

# Manual Motor Starters

## Product Selection Guide

### Quick selection table ... IEC rating



Frame			32AF																				
Type	Current adjustable type		MMS-32S						MMS-32H														
	Instantaneous type		-						MMS-32HI														
Breaking capacity			Standard						High breaking														
Handle Type			Toggle						Rotary														
Number of poles			3						3														
Rated operational voltage (Ue)			Up to 690V						Up to 690V														
Rated frequency			50/60 Hz						50/60 Hz														
Rated insulation voltage (Ui)			690V						690V														
Rated impulse voltage (Uimp)			6kV						6kV														
Utilization category	IEC 60 947-2 (Breaker)		Cat. A						Cat. A														
	IEC 60 947-4 (Motor starter)		AC 3						AC 3														
Mechanical endurance (Operating)			100,000						100,000														
Electrical endurance (Cycles)			100,000						100,000														
Max operating frequency per hour (Ope./h)			25						25														
Temperature compensation (Operation)			-20 ~ +60°C						-20 ~ +60°C														
Instantaneous short circuit release			13 × I <sub>e</sub> max.						13 × I <sub>e</sub> max.														
Overload protection			o						o														
Phase failure function			o						o														
Trip indicating function			x						x														
Test function			o						o														
Weight (g)			320						360														
Rated breaking capacity (kA)	Rated operational current (I <sub>e</sub> )	Thermal release Adjustment range (A)	220V 240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		220V 240V 230V		415V 400V		460V 440V		525V 500V		690V 600V		
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	0.16	0.16-0.16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	0.25	0.16-0.25	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	0.4	0.25-0.4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	0.63	0.4-0.63	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	1	0.63-1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	1.6	1-1.6	100	100	100	100	100	100	100	100	3	3	100	100	100	100	100	100	100	100	100	100	
	2.5	1.6-2.5	100	100	100	100	100	100	50	38	3	3	100	100	100	100	100	100	100	100	100	8	8
	4	2.5-4	100	100	100	100	50	38	15	11	3	3	100	100	100	100	100	100	100	100	8	8	
	6	4-6	100	100	100	100	15	11	10	8	3	3	100	100	100	100	100	100	100	100	6	6	
	8	5-8	100	100	100	100	15	11	10	8	3	3	100	100	100	100	50	38	50	38	6	6	
	10	6-10	100	100	50	38	15	11	6	5	3	3	100	100	100	100	50	38	50	38	6	6	
	13	9-13	100	100	50	38	10	8	6	5	3	3	100	100	100	100	50	38	42	32	6	6	
	17	11-17	50	38	20	15	10	8	6	5	3	3	100	100	50	38	20	15	10	8	4	4	
	22	14-22	40	30	15	11	8	6	6	5	3	3	100	100	50	38	20	15	10	8	4	4	
	26	18-26	40	30	15	11	8	6	5	4	3	3	100	100	50	38	20	15	10	8	4	4	
32	22-32	30	22	15	11	6	4	5	4	3	3	100	100	50	38	20	15	10	8	4	4		
40	28-40	20	15	10	8	5	3	4	3	2	2	100	100	40	30	15	11	8	6	3	3		
50	34-50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
63	45-63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
65	47-65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
75	55-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
90	70-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
100	80-100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



63AF															100AF														
MMS-63S					MMS-63H					MMS-100S					MMS-100H														
-					MMS-63HI					-					MMS-100HI														
Standard					High breaking					Standard					High breaking														
Rotary					Rotary					Rotary					Rotary														
3					3					3					3														
Up to 690V					Up to 690V					Up to 690V					Up to 690V														
50/60 Hz					50/60 Hz					50/60 Hz					50/60 Hz														
1,000V					1,000V					1,000V					1,000V														
8kV					8kV					8kV					8kV														
Cat. A					Cat. A					Cat. A					Cat. A														
AC 3					AC 3					AC 3					AC 3														
50,000					50,000					50,000					50,000														
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25					25					25					25														
-20 ~ +60°C					-20 ~ +60°C					-20 ~ +60°C					-20 ~ +60°C														
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1,000					1,000					2,200					2,200														
220V 240V 230V	415V 400V	460V 440V	525V 500V	690V 600V	220V 240V 230V	415V 400V	460V 440V	525V 500V	690V 600V	220V 240V 230V	415V 400V	460V 440V	525V 500V	690V 600V	220V 240V 230V	415V 400V	460V 440V	525V 500V	690V 600V										
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100	100	50	38	10	8	6	5	4	3	100	100	100	100	50	38	42	32	6	5										
100	100	25	19	10	8	6	5	4	3	100	100	50	50	50	38	12	9	5	5										
50	38	25	19	10	8	6	5	4	3	100	100	50	50	50	38	12	9	5	5										
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50	38	25	19	10	8	6	5	4	3	75	50	35	27	25	19	6	5	3	3										
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