	65	50	25	—	65	50	25	—	103S-DS02-DC25C	107S-DS03-DC25C
18.0...25.0	6.3	11	15	—	65	50	25	—	65	50	25	—	103S-ES03-DC25C	107S-ES03-DC25C
F-Frame with 100-C/104-C Contactors on ISO Bus Bar Modules														
6.30...10.0	2.2	4	5.5	7.5	65	65	50	50	65	65	50	50	103S-ES03-FC10C	107S-ES03-FC10C
10.0...16.0	4	7.5	10	13	65	65	50	50	65	65	50	50	103S-ES03-FC16C	107S-ES03-FC16C
14.5...20.0	4	10	11	15	65	65	50	50	65	65	50	50	103S-ES03-FC20C	107S-ES03-FC20C
18.0...25.0	6.3	11	15	—	65	65	50	—	65	65	50	—	103S-ES03-FC25C	107S-ES03-FC25C
18.0...25.0	6.3	11	15	22	65	65	50	50	65	65	50	50	103S-GS03-FC25C	107S-GS03-FC25C
23.0...30.0	7.5	15	15	—	65	65	50	—	65	65	50	—	103S-ES03-FC32C	107S-ES03-FC32C
23.0...32.0	7.5	15	20	—	65	65	50	—	65	65	50	—	103S-FS03-FC32C	107S-FS03-FC32C
23.0...32.0	7.5	15	20	22	65	65	50	50	65	65	50	50	103S-GS03-FC32C	107S-GS03-FC32C
32.0...37.0	11	18.5	—	—	65	65	—	—	65	65	—	—	103S-FS03-FC45C	107S-FS03-FC45C
32.0...43.0	13	22	25	—	65	65	50	—	65	65	50	—	103S-GS03-FC45C	107S-GS03-FC45C

* kW ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊗ Coil voltage code—see page 2-315



Open Type Starters

Product Selection & Coordination Ratings

IEC Type 1 and Type 2 Short-Circuit Coordination, Continued

2

Motor Current Adjustment Range [A]	IEC kW and Coordination Ratings (50 Hz)												DOL Starters Cat. No.	Reversing Starters Cat. No.
	kW Ratings*				Max. Short-Circuit Current [kA]									
					Type 1 Coordination				Type 2 Coordination					
	230V AC	400V AC	500V AC	690V AC	230V AC	400V AC	500V AC	690V AC	230V AC	400V AC	500V AC	690V AC		
C-Frame with 100-C/104-C Contactors on Panel Mounting Modules														
0.10...0.16	—	—	0.06	0.06	100	100	65	50	65	65	65	50	103S-AW02-CA16C	107S-AW03-CA16C
0.16...0.25	0.02	0.06	0.06	0.12	100	100	65	50	65	65	65	50	103S-AW02-CA25C	107S-AW03-CA25C
0.25...0.40	0.06	0.09	0.12	0.18	100	100	65	50	65	65	65	50	103S-AW02-CA40C	107S-AW03-CA40C
0.40...0.63	0.09	0.18	0.18	0.37	100	100	65	50	65	65	65	50	103S-AW02-CA63C	107S-AW03-CA63C
0.63...1.00	0.12	0.25	0.37	0.55	100	100	65	50	65	65	65	50	103S-AW02-CB10C	107S-AW03-CB10C
1.00...1.60	0.25	0.55	0.75	1.1	100	100	65	50	65	65	65	50	103S-AW02-CB16C	107S-AW03-CB16C
1.60...2.50	0.55	0.75	1.1	1.8	100	65	50	8	65	50	50	8	103S-AW02-CB25C	107S-AW03-CB25C
2.50...4.00	0.75	1.5	2.2	3	100	50	50	8	50	50	—	—	103S-AW02-CB40C	107S-AW03-CB40C
4.00...6.30	1.5	2.2	3	4	100	50	50	4	50	50	—	—	103S-AW02-CB63C	107S-AW03-CB63C
6.30...9.00	2.2	4	4	—	100	65	50	—	50	50	—	—	103S-AW02-CC10C	107S-AW03-CC10C
6.30...10.0	2.2	4	5.5	5.5	100	65	50	4	50	50	50	—	103S-BW02-CC10C	107S-BW03-CC10C
6.30...10.0	2.2	4	5.5	7.5	100	65	50	4	50	50	50	—	103S-CW02-CC10C	107S-CW03-CC10C
10.0...12.0	4	5.5	—	—	100	65	—	—	50	50	—	—	103S-BW02-CC16C	107S-BW03-CC16C
10.0...16.0	4	7.5	7.5	—	100	50	10	—	50	—	—	—	103S-CW02-CC16C	107S-CW03-CC16C
10.0...16.0	4	7.5	10	10	100	50	10	3	50	50	—	—	103S-DW02-CC16C	107S-DW03-CC16C
14.5...20.0	4	10	11	—	50	15	6	—	15	—	—	—	103S-DW02-CC20C	107S-DW03-CC20C
18.0...23.0	6.3	11	13	—	50	15	6	—	15	—	—	—	103S-DW02-CC25C	107S-DW03-CC25C
D-Frame with 100-C/104-C Contactors on Panel Mounting Modules														
1.60...2.50	0.55	0.75	1.1	1.8	100	100	50	10	100	100	50	10	103S-AW02-DB25C	107S-AW03-DB25C
1.60...2.50	0.55	0.75	1.1	1.8	100	100	50	10	100	100	50	10	103S-DW02-DB25C	107S-DW03-DB25C
2.50...4.00	0.75	1.5	2.2	3	100	100	50	10	100	100	50	—	103S-AW02-DB40C	107S-AW03-DB40C
2.50...4.00	0.75	1.5	2.2	3	100	100	50	50	100	100	50	50	103S-DW02-DB40C	107S-DW03-DB40C
4.00...6.30	1.5	2.2	3	4	100	100	50	50	100	100	50	—	103S-AW02-DB63C	107S-AW03-DB63C
4.00...6.30	1.5	2.2	3	4	100	100	50	50	100	100	50	50	103S-EW03-DB63C	107S-EW03-DB63C
6.30...9.00	2.2	4	4	—	100	65	50	—	65	65	—	—	103S-AW02-DC10C	107S-AW03-DC10C
6.30...10.0	2.2	4	5.5	5.5	100	100	65	50	100	100	65	—	103S-BW02-DC10C	107S-BW03-DC10C
6.30...10.0	2.2	4	5.5	7.5	100	100	65	50	100	100	65	50	103S-CW02-DC10C	107S-CW03-DC10C
6.30...10.0	2.2	4	5.5	7.5	100	100	65	50	100	100	65	50	103S-EW03-DC10C	107S-EW03-DC10C
10.0...12.0	4	5.5	—	—	100	65	—	—	65	65	—	—	103S-BW02-DC16C	107S-BW03-DC16C
10.0...16.0	4	7.5	7.5	—	100	65	50	—	65	65	50	—	103S-CW02-DC16C	107S-CW03-DC16C
10.0...16.0	4	7.5	10	10	100	65	50	6	65	65	50	—	103S-DW02-DC16C	107S-DW03-DC16C
10.0...16.0	4	7.5	10	13	100	65	50	6	65	65	50	—	103S-EW03-DC16C	107S-EW03-DC16C
14.5...20.0	4	10	11	—	65	65	25	—	65	65	25	—	103S-DW02-DC20C	107S-DW03-DC20C
14.5...20.0	4	10	11	15	65	65	25	6	65	65	25	—	103S-EW03-DC20C	107S-EW03-DC20C
18.0...23.0	6.3	11	13	—	65	50	25	—	65	50	25	—	103S-DW02-DC25C	107S-DW03-DC25C
18.0...25.0	6.3	11	15	—	65	50	25	—	65	50	25	—	103S-EW03-DC25C	107S-EW03-DC25C
F-Frame with 100-C/104-C Contactors on Panel Mounting Modules														
6.30...10.0	2.2	4	5.5	7.5	100	100	50	50	100	100	50	50	103S-EW03-FC10C	107S-EW03-FC10C
10.0...16.0	4	7.5	10	13	100	100	50	50	100	100	50	50	103S-EW03-FC16C	107S-EW03-FC16C
14.5...20.0	4	10	11	15	100	100	50	50	100	100	50	50	103S-EW03-FC20C	107S-EW03-FC20C
18.0...25.0	6.3	11	15	—	100	100	50	—	100	100	50	—	103S-EW03-FC25C	107S-EW03-FC25C
18.0...25.0	6.3	11	15	22	100	100	50	50	100	100	50	50	103S-GW03-FC25C	107S-GW03-FC25C
23.0...30.0	7.5	15	15	—	100	100	50	—	100	100	50	—	103S-EW03-FC32C	107S-EW03-FC32C
23.0...32.0	7.5	15	20	—	100	100	50	—	100	100	50	—	103S-FW03-FC32C	107S-FW03-FC32C
23.0...32.0	7.5	15	20	22	100	100	50	50	100	100	50	50	107S-GW03-FC32C	107S-GW03-FC32C
32.0...37.0	11	18.5	—	—	100	100	—	—	100	100	—	—	103S-FW03-FC45C	107S-FW03-FC45C
32.0...43.0	13	22	25	—	100	100	50	—	100	100	50	—	103S-GW03-FC45C	107S-GW03-FC45C

