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PRODUCT-DETAILS

## HF0.6-DOL-24VDC

## HF0.6-DOL-24VDC Electronic Compact Starter 24 VDC



| Extended Product Type | HF0.6-DOL-24VDC |
|-----------------------|-----------------|
| Product ID            | 1SAT112000R1011 |
| EAN                   | 4013614515576   |

Catalog Description HF0.6-DOL-24VDC Electronic Compact Starter 24 VDC

The HF-DOL-range is used for the direct-on-line start of motors and the switching of non-resistive loads. With contactor and overload relay functionalities integrated into one device, the results are faster wiring times and fewer faults. The range covers 0.6 A, 2.4 A and up to 9 A - for motors up to 3 kW – 500 V AC. The integrated electronic overload protection has a wide setting range that enables just three models to cover all requirements. Setting range of HF0.6-DOL-24VDC is 0.075 A to 0.6 A. The control supply voltage is 24 V DC. For the control and main connection points ABB offers screw connections. ABB also offers a HF-DOLE safety range with emergency stop function. This offers Safety Integrity Level 3 in accordance with functional safety standard IEC 61508-1 and Performance Level 'e' in accordance with ISO 13849-1. The safety range is

Long Description

Ordering

Minimum Order Quantity 1 piece
Customs Tariff Number 85371098

ATEX-certified.

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Product Main Type HF
Product Name Electronic Starter

| Popular Downloads |                 |
|-------------------|-----------------|
| Instructions and  | 2CDC130014M0401 |
| Manuals           | 2CDC130009M0401 |
|                   | 2CDC130013M0401 |
|                   | 2CDC130007M0401 |
|                   | 2CDC130015M0401 |
| Dimension Diagram | 1SAT100401F0001 |

| Dimensions                 |          |
|----------------------------|----------|
| Product Net Width          | 22.5 mm  |
| Product Net Height         | 99 mm    |
| Product Net Depth / Length | 114.5 mm |
| Product Net Weight         | 0.205 kg |

| Technical   |   |
|---|---|
| Standards   | IEC/EN 60947-1<br>IEC/EN 60947-4-2<br>UL 60947-1<br>UL 60947-4-2                          |
| Function  | Direct-on-line starter with overload protection   |
| Utilization   | Motor Protection  |
| Rated Operational<br>Voltage                              | Main Circuit 500 V AC   |
| Operational Voltage                                       | Maximum 550 V AC<br>Minimum 42 V AC   |
| Rated Frequency (f)                                       | Main Circuit 50 Hz<br>Main Circuit 60 Hz  |
| Rated Control Supply<br>Voltage (U <sub>s</sub> )         | 24 V DC   |
| Rated Input Voltage (U <sub>IN</sub><br>)                 | Switching Threshold at Signal <0> -3 9.6 V<br>Switching Threshold at Signal <1> 19.2 30 V |
| Rated Impulse<br>Withstand Voltage (U <sub>imp</sub><br>) | Main Circuit 6 kV   |
| Rated Insulation Voltage<br>(U <sub>i</sub> )             | 500 V   |
| <del></del>   | 0.6 A   |
|   | 0.6 A   |
| Rated Control Supply<br>Current (I <sub>S</sub> )         | 0.04 A  |
| Rated Uninterrupted<br>Current (I <sub>u</sub> )          | 0.6 A   |
| Input Current   | 0.003 A   |
| Switching Frequency                                       | ≤ 2 Hz<br>120 starts/min<br>7200 starts/h   |
| Rated Operational Power<br>AC-53a (P <sub>e</sub> )       | 0.18 kW   |
| Overvoltage Category                                      | III   |
| Overload Protection                                       | Electronic overload protection  |
|   |   |

