



PRODUCT-DETAILS

MS165-54

MS165-54 Manual Motor Starter 40 ... 54 A



Información General	
Tipo de producto extendido	MS165-54
Código de producto	1SAM451000R1016
EAN	4013614486104
Descripción corta	MS165-54 Manual Motor Starter 40 ... 54 A
Descripción larga	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.

Clasificación	
Cantidad mínima de pedido	1 piece

Descargas Populares	
Ficha técnica, información técnica	2CDC131083D0201
Instrucciones y manuales	2CDC131081M6801
Instrucciones y manuales (parte 2)	2CDC131060M0202
Instrucciones de uso Ex	2CDC131087M6801
Curva característica tiempo-corriente	1SAM400505F0006
I²t Característica	1SAM400506F0001
Característica de la corriente de corte	1SAM400507F0001
Dibujo dimensional CAD	2CDC001079B0201
Diagrama de dimensiones	1SAM400401F0001

Dimensiones	
Ancho del product	55 mm
Alto del producto	142.65 mm
Largo del product	122.1 mm
Peso del product	0.97 kg

Technical	
Capacidad nominal de corte en cortocircuito en servicio (I _{cs})	(230 V AC) 30 kA (250 V DC) 3 Poles in Series 100 kA (400 V AC) 30 kA (440 V AC) 30 kA (500 V AC) 20 kA (690 V AC) 6 kA
Capacidad nominal de corte en cortocircuito (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
Ajuste de la corriente de cortocircuito instantánea nominal (I _i)	810 A
Rango de ajuste	40 ... 54 A
Potencia operativa nominal AC-3 (P _e)	(400 V) Three Phase 22 kW
Potencia operativa nominal AC-3e (P _e)	(400 V) Three Phase 22 kW
Tensión nominal de operación	Main Circuit 690 V AC Main Circuit 250 V DC
Corriente nominal de funcionamiento (I _e)	54 A
Corriente nominal de funcionamiento AC-3 (I _e)	54 A
Corriente nominal de funcionamiento AC-3e (I _e)	54 A
Corriente nominal de	54 A

funcionamiento DC-5 (I _e)	
Frecuencia nominal (f)	Main Circuit 50 Hz Main Circuit 60 Hz
Frecuencia de funcionamiento (f _{sw})	0 ... 415 Hz
Tensión nominal soportada por impulsos (U _{imp})	Main Circuit 8 kV
Tensión nominal de aislamiento (U _i)	1000 V
Pérdida de potencia	at Rated Operating Conditions per Pole 3.84 ... 6.99 W
Número de polos	3
Corriente térmica convencional de aire libre (I _{th})	Main Circuit 54 A
Grado de protección	Housing IP20 Main Circuit Terminals IP10
Grado de contaminación	3
Durabilidad eléctrica	25000 cycle
Durabilidad mecánica	50000 cycle
Tipo de terminal	Screw Terminals
Capacidad de conexión del circuito principal	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
Par de apriete	Main Circuit 4 N·m
Longitud de pelado del cable	Main Circuit 16 mm
Destornillador recomendado	Pozidriv 2
Posición de montaje	1 ... 6
Montaje en contactores	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
Distancia mínima de montaje	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
Tipo de actuador	Rotary Handle
Indicación de la posición del contacto	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

Capacidad de corriente de cortocircuito (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
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	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
Tensión máxima de funcionamiento UL/CSA	Main Circuit 600 V AC
Potencia nominal 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
Amperios a plena carga Uso del motor	(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
Rotor bloqueado Amperios	(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
Clasificación de uso general UL/CSA	(600 V AC) 54 A
Capacidad de conexión del circuito principal UL/CSA	Flexible 1/2x 16-0 AWG Stranded 1/2x 16-0 AWG
Par de apriete UL/CSA	Main Circuit 35 in-lb

Ambiente

Temperatura ambiente	Funcionamiento -25 ... +60 °C Operation Compensated -25 ... +60 °C Almacenamiento -50 ... +80 °C
Compensación de la temperatura del aire ambiente	Yes
Altitud máxima de funcionamiento permisible	2000 m
Resistencia a los golpes según IEC 60068-2-27	11 ms Pulse 25g
Resistencia a las vibraciones según IEC 60068-2-6	Mounted on Mounting Plate: 5g 3 ... 150 Hz Mounted on DIN-Rail: 4g 3 ... 150 Hz

Material Compliance

Plantilla de notificación de minerales de conflicto (CMRT)	9AKK108467A5658
Declaración REACH	1SAA963005-4502
Información sobre RoHS	1SAA963006-4502
Estado de RoHS	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006539
WEEE B2C / B2B	Business To Business
Categoría RAEE	5. Small Equipment (No External Dimension More Than 50 cm)

