

For Efficiency and Reliability in the Control Cabinet

The SIRIUS 3RA6 Compact Starter



SIRIUS

Answers for industry.

SIEMENS



Highlights

- Space savings in the control cabinet, thanks to compact design
- Minimized engineering, installation, and selection cost as a result of a single complete device
- Fewer variants, thanks to wide ranges of control voltage and current settings
- Maximized system availability, thanks to removable terminals for fast device replacement and integrated functions such as visual indication of end of service life
- Efficient power distribution with the corresponding SIRIUS 3RA6 infeed system
- Integration in Totally Integrated Automation with optional connection to AS-Interface or IO-Link

Oriented Towards Current Market Trends: The New SIRIUS 3RA6 Compact Starter

The new member of the successful SIRIUS industrial controls portfolio – the SIRIUS 3RA6 compact starter – sets completely new standards. It reduces planning costs and significantly minimizes the overall costs from configuration to commissioning. Compared to conventional feeders, this starter is more compact, offers higher functionality, and is simpler to maintain. In short: The SIRIUS 3RA6 compact starter forms the basis for high availability and future machine concepts.

Lower planning costs, more space in the control cabinet

The new SIRIUS 3RA6 compact starter is functionally positioned between the individual devices of the SIRIUS industrial controls portfolio for the assembly of load feeders and the SIMATIC ET 200S motor starters. Featuring a multitude of technical highlights, the SIRIUS 3RA6 compact starter caters to current market trends. For example, miniaturization and reduced variation: Using a compact design, the universal motor feeder according to IEC/EN 60947-6 2 combines the functions of circuit breaker/MSP, solid-state overload relay and contactor.

The SIRIUS 3RA6 compact starter can be used in applications in which three-phase standard motors up to 32 A (approx. 15 kW/400 V) are directly started. Its compact size and fewer variants simplify planning as well as wiring and mounting. This facilitates lower inventory costs and saves space in the control cabinet.

For high availability and future-proof machine concepts

The SIRIUS 3RA6 compact starter demonstrates its ability in maximizing machine utilization while minimizing machine maintenance. With comprehensive onboard functions – such as visual indication of end of service life or the optional control kit for early fault detection even before commissioning – the SIRIUS 3RA6 compact starter ensures a high reliability of machines and systems. With retained wiring, it can be easily and rapidly maintained thanks to removable terminals. Maximum efficiency can be attained with the corresponding SIRIUS 3RA6 infeed system. This system not only minimizes wiring costs even further, but can also be easily expanded as required.

Features and Benefits of the SIRIUS 3RA6 Compact Starter

Time- and space-saving installation in the control cabinet

- Enormous space advantages and reduced wiring, thanks to compact design of direct-on-line and reversing starters
- Direct-on-line and reversing starters are the same height, for uniform tier spacing in the control cabinet
- Flexible connection options, thanks to spring-loaded or screw-type terminals
- Minimum planning and mounting costs, as well as considerably reduced wiring, thanks to a single complete device with one order number
- Particularly easy mounting and replacement, thanks to removable terminals (with retained wiring)
- Optimum power supply in the control cabinet, thanks to multiple power feed options

Integrated functionalities for fewer variants and maximum system availability

- Fewer variants, thanks to wide setting ranges for overload (only 5 types up to 32 A) and wide-band control voltage (24 V, 42–70 V, 110–240 V, all AC/DC).
- Setting of overload tripping class directly on the compact starter (CLASS 10/20)
- Easy checking of the wiring and testing of the motor's rotation direction prior to commissioning, with the optional control kit
- Maximum system availability, thanks to prevention of main contact welding and disconnection upon end of service life
- Increased productivity, thanks to automatic device reset in case of overload, as well as differentiated overload and short-circuit detection via IO-Link





Highly efficient power wiring and simplified motor connection infeed system

- Reduced wiring in the main circuit, by up to 80 %
- Connection and routing of infeed cables up to a cross-section of 70 mm², 2/0 AWG
- Easy mounting and disassembly of SIRIUS compact starters, thanks to plug-in technology
- Flexible expandability, thanks to plug-on expansion modules
- Easy replacement of SIRIUS compact starters, thanks to removable terminals – without removing the main circuit wiring
- Direct connection of the motor feeder cables to the SIRIUS 3RA6 infeed system, thanks to integrated PE bar
- Easily integrates into the SIRIUS product family, e. g. with SIRIUS circuit breakers/MSPs and the SIRIUS 3RV19 infeed system

Easy connection to the automation level via IO-Link or AS-Interface

- Significantly reduced wiring in the control circuit
- Improved system availability and process transparency thanks to transfer of diagnostics information to the superior control
- Integration in Totally Integrated Automation

