

SIEMENS

Distribution Equipment **SPEEDFAX**

Section 11

Low Voltage Motor Starters

Contents

Reference, Starter Types	11/2
Reference, Gold, Silver & Bronze Starter Packages	11/3
Selection, Starter Packages	11/4



AZ

Low Voltage Motor Starters

REFERENCE

Siemens SIRIUS IEC Starters

The SIRIUS IEC Starter is the new generation of IEC HP rated magnetic starters, designed to meet and exceed today's market requirements for HP rated starters.

The new SIRIUS Starters take advantage of the reliability of the SIRIUS line of contactors and overload relays in addition to the new line of SIGNUM 3SB3 22mm pilot devices as the standard control device.

As evident in the design and size, all efforts were put in place to offer a new line of starters that exceeds the performance of the previous generation.

The SIRIUS IEC Starters line also offers more price flexibility in the very competitive starters market.

SIRIUS Starters Features:

- CSA approved
- 100HP, 600V max
- Standard 2NO+2NC auxiliary contacts^①
- Ambient 60°C on contactors
- Fast and simple 3-prong overload/contactor connection: no coil extension required
- Standard primary and secondary fusing on control transformers
- Standard Metal 22mm SIGNUM Control Devices

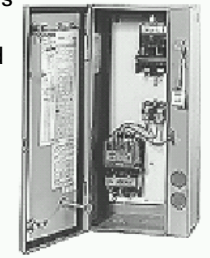


Siemens EEMAC/NEMA Sized Starters

Heavy Duty starters are designed for across the line starting of single phase and polyphase motors. These controllers are available in NEMA Sizes 00 through 8. In addition to the usual NEMA Starter Sizes, Siemens offers three exclusive Half Sizes; 1 3/4, 2 1/2 and 3 1/2. These integral sizes offer the same rugged, industrial construction as our NEMA Sizes and ensure efficient operating performance. Half Sizes provide a real cost savings by cutting down on over capacity when NEMA Sizes exceed the motor ratings. All Siemens Heavy Duty controls, including our popular Half Sizes comply with applicable NEMA and UL/CSA requirements.

Size 00–6 magnetic starters include the following standard features:

- Rugged Industrial Design
- Half Sizes for Cost and Space Savings
- Dual Voltage, Dual Frequency Coils
- Solid State or Ambient Compensated Bimetal Overload Protection
- Wide Range of Accessories
- Easy Coil Access
- Overload Test Feature
- Straight Thru Wiring
- Gravity Dropout
- Large Silver Oxide Contacts



Siemens Class 70 & 71 Solid State Soft Starters

Siemens solid-state reduced voltage starters are ideal for new as well as existing applications where total motor control is required. Combination and non-combination starters are available with a host of standard features and enclosure types. Combination starters are available with a choice of Fusible or Circuit Breaker disconnects. Options include pilot lights, push buttons, metering, monitoring devices, and custom designed panels.

The Siemens Class 70, 71 is a reduced voltage motor starter. It is ideal for high duty cycle applications. The Class 70, 71 starter provides a smooth start, eliminating physical stresses to the system and load while minimizing starting current.

Features

- Adjustable Initial Torque Settings
- Adjustable Start Time
- Adjustable Stop Time
- Heavy Duty
- Fan Cooled
- UL Listed
- CSA Certified
- Copper/Aluminum lugs are supplied on all starters
- Complete starter includes 3RW34 controller, solid state overload relay and CPT.



^① 1NO auxiliary contact for starters up to 10HP at 600V.

For detailed starter information please consult IEC and EEMAC Starters catalog. Order # 5.0_03/03_A&D-1244

SIRIUS GOLD, SILVER AND BRONZE Starter Packages

Offer these standard features:

- 15HP, 600V max
- Standard 1NO auxiliary contact up to 10HP, 600V
2NO+2NC auxiliary contacts on 15HP, 600V
- Ambient 60°C on contactors
- Fast and simple 3-prong overload/contactor connection: no coil extension required
- Standard primary and secondary fusing on control transformers
- Standard Metal 22mm SIGNUM Control Devices

Siemens SIRIUS pre-assembled starter packages are the simple way to order starters. All features of the SIRIUS line are incorporated into three starters:

GOLD

- 50 VA 600/120V control transformer
- 3 pos. selector switch H.O.A.
- Pilot light 120V red

SILVER

- 50 VA 600/120V control transformer
- Start/Stop pushbuttons
- Pilot light 120V red

BRONZE

- No control transformer
- No pilot devices



11
LOW VOLTAGE
MOTOR STARTERS

Siemens modular line of quality Motor Control Products meets and exceeds international standards and are built to serve global markets. Here's why choosing a package is the smarter way to select a starter:

Saves Time

No more lengthy navigating through product catalogues! GOLD, SILVER and BRONZE starters offer an easy 2 step approach to selecting your starter.

1. Select the starter based on Horsepower (HP) and Line Voltage.
2. Select the appropriate overload relay.

Then it's ready to install. All this convenience is now available off your distributor's shelves.

Saves Money

This unique solution for the industry's most popular full voltage non-reversing starters is competitively priced compared to other custom-engineered starters.

Saves Hassle

Ease of selection. Off the shelf availability. Competitive pricing. It's easy to see why GOLD, SILVER and BRONZE packages are the ideal solution. For serious performance and serious convenience, take a SIRIUS approach to starters.