* kW ratings shown in the table are for reference. Final selection of the starter depends upon the actual motor full-load current.

⊗ Coil voltage code—see page 2-315



⊗ **Coil Voltage Codes for AC Control**

Voltage [V]	12	24	32	36	42	48	100	100-110	110	120	127	200	200-220	200-230	208	208-240
50 Hz	R	K	V	W	X	Y	KP	—	D	P	S	KG	—	—	—	—
60 Hz	Q	J	—	V	—	X	—	KP	—	D	—	—	KG	—	H	L
50/60 Hz	—	KJ	—	—	—	KY	KP	—	KD	—	—	KG	—	KL	—	—
Voltage [V]	220-230	230	230-240	240	277	347	380	380-400	400	400-415	440	480	500	550	600	
50 Hz	F	—	VA	T	—	—	—	N	—	G	B	—	M	C	—	
60 Hz	—	—	—	A	T	I	E	—	—	—	N	B	—	—	C	
50/60 Hz	—	KF	—	KA	—	—	—	—	KN	—	KB	—	—	—	—	

⊗ **Coil Voltage Codes for DC Control**

DC Voltages [V]		9	12	24	36	48	60	64	72	80	110	115	125	220	230	250
Contactor size A...G	Standard	ZR	ZQ	ZJ	ZW	ZY	ZZ	ZB	ZG	ZE	ZD	ZP	ZS	ZA	ZF	ZT
	with Integrated Diode	—	—	DJ	—	—	—	—	—	—	—	—	—	—	—	—
	with Electronic Coil	—	—	EJ	—	—	—	—	—	—	—	—	—	—	—	—
Contactor size H...J	with Integrated Diode	DR	DQ	DJ	DW	DY	DZ	DB	DG	DE	DD	DP	DS	DA	DF	DT



103S Factory-Installed Options

Change option code ① to desired auxiliary contact: 103S-AWD①-CA16C

Contactor Auxiliaries without “-SP” Control Plug									
Option ①	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
2	1 N.O.	NA	NA	NA	Standard	Standard	Standard	Standard	Standard
3	1 N.O. + 1 N.C.	NA	NA	NA	Available	Available	Available	Available	Available
4	2 N.O.	NA	NA	NA	Available	Available	Available	Available	Available
6	2 N.O. + 1 N.C.	NA	NA	NA	Available	NA	NA	Available	NA
7	2 N.O. + 2 N.C.	NA	NA	NA	NA	Available	Available	NA	Available
8	3 N.O. + 2 N.C.	NA	NA	NA	Available	NA	NA	Available	NA

