

# Circuit breaker type

## A9 - AF750

### Reversing, three phase

3

UL motor switching current	Contactor size	Maximum ratings - UL Listed				UL Type 1 (Indoor metal)		UL type 3R (Outdoor metal)		UL Type 12 (Metal dustight)	
		Maximum motor horsepower ratings				Catalog number	List price	Catalog number	List price	Catalog number	List price
		200/208V	230/240V	480/480V	575/600V						
<b>UL rated</b>											
9	A9	2	2	5	7.5	12M1-2Δ‡	\$ 1,185	12M3-2Δ‡	\$ 1,365	12M2-2Δ‡	\$ 1,365
11	A12	3	3	7.5	10	22M1-2Δ‡	1,275	22M3-2Δ‡	1,455	22M2-2Δ‡	1,455
17	A16	5	5	10	15	32M1-2Δ‡	1,335	32M3-2Δ‡	1,515	32M2-2Δ‡	1,515
28	A26	7.5	10	20	25	42M1-2Δ‡	1,478	42M3-2Δ‡	1,658	42M2-2Δ‡	1,658
34	A30	10	10	25	30	52M1-2Δ‡	1,703	52M3-2Δ‡	1,883	52M2-2Δ‡	1,883
42	A40	10	15	30	40	62M1-2Δ‡	1,935	62M3-2Δ‡	2,115	62M2-2Δ‡	2,115
54	A50	15	20	40	50	72M1-2Δ‡	2,468	72M3-2Δ‡	2,648	72M2-2Δ‡	2,648
65	A63	20	25	50	50	82M1-2Δ‡	2,899	82M3-2Δ‡	3,030	82M2-2Δ‡	3,030
80	A95	25	30	60	75	92M1-2Δ‡	2,940	92M3-2Δ‡	4,035	92M2-2Δ‡	4,035
110	A110	30	40	75	100	A2M1-2Δ‡	4,200	A2M3-2Δ‡	5,235	A2M2-2Δ‡	5,235
130	A145	40	50	100	125	B2M1-2Δ‡	4,335	B2M3-2Δ‡	7,470	B2M2-2Δ‡	7,470
156	A185	50	60	125	150	C2M1-2Δ‡	6,285	C2M3-2Δ‡	8,970	C2M2-2Δ‡	8,970
192	A210	60	75	150	200	D2M1-2Δ‡	8,310	D2M3-2Δ‡	13,080	D2M2-2Δ‡	13,080
248	A260	75	100	200	250	E2M1-2Δ‡	8,160	E2M3-2Δ‡	14,640	E2M2-2Δ‡	14,640
302	A300	100	100	250	300	F2M1-2Δ‡	11,115	F2M3-2Δ‡	16,110	F2M2-2Δ‡	16,110
414	AF400	125	150	350	400	G2M1-2Δ‡	18,435	G2M3-2Δ‡	18,975	G2M2-2Δ‡	18,975
480	AF460	150	200	400	500	H2M1-70Δ‡	31,635	H2M3-70Δ‡	33,435	H2M2-70Δ‡	33,435
590	AF585	200	250	500	600	T2M1-70Δ‡	40,035	T2M3-70Δ‡	41,835	T2M2-70Δ‡	41,835
810	AF750	250	300	600	700	U2M1-70Δ‡	42,885	U2M3-70Δ‡	46,065	U2M2-70Δ‡	46,065

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 3.6 - 3.7. Overload relays are required for all combination starters. If overload relay is provided by customer, substitute an "X" in place of the Δ and then subtract list price of overload relay from combination starter's list price.

‡ MCP or breaker rating. See codes on page 3.51.

Example: 12M1-2X      \$ 1185      List  
    - 63            - OLR  
    \$ 1122           Net price

### Coil voltage selection

All AC operated catalog numbers include a 120VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number.

Ex.: A 240V coil is required for an A75 starter: 92M1-4Δ

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number.

Ex.: A 480V primary voltage with a 120V secondary voltage is required for an A75 starter: 92M1-CF

### Factory modifications

See page 3.3

### Coil voltage selection – A9 - A300

Hz	Contactor type	Volts									
		24	110	120	208	220	240	440	480	500	600
60	A	1		2	3		4	5	6		7
50	A	1	2			4					7

### Coil voltage selection – AF400 - AF750 ①

Hz	Contactor type	Volts	
		100 - 250	250 - 500
50/60	AF	70	71

### Control transformer voltage selection chart

Hz	Volts				
	Type	200-208/120	240/120	460 - 480/120	575 - 600/120
	A/AF	A	B	C	D
50/60	Type	200-208/24	240/24	460 - 480/24	575 - 600/24
	A/AF	E	F	G	H

### Maximum short circuit rating for UL listed combination starters

Contactor	Maximum MCP 480VAC	KA at 480VAC	MCP 600VAC	KA at 600VAC
A9	S3L050MW	35	S3L010MW	35
A12	S3L050MW	35	S3L010MW	35
A16	S3L050MW	35	—	—
A26	S3L100MW	35	S3L100MW	35
A30	S3L150MW	65	—	—
A40	S3L150MW	65	—	—
A50	S3L150MW	85	S3L150MW	35
A63	S4L250MW	85	—	—
A75	S4L250MW	85	—	—
A95	S4L250MW	85	S4L250MW	35
A110	S4L250MW	85	S4L250MW	35
A145	S5L400MW	65	S4L250MW	10
A185	S5L400MW	85	S4L250MW	10
A210	S6L800MW	85	S4L250MW	18
A260	S6L800MW	85	S5L400MW	18
A300	S6L800MW	85	S5L400MW	18
AF400	S7H1200MW	85	Consult factory	
AF460	S7H1200MW	85		
AF580	S7H1200MW	85		
AF750	S7H1200MW	85		

For thermal magnetic molded case breakers, consult factory.

