



**Electric Automation**  
Automation specialists

Reference: MS497-40  
Code: 1SAM580000R1005

MS497-40 Manual Motor Starter

Buy it at Electric Automation Network



The MS497-40 manual motor starter is a 70 mm width devices with a rated operational current of  $I_e = 40.0$  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  $I_{cs} = 50$  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 and shunt trips are available as accessory.

### Ordering

EAN:	4013614265617
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85362010

### Dimensions

Product Net Width:	70 mm
Product Net Height:	165 mm
Product Net Depth:	174 mm
Product Net Weight:	2.203 kg

## Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	76.5 mm
Package Level 1 Height:	171 mm
Package Level 1 Length:	190 mm
Package Level 1 Gross Weight:	2.223 kg

## 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 25g
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
Ampere Rating UL/CSA:	40 A
Horsepower Rating UL/CSA:	(200 V AC) Three Phase 10 Hp (208 V AC) Three Phase 10 Hp (220 ... 240 V AC) Three Phase 15 Hp (440 ... 480 V AC) Three Phase 30 Hp (550 ... 600 V AC) Three Phase 40 Hp
General Use Rating UL/CSA:	(600 V AC) 40 A
Connecting Capacity Main Circuit UL/CSA:	Flexible 1x 10 ... 2/0 AWG Flexible 1/2x 10 ... 1/0 AWG Stranded 1x 10 ... 2/0 AWG Stranded 1/2x 10 ... 1/0 AWG
Tightening Torque UL/CSA:	Main Circuit 35 ... 53 in·lb

## Additional Information

Actuator Type:	Rotary Handle
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1x 2.5 ... 50 mm <sup>2</sup> Flexible with Ferrule 2x 2.5 ... 35 mm <sup>2</sup> Solid 1/2x 2.5 ... 16 mm <sup>2</sup> Stranded 1x 10 ... 70 mm <sup>2</sup> Stranded 2x 10 ... 50 mm <sup>2</sup>
Conventional Free-air Thermal Current (I <sub>th</sub> ):	Main Circuit 40 A
Degree of Protection:	Housing IP20 Main Circuit Terminals IP00
Electrical Durability:	25000 cycle

IIT Publishing Status:	Level 0 - Information enabled
Mechanical Durability:	50000 cycle
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
Mounting Position:	Position 1 to 6
Number of Poles:	3
Number of Protected Poles:	3
Pollution Degree:	3
Power Loss:	at Rated Operating Conditions per Pole 3.3 ... 6.7 W
Product Main Type:	MS497
Product Name:	Manual Motor Starter
Rated Current ( $I_n$ ):	40 A
Rated Frequency (f):	Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage ( $U_{imp}$ ):	Main Circuit 6 kV
Rated Instantaneous Short-Circuit Current Setting ( $I_i$ ):	520 A
Rated Insulation Voltage ( $U_i$ ):	690 V
Rated Operational Current ( $I_e$ ):	40 A
Rated Operational Current AC-3 ( $I_e$ ):	40 A
Rated Operational Power AC-3 ( $P_e$ ):	(400 V) Three Phase 18.5 kW
Rated Operational Voltage:	Main Circuit 690 V AC Main Circuit 450 V DC
Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ ):	(230 V AC) 100 kA (400 V AC) 50 kA (440 V AC) 50 kA (500 V AC) 9 kA (690 V AC) 6 kA
Rated Service Short-Circuit Breaking Capacity, in % of $I_{cu}$ ( $I_{cs}$ ):	100 %
Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ ):	(230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 100 kA (500 V AC) 18 kA (690 V AC) 12 kA
Rated Uninterrupted Current ( $I_u$ ):	40 A
Recommended Screw Driver:	Hexagon 4
RoHS Date:	0016
Setting Range:	28 ... 40 A
Standards:	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 508 CSA 22.2 No. 14
Tightening Torque:	Main Circuit 4 ... 6 N·m
Wire Stripping Length:	Main Circuit 17 mm

## Certificates and Declarations (Document Number)

ATEX Certificate:	1SAA937000-3901
BV Certificate:	1SAA937000-0202
CCC Certificate:	1SAA937001-3803
cUL Certificate:	cUL_E195536
Data Sheet, Technical Information:	1SBC100173C0201
Data Sheet, Technical Information (Part 2):	1SAM500503F0005
Data Sheet, Technical Information (Part 3):	9AKK105713A1104
Declaration of Conformity - CE:	1SAD938503-0050
DNV Certificate:	1SAA937000-0301
EAC Certificate:	1SAA937001-2703
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

eClass:	7.0 27370401
ETIM 4:	EC000074 - Motor protective circuit-breaker
ETIM 5:	EC000074 - Motor protective circuit-breaker
Object Classification Code:	F
UNSPSC:	39121521