Change option code ① to desired auxiliary contact: 103S-AWD①-CA16C

Contactor Auxiliaries with “-SP” Control Plug									
Option ①	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
2	1 N.O.	Standard	Standard	NA	Available	Available	Available	Available	Available
3	1 N.O. + 1 N.C.	Available	Available	NA	Available	Available	Available	Available	Available
4	2 N.O.	Available	Available	NA	Available	Available	Available	Available	Available
6	2 N.O. + 1 N.C.	NA	NA	NA	NA	NA	NA	NA	NA
7	2 N.O. + 2 N.C.	NA	NA	NA	NA	NA	NA	NA	NA
8	3 N.O. + 2 N.C.	NA	NA	NA	NA	NA	NA	NA	NA

Change option code ② to desired auxiliary contact: 103S-AWD2-CA16②

Circuit Breaker Aux/Trip Contacts									
Option ②	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
X*	Without Aux/Trip Contacts	NA	NA	NA	Available	Available	Available	Available	Available
A*	1 N.C. Aux.	NA	NA	NA	Available	Available	NA	Available	Available
B	1 N.O. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
C	1 N.O. + 1 N.C. Aux.	Standard	Standard	NA	Standard	Standard	Standard	Standard	Standard
D	2 N.O. Aux.	Available	Available	NA	Available	Available	Available	Available	Available
E*	2 N.C. Aux.	NA	NA	NA	Available	Available	Available	Available	Available
R*	1 N.O. Trip + 1 N.C. Aux	NA	NA	NA	Available	Available	NA	Available	Available
S	1 N.O. Trip + 1 N.O. Aux	Available	Available	NA	Available	Available	NA	Available	Available

* Not available when an “-SP” Control Plug is selected.

Add option code ③ to desired auxiliary contact: 103S-AWD2-CA16C③

Additional Circuit Breaker Aux/Trip Contacts									
Option ③	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
Blank	Without Aux/Trip Contacts	Available	Available	Available	Available	Available	Available	Available	Available
C*	1 N.O. + 1 N.C. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
D*	2 N.O. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
E*‡	2 N.C. Aux.	Available	Available	NA	Standard	Standard	NA	Standard	Standard
K	1 N.C. (OL) Trip + 1 N.C. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
L	1 N.O. (OL) Trip + 1 N.O. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
M‡	1 N.C. (OL) Trip + 1 N.O. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
N‡	1 N.O. (OL) Trip + 1 N.C. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
Q‡	1 N.O. (SC) Trip + 1 N.C. (SC) Trip	Available	Available	NA	Available	Available	NA	Available	Available

* Not available on 60...85 A starters.

‡ Not available when an “-SP” Control Plug is selected on 60...85 A starters.

Add option code ④ to desired auxiliary contact: 103S-AWD2-CA16C-④

Modifications/Accessories	
Option ④	Description
JE	Electronic Interface
R	Surge Suppressor, RC
V	Surge Suppressor, Varistor
D	Surge Suppressor, Diode
KN	Lockable Knob, Black
KY	Lockable Knob, Red/Yellow
TE	Spacing Adapter for UL508 Type E
SP	Control Plug, Top Mount

107S Factory-Installed Options

Change option code ① to desired auxiliary contact: 107S-AWD①-CA16C

Contactor Auxiliaries without “-SP” Control Plug									
Option ①	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
3	1 N.O. + 1 N.C.	NA	NA	NA	Standard	Standard	Standard	Standard	Standard
7	2 N.O. + 2 N.C.	NA	NA	NA	Available	Available	Available	Available	Available

Change option code ① to desired auxiliary contact: 107S-AWD①-CA16C

Contactor Auxiliaries with “-SP” Control Plug									
Option ①	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
3	1 N.O. + 1 N.C.	Standard	Standard	NA	Available	Available	Available	Available	Available
7	2 N.O. + 2 N.C.	Available	Available	NA	Available	Available	Available	Available	Available

Change option code ② to desired auxiliary contact: 107S-AWD2-CA16②

Circuit Breaker Aux/Trip Contacts									
Option ②	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
X*	Without Aux/Trip Contacts	NA	NA	NA	Available	Available	Available	Available	Available
A*	1 N.C. Aux.	NA	NA	NA	Available	Available	NA	Available	Available
B	1 N.O. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
C	1 N.O. + 1 N.C. Aux.	Standard	Standard	NA	Standard	Standard	Standard	Standard	Standard
D	2 N.O. Aux.	Available	Available	NA	Available	Available	Available	Available	Available
E*	2 N.C. Aux.	NA	NA	NA	Available	Available	Available	Available	Available
R*	1 N.O. Trip + 1 N.C. Aux	NA	NA	NA	Available	Available	NA	Available	Available
S	1 N.O. Trip + 1 N.O. Aux	Available	Available	NA	Available	Available	NA	Available	Available

* Not available when an “-SP” Control Plug is selected.

Add option code ③ to desired auxiliary contact: 107S-AWD2-CA16C③

Additional Circuit Breaker Aux/Trip Contacts									
Option ③	Description	ISO Busbar Mount			Standard Busbar Mount			Panel Mount	
		9...23 A	30...43 A	60...85 A	9...23 A	30...43 A	60...85 A	9...23 A	30...43 A
Blank	Without Aux/Trip Contacts	Available	Available	Available	Available	Available	Available	Available	Available
C*	1 N.O. + 1 N.C. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
D*	2 N.O. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
E*‡	2 N.C. Aux.	Available	Available	NA	Available	Available	NA	Available	Available
K	1 N.C. (OL) Trip + 1 N.C. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
L	1 N.O. (OL) Trip + 1 N.O. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
M‡	1 N.C. (OL) Trip + 1 N.O. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
N‡	1 N.O. (OL) Trip + 1 N.C. (SC) Trip	Available	Available	NA	Available	Available	Available	Available	Available
Q*	1 N.O. (SC) Trip + 1 N.C. (SC) Trip	Available	Available	NA	Available	Available	NA	Available	Available

* Not available on 60...85 A starters.

