

MO165-54



MO165-54 Manual Motor Starter Magnetic Only

General Information

Extended Product Type	MO165-54
Product ID	1SAM461000R1016
EAN	4013614486173
Catalog Description	MO165-54 Manual Motor Starter Magnetic Only
Long Description	The MO165 manual motor starter magnetic only is a compact and powerful range for motor protection up to 45 kW (400 V) in width of 45 mm. The devices are used to manually switch on and off loads/motors and to protect them reliably and without the need for a fuse from short-circuits. The manual motor starter offers a rated service short-circuit breaking capacity up to 30 kA at 400 V AC. A combination together with overload relays or motor controllers allows the protection of motors. Further features are the built-in disconnect function, trip-free mechanism and a rotary handle with a clear switch position indication. The manual motor starters magnetic only are suitable for three- and single-phase applications. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signaling contacts, undervoltage releases, shunt trips, 3-phase bus bars and power in-feed blocks are available as accessory.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85362010

Popular Downloads

Data Sheet, Technical Information	2CDC131084D0201
Data Sheet, Technical Information (Part 2)	1SAM400506F0001 1SAM400507F0001
Instructions and Manuals	2CDC131082M6801
Instructions and Manuals (Part 2)	2CDC131085M0201
Dimension Diagram	1SAM400402F0001

Dimensions

Product Net Width	55 mm
Product Net Height	142.65 mm
Product Net Depth / Length	122.1 mm
Product Net Weight	0.97 kg

Technical

Rated Service Short-Circuit Breaking Capacity (I_{cs})	(230 V AC) 30 kA (250 V DC) 3 Poles in Series 100 kA
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	(400 V AC) 30 kA (440 V AC) 30 kA (500 V AC) 20 kA (690 V AC) 5 kA
Rated Ultimate Short-Circuit Breaking Capacity (I_{cu})	(230 V AC) 50 kA (250 V DC) 100 kA (400 V AC) 50 kA (440 V AC) 45 kA (500 V AC) 20 kA (690 V AC) 8 kA
Rated Instantaneous Short-Circuit Current Setting (I_f)	810 A
Setting Range	None
Rated Operational Power AC-3 (P_e)	(400 V) Three Phase 22 kW
Rated Operational Voltage	Main Circuit 690 V AC Main Circuit 250 V DC
Rated Operational Current (I_e)	54 A
Rated Operational Current AC-3 (I_e)	54 A
Rated Operational Current DC-5 (I_e)	54 A
Rated Frequency (f)	Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage (U_{imp})	Main Circuit 8 kV
Rated Insulation Voltage (U_i)	1000 V
Power Loss	7 W
Number of Poles	3
Conventional Free-air Thermal Current (I_{th})	Main Circuit 54 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP10
Pollution Degree	3
Electrical Durability	25000 cycle
Mechanical Durability	50000 cycle
Terminal Type	Screw Terminals
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1 ... 35 mm ² Flexible with Insulated Ferrule 1/2x 1 ... 35 mm ² Flexible 1/2x 1 ... 35 mm ² Rigid 1/2x 1 ... 4 mm ² Solid 1/2x 1 ... 4 mm ² Stranded 1/2x 1 ... 50 mm ²
Tightening Torque	Main Circuit 4 N·m
Wire Stripping Length	Main Circuit 16 mm
Recommended Screw Driver	Pozidriv 2
Mounting Position	Position 1 to 6
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
Minimum Mounting Distance	Electrical Conductive Board, Horizontal - Up to 1000 V 1.5 mm Electrical Conductive Board, Horizontal - Up to 400 V 0 mm Electrical Conductive Board, Horizontal - Up to 690 V 1.5 mm Electrical Conductive Board, Vertical 75 mm Other Device Same Type, Horizontal 0 mm Other Device Same Type, Vertical 150 mm
Actuator Type	Rotary Handle
Contact Position Indication	ON / OFF / TRIP
Standards	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-4-1 CSA 22.2 No. 14
Remarks	For overload protection of the motors, an appropriate thermal or electronic overload relays must be used

Environmental

Ambient Air Temperature	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C
Ambient Air Temperature Compensation	No
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 25g
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Ampere Rating UL/CSA	54 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 15 Hp (208 V AC) Three Phase 15 Hp (220 ... 240 V AC) Three Phase 20 Hp (440 ... 480 V AC) Three Phase 40 Hp (550 ... 600 V AC) Three Phase 50 Hp
Full Load Amps Motor Use	(200 V AC) Three Phase 48.3 A (208 V AC) Three Phase 46.2 A (220 ... 240 V AC) Three Phase 54 A (440 ... 480 V AC) Three Phase 52 A (550 ... 600 V AC) Three Phase 52 A
Locked Rotor Amps	(200 V AC) Three Phase 267 A (208 V AC) Three Phase 257 A (220 ... 240 V AC) Three Phase 290 A (440 ... 480 V AC) Three Phase 290 A (550 ... 600 V AC) Three Phase 290 A
General Use Rating UL/CSA	(600 V AC) 54 A
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 16-0 AWG Stranded 1/2x 16-0 AWG
Tightening Torque UL/CSA	Main Circuit 35 in-lb

Certificates and Declarations (Document Number)

ABS Certificate	1SAA963002-0101
BV Certificate	1SAA963002-0201
CB Certificate	1SAA918002-2002
CCC Certificate	1SAA918004-3801
Declaration of Conformity - CE	1SAD938502-0191
DNV GL Certificate	1SAA963002-0301
EAC Certificate	1SAA963002-2701
Instructions and Manuals	2CDC131082M6801
LR Certificate	1SAA918001-0501
RMRS Certificate	1SAA918000-0704
RoHS Information	1SAD938502-0191
UL Certificate	cUL_E137861 UL_E137861 cUL_E345003 UL_345003

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	78 mm
Package Level 1 Depth / Length	155 mm
Package Level 1 Height	155 mm
Package Level 1 Gross Weight	1.1 kg
Package Level 1 EAN	4013614486173
Package Level 2 Units	12 piece
Package Level 2 Width	330 mm
Package Level 2 Depth / Length	400 mm
Package Level 2 Height	320 mm
Package Level 2 Gross Weight	13 kg
Package Level 2 EAN	4013614504037

Classifications

Object Classification Code	F
E-nummer	3110143
ETIM 5	EC000074 - Motor protective circuit-breaker
ETIM 6	EC000074 - Motor protection circuit-breaker
ETIM 7	EC000074 - Motor protection circuit-breaker
eClass	7.0 27370401
UNSPSC	39121521

Categories

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

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

