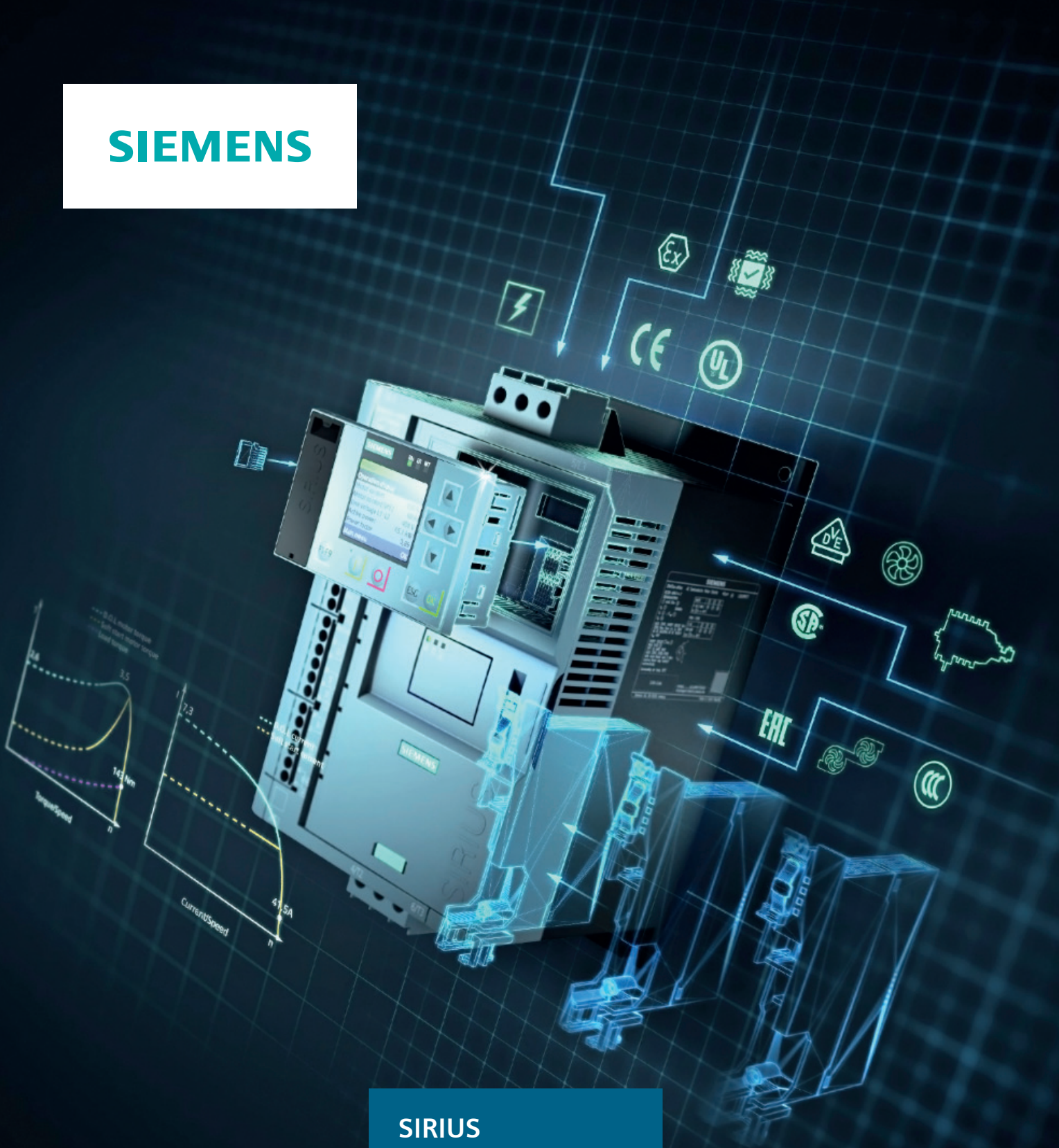
SIEMENS



SIRIUS

Industrial Controls

SIRIUS 3RW soft starters

Catalog
Abridged
IC 10 A

Edition
April
2018

siemens.com/soft-starter

Related catalogs

Industrial Controls IC 10
SIRIUS

PDF (E86060-K1010-A101-A8-7600)

Industrial Controls IC 10 AO
SIRIUS Classic

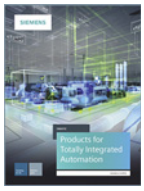
PDF (E86060-K1010-A191-A5-7600)

Industrial Communication IK PI
SIMATIC NET

E86060-K6710-A101-B8-7600

SIMATIC ST 70
Products for
Totally Integrated Automation

E86060-K4670-A101-B6-7600



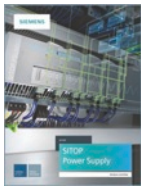
Low-Voltage Power Distribution and Electrical Installation Technology LV 10
SENTRON • SIVACON • ALPHA
Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

PDF/print (E86060-K8280-A101-A6-7600)

SIMOTICS GP, SD, XP, DP Low-Voltage Motors D 81.1
Type series 1FP1, 1LE1, 1MB1 and 1PC1
Frame sizes 71 to 315
Power range 0.09 to 200 kW
E86060-K5581-A111-A9-7600

SITOP KT 10.1
SITOP
Power supply

E86060-K2410-A101-B3-7600



SITRAIN
Training for Industry

www.siemens.com/sitrain

Miscellaneous

Products for Automation and Drives CA 01
Interactive Catalog
Download

www.siemens.com/ca01download

Industry Mall
Information and Ordering Platform
on the Internet:

www.siemens.com/industrymall

Siemens TIA Selection Tool
for the selection, configuration and ordering of TIA products and devices

www.siemens.com/tst

Information and Download Center
Digital versions of the catalogs are available on the Internet

www.siemens.com/sirius/catalogs

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Trademarks

Further information about industrial controls:
www.siemens.com/sirius

Technical Assistance

Expert technical assistance
for Industrial controls:
Tel.: +49 (911) 895-5900
Fax: +49 (911) 895-5907

E-Mail: technical-assistance@siemens.com

Industrial Controls

SIRIUS

Catalog IC 10 A · 04/2018

With prices valid from April 1, 2018

The Catalog Abridged IC 10 A · 04/2018 is an extract from the Catalog IC 10 · 2018 with updated contents. This abridged version replaces the corresponding contents of Catalog IC 10 · 2018.

Refer to the Industry Mall for regular updates of all contents of Catalog IC 10:
www.siemens.com/industrymall

Please contact your local Siemens branch.

The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with EN ISO 9001
(for the Certified Registration Nos. see www.siemens.com/system-certificates/cp).
The certificate is recognized by all IQNet countries.

Ordering notes

Things you should know about Catalog Abridged IC 10 A

Catalog Abridged IC 10 contains all selection and order-relevant data.

Ordering notes

Ordering special versions

When ordering products that differ from the versions listed in the catalog, the article number specified in the catalog must be supplemented with "–Z"; the required features must be specified by means of the alphanumeric order codes or in plain text.

Small orders

When small orders are placed, the costs associated with order processing are greater than the order value. We recommend therefore that you combine several small orders. Where this is not possible, we unfortunately have to charge a processing supplement of € 20.– to cover our costs for order processing and invoicing for all orders with a net goods value of less than € 250.–.

Standard delivery time (SD)

SD in days (d)
► Preferred type
X On request

Preferred types are available immediately from stock, i.e. are dispatched within 24 hours.

Normal quantities of the products are usually delivered within the specified time following receipt of your order at our branch.

In exceptional cases, the actual delivery time may differ from that specified.

The delivery times apply up to the ramp at Siemens AG (products ready for dispatch). The transport times depend on the destination and type of shipping. The standard transport time for Germany is one day.

The delivery times specified here represent the situation in March 2018. They are continuously optimized. For more up-to-the-minute information, please visit www.siemens.com/sirius/mall.

Price units (PU)

The price unit defines the number of units, sets or meters to which the specified price applies.

Packaging sizes (PS)

The packaging size defines the number, e.g. of units, sets or meters, contained in an outer packaging.

Only the quantity defined by the packaging size or a multiple thereof can be ordered.

For multi-unit packing and reusable packaging, see page 16/5.

Price groups (PG)

Each product is assigned to a price group.

Example

3RA2110-0FA15-1AP0

SD: 2 working days
PG: 41D
Order quantity 1 unit or a multiple thereof

3RV1901-0H

SD: Preferred type
PG: 41E
Order quantity 10 units or a multiple thereof

3SU1900-0AB71-0AB0

SD: 5 working days
PG: 41J
Order quantity 10 units or a multiple thereof

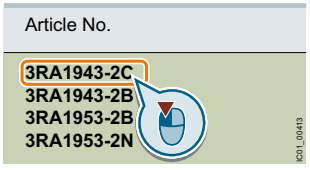
SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
2	**3RA2110-0FA15-1AP0**		1	1 unit	41D
►	**3RV1901-0H**		1	10 units	41E
5	**3SU1900-0AB71-0AB0**		100	10 units	41J

Dimensions

All dimensions in mm.

NEW

Click on an article number in the catalog PDF to call it up in the Industry Mall and you will have access to all the required information.



Or directly on the Internet, e.g. www.siemens.com/product?3RA1943-2C

Introduction

Overview

More information	
Homepage, see www.siemens.com/soft-starter	Online configurator, see www.siemens.com/sirius/configurators
Industry Mall, see www.siemens.com/product?3RW	Simulation Tool for Soft Starters (STS), see page 14/5 or https://support.industry.siemens.com/cs/ww/en/view/101494917


3RW55


3RW44


3RW52


3RW40


3RW30

		Page
3RW soft starters		
High Performance soft starters		
3RW55 soft starters	• TIA integration optional • Plug-in communication modules for PROFINET, PROFIBUS and Modbus TCP • Removable HMI module with color display, local interface and slot for a micro SD memory card • Extended protection functions • Up to 560 kW at 400 V (can be used in supply systems up to 690 V) • Automatic parameterization for easy commissioning and reliability even under changing load conditions • Hybrid switching devices and three-phase motor control for minimum power loss and optimum/symmetrical motor control • Pump stop for reduced mechanical stress and optimum pump stop control	6/11
3RW44 soft starters	• TIA Integration optional • PROFIBUS and PROFINET • Integrated display • External Display/control module optional • Extended protection functions • Up to 1200 kW at 400 V (can be used in supply systems up to 690 V)	6/21
General Performance soft starters		
3RW52 soft starters	• TIA integration optional • Plug-in communication modules for PROFINET, PROFIBUS and Modbus • HMI modules optional • Soft starting and stopping • Current limiting • Motor overload protection • Up to 560 kW at 400 V (can be used in supply systems up to 600 V) • Hybrid switching devices and three-phase motor control • Soft Torque for reduced mechanical loading and optimum pump stop control • Parameterization using potentiometers	6/36
Basic Performance soft starters		
3RW40 soft starters	• Soft starting and stopping • Current limiting • Motor overload protection • Up to 250 kW at 400 V (can be used in supply systems up to 600 V)	6/46
3RW30 soft starters	• Soft starting with voltage ramp • Up to 55 kW at 400 V (can be used in supply systems up to 480 V)	6/60

Use of soft starters in conjunction with IE3/IE4 motors

Note:

For the use of SIRIUS 3RW soft starters in conjunction with highly energy-efficient IE3/IE4 motors, please observe the information on dimensioning and configuring, see Application Manual.

For more information, see page 1/7.

More information	
Homepage, see www.siemens.com/solid-state-switching-devices Industry Mall, see www.siemens.com/product?3RF	Online configurator, see www.siemens.com/sirius/configurators


3RF21


3RF20


3RF22


3RF23


3RF24


3RF29


3RF34 (motor)

		Article No.	Page
SIRIUS solid-state switching devices for switching resistive/inductive loads			
Solid-state relays			
Solid-state relays	• Widths of 22.5 mm and 45 mm • Compact and space-saving design • "Zero-point switching" version • Mounting onto existing heat sinks	**3RF21** **3RF20** **3RF22**	6/65 6/70 6/74
Solid-state contactors			
Solid-state contactors	• Complete units comprising a solid-state relay and an optimized heat sink, "ready to use" • Compact and space-saving design • Versions for resistive loads "zero-point switching" and inductive loads "instantaneous switching" • Special versions "Low Noise" and "Short-Circuit Proof"	**3RF23** **3RF24**	6/78 6/88
Function modules	For extending the functionality of the 3RF21 solid-state relays and the 3RF23 solid-state contactors for many different applications:		
Converters	• For converting an analog input signal into an on/off ratio; can also be used on 3RF22 and 3RF24 three-phase switching devices	**3RF2900-0EA18**	6/99
Load monitoring	• For load monitoring of one or more loads (partial loads)	**3RF29..-0FA08, 3RF29.0-0GA..**	6/100
Heating current monitoring	• For load monitoring of one or more loads (partial loads); remote teach	**3RF29..-0JA..**	6/101
Power controllers	• For setting the current by means of a solid-state switching device depending on a setpoint value set by the power controller. There is a choice of full-wave control and generalized phase control.	**3RF29..-0KA.**	6/102
Power regulators	• For regulating the current by means of a solid-state switching device, depending on a setpoint value set by the power regulator. Closed-loop control: full-wave control or generalized phase control	**3RF29.0-0HA..**	6/103
SIRIUS solid-state switching devices for switching motors			
Solid-state contactors			
Solid-state contactors, solid-state reversing contactors	• Complete units in the insulated enclosure with integrated heat sink, "ready to use" • Compact and space-saving design • Version for motors, "instantaneous switching"	**3RF34**	6/108, 6/112

Use of SIRIUS solid-state switching devices for switching motors in conjunction with IE3/IE4 motors

Note:

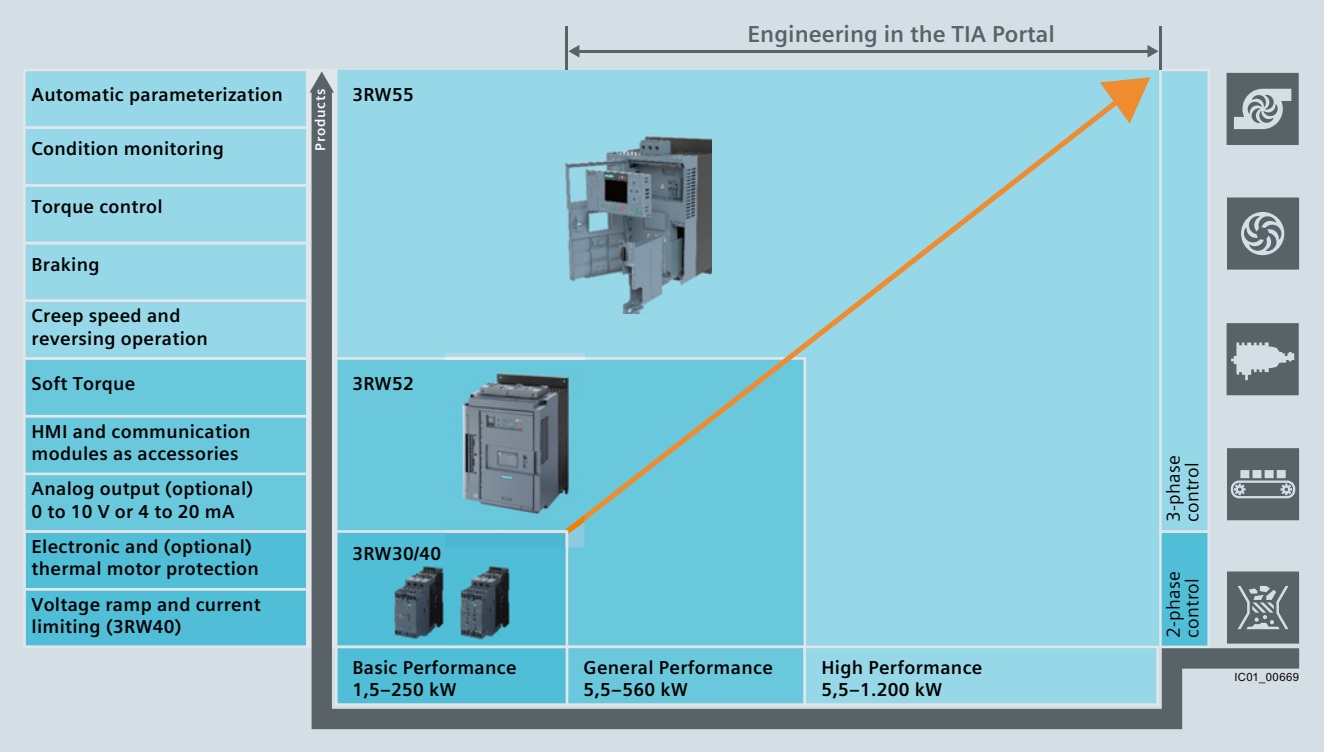
For the use of SIRIUS 3RF solid-state switching devices for switching motors in conjunction with highly energy-efficient IE3/IE4 motors, please observe the information on dimensioning and configuring, see Application Manual.

For more information, see page 1/7.

Overview

More information	
Homepage, see www.siemens.com/soft-starter Industry Mall, see www.siemens.com/product?3RW SIOS, see https://support.industry.siemens.com/cs/ww/en/view/109747404	Simulation Tool for Soft Starters (STS), see https://support.industry.siemens.com/cs/ww/en/view/101494917

SIRIUS 3RW soft starters - as versatile as your application







Applications	High Performance		General Performance	Basic Performance	
	3RW55	3RW44	3RW52	3RW40	3RW30
Selection aid for soft starters					
Normal starting (CLASS 10)					
Pumps	●	●	●	●	●
Pumps with special pump stop (to prevent water hammer)	●	●	❍		
Heat pumps	●	●	●	●	●
Hydraulic pumps	●	●	●	●	❍
Presses	●	●	●	●	❍
Conveyor belts	●	●	●	●	❍
Roller conveyors	●	●	●	●	❍
Screw conveyors	●	●	●	●	❍
Escalators	●	●	●	●	
Piston compressors	●	●	●	●	
Screw compressors	●	●	●	●	
Small fans[1]	●	●	●	●	
Centrifugal blowers	●	●	●	●	
Bow thrusters	●	●	●	●	
Heavy starting (CLASS 20)					
Stirrers	●	●	❍	❍	
Extruders	●	●	❍	❍	
Lathes	●	●	❍	❍	
Milling machines	●	●	❍	❍	
Very heavy starting (CLASS 30)					
Large fans[2]	●	●			
Circular saws/bandsaws	●	●			
Centrifuges	●	●			
Mills	●	●			
Crushers	●	●			

● Recommended soft starter
❍ Possible soft starter

[1] The mass inertia of the fan is <10 times the mass inertia of the motor.
[2] The mass inertia of the fan is ≥10 times the mass inertia of the motor.

