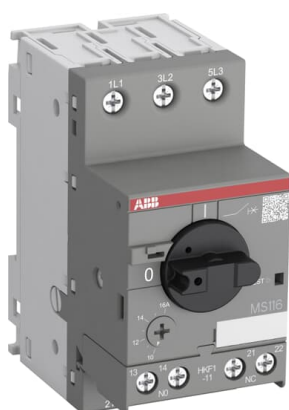


PRODUCT-DETAILS

MS116-2.5-HKF1-11

MS116-2.5-HKF1-11 Manual Motor Starter 1.6 ... 2.5 A



Informations générales

| | |
|------------------------------|--|
| Extension du type de produit | MS116-2.5-HKF1-11 |
| Code de produit | 1SAM250005R1007 |
| EAN | 4013614394775 |
| Description courte | MS116-2.5-HKF1-11 Manual Motor Starter 1.6 ... 2.5 A |

Description longue

The MS116-2.5-HKF1-11 manual motor starter (also known as motor protection circuit breaker or manual motor protector) is a compact 45 mm width device with a rated operational current of $I_e = 2.5$ A and a pre-assembled front mounted auxiliary contact HKF1-11. 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 trip class 10A. 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. Auxiliary contacts, signaling contacts, undervoltage releases, shunt trips, 3-phase bus bars, power in-feed blocks and locking devices for protection against unauthorized changes are available as accessory.

Commande

| | |
|------------------|----------|
| Quantité minimum | 1 pièce |
| Code douanier | 85362010 |

Downloads Préférés

| | |
|-----------------------------|-----------------|
| Fiche produit, informations | 2CDC131025D0201 |
|-----------------------------|-----------------|

techniques

| | |
|--|--|
| Data Sheet, Technical Information (Part 3) | 1SAM200507F0001 1SAM200507F0002 1SAM200507F0003 1SAM200508F0001 1SAM200508F0002 1SAM200508F0003 |
| Instructions et manuels | 2CDC131011M6802 |
| Instructions et manuels (Partie 2) | 2CDC131060M0202 |
| Time-Current Characteristic Curve | 1SAM200505F0107 |
| CAD Dimensional Drawing | 2CDC001079B0201 |
| Schéma dimensionnel | 1SAM200422F0001 |

Dimensions

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|----------------------|---------|
| Produit Largeur Net | 45 mm |
| Produit Hauteur Net | 90 mm |
| Produit Longueur Net | 85.6 mm |
| Poids net | 0.28 kg |

Technique

| | |
|---|--|
| Pouvoir assigné de coupure de service en court-circuit (I_{cs}) | (230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 10 kA (500 V AC) 10 kA (690 V AC) 5 kA |
| Pouvoir assigné de coupure ultime en court-circuit (I_{cu}) | (230 V AC) 75 kA (400 V AC) 75 kA (440 V AC) 30 kA (500 V AC) 20 kA (690 V AC) 10 kA |
| Courant assigné instantané de réglage de court-circuit (I_i) | 31.3 A |
| Setting Range | 1.6 ... 2.5 A |
| Puissance assignée d'emploi AC-3 (P_e) | (400 V) Three Phase 0.75 kW |
| Puissance assignée d'emploi AC-3e (P_e) | (400 V) Three Phase 0.75 kW |
| Tension | Circuit principal 690 V AC |
| Courant nominal de fonctionnement (I_e) | 2.5 A |
| Courant assignée d'emploi AC-3 (I_e) | 2.5 A |
| Courant assignée d'emploi AC-3e (I_e) | 2.5 A |
| Fréquence assignée (f) | Circuit principal 50 Hz Circuit principal 60 Hz |
| Tension assignée de tenue aux chocs (U_{imp}) | Circuit principal 6 kV |
| Tension assignée d'isolement (U_i) | 690 V |
| Power Loss | at Rated Operating Conditions per Pole 0.7 ... 1.8 W |
| Nombre de pôles | 3 |
| Mounted Auxiliary Contacts | 1 NO, 1 NC |