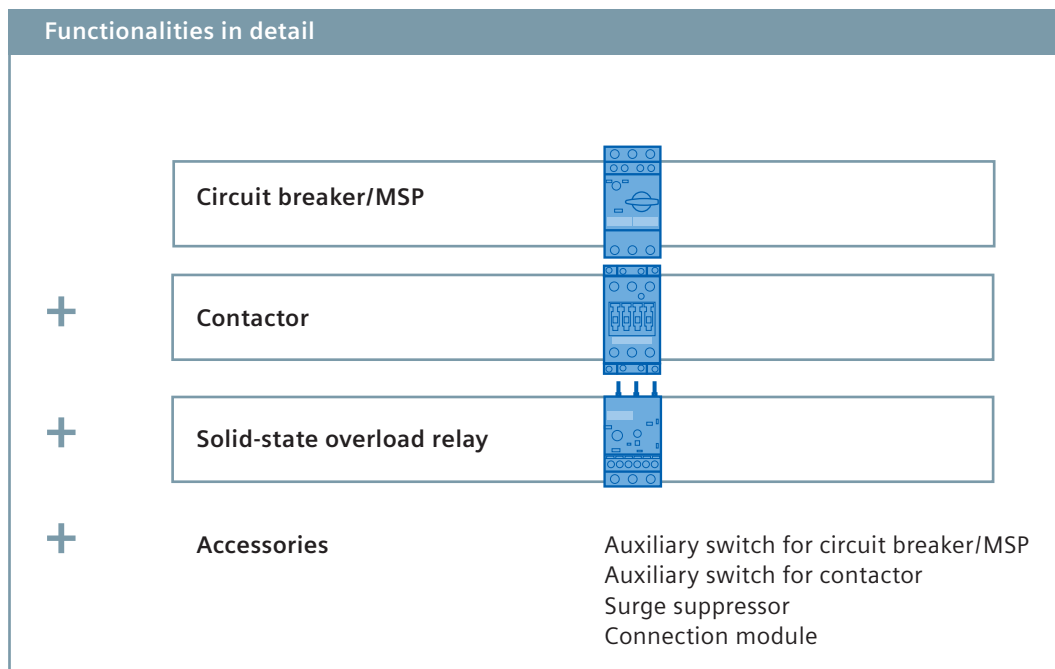
IO-Link connection:

- High information density in the control cabinet
- Comfortable handling via an operator panel directly integrated in the control cabinet door (optional)
- Fast and standardized configuration via Port Configuration Tool (PCT) in STEP7

AS-Interface connection:

- Easy wiring of spatially distributed actuators and sensors
- Easy integration in AS-Interface, thanks to mounting of the optional AS-i add-on modules without tools
- Standardized input and output assignment for reduced software programming costs and provision of additional local inputs and outputs

Time- and Space-Saving Installation in the Control Cabinet



With the SIRIUS 3RA6 compact starter, a new generation of load feeders enters the world of industrial controls: A single compact device which combines the functionalities of circuit breaker/MSP, contactor and solid-state overload relay. Also, accessories such as auxiliary switches and a surge suppressor are already integrated.

Three become one

All functions for motor start-up combined in a single device: Doing away with laborious planning, ordering and mounting of each single component for every function, the SIRIUS 3RA6 compact starter offers a fast and easy solution. Three become one – simply three times as fast.



Compact solution with the SIRIUS 3RA6 compact starter



Clean and efficient control cabinet layout

The SIRIUS 3RA6 compact starter helps tidy up the control cabinet, with only one size up to 32 A: 45-mm width with direct-on-line starters and 90-mm width with reversing starters (with mechanical interlocking for electrical safety). The identical height of the direct-on-line and reversing starters facilitates a uniform tier spacing for installation in the control cabinet. These features allow for a tidy and clearly structured control cabinet arrangement, and simplify configuration.

Rapid mounting, easy replacement

The SIRIUS 3RA6 compact starter offers easy mounting and maintenance, thanks to the simplified main and control circuit wiring. Removable terminals in screw-type or spring-loaded technology allow for easy starter replacement while retaining the wiring, which provides a high system availability. A further advantage: The SIRIUS 3RA6 compact starter can be integrated and configured as the last component of the already wired control cabinet. This ensures maximum flexibility until system start-up and eliminates unnecessary investment.

Optimum power supply in the control cabinet, thanks to multiple infeed options

The SIRIUS 3RA6 compact starter offers numerous wiring options including parallel wiring, a 3-phase comb busbar or wiring via the 8US busbar adapter, upon which the SIRIUS 3RA6 compact starter can be directly mounted on a 60-mm busbar system. The easiest way to connect the SIRIUS 3RA6 compact starter is to use the corresponding SIRIUS 3RA6 infeed system (more information on page 10).

Integrated Functionalities for Fewer Variants and Maximum System Availability

Fewer variants, more functionality – the SIRIUS 3RA6 compact starter simplifies the planning and assembly of load feeders, while simultaneously increasing the availability of machines and systems. Convincing arguments all along the line.