General data





SIRIUS soft starters		High Performance 3RW55	High Performance 3RW44	General Performance 3RW52	Basic Performance 3RW40	Basic Performance 3RW30
General technical specifications						
Operational current at 40 °C	A	13 ... 987	29 ... 1214	13 ... 987	12.5 ... 432	3 ... 106
Operational voltage	V	200 ... 690[1]	200 ... 690[1]	200 ... 600	200 ... 600	200 ... 480
Operating power for three-phase motors						
• At 400 V, at 40 °C						
- Inline circuit	kW	5.5 ... 315	15 ... 710	5.5 ... 315	5.5 ... 250	1.5 ... 55
- Inside-delta circuit	kW	11 ... 560	22 ... 1 200	11 ... 560	--	--
• At 460/480 V at 50 °C						
- Inline circuit	hp	7.5 ... 400	15 ... 950	7.5 ... 400	7.5 ... 300	1.5 ... 75
- Inside-delta circuit	hp	10 ... 750	30 ... 1 700	10 ... 750	--	--
Ambient temperature[2]	°C	-25 ... +60	0 …+60	-25 ... +60	-25 ... +60	-25 ... +60
Soft starting/ramp-down		✓	✓	✓	✓	✓[3]
Voltage ramp		✓	✓	✓	✓	✓
Starting voltage	%	20 ... 100	20 ... 100	30 ... 100	40 ... 100	40 ... 100
Ramp-up and ramp-down time	s	0 ... 360	0 ... 360	0 ... 20	0 ... 20	0 ... 20[3]
Pump stop (torque control)[4]		✓	✓	--	--	--
• Starting torque	%	10 ... 100	20 ... 100	--	--	--
• Torque limit	%	20 ... 200	20 ... 200	--	--	--
Soft Torque (torque limit)		--	--	✓	--	--
Integral bypass contact system		✓	✓	✓	✓	✓
Intrinsic device protection		✓	✓	✓	✓	--
Motor overload protection		✓	✓	✓	✓[5]	--
Thermistor motor protection evaluation		✓	✓	✓[6]	✓[6]	--
Analog output		✓	--	✓[6]	--	--
Remote RESET		✓	✓	✓	✓[6]	--
Adjustable current limiting		✓	✓	✓	✓	--
Inside-delta circuit[1]		✓	✓	✓	--	--
Breakaway pulse		✓	✓	--	--	--
Automatic parameterization		✓	--	--	--	--
Pump cleaning		✓	--	--	--	--
Reversing duty		✓	--	--	--	--
Condition monitoring		✓	--	--	--	--
User account administration[8]		✓	--	--	--	--
Creep speed in both directions of rotation		✓	✓	--	--	--
DC braking[4] [7]		✓	✓	--	--	--
Combined braking[4] [7]		✓	✓	--	--	--
Motor heating		✓	✓	--	--	--
Communication function[9]		✓	✓	✓	--	--
HMI module installable in the cabinet door		✓	✓[9]	✓[9]	--	--
Operating measured value display		✓	✓	✓[9]	--	--
Logbooks		✓	✓[8]	✓[9]	--	--
Event list		✓	✓	--	--	--
Slave pointer function		✓	✓	--	--	--
Trace function[8]		✓	✓	--	--	--
Programmable control inputs and outputs		✓	✓	--	--	--
Number of parameter sets		3	3	1	1	1
• Parameterizable via software[8]		✓	✓	--	--	--
Number of controlled phases		3	3	3	2	2
Heavy starting CLASS 30[4]		✓	✓	--	--	--

✓ Function available

-- Function not available

1) Inside-delta circuit only up to line voltage 600 V.

2) Note derating above 40 °C.

3) Only soft starting available for 3RW30.

4) Calculate soft starter and motor with size allowance where required.

5) When using the motor overload protection according to ATEX, an upstream contactor is required.

6) Special device versions only.

7) Not possible in inside-delta circuit.

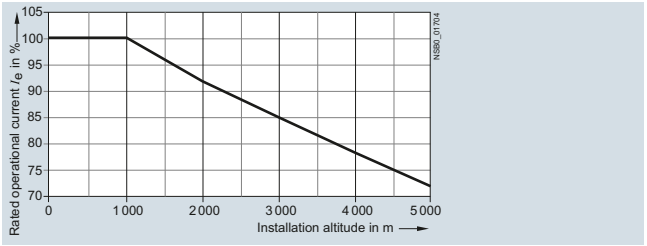
8) With software Soft Starter ES (TIA Portal)

9) Only in conjunction with special accessories.

Boundary conditions

The 3RW soft starter should always be designed on the basis of the required rated operational current of the motor. The motor ratings listed in the selection and ordering data are rough guide values and designed for basic starting conditions (CLASS 10). For other starting conditions we recommend the Simulation Tool for Soft Starters (STS).

Motor rating data in kW and hp is based on IEC 60947-4-1.



At an installation altitude above 2 000 m, max. permissible operational voltage is reduced to 480 V.

The selection and ordering data were determined for the following boundary conditions (stand-alone installation without additional fan)

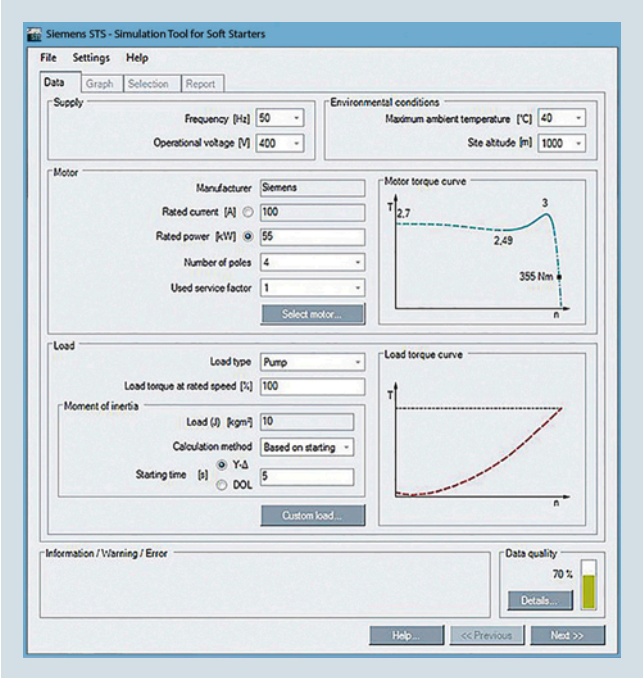
						
		High Performance		**General Performance**	**Basic Performance**	
SIRIUS soft starters		**3RW55**	**3RW44**	**3RW52**	**3RW40**	**3RW30**
Boundary conditions						
Maximum starting time	s	20	10		10	3
Maximum starting current in % of motor current	I_e	300				
Maximum number of starts per hour	1/h	5				20

Simulation Tool for Soft Starters (STS)

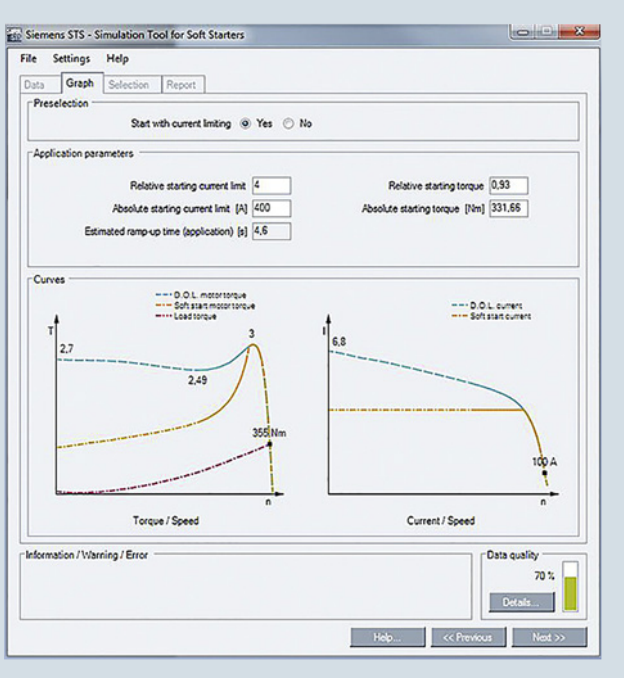
The Simulation Tool for Soft Starters (STS) provides a convenient means of designing soft starters using a simple, quick and easy-to-use interface.
Entering the motor and load data will simulate the application and prompt suggestions for suitable soft starters.

Link to the free download of the Simulation Tool for Soft Starters (STS).

- Simple, quick and user-friendly interface
- Detailed and up-to-date Siemens motor database, including IE3 and IE4 motors.
- Simulation of heavy starting up to CLASS 30
- Update-capable (e.g. motors, load types, functions)
- Fast simulations with minimum input data
- Immediate, graphical curve charts of start operations with limit values
- Table view of suitable soft starters for the application



Easy input of motor and load data



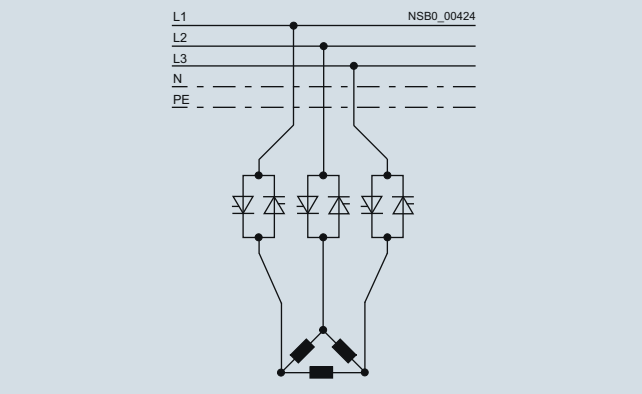
Graphic display of start operations

Circuit concept

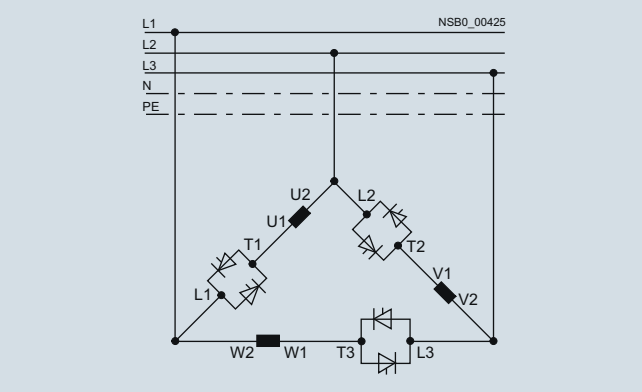
Three-phase controlled SIRIUS 3RW soft starters can be operated in two different types of circuit:

- Inline circuit
  The controls for isolating and protecting the motor are simply connected in series with the soft starter. The motor is connected to the soft starter with three leads.
- Inside-delta circuit
  The wiring is similar to that of wye-delta starters. The phases of the soft starter are connected in series with the individual motor windings. The soft starter then only has to carry the phase current, amounting to about 58% of the rated motor current (conductor current).

Comparison of the types of circuit:



Inline circuit: Rated current I_e corresponds to the rated motor current I_n, three cables to the motor



Inside-delta circuit: Rated current I_e corresponds to approx. 58% of the rated motor current I_n, six cables to the motor (as for wye-delta starters)

Which circuit?

Using the inline circuit involves the lowest wiring outlay. If the soft starter to motor connections are long, this circuit is preferable.

The wiring complexity is twice as high when using the inside-delta circuit, but a smaller device can be used with the same rating. Thanks to the choice of operating mode between the inline circuit and inside-delta circuit, it is always possible to select the most favorable solution.

The braking function is possible only in the inline circuit.
The inside-delta circuit cannot be used in 690 V line supplies.

Configuration

The solid-state 3RW soft starters are designed for normal starting. In case of heavy starting or increased starting frequency, a larger unit must be selected. The 3RW44 and 3RW52 soft starters may be used in isolated supply networks (IT systems) up to 600 V AC and the 3RW55 soft starter even up to 690 V.

For long starting times it is recommended to have a PTC sensor or temperature switch in the motor. This also applies for the "torque control", "pump stop" and "DC braking" ramp-down modes, because during the ramp-down time in these modes, an additional current loading applies in contrast to free ramp-down.

No capacitive elements are permitted in the motor feeder between the SIRIUS 3RW soft starter and the motor (e.g. no reactive-power compensation equipment). In addition, neither static systems for reactive-power compensation nor dynamic PFC (Power Factor Correction) must be operated in parallel during starting and ramp-down of the soft starter. This is important to prevent faults arising on the compensation equipment and/or the soft starter.

All elements of the main circuit (such as fuses and controls) should be dimensioned for direct-on-line starting, following the load short-circuit conditions. Fuses and switching devices must be ordered separately. The harmonic component load for starting currents must be taken into consideration for the selection of motor starter protectors (selection of release). Please observe the maximum switching frequencies specified in the technical specifications.

Notes:

When three-phase motors are switched on, voltage drops occur as a rule on starters of all types (direct-on-line starters, wye-delta starters, soft starters). The infeed transformer must always be dimensioned such that the voltage dip when starting the motor remains within the permissible tolerance. If the infeed transformer is dimensioned with only a small margin, it is best for the control voltage to be supplied from a separate circuit (independently of the main voltage) in order to avoid the potential switching off of the soft starter.

For dimensioning soft starters, we recommend our Simulation Tool for Soft Starters (STS), see page 6/7.

or our Technical Assistance:
Phone: +49 911 895-5900,
email: technical-assistance@siemens.com.

Recommended parameters for the initial commissioning of our SIRIUS 3RW soft starters are listed in every report of our Simulation Tool for Soft Starters (STS). In addition, our High Performance soft starters provide support by means of their commissioning wizards.

Article No. scheme

Product versions		Article number								
Device type	**High Performance soft starters**	**3RW55**	☐	☐	–	☐	☐	☐	☐	☐
		3RW44	☐	☐	–	☐	☐	☐	☐	☐
	General Performance soft starters	**3RW52**	☐	☐	–	☐	☐	☐	☐	☐
	Basic Performance soft starters	**3RW40**	☐	☐	–	☐	☐	☐	☐	☐
		3RW30	☐	☐	–	☐	☐	☐	☐	☐
Size/rated operational current I_e	e. g. 15 = 25 A in size S1		☐	☐						
Connection type	e.g. 1 = screw terminal					☐				
Soft starter functionality	e.g. AC = with bypass and analog output, three-phase controlled						☐	☐		
Rated control supply voltage U_s	e.g. 0 = 24 V AC/DC								☐	
Rated operational voltage U_e	e.g. 4 = 200 ... 480 V AC									☐
Example		**3RW52**	**1**	**5**	**–**	**1**	**A**	**C**	**0**	**4**

Note:

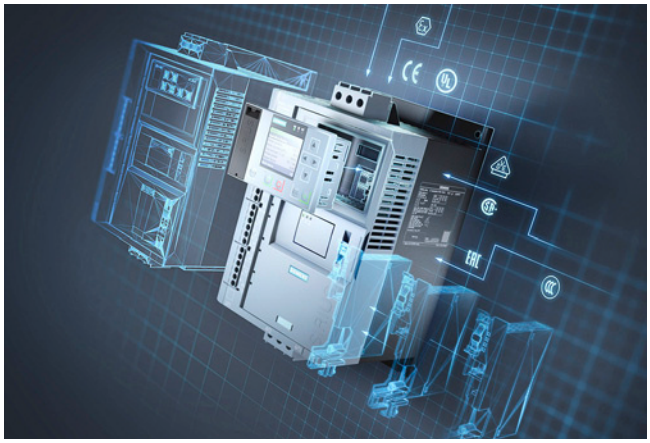
The Article No. scheme shows an overview of product versions for better understanding of the logic behind the article numbers.

For your orders please use the article numbers quoted in the selection and ordering data.

Benefits

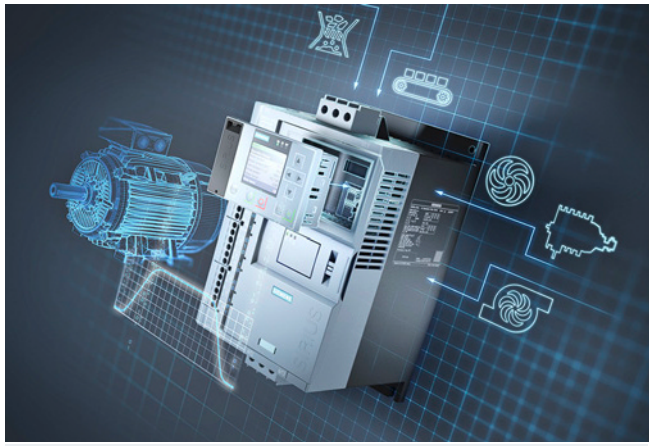
Can be flexibly deployed in many applications

Strong portfolio: comprehensive, coordinated soft starter portfolio



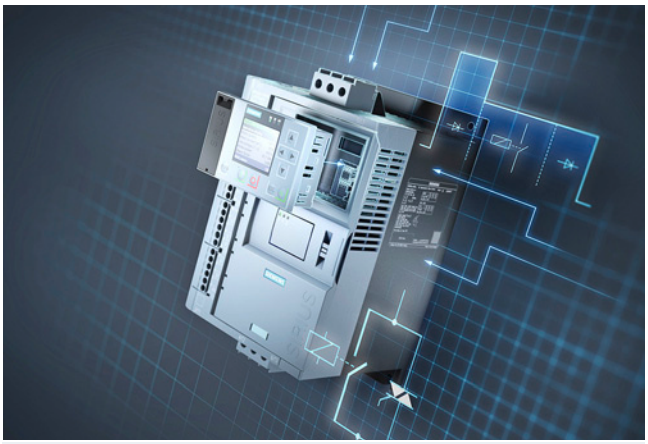
- The right hardware for all requirements, soft starters for tasks ranging from simple to demanding starting in Basic, General and High Performance versions
- Extensive portfolio for individual expansion: Optional HMIs for installation in the device or mounting on the control cabinet door Communication via PROFINET/PROFIBUS and Modbus
- Designer enclosure with removable terminals, space-saving thanks to compact design and rugged thanks to coated printed circuit boards
- Can be used worldwide thanks to numerous certificates and approvals, IEC, UL, CSA, CCC

Intelligent operation: concentrated, application-specific functionality



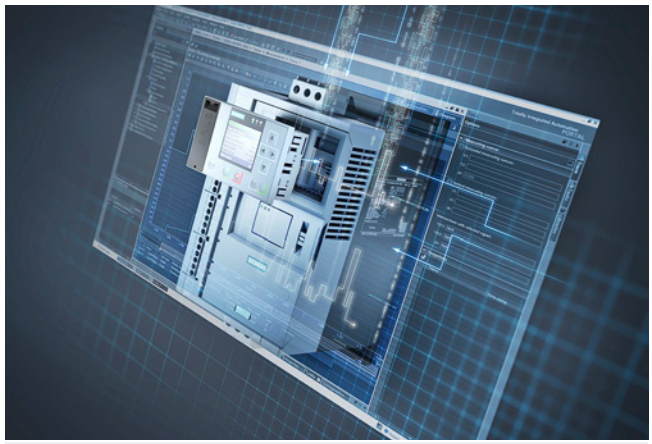
- Can be used in a wide variety of applications: Pumping, ventilating, compressing, moving and processing
- Integrated, self-learning automatic parameterization depending on motor starting conditions
- Application-specific functionality such as pump cleaning and pump stop
- Condition monitoring: Current and energy monitoring with warning and alarm limits, starting time monitoring

Efficient switching: hybrid switching technology on board



- Energy-efficient switching and mechanical protection of the drive train thanks to soft starters with hybrid switching technology
- Low-wear switching extends the service life of the devices
- Soft starting prevents current spikes, thereby increasing the network stability
- Protection against disturbances in the application. Mechanical protection for the drive train

