



**Automatización Eléctrica**

Especialistas en Automatización

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## General Information

Extended Product Type:	MS497-90
Product ID:	1SAM580000R1009
EAN:	4013614265655
Catalog Description:	MS497-90 Manual Motor Starter
Long Description:	The MS497-90 manual motor starter is a 70 mm width devices with a rated operational current of $I_e = 90.0$ 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.

## 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

## Ordering

EAN:	4013614265655
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85362090

## Dimensions

Product Net Width:	70 mm
Product Net Height:	165 mm
Product Net Depth:	174 mm
Product Net Weight:	2.268 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:	2.26 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:	90 A
Horsepower Rating UL/CSA:	(200 V AC) Three Phase 30 Hp (208 V AC) Three Phase 30 Hp (220 ... 240 V AC) Three Phase 30 Hp (440 ... 480 V AC) Three Phase 75 Hp (550 ... 600 V AC) Three Phase 100 Hp
General Use Rating UL/CSA:	(600 V AC) 90 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

<b>Actuator Type:</b>	Rotary Handle
<b>Connecting Capacity-Main Circuit:</b>	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>
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	Main Circuit 90 A
<b>Degree of Protection:</b>	Housing IP20 Main Circuit Terminals IP00
<b>Electrical Durability:</b>	25000 cycle
<b>IIT Publishing Status:</b>	Level 0 - Information enabled
<b>Mechanical Durability:</b>	50000 cycle
<b>Mounting on DIN Rail:</b>	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
<b>Mounting Position:</b>	Position 1 to 6
<b>Number of Poles:</b>	3
<b>Number of Protected Poles:</b>	3
<b>Pollution Degree:</b>	3
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 6.1 ... 10 W
<b>Product Main Type:</b>	MS497
<b>Product Name:</b>	Manual Motor Starter
<b>Rated Current (I<sub>n</sub>):</b>	90 A
<b>Rated Frequency (f):</b>	Main Circuit 50 Hz Main Circuit 60 Hz
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	Main Circuit 6 kV
<b>Rated Instantaneous Short-Circuit Current Setting (I<sub>i</sub>):</b>	1170 A
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	690 V
<b>Rated Operational Current (I<sub>e</sub>):</b>	90 A
<b>Rated Operational Current AC-3 (I<sub>e</sub>):</b>	90 A
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(400 V) Three Phase 45 kW
<b>Rated Operational Voltage:</b>	Main Circuit 690 V AC Main Circuit 450 V DC
<b>Rated Service Short-Circuit Breaking Capacity (I<sub>cs</sub>):</b>	(230 V AC) 100 kA (400 V AC) 50 kA (440 V AC) 50 kA (500 V AC) 5 kA (690 V AC) 3 kA
<b>Rated Service Short-Circuit Breaking Capacity, in % of I<sub>cu</sub> (I<sub>cs</sub>):</b>	100 %
<b>Rated Ultimate Short-Circuit Breaking Capacity (I<sub>cu</sub>):</b>	(230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 70 kA (500 V AC) 10 kA (690 V AC) 10 kA
<b>Rated Uninterrupted Current (I<sub>u</sub>):</b>	90 A
<b>Recommended Screw Driver:</b>	Hexagon 4
<b>RoHS Date:</b>	0016
<b>Setting Range:</b>	70 ... 90 A
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 508 CSA 22.2 No. 14
<b>Tightening Torque:</b>	Main Circuit 4 ... 6 N·m
<b>Wire Stripping Length:</b>	Main Circuit 17 mm

## Certificates and Declarations (Document Number)

<b>ATEX Certificate:</b>	1SAA937000-3901
<b>BV Certificate:</b>	1SAA937000-0202
<b>CCC Certificate:</b>	1SAA937001-3803
<b>cUL Certificate:</b>	cUL_E195536
<b>Data Sheet, Technical Information:</b>	1SBC100173C0201
<b>Data Sheet, Technical Information (Part 2):</b>	1SAM500503F0009

**Data Sheet, Technical Information** 9AKK105713A1104  
(Part 3):

<b>Declaration of Conformity - CE:</b>	1SAD938503-0050
<b>DNV Certificate:</b>	1SAA937000-0301
<b>EAC Certificate:</b>	1SAA937001-2703
<b>GL Certificate:</b>	1SAA937000-0404
<b>GOST Certificate:</b>	1SAA937000-2703
<b>LR Certificate:</b>	1SAA937000-0504
<b>RMRS Certificate:</b>	1SAA918000-0703
<b>RoHS Information:</b>	1SAA918002-4401
<b>UL Certificate:</b>	UL_E167205 UL_E195536

## Classifications

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





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Product	Code	Reference	Product link
MS497-90 Manual Motor Starter	1SAM580000R1009	MS497-90	<a href="#">Buy on EAN</a>