Low Voltage Motor Starters

SELECTION

Siemens SIRIUS IEC Starters

STARTER PACKAGE SELECTION EEMAC TYPE 1 ENCLOSED

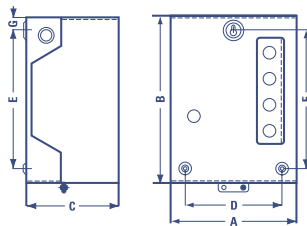
Catalogue Number	Pilot Devices	Control Transformer w/ Primary and Secondary Fuses	CSA Maximum HP rating				Contactor Reference No.	Enclosure Reference No.
			3 phase					
			208V	240V	480V	600V		
GOLD3R-5-600 GOLD3R-3-480 GOLD3R-2-240 GOLD3R-1.5-208	3 pos. Selector Switch and Pilot Light	Included 120V sec.	1 1/2	2	3	5	15	V0
GOLD3R-7.5-600 GOLD3R-5-480 GOLD3R-3-240 GOLD3R-2-208	3 pos. Selector Switch and Pilot Light	Included 120V sec.	2	3	5	7 1/2	16	V0
GOLD3R-10-600 GOLD3R-7.5-480 GOLD3R-3-240 GOLD3R-3-208	3 pos. Selector Switch and Pilot Light	Included 120V sec.	3	3	7 1/2	10	17	V0
GOLD3R-15-600 GOLD3R-10-480 GOLD3R-5-240 GOLD3R-5-208	3 pos. Selector Switch and Pilot Light	Included 120V sec.	5	5	10	15	25	V1
SILVER3R-5-600 SILVER3R-3-480 SILVER3R-2-240 SILVER3R-1.5-208	Start/Stop Pushbuttons and Pilot Light	Included 120V sec.	1 1/2	2	3	5	15	V0
SILVER3R-7.5-600 SILVER3R-5-480 SILVER3R-3-240 SILVER3R-2-208	Start/Stop Pushbuttons and Pilot Light	Included 120V sec.	2	3	5	7 1/2	16	V0
SILVER3R-10-600 SILVER3R-7.5-480 SILVER3R-3-240 SILVER3R-3-208	Start/Stop Pushbuttons and Pilot Light	Included 120V sec.	3	3	7 1/2	10	17	V0
SILVER3R-15-600 SILVER3R-10-480 SILVER3R-5-240 SILVER3R-5-208	Start/Stop Pushbuttons and Pilot Light	Included 120V sec.	5	5	10	15	25	V1
BRONZE3R-5-600	none	none	1 1/2	2	3	5	15	V0
BRONZE3R-7.5-600	none	none	2	3	5	7 1/2	16	V0
BRONZE3R-10-600	none	none	3	3	7 1/2	10	17	V0
BRONZE3R-15-600	none	none	5	5	10	15	25	V1

OVERLOAD RELAY SELECTION CHART FOR GOLD, SILVER AND BRONZE PACKAGES

FLA Adjustment Range Amps	15/16/17	25/26
	Overload Catalogue Number	
0.11-0.16	3RU1116-0ABO	
0.14-0.2	3RU1116-0BBO	
0.18-0.25	3RU1116-0CBO	
0.22-0.32	3RU1116-0DBO	
0.28-0.4	3RU1116-0EBO	
0.35-0.5	3RU1116-0FBO	
0.45-0.63	3RU1116-0GBO	
0.55-0.8	3RU1116-0HBO	
0.7-1.0	3RU1116-0JBO	
0.9-1.25	3RU1116-0KBO	
1.1-1.6	3RU1116-1ABO	
1.4-2.0	3RU1116-1BBO	
1.8-2.5	3RU1116-1CBO	3RU1126-1CBO
2.2-3.2	3RU1116-1DBO	3RU1126-1DBO
2.8-4.0	3RU1116-1EBO	3RU1126-1EBO
3.5-5.0	3RU1116-1FBO	3RU1126-1FBO
4.5-6.3	3RU1116-1GBO	3RU1126-1GBO
5.5-8.0	3RU1116-1HBO	3RU1126-1HBO
7.0-10	3RU1116-1JBO	3RU1126-1JBO
9.0-12	3RU1116-1KBO	-
9.0-12.5	-	3RU1126-1KBO
11-16	-	3RU1126-4ABO

CONTROL CIRCUIT TRANSFORMERS C/W 2 PRIMARY AND 1 SECONDARY FUSE

Rating at 50/60 Hz VA	Catalogue No.			
	Primary / Secondary Voltage			
	208/120	240/120	480/120	600/120
50	VFMKT2050	VFMKT4050	VFMKT4050	VFMKT6050



CONTROL CIRCUIT FIELD MODIFICATION KITS

Pilot Device - suitable for installation in EEMAC1/12/4 enclosures			
Pushbuttons	Legend Plates		Catalogue Number
	English	French	
2 - pushbuttons momentary, 1 red extended, 1 green flush, 1NC, 1NO	STOP START	ARRÊT MARCHE	VFMK50
Selector Switches			
2- position maintained, black lever, 1NO	ON OFF	EN CIRCUIT ARRÊT	VFMKCO
3 position maintained, black lever, 2x1 NO	HAND OFF AUTO	MAN ARRÊT AUTO	VFMKG0
Pilot Lights			
Full voltage 120V incandescent c/w 2 lenses red and green	none		VFMK01

GOLD, SILVER AND BRONZE ENCLOSURE DIMENSIONS EEMAC TYPE 1

Enclosure Reference No.	Width		Height		Depth		Mtg-Holes					
	A		B		C		D		E		G	
	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH
V0	161.70	6.37	244.70	9.64	146.00	5.75	110.30	4.34	177.00	6.97	24.40	0.96
V1	241.50	9.51	320.90	12.64	178.30	7.02	187.30	7.38	268.10	10.55	24.00	0.95

LOW VOLTAGE MOTOR STARTERS