Ready for a digital future: data available whenever and wherever needed



- Support from tools and data during engineering
- Simulation Tool for Soft Starters for support during product selection
- Very simple, standardized commissioning and configuration via Soft Starter ES in TIA Portal
- Integration in the automation system via communication interfaces
- Data availability and analysis: large volumes of data at any time and anywhere, even into MindSphere

Overview

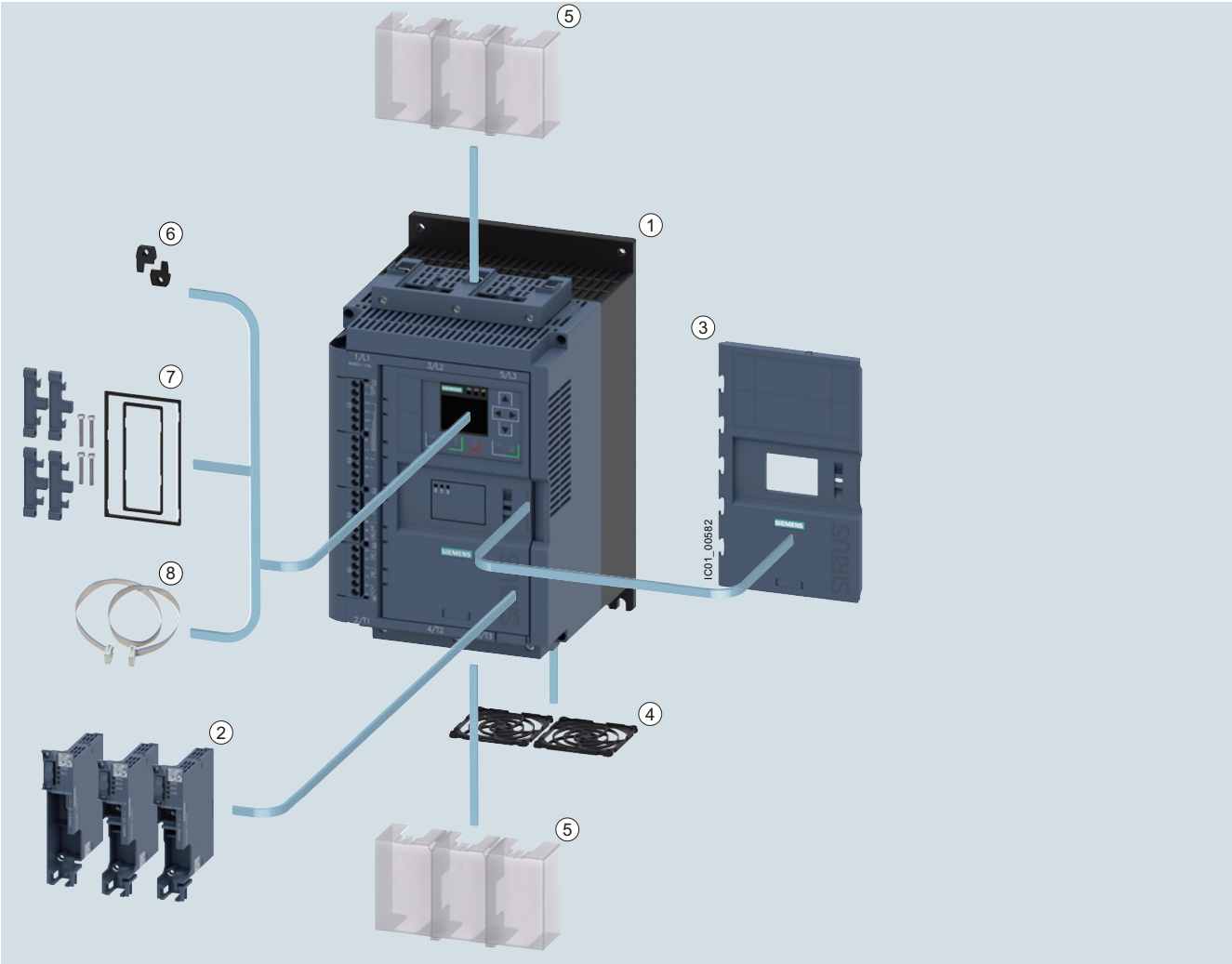
More information

Homepage, see www.siemens.com/soft-starter
Industry Mall, see www.siemens.com/product?3RW

Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917
SIRIUS Soft Starter ES (TIA Portal), see pages 14/6 and 14/9

Equipped with the utmost functionality, the SIRIUS 3RW55 High Performance soft starters confidently handle even difficult starting and stopping operations. Thanks to innovative torque control, the device can be used for drives with an output between 5.5 kW and 560 kW (at 400 V).

The functions have been specially designed to offer maximum user friendliness. By means of the detachable HMI (with color display, local interface and a slot for MicroSD memory card) and plug-in communication modules (PROFINET, PROFIBUS, Modbus), they ensure maximum flexibility. With their modern hybrid switching technology, the SIRIUS 3RW55 soft starters offer efficient switching for long-term, energy-saving use.

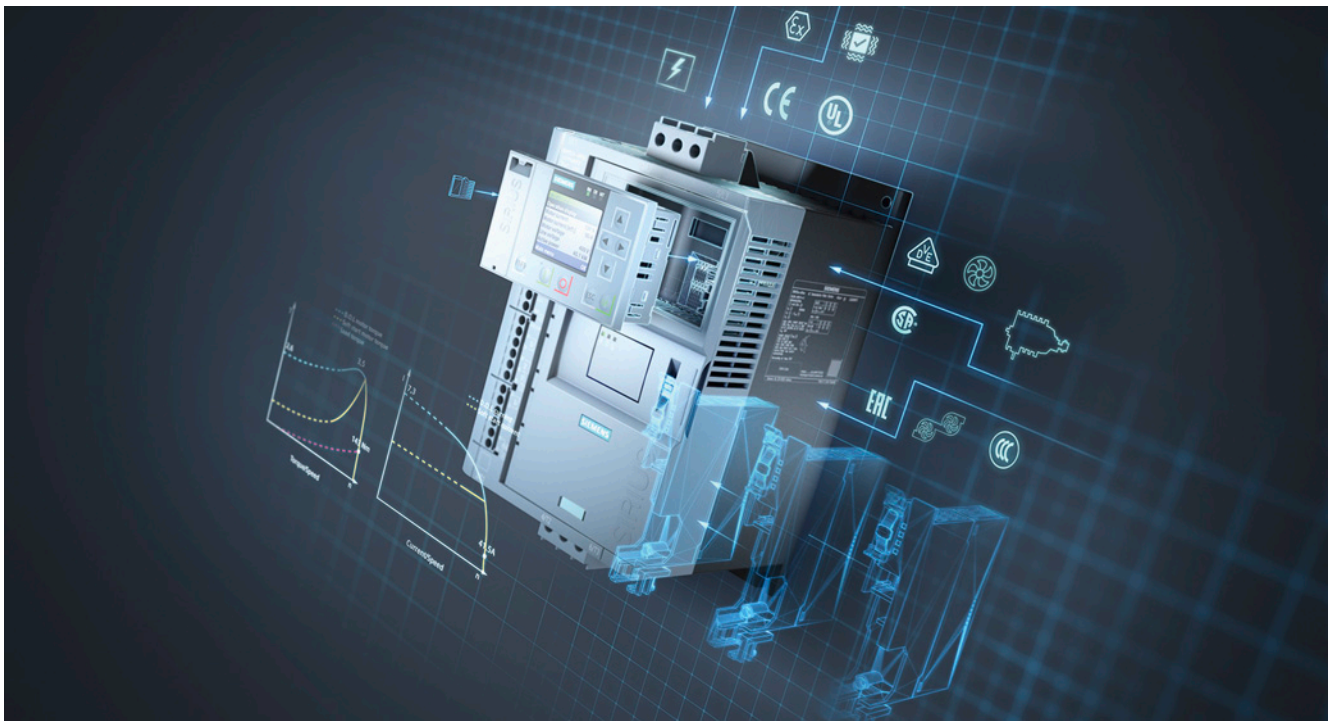


1 3RW55 soft starter

2 Communication modules
3 Hinged cover
4 Fan covers
5 Terminal covers
6 HMI Push-in lugs for wall mounting
7 HMI IP65 door mounting kit
8 HMI soft starter connection cable

3RW55 High Performance soft starters - accessories, see page 6/19.

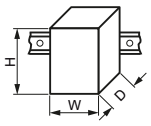
Benefits



Product characteristics / function	Performance features / benefits
Automatic parameterization	Extremely easy commissioning and reliability even under changing load conditions
Hybrid switching devices and three-phase motor control	Minimum power loss and optimum/symmetrical motor control
Integration into TIA Portal – communication modules optional	Efficient configuration and maximum flexibility in automation engineering
Detachable HMI with color display, local interface, slot for micro SD card	Maximum flexibility with regard to user interface and intuitive menu guidance
Pump stop and torque control	Reduced mechanical loading and optimum pump stop control

Technical specifications

More information	
For "SIRIUS 3RW55 Soft Starter" Manual, see https://support.industry.siemens.com/cs/ww/en/view/109753752 FAQs, see https://support.industry.siemens.com/cs/ww/en/ps/25099/faq	Simulation Tool for Soft Starters (STS), see page 14/5 or https://support.industry.siemens.com/cs/ww/en/view/101494917

Type		3RW551.-.HA.4 3RW551.-.HA.5	3RW552.-.HA.6 3RW553.-.HA.6	3RW552.-.HA.4 3RW553.-.HA.4	3RW554.-.HA.4	3RW554.-.HA.6
Installation/fixing/dimensions:						
Width x height x depth 	mm	170 × 275 × 152	185 × 306 × 203		210 × 393 × 203	
Type of fixing		Screw fixing				
Mounting position		Vertical (can be rotated +/-90° and tilted +/- 22.5° forward or backward)				
Distance to be maintained with side-by-side mounting						
• Above	mm	100				
• At the side	mm	5				
• Below	mm	75				
Installation altitude at height above sea level, maximum[1]	m	5 000	2 000	5 000		2 000
Ambient conditions						
Ambient temperature						
• During operation[2]	°C	-25 ... +60				
• During storage	°C	-40 ... +80				
Environmental category according to IEC 60721						
• During operation		3K6 (no ice formation, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
• During storage		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4				
• During transport		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)				

1) Derating from 1000 m, see Manual or characteristic curve on page 6/7.
2) Note derating above 40 °C.

General data NEW

Type		3RW55..-.HA0.	3RW55..-.HA1.
Control circuit/control			
Control supply voltage			
• At AC/DC, rated value	V	24/24	--/--
• At AC	V	--/--	110 ... 250
• Relative negative tolerance/ relative positive tolerance with DC	%	-20/20	--/--
• Relative negative tolerance/ relative positive tolerance with AC	%	-20/20	-15/10
Frequency of the control supply voltage	Hz	50 ... 60	
• Relative negative tolerance/ relative positive tolerance	%	-10/10	
Type of overvoltage protection		Varistors	
Type of short-circuit protection for control circuit[1]		Fuse 4 A gG (I_{cu} =1 kA), fuse 6 A quick-response (I_{cu} =1 kA), MCB C1 (I_{cu} = 600 A), MCB C6 (I_{cu} = 300 A)	

1) Not included in scope of supply

Type		3RW55..-.HA.4	3RW55..-.HA.5	3RW55..-.HA.6
Power electronics				
Operational voltage rated value	V	200 ... 480	200 ... 600	200 ... 690
• Relative negative tolerance/ relative positive tolerance	%	-15/10		
Operational voltage for inside-delta circuit rated value	V	200 ... 480	200 ... 600	--
• Relative negative tolerance/ relative positive tolerance	%	-15/10		--/--
Operating frequency, rated value	Hz	50 ... 60		
• Relative negative tolerance/ relative positive tolerance	%	-10/10		
Minimum load [% of I_M][1]	%	10		
Maximum cable length between soft starter and motor	m	800		
Power loss [W] at 40 °C				
• At rated value current after startup	W	4		8

1) Relative to set I_e

Selection and ordering data

For normal starting (CLASS 10E)


3RW551.


3RW552.


3RW553.


3RW554.

At 40 °C					At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors at 230 V	at 400 V	at 500 V	at 690 V	Operational current	Rating [hp] for three-phase motors at 200/208 V	at 220/230 V	at 460/480 V	at 575/600 V						
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 480 V															
13	3	**5.5**	--	--	11.5	3	3	**7.5**	--	5	**3RW5513-□HA□4**		1	1 unit	42S
18	4	**7.5**	--	--	15.9	3	3	**10**	--	5	**3RW5514-□HA□4**		1	1 unit	42S
25	5.5	**11**	--	--	22.3	5	5	**15**	--	5	**3RW5515-□HA□4**		1	1 unit	42S
32	7.5	**15**	--	--	28.4	7.5	7.5	**15**	--	5	**3RW5516-□HA□4**		1	1 unit	42S
38	11	**18.5**	--	--	33.5	10	10	**20**	--	5	**3RW5517-□HA□4**		1	1 unit	42S
47	11	**22**	--	--	41.6	10	15	**30**	--	5	**3RW5524-□HA□4**		1	1 unit	42S
63	18.5	**30**	--	--	55.5	15	20	**40**	--	5	**3RW5525-□HA□4**		1	1 unit	42S
77	22	**37**	--	--	68	20	20	**50**	--	5	**3RW5526-□HA□4**		1	1 unit	42S
93	22	**45**	--	--	82.5	25	25	**60**	--	5	**3RW5527-□HA□4**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals → **1 3**
Spring-type terminals → **0 1**

Control supply voltage
24 V AC/DC → **0 1**
110 ... 250 V AC → **0 1**

[1] 3RW55 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

At 40 °C					At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors At 230 V	At 400 V	At 500 V	At 690 V	Operational current	Rating [hp] for three-phase motors At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 480 V															
113	30	**55**	--	--	101	30	30	**75**	--	5	**3RW5534-□HA□4**		1	1 unit	42S
143	37	**75**	--	--	128	30	40	**75**	--	5	**3RW5535-□HA□4**		1	1 unit	42S
171	45	**90**	--	--	153	40	50	**100**	--	5	**3RW5536-□HA□4**		1	1 unit	42S
210	55	**110**	--	--	186	50	60	**125**	--	5	**3RW5543-□HA□4**		1	1 unit	42S
250	75	**132**	--	--	220	60	75	**150**	--	5	**3RW5544-□HA□4**		1	1 unit	42S
315	90	**160**	--	--	279	75	100	**200**	--	5	**3RW5545-□HA□4**		1	1 unit	42S
370	110	**200**	--	--	328	100	125	**250**	--	5	**3RW5546-□HA□4**		1	1 unit	42S
470	132	**250**	--	--	416	125	150	**300**	--	5	**3RW5547-□HA□4**		1	1 unit	42S
570	160	**315**	--	--	504	150	200	**400**	--	5	**3RW5548-□HA□4**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals → **2 6**
Screw terminals → **1 3**

Control supply voltage
24 V AC/DC → **0 1**
110 ... 250 V AC → **0 1**

[1] 3RW55 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

Inline circuit *IE3/IE4 ready* NEW

For normal starting (CLASS 10E)


3RW551.


3RW552.


3RW553.


3RW554.

At 40 °C					At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors				Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V	At 690 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 600 V															
13	3	**5.5**	7.5	--	11.5	3	3	**7.5**	10	5	**3RW5513-□HA□5**		1	1 unit	42S
18	4	**7.5**	11	--	15.9	3	3	**10**	15	5	**3RW5514-□HA□5**		1	1 unit	42S
25	5.5	**11**	15	--	22.3	5	5	**15**	20	5	**3RW5515-□HA□5**		1	1 unit	42S
32	7.5	**15**	18.5	--	28.4	7.5	7.5	**15**	25	5	**3RW5516-□HA□5**		1	1 unit	42S
38	11	**18.5**	22	--	33.5	10	10	**20**	30	5	**3RW5517-□HA□5**		1	1 unit	42S
Operational voltage 200 ... 690 V															
25	5.5	**11**	15	22	22.3	5	5	**15**	20	5	**3RW5521-□HA□6**		1	1 unit	42S
47	11	**22**	30	45	41.6	10	15	**30**	40	5	**3RW5524-□HA□6**		1	1 unit	42S
63	18.5	**30**	37	55	55.5	15	20	**40**	50	5	**3RW5525-□HA□6**		1	1 unit	42S
77	22	**37**	45	75	68	20	20	**50**	60	5	**3RW5526-□HA□6**		1	1 unit	42S
93	22	**45**	55	90	82.5	25	25	**60**	75	5	**3RW5527-□HA□6**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals
Spring-type terminals

Control supply voltage
24 V AC/DC
110 ... 250 V AC

1 3
0 1

[1] 3RW55 soft starter with screw terminals for operational voltage up to 690 V: Standard delivery time SD = 2 days (d).

At 40 °C					At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors				Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V	At 690 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 690 V															
113	30	**55**	75	110	101	30	30	**75**	75	5	**3RW5534-□HA□6**		1	1 unit	42S
143	37	**75**	90	132	128	30	40	**75**	100	5	**3RW5535-□HA□6**		1	1 unit	42S
171	45	**90**	110	160	153	40	50	**100**	125	5	**3RW5536-□HA□6**		1	1 unit	42S
210	55	**110**	132	200	186	50	60	**125**	150	5	**3RW5543-□HA□6**		1	1 unit	42S
250	75	**132**	160	250	220	60	75	**150**	200	5	**3RW5544-□HA□6**		1	1 unit	42S
315	90	**160**	200	315	279	75	100	**200**	250	5	**3RW5545-□HA□6**		1	1 unit	42S
370	110	**200**	250	355	328	100	125	**250**	300	5	**3RW5546-□HA□6**		1	1 unit	42S
470	132	**250**	315	400	416	125	150	**300**	400	5	**3RW5547-□HA□6**		1	1 unit	42S
570	160	**315**	355	560	504	150	200	**400**	500	5	**3RW5548-□HA□6**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals
Screw terminals

Control supply voltage
24 V AC/DC
110 ... 250 V AC

2 6
0 1

[1] 3RW55 soft starter with screw terminals for operational voltage up to 690 V: Standard delivery time SD = 2 days (d).

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Selection and ordering data

For normal starting (CLASS 10E)


3RW551.


3RW552.


3RW553.


3RW554.