‡ Not available when a “-SP” Control Plug is selected on 60...85 A starters.

Add option code ④ to desired auxiliary contact: 107S-AWD2-CA16C-④

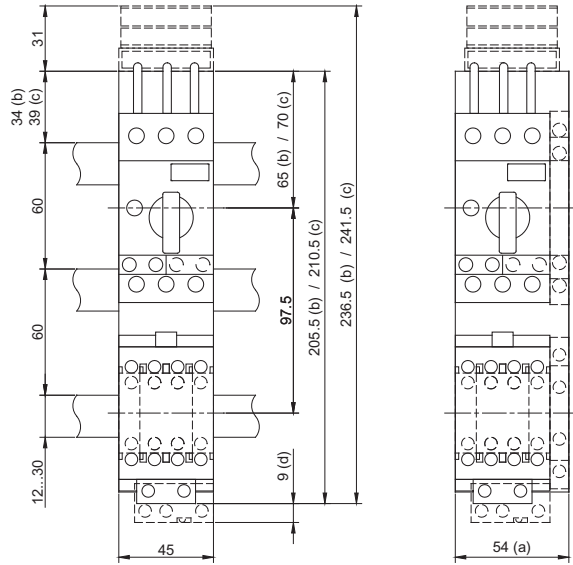
Modifications/Accessories	
Option ④	Description
JE	Electronic Interface
R	Surge Suppressor, RC
V	Surge Suppressor, Varistor
D	Surge Suppressor, Diode
KN	Lockable Knob, Black
KY	Lockable Knob, Red/Yellow
TE	Spacing Adapter for UL508 Type E
SP	Control Plug, Top Mount

Bulletin 103S/107S
Open Type Starters
 Approximate Dimensions

Dimensions are shown in millimeters. Dimensions are not intended for manufacturing purposes.

Standard and ISO Busbar Mount — Bulletin 103S Non-Reversing Starters

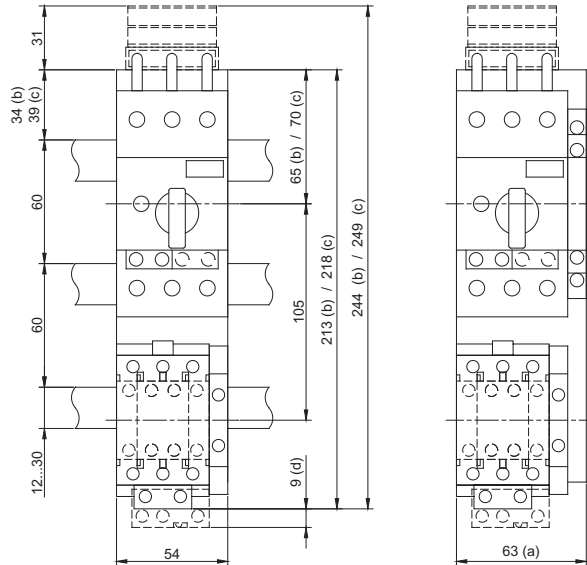
2



Circuit Breaker: 140M-C / -D
 Contactor: 100-C09...23
 Reference Print: D00GMD

- (a) With additional side-mount aux. or trip contact(s)
- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

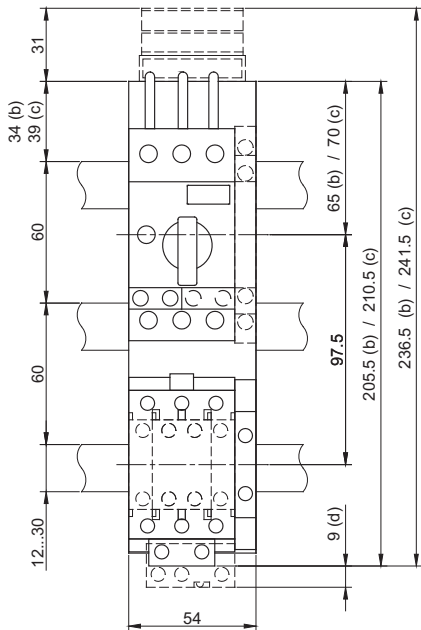
Bulletin 103S Busbar Mount



Circuit Breaker: 140M-F
 Contactor: 100-C30...37
 Reference Print: D10GMF

- (a) With additional side-mount aux. or trip contact
- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