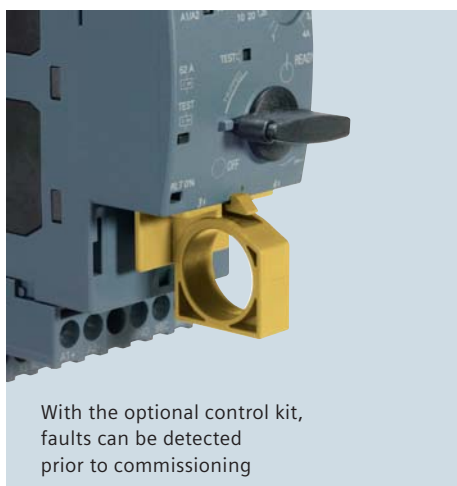
Less is more

The 3RA6 compact starter, with only five wide current setting ranges (up to 32 A) and three wide-range control voltages (24, 42–70, 110–240 V, AC/DC), simplifies the many variations of load feeders. Even the overload tripping classes 10 and 20 can be directly selected on one and the same device as required. This consistent variance minimization considerably simplifies planning, stock-keeping and logistics – without limiting the functionality!


System availability par excellence – prior to commissioning ...

Overall system optimization represented an essential aspect in the development of the new SIRIUS 3RA6 compact starter. The goals included improved handling, minimized risk and sustainably increased system availability. The result is impressive: With the control kit, the wiring and direction of rotation of the connected motor can be checked and possible faults detected prior to commissioning.

In addition, the disconnection functions in case of short circuit can already be tested prior to system start-up via the test buttons integrated in the SIRIUS 3RA6 compact starter.