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage for inside-delta circuit 200 ... 480 V														
22.5	5.5	**11**	--	19.9	5	5	**15**	--	5	**3RW5513-□HA□4**		1	1 unit	42S
31.2	7.5	**15**	--	28	5	5	**15**	--	5	**3RW5514-□HA□4**		1	1 unit	42S
43.3	11	**18.5**	--	39	7.5	7.5	**20**	--	5	**3RW5515-□HA□4**		1	1 unit	42S
55.4	15	**22**	--	49	10	10	**30**	--	5	**3RW5516-□HA□4**		1	1 unit	42S
65.8	18.5	**30**	--	58	15	15	**40**	--	5	**3RW5517-□HA□4**		1	1 unit	42S
81.4	22	**45**	--	72	20	25	**50**	--	5	**3RW5524-□HA□4**		1	1 unit	42S
109	30	**55**	--	96	25	30	**60**	--	5	**3RW5525-□HA□4**		1	1 unit	42S
133	37	**75**	--	118	30	40	**75**	--	5	**3RW5526-□HA□4**		1	1 unit	42S
161	45	**90**	--	143	40	50	**100**	--	5	**3RW5527-□HA□4**		1	1 unit	42S

Type of electrical connection for the control circuit → **3RW5513-□HA□4**
Screw terminals → **1**
Spring-type terminals → **3**

Control supply voltage → **3RW5513-□HA□4**
24 V AC/DC → **0**
110 ... 250 V AC → **1**

[1] 3RW55 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage for inside-delta circuit 200 ... 480 V														
195	55	**110**	--	175	50	60	**125**	--	5	**3RW5534-□HA□4**		1	1 unit	42S
247	75	**132**	--	222	60	75	**150**	--	5	**3RW5535-□HA□4**		1	1 unit	42S
296	90	**160**	--	265	75	100	**200**	--	5	**3RW5536-□HA□4**		1	1 unit	42S
363	110	**200**	--	322	100	125	**250**	--	5	**3RW5543-□HA□4**		1	1 unit	42S
433	132	**250**	--	381	125	150	**300**	--	5	**3RW5544-□HA□4**		1	1 unit	42S
545	160	**315**	--	483	150	200	**400**	--	5	**3RW5545-□HA□4**		1	1 unit	42S
640	200	**355**	--	568	150	200	**450**	--	5	**3RW5546-□HA□4**		1	1 unit	42S
814	250	**400**	--	721	200	250	**600**	--	5	**3RW5547-□HA□4**		1	1 unit	42S
987	315	**560**	--	873	300	350	**750**	--	5	**3RW5548-□HA□4**		1	1 unit	42S

Type of electrical connection for the control circuit → **3RW5534-□HA□4**
Spring-type terminals → **2**
Screw terminals → **6**

Control supply voltage → **3RW5534-□HA□4**
24 V AC/DC → **0**
110 ... 250 V AC → **1**

[1] 3RW55 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

Inside-delta circuit *IE3/IE4 ready* NEW

For normal starting (CLASS 10E)


3RW551.


3RW552.


3RW553.


3RW554.

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage for inside-delta circuit 200 ... 600 V														
22.5	5.5	**11**	15	19.9	5	5	**15**	20	5	**3RW5513-□HA□5**		1	1 unit	42S
31.2	7.5	**15**	18.5	28	5	5	**15**	25	5	**3RW5514-□HA□5**		1	1 unit	42S
43.3	11	**18.5**	22	39	7.5	7.5	**20**	30	5	**3RW5515-□HA□5**		1	1 unit	42S
55.4	15	**22**	30	49	10	10	**30**	40	5	**3RW5516-□HA□5**		1	1 unit	42S
65.8	18.5	**30**	37	58	15	15	**40**	50	5	**3RW5517-□HA□5**		1	1 unit	42S
43.3	11	**18.5**	22	39	7.5	7.5	**20**	30	5	**3RW5521-□HA□6**		1	1 unit	42S
81.4	22	**45**	45	72	20	25	**50**	60	5	**3RW5524-□HA□6**		1	1 unit	42S
109	30	**55**	55	96	25	30	**60**	75	5	**3RW5525-□HA□6**		1	1 unit	42S
133	37	**75**	90	118	30	40	**75**	100	5	**3RW5526-□HA□6**		1	1 unit	42S
161	45	**90**	110	143	40	50	**100**	125	5	**3RW5527-□HA□6**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals — **1 3**
Spring-type terminals

Control supply voltage
24 V AC/DC — **0 1**
110 ... 250 V AC

[1] 3RW55 soft starter with screw terminals for operational voltage up to 600 V: Standard delivery time SD = 2 days (d).

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage for inside-delta circuit 200 ... 600 V														
195	55	**110**	132	175	50	60	**125**	150	5	**3RW5534-□HA□6**		1	1 unit	42S
247	75	**132**	160	222	60	75	**150**	200	5	**3RW5535-□HA□6**		1	1 unit	42S
296	90	**160**	200	265	75	100	**200**	250	5	**3RW5536-□HA□6**		1	1 unit	42S
363	110	**200**	250	322	100	125	**250**	300	5	**3RW5543-□HA□6**		1	1 unit	42S
433	132	**250**	315	381	125	150	**300**	350	5	**3RW5544-□HA□6**		1	1 unit	42S
545	160	**315**	355	483	150	200	**400**	500	5	**3RW5545-□HA□6**		1	1 unit	42S
640	200	**355**	450	568	150	200	**450**	600	5	**3RW5546-□HA□6**		1	1 unit	42S
814	250	**400**	500	721	200	250	**600**	750	5	**3RW5547-□HA□6**		1	1 unit	42S
987	315	**560**	630	873	300	350	**750**	950	5	**3RW5548-□HA□6**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals — **2 6**
Screw terminals

Control supply voltage
24 V AC/DC — **0 1**
110 ... 250 V AC

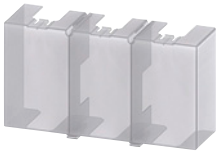
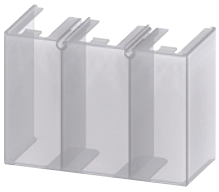
[1] 3RW55 soft starter with screw terminals for operational voltage up to 600 V: Standard delivery time SD = 2 days (d).

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

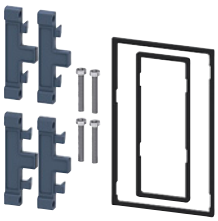
* You can order this quantity or a multiple thereof.
Illustrations are approximate

Selection and ordering data

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	Application	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Fan covers										
 3RW5983-0FC00	**Fan cover**	3RW551(1x), 3RW552, 3RW553 (2x)	--	--	1	**3RW5983-0FC00**		1	1 unit	42S
		3RW554	--	--	1	**3RW5984-0FC00**		1	1 unit	42S
Terminal covers										
 3RW5983-0TC20	**Terminal cover**	3RW552, 3RW553 (2x)	--	--	1	**3RW5983-0TC20**		1	1 unit	42S
 3RW5984-0TC20		3RW554 (2x)	--	--	1	**3RW5984-0TC20**		1	1 unit	42S
Enclosure components										
 3RW5950-0GL20	**Hinged cover**	3RW55	Without cutout	--	1	**3RW5950-0GL20**		1	1 unit	42S
Communication modules										
 3RW5980-0CS00	**Communication module**	3RW55	PROFINET Standard	--	1	**3RW5980-0CS00**		1	1 unit	42S
			PROFIBUS	--	1	**3RW5980-0CP00**		1	1 unit	42S
			Modbus TCP	--	1	**3RW5980-0CT00**		1	1 unit	42S

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Accessories NEW

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	Application	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
					d					
HMI modules										
 3RW5980-0HD00	**Door mounting kit**	3RW55	IP65	For HMI modules	1	**3RW5980-0HD00**		1	1 unit	42S
Connection cables										
 3UF793	**HMI connection cable**	3RW55	5 m	For door mounting	1	**3RW5980-0HC60**		1	1 unit	42S
	Connection cables	--	Length 2.5 m, round	For connection of the system components	▶	**3UF7933-0BA00-0**		1	1 unit	42J
			Length 1.0 m, round	For connection of the system components	▶	**3UF7937-0BA00-0**		1	1 unit	42J
			Length 0.5 m, round	For connection of the system components	▶	**3UF7932-0BA00-0**		1	1 unit	42J
Further accessories										
 3ZY1311-0AA00	**Push-in lugs for wall mounting**		Two lugs are required per device	--	2	**3ZY1311-0AA00**		1	10 units	41L

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Overview

More information	
Homepage, see www.siemens.com/soft-starter	Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917
Industry Mall, see www.siemens.com/product?3RW	SIRIUS Soft Starter ES (TIA Portal), see pages 14/6 and 14/9
Online configurator, see www.siemens.com/sirius/configurators	SIRIUS 3RW44 Soft Starter block library for SIMATIC PCS 7, see page 14/11

The SIRIUS 3RW44 High Performance soft starters are suitable for the torque-controlled soft starting and stopping as well as braking of three-phase asynchronous motors.

In addition to soft starting and stopping, the SIRIUS 3RW44 soft starters provide numerous functions for higher-level requirements. Soft starters are available in a performance range up to 710 kW (at 400 V) in the inline circuit and up to 1 200 kW (at 400 V) in the inside-delta circuit.

Combinations of various starting, operating and ramp-down possibilities ensure an optimum adaptation to the application-specific requirements.

Benefits

3RW442.

3RW443.

3RW444.

3RW445.

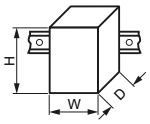
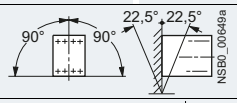
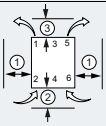
3RW446.

Product characteristics / function	Performance features / benefits
Soft starting with breakaway pulse, torque control or adjustable current limiting	Optimum adaptation to the requirements of the application
Keypad with a menu-prompted, multi-line graphic display with background lighting	Simple and fast commissioning and maintenance
Various setting options for the starting parameters such as starting torque, starting voltage, starting and ramp-down time, and much more in three separate parameter sets	Efficient configuration and maximum flexibility in automation engineering
Integral bypass contact system	Reduction of power loss during operation
Communication interface to the PC	More accurate setting of the parameters as well as control and monitoring
Connection to PROFIBUS and PROFINET with optional PROFIBUS DP or PROFINET module	Simple integration into higher-level controls

General data

Technical specifications

More information	
Manual "SIRIUS 3RW44 soft starters", see https://support.industry.siemens.com/cs/ww/en/view/21772518 FAQs, see https://support.industry.siemens.com/cs/ww/en/ps/16214/faq	Catalog LV 10, see www.siemens.com/lowvoltage/lv10

Type			3RW442.	3RW443.	3RW444.	3RW445.	3RW446.
Mechanics and environment							
Mounting dimensions (W x H x D) • Screw terminals • Spring-type terminals		mm mm	170 x 184 x 270 170 x 184 x 270	170 x 198 x 270 170 x 198 x 270	210 x 230 x 298 210 x 230 x 298	510 x 638.5 x 290 510 x 638.5 x 290	576 x 667 x 290 576 x 667 x 290
Permissible ambient temperature During operation During storage		°C °C	0 ... +60; (derating from +40) -25 ... +80				
Weight		kg	6.5	7.9	11.5	50	78
Permissible mounting position							
Installation type			Stand-alone installation  ① ≥ 5 mm (≥ 0.2 in) ② ≥ 75 mm (≥ 3 in) ③ ≥ 100 mm (≥ 4 in)				
Permissible installation altitude		m	5 000 (derating from 1 000, see characteristic curve on page 6/7)				
Degree of protection			IP00				

Type	Terminal		3RW44..-.BC3.	3RW44..-.BC4.
Control electronics				
Rated values Rated control supply voltage • Tolerance	A1/A2/PE	V %	115 AC -15/+10	230 AC
Rated frequency • Tolerance		Hz %	50 ... 60 ± 10	

Type		3RW44..-.BC.4	3RW44..-.BC.5	3RW44..-.BC.6
Power electronics				
Rated operational voltage for inline circuit[1] Tolerance	V AC %	200 ... 460 -15/+10	400 ... 600	400 ... 690
Maximum blocking voltage (thyristor)	V AC	1 400	1 800	
Rated operational voltage for inside-delta circuit Tolerance	V AC %	200 ... 460 -15/+10	400 ... 600	
Rated frequency Tolerance	Hz %	50 ... 60 ± 10		
Uninterrupted duty at 40 °C (% of I_e)	%	115		
Minimum load (% of set motor current I_M)	%	8		
Maximum cable length between soft starter and motor	m	500[2]		

1) 3RW44 soft starters may be used in isolated supply networks (IT systems) up to 600 V AC.

2) At the project configuration stage, it is important to make allowance for the voltage drop on the motor cable up to the motor connection. If necessary, higher values for the rated operational voltage or current must be calculated accordingly for the soft starter.

Type		3RW4422	3RW4423	3RW4424	3RW4425	3RW4426	3RW4427
Power electronics							
Rated operational current I_e	A	29	36	47	57	77	93
Load rating with rated operational current I_e							
• According to IEC and UL/CSA[1], for individual mounting, AC-53a							
- At 40/50/60 °C	A	29/26/23	36/32/29	47/42/37	57/51/45	77/68/59	93/82/72
Smallest adjustable rated motor current I_M For the motor overload protection	A	5	7	9	11	15	18
Power loss							
• In operation after completed starting with uninterrupted rated operational current (40/50/60 °C) approx.	W	8/7.5/7	10/9/8.5	32/31/29	36/34/31	45/41/37	55/51/47
• During starting with current limit set to 350% I_M (40/50/60 °C)	W	400/345/290	470/410/355	600/515/440	725/630/525	940/790/660	1160/980/830
Permissible rated motor current and starts per hour at 40/50/60 °C							
• **For normal starting (CLASS 10)**							
- Rated motor current I_M[2], ramp-up time 10 s	A	29/26/23	36/32.5/29	47/42/37	57/51/45	77/68/59	93/82/72
- Starts per hour[3]	1/h	20	15	20	20	20	20
- Rated motor current I_M[2], ramp-up time 20 s	A	29/26/23	36/32.5/29	47/42/37	57/51/45	77/68/59	93/82/72
- Starts per hour[3]	1/h	10	6	10	10	8	8

[1] Measurement at 60 °C according to UL/CSA not required.

[2] Current limit on soft starter set to 350% I_M, ON period = 70%. Maximum adjustable rated motor current I_M dependent on CLASS setting.

[3] For intermittent duty S4 with ON period = 70%, T_u = 40/50/60 °C, stand-alone installation, vertical. The quoted switching frequencies do not apply for automatic mode.

Type		3RW4434	3RW4435	3RW4436
Power electronics				
Rated operational current I_e	A	113	134	162
Load rating with rated operational current I_e				
• According to IEC and UL/CSA[1], for individual mounting, AC-53a				
- At 40/50/60 °C	A	113/100/88	134/117/100	162/145/125
Smallest adjustable rated motor current I_M For the motor overload protection	A	22	26	32
Power loss				
• In operation after completed starting with uninterrupted rated operational current (40/50/60 °C) approx.	W	64/58/53	76/67/58	95/83/71
• During starting with current limit set to 350% I_M (40/50/60 °C)	W	1 350/1 140/970	1 700/1 400/1 140	2 460/1 980/1 620
Permissible rated motor current and starts per hour at 40/50/60 °C				
• **For normal starting (CLASS 10)**				
- Rated motor current I_M[2], ramp-up time 10 s	A	113/100/88	134/117/100	162/145/125
- Starts per hour[3]	1/h	20	15	20
- Rated motor current I_M[2], ramp-up time 20 s	A	113/100/88	134/117/100	162/145/125
- Starts per hour[3]	1/h	9	6	7

[1] Measurement at 60 °C according to UL/CSA not required.

[2] Current limit on soft starter set to 350% I_M, ON period = 70%. Maximum adjustable rated motor current I_M dependent on CLASS setting.

[3] For intermittent duty S4 with ON period = 70%, T_u = 40/50/60 °C, stand-alone installation, vertical. The quoted switching frequencies do not apply for automatic mode.

Type		3RW4443	3RW4444	3RW4445	3RW4446	3RW4447
Power electronics						
Rated operational current I_e	A	203	250	313	356	432
Load rating with rated operational current I_e						
• According to IEC and UL/CSA[1], for individual mounting, AC-53a						
- At 40/50/60 °C	A	203/180/156	250/215/185	313/280/250	356/315/280	432/385/335
Smallest adjustable rated motor current I_M For the motor overload protection	A	40	50	62	71	86
Power loss						
• In operation after completed starting with uninterrupted rated operational current (40/50/60 °C) approx.	W	89/81/73	110/94/83	145/126/110	174/147/126	232/194/159
• During starting with current limit set to 350% I_M (40/50/60 °C)	W	3350/2600/2150	4000/2900/2350	4470/4000/3400	5350/4050/3500	5860/5020/4200
Permissible rated motor current and starts per hour at 40/50/60 °C						
• **For normal starting (CLASS 10)**						
- Rated motor current I_M[2], ramp-up time 10 s	A	203/180/156	250/215/185	313/280/250	356/315/280	432/385/335
- Starts per hour[3]	1/h	20	20	19	17	16
- Rated motor current I_M[2], ramp-up time 20 s	A	203/180/156	250/215/185	313/280/250	356/315/280	432/385/335
- Starts per hour[3]	1/h	9	10	6	4	5

[1] Measurement at 60 °C according to UL/CSA not required.

[2] Current limit on soft starter set to 350% I_M, ON period = 70%. Maximum adjustable rated motor current I_M dependent on CLASS setting.

[3] For intermittent duty S4 with ON period = 70%, T_u = 40/50/60 °C, stand-alone installation, vertical. The quoted switching frequencies do not apply for automatic mode.

General data

Type		3RW4453	3RW4454	3RW4455	3RW4456	3RW4457	3RW4458
Power electronics							
Rated operational current I_e	A	551	615	693	780	880	970
Load rating with rated operational current I_e							
• According to IEC and UL/CSA[1], for individual mounting, AC-53a							
- At 40/50/60 °C	A	551/494/438	615/551/489	693/615/551	780/693/615	880/780/693	970/850/760
Smallest adjustable rated motor current I_M For the motor overload protection	A	110	123	138	156	176	194
Power loss							
• In operation after completed starting with uninterrupted rated operational current (40/50/60 °C) approx.	W	159/135/113	186/156/130	220/181/152	214/176/146	250/204/168	270/215/179
• During starting with current limit set to 350% I_M							
- At 40 °C	W	7 020	8 100	9 500	11 100	13 100	15 000
- At 50 °C	W	6 111	7 020	8 100	9 500	11 000	12 500
- At 60 °C	W	5 263	5 996	7 020	8 100	8 100	10 700
Permissible rated motor current and starts per hour at 40/50/60 °C							
• For normal starting (CLASS 10)							
- Rated motor current I_M[2], ramp-up time 10 s	A	551/494/438	615/551/489	693/615/551	780/693/615	880/780/693	970/850/760
- Starts per hour[3]	1/h	20	20	16	13	8	5
- Rated motor current I_M[2], ramp-up time 20 s	A	551/494/438	615/551/489	693/615/551	780/693/615	880/780/693	970/850/760
- Starts per hour[3]	1/h	10	9	6	4	0.3	0.3

[1] Measurement at 60 °C according to UL/CSA not required.

[2] Current limit on soft starter set to 350% I_M, ON period = 70%. Maximum adjustable rated motor current I_M dependent on CLASS setting.

[3] For intermittent duty S4 with ON period = 70%, T_u = 40/50/60 °C, stand-alone installation, vertical. The quoted switching frequencies do not apply for automatic mode.

Type		3RW4465	3RW4466
Power electronics			
Rated operational current I_e	A	1076	1214
Load rating with rated operational current I_e			
• According to IEC and UL/CSA[1], for individual mounting, AC-53a			
- At 40/50/60 °C	A	1076/970/880	1214/1076/970
Smallest adjustable rated motor current I_M For the motor overload protection	A	215	242
Power loss			
• In operation after completed starting with uninterrupted rated operational current (40/50/60 °C) approx.	W	510/420/360	630/510/420
• During starting with current limit set to 350% I_M			
- At 40 °C	W	15 000	17 500
- At 50 °C	W	13 000	15 000
- At 60 °C	W	11 500	13 000
Permissible rated motor current and starts per hour at 40/50/60 °C			
• For normal starting (CLASS 10)			
- Rated motor current I_M[2], ramp-up time 10 s	A	1076/970/880	1214/1076/970
- Starts per hour[3]	1/h	11	6
- Rated motor current I_M[2], ramp-up time 20 s	A	1076/970/880	1214/1076/970
- Starts per hour[3]	1/h	3	0.5

[1] Measurement at 60 °C according to UL/CSA not required.