Circular Value	
Instrucciones para el final de la vida	1SAC00284H0001

Certificados y Declaraciones (Número de Documento)	
Certificado ABS	1SAA963002-0101
Certificado ATEX	1SAA918001-3901
Certificado BV	1SAA963002-0201
Certificado CB	1SAA918002-2002
Certificado CQC	CQC2015010307760141
Característica de la corriente de corte	1SAM400507F0001
Declaración de conformidad - CCC	2020980307003042
Declaración de conformidad - CE	1SAD101100-3408
Declaración de conformidad - UKCA	1SAD201100-3408
Certificado DNV GL	1SAA963002-0301
Certificado EAC	1SAA963000-2701
I ² t Característica	1SAM400506F0001
Certificado IECEx	1SAA918000-4001
Certificado KC	1SAA963001-1501
Certificado LR	1SAA918001-0501
Certificado RMRS	1SAA918000-0704
Certificado UL	E137861-20150206 E345003-20150206

Información de Embalaje	
Embalaje Nivel 1 Unidades	box 1 piece
Embalaje Nivel 1 Ancho	64 mm
Embalaje Nivel 1 Largo	177 mm
Embalaje Nivel 1 Alto	140 mm
Embalaje Nivel 1 Peso	1.1 kg
Embalaje Nivel 1 EAN	4013614486104
Embalaje Nivel 2 Unidades	carton 12 piece
Embalaje Nivel 2 Ancho	330 mm
Embalaje Nivel 2 Largo	400 mm
Embalaje Nivel 2 Alto	320 mm
Embalaje Nivel 2 Peso	13 kg
Nivel de paquete 2 EAN	4013614503962

Clasificaciones	
Código de clasificación de objetos	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

Clase electrónica	V11.0 : 27370401
UNSPSC	39121521
Código de categoría granular de IDEA (IGCC)	4731 >> Manual Starters
Número E (Finlandia)	3707289
Número E (Suecia)	3110056

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SAM201901R1001	HKF1-11 Aux.-contact for front mounting	HKF1-11	1	piece
1SAM201901R1201	HKF1-11K Aux.-contact for frontmounting with Push-In terminals	HKF1-11K	1	piece
1SAM201901R1002	HKF1-20 Aux.-contact 2NO, front mounting	HKF1-20	1	piece
1SAM201901R1202	HKF1-20K Aux.-contact for frontmounting with Push-In terminals	HKF1-20K	1	piece
1SAM201901R1004	HKF1-01 Aux.-contact for front mounting	HKF1-01	1	piece
1SAM201901R1003	HKF1-10 Aux.-contact for front mounting	HKF1-10	1	piece
1SAM201902R1002	HK1-20 Aux.-contact 2 NO	HK1-20	1	piece
1SAM201902R1202	HK1-20K Aux.-contact 2 NO with Push-In terminals	HK1-20K	1	piece
1SAM201902R1001	HK1-11 Aux.-contact 1 NO + 1 NC	HK1-11	1	piece
1SAM201902R1201	HK1-11K Aux.-contact 1 NO + 1 NC with Push-In terminals	HK1-11K	1	piece
1SAM201902R1003	HK1-02 Aux.-contact 2 NC	HK1-02	1	piece
1SAM201902R1203	HK1-02K Aux.-contact 2 NC with Push-In terminals	HK1-02K	1	piece
1SAM201902R1004	HK1-20L Aux.-cont. w. 2 lead contacts 2 NO	HK1-20L	1	piece
1SAM201902R1204	HK1-20LK Aux.-cont. w. 2 leading contacts 2 NO, with Push-In terminals	HK1-20LK	1	piece
1SAM201903R1002	SK1-20 Signaling Contact 2 NO	SK1-20	1	piece
1SAM201903R1202	SK1-20K Signaling Contact 2 NO with Push-In terminals	SK1-20K	1	piece
1SAM201903R1005	SK1-20AR Signaling Contact, 2NO with screw terminals	SK1-20AR	1	piece
1SAM201903R1205	SK1-20ARK Signaling Contact, 2NO with Push-in Spring terminals	SK1-20ARK	1	piece
1SAM201903R1001	SK1-11 Signaling Contact 1 NO + 1 NC	SK1-11	1	piece
1SAM201903R1201	SK1-11K Signaling Contact 1 NO + 1 NC with Push-In terminals	SK1-11K	1	piece
1SAM201903R1004	SK1-11AR Signaling Contact, 1NO+1NC with screw terminals	SK1-11AR	1	piece
1SAM201903R1204	SK1-11ARK Signaling Contact, 1NO+1NC with Push-in Spring terminals	SK1-11ARK	1	piece
1SAM201903R1003	SK1-02 Signaling Contact 2 NC	SK1-02	1	piece
1SAM201903R1203	SK1-02K Signaling Contact 2 NC with Push-In terminals	SK1-02K	1	piece
1SAM201903R1006	SK1-02AR Signaling Contact, 2NC with screw terminals	SK1-02AR	1	piece
1SAM201903R1206	SK1-02ARK Signaling Contact, 2NC with Push-in Spring terminals	SK1-02ARK	1	piece
1SAM301901R1002	CK1-20 Short-Circuit Signaling Contact 2 NO	CK1-20	1	piece
1SAM301901R1001	CK1-11 Short-Circuit Signaling Contact 1 NO + 1 NC	CK1-11	1	piece
1SAM301901R1003	CK1-02 Short-Circuit Signaling Contact 2 NC	CK1-02	1	piece
1SAM201910R1001	AA1-24 Shunt Trip 20-24V	AA1-24	1	piece
1SAM201910R1002	AA1-110 Shunt Trip 110V	AA1-110	1	piece