### Control transformer option

Contactor size	VA rating	List price adder
A9 - A40	50	\$ 360
A50 - A75	75	435
A95 - A110	100	560
A145 - A185	150	720
A210 - A300	250	795
AF400 - AF460	150	720
AF580 - AF750	250	795

Reference page 3.50 for extra VA under all (Control Transformer Options chart)

NOTES: MCPs are supplied as standard. Thermal magnetic/electronic trip type breakers can be supplied by substituting the letter "B" in place of the "M". List price is the same.

Example: 12G1-2Δ‡, \$ 1185.00.

For AF50 - AF300 starters, consult factory.

① AF400 - AF750 only.

# Circuit breaker type A9 - AF750 Reversing, three phase

Combination  
starters

3

UL Type 4 (Watertight)		UL Type 4X (Stainless steel)		UL Type 1, 3R, 4, 4X & 12 (Plastic)	
Catalog number	List price	Catalog number	List price	Catalog number	List price
<b>UL rated</b>					
12M4-2Δ‡	\$ 1,515	12MX-2Δ‡	\$ 2,090	12MP-2Δ‡	\$ 1,320
22M4-2Δ‡	1,605	22MX-2Δ‡	2,180	22MP-2Δ‡	1,410
32M4-2Δ‡	1,688	32MX-2Δ‡	2,240	32MP-2Δ‡	1,470
42M4-2Δ‡	1,800	42MX-2Δ‡	2,405	42MP-2Δ‡	1,703
52M4-2Δ‡	2,100	52MX-2Δ‡	2,878	52MP-2Δ‡	1,853
62M4-2Δ‡	2,438	62MX-2Δ‡	3,395	62MP-2Δ‡	2,085
72M4-2Δ‡	2,963	72MX-2Δ‡	3,988	72MP-2Δ‡	2,618
82M4-2Δ‡	3,338	82MX-2Δ‡	4,505	82MP-2Δ‡	3,090
92M4-2Δ‡	4,200	92MX-2Δ‡	5,210	92MP-2Δ‡	3,855
A2M4-2Δ‡	5,663	A2MX-2Δ‡	7,415	A2MP-2Δ‡	4,700
B2M4-2Δ‡	7,950	B2MX-2Δ‡	9,885	B2MP-2Δ‡	7,620
C2M4-2Δ‡	9,638	C2MX-2Δ‡	12,510	C2MP-2Δ‡	9,250
D2M4-2Δ‡	13,650	D2MX-2Δ‡	16,545	D2MP-2Δ‡	13,300
E2M4-2Δ‡	15,450	E2MX-2Δ‡	21,735	E2MP-2Δ‡	15,000
F2M4-2Δ‡	18,150	F2MX-2Δ‡	28,260	F2MP-2Δ‡	17,600
G2M4-2Δ‡	21,000	G2MX-2Δ‡	32,835	—	—
H2M4-70Δ‡	35,850	H2MX-70Δ‡	41,280	—	—
T2M4-70Δ‡	45,000	T2MX-70Δ‡	53,385	—	—
U2M4-70Δ‡	48,338	U2MX-70Δ‡	56,385	—	—

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 3.6 - 3.7. Overload relays are required for all combination starters. If overload relay is provided by customer, substitute an "X" in place of the Δ and then subtract list price of overload relay from combination starter's list price.

‡ MCP or breaker rating. See codes on page 3.51.

### Motor circuit protector data

Motor full load amperes	MCP continuous rating	Suffix code ‡	Catalog number	Starter size	1.5X	2X	4X	5X	6X	7X	8X	9X	10X	11X	12X
.92 - 2.76	3	1	S3L003MW	0	—	—	12	15	18	21	24	27	30	33	36
1.53 - 4.61	5	2	S3L005MW	0	—	—	20	25	30	35	40	45	50	55	60
3.07 - 9.23	10	3	S3L010MW	0	—	—	40	50	60	70	80	90	100	110	120
7.69 - 23.08	25	4	S3L025MW	1	—	—	100	125	150	175	200	225	250	275	300
15.38 - 46.15	50	5	S3L050MW	2	—	—	200	250	300	350	400	450	500	550	600
30.77 - 92.31	100	6	S3L100MW	3	—	—	400	500	600	700	800	900	1000	1100	1200
46.15 - 138.46	150	7	S3L150MW	4	—	—	600	750	900	1050	1200	1350	1500	1650	1800
28.85 - 230.77	250	8	S4L250MW	4	375	500	1000	—	1500	—	2000	—	2500	—	3000
46.15 - 369.23	400	9	S5L400MW	5	600	800	1600	—	2400	—	3200	—	4000	—	4800
69.23 - 553.85	600	C	S6L600MW	6	900	1200	2400	—	3600	—	4800	—	6000	—	7200
92.31 - 738.46	800	E	S6L800MW	7	1200	1600	3200	—	4800	—	6400	—	8000	—	9600
115.38 - 923.07	1000	G	S7H1000MW	7	1500	2000	4000	—	6000	—	8000	—	10,000	—	12,000
138.46 - 1107.69	1200	H	S7H1200MW	7	1800	2400	4800	—	7200	—	9600	—	12,000	—	14,400