[2] Current limit on soft starter set to 350% I_M, ON period = 70%. Maximum adjustable rated motor current I_M dependent on CLASS setting.

[3] For intermittent duty S4 with ON period = 70%, T_u = 40/50/60 °C, stand-alone installation, vertical. The quoted switching frequencies do not apply for automatic mode.

Motor feeders with soft starters

The type of coordination according to which the motor feeder with soft starter is mounted depends on the application-specific requirements. Normally, fuseless mounting (combination of motor starter protector and soft starter) is sufficient.

If type of coordination "2" is to be fulfilled, then semiconductor fuses must be fitted in the motor feeder.

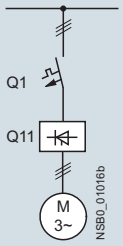
ToC 1 Type of coordination "1" according to IEC 60947-4-1: After a short-circuit incident, the unit is defective and therefore unsuitable for further use (protection of persons and system guaranteed).

ToC 2 Type of coordination "2" according to IEC 60947-4-1: After a short-circuit incident the unit is suitable for further use (protection of persons and system guaranteed).

The type of coordination refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

The types of coordination are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Inline circuit fuseless version

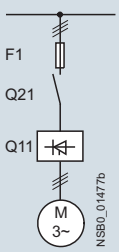


Soft starters ToC 1		Motor starter protectors[1]		
	Rated current	400 V + 10%		Rated current
Q11		Q1	I_q	
Type	A	Type	kA	A
Type of coordination "1"				
3RW4422	29	3RV2021-4EA10	42	32
3RW4423	36	3RV2021-4FA10	42	40
3RW4424	47	3RV2031-4WA10	32	52
3RW4425	57	3RV2031-4JA10	32	65
3RW4426	77	3RV2031-4RA10	32	80
3RW4427	93	3RV2042-4MA10	32	100
3RW4434	113	3VA2216-5MN32	55	160
3RW4435	134	3VA2216-5MN32	55	160
3RW4436	162	3VA2220-7MN32	55	200
3RW4443	203	3VA2325-7MN32	110	250
3RW4444	250	3VA2325-7MN32	110	250
3RW4445	313	3VA2440-7MN32	110	400
3RW4446	356	3VA2450-7MN32	110	500
3RW4447	432	3VA2450-7MN32	110	500
3RW4453	551	3VL6780-3SB36	65	800
3RW4454	615	3VL6780-3SB36	65	800
3RW4455	693	3VL6780-3SB36	65	800
3RW4456	780	3VL7710-3SB36	65	1 000
3RW4457	880	3VL7710-3SB36	65	1 000
3RW4458	970	3VL7712-3SB36	65	1 250
3RW4465	1 076	3VL7712-3SB36	65	1 250
3RW4466	1 214	3VL7712-3SB36	65	1 250

[1] The rated motor current must be considered when selecting the devices.

General data

Inline circuit fused version (line protection only)



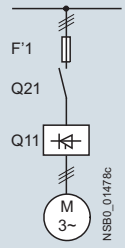
Soft starters ToC 1		Line protection, maximum				Braking contactors[1)2)]	
	Rated current	690 V + 5%	Rated current	Size	(optional)	(example circuit, see Manual 3RW44)	
Q11 Type	A	F1 Type	A		Q21 Type	Q91 Type	Q92 Type
Type of coordination "1"[3)]: I_q = 65 kA							
3RW4422	29	3NA3820-6	50	00	3RT2027	3RT2526	--
3RW4423	36	3NA3822-6	63	00	3RT2028	3RT2526	--
3RW4424	47	3NA3824-6	80	00	3RT2036	3RT2535	--
3RW4425	57	3NA3830-6	100	00	3RT2037	3RT2535	--
3RW4426	77	3NA3132-6	125	1	3RT2038	3RT2024	3RT2035
3RW4427	93	3NA3136-6	160	1	3RT2046	3RT2025	3RT2036
3RW4434	113	3NA3244-6	250	2	3RT1054	3RT2027	3RT2037
3RW4435	134	3NA3244-6	250	2	3RT1055	3RT2036	3RT2038
3RW4436	162	3NA3365-6	500	3	3RT1056	3RT2037	3RT2038
3RW4443	203	2 x 3NA3354-6	2 x 355	3	3RT1064	3RT2037	3RT1054
3RW4444	250	2 x 3NA3354-6	2 x 355	3	3RT1065	3RT2037	3RT1055
3RW4445	313	2 x 3NA3365-6	2 x 500	3	3RT1075	3RT1054	3RT1056
3RW4446	356	2 x 3NA3365-6	2 x 500	3	3RT1075	3RT1054	3RT1056
3RW4447	432	2 x 3NA3365-6	2 x 500	3	3RT1076	3RT1055	3RT1064
3RW4453	551	2 x 3NA3365-6	2 x 500	3	3TF68	3RT1064	3RT1066
3RW4454	615	2 x 3NA3365-6	2 x 500	3	3TF68	3RT1064	3RT1075
3RW4455	693	2 x 3NA3365-6	2 x 500	3	3TF69	3RT1065	3RT1075
3RW4456	780	2 x 3NA3365-6	2 x 500	3	3TF69	3RT1065	3RT1075
3RW4457	880	2 x 3NA3365-6	2 x 500	3	--	3RT1075	3RT1076
3RW4458	970	3 x 3NA3365-6	3 x 500	3	--	3RT1075	3RT1076
3RW4465	1 076	3 x 3NA3365-6	3 x 500	3	--	3RT1075	3TF68
3RW4466	1 214	3 x 3NA3365-6	3 x 500	3	--	3RT1076	3TF68

1) If the ramp-down function "Combined braking" is selected, no braking contactor is required.
If the ramp-down function "DC braking" is selected, a braking contactor must be used in addition (type, see table).
For applications with large centrifugal masses ($J_{Load} > J_{Motor}$) the function "DC braking" is recommended.

2) Additional auxiliary relay K4:
LZS:RT4A4T30
(3RW44 soft starter with rated control supply voltage 230 V AC),
LZS:RT4A4S15
(3RW44 soft starter with rated control supply voltage 115 V AC).

3) The type of coordination "1" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

Inline circuit fused version with 3NE1 SITOR all-range fuse (semiconductor and line protection)



For matching fuse bases, see Catalog LV 10:

- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

Soft starters ToC 2		All-range fuses				Line contactors up to 400 V	Braking contactors[1)2)]	
	Rated current		Rated current	Voltage	Size	(optional)	(example circuit, see Manual 3RW44)	
Q11 Type	A	F'1 Type	A	V		Q21 Type	Q91 Type	Q92 Type
Type of coordination "2"[3)]: I_q = 65 kA								
3RW4422	29	3NE1020-2	80	690 + 5%	00	3RT2027	3RT2526	--
3RW4423	36	3NE1020-2	80	690 + 5%	00	3RT2028	3RT2526	--
3RW4424	47	3NE1021-2	100	690 + 5%	00	3RT2036	3RT2535	--
3RW4425	57	3NE1022-2	125	690 + 5%	00	3RT2037	3RT2535	--
3RW4426	77	3NE1022-2	125	690 + 5%	00	3RT2038	3RT2024	3RT2035
3RW4427	93	3NE1224-2	160	690 + 5%	1	3RT2046	3RT2025	3RT2036
3RW4434	113	3NE1225-2	200	690 + 5%	1	3RT1054	3RT2027	3RT2037
3RW4435	134	3NE1227-2	250	690 + 5%	1	3RT1055	3RT2036	3RT2038
3RW4436	162	3NE1227-2	250	690 + 5%	1	3RT1056	3RT2037	3RT2038
3RW4443	203	3NE1230-2	315	600 + 10%	1	3RT1064	3RT2037	3RT1054
3RW4444	250	3NE1331-2	350	460 + 10%	2	3RT1065	3RT2037	3RT1055
3RW4445	313	3NE1333-2	450	690 + 5%	2	3RT1075	3RT1054	3RT1056
3RW4446	356	3NE1334-2	500	690 + 5%	2	3RT1075	3RT1054	3RT1056
3RW4447	432	3NE1435-2	560	690 + 5%	3	3RT1076	3RT1055	3RT1064
3RW4453	551	2 x 3NE1334-2	500	690 + 10%	2	3TF68	3RT1064	3RT1066
3RW4454	615	2 x 3NE1334-2	500	690 + 10%	2	3TF68	3RT1064	3RT1075
3RW4455	693	2 x 3NE1334-2	500	690 + 10%	2	3TF69	3RT1065	3RT1075
3RW4456	780	2 x 3NE1435-2	560	690 + 10%	3	3TF69	3RT1065	3RT1075
3RW4457	880	2 x 3NE1435-2	560	690 + 10%	3	--	3RT1075	3RT1076
3RW4458	970	2 x 3NE1435-2	560	690 + 10%	3	--	3RT1075	3RT1076
3RW4465	1 076	3 x 3NE1334-2	500	690 + 10%	2	--	3RT1075	3TF68
3RW4466	1 214	3 x 3NE1435-2	560	690 + 10%	3	--	3RT1076	3TF68

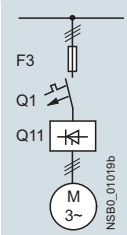
1) If the ramp-down function "Combined braking" is selected, no braking contactor is required.
If the ramp-down function "DC braking" is selected, a braking contactor must be used in addition (type, see table).
For applications with large centrifugal masses ($J_{Load} > J_{Motor}$) the function "DC braking" is recommended.

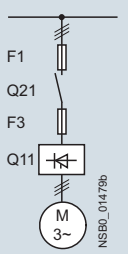
2) Additional auxiliary relay K4:
LZS:RT4A4T30
(3RW44 soft starter with rated control supply voltage 230 V AC),
LZS:RT4A4S15
(3RW44 soft starter with rated control supply voltage 115 V AC).

3) The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

General data

Inline circuit fused version with 3NE or 3NC SITOR semiconductor fuse
(semiconductor protection by fuse, line and overload protection by motor starter protector)





For matching fuse bases, see Catalog LV 10:
- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

Soft starters ToC 2		Semiconductor fuses, minimum			Semiconductor fuses (cylinder)		
	Rated current	690 V + 10%	Rated current	Size		Rated current	Size
Q11 Type	A	F3 Type	A		F3 Type	A	
Type of coordination "2"[1]: I_q = 65 kA							
3RW4422	29	3NE4120	80	0	3NC2280	80	22 x 58
3RW4423	36	3NE4121	100	0	3NC2200	100	22 x 58
3RW4424	47	3NE4121	100	0	3NC2200	100	22 x 58
3RW4425	57	3NE4122	125	0	--	--	--
3RW4426	77	3NE4124	160	0	--	--	--
3RW4427	93	3NE3224	160	1	--	--	--
3RW4434	113	3NE3225	200	1	--	--	--
3RW4435	134	3NE3225	200	1	--	--	--
3RW4436	162	3NE3227	250	1	--	--	--
3RW4443	203	3NE3230-0B	315	1	--	--	--
3RW4444	250	3NE3230-0B	315	1	--	--	--
3RW4445	313	3NE3233	450	1	--	--	--
3RW4446	356	3NE3333	450	2	--	--	--
3RW4447	432	3NE3335	560	2	--	--	--
3RW4453	551	2 x 3NE3335	560	2	--	--	--
3RW4454	615	2 x 3NE3335	560	2	--	--	--
3RW4455	693	2 x 3NE3335	560	2	--	--	--
3RW4456	780	2 x 3NE3336	630	2	--	--	--
3RW4457	880	2 x 3NE3336	630	2	--	--	--
3RW4458	970	2 x 3NE3336	630	2	--	--	--
3RW4465	1 076	2 x 3NE3340-8	900	2	--	--	--
3RW4466	1 214	2 x 3NE3340-8	900	2	--	--	--

Soft starters ToC 2		Line contactors up to 400 V	Braking contactors[2][3]		Motor starter protectors		Line protection, maximum		
	Rated current	(optional)	(example circuit, see Manual 3RW44)		400 V + 10%	Rated current	690 V + 5%	Rated current	Size
Q11 Type	A	Q21 Type	Q91 Type	Q92 Type	Q1 Type	A	F1 Type	A	
Type of coordination "2"[1]: I_q = 65 kA									
3RW4422	29	3RT2027	3RT2526	--	3RV2021-4EA10	32	3NA3820-6	50	00
3RW4423	36	3RT2028	3RT2526	--	3RV2021-4FA10	40	3NA3822-6	63	00
3RW4424	47	3RT2036	3RT2535	--	3RV2031-4WA10	52	3NA3824-6	80	00
3RW4425	57	3RT2037	3RT2535	--	3RV2031-4JA10	65	3NA3830-6	100	00
3RW4426	77	3RT2038	3RT2024	3RT2035	3RV2031-4RA10	80	3NA3132-6	125	1
3RW4427	93	3RT2046	3RT2025	3RT2036	3RV2042-4MA10	100	3NA3136-6	160	1
3RW4434	113	3RT1054	3RT2027	3RT2037	3VA2216-5MN32	160	3NA3244-6	250	2
3RW4435	134	3RT1055	3RT2036	3RT2038	3VA2216-5MN32	160	3NA3244-6	250	2
3RW4436	162	3RT1056	3RT2037	3RT2038	3VA2220-7MN32	200	3NA3365-6	500	3
3RW4443	203	3RT1064	3RT2037	3RT1054	3VA2325-7MN32	250	2 x 3NA3354-6	2 x 355	3
3RW4444	250	3RT1065	3RT2037	3RT1055	3VA2325-7MN32	250	2 x 3NA3354-6	2 x 355	3
3RW4445	313	3RT1075	3RT1054	3RT1056	3VA2440-7MN32	400	2 x 3NA3365-6	2 x 500	3
3RW4446	356	3RT1075	3RT1054	3RT1056	3VA2450-7MN32	500	2 x 3NA3365-6	2 x 500	3
3RW4447	432	3RT1076	3RT1055	3RT1064	3VA2450-7MN32	500	2 x 3NA3365-6	2 x 500	3
3RW4453	551	3TF68	3RT1064	3RT1066	3VL6780	800	2 x 3NA3365-6	2 x 500	3
3RW4454	615	3TF68	3RT1064	3RT1075	3VL6780	800	2 x 3NA3365-6	2 x 500	3
3RW4455	693	3TF69	3RT1065	3RT1075	3VL6780	800	2 x 3NA3365-6	2 x 500	3
3RW4456	780	3TF69	3RT1065	3RT1075	3VL7710	1 000	2 x 3NA3365-6	2 x 500	3
3RW4457	880	--	3RT1075	3RT1076	3VL7710	1 000	2 x 3NA3365-6	2 x 500	3
3RW4458	970	--	3RT1075	3RT1076	3VL7712	1 250	3 x 3NA3365-6	3 x 500	3
3RW4465	1 076	--	3RT1075	3TF68	3VL7712	1 250	3 x 3NA3365-6	3 x 500	3
3RW4466	1 214	--	3RT1076	3TF68	3VL7712	1 250	3 x 3NA3365-6	3 x 500	3

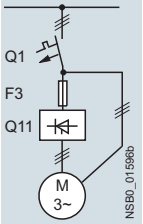
1) The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

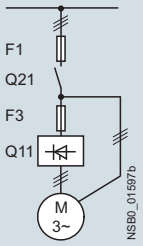
2) If the ramp-down function "Combined braking" is selected, no braking contactor is required. If the ramp-down function "DC braking" is selected, a braking contactor must be used in addition (type, see table).

For applications with large centrifugal masses ($J_{Load} > J_{Motor}$) the function "DC braking" is recommended.

3) Additional auxiliary relay K4:
LZS:RT4A4T30
(3RW44 soft starter with rated control supply voltage 230 V AC),
LZS:RT4A4S15
(3RW44 soft starter with rated control supply voltage 115 V AC).

Inside-delta circuit fused version with 3NE or 3NC SITOR fuses
(semiconductor protection by fuse, line and overload protection by motor starter protector)





For matching fuse bases, see Catalog LV 10:
- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

Soft starters		Semiconductor fuses, minimum			Semiconductor fuses (cylinder)		
Q11 Type	Rated current A	690 V +10% F3 Type	Rated current A	Size	F3 Type	Rated current A	Size
Type of coordination "2"[1]							
3RW4422	50	3NE4120	80	0	3NC2280	80	22 x 58
3RW4423	62	3NE4121	100	0	3NC2200	100	22 x 58
3RW4424	81	3NE4121	100	0	3NC2200	100	22 x 58
3RW4425	99	3NE4122	125	0	--	--	--
3RW4426	133	3NE4124	160	0	--	--	--
3RW4427	161	3NE3224	160	1	--	--	--
3RW4434	196	3NE3225	200	1	--	--	--
3RW4435	232	3NE3225	200	1	--	--	--
3RW4436	281	3NE3227	250	1	--	--	--
3RW4443	352	3NE3230-0B	315	1	--	--	--
3RW4444	433	3NE3230-0B	315	1	--	--	--
3RW4445	542	3NE3233	450	1	--	--	--
3RW4446	617	3NE3333	450	2	--	--	--
3RW4447	748	3NE3335	560	2	--	--	--
3RW4453	954	2 x 3NE3335	560	2	--	--	--
3RW4454	1 065	2 x 3NE3335	560	2	--	--	--
3RW4455	1 200	2 x 3NE3335	560	2	--	--	--
3RW4456	1 351	2 x 3NE3336	630	2	--	--	--
3RW4457	1 524	2 x 3NE3336	630	2	--	--	--
3RW4458	1 680	2 x 3NE3336	630	2	--	--	--
3RW4465	1 864	2 x 3NE3340-8	900	2	--	--	--
3RW4466	2 103	2 x 3NE3340-8	900	2	--	--	--

Soft starters		Line contactors up to 400 V	Motor starter protectors		Line protection, maximum		
Q11 Type	Rated current A	(optional) Q21 Type	400 V +10% Q1 Type	Rated current A	690 V +5% F1 Type	Rated current A	Size
Type of coordination "2"[1]							
3RW4422	50	3RT2036-1AP04	3RV2032-4VA10	45	3NA3824-6	80	00
3RW4423	62	3RT2037-1AP04	3RV2032-4JA10	65	3NA3830-6	100	00
3RW4424	81	3RT2038-1AP04	3RV2042-4YA10	93	3NA3132-6	125	1
3RW4425	99	3RT1054-1AP36	3RV2042-4MA10	100	3NA3136-6	160	1
3RW4426	133	3RT1055-6AP36	3VA2216-.MS32-0AA0	160	3NA3240-6	200	2
3RW4427	161	3RT1056-6AP36	3VA2220-.MS32-0AA0	200	3NA3244-6	250	2
3RW4434	196	3RT1064-6AP36	3VA2325-.MS32-0AA0	250	3NA3360-6	400	3
3RW4435	232	3RT1065-6AP36	3VA2325-.MS32-0AA0	250	3NA3360-6	400	3
3RW4436	281	3RT1066-6AP36	3VA2440-.MS32-0AA0	400	2 x 3NA3360-6	2 x 400	3
3RW4443	352	3RT1075-6AP36	3VA2440-.MS32-0AA0	400	2 x 3NA3365-6	2 x 500	3
3RW4444	433	3RT1076-6AP36	3VA2450-.MS32-0AA0	500	2 x 3NA3365-6	2 x 500	3
3RW4445	542	3TF6844-0CM7	3VL5763	630	3 x 3NA3365-6	3 x 500	3
3RW4446	617	3TF6844-0CM7	3VL6780	800	3 x 3NA3365-6	3 x 500	3
3RW4447	748	3TF69	3VL6780	800	3 x 3NA3365-6	3 x 500	3
3RW4453	954	--	3VL7710	1 000	3 x 3NA3365-6	3 x 500	3
3RW4454	1 065	--	3VL7712	1 250	3 x 3NA3365-6	3 x 500	3
3RW4455	1 200	--	3VL8716	1 600	3 x 3NA3365-6	3 x 500	3
3RW4456	1 351	--	3VL8716	1 600	3 x 3NA3372	3 x 630	3
3RW4457	1 524	--	3VL8716	1 600	3 x 3NA3372	3 x 630	3
3RW4458	1 680	--	3WL1220	2 000	2 x 3NA3480	2 x 1 000	4
3RW4465	1 864	--	3WL1225	2 500	2 x 3NA3482	2 x 1 250	4
3RW4466	2 103	--	3WL1225	2 500	2 x 3NA3482	2 x 1 250	4

[1] The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.
If the F3 semiconductor fuse is not used, the type of coordination "2" is reduced to type of coordination "1" for soft starters in combination with the stipulated protective device.

