

General Info MMP type MS116

- Suitable for 3phase motors up to 10 HP @ 480V
- AMP range from 0.16-16A
- UL listed & CSA certified for Group Motor Installation
- Wide range of accessories
- Small width (45mm)Arguments
- Save space
- High short circuit capacity
- Adjustable Overload protection
- Short circuit protection
- Phase failure detection



Technical data

Rated current: 0.16-16A
Rated operating voltage:
max. 600V
Tripping class:10
Max. kA IC @ 600V 30kA
Mechanical Life Time:
100,000 switches

Accessories

- Auxiliary contacts (side & front)
- Under-voltage release
- Shunt trips
- Bell alarm
- Locking device
- Through the door operator
- Enclosures
- Direct contactor mounting adapter
- Suitable for Smissline busbar system up to 200A
- Busbar system

General Info MMP type MS325

- Suitable for 3phase motors up to 15 HP @ 480V
- AMP range from 0.16-25A
- UL listed & CSA certified for Group Motor Installation
- Wide range of accessories
- Save space
- High short circuit capacity
- Adjustable Overload protection
- Short circuit protection
- Phase failure detection
- UL508 (type E) listing available



Technical data

Rated current:
0.16-25A
Rated operating voltage:
max. 600V
Tripping class: 10
Max. kA IC @ 600V 50kA
Mechanical Life Time:
100,000 switches

Accessories

- Auxiliary contacts (side & front)
- Under-voltage release
- Shunt trips
- Bell alarm
- Locking device
- Through the door operator
- Enclosures
- Direct contactor mounting adapter
- Suitable for Smissline busbar system up to 200A
- Busbar system

General Info MMP type MS45x

- Suitable for 3phase motors up to 40 HP @ 480V
- AMP range from 11-50A
- UL listed & CSA certified for Group Motor Installation
- Wide range of accessories
- Save space
- High short circuit capacity
- Adjustable Overload protection
- Short circuit protection
- Phase failure detection
- UL508 (type E) listing available



Technical data

Rated current: 11-50A
Rated operating voltage:
max. 600V
Tripping class:10/20
Max. kA IC @ 600V 50kA
Mechanical Life Time:
100,000 switches

Accessories

- Auxiliary contacts (side & front)
- Under-voltage release
- Shunt trips
- Locking device
- Through the door operator
- Enclosures
- Direct contactor mounting adapter
- Suitable for Smissline busbar system up to 200A
- Busbar system

General Info MMP type MS49x

- Suitable for 3phase motors up to 75 HP @ 480V
- AMP range from 11-100A
- UL listed & CSA certified for Group Motor Installation
- Wide range of accessories
- Save space
- High short circuit capacity
- Adjustable Overload protection
- Short circuit protection
- Phase failure detection
- UL508 (type E) listing available



Technical data

Rated current:
11-100A
Rated operating voltage:
max. 600V
Tripping class: 10/20
Max. kA IC @ 600V 100kA
Mechanical Life Time:
100,000 switches

Accessories

- Auxiliary contacts (side & front)
- Under-voltage release
- Shunt trips
- Locking device
- Enclosures
- Direct contactor mounting adapter
- Suitable for Smissline busbar system up to 200A

Manual Motor Protector MS116



MS116, BEA16/116, A12-30-10-84



MS116, BEA7/116, B7C-1



HK1-11



HKF1-11



UA1-120



AA1-110



BEA7/116





12644

Thermal setting range (Amps)	3-phase horsepower ratings			Catalog Number
	240V	480V	600V	
0.10 - 0.16	-	-	-	MS116-0.16
0.16 - 0.25	-	-	-	MS116-0.25
0.25 - 0.40	-	-	-	MS116-0.40
0.40 - 0.63	-	-	-	MS116-0.63
0.63 - 1.0	-	1/2	1/2	MS116-1.0
1.0 - 1.6	-	3/4	3/4	MS116-1.6
1.6 - 2.5	-	1	1.5	MS116-2.5
2.5 - 4.0	1/8	2	3	MS116-4.0
4.0 - 6.3	1/4	3	5	MS116-6.3
6.3 - 10	1/2	5	7.5	MS116-10
8.0 - 12	1/2	7.5	10	MS116-12
10.0 - 16	1	10	10	MS116-16

