

Alternate Catalog No. HF9-R
Catalog No. 1SAT144000R1011

Description: HF9-R Electronic Compact Starter 24 VDC

UPC No 4013614515637

Home > Starters > Electronic Starters

The HF-R-range is used for forward and reverse running motors, as well as for switching non resistive loads. Without overload protection and setting range it is the most simple solution, which is as compact as the whole range. The control supply voltage is 24 V DC. For the control and main connection points ABB offers screw connections.

Descriptors

Category	Electronic Starters

Specifications

Function	Reversed-on-line-starter
Horsepower Rating UL/CSA	Nominal Switching Performance Full Load (power factor = 0.4) 3 hp Nominal Switching Performance Full Load (power factor = 0.8) 6.1 hp
Full Load Amps Motor Use	6.5 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	6.5 A
Connecting Capacity Main Circuit UL/CSA	Flexible with Ferrule 1x 24 ... 14 AWG Flexible 1x 24 ... 14 AWG Solid 1x 24 ... 14 AWG
Connecting Capacity Control Circuit UL/CSA	Flexible with Ferrule 1x 24 ... 14 AWG Flexible 16-8 AWG 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
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
Rated Operational Current AC-51	9 A
Rated Operational Current AC-53a	6.5 A
Rated Control Supply Current	0.04 A
Rated Uninterrupted Current	9 A

Specifications

Input Current	0.00 A
Switching Frequency	≤ 2 Hz 120 starts/min 7200 starts/h
Rated Operational Power AC-53a	3 kW
Overvoltage Category	III
Overload Protection	No overload protection
Trip Class	None
Number of Poles	3
Power Loss	Maximum 14,6 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 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 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
Pollution Degree	2
Phase Loss Sensitive	Yes
Degree of Protection	Housing IP20 Main Circuit Terminals IP20
Short-Circuit Current Rating (SCCR)	(500 V AC, 30 A Class J 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
Product Net Height	99 mm
Product Net Depth / Length	114.5 mm
Product Net Weight	0.174 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	0.274 kg
Package Level 1 EAN	4013614515637

Safety Information

Mean Time to Failure	39.6 year