Inline circuit ***IE3/IE4 ready***

Selection and ordering data

For normal starting (CLASS 10)


3RW442.


3RW443.


3RW444.


3RW445.


3RW446.

3RW ambient temperature 40 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	690 V	3RW ambient temperature 50 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Inline circuit, rated operational voltage 200 ... 460 V															
29	5.5	**15**	--	--	26	7.5	7.5	**15**	--	5	**3RW4422-□BC□4**		1	1 unit	42H
36	7.5	**18.5**	--	--	32	10	10	**20**	--	5	**3RW4423-□BC□4**		1	1 unit	42H
47	11	**22**	--	--	42	10	15	**25**	--	5	**3RW4424-□BC□4**		1	1 unit	42H
57	15	**30**	--	--	51	15	15	**30**	--	5	**3RW4425-□BC□4**		1	1 unit	42H
77	18.5	**37**	--	--	68	20	20	**50**	--	5	**3RW4426-□BC□4**		1	1 unit	42H
93	22	**45**	--	--	82	25	25	**60**	--	5	**3RW4427-□BC□4**		1	1 unit	42H

Article No. supplement for connection types

- With screw terminals
- With spring-type terminals

1 3

113	30	**55**	--	--	100	30	30	**75**	--	5	**3RW4434-□BC□4**		1	1 unit	42H
134	37	**75**	--	--	117	30	40	**75**	--	5	**3RW4435-□BC□4**		1	1 unit	42H
162	45	**90**	--	--	145	40	50	**100**	--	5	**3RW4436-□BC□4**		1	1 unit	42H
203	55	**110**	--	--	180	50	60	**125**	--	5	**3RW4443-□BC□4**		1	1 unit	42H
250	75	**132**	--	--	215	60	75	**150**	--	5	**3RW4444-□BC□4**		1	1 unit	42H
313	90	**160**	--	--	280	75	100	**200**	--	5	**3RW4445-□BC□4**		1	1 unit	42H
356	110	**200**	--	--	315	100	125	**250**	--	5	**3RW4446-□BC□4**		1	1 unit	42H
432	132	**250**	--	--	385	125	150	**300**	--	5	**3RW4447-□BC□4**		1	1 unit	42H
551	160	**315**	--	--	494	150	200	**400**	--	15	**3RW4453-□BC□4**		1	1 unit	42H
615	200	**355**	--	--	551	150	200	**450**	--	15	**3RW4454-□BC□4**		1	1 unit	42H
693	200	**400**	--	--	615	200	250	**500**	--	15	**3RW4455-□BC□4**		1	1 unit	42H
780	250	**450**	--	--	693	200	250	**600**	--	15	**3RW4456-□BC□4**		1	1 unit	42H
880	250	**500**	--	--	780	250	300	**700**	--	15	**3RW4457-□BC□4**		1	1 unit	42H
970	315	**560**	--	--	850	300	350	**750**	--	15	**3RW4458-□BC□4**		1	1 unit	42H
1 076	355	**630**	--	--	970	350	400	**850**	--	15	**3RW4465-□BC□4**		1	1 unit	42H
1 214	400	**710**	--	--	1 076	350	450	**950**	--	15	**3RW4466-□BC□4**		1	1 unit	42H

Article No. supplement for connection types

- With spring-type terminals
- With screw terminals

2 6

Article No. supplement for rated control supply voltage U_s[2]

- 115 V AC
- 230 V AC

3 4

[1] 3RW442. to 3RW444. soft starters with screw terminals: Standard delivery time SD = 1 day (d).

[2] Control by way of the internal 24 V DC supply and direct control via PLC possible.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

For normal starting (CLASS 10)

3RW442.

3RW443.

3RW444.

3RW445.

3RW446.

3RW ambient temperature 40 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	690 V	3RW ambient temperature 50 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Inline circuit, rated operational voltage 400 ... 600 V															
29	--	15	**18.5**	--	26	--	--	15	**20**	5	**3RW4422-☐BC☐5**		1	1 unit	42H
36	--	18.5	**22**	--	32	--	--	20	**25**	5	**3RW4423-☐BC☐5**		1	1 unit	42H
47	--	22	**30**	--	42	--	--	25	**30**	5	**3RW4424-☐BC☐5**		1	1 unit	42H
57	--	30	**37**	--	51	--	--	30	**40**	5	**3RW4425-☐BC☐5**		1	1 unit	42H
77	--	37	**45**	--	68	--	--	50	**50**	5	**3RW4426-☐BC☐5**		1	1 unit	42H
93	--	45	**55**	--	82	--	--	60	**75**	5	**3RW4427-☐BC☐5**		1	1 unit	42H

Article No. supplement for connection types

- With screw terminals
- With spring-type terminals

1
3

113	--	55	**75**	--	100	--	--	75	**75**	5	**3RW4434-☐BC☐5**		1	1 unit	42H
134	--	75	**90**	--	117	--	--	75	**100**	5	**3RW4435-☐BC☐5**		1	1 unit	42H
162	--	90	**110**	--	145	--	--	100	**125**	5	**3RW4436-☐BC☐5**		1	1 unit	42H
203	--	110	**132**	--	180	--	--	125	**150**	5	**3RW4443-☐BC☐5**		1	1 unit	42H
250	--	132	**160**	--	215	--	--	150	**200**	5	**3RW4444-☐BC☐5**		1	1 unit	42H
313	--	160	**200**	--	280	--	--	200	**250**	5	**3RW4445-☐BC☐5**		1	1 unit	42H
356	--	200	**250**	--	315	--	--	250	**300**	5	**3RW4446-☐BC☐5**		1	1 unit	42H
432	--	250	**315**	--	385	--	--	300	**400**	5	**3RW4447-☐BC☐5**		1	1 unit	42H
551	--	315	**355**	--	494	--	--	400	**500**	15	**3RW4453-☐BC☐5**		1	1 unit	42H
615	--	355	**400**	--	551	--	--	450	**600**	15	**3RW4454-☐BC☐5**		1	1 unit	42H
693	--	400	**500**	--	615	--	--	500	**700**	15	**3RW4455-☐BC☐5**		1	1 unit	42H
780	--	450	**560**	--	693	--	--	600	**750**	15	**3RW4456-☐BC☐5**		1	1 unit	42H
880	--	500	**630**	--	780	--	--	700	**850**	15	**3RW4457-☐BC☐5**		1	1 unit	42H
970	--	560	**710**	--	850	--	--	750	**900**	15	**3RW4458-☐BC☐5**		1	1 unit	42H
1 076	--	630	**800**	--	970	--	--	850	**1 100**	15	**3RW4465-☐BC☐5**		1	1 unit	42H
1 214	--	710	**900**	--	1 076	--	--	950	**1 200**	15	**3RW4466-☐BC☐5**		1	1 unit	42H

Article No. supplement for connection types

- With spring-type terminals
- With screw terminals

2
6

Article No. supplement for rated control supply voltage U_s[2)]

- 115 V AC
- 230 V AC

3
4

[1)] Soft starter with screw terminals:
3RW442. to 3RW444. Standard delivery time SD = 2 days (d),
3RW445. to 3RW446. Standard delivery time SD = 5 days (d).

[2)] Control by way of the internal 24 V DC supply and direct control via PLC possible.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

Inline circuit ***IE3/IE4 ready***

For normal starting (CLASS 10)


3RW442.


3RW443.


3RW444.


3RW445.


3RW446.

3RW ambient temperature 40 °C Rated values of three-phase motors					3RW ambient temperature 50 °C Rated values of three-phase motors					SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	690 V	Operational current I_e	200 V	230 V	460 V	575 V						
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Inline circuit, rated operational voltage 400 ... 690 V															
29	--	15	18.5	**30**	26	--	--	15	**20**	5	**3RW4422-□BC□6**		1	1 unit	42H
36	--	18.5	22	**37**	32	--	--	20	**25**	5	**3RW4423-□BC□6**		1	1 unit	42H
47	--	22	30	**45**	42	--	--	25	**30**	5	**3RW4424-□BC□6**		1	1 unit	42H
57	--	30	37	**55**	51	--	--	30	**40**	5	**3RW4425-□BC□6**		1	1 unit	42H
77	--	37	45	**75**	68	--	--	50	**50**	5	**3RW4426-□BC□6**		1	1 unit	42H
93	--	45	55	**90**	82	--	--	60	**75**	5	**3RW4427-□BC□6**		1	1 unit	42H
113	--	55	75	**110**	100	--	--	75	**75**	5	**3RW4434-□BC□6**		1	1 unit	42H
134	--	75	90	**132**	117	--	--	75	**100**	5	**3RW4435-□BC□6**		1	1 unit	42H
162	--	90	110	**160**	145	--	--	100	**125**	5	**3RW4436-□BC□6**		1	1 unit	42H
203	--	110	132	**200**	180	--	--	125	**150**	5	**3RW4443-□BC□6**		1	1 unit	42H
250	--	132	160	**250**	215	--	--	150	**200**	5	**3RW4444-□BC□6**		1	1 unit	42H
313	--	160	200	**315**	280	--	--	200	**250**	5	**3RW4445-□BC□6**		1	1 unit	42H
356	--	200	250	**355**	315	--	--	250	**300**	5	**3RW4446-□BC□6**		1	1 unit	42H
432	--	250	315	**400**	385	--	--	300	**400**	5	**3RW4447-□BC□6**		1	1 unit	42H
551	--	315	355	**560**	494	--	--	400	**500**	15	**3RW4453-□BC□6**		1	1 unit	42H
615	--	355	400	**630**	551	--	--	450	**600**	15	**3RW4454-□BC□6**		1	1 unit	42H
693	--	400	500	**710**	615	--	--	500	**700**	15	**3RW4455-□BC□6**		1	1 unit	42H
780	--	450	560	**800**	693	--	--	600	**750**	15	**3RW4456-□BC□6**		1	1 unit	42H
880	--	500	630	**900**	780	--	--	700	**850**	15	**3RW4457-□BC□6**		1	1 unit	42H
970	--	560	710	**1 000**	850	--	--	750	**900**	15	**3RW4458-□BC□6**		1	1 unit	42H
1 076	--	630	800	**1 100**	970	--	--	850	**1 100**	15	**3RW4465-□BC□6**		1	1 unit	42H
1 214	--	710	900	**1 200**	1 076	--	--	950	**1 200**	15	**3RW4466-□BC□6**		1	1 unit	42H

Article No. supplement for connection types

- With screw terminals
- With spring-type terminals

1
3

Article No. supplement for connection types

- With spring-type terminals
- With screw terminals

2
6

Article No. supplement for rated control supply voltage U_s [1)]

- 115 V AC
- 230 V AC

3
4

1) Control by way of the internal 24 V DC supply and direct control via PLC possible.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Selection and ordering data

For normal starting (CLASS 10)

3RW442.

3RW443.

3RW444.

3RW445.

3RW446.

3RW ambient temperature 40 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	690 V	3RW ambient temperature 50 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Inside-delta circuit, rated operational voltage 200 ... 460 V															
50	15	**22**	--	--	45	10	15	**30**	--	5	**3RW4422-☐BC☐4**		1	1 unit	42H
62	18.5	**30**	--	--	55	15	20	**40**	--	5	**3RW4423-☐BC☐4**		1	1 unit	42H
81	22	**45**	--	--	73	20	25	**50**	--	5	**3RW4424-☐BC☐4**		1	1 unit	42H
99	30	**55**	--	--	88	25	30	**60**	--	5	**3RW4425-☐BC☐4**		1	1 unit	42H
133	37	**75**	--	--	118	30	40	**75**	--	5	**3RW4426-☐BC☐4**		1	1 unit	42H
161	45	**90**	--	--	142	40	50	**100**	--	5	**3RW4427-☐BC☐4**		1	1 unit	42H
196	55	**110**	--	--	173	50	60	**125**	--	5	**3RW4434-☐BC☐4**		1	1 unit	42H
232	75	**132**	--	--	203	60	75	**150**	--	5	**3RW4435-☐BC☐4**		1	1 unit	42H
281	90	**160**	--	--	251	75	100	**200**	--	5	**3RW4436-☐BC☐4**		1	1 unit	42H
352	110	**200**	--	--	312	100	125	**250**	--	5	**3RW4443-☐BC☐4**		1	1 unit	42H
433	132	**250**	--	--	372	125	150	**300**	--	5	**3RW4444-☐BC☐4**		1	1 unit	42H
542	160	**315**	--	--	485	150	200	**400**	--	5	**3RW4445-☐BC☐4**		1	1 unit	42H
617	200	**355**	--	--	546	150	200	**450**	--	5	**3RW4446-☐BC☐4**		1	1 unit	42H
748	250	**400**	--	--	667	200	250	**600**	--	5	**3RW4447-☐BC☐4**		1	1 unit	42H
954	315	**560**	--	--	856	300	350	**750**	--	15	**3RW4453-☐BC☐4**		1	1 unit	42H
1 065	355	**630**	--	--	954	350	400	**850**	--	15	**3RW4454-☐BC☐4**		1	1 unit	42H
1 200	400	**710**	--	--	1 065	350	450	**950**	--	15	**3RW4455-☐BC☐4**		1	1 unit	42H
1 351	450	**800**	--	--	1 200	450	500	**1 050**	--	15	**3RW4456-☐BC☐4**		1	1 unit	42H
1 524	500	**900**	--	--	1 351	450	600	**1 200**	--	15	**3RW4457-☐BC☐4**		1	1 unit	42H
1 680	560	**1 000**	--	--	1 472	550	650	**1 300**	--	15	**3RW4458-☐BC☐4**		1	1 unit	42H
1 864	630	**1 100**	--	--	1 680	650	750	**1 500**	--	15	**3RW4465-☐BC☐4**		1	1 unit	42H
2 103	710	**1 200**	--	--	1 864	700	850	**1 700**	--	15	**3RW4466-☐BC☐4**		1	1 unit	42H

Article No. supplement for connection types

- With screw terminals
- With spring-type terminals

1
3

Article No. supplement for connection types

- With spring-type terminals
- With screw terminals

2
6

Article No. supplement for rated control supply voltage U_s[2)]

- 115 V AC
- 230 V AC

3
4

[1)] 3RW442. to 3RW444. soft starters with screw terminals: Standard delivery time SD = 1 day (d).

[2)] Control by way of the internal 24 V DC supply and direct control via PLC possible.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

Inside-delta circuit *IE3/IE4 ready*

For normal starting (CLASS 10)


3RW442.


3RW443.


3RW444.


3RW445.


3RW446.

3RW ambient temperature 40 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	690 V	3RW ambient temperature 50 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
A	kW	kW	kW	kW	A	hp	hp	hp	hp	d					
Inside-delta circuit, rated operational voltage 400 ... 600 V															
50	--	22	**30**	--	45	--	--	30	**40**	5	**3RW4422-□BC□5**		1	1 unit	42H
62	--	30	**37**	--	55	--	--	40	**50**	5	**3RW4423-□BC□5**		1	1 unit	42H
81	--	45	**45**	--	73	--	--	50	**60**	5	**3RW4424-□BC□5**		1	1 unit	42H
99	--	55	**55**	--	88	--	--	60	**75**	5	**3RW4425-□BC□5**		1	1 unit	42H
133	--	75	**90**	--	118	--	--	75	**100**	5	**3RW4426-□BC□5**		1	1 unit	42H
161	--	90	**110**	--	142	--	--	100	**125**	5	**3RW4427-□BC□5**		1	1 unit	42H
196	--	110	**132**	--	173	--	--	125	**150**	5	**3RW4434-□BC□5**		1	1 unit	42H
232	--	132	**160**	--	203	--	--	150	**200**	5	**3RW4435-□BC□5**		1	1 unit	42H
281	--	160	**200**	--	251	--	--	200	**250**	5	**3RW4436-□BC□5**		1	1 unit	42H
352	--	200	**250**	--	312	--	--	250	**300**	5	**3RW4443-□BC□5**		1	1 unit	42H
433	--	250	**315**	--	372	--	--	300	**350**	5	**3RW4444-□BC□5**		1	1 unit	42H
542	--	315	**355**	--	485	--	--	400	**500**	5	**3RW4445-□BC□5**		1	1 unit	42H
617	--	355	**450**	--	546	--	--	450	**600**	5	**3RW4446-□BC□5**		1	1 unit	42H
748	--	400	**500**	--	667	--	--	600	**750**	5	**3RW4447-□BC□5**		1	1 unit	42H
954	--	560	**630**	--	856	--	--	750	**950**	15	**3RW4453-□BC□5**		1	1 unit	42H
1 065	--	630	**710**	--	954	--	--	850	**1 050**	15	**3RW4454-□BC□5**		1	1 unit	42H
1 200	--	710	**800**	--	1 065	--	--	950	**1 200**	15	**3RW4455-□BC□5**		1	1 unit	42H
1 351	--	800	**900**	--	1 200	--	--	1 050	**1 350**	15	**3RW4456-□BC□5**		1	1 unit	42H
1 524	--	900	**1 000**	--	1 351	--	--	1 200	**1 500**	15	**3RW4457-□BC□5**		1	1 unit	42H
1 680	--	1 000	**1 200**	--	1 472	--	--	1 300	**1 650**	15	**3RW4458-□BC□5**		1	1 unit	42H
1 864	--	1 100	**1 350**	--	1 680	--	--	1 500	**1 900**	15	**3RW4465-□BC□5**		1	1 unit	42H
2 103	--	1 200	**1 500**	--	1 864	--	--	1 700	**2 100**	15	**3RW4466-□BC□5**		1	1 unit	42H

Article No. supplement for connection types

- With screw terminals
- With spring-type terminals

1
3

Article No. supplement for connection types

- With spring-type terminals
- With screw terminals

2
6

Article No. supplement for rated control supply voltage U_s[2]

- 115 V AC
- 230 V AC

3
4

[1] Soft starter with screw terminals:
3RW442. to 3RW444. Standard delivery time SD = 2 days (d),
3RW445. to 3RW446. Standard delivery time SD = 5 days (d).