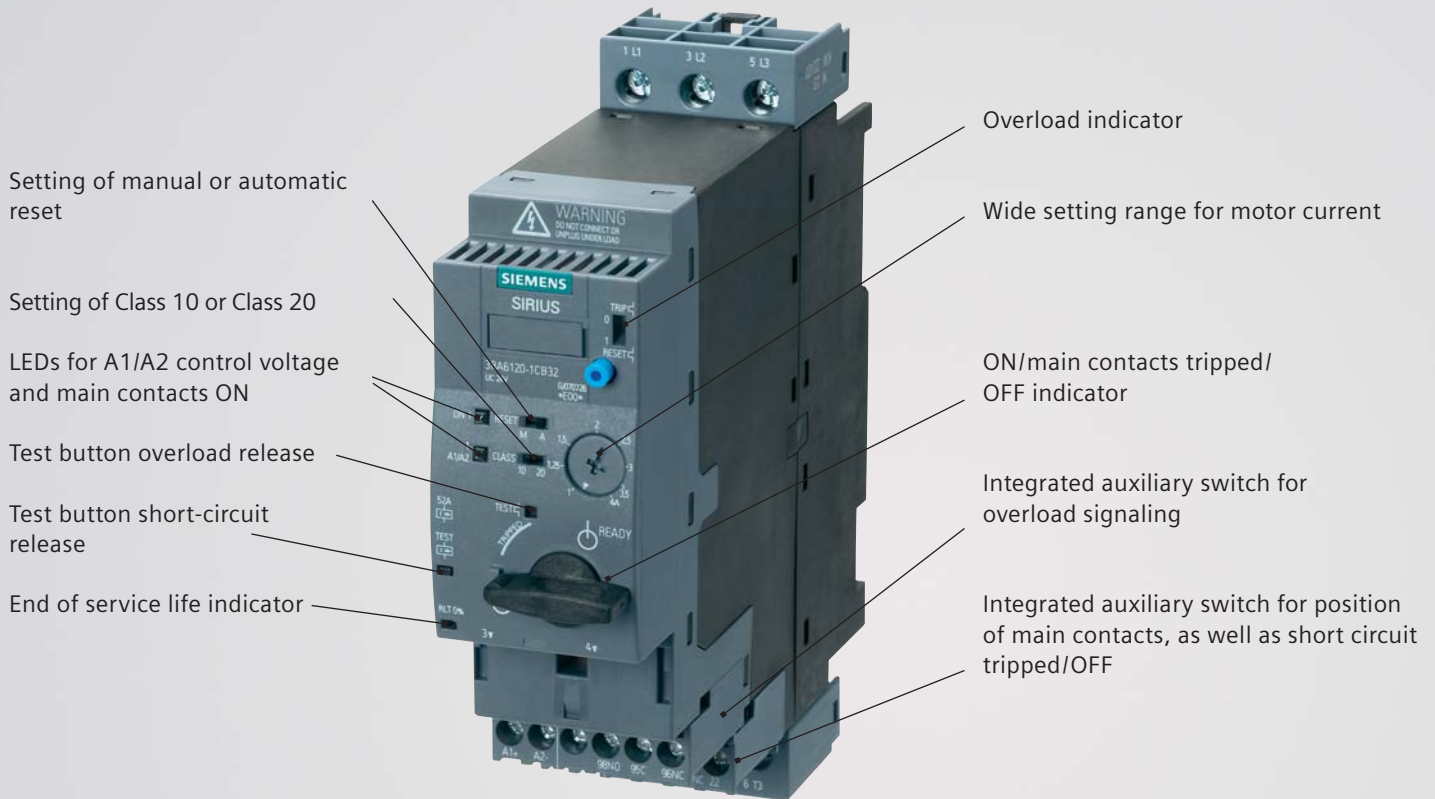
Easy type selection for any application

| Starter types | | Current setting ranges | |
|---|---|------------------------|-------------------|
|  Direct-on-line starter | X | 0.1 ... 0.4 A | = 10 device types |
| | | 0.32 ... 1.25 A | |
| | | 1 ... 4 A | |
| | | 3 ... 12 A | |
| Reversing starter | | 8 ... 32 A | |



Functionalities

Functions and displays of the SIRIUS 3RA6 compact starter (standard version)



... and during operation

Furthermore, the SIRIUS 3RA6 compact starter offers particular advantages during system operation. With high loads or frequent switching of the main contacts, sooner or later, the contact material of conventional devices is subject to wear, which typically results in the welding of the main contacts. The 3RA6 compact starter eliminates this problem: It detects the fault and disconnects the starter – even at the end of its service life.

With this patented technology, the SIRIUS 3RA6 compact starter embarks upon a completely new and innovative path. For even better system availability!

In addition, the SIRIUS 3RA6 compact starter protects three-phase motors against overload and short circuit and prevents long system downtimes. The integrated overload monitoring facilitates targeted fault diagnostics and a fast reset. In case of overload, the fault message

can be easily reset – either directly on the SIRIUS 3RA6 compact starter via manual reset, or via automatic reset – without having to open the control cabinet door. Whether the fault was caused by an overload or short circuit is separately indicated, and signaled via separate auxiliary switches.

In service cases, the SIRIUS 3RA6 compact starter can be rapidly and easily replaced thanks to its removable terminals. Wiring faults are eliminated!

Highly Efficient Power Wiring and Simplified Motor Connection Infeed System



SIRIUS 3RA6 infeed system with SIRIUS compact starters and expansion module

The SIRIUS 3RA6 compact starter ensures an optimum power supply in the control cabinet. For infeed of the main circuit, you can employ conventional methods or opt for an even more efficient way – with the corresponding SIRIUS 3RA6 infeed system.

Systematic infeed

A corresponding infeed system is available for the 3RA6 compact starter. The 3RA6 infeed system comes with the main circuit side completely pre-wired and is available with screw-type or spring-loaded connection technology. In the spring-loaded version, the power infeed is realized from the front for maximum user friendliness. However, particularly when it comes to the routing of large cross-sections (70 mm², 2/0 AWG) or multi-tier assemblies, the screw-type infeed from the top and bottom via two-tier terminals offers additional advantages.

By means of the integrated PE bar, the motor connection cable can be directly connected to the SIRIUS 3RA6 infeed system – doing away with countless rows of connection terminals. This not only reduces configuration and wiring costs, but also saves space and improves your control cabinet's layout.

Easy and flexible expandability

The SIRIUS 3RA6 compact starter is easily installed in the 3RA6 infeed system through plug-in technology without the use of tools. A direct-on-line starter with 45-mm width occupies one slot and a reversing starter with 90-mm width two slots. The system can be flexibly and system-specifically expanded by additional slots, up to a maximum length of 1.20 m. Expansion modules, either in spring-loaded or screw-type technology as required, incorporate the same plug-in technology.



SIRIUS 3RA6 infeed system in combination with SIRIUS 3RV29 infeed system

Increased availability

The SIRIUS 3RA6 compact starter can be removed from the corresponding SIRIUS 3RA6 infeed system with only a flick of the wrist. In order to maximize machine runtime, the SIRIUS compact starter 3RA6 has been designed with removable terminals. This design allows the SIRIUS compact starter to be quickly and easily removed from the corresponding SIRIUS 3RA6 infeed system.

Optimum integration within the SIRIUS industrial controls portfolio

With the SIRIUS 3RA6 infeed system, not only the corresponding SIRIUS compact starters, but also further SIRIUS industrial control components can be fed efficiently.

Also a power outfeed for external add-on devices can be easily realized via an expansion plug with 3-phase outfeed terminal.

