

PRODUCT-DETAILS

MS132-20T

MS132-20T Circuit Breaker for Primary Transformer Protection



General Information

Extended Product Type	MS132-20T
Product ID	1SAM340000R1013
EAN	4013614485039
Catalog Description	MS132-20T Circuit Breaker for Primary Transformer Protection

Long Description

The circuit breaker for transformer protection MS132-20T is a compact 45 mm width device designed to protect control transformers on the primary side. This device has a rated operational current of $I_e = 20$ A. It allows fuse-less protection against overload and short-circuit. The short-circuit current setting is fixed to 20 times the rated operational current to handle the high inrush current generated by transformers. The device allows manually connect and disconnect the transformer from the mains thanks of its built-in disconnection function. The circuit breaker for transformer protection offers a rated service short-circuit breaking capacity of $I_{cs} = 100$ kA at 400 VAC and a trip class 10. Further features are temperature compensation, trip-free mechanism, rotary handle with a clear switch position indication and short circuit trip indicator. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signalling contacts, undervoltage releases, shunt trips, power in-feed blocks and terminal spacers are available as accessory.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85362010

Popular Downloads

Data Sheet, Technical	2CDC131058D0201
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Information

Data Sheet, Technical Information (Part 2)	1SAM300535F0013
Instructions and Manuals	2CDC131057M6801
Instructions and Manuals (Part 2)	2CDC131060M0202
I ² t Characteristic	1SAM300517F0001
Dimension Diagram	1SAM300402F0002

Dimensions

Product Net Width	45 mm
Product Net Height	97.8 mm
Product Net Depth / Length	86.05 mm
Product Net Weight	0.31 kg

Technical

Rated Service Short-Circuit Breaking Capacity (I _{cs})	(230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 30 kA
Rated Ultimate Short-Circuit Breaking Capacity (I _{cu})	(400 V AC) 100 kA
Rated Instantaneous Short-Circuit Current Setting (I _i)	400 A
Setting Range	16 ... 20 A
Rated Operational Voltage	Main Circuit 690 V AC
Rated Operational Current (I _e)	20 A
Rated Frequency (f)	Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage (U _{imp})	Main Circuit 6 kV
Rated Insulation Voltage (U _i)	690 V
Power Loss	at Rated Operating Conditions per Pole 1 W
Number of Poles	3
Conventional Free-air Thermal Current (I _{th})	Main Circuit 20 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP10
Pollution Degree	3
Electrical Durability	50000 cycle
Mechanical Durability	100000 cycle
Terminal Type	Screw Terminals
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.75 ... 6 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 6 mm ² Flexible 1/2x 1 ... 2.5 mm ² Flexible 1/2x 2.5 ... 6 mm ² Rigid 1/2x 1 ... 2.5 mm ² Rigid 1/2x 2.5 ... 6 mm ²
Tightening Torque	Main Circuit 2 N·m
Wire Stripping Length	Main Circuit 10 mm
Recommended Screw Driver	M4 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, Vertical 75 mm Other Device Same Type, Horizontal 9 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

Technical UL/CSA

Short-Circuit Current Rating (SCCR)	Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) 18 kA
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Ampere Rating UL/CSA	20 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 1.5 Hp (220 ... 240 V AC) Single Phase 3 Hp
Full Load Amps Motor Use	(120 V AC) Single Phase 20 A (220 ... 240 V AC) Single Phase 17 A
Locked Rotor Amps	(120 V AC) Single Phase 120 A (220 ... 240 V AC) Single Phase 120 A
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 16-8 AWG Stranded 1/2x 16-8 AWG
Tightening Torque UL/CSA	Main Circuit 16 in-lb

Environmental

Ambient Air Temperature	Around the Enclosure 0 ... +40 °C Operation -25 ... +70 °C Operation Compensated -25 ... +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
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

CQC Certificate	CQC2010010307387700
cUL Certificate	cUL_E137861
cULus Certificate	cUL_E137861
cUR Certificate	cUL_E137861
Declaration of Conformity - CCC	2020980307003526
Declaration of Conformity - CE	1SAD938508-0188
Environmental Information	1SAC200049H0009
GOST Certificate	1SAA937000-2703

I ² t Characteristic	1SAM300517F0001
Instructions and Manuals	2CDC131057M6801
Instructions and Manuals (Part 2)	2CDC131060M0202
KC Certificate	1SAA963002-1502
RMRS Certificate	1SAA918000-0704
RoHS Information	1SAD938503-0188

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	92 mm
Package Level 1 Depth / Length	102 mm
Package Level 1 Height	50 mm
Package Level 1 Gross Weight	0.325 kg
Package Level 1 EAN	4013614485039
Package Level 2 Units	40 piece
Package Level 2 Width	280 mm
Package Level 2 Depth / Length	395 mm
Package Level 2 Height	210 mm
Package Level 2 Gross Weight	13.386 kg
Package Level 2 EAN	4013614487231