[2] Control by way of the internal 24 V DC supply and direct control via PLC possible.

Note:

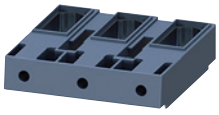
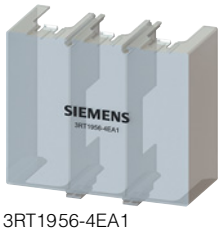
For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Selection and ordering data

More information

Manual "SIRIUS 3RW44 soft starters", see
https://support.industry.siemens.com/cs/ww/en/view/21772518

	Version		SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
			d					
USB PC cables								
 3UF7941-0AA00-0	**For PC/PG communication with SIRIUS 3RW44 soft starters** Through the system interface, for connecting to the USB interface of the PC/PG		►	**3UF7941-0AA00-0**		1	1 unit	42J
Communication modules								
 3RW4900-0KC00	**PROFIBUS communication module** For 3RW44 soft starter integration in the PROFIBUS network with DPV1 slave functionality. With firmware version E04 and higher (or date of manufacture 01.05.2009 and later) of the module, DPV1 operation of the soft starter on a Y-link is also possible (only DPV0 operation possible with < E04).		►	**3RW4900-0KC00**		1	1 unit	42H
 3RW4900-0NC00	**PROFINET communication module** For 3RW44 soft starter integration in the PROFINET network, suitable for devices with firmware version E12 or higher		►	**3RW4900-0NC00**		1	1 unit	42H
External display and operator module								
 3RW4900-0AC00	For indicating and operating the functions provided by the soft starter using an externally mounted display and operator module in degree of protection IP54 (e.g. in the control cabinet door)		►	**3RW4900-0AC00**		1	1 unit	42H
	Connection cables From the device interface (serial) of the 3RW44 soft starter to the external display and operator module							
	• Length 0.5 m, flat		►	**3UF7932-0AA00-0**		1	1 unit	42J
	• Length 0.5 m, round		►	**3UF7932-0BA00-0**		1	1 unit	42J
	• Length 1.0 m, round		►	**3UF7937-0BA00-0**		1	1 unit	42J
	• Length 2.5 m, round		►	**3UF7933-0BA00-0**		1	1 unit	42J
Box terminal blocks for soft starters								
 3RT1956-4G	**Box terminal block** (2 units are required for each device)							
	3RW442.	Included in the scope of supply						
	3RW443.	• Up to 70 mm^2	►	**3RT1955-4G**		1	1 unit	41B
		• Up to 120 mm^2	►	**3RT1956-4G**		1	1 unit	41B
		Auxiliary conductor connection for box terminals	5	**3TX7500-0A**		1	1 unit	41B
	3RW444.	• Up to 240 mm^2 (with auxiliary conductor connection)	►	**3RT1966-4G**		1	1 unit	41B
Covers for soft starters								
	Terminal covers for box terminals Additional touch protection to be fitted at the box terminals (2 units required per device)							
	3RW442. and 3RW443.		►	**3RT1956-4EA2**		1	1 unit	41B
	3RW444.		►	**3RT1966-4EA2**		1	1 unit	41B
 3RT1956-4EA1	**Terminal covers for cable lugs and busbar connections**							
	3RW442. and 3RW443.	For complying with the voltage clearances and as touch protection (2 units required per contactor) Also fits on mounted box terminals.	►	**3RT1956-4EA1**		1	1 unit	41B
	3RW444.		►	**3RT1966-4EA1**		1	1 unit	41B

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

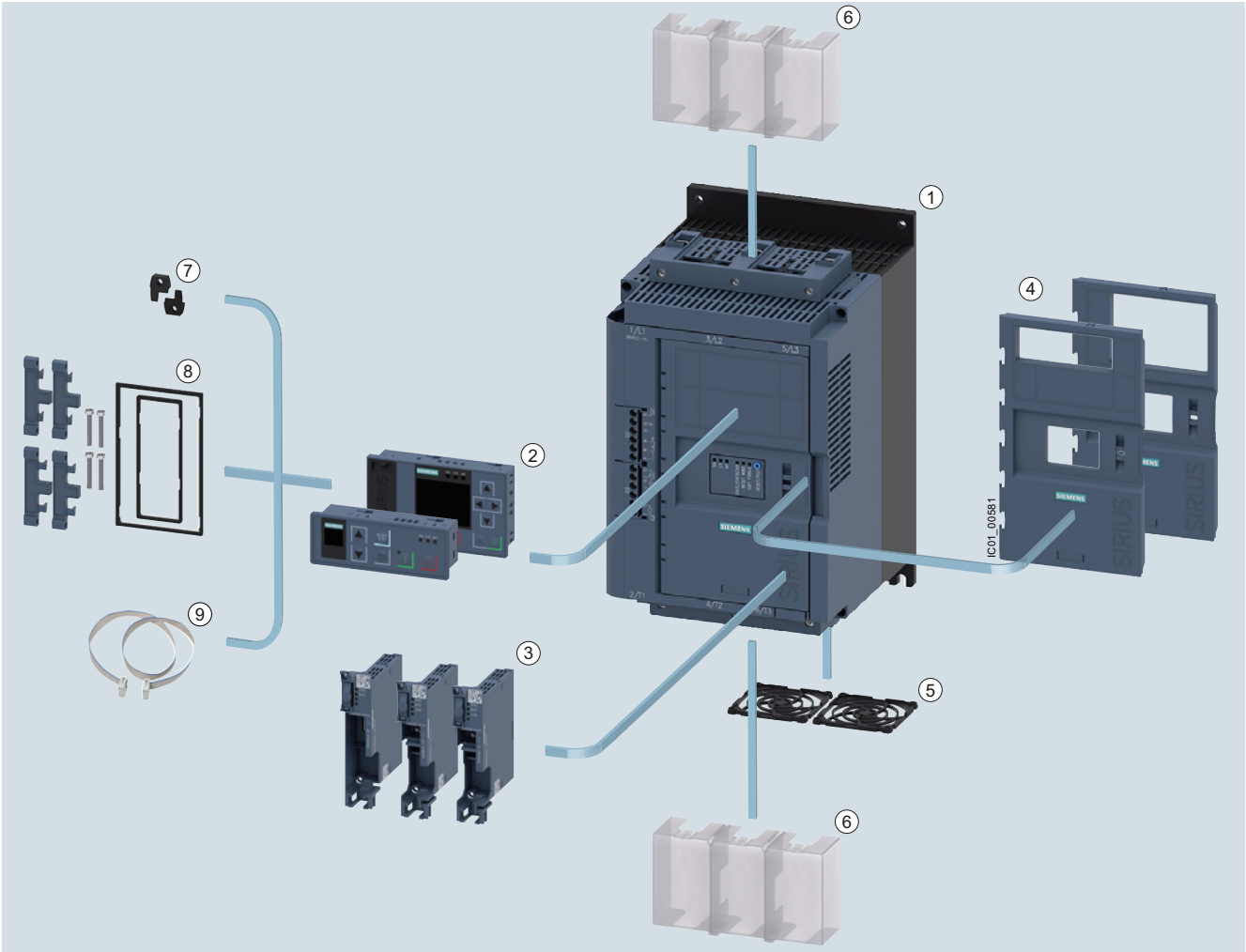
Overview

More information

Homepage, see www.siemens.com/soft-starter
Industry Mall, see www.siemens.com/product?3RW
Online configurator, see www.siemens.com/sirius/configurators
Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917

SIRIUS 3RW52 General Performance soft starters are the ideal solution for standard applications. With ideal 3-phase motor control, they cover the performance range from 5.5 kW to 560 kW (at 400 V).

With optional HMI modules, plug-in communication modules (PROFINET, PROFIBUS, Modbus) and either an analog output or thermistor motor protection, they ensure maximum flexibility. With their modern hybrid switching technology, the SIRIUS 3RW52 soft starters offer efficient switching for long-term, energy-saving use.

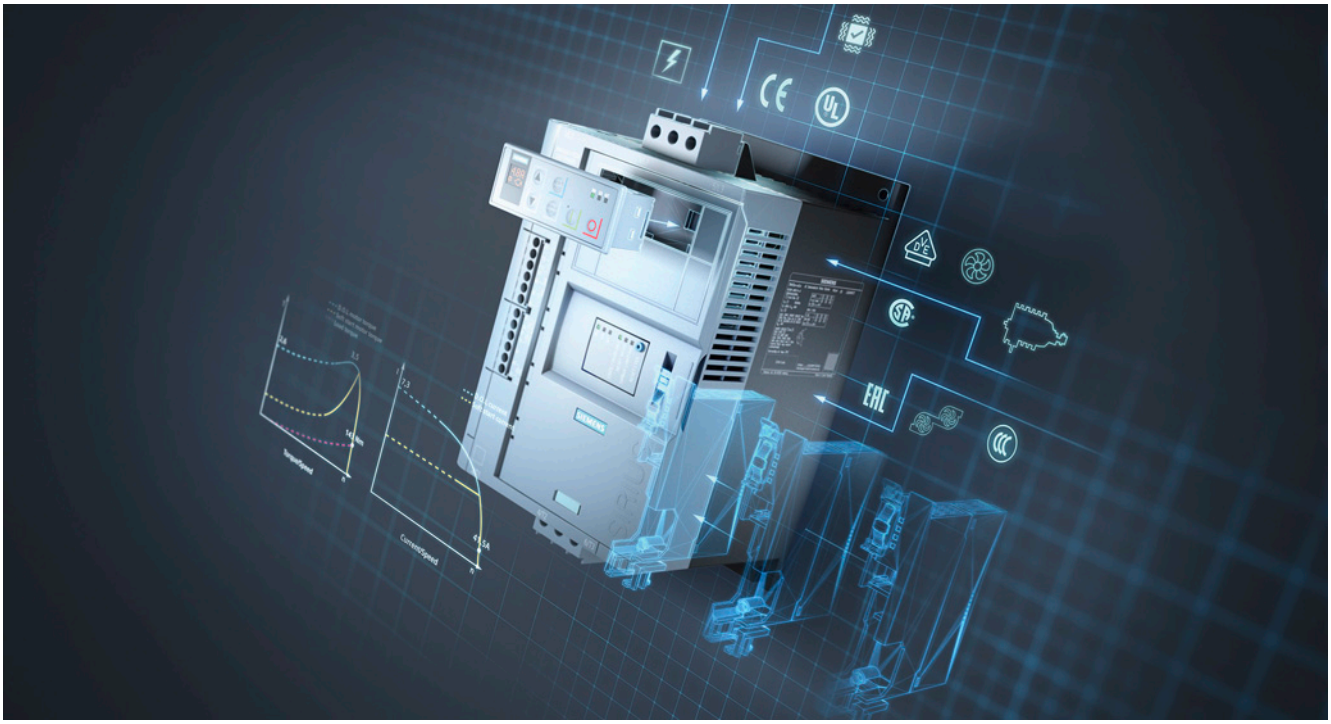


1 3RW52 soft starter

2 HMI modules
3 Communication modules
4 Hinged cover
5 Fan covers
6 Terminal covers
7 Push-in lugs for wall mounting
8 IP65 door mounting kit
9 HMI soft starter connection cable

General Performance soft starters with accessories, for expansion with HMI module or communication modules, see Accessories, page 6/44

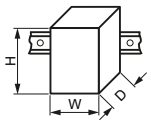
Benefits



Product characteristics / function	Performance features / benefits
Hybrid switching devices and three-phase motor control	Minimum power loss and optimum/symmetrical motor control
TIA-Integration – communication modules and HMI modules optional	Efficient configuration and maximum flexibility in automation engineering
Soft Torque	Reduced mechanical loading and optimum pump stop
Parameterization using potentiometers	Simple and fast commissioning
Wide range for control supply and main voltage	Low variance, high system availability even with weak supply networks

Technical specifications

More information	
Technical specifications, see https://support.industry.siemens.com/cs/ww/en/ps/25100/td Manual, see https://support.industry.siemens.com/cs/ww/en/view/109753751 FAQs, see https://support.industry.siemens.com/cs/ww/en/ps/25100/faq	Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917

Type			3RW5213 3RW5214 3RW5215	3RW5216 3RW5217	3RW5224 3RW5225	3RW5226 3RW5227 3RW5234 3RW5235 3RW5236	3RW5243 3RW5244 3RW5245 3RW5246 3RW5247 3RW5248
Installation/fixing/dimensions							
Width x height x depth		mm	170 × 275 × 152		185 × 306 × 203		210 × 393 × 203
Type of fixing			Screw fixing				
Mounting position			For vertical mounting surface can be rotated +/-10° and tilted forward or backward	For vertical mounting surface can be rotated +/-90°, for vertical mounting surface can be tilted +/- 22.5° forward or backward	For vertical mounting surface can be rotated +/-10° and tilted forward or backward	For vertical mounting surface can be rotated +/-90°, for vertical mounting surface can be tilted +/- 22.5° forward or backward	
Distance to be maintained with side-by-side mounting							
• Above		mm	100				
• At the side		mm	5				
• Below		mm	75				
Maximum installation altitude above sea level[1]		m	5 000				
Ambient conditions							
Ambient temperature							
• During operation[2]		°C	-25 ... +60				
• During storage		°C	-40 ... +80				
Environmental category according to IEC 60721							
• During operation			3K6 (no ice formation, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
• During storage			3K6 (no ice formation, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
• During transport			3K6 (no ice formation, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				

1) Derating above 1000 m, see Manual or characteristic curve on page 6/7.
2) Note derating above 40 °C

Type		3RW521.-..C0.	3RW521.-..C1.	3RW522.-..C0. 3RW523.-..C0.	3RW522.-..C1. 3RW523.-..C1.	3RW524.-..C0.	3RW524.-..C1.
Control circuit/control							
Control supply voltage							
• At AC/DC, rated value	V	24/24	--/--	24/24	--/--	24/24	--/--
• At AC	V	--	110 ... 250	--	110 ... 250	--	110 ... 250
• Relative negative tolerance/ relative positive tolerance with AC	%	-20/20	-15/10	-20/20	-15/10	-20/20	-15/10
• Relative negative tolerance/ relative positive tolerance with DC	%	-20/20	--/--	-20/20	--/--	-20/20	--/--
Frequency of the control supply voltage	Hz	50 ... 60					
• Relative negative tolerance/relative positive tolerance	%	-10/10					
Control supply current in standby mode Rated value	mA	160	30	160	30	160	30
Holding current in bypass mode Rated value	mA	360	75	380	75	470	100
Maximum locked-rotor current on closing the bypass contacts	A	0.75	0.17	7.6	2.5	7.6	2.2
Maximum inrush current peak on applying the control supply voltage	A	3.3	12.2	3.3	12.2	3.3	12.2
Duration of inrush current peak on applying the control supply voltage	ms	12.1	2.2	12.1	2.2	12.1	2.2
Type of overvoltage protection		Varistors					
Type of short-circuit protection for control circuit[1)]		Fuse 4 A gG (I_{cu}=1 kA), fuse 6 A quick-response (I_{cu}=1 kA), MCB C1 (I_{cu} = 600 A), MCB C6 (I_{cu} = 300 A)					

1) Not included in scope of supply

Type		3RW52..-..C.4	3RW52..-..C.5
Power electronics			
Operational voltage rated value	V	200 ... 480	200 ... 600
• Relative negative tolerance/ relative positive tolerance	%	-15/10	
Operational voltage for inside-delta circuit rated value	V	200 ... 480	200 ... 600
• Relative negative tolerance/ relative positive tolerance	%	-15/10	
Operating frequency	Hz	50 ... 60	
• Relative negative tolerance/ relative positive tolerance	%	-10/10	
Minimum load [% of I_M][1)]	%	15	
Length of cable between soft starter and motor	m	800	
Power loss [W] at 40 °C			
• At rated value current after startup	W	4	

1) Relative to set I_e

Inline circuit | *IE3/IE4 ready* | NEW

Selection and ordering data

For normal starting (CLASS 10A)


3RW521.


3RW522.


3RW523.


3RW524.

At 40 °C				At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 480 V														
13	3	**5.5**	--	11.5	2	3	**7.5**	--	5	**3RW5213-□□C□4**		1	1 unit	42S
18	4	**7.5**	--	15.9	3	5	**10**	--	5	**3RW5214-□□C□4**		1	1 unit	42S
25	5.5	**11**	--	22.3	5	7.5	**15**	--	5	**3RW5215-□□C□4**		1	1 unit	42S
32	7.5	**15**	--	28.4	7.5	10	**20**	--	5	**3RW5216-□□C□4**		1	1 unit	42S
38	11	**18.5**	--	33.5	10	10	**20**	--	5	**3RW5217-□□C□4**		1	1 unit	42S
47	11	**22**	--	41.6	10	10	**30**	--	5	**3RW5224-□□C□4**		1	1 unit	42S
63	18.5	**30**	--	55.5	15	20	**40**	--	5	**3RW5225-□□C□4**		1	1 unit	42S
77	22	**37**	--	68	20	25	**50**	--	5	**3RW5226-□□C□4**		1	1 unit	42S
93	22	**45**	--	82.5	25	30	**60**	--	5	**3RW5227-□□C□4**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals — **1 3**
Spring-type terminals — **2 6**

Product function
Analog output — **A**
Thermistor motor protection — **T**

Control supply voltage
24 V AC/DC — **0**
110 ... 250 V AC — **1**

[1] 3RW52 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

At 40 °C				At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 480 V														
113	30	**55**	--	101	30	30	**75**	--	5	**3RW5234-□□C□4**		1	1 unit	42S
143	37	**75**	--	128	40	40	**100**	--	5	**3RW5235-□□C□4**		1	1 unit	42S
171	45	**90**	--	153	50	50	**100**	--	5	**3RW5236-□□C□4**		1	1 unit	42S
210	55	**110**	--	186	60	60	**150**	--	5	**3RW5243-□□C□4**		1	1 unit	42S
250	75	**132**	--	220	60	75	**150**	--	5	**3RW5244-□□C□4**		1	1 unit	42S
315	90	**160**	--	279	75	100	**200**	--	5	**3RW5245-□□C□4**		1	1 unit	42S
370	110	**200**	--	328	100	125	**250**	--	5	**3RW5246-□□C□4**		1	1 unit	42S
470	132	**250**	--	416	150	150	**350**	--	5	**3RW5247-□□C□4**		1	1 unit	42S
570	160	**315**	--	504	150	200	**400**	--	5	**3RW5248-□□C□4**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals — **2 6**
Screw terminals — **1 3**

Product function
Analog output — **A**
Thermistor motor protection — **T**

Control supply voltage
24 V AC/DC — **0**
110 ... 250 V AC — **1**

[1] 3RW52 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

Note:
For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

NEW IE3/IE4 ready Inline circuit

For normal starting (CLASS 10A)


3RW5213.


3RW522.


3RW523.


3RW524.