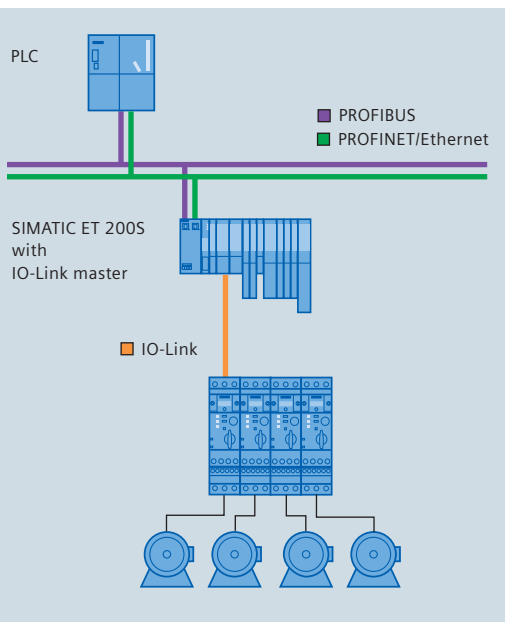
When it comes to power infeed, the SIRIUS components ideally complement each other: All that is needed, for example, to connect the new 3RA6 infeed system with the SIRIUS 3RV29 infeed system and combine the advantages of both systems is a corresponding expansion plug.

The SIRIUS 3RA6 infeed system thus not only offers benefits for easy assembly in the control cabinet, but also supports a flexible solution in terms of the entire SIRIUS industrial controls portfolio.

Communication with SIRIUS 3RA6: Connection to the Automation Level



SIRIUS 3RA6 compact starter
in IO-Link design or with AS-i
add-on module



IO-Link design for applications which require more information per device

IO-Link is the clever, manufacturer-independent concept for the uniform connection of sensors, switching devices and actuators to the control level by means of a point-to-point connection below the field bus level. The electrical connection is realized via three standard cables. Up to four compact starters (reversing and direct-on-line starters) can be interlinked and comfortably connected to the IO-Link master via a standardized IO-Link connection, ensuring a higher density of diagnostics information.

Besides display on the device itself, the diagnostics data of the process detected by the SIRIUS 3RA6 compact starter – for example short circuit, end of service life, limit position, etc. – are transmitted to the superior control via IO-Link.

The optional operator panel, which can be installed in the control cabinet door, allows for the comfortable control of the SIRIUS 3RA6 IO-Link compact starters without having to open the control cabinet.



The SIRIUS 3RA6 compact starter can be connected to the control via both the AS-Interface field bus system as well as via intelligent IO-Link wiring. This allows for maximum flexibility and significantly reduced wiring in the control circuit. In addition to the starter's operational data, various diagnostics such as short circuit or end of service life can be directly transmitted to the control via IO-Link. This ensures system-wide diagnostics down to the last component of the field level. Thanks to the seamless integration in STEP7, the data is centrally available and can be comfortably read out. As a result, faults can be rapidly localized and provided as plain text display for their fast rectification. The advantage: Improved system availability and reduced engineering costs with full integration in Totally Integrated Automation.

AS-i V2.1 (A/B) connection for applications which involve many remotely distributed I/Os in the field and require safe disconnection

AS-Interface, or for short AS-i, is a manufacturer-independent bus system which connects spatially distributed actuators and sensors on the field level to the control level in a particularly easy manner.

Each AS-i Master can accommodate up to 62 slaves distributed in the field. For this purpose, the cost-favorable and rugged system uses an unshielded, highly flexible 2-wire line which simultaneously transmits data and power.

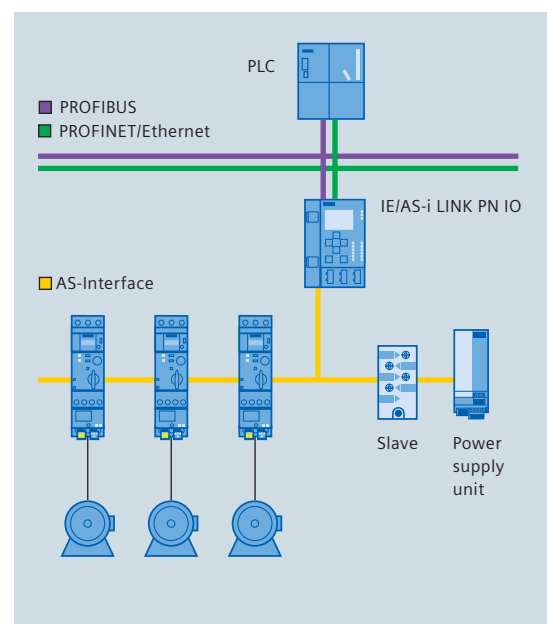
The connection of the SIRIUS 3RA6 compact starter to AS-i is especially easy thanks to special AS-i add-on modules which are plugged onto the SIRIUS 3RA6 compact starter – without any tools or wiring.

A special version of the AS-i add-on module comes with two local inputs for safe disconnection. This allows for the

direct connection of safety sensors to the SIRIUS compact starter. A correspondingly wired position switch can then, for example, disconnect the compact starter directly and without detour via the control in accordance with the IEC/EN 13849-1 standard (according to Category 2). Further add-on modules are available which provide free external inputs and outputs.