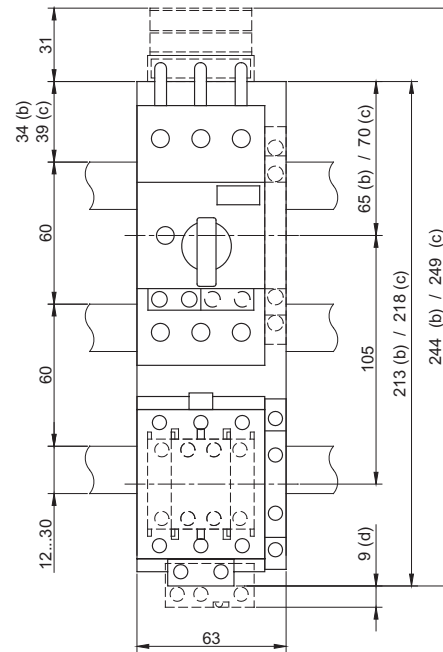
Bulletin 103S Busbar Mount



Circuit Breaker: 140M-D
 Contactor: 100-C30...37
 Reference Print: D10GMF

- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

Bulletin 103S Busbar Mount



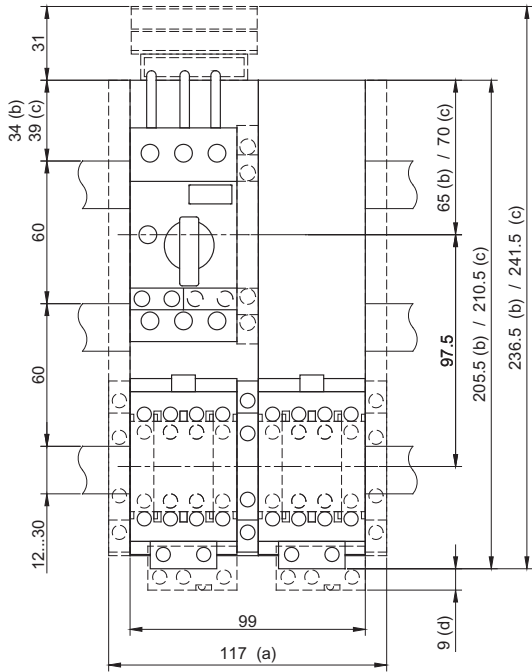
Circuit Breaker: 140M-F
 Contactor: 100-C43
 Reference Print: D20GMF

- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

Bulletin 103S Busbar Mount

Dimensions are shown in millimeters. Dimensions are not intended for manufacturing purposes.

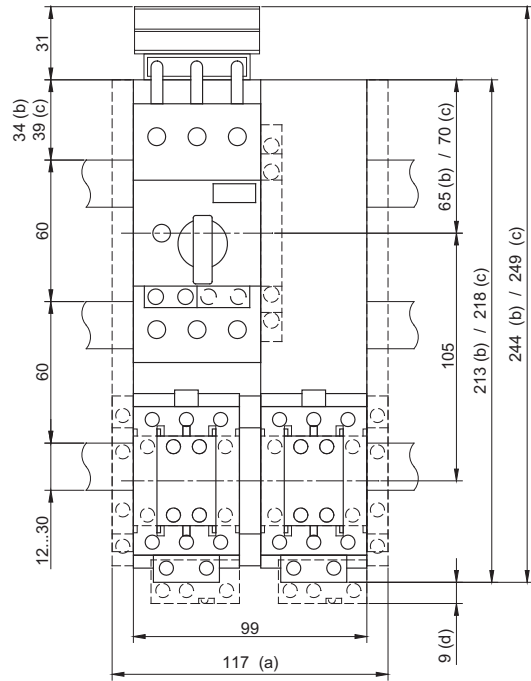
Standard and ISO Busbar Mount — Bulletin 107S Reversing Starters



Circuit Breaker: 140M-D
 Contactors: 100-C09...23
 Reference Print: R00GMD

- (a) With additional side-mount aux. contacts
- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interfaces

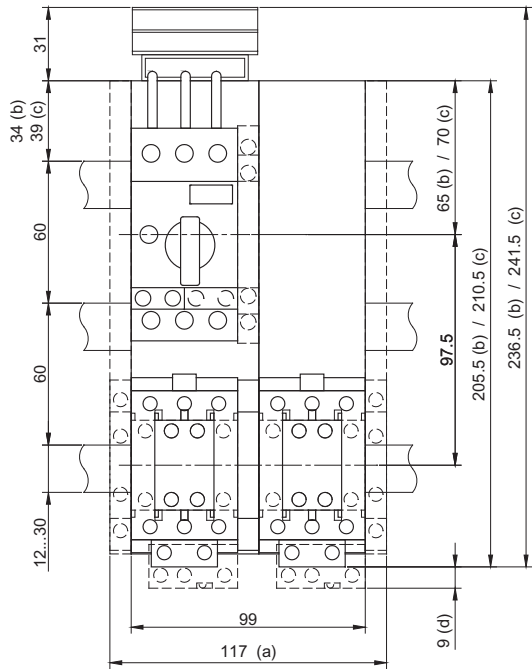
Bulletin 107S Busbar Mount



Circuit Breaker: 140M-F
 Contactors: 100-C30...37
 Reference Print: R10GMF

- (a) With additional side-mount aux. contacts
- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

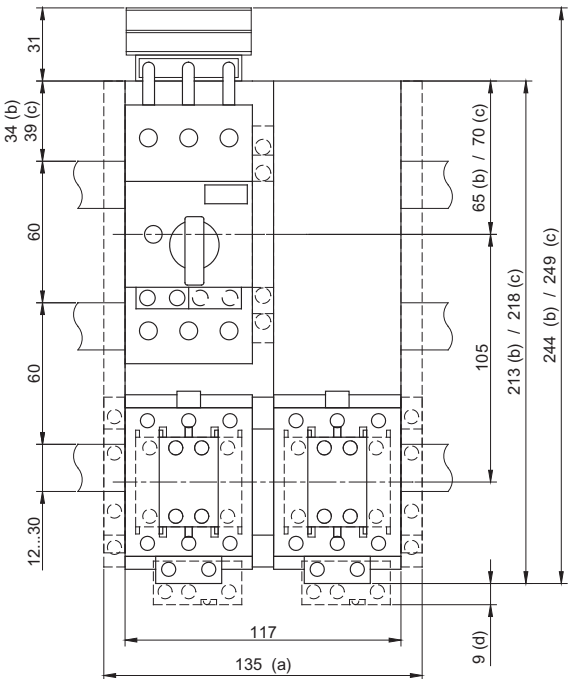
Bulletin 107S Busbar Mount



Circuit Breaker: 140M-D
 Contactors: 100-C30...37
 Reference Print: R10GMD

- (a) With additional side-mount aux. contacts
- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

Bulletin 107S Busbar Mount



Circuit Breaker: 140M-F
 Contactors: 100-C43
 Reference Print: R20GMF

- (a) With additional side-mount aux. contacts
- (b) Standard busbar mount with control plug
- (c) Iso busbar mount
- (d) Electronic interface