1SAM201910R1003	AA1-230 Shunt Trip 200-240V	AA1-230	1	piece
1SAM201910R1004	AA1-400 Shunt Trip 350-415V	AA1-400	1	piece
1SAM201904R1010	UA1-20 Undervoltage release 20V 50Hz / 24V 60 Hz	UA1-20	1	piece
1SAM201904R1001	UA1-24 Undervoltage release 24 V	UA1-24	1	piece
1SAM201904R1002	UA1-48 Undervoltage release 48V	UA1-48	1	piece
1SAM201904R1003	UA1-60 Undervoltage release 60V	UA1-60	1	piece
1SAM201904R1004	UA1-110 Undervoltage release 110V 110V 50Hz/120V 60Hz	UA1-110	1	piece
1SAM201904R1008	UA1-208 Undervoltage release 208V 60Hz	UA1-208	1	piece
1SAM201904R1005	UA1-230 Undervoltage release 230 V 50 Hz / 240 V 60 Hz	UA1-230	1	piece
1SAM201904R1006	UA1-400 Undervoltage release 400V	UA1-400	1	piece
1SAM201904R1007	UA1-415 Undervoltage release 415V 415V 50Hz/480V 60Hz	UA1-415	1	piece
1SAM201904R1009	UA1-575 Undervoltage release 575V 60Hz	UA1-575	1	piece
1SAM401923R1003	S2-M3-50 3-phase Power infeed Block for MS165, 50 mm ²	S2-M3-50	1	piece
1SAM401920R1002	PS2-2-0-125 3-phase busbar for 2 MS165, I _e =125A	PS2-2-0-125	1	piece
1SAM401920R1003	PS2-3-0-125 3-phase busbar for 3 MS165, I _e =125A	PS2-3-0-125	1	piece
1SAM401920R1004	PS2-4-0-125 3-phase busbar for 4 MS165, I _e =125A	PS2-4-0-125	1	piece
1SAM401920R1022	PS2-2-2-125 3-phase busbar for 2 MS165 with 2 HK/SK, I _e =125A	PS2-2-2-125	1	piece
1SAM401920R1023	PS2-3-2-125 3-phase busbar for 3 MS165 with 2 HK/SK, I _e =125A	PS2-3-2-125	1	piece
1SAM401920R1024	PS2-4-2-125 3-phase busbar for 4 MS165 with 2 HK/SK, I _e =125A	PS2-4-2-125	1	piece
1SAM401921R1001	BS2-3 Protection Cover for busbars	BS2-3	1	piece
1SAM401922R1001	KA165 Terminal Shroud for MS165/MO165	KA165	1	piece
GJF1101903R0002	SA2 Dispositivo enclavamiento	SA2	1	piece
1SAM201920R1011	MSHD-LTB Handle, IP64, black, 3 times lockable, defeatable, 0-TRIP-I	MSHD-LTB	1	piece
1SAM201920R1012	MSHD-LTY Handle, IP64, red/yellow, 3 times lockable, defeatable, 0-TRIP-I	MSHD-LTY	1	piece
1SAM201920R1000	MSH-AR Shaft alignment ring suitable for MSHD and MSH handles	MSH-AR	1	piece
1SAM101923R0002	MSMN Driver w. screw for manual motor starters, 6x6	MSMN	1	piece
1SAM101923R0012	MSMNO Driver w/o coding w. screw for manual motor starters, 6x6	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

Categorías

Productos y sistemas de baja tensión → Aparatos de control → Guardamotores → Guardamotores

Productos y sistemas de baja tensión → Interruptores automáticos → Guardamotores