The innovation AS-i Power 24V

The expansion of AS-Interface by AS-i Power 24V now also facilitates the application of 24 V standard power supply units. The 30 V AS-i power supply unit, which is additionally required for small applications (with very few I/Os, where parallel wiring is still rather dominant), often represents a cost obstacle. The expansion by AS-i Power 24V and the resulting possibility of



utilizing existing standard 24 V DC power supply units in AS-i networks now also opens up AS-Interface for very tightly calculated applications.

Motor Starting Solutions with SIRIUS

Whether conventional solutions with SIRIUS 3RA1 load feeders, high-feature applications with SIMATIC ET 200S motor starters or the new SIRIUS 3RA6 compact starters – the following overview provides information as to which of our motor starting solutions with SIRIUS is suitable for the respective application.



| | SIMATIC ET 200S motor starter | SIRIUS 3RA6 compact starter | SIRIUS modular system |
|--|--|--|---|
| Current/power range | 16 A/7.5 kW | 32 A/15 kW | 630 A/250 kW |
| Starter and assembly type | Direct-on-line and reversing starters, soft starters and frequency converters as modules of an I/O system | Direct-on-line and reversing starters as a compact unit | Flexible assembly of all starter types with individual devices |
| Main and control circuit wiring | Completely pre-wired system both on the main and control circuit side with power bus, PE connection option and retained wiring for fast replacement | Completely pre-wired system on the main circuit side with power bus, PE connection option and retained wiring for fast replacement | Individual devices which can be combined via connection modules and conventional wiring in the main and control circuit |
| Integration in the automation environment | Modular I/O system with optional motor starters which is connected to the control via PROFIBUS or PROFINET without additional wiring; remote parameterization and comprehensive diagnostics included in the system | Conventional compact switching device which is connected to the control via I/Os, an AS-Interface add-on module or on the basis of an IO-Link design | Conventional switching devices which are connected to the control via I/Os |
| Conclusion | The solution offering maximum integration in the control level | The compact solution with minimum wiring costs and integration options | The solution featuring the largest power range and very flexible assembly options |

Technical Data

| | | |
|---|--|-------------------|
| Device standard | | IEC/EN 60947-6-2 |
| Number of poles | | 3 |
| Permissible operating temperature | In acc. with IEC/EN 60721-3-3 | −20 to +60 °C |
| Relative humidity | | 10 to 90 % |
| Rated frequency | | 50/60 Hz |
| Rated impulse voltage | | 6 kV |
| Degree of protection | In acc. with IEC 60947-1 | IP20 |
| Touch protection | In acc. with DIN VDE 0660 Part 514, DIN EN 50274 | finger-proof |
| Max. dimensions direct-on-line starter | Screw-type connection system (W x H x D) | 45 x 170 x 165 mm |
| | Spring-loaded connection system (W x H x D) | 45 x 191 x 165 mm |
| Max. dimensions reversing starter | Screw-type connection system (W x H x D) | 90 x 170 x 165 mm |
| | Spring-loaded connection system (W x H x D) | 90 x 191 x 165 mm |
| Switching capacity with 400 V | All types | up to 53 kA |
| Electrical service life (switching cycles) with 400 V | | up to 10 million |
| Surge suppressor | Coil | integrated |
| Number of integrated main switches | Main contacts | 1NO/1NC |
| | Latching mechanism (e.g. short circuit) | 1NO |
| | Overload | 1CO |

Selection and Ordering Data

| Three-phase standard motor 3-pole with 400 V AC ¹⁾ Standard power P in kW | Setting range solid-state overload relay in A | Order number | Order number |
|---|---|--|---|
| Type of coordination: continuous operation up to 53 kA; rated service short-circuit breaking capacity I_{cs} with 400 V (weld-free) | | | |
| SIRIUS 3RA61 compact starter | | 3RA61 direct-on-line starter | 3RA64 direct-on-line starter with IO-Link |
| 0.09 | 0.1 ... 0.4 | 3RA61 20- <input type="checkbox"/> A <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA64 00- <input type="checkbox"/> AB4 <input type="checkbox"/> |
| 0.37 | 0.32 ... 1.25 | 3RA61 20- <input type="checkbox"/> B <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA64 00- <input type="checkbox"/> BB4 <input type="checkbox"/> |
| 1.5 | 1 ... 4 | 3RA61 20- <input type="checkbox"/> C <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA64 00- <input type="checkbox"/> CB4 <input type="checkbox"/> |
| 5.5 | 3 ... 12 | 3RA61 20- <input type="checkbox"/> D <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA64 00- <input type="checkbox"/> DB4 <input type="checkbox"/> |
| 15 | 8 ... 32 | 3RA61 20- <input type="checkbox"/> E <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA64 00- <input type="checkbox"/> EB4 <input type="checkbox"/> |
| SIRIUS 3RA62 compact starter | | 3RA62 reversing starter | 3RA65 reversing starter with IO-Link |
| 0.09 | 0.1 ... 0.4 | 3RA62 50- <input type="checkbox"/> A <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA65 00- <input type="checkbox"/> AB4 <input type="checkbox"/> |
| 0.37 | 0.32 ... 1.25 | 3RA62 50- <input type="checkbox"/> B <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA65 00- <input type="checkbox"/> BB4 <input type="checkbox"/> |
| 1.5 | 1 ... 4 | 3RA62 50- <input type="checkbox"/> C <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA65 00- <input type="checkbox"/> CB4 <input type="checkbox"/> |
| 5.5 | 3 ... 12 | 3RA62 50- <input type="checkbox"/> D <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA65 00- <input type="checkbox"/> DB4 <input type="checkbox"/> |
| 15 | 8 ... 32 | 3RA62 50- <input type="checkbox"/> E <input type="checkbox"/> 3 <input type="checkbox"/> | 3RA65 00- <input type="checkbox"/> EB4 <input type="checkbox"/> |