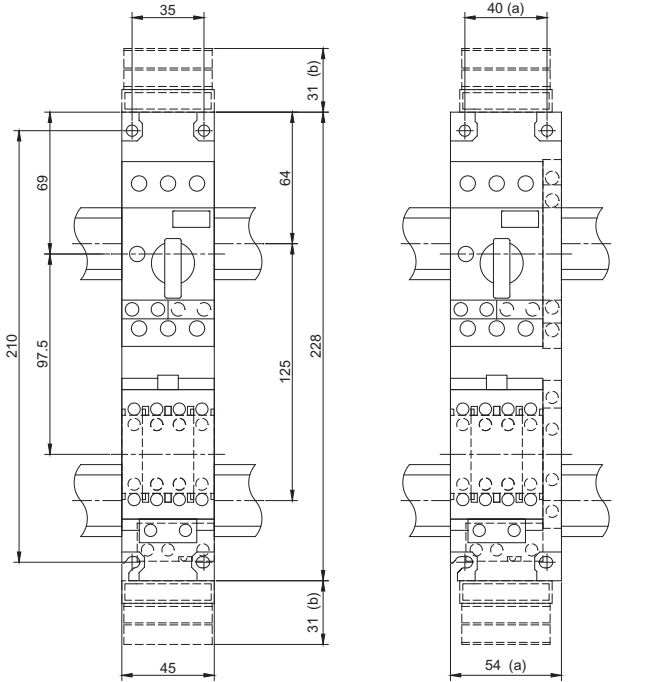
Bulletin 107S Busbar Mount

Bulletin 103S/107S
Open Type Starters
 Approximate Dimensions

Dimensions are shown in millimeters. Dimensions are not intended for manufacturing purposes.

Panel Mount — Bulletin 103S Non-Reversing Starters

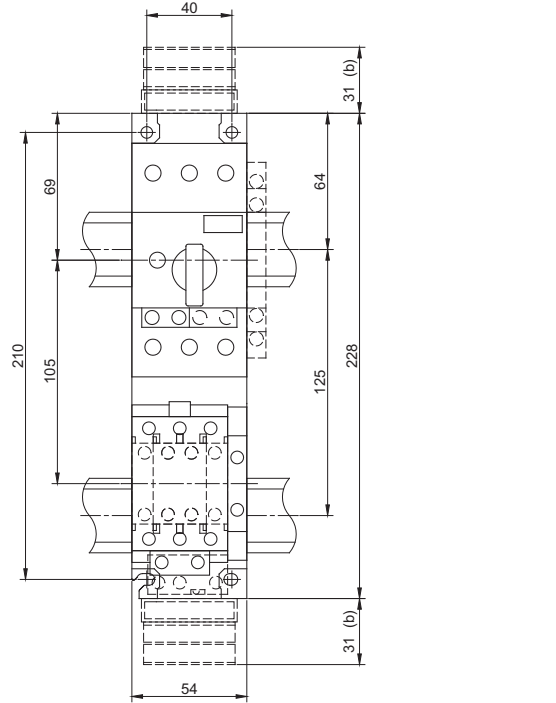
2



Circuit Breaker: 140M-C/D
 Contactor: 100-C09...23
 Reference Print: D00WMD

(a) With additional side-mount aux. or trip contact(s)
 (b) Control plug on top OR bottom side optional

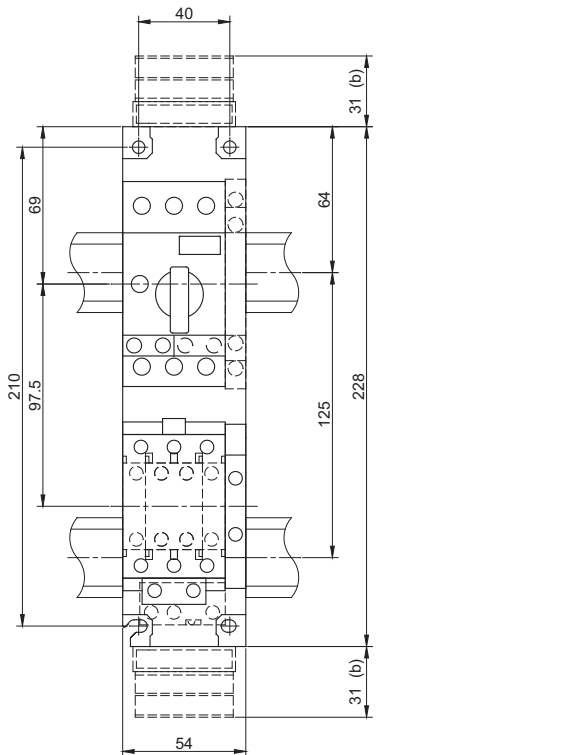
Bulletin 103S Panel Mount



Circuit Breaker: 140M-F
 Contactor: 100-C30...37
 Reference Print: D10WMF

(a) With additional side-mount aux. or trip contact
 (b) Control plug on top OR bottom side optional

