

PRODUCT-DETAILS

MS165-16

MS165-16 Manual Motor Starter



Informações gerais

Tipo de produto alargado	MS165-16
ID do produto	1SAM451000R1011
EAN	4013614486050
Descrição do catálogo	MS165-16 Manual Motor Starter

Descrição longa

MS165 is a compact and powerful range for motor protection up to 45 kW (400 V) / 80 A in width of 55 mm. They offer a reliable protection for motors in the event of overload or phase failure. The devices have trip class 10.

This type has also a clear and reliable indication of fault in a separate window in the event of short-circuit tripping. 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 (also known as motor protection circuit breaker or manual motor protector) is suitable for three- and single phase applications. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signaling contacts, undervoltage releases, shunt trips, power in-feed blocks are available as accessory. These are suitable throughout the MS116/MS132/MS165 range.

Ordering

Quantidade Mínima de Encomenda	1 piece
Número de tarifa aduaneira	85362010

Popular Downloads

Ficha de dados, informação técnica	2CDC131083D0201
Instruções e Manuais	2CDC131081M6801
Instruções e Manuais (Parte 2)	2CDC131060M0202
Ex Operating Instructions	2CDC131087M6801
Time-Current Characteristic Curve	1SAM400505F0001
I ² t Characteristic	1SAM400506F0001
Cut-off Current Characteristic	1SAM400507F0001
Diagrama de medidas	1SAM400401F0001

Dimensions

Largura Líquida do Produto	55 mm
Altura Líquida do Produto	142.65 mm
Profundidade/Comprimento Líquidos do Produto	122.1 mm
Peso Líquido do Produto	0.95 kg

Technical

Rated Service Short-Circuit Breaking Capacity (I _{cs})	(230 V AC) 100 kA (250 V DC) 3 Poles in Series 100 kA (400 V AC) 100 kA (440 V AC) 75 kA (500 V AC) 40 kA (690 V AC) 10 kA
Rated Ultimate Short-Circuit Breaking Capacity (I _{cu})	(230 V AC) 100 kA (250 V DC) 100 kA (400 V AC) 100 kA (440 V AC) 75 kA (500 V AC) 40 kA (690 V AC) 10 kA
Rated Instantaneous Short-Circuit Current Setting (I _i)	240 A
Setting Range	10 ... 16 A
Rated Operational Power AC-3 (P _e)	(400 V) Three Phase 7.5 kW
Rated Operational Power AC-3e (P _e)	(400 V) Three Phase 7.5 kW
Tensão operacional nominal	Main Circuit 690 V AC Main Circuit 250 V DC
Corrente operacional nominal (I _e)	16 A
Rated Operational Current AC-3 (I _e)	16 A
Rated Operational Current AC-3e (I _e)	16 A
Rated Operational Current DC-5 (I _e)	16 A
Frequência nominal (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	at Rated Operating Conditions per Pole 1.49 ... 3.81 W
Número de polos	3
Conventional Free-air Thermal Current (I_{th})	Main Circuit 16 A
Grau de proteção	Housing IP20 Main Circuit Terminals IP10
Pollution Degree	3
Electrical Durability	25000 cycle
Mechanical Durability	50000 cycle
Tipo de terminal	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
Binário de aperto	Main Circuit 4 N·m
Wire Stripping Length	Main Circuit 16 mm
Recommended Screw Driver	Pozidriv 2
Posição de montagem	1 ... 6
Montagem na calha DIN	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
Normas	CSA 22.2 No. 14 IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-4-1

Technical UL/CSA

Short-Circuit Current Rating (SCCR)	Manual Self-Protected Combination Controllers (Type E), (480Y / 277 V AC) 65 kA Manual Self-Protected Combination Controllers (Type E), (600Y / 347 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 65 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 65 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) 65 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) 30 kA
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Classificação de potência UL/CSA	(200 V AC) Three Phase 3 Hp (208 V AC) Three Phase 3 Hp (220 ... 240 V AC) Three Phase 5 Hp (440 ... 480 V AC) Three Phase 10 Hp (550 ... 600 V AC) Three Phase 10 Hp
Full Load Amps Motor Use	(200 V AC) Three Phase 11 A (208 V AC) Three Phase 10.6 A (220 ... 240 V AC) Three Phase 15.2 A (440 ... 480 V AC) Three Phase 14 A

