

MS450-50

ABB contact for [United States of America](#) [Print to Pdf..](#)

General Information

Extended Product Type:	MS450-50
Product ID:	1SAM450000R1007
EAN:	4013614265198
Catalog Description:	MS450-50 Manual Motor Starter
Long Description:	The MS450-50 manual motor starter is a 55 mm width devices with a rated operational current of $I_e = 50.0$ A. This device is used to manually switch on and off motors and to protect them reliably and without the need for a fuse from short-circuits, overload and phase failures. The manual motor starter offers a rated service short-circuit breaking capacity $I_{cs} = 25$ kA at 400 VAC and the trip class 10. Further features are the build-in disconnect function, temperature compensation, trip-free mechanism and a rotary handle with a clear switch position indication. The manual motor starter is suitable for three- and single-phase applications. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signalling contacts, undervoltage releases, shunt trips, 3-phase bus bars, power in-feed blocks are available as accessory.



Categories

Products » Low Voltage Products and Systems » Circuit Breakers » Manual Motor Starters

Products » Low Voltage Products and Systems » Control Products » Manual Motor Starters » Manual Motor Starters

Accessories [Show accessory images](#)

Ordering

EAN:	4013614265198
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85362010

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	62.5 mm
Package Level 1 Length:	165.0 mm
Package Level 1 Height:	147.0 mm
Package Level 1 Gross Weight:	1.087 kg

Dimensions

Product Net Width:	55.0 mm
Product Net Height:	140.0 mm
Product Net Depth:	149.0 mm
Product Net Weight:	1.027 kg

Technical

Rated Service Short-Circuit Breaking Capacity (I_{CS}):	(230V AC) 100.0 kA (400V AC) 25.0 kA (440V AC) 15.0 kA (500V AC) 5.0 kA (690V AC) 2.0 kA
Rated Ultimate Short-Circuit Breaking Capacity (I_{CU}):	(230V AC) 100.0 kA (400V AC) 50.0 kA (440V AC) 50.0 kA (500V AC) 10.0 kA (690V AC) 4.0 kA
Rated Instantaneous Short-Circuit Current Setting (I_I):	650.0 A
Setting Range:	40 ... 50 A
Rated Operational Power AC-3 (P_e):	(400V) Three Phase 22.00 kW
Rated Operational Voltage:	Main Circuit 690 V AC Main Circuit 450 V DC
Rated Operational Current (I_e):	50 A
Rated Operational Current AC-3 (I_e):	50.00 A
Rated Frequency (f):	Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage (U_{imp}):	Main Circuit 6 kV
Rated Insulation Voltage (U_i):	690 V
Power Loss:	Per Pole 4.3 ... 6.7 W
Number of Poles:	3
Conventional Free-air Thermal Current (I_{th}):	Main Circuit 50.00 A
Degree of Protection:	Housing IP20 Main Circuit Terminals IP00
Pollution Degree:	3
Electrical Durability:	25000 cycle
Mechanical Durability:	50000 cycle
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1x 0.75 ... 25 mm ² Flexible with Ferrule 2x 0.75 ... 16 mm ² Solid 1/2x 0.75 ... 16 mm ² Stranded 1x 0.75 ... 35 mm ² Stranded 2x 0.75 ... 25 mm ²
Tightening Torque:	Main Circuit 3 ... 4.5 N·m
Wire Stripping Length:	Main Circuit 13 mm
Recommended Screw Driver:	M5

Mounting Position:	Position 1 to 6
Actuator Type:	Rotary Handle
Contact Position Indication:	ON / OFF / TRIP
Mounting on DIN Rail:	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Standards:	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 508 CSA 22.2 No. 14

Environmental

Ambient Air Temperature:	Operation -20 ... +70 °C Operation Compensated -20 ... +60 °C Storage -50 ... +80 °C
Ambient Air Temperature Compensation:	Yes
Maximum Operating Altitude Permissible:	2000 m
Resistance to Shock acc. to IEC 60068-2-27:	11 ms Pulse 250 m/s ²
Resistance to Vibrations acc. to IEC 60068-2-6:	2g / 5 ... 150 Hz
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V AC
Horse Power Rating UL/CSA:	200V AC Three Phase 15.00 Hp 208V AC Three Phase 15.00 Hp 220 ... 240V AC Three Phase 20.00 Hp 440 ... 480V AC Three Phase 40.00 Hp 550 ... 600V AC Three Phase 50.00 Hp
Ampere Rating UL/CSA:	50.00 A
General Use Rating UL/CSA:	600V AC 50.00 A
Connecting Capacity-Main Circuit UL/CSA:	Flexible 2x 18 ... 2 AWG Stranded 2x 18 ... 2 AWG
Tightening Torque UL/CSA:	Main Circuit 27 ... 40 in·lb

Certificates and Declarations (Document Number)

ATEX Certificate:	1SAA937000-3901
BV Certificate:	1SAA937000-0202
CCC Certificate:	1SAA937000-3803
cUL Certificate:	cUL_E195536
Declaration of Conformity - CE:	1SAD938503-0050
DNV Certificate:	1SAA937000-0302
GL Certificate:	1SAA937000-0404
GOST Certificate:	1SAA937000-2703

LR Certificate: 1SAA937000-0504
RMRS Certificate: 1SAA918000-0703
RoHS Information: 1SAA918002-4401
UL Certificate: UL_E167205
UL_E195536

Classifications

Object Classification Code: F
E-nummer: 3112214
UNSPSC: 39121521