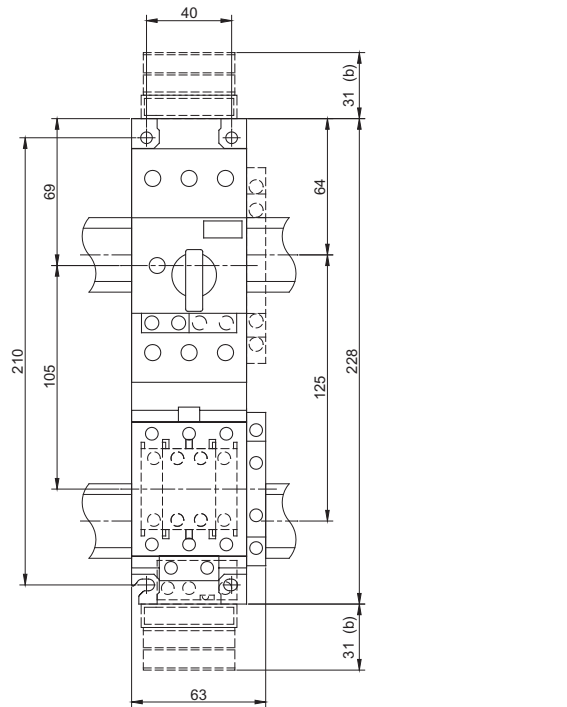
Bulletin 103S Panel Mount



Circuit Breaker: 140M-D
 Contactor: 100-C30...37
 Reference Print: D10WMD

(b) Control plug on top OR bottom side optional

Bulletin 103S Panel Mount



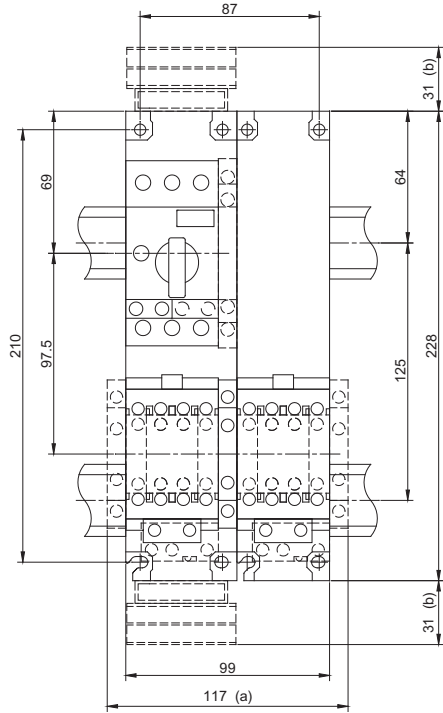
Circuit Breaker: 140M-F
 Contactor: 100-C43
 Reference Print: D20WMF

(a) With additional side-mount aux. or trip contact
 (b) Control plug on top OR bottom side optional

Bulletin 103S Panel Mount

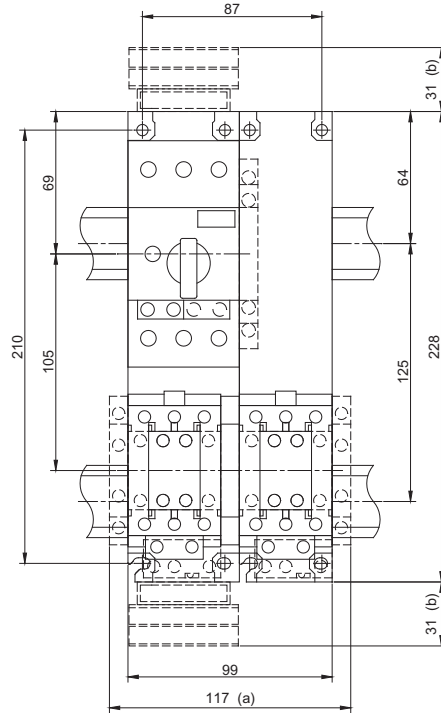
Dimensions are shown in millimeters. Dimensions are not intended for manufacturing purposes.

Panel Mount — Bulletin 107S Reversing Starters



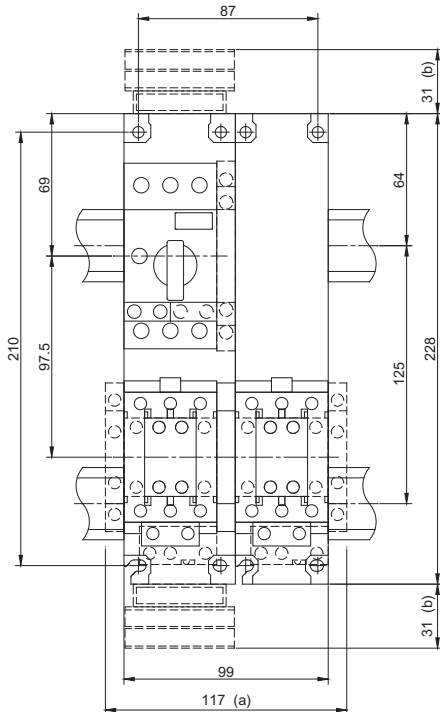
Circuit Breaker: 140M-C/D
 Contactors: 100-C09...23
 Reference Print: R00WMD
 (a) With additional side-mount aux. contacts
 (b) Control plug on top OR bottom side optional

Bulletin 107S Panel Mount



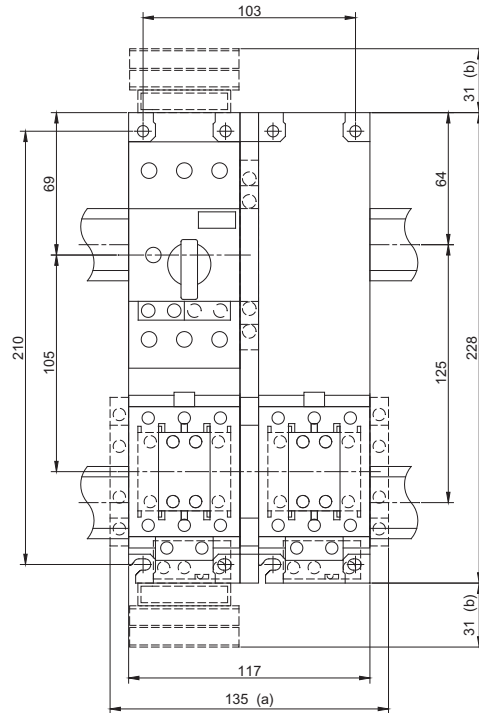
Circuit Breaker: 140M-F
 Contactors: 100-C30...37
 Reference Print: R10WMF
 (a) With additional side-mount aux. contacts
 (b) Control plug on top OR bottom side optional

Bulletin 107S Panel Mount



Circuit Breaker: 140M-D
 Contactors: 100-C30...37
 Reference Print: R10WMD
 (a) With additional side-mount aux. contacts
 (b) Control plug on top OR bottom side optional