ACCESSORIES FOR MS116

DESCRIPTION	Catalog Number
1 NO & 1 NC Auxiliary contact blocks, side mount	HK1-11
2 NO Auxiliary contact blocks, side mount	HK1-20
2 NC Auxiliary contact blocks, side mount	HK1-02
1 NO & 1 NC Auxiliary contact blocks, front mount	HKF1-11
1 NO & 1 NC Bell alarm contact blocks	SK1-11
2 NO Bell alarm contact blocks	SK1-20
2 NC Bell alarm contact blocks	SK1-02
24VAC Undervoltage trip	UA1-24
48VAC Undervoltage trip	UA1-48
60VAC Undervoltage trip	UA1-60
120VAC Undervoltage trip	UA1-120
230VAC Undervoltage trip	UA1-230
400VAC Undervoltage trip	UA1-400
415VAC Undervoltage trip	UA1-415
24VAC Shunt trip	AA1-24
110VAC Shunt trip	AA1-110
200 - 240VAC Shunt trip	AA1-230
350 - 415VAC Shunt trip	AA1-400
Busbar for direct mounting of contactors B6/B7	BEA7/116
Busbar for direct mounting of contactors A9/A12/A16	BEA16/116
Busbar for direct mounting of contactors A26	BEA26/116
Gray Enclosure with black handle, IP64	OTPA116L2P1
Gray Enclosure with red handle, IP64	OTPA116A2P1
Gray Enclosure with clear cover, 4 poles, IP55	12644
Gray Enclosure with clear cover, 6 poles, IP55	12646

Manual Motor Protector MS325

	Thermal setting range (Amps)	3-phase horsepower ratings			Catalog Number
		240V	480V	600V	
	0.10 - 0.16	-	-	-	MS325-0.16
	0.16 - 0.25	-	-	-	MS325-0.25
	0.25 - 0.40	-	-	-	MS325-0.40
	0.40 - 0.63	-	-	-	MS325-0.63
MS325	0.63 - 1.0	-	1/2	1/2	MS325-1.0
UL 580 Type E	1.0 - 1.6	-	3/4	3/4	MS325-1.6
	1.6 - 2.5	1/2	1	1.5	MS325-2.5
	2.5 - 4.0	1	2	3	MS325-4.0
	4.0 - 6.3	1.5	3	5	MS325-6.3
	6.3 - 9.0	2.5	5	7.5	MS325-9.0
	9.0 - 12.5	3	7.5	10	MS325-12.5
MS325, BEA26/325, A26-30-10-84, S3-M3, CK-11	12.5 - 16	5	10	10	MS325-16
	16 - 20	5	10	15	MS325-20
	20 - 25	7.5	15	20	MS325-25
ACCESSORIES FOR MS325					
	DESCRIPTION				Catalog Number
	1 NO & 1 NC Auxiliary contact blocks, side mount				MS325-HK11
	2 NO Auxiliary contact blocks, side mount				MS325-HK20
	2 NC Auxiliary contact blocks, side mount				MS325-HK02
MS325-HK11					
	1 NO & 1 NC Auxiliary contact blocks, front mount				MS325-HKF11
	2 NO Auxiliary contact blocks, front mount				MS325-HKF20
	1 NO Bell alarm contact blocks				MS325-SK10
	1 NC Bell alarm contact blocks				MS325-SK01
MS325-SK10					
	24VAC Undervoltage trip				MS325-UA24
	48VAC Undervoltage trip				MS325-UA48
	60VAC Undervoltage trip				MS325-UA60
	120VAC Undervoltage trip				MS325-UA110
	230VAC Undervoltage trip				MS325-UA230
	400VAC Undervoltage trip				MS325-UA400
	415VAC Undervoltage trip				MS325-UA415
	480VAC Undervoltage trip				MS325-UA480
MS325-UA110					
	110 - 240VAC/DC Shunt trip				MS325-ST110
	24 - 60VAC/DC Shunt trip				MS325-ST24
MS325-AS					
	Busbar for direct mounting of contactors B6/B7				BEA7/325
	Busbar for direct mounting of reversing contactors VB6/VB7				MS325-VB7
	Busbar for direct mounting of contactors A9/A12/A16				BEA16/325
	Busbar for direct mounting of contactor A26				BEA26/325
BEA16/325					
	Gray Enclosure with black handle, IP64				OTPA325B2P1
	Gray Enclosure with red handle, IP64				OTPA325A2P1
	Gray Enclosure with clear cover, 4 poles, IP55				12644
	Gray Enclosure with clear cover, 6 poles, IP55				12646
OTPA116A2P1					
	Line Side infeed block - required for UL508 type E				S3-M3
	Short circuit trip signal - required for UL 508 type E				CK-11