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| Setting Range                          | 0.075 0.600 A   |
|--|---|
| Trip Class                             | class 10A   |
| Number of Poles                        | 3   |
| Power Loss                             | Maximum 1.5 W<br>Minimum 1.1 W  |
| Number of Protected<br>Poles           | 3   |
| Mechanical Durability                  | 10000 cycle   |
| Electrical Durability                  | 30000000 cycle  |
| Delay Time (T)                         | Off, Maximum, Switched Off via Supply Voltage 500 ms<br>Off, Typical, Switched Off via Control Input Voltage 30 ms<br>Off, Typical, Switched Off via Supply Voltage 25 ms<br>Off, Maximum, Switched Off with Pushbutton 3 second [unit of time]<br>Off, Minimum, Switched Off with Pushbutton 0.5 second [unit of time] |
| Mounting on DIN Rail                   | TH35-15 (35 $\times$ 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 $\times$ 7.5 mm Mounting Rail) acc. to IEC 60715 .   |
| Mounting Position                      | 1   |
| Connecting Capacity Control Circuit    | Flexible with Ferrule 1/2x 1 2.5 mm²<br>Flexible 1/2x 1 2.5 mm²<br>Rigid 1x 0.5 4 mm²   |
| Connecting Capacity<br>Main Circuit    | Flexible with Ferrule 1x 2 2.5 mm²<br>Flexible 1x 2 2.5 mm²<br>Rigid 1x 2 2.5 mm²   |
| Recommended Screw<br>Driver            | Control Circuit M3<br>Main Circuit M3   |
| Terminal Type                          | Screw Terminals   |
| Tightening Torque                      | Control Circuit 0.5 0.6 N·m<br>Main Circuit 0.5 0.6 N·m   |
| Wire Stripping Length                  | Control Circuit 8 mm<br>Main Circuit 8 mm   |
| Response Time                          | Phase Asymmetry 33% 120 second [unit of time]<br>Phase Asymmetry 67% 1.8 second [unit of time]<br>Phase Failure 1.8 second [unit of time]   |
| Pollution Degree                       | 2   |
| Phase Loss Sensitive                   | Yes   |
| Degree of Protection                   | Housing IP20<br>Main Circuit Terminals IP20   |
| Short-Circuit Current<br>Rating (SCCR) | (500 V AC, 30 A Class J or CC) 100 kA   |

| Tec | hnical | UL | /CSA |
|-----|--------|----|------|
|-----|--------|----|------|

| Maximum Operating<br>Voltage UL/CSA        | Main Circuit 500 V AC  |
|--|--|
| Horsepower Rating UL/CSA                   | Nominal Switching Performance Full Load (power factor = 0.4) 0.4 Hp<br>Nominal Switching Performance Full Load (power factor = 0.8) 0.6 Hp |
| Full Load Amps Motor<br>Use                | 0.6 A  |
| Connecting Capacity<br>Main Circuit UL/CSA | Flexible with Ferrule 1x 24 14 AWG<br>Flexible 1x 24 14 AWG<br>Solid 1x 24 14 AWG  |
| Connecting Capacity Control Circuit UL/CSA | Flexible with Ferrule 1x 24 14 AWG<br>Flexible 16-8 AWG<br>Solid 1x 24 14 AWG  |
| Tightening Torque<br>UL/CSA                | Control Circuit 5 7 in·lb<br>Main Circuit 5 7 in·lb  |

## Safety Information

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Mean Time to Failure 43.3 year (MTTF)

| Environmental                          |   |
|--|---|
| Ambient Air<br>Temperature             | Operation -25 +70 °C<br>Operation Compensated -40 + 80 °C |
| Maximum Operating Altitude Permissible | Without Derating 2000 m                                   |

| Material Compliance                               |  |
|---|--|
| Conflict Minerals<br>Reporting Template<br>(CMRT) | 9AKK108467A5658  |
| RoHS Information                                  | 1SVD981001-4401  |
| RoHS Status                                       | Following EU Directive 2011/65/EU                          |
| Toxic Substances<br>Control Act - TSCA            | 2CMT2023-006538  |
| WEEE B2C / B2B                                    | Business To Business                                       |
| WEEE Category                                     | 5. Small Equipment (No External Dimension More Than 50 cm) |

| Certificates and Declarations       |                  |
|-------------------------------------|------------------|
| cUL Certificate                     | cUL E191658      |
| Declaration of Conformity - CCC     | 2020970304003456 |
| Declaration of<br>Conformity - CE   | 1SAD938504-0195  |
| Declaration of<br>Conformity - UKCA | 1SAD938501-1195  |

| Container Information           |               |
|---------------------------------|---------------|
| Package Level 1 Units           | 1 piece       |
| Package Level 1 Width           | 150 mm        |
| Package Level 1 Depth / Length  | 115 mm        |
| Package Level 1 Height          | 34 mm         |
| Package Level 1 Gross<br>Weight | 0.305 kg      |
| Package Level 1 EAN             | 4013614515576 |

| Classifications                       |  |
|---------------------------------------|--|
| Object Classification<br>Code         | В  |
| ETIM 6                                | EC001037 - Motor starter/Motor starter combination |
| ETIM 7                                | EC001037 - Motor starter/Motor starter combination |
| ETIM 8                                | EC001037 - Motor starter/Motor starter combination |
| eClass                                | V11.0 : 27370905                                   |
| UNSPSC                                | 39121521   |
| IDEA Granular Category<br>Code (IGCC) | 4727 >> Motor starter controls                     |

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 E-Number (Finland)
 3707540

 E-Number (Sweden)
 3210488

## **Categories**

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Controll\ Products\ \rightarrow Motor\ Controllers\ \rightarrow Motor\ Controllers\ \rightarrow Electronic\ Starters$ 