Order number supplement for alternative equipment

- for DIN rail or screw fastening 2
- for use with the infeed system for 3RA6 3
- for DIN rail or screw fastening for use with the AS-i add-on module ²⁾ B 4
- without control circuit terminals, with main circuit terminals

Order number supplement for connection type






- without terminals 0
- for use with 3RA6 infeed system and AS-i add-on module
- with screw-type terminals 1
- with spring-loaded terminals 2

Order number supplement for rated control supply voltage

- 24 V DC B
- 24 V AC/DC E
- 42 ... 70 V AC/DC P
- 110 ... 240 V AC/DC

1) The specific start-up and rated data of the motor to be protected are critical for selection

2) Only for use with 24 V DC control supply voltage

| Accessories for direct-on-line and reversing starters | Selection | Technical features | Order number |
|---|---|---|--------------|
| Auxiliary switch block for 3RA6 compact starter  | Screw-type terminals | 2NO | 3RA69 11-1A |
| | | 2NC | 3RA69 12-1A |
| | | 1NO + 1NC | 3RA69 13-1A |
| | Spring-loaded terminals | 2NO | 3RA69 11-2A |
| | | 2NC | 3RA69 12-2A |
| | | 1NO + 1NC | 3RA69 13-2A |
| Terminal block according to UL 508  | Infeed terminals according to UL 508 for "self-protected combination motor controller (type E)" for parallel wiring of compact starters | For extended clearance and creepage distances | 3RV19 28-1H |
| Adapter for screw fastening  | | For screw fastening of the compact starter (set incl. plug-in lugs) | 3RA69 40-0A |
| Control kit  | | For mechanical operation of the compact starter's main contacts | 3RA69 50-0A |
| Connection to AS-Interface, Version 2.1 (A/B technology) ³⁾ AS-i Power 24V-capable  | AS-i add-on module | For communication of the compact starter with the control via AS-i | 3RA69 70-3A |
| | AS-i add-on module with two local inputs | For safe disconnection via local safety relays, e.g. cable-operated switches | 3RA69 70-3B |
| | AS-i add-on module with two free external inputs | Replacement of the digital standard inputs "Motor ON" and "Group warning" | 3RA69 70-3C |
| | AS-i add-on module with one free external input and output each | Replacement of the digital standard input "Group warning" | 3RA69 70-3D |
| | AS-i add-on module with two free external outputs | Only for direct-on-line starters; replacement of the digital standard output "Motor left" | 3RA69 70-3E |
| | AS-i add-on module for manual control ⁴⁾ | | 3RA 6970-3F |
| Accessories for SIRIUS 3RA6 in IO-Link design  | Additional connection cable for the side-by-side connection of compact starters | 14-pole, 8 mm ¹⁾ , 5 items / packing | 3RA69 31-0A |
| | | 10-pole, 8 mm ²⁾ , 5 items / packing | 3RA69 32-0A |
| | | 10-pole, 200 mm ²⁾ , 5 items / packing | 3RA69 33-0B |
| | | 14-pole, 200 mm, 5 items / packing | 3RA69 33-0C |
| | Operator panel for compact starter (incl. enabling module and blanking cover) | | 3RA69 35-0A |
| | Enabling module | | 3RA69 36-0A |
| | Blanking cover | 5 items / packing | 3RA69 36-0B |
| | Connection cable for connection of the operator panel | 10-pole, 2000 mm | 3RA69 33-0A |

1) Already included in the scope of supply of the SIRIUS 3RA6 compact starter in IO-Link design