Bulletin 107S Panel Mount



Circuit Breaker: 140M-F
 Contactors: 100-C43
 Reference Print: R20WMF
 (a) With additional side-mount aux. contacts
 (b) Control plug on top OR bottom side optional

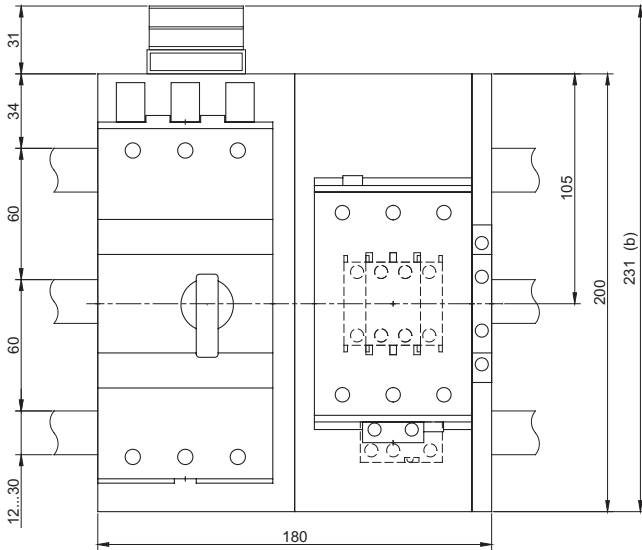
Bulletin 107S Panel Mount

Bulletin 103S/107S
Open Type Starters
 Approximate Dimensions

Dimensions are shown in millimeters. Dimensions are not intended for manufacturing purposes.

Standard Busbar Mount — Bulletin 103S Non-Reversing and Bulletin 107S Reversing Starters

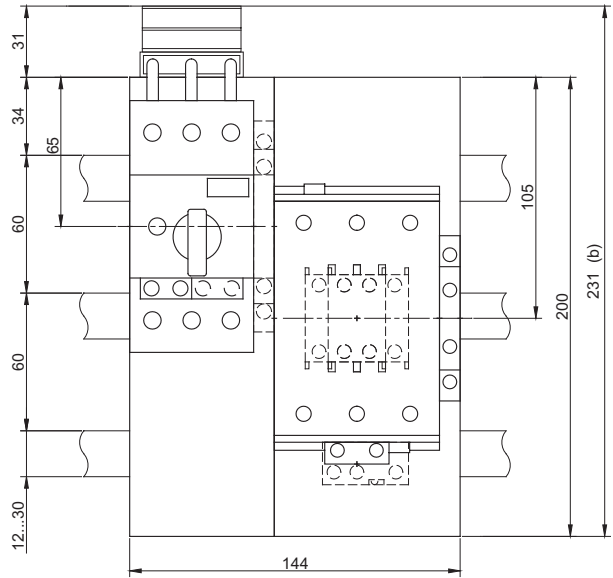
2



Circuit Breaker: 140-CMN
 Contactor: 100-C60...85
 Reference Print: D30GCM

(b) Standard busbar mount with control plug

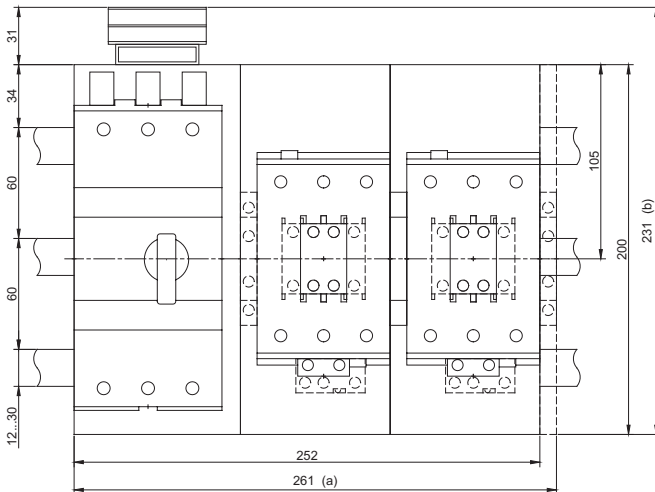
Bulletin 103S Busbar Mount



Circuit Breaker: 140M-F
 Contactor: 100-C60...85
 Reference Print: D30GMF

(b) Standard busbar mount with control plug

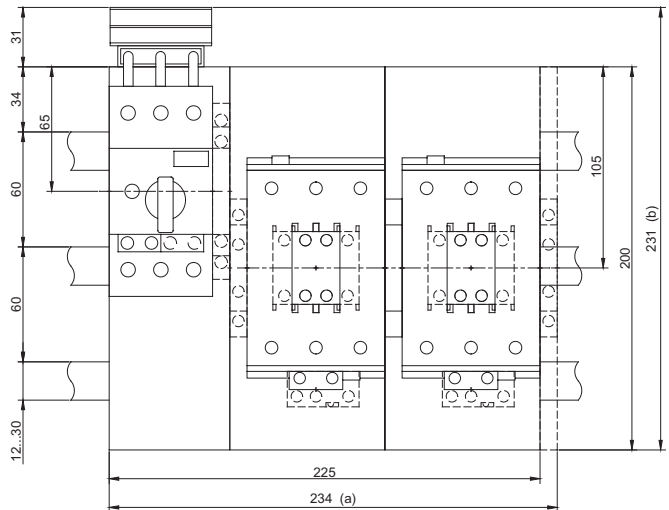
Bulletin 103S Busbar Mount



Circuit Breaker: 140-CMN
 Contactors: 100-C60...85
 Reference Print: R30GCM

(a) With additional side-mount aux. contacts
 (b) Standard busbar mount with control plug

Bulletin 107S Busbar Mount



Circuit Breaker: 140M-F
 Contactors: 100-C60...85
 Reference Print: R30GMF

(a) With additional side-mount aux. contacts
 (b) Standard busbar adapter with control plug

Bulletin 107S Busbar Mount