	(550 ... 600 V AC) Three Phase 11 A
Locked Rotor Amps	(200 V AC) Three Phase 73.6 A (208 V AC) Three Phase 71 A (220 ... 240 V AC) Three Phase 92 A (440 ... 480 V AC) Three Phase 81 A (550 ... 600 V AC) Three Phase 64.8 A
General Use Rating UL/CSA	(600 V AC) 16 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

Environmental

Temperatura do ar ambiente	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C
Ambient Air Temperature Compensation	Yes
Altitude de operação máxima permissível	2000 m
Resistência ao Choque de acordo com IEC 60068-2-27	11 ms Pulse 25g
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
Estado RoHS	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

Certificado ABS	1SAA963002-0101
Certificado ATEX	1SAA918001-3901
Certificado BV	1SAA963002-0201
CB Certificate	1SAA918002-2002
CQC Certificate	CQC2015010307760141
Certificado cUL	cUL_E345003 cUL_E137861
Cut-off Current Characteristic	1SAM400507F0001
Declaration of Conformity - CCC	2020980307003042
Declaração de conformidade -CE	1SAD101100-3408
Declaration of Conformity - UKCA	1SAD201100-3408
DNV GL Certificate	1SAA963002-0301
EAC Certificate	1SAA963000-2701
Informação ambiental	1SAC200051H0009
I ² t Characteristic	1SAM400506F0001
IECEX Certificate	1SAA918000-4001
Instruções e Manuais	2CDC131081M6801
Instruções e Manuais (Parte 2)	2CDC131060M0202
KC Certificate	1SAA963001-1501
Certificado LR	1SAA918001-0501
Certificado RMRS	1SAA918000-0704
Informação RoHS	1SAD938505-0190
Time-Current Characteristic Curve	1SAM400505F0001
Certificado UL	UL_E137861

UL_345003

Container Information

Unidades de embalagem Nível 1	box 1 piece
Largura da embalagem Nível 1	78 mm
Profundidade/Comprimento da embalagem Nível 1	155 mm
Altura da embalagem Nível 1	155 mm
Peso bruto da embalagem Nível 1	1.1 kg
Nível de Embalagem 1 EAN	4013614486050
Unidades de embalagem Nível 2	carton 12 piece
Largura da embalagem Nível 2	330 mm
Profundidade/Comprimento da embalagem Nível 2	400 mm
Altura da embalagem Nível 2	320 mm
Peso bruto da embalagem Nível 2	13 kg
Nível de Embalagem 2 EAN	4013614503917

Classifications

Código de classificação do objeto	F
ETIM 5	EC000074 - Motor protective circuit-breaker
ETIM 6	EC000074 - Motor protection circuit-breaker
ETIM 7	EC000074 - Motor protection circuit-breaker
ETIM 8	EC000074 - Motor protection circuit-breaker
eClass	V11.0 : 27370401
UNSPSC	39121521
Código de Categoria Granular IDEA (IGCC)	4845 >> 3 Pole Motor Circuit Protector Circuit Breakers
E-Number (Finland)	3707284
E-Number (Sweden)	3110051

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SAM201901R1001	HKF1-11 Auxiliary Contact	HKF1-11	1	piece
1SAM201901R1201	HKF1-11K Auxiliary Contact	HKF1-11K	1	piece
1SAM201901R1002	HKF1-20 Auxiliary Contact	HKF1-20	1	piece
1SAM201901R1202	HKF1-20K Auxiliary Contact	HKF1-20K	1	piece
1SAM201901R1004	HKF1-01 Auxiliary Contact	HKF1-01	1	piece
1SAM201901R1003	HKF1-10 Auxiliary Contact	HKF1-10	1	piece
1SAM201902R1002	HK1-20 Auxiliary Contact	HK1-20	1	piece
1SAM201902R1202	HK1-20K Auxiliary Contact	HK1-20K	1	piece
1SAM201902R1001	HK1-11 Auxiliary Contact	HK1-11	1	piece
1SAM201902R1201	HK1-11K Auxiliary Contact	HK1-11K	1	piece