| | |
|--|---|
| Courant thermique conventionnel à l'air libre (I_{th}) | Main Circuit 2.5 A |
| Indice de protection | Housing IP20 Main Circuit Terminals IP10 |
| Degré de pollution | 3 |
| Electrical Durability | 100000 cycle |
| Durabilité mécanique | 100000 cycle |
| Type de borne | Screw Terminals |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible 1/2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 1.5 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 1.5 mm ² Flexible 1/2x 0.75 ... 1.5 mm ² Rigid 1/2x 1 ... 1.5 mm ² |
| Couple de serrage | Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 0.8 ... 1.2 N·m |
| Wire Stripping Length | Auxiliary Circuit 8 mm Main Circuit 9 mm |
| Recommended Screw Driver | Pozidriv 2 |
| Type d'encastrement | 1 ... 6 |
| Montage sur rail 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 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 |
| Normes et standards | IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 |

Technique UL/CSA

| | |
|-------------------------------------|--|
| Short-Circuit Current Rating (SCCR) | Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 5 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 5 kA |
| Maximum Operating Voltage UL/CSA | Circuit auxiliaire 250 V AC/DC Circuit principal 600 V AC |
| Puissance nominale UL/CSA | (200 V AC) Three Phase 0.5 Hp (208 V AC) Three Phase 0.5 Hp (220 ... 240 V AC) Three Phase 0.5 Hp (440 ... 480 V AC) Three Phase 1 Hp (550 ... 600 V AC) Three Phase 1.5 Hp |
| Full Load Amps Motor Use | (200 V AC) Three Phase 2.5 A (208 V AC) Three Phase 2.5 A (220 ... 240 V AC) Three Phase 2.5 A (440 ... 480 V AC) Three Phase 2.5 A (550 ... 600 V AC) Three Phase 2.5 A |
| Locked Rotor Amps | (200 V AC) Three Phase 15 A (208 V AC) Three Phase 15 A (220 ... 240 V AC) Three Phase 15 A (440 ... 480 V AC) Three Phase 15 A (550 ... 600 V AC) Three Phase 15 A |
| General Use Rating UL/CSA | (600 V AC) 2.5 A |

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|--|--|
| Connecting Capacity Main Circuit UL/CSA | Flexible 1/2x 16-12 AWG Stranded 1/2x 16-12 AWG |
| Connecting Capacity Auxiliary Circuit UL/CSA | Flexible 1/2x 16-14 AWG Stranded 1/2x 16-14 AWG |
| Tightening Torque UL/CSA | Auxiliary Circuit 7 in-lb Main Circuit 10 in-lb |
| Contact Rating UL/CSA | B300 R300 |

Environnement

| | |
|--|---|
| Température de l'air ambiant | Around the Enclosure 0 ... +40 °C Operation -25 ... +70 °C Operation Compensated -25 ... +55 °C Storage -50 ... +80 °C |
| Ambient Air Temperature Compensation | Oui |
| Altitude de fonctionnement maximale autorisée | 2000 m |
| REACH Declaration | 1SAA963005-4502 |
| Résistance aux chocs selon CEI 60068-2-27 | 11 ms Pulse 25g |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5g / 3 ... 150 Hz |
| Informations RoHS | 1SAA963006-4502 |
| Statut RoHS | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