Manual Motor Protection MS45x / MS49x

MS495, BEA110/495, A95-30-11-84



HKS4-11



HK4-11



UA4-120



AA4-110



BEA75/495



SK4-11

Thermal setting range (Amps)	3-phase horsepower ratings			Catalog Number
	230V	480V	575V	
11 - 16	5	10	15	MS450-16
14 - 20	7.5	15	20	MS450-20
18 - 25	10	20	25	MS450-25
22 - 32	10	25	30	MS450-32
28 - 40	15	30	40	MS450-40
36 - 45	15	30	40	MS450-45
40 - 50	20	40	50	MS450-50
11 - 16	5	10	15	MS497-16
14 - 20	7.5	15	20	MS497-20
18 - 25	10	20	25	MS497-25
22 - 32	10	25	30	MS497-32
28 - 40	15	30	40	MS497-40
36 - 50	20	40	50	MS497-50
45 - 63	25	50	60	MS497-63
57 - 75	25	60	75	MS497-75
70 - 90	30	75	100	MS497-90
80 - 100	40	75	100	MS497-100

ACCESSORIES FOR MS45x / MS49x

DESCRIPTION	Catalog Number
1 NO & 1 NC Auxiliary contact blocks, side mount	HKS4-11
2 NO Auxiliary contact blocks, side mount	HKS4-20
2 NC Auxiliary contact blocks, side mount	HKS4-02
1 NO & 1 NC Auxiliary contact blocks, front mount	HK4-11
1 CHANGEOVER Auxiliary contact blocks, front mount	HK4-W
110 - 120VAC Undervoltage trip	UA4-120
208VAC Undervoltage trip	UA4-208
230 - 240VAC Undervoltage trip	UA4-240
400VAC Undervoltage trip	UA4-400
480VAC Undervoltage trip	UA4-480
Voltage continuous 50 - 60 Hz 20 - 24 Shunt trip 30 - 110 210 - 240 350 - 415	AA4-24 AA4-110 AA4-240 AA4-415
Voltage 5 sec. Max.50 - 60 Hz, DC 20 - 70 Shunt trip 70 - 190 190 - 330 330 - 500	AA4-24 AA4-110 AA4-240 AA4-415
MS450 Busbar for direct mounting of contactors A30/A40	BEA40/450
MS450 Busbar for direct mounting of contactor A50	BEA50/450
MS497 Busbar for direct mounting of contactors A50/A63/A75	BEA75/495
MS497 Busbar for direct mounting of contactors A95/A110	BEA110/495
Short circuit trip 1NO & 1NC - required for UL508 Type E applications	SK4-11
MS49x Type E Terminal - required for UL508 Type E applications	DX495