1SAM201902R1003	HK1-02 Auxiliary Contact	HK1-02	1	piece
1SAM201902R1203	HK1-02K Auxiliary Contact	HK1-02K	1	piece
1SAM201902R1004	HK1-20L Auxiliary Contact	HK1-20L	1	piece
1SAM201902R1204	HK1-20LK Auxiliary Contact	HK1-20LK	1	piece
1SAM201903R1002	SK1-20 Signaling Contact	SK1-20	1	piece
1SAM201903R1202	SK1-20K Signaling Contact	SK1-20K	1	piece
1SAM201903R1005	SK1-20AR Signaling Contact	SK1-20AR	1	piece
1SAM201903R1205	SK1-20ARK Signaling Contact	SK1-20ARK	1	piece
1SAM201903R1001	SK1-11 Signaling Contact	SK1-11	1	piece
1SAM201903R1201	SK1-11K Signaling Contact	SK1-11K	1	piece
1SAM201903R1004	SK1-11AR Signaling Contact	SK1-11AR	1	piece
1SAM201903R1204	SK1-11ARK Signaling Contact	SK1-11ARK	1	piece
1SAM201903R1003	SK1-02 Signaling Contact	SK1-02	1	piece
1SAM201903R1203	SK1-02K Signaling Contact	SK1-02K	1	piece
1SAM201903R1006	SK1-02AR Signaling Contact	SK1-02AR	1	piece
1SAM201903R1206	SK1-02ARK Signaling Contact	SK1-02ARK	1	piece
1SAM301901R1002	CK1-20 Short Circuit Signaling Contact	CK1-20	1	piece
1SAM301901R1001	CK1-11 Short Circuit Signaling Contact	CK1-11	1	piece
1SAM301901R1003	CK1-02 Short Circuit Signaling Contact	CK1-02	1	piece
1SAM201910R1001	AA1-24 Shunt Trip	AA1-24	1	piece
1SAM201910R1002	AA1-110 Shunt Trip	AA1-110	1	piece
1SAM201910R1003	AA1-230 Shunt Trip	AA1-230	1	piece
1SAM201910R1004	AA1-400 Shunt Trip	AA1-400	1	piece
1SAM201904R1010	UA1-20 Undervoltage Release	UA1-20	1	piece
1SAM201904R1001	UA1-24 Undervoltage Release	UA1-24	1	piece
1SAM201904R1002	UA1-48 Undervoltage Release	UA1-48	1	piece
1SAM201904R1003	UA1-60 Undervoltage Release	UA1-60	1	piece
1SAM201904R1004	UA1-110 Undervoltage Release	UA1-110	1	piece
1SAM201904R1008	UA1-208 Undervoltage Release	UA1-208	1	piece
1SAM201904R1005	UA1-230 Undervoltage Release	UA1-230	1	piece
1SAM201904R1006	UA1-400 Undervoltage Release	UA1-400	1	piece
1SAM201904R1007	UA1-415 Undervoltage Release	UA1-415	1	piece
1SAM201904R1009	UA1-575 Undervoltage Release	UA1-575	1	piece
1SAM401923R1003	S2-M3-50 Power Infeed Block	S2-M3-50	1	piece
1SAM401920R1002	PS2-2-0-125 Busbar	PS2-2-0-125	1	piece
1SAM401920R1003	PS2-3-0-125 Busbar	PS2-3-0-125	1	piece
1SAM401920R1004	PS2-4-0-125 Busbar	PS2-4-0-125	1	piece
1SAM401920R1022	PS2-2-2-125 Busbar	PS2-2-2-125	1	piece
1SAM401920R1023	PS2-3-2-125 Busbar	PS2-3-2-125	1	piece
1SAM401920R1024	PS2-4-2-125 Busbar	PS2-4-2-125	1	piece
1SAM401921R1001	BS2-3 Protection Cover	BS2-3	1	piece
1SAM401922R1001	KA165 Terminal Shroud	KA165	1	piece
GJF1101903R0002	SA2 Terminals and Installation Material	SA2	1	piece
1SAM201920R1011	MSHD-LTB Handles	MSHD-LTB	1	piece
1SAM201920R1012	MSHD-LTY Handles	MSHD-LTY	1	piece
1SAM201920R1000	MSH-AR Shaft Alignment Ring	MSH-AR	1	piece
1SAM101923R0002	MSMN Driver	MSMN	1	piece
1SAM101923R0012	MSMNO Driver	MSMNO	1	piece
1SCA101647R1001	OXS6X85 SHAFT	OXS6X85	1	piece
1SCA108043R1001	OXS6X105 SHAFT	OXS6X105	1	piece
1SCA101655R1001	OXS6X130 SHAFT	OXS6X130	1	piece
1SCA101659R1001	OXS6X180 SHAFT	OXS6X180	1	piece

Categorias

Produtos e Sistemas de Baixa Tensão → Disjuntores → Disjuntores motor

Produtos e Sistemas de Baixa Tensão → Produtos para controle → Disjuntores motor → Disjuntores motor