Classifications

Object Classification Code	F
ETIM 4	EC000228 - Power circuit-breaker for trafo/generator/installation prot.
ETIM 5	EC000228 - Power circuit-breaker for trafo/generator/installation prot.
ETIM 6	EC000228 - Power circuit-breaker for trafo/generator/installation prot.
ETIM 7	EC000228 - Power circuit-breaker for trafo/generator/installation protection
eClass	V11.0 : 27370409
UNSPSC	39121601
IDEA Granular Category Code (IGCC)	4813 >> Circuit breakers
E-Number (Finland)	3707275

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 Signal Contact	SK1-20	1	piece
1SAM201903R1202	SK1-20K Signal Contact	SK1-20K	1	piece
1SAM201903R1001	SK1-11 Signal Contact	SK1-11	1	piece
1SAM201903R1201	SK1-11K Signal Contact	SK1-11K	1	piece
1SAM201903R1003	SK1-02 Signal Contact	SK1-02	1	piece
1SAM201903R1203	SK1-02K Signal Contact	SK1-02K	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
1SAM201906R1102	PS1-2-0-65 Busbar	PS1-2-0-65	1	piece
1SAM201906R1112	PS1-2-1-65 Busbar	PS1-2-1-65	1	piece
1SAM201906R1122	PS1-2-2-65 Busbar	PS1-2-2-65	1	piece
1SAM201916R1103	PS1-3-0-100 Busbar	PS1-3-0-100	1	piece
1SAM201906R1103	PS1-3-0-65 Busbar	PS1-3-0-65	1	piece
1SAM201916R1113	PS1-3-1-100 Busbar	PS1-3-1-100	1	piece
1SAM201906R1113	PS1-3-1-65 Busbar	PS1-3-1-65	1	piece
1SAM201916R1123	PS1-3-2-100 Busbar	PS1-3-2-100	1	piece
1SAM201906R1123	PS1-3-2-65 Busbar	PS1-3-2-65	1	piece
1SAM201916R1104	PS1-4-0-100 Busbar	PS1-4-0-100	1	piece
1SAM201906R1104	PS1-4-0-65 Busbar	PS1-4-0-65	1	piece
1SAM201916R1114	PS1-4-1-100 Busbar	PS1-4-1-100	1	piece
1SAM201906R1114	PS1-4-1-65 Busbar	PS1-4-1-65	1	piece
1SAM201906R1124	PS1-4-2-65 Busbar	PS1-4-2-65	1	piece
1SAM201916R1105	PS1-5-0-100 Busbar	PS1-5-0-100	1	piece
1SAM201906R1105	PS1-5-0-65 Busbar	PS1-5-0-65	1	piece
1SAM201916R1115	PS1-5-1-100 Busbar	PS1-5-1-100	1	piece
1SAM201906R1115	PS1-5-1-65 Busbar	PS1-5-1-65	1	piece
1SAM201906R1125	PS1-5-2-65 Busbar	PS1-5-2-65	1	piece
1SAM201907R1101	S1-M1-25 Power Infeed Block	S1-M1-25	1	piece
1SAM201907R1102	S1-M2-25 Power Infeed Block	S1-M2-25	1	piece
1SAM201907R1103	S1-M3-25 Power Infeed Block	S1-M3-25	1	piece
1SAM201913R1103	S1-M3-35 Power Infeed Block	S1-M3-35	1	piece
1SAM201914R1002	S1-PB1-25 Power Infeed Block	S1-PB1-25	1	piece
1SAM301911R1001	TS1-M3-S1 Terminal Spacer	TS1-M3-S1	1	piece
1SAM301912R1001	TS1-M3-S2 Terminal Spacer	S1-M3-S2	1	piece
1SAM201908R1001	BS1-3 Protection Cover	BS1-3	1	piece
1SAM201909R1001	FS116 Screw Fixing Kit	FS116	1	piece
1SAM201914R1001	PB1-1-32 Connecting Link	PB1-1-32	1	piece
GJF1101903R0002	SA2 - Terminals and Installation Material	SA2	1	piece
1SAM201911R1012	IB132-F Enclosure	IB132-F	1	piece

1SAM201911R1010	IB132-G Enclosure	IB132-G	1	piece
1SAM201911R1011	IB132-Y Enclosure	IB132-Y	1	piece
1SAM201912R1010	DMS132-G Door Mounting Kit	DMS132-G	1	piece
1SAM201912R1011	DMS132-Y Door Mounting Kit	DMS132-Y	1	piece
1SAM201909R1021	MSAH1 Shaft Supporter	MSAH1	1	piece
1SAM201920R1011	MSHD-LTB Handles	MSHD-LTB	1	piece
1SAM201920R1012	MSHD-LTY Handles	MSHD-LTY	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

Categories

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