

# MS-Series Three Phase Adjustable Trip Economy Manual Motor Controllers

with overload and short circuit protection,  
phase failure sensitivity according to  
IEC 947-4-1, DIN VDE 0660 Part 102

With its high breaking capacity and current limitation the MS Manual Motor Controllers provide optimum protection for electrical motors as well as for other consumer units up to 25 amps. They are equipped with phase failure sensitivity, isolating and main switch functions. 13 ranges cover nominal rated currents from 0.1 up to 25 amps. The MS's are temperature compensated; the trip current of the magnetic part is  $12 \times I_n$ . The Manual Motor Controllers are built in accordance with IEC 947.



### Type Designation

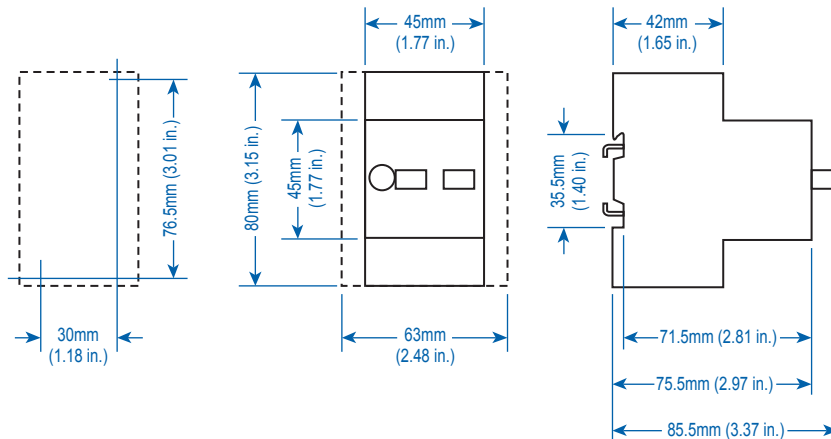
MS 016  
(a) (b)

- (a) = MS - Manual Motor Controller
- (b) = Rated Current

Type/ Cat. No.	Rated Current	Overload release adjustment/FLA (A)	Instantaneous setting (A)	3Ø Horsepower Rating				
				115V	200V	230V	480V	600V
MS016	0.16	0.1 - 0.16	1.92	Ampere rated for motor circuits having a full-load-amperage (FLA) not exceeding the MS's general purpose rated current and a locked rotor current not exceeding 6 times the MS's rated current.				
MS025	0.25	0.16 - 0.25	3					
MS04	0.4	0.25 - 0.4	4.8					
MS063	0.63	0.4 - 0.63	7.6					
MS1	1.0	0.63 - 1	12		1/2hp	1/2hp		
MS1.6	1.6	1 - 1.6	19.2				3/4hp	1hp
MS2.5	2.5	1.6 - 2.5	30		1/2hp	1/2hp	1hp	1 1/2hp
MS4	4.0	2.5 - 4	48	1/2hp	3/4hp	1hp	2hp	3hp
MS6.3	6.3	4 - 6.3	75.6	3/4hp	1 1/2hp	1 1/2hp	3hp	5hp
MS10	10.0	6.3 - 10	120	1hp	2hp	3hp	5hp	7 1/2hp
MS16	16.0	10 - 16	192	2hp	3hp	5hp	10hp	10hp
MS20	20.0	16 - 20	240	3hp	5hp	7 1/2hp	15hp	-
MS25	25.0	20 - 25	300	3hp	5hp	7 1/2hp	15hp	-

Maximum Voltage	600V AC (MS20 and MS25, 480V AC)
Short Circuit Withstanding Rating (UL/CSA Rating)	5kA
Group Short Circuit Withstanding Rating (UL/CSA Rating)	5kA
Interrupting Capacity (VDE - Ratings)	0.16-6.3A: Self protected 10-25A: 6kA
Mechanical Endurance	10000 on/off operations
Standard Pack and Weight	1/250g (0.55lb)
Terminal Size Acceptability	14-10 AWG
Terminal Torque	1.8Nm (16lb. in.)

### Dimensions



**Accessories**  
**MS Three Phase**  
**Adjustable Trip Economy**  
**Manual Motor Controllers**



Auxiliary contact blocks for side mounting (3.5A/230VAC; 2A/400V AC)

Width mm	Contacts	Type/Cat. No.	Weight g/pc.	Std. Pk.
9	2No	HMS20	40	10
9	1No + 1Nc	HMS11	40	10
9	1No	HMS10	35	10
9	2Nc	HMS02	40	10
9	1Nc	HMS01	35	10



**Insulated Enclosure IP55**  
 with integrated pe(N) terminal;  
 top and bottom each have 2 metric  
 knock-outs

Type/Cat. No.	Weight g/pc.	Std. Pk.
MS.G55	240	1



**Emergency-Stop**  
 twist or key to release,  
 red on yellow background

Release Type	Type/Cat. No.	Weight g/pc.	Std. Pk.
twist	MS.PV	60	5
Key	MS.PS2	65	5



**Flush Mounting Enclosure IP55**  
 with integrated pe(N) terminal

Type/Cat. No.	Weight g/pc.	Std. Pk.
MS.F55	170	1

**Indicator Light**  
 with neon bulb, nominal rated voltage:  
 220 - 240v or 380 - 440v



Color	Type/Cat. No.	Weight g/pc.	Std. Pk.
trans	MS.SLW2 MS.SLW3	380-440V	10 5
green	MS.SLG2 MS.SLG3		10 5
red	MS.SLR2 MS.SLR3		10 5
yellow	MS.SLJ2 MS.SLJ3		10 5

**Busbar**



Busbar 63A	for 2 MS	Type/Cat. No. for 3 MS	for 4 MS	for 5 MS
no spacing	G45-14-2	G45-14-3	G45-14-4	G45-14-5

with auxiliary switch (1/2 pole) spacing  
 G54-14-2 G54-14-3 G54-14-4 G54-14-5



**Power Feed Block**

Type/Cat. No.	Rating (A)	Std. Pk.
GE2-14	63A	1