



**Descriptors** 

## Alternate Catalog No. HF0.6-DOL Catalog No. 1SAT112000R1011

**Description: HF0.6-DOL Electronic Compact Starter 24 VDC** 

UPC No 4013614515576

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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 ATEX-certified

Descriptors	
Category	Electronic Starters
Specifications	
Function	Direct-on-line starter with overload protection
Horsepower Rating UL/CSA	Nominal Switching Performance Full Load (power factor = 0.4) 0.4 hp  Nominal Switching Performance Full Load (power factor = 0.8) 0.6 hp
Setting Range	0.075 0.600 A
Full Load Amps Motor Use	0.60 A
Ambient Air Temperature	Operation -25 +70 °C Operation Compensated -40 + 80 °C
RoHS Status	Following EU Directive 2011/65/EU
Maximum Operating Voltage UL/CSA	Main Circuit 500 V AC
Ampere Rating UL/CSA	0.60 A
Connecting Capacity Main Circuit UL/CSA  Connecting Capacity Control Circuit UL/CSA	Flexible with Ferrule 1x 24 14 AWG Flexible 1x 24 14 AWG Solid 1x 24 14 AWG Flexible with Ferrule 1x 24 14 AWG Flexible 16-8 AWG
Connecting Capacity Control Circuit 6L/C3A	Solid 1x 24 14 AWG
Tightening Torque UL/CSA	Control Circuit 5 7 in-lb  Main Circuit 5 7 in-lb
Standards	IEC/EN 60947-1 IEC/EN 60947-4-2 UL 60947-1 UL 60947-4-2
Utilization	Motor Protection
Rated Operational Voltage	Main Circuit 500 V AC
Operational Voltage	Maximum 550 V AC Minimum 42 V AC
Rated Frequency	Main Circuit 50Hz Main Circuit 60 Hz
Rated Control Supply Voltage	24 V DC
Rated Input Voltage	Switching Threshold at Signal 0> -3 9.6 V Switching Threshold at Signal 1> 19.2 30 V
Rated Impulse Withstand Voltage	Main Circuit 6 kV
Rated Insulation Voltage	500 V

Specifications	
Rated Operational Current AC-51	0.60 A
Rated Operational Current AC-53a	0.60 A
Rated Control Supply Current	0.04 A
Rated Uninterrupted Current	0.60 A
Input Current	0.00 A
Switching Frequency	≤ 2 Hz 120 starts/min 7200 starts/h
Rated Operational Power AC-53a	0.18 kW
Overvoltage Category	III
Overload Protection	Electronic overload protection
Trip Class	class 10A
Number of Poles	3
Power Loss	Maximum 1,5 W Minimum 1,1 W
Number of Protected Poles	3
Mechanical Durability	10000 cycle
Electrical Durability	30000000 cycle
Delay Time	Off, Maximum, Switched Off via Supply Voltage 500 ms Off, Typical, Switched Off via Control Input Voltage 30 ms Off, Typical, Switched Off via Supply Voltage 25 ms Off, Maximum, Switched Off with Pushbutton 3 second [unit of time] 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	Position 1, load side bottom
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 1 2.5 mm2 Flexible 1/2x 1 2.5 mm2 Rigid 1x 0.5 4 mm2
Connecting Capacity Main Circuit	Flexible with Ferrule 1x 2 2.5 mm2 Flexible 1x 2 2.5 mm2 Rigid 1x 2 2.5 mm2
Recommended Screw Driver	Control Circuit M3 Main Circuit M3
Terminal Type	Screw Terminals
Tightening Torque	Control Circuit 0.5 0.6 N·m Main Circuit 0.5 0.6 N·m
Wire Stripping Length	Control Circuit 8 mm Main Circuit 8 mm
Response Time	Phase Asymmetry 33% 120 second [unit of time] Phase Asymmetry 67% 1.8 second [unit of time] Phase Failure 1.8 second [unit of time]
Pollution Degree	2
Phase Loss Sensitive	Yes
Degree of Protection	Housing IP20
Short-Circuit Current Rating (SCCR)	Main Circuit Terminals IP20 (500 V AC, 30 A Class   or CC) 100 kA

Classifications	
ETIM 5.0	EC001037 - Motor starter combination
ETIM 6.0	EC001037 - Motor starter/Motor starter combination
ETIM 7	EC001037 - Motor starter/Motor starter combination
eClass	7.0 27370905

Dimensions	
Product Net Width	22.5 mm

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Dimensions		
Product Net Height	99 mm	
Product Net Depth / Length	114.5 mm	
Product Net Weight	0.205 kg	

Package 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 Weight	0.305 kg	
Package Level 1 EAN	4013614515576	

Safety Information	
Mean Time to Failure	43.3 year

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