2) 10-pole connection cables are required for group EMERGENCY-STOP concepts

3) Only for 3RA61/62 in 24 V AC/DC version

4) Optional control of the compact starter with AS-Interface or local switching

| SIRIUS infeed system for 3RA6 | | | |
|---|---|--|--------------|
| 3-phase infeeds | Selection | Technical features | Order number |
|  | Infeed left with permanently attached triple expansion module, motor output side in screw-type technology, including built-in PE bar | 25/35 mm² up to 63 A, 4–2 AWG | 3RA68 12-8AB |
| | | 50/70 mm² up to 100 A, 0–2/0 AWG | 3RA68 13-8AB |
| | Infeed left with permanently attached triple expansion module, motor output side in spring-loaded technology, including built-in PE bar | 25/35 mm² up to 63 A, 4–2 AWG | 3RA68 12-8AC |
| | | 50/70 mm² up to 100 A, 0–2/0 AWG | 3RA68 13-8AC |
|  | Infeed left, right or center with spring-loaded technology | 25/35 mm² up to 63 A, 4–2 AWG | 3RA68 30-5AC |
| Expansion modules | Selection | Technical features | Order number |
|  | Expansion module, motor output side in screw-type technology, including built-in PE bar | Double expansion module with 2 slots for 2 direct-on-line starters or 1 reversing starter | 3RA68 22-0AB |
| | | Triple expansion module with 3 slots for 3 direct-on-line starters or 1 direct-on-line starter and 1 reversing starter | 3RA68 23-0AB |
| | Expansion module, motor output side in spring-loaded technology, including built-in PE bar | Double expansion module with 2 slots for 2 direct-on-line starters or 1 reversing starter | 3RA68 22-0AC |
| | | Triple expansion module with 3 slots for 3 direct-on-line starters or 1 direct-on-line starter and 1 reversing starter | 3RA68 23-0AC |
| Accessories for SIRIUS infeed system for 3RA6 | Selection | Technical features | Order number |
|  | Screw-type terminal | 25/35 mm², 4–2 AWG | 3RA68 60-6AB |
| | Spring-loaded terminal | 25/35 mm², 4–2 AWG | 3RA68 60-5AC |
|  | Screw-type terminal | 6/10 mm², 10–8 AWG | 3RA68 70-4AB |
| | Spring-loaded terminal | 6/10 mm², 10–8 AWG | 3RA68 70-3AC |
|  | PE expansion plug | Interconnects the PE bars of expansion modules | 3RA68 90-0EA |
| | Expansion plug for SIRIUS 3RV19 infeed system | Connects infeed system for 3RA6 with 3RV19 infeed system | 3RA68 90-1AA |
|  | Adapter in 45-mm width | For integration of SIRIUS 3RV1 circuit breaker/MSP size S0 in screw-type technology | 3RA68 90-0BA |

Further technical information is available in the manual, SIRIUS 3RA6 Compact Starters (order number: 3RA6992-0A) and the catalog, News LV 1 N SIRIUS Innovations – January 2010 (order number: E86060-K1002-A361-A2-7600).

Easy, Fast and Comfortable: The Online Configuration Tool for Perfect Assembly



www.siemens.com/industrial-controls/configurators

To further simplify the application of the SIRIUS 3RA6 compact starter, we offer an intelligent and user friendly tool which helps you with the selection of the suitable components for your application. Regardless of whether you require the compact starter as a stand-alone solution, with corresponding infeed system, or with connection to AS-Interface or IO-Link, the configuration can be easily and rapidly realized. All data required for the compact starter's correct assembly are compiled during the configuration process.

With the help of the online configurator, not only can the suitable compact starter be selected, but the complete product documentation is also prepared. Subsequently, your configuration result can be directly and easily transferred to the catalog and ordering system.

The following data are available for download:

Technical documentation

- Operating instructions
- System manual
- Product data sheets
- Characteristic curves

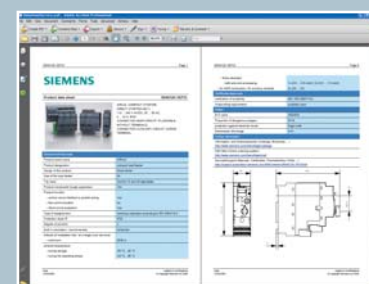
Graphical data

- Images
- Dimension drawings (dxf)
- ISO illustrations (dxf)
- 3-D models (stp)

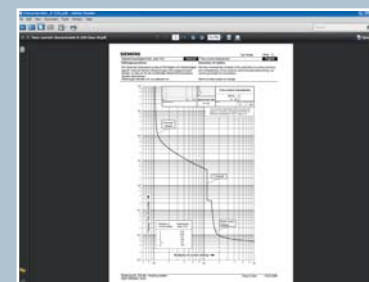
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Product configuration



Product data sheet



Characteristic curves



CAD data in 2-D/3-D format



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Siemens AG
Industry Sector
Industry Automation
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P.O. Box 23 55
90713 FÜRTH, GERMANY

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Subject to change without prior notice 11/09
Order No. E20001-A840-P305-V3-7600
DISPO 27601
WÜ/32687 KPXX.52.1.02 WS 0411 PDF
Printed in Germany
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