Certificats et Déclarations (Numéro de document)

| | |
|----------------------------------|---------------------|
| Certificat ABS | 1SAA963000-0104 |
| Certificat BV | 1SAA963000-0204 |
| CB Certificate | 1SAA963005-2003 |
| CQC Certificate | CQC2019010307170287 |
| Declaration of Conformity - CCC | 2020980307003381 |
| Déclaration de Conformité - CE | 1SAD101100-3401 |
| Declaration of Conformity - UKCA | 1SAD201100-3401 |
| Certificat DNV | 1SAA963000-0304 |
| DNV GL Certificate | 1SAA963000-0304 |
| EAC Certificate | 1SAA963000-2701 |
| Certificat GL | 1SAA963000-0402 |
| KC Certificate | 1SAA963000-1501 |
| Certificat LR | 1SAA963000-0505 |
| Certificat RMRS | 1SAA918000-0704 |
| Certificat UL | E137861-20001218 |

Emballage

| | |
|-----------------------------|-------------|
| Emballage Niveau 1 Unités | box 1 pièce |
| Emballage Niveau 1 Largeur | 92 mm |
| Emballage Niveau 1 Longueur | 95 mm |

| | |
|--------------------------------|-----------------|
| Emballage Niveau 1 Hauteur | 50 mm |
| Emballage Niveau 1 Poids | 0.295 kg |
| Emballage Niveau 1 EAN | 4013614394775 |
| Emballage Niveau 2 Unités | carton 40 pièce |
| Emballage Niveau 2 Largeur | 280 mm |
| Emballage Niveau 2 Longueur | 395 mm |
| Emballage Niveau 2 Hauteur | 210 mm |
| Emballage Niveau 2 Poids | 12.186 kg |
| Emballage Niveau 2 EAN | 4013614408823 |

Classifications

| | |
|---|---|
| Code de classification d'objet | F |
| ETIM 4 | EC000074 - Motor protective circuit-breaker |
| ETIM 5 | EC000074 - Motor protective circuit-breaker |
| ETIM 6 | EC000074 - disjoncteur/démarrateur de moteur |
| ETIM 7 | EC000074 - Motor protection circuit-breaker |
| ETIM 8 | EC000074 - Motor protection circuit-breaker |
| eClass | V11.0 : 27370401 |
| UNSPSC | 39121521 |
| Code de catégorie granulaire IDEA (IGCC) | 4845 >> 3 Pole Motor Circuit Protector Circuit Breakers |
| E-Number (Finland) | 3707206 |

Accessories

| Identifiant | 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 |
| 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 |
| 1SAM201914R1001 | PB1-1-32 Connecting Link | PB1-1-32 | 1 | piece |
| 1SAM201908R1001 | BS1-3 Protection Cover | BS1-3 | 1 | piece |
| 1SAM201909R1001 | FS116 Screw Fixing Kit | FS116 | 1 | piece |
| GJF1101903R0001 | SA1 Terminals and Installation Material | SA1 | 1 | piece |
| GJF1101903R0002 | SA2 Terminals and Installation Material | SA2 | 1 | piece |
| GJF1101903R0003 | SA3 Terminals and Installation Material | SA3 | 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 |
| 1SAM201920R1001 | MSHD-LB Handles | MSHD-LB | 1 | piece |
| 1SAM201920R1002 | MSHD-LY Handles | MSHD-LY | 1 | piece |
| 1SAM201920R1000 | MSH-AR Shaft Alignment Ring | MSH-AR | 1 | piece |
| 1SAM101923R0002 | MSMN Driver | MSMN | 1 | piece |
| 1SCA101655R1001 | OXS6X130 SHAFT | OXS6X130 | 1 | piece |
| 1SAM101923R0012 | MSMNO Driver | MSMNO | 1 | piece |
| 1SCA101659R1001 | OXS6X180 SHAFT | OXS6X180 | 1 | piece |
| 1SCA101647R1001 | OXS6X85 SHAFT | OXS6X85 | 1 | piece |
| 1SCA108043R1001 | OXS6X105 SHAFT | OXS6X105 | 1 | piece |

Catégories

Produits basse tension → Disjoncteurs de puissance → Disjoncteurs-moteurs

Produits basse tension → Produits de Contrôle, Protection et sécurité machines → Disjoncteurs-moteurs → Disjoncteurs-moteurs