At 40 °C				At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 600 V														
13	3	**5.5**	7.5	11.5	2	3	**7.5**	10	5	**3RW5213-□□C□5**		1	1 unit	42S
18	4	**7.5**	11	15.9	3	5	**10**	10	5	**3RW5214-□□C□5**		1	1 unit	42S
25	5.5	**11**	15	22.3	5	7.5	**15**	20	5	**3RW5215-□□C□5**		1	1 unit	42S
32	7.5	**15**	18.5	28.4	7.5	10	**20**	25	5	**3RW5216-□□C□5**		1	1 unit	42S
38	11	**18.5**	22	33.5	10	10	**20**	30	5	**3RW5217-□□C□5**		1	1 unit	42S
47	11	**22**	30	41.6	10	10	**30**	40	5	**3RW5224-□□C□5**		1	1 unit	42S
63	18.5	**30**	37	55.5	15	20	**40**	50	5	**3RW5225-□□C□5**		1	1 unit	42S
77	22	**37**	45	68	20	25	**50**	60	5	**3RW5226-□□C□5**		1	1 unit	42S
93	22	**45**	55	82.5	25	30	**60**	75	5	**3RW5227-□□C□5**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals
Spring-type terminals

Product function
Analog output
Thermistor motor protection

Control supply voltage
24 V AC/DC
110 ... 250 V AC

3RW5227-**1 3** **A T** **0 1**

[1] 3RW52 soft starter with screw terminals for operational voltage up to 600 V: Standard delivery time SD = 2 days (d).

At 40 °C				At 50 °C					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 600 V														
113	30	**55**	75	101	30	30	**75**	100	5	**3RW5234-□□C□5**		1	1 unit	42S
143	37	**75**	90	128	40	40	**100**	125	5	**3RW5235-□□C□5**		1	1 unit	42S
171	45	**90**	110	153	50	50	**100**	150	5	**3RW5236-□□C□5**		1	1 unit	42S
210	55	**110**	132	186	60	60	**150**	150	5	**3RW5243-□□C□5**		1	1 unit	42S
250	75	**132**	160	220	60	75	**150**	200	5	**3RW5244-□□C□5**		1	1 unit	42S
315	90	**160**	200	279	75	100	**200**	250	5	**3RW5245-□□C□5**		1	1 unit	42S
370	110	**200**	250	328	100	125	**250**	300	5	**3RW5246-□□C□5**		1	1 unit	42S
470	132	**250**	315	416	150	150	**350**	450	5	**3RW5247-□□C□5**		1	1 unit	42S
570	160	**315**	355	504	150	200	**400**	500	5	**3RW5248-□□C□5**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals
Screw terminals

Product function
Analog output
Thermistor motor protection

Control supply voltage
24 V AC/DC
110 ... 250 V AC

3RW5248-**2 6** **A T** **0 1**

[1] 3RW52 soft starter with screw terminals for operational voltage up to 600 V: Standard delivery time SD = 2 days (d).

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

Inside-delta circuit *IE3/IE4 ready* NEW

Selection and ordering data

For normal starting (CLASS 10A)


3RW521.


3RW522.


3RW523.


3RW524.

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 480 V														
22.5	5.5	**11**	--	19.9	5	5	**10**	--	5	**3RW5213-□□C□4**		1	1 unit	42S
31.5	7.5	**15**	--	28	7.5	7.5	**20**	--	5	**3RW5214-□□C□4**		1	1 unit	42S
43.3	11	**18.5**	--	39	10	10	**25**	--	5	**3RW5215-□□C□4**		1	1 unit	42S
55.4	15	**22**	--	49	15	15	**30**	--	5	**3RW5216-□□C□4**		1	1 unit	42S
65.8	18.5	**30**	--	58	15	20	**40**	--	5	**3RW5217-□□C□4**		1	1 unit	42S
81.4	22	**45**	--	72	20	25	**50**	--	5	**3RW5224-□□C□4**		1	1 unit	42S
109	30	**55**	--	96	30	30	**75**	--	5	**3RW5225-□□C□4**		1	1 unit	42S
133	37	**75**	--	118	30	40	**75**	--	5	**3RW5226-□□C□4**		1	1 unit	42S
161	45	**90**	--	143	40	50	**100**	--	5	**3RW5227-□□C□4**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals
Spring-type terminals

Product function
Analog output
Thermistor motor protection

Control supply voltage
24 V AC/DC
110 ... 250 V AC

1 3 A T 0 1

[1] 3RW52 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 480 V														
196	55	**110**	--	175	50	60	**125**	--	5	**3RW5234-□□C□4**		1	1 unit	42S
248	75	**132**	--	222	75	75	**150**	--	5	**3RW5235-□□C□4**		1	1 unit	42S
296	90	**160**	--	265	75	100	**200**	--	5	**3RW5236-□□C□4**		1	1 unit	42S
364	110	**200**	--	322	100	125	**250**	--	5	**3RW5243-□□C□4**		1	1 unit	42S
433	132	**250**	--	381	125	150	**300**	--	5	**3RW5244-□□C□4**		1	1 unit	42S
546	160	**315**	--	483	150	200	**400**	--	5	**3RW5245-□□C□4**		1	1 unit	42S
641	200	**355**	--	568	200	200	**450**	--	5	**3RW5246-□□C□4**		1	1 unit	42S
814	250	**400**	--	721	250	250	**600**	--	5	**3RW5247-□□C□4**		1	1 unit	42S
987	315	**560**	--	873	300	350	**750**	--	5	**3RW5248-□□C□4**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals
Screw terminals

Product function
Analog output
Thermistor motor protection

Control supply voltage
24 V AC/DC
110 ... 250 V AC

2 6 A T 0 1

[1] 3RW52 soft starter with screw terminals for operational voltage up to 480 V: Standard delivery time SD = 1 day (d).

Note:
For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

NEW IE3/IE4 ready Inside-delta circuit

For normal starting (CLASS 10A)


3RW521.


3RW522.


3RW523.


3RW524.

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 600 V														
22.5	5.5	**11**	15	19.9	5	5	**10**	15	5	**3RW5213-□□C□5**		1	1 unit	42S
31.5	7.5	**15**	18.5	28	7.5	7.5	**20**	25	5	**3RW5214-□□C□5**		1	1 unit	42S
43.3	11	**18.5**	22	39	10	10	**25**	30	5	**3RW5215-□□C□5**		1	1 unit	42S
55.4	15	**22**	30	49	15	15	**30**	40	5	**3RW5216-□□C□5**		1	1 unit	42S
65.8	18.5	**30**	37	58	15	20	**40**	50	5	**3RW5217-□□C□5**		1	1 unit	42S
81.4	22	**45**	45	72	20	25	**50**	60	5	**3RW5224-□□C□5**		1	1 unit	42S
109	30	**55**	55	96	30	30	**75**	75	5	**3RW5225-□□C□5**		1	1 unit	42S
133	37	**75**	90	118	30	40	**75**	100	5	**3RW5226-□□C□5**		1	1 unit	42S
161	45	**90**	110	143	40	50	**100**	125	5	**3RW5227-□□C□5**		1	1 unit	42S

Type of electrical connection for the control circuit
Screw terminals → 1 3
Spring-type terminals

Product function
Analog output → A T
Thermistor motor protection

Control supply voltage
24 V AC/DC → 0 1
110 ... 250 V AC

[1] 3RW52 soft starter with screw terminals for operational voltage up to 600 V: Standard delivery time SD = 2 days (d).

At 40 °C for inside-delta circuit				At 50 °C for inside-delta circuit					SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current	Operating power for three-phase motors			Operational current	Rating [hp] for three-phase motors									
	At 230 V	At 400 V	At 500 V		At 200/208 V	At 220/230 V	At 460/480 V	At 575/600 V						
A	kW	kW	kW	A	hp	hp	hp	hp	d					
Operational voltage 200 ... 600 V														
196	**55**	110	132	175	50	60	**125**	150	5	**3RW5234-□□C□5**		1	1 unit	42S
248	**75**	132	160	222	75	75	**150**	200	5	**3RW5235-□□C□5**		1	1 unit	42S
296	**90**	160	200	265	75	100	**200**	250	5	**3RW5236-□□C□5**		1	1 unit	42S
364	**110**	200	250	322	100	125	**250**	300	5	**3RW5243-□□C□5**		1	1 unit	42S
433	**132**	250	315	381	125	150	**300**	350	5	**3RW5244-□□C□5**		1	1 unit	42S
546	**160**	315	355	483	150	200	**400**	500	5	**3RW5245-□□C□5**		1	1 unit	42S
641	**200**	355	450	568	200	200	**450**	600	5	**3RW5246-□□C□5**		1	1 unit	42S
814	**250**	400	500	721	250	250	**600**	800	5	**3RW5247-□□C□5**		1	1 unit	42S
987	**315**	560	630	873	300	350	**750**	950	5	**3RW5248-□□C□5**		1	1 unit	42S

Type of electrical connection for the control circuit
Spring-type terminals → 2 6
Screw terminals

Product function
Analog output → A T
Thermistor motor protection

Control supply voltage
24 V AC/DC → 0 1
110 ... 250 V AC

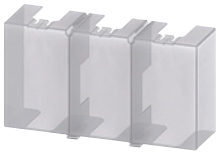
[1] 3RW52 soft starter with screw terminals for operational voltage up to 600 V: Standard delivery time SD = 2 days (d).

Note:

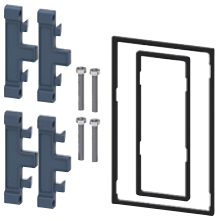
For the boundary conditions for the motor outputs specified here, see page 6/7.

Accessories NEW

Selection and ordering data

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	Application	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Fan covers										
 3RW5983-0FC00	**Fan cover**	3RW5216/17 (1x), 3RW5226/27, 3RW523 (2x)	--	--	1	**3RW5983-0FC00**		1	1 unit	42S
		3RW524	--	--	1	**3RW5984-0FC00**		1	1 unit	42S
Terminal covers										
 3RW5983-0TC20	**Terminal cover**	3RW522, 3RW523 (2x)	--	--	1	**3RW5983-0TC20**		1	1 unit	42S
 3RW5984-0TC20		3RW524 (2x)	--	--	1	**3RW5984-0TC20**		1	1 unit	42S
Enclosure components										
 3RW5950-0GL30	**Hinged cover**	3RW52	With cutout for HMI module High Feature	--	1	**3RW5950-0GL30**		1	1 unit	42S
 3RW5950-0GL40			With cutout for HMI module Standard	--	1	**3RW5950-0GL40**		1	1 unit	42S
Communication modules										
 3RW5980-0CS00	**Communication module**	3RW52	PROFINET Standard	--	1	**3RW5980-0CS00**		1	1 unit	42S
			PROFIBUS	--	1	**3RW5980-0CP00**		1	1 unit	42S
			Modbus TCP	--	1	**3RW5980-0CT00**		1	1 unit	42S

* You can order this quantity or a multiple thereof.
Illustrations are approximate

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	Application	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
HMI modules										
 3RW5980-0HF00	**HMI module**	3RW52	High Feature	--	1	**3RW5980-0HF00**		1	1 unit	42S
 3RW5980-0HS00			Standard	--	1	**3RW5980-0HS00**		1	1 unit	42S
 3RW5980-0HD00	**Door mounting kit**	3RW52	IP65	For HMI modules	1	**3RW5980-0HD00**		1	1 unit	42S
Connection cables										
	HMI connection cable	3RW52	5 m	For door mounting	1	**3RW5980-0HC60**		1	1 unit	42S
 3UF793.-0BA00-0	**Connection cables**	--	Length 2.5 m, round	For connection of the system components ▶		**3UF7933-0BA00-0**		1	1 unit	42J
			Length 1.0 m, round	For connection of the system components ▶		**3UF7937-0BA00-0**		1	1 unit	42J
			Length 0.5 m, round	For connection of the system components ▶		**3UF7932-0BA00-0**		1	1 unit	42J
 3UF7931-0AA00-0			Length 0.1 m, flat	For connection of the system components ▶		**3UF7931-0AA00-0**		1	1 unit	42J
Further accessories										
 3ZY1311-0AA00	**Push-in lugs for wall mounting**	--	Two lugs are required per device	--	2	**3ZY1311-0AA00**		1	10 units	41L

* You can order this quantity or a multiple thereof.
Illustrations are approximate

General data

Overview

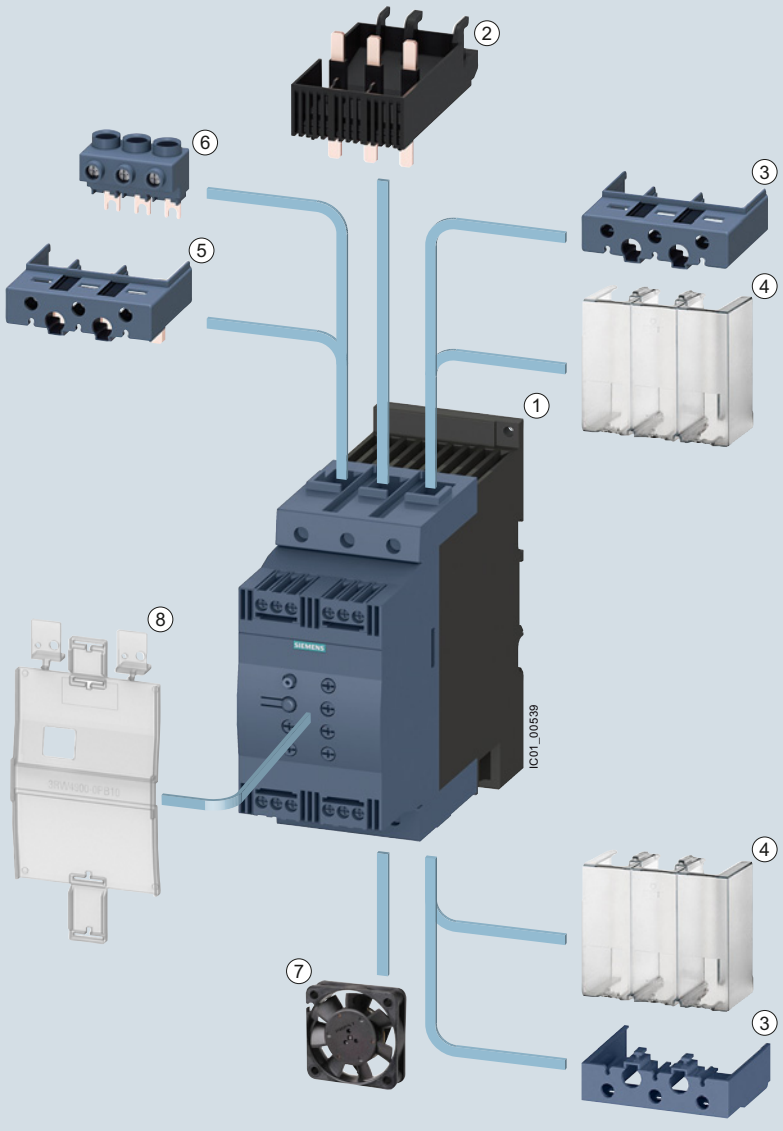
More information

Homepage, see www.siemens.com/soft-starter
Industry Mall, see www.siemens.com/product?3RW
Online configurator, see www.siemens.com/sirius/configurators
Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917

The SIRIUS 3RW40 Basic Performance soft starters are suitable for soft starting and stopping of three-phase asynchronous motors.

Due to two-phase control, the current is kept at minimum values in all three phases throughout the entire starting time and disturbing direct current components are eliminated in addition. This not only enables the two-phase starting of motors up to 250 kW (at 400 V) but also avoids the current and torque peaks which occur e.g. with wye-delta starters.

The SIRIUS 3RW40 soft starters are suitable for the starting of explosion-proof motors with "increased safety" type of protection EEx e according to ATEX Directive 94/9/EC.



1. 3RW40 soft starter
2. Link module to motor starter protector
3. Terminal cover for box terminals (S2, S3)
4. Terminal cover for cable lug and busbar connections (S3)
5. Auxiliary terminal (S3)
6. Infeed terminal (S0)
7. Fan
8. Sealing cover

3RW40 Basic Performance soft starters, accessories, see page 6/57.

Benefits


3RW402.


3RW403.


3RW404.


3RW405.

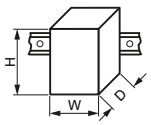
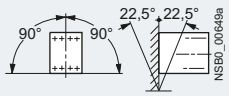
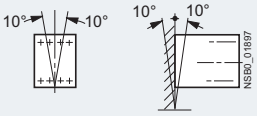
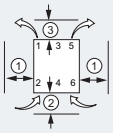
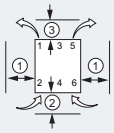

3RW407.

Product characteristics / function	Performance features / benefits
Small and compact design	Space-saving, clearly arranged control panel layout
Motor overload and intrinsic device protection without additional wiring	Adjustable trip classes, integrated diagnostics functions
Integrated bypass contact system	Reduction of power loss during operation
Certified according to ATEX Directive 94/9/EC	Suitable for the starting of explosion-proof motors with "increased safety" type of protection EEx e.
Optional thermistor motor protection up to a rating of 55 kW	Full motor protection

General data

Technical specifications

More information	
Manual "SIRIUS 3RW30/3RW40 Soft Starters", see https://support.industry.siemens.com/cs/ww/en/view/38752095	Catalog LV 10, see www.siemens.com/lowvoltage/lv10
FAQs, see https://support.industry.siemens.com/cs/ww/en/ps/25251/faq	

Type			3RW402.	3RW403.	3RW404.	3RW405.	3RW407.
Mechanics and environment							
Mounting dimensions (W x H x D)							
• Screw terminals		mm	45 x 125 x 154	55 x 144 x 170	70 x 160 x 188	120 x 198 x 250	160 x 230 x 278
• Spring-type terminals		mm	45 x 150 x 154	55 x 144 x 170	70 x 160 x 188	120 x 198 x 250	160 x 230 x 278
Permissible ambient temperature							
During operation		°C	-25 ... +60; (derating from +40)				
During storage		°C	-40 ... +80				
Weight		kg	0.77	1.35	1.9	4.9 (3RW4055) 6.9 (3RW4056)	8.9
Permissible mounting position[1]							
• With auxiliary fan (for 3RW402. ... 3RW404.)							
• Without auxiliary fan (for 3RW402. ... 3RW404.)						-- (fan integrated in the soft starter)	
Installation type[1]	Stand-alone installation		3RW402.			3RW405., 3RW407.	
			 ① ≥ 15 mm (≥ 0.59 in) ② ≥ 40 mm (≥ 1.56 in) ③ ≥ 60 mm (≥ 2.36 in)			① ≥ 5 mm (≥ 0.2 in) ② ≥ 75 mm (≥ 3 in) ③ ≥ 100 mm (≥ 4 in)	
			3RW403., 3RW404.				
			 ① ≥ 30 mm (≥ 1.18 in) ② ≥ 40 mm (≥ 1.56 in) ③ ≥ 60 mm (≥ 2.36 in)				
Permissible installation altitude		m	5 000 (Derating from 1 000, see characteristic curve on page 6/7)				
Degree of protection			IP20 for 3RW402.; all others IP00				

[1] In the case of deviations, please observe derating, see Manual in the chapter "Configuring".

Type	Terminal		3RW402., 3RW403., 3RW404.		3RW405., 3RW407.	
Control electronics						
Rated values						
Rated control supply voltage	A1/A2	V	24 DC/AC	110 ... 230 AC/DC	115 AC	230 AC
• Tolerance		%	± 20	-15/+10		
Rated frequency		Hz	50/60			
• Tolerance		%	± 10			

Type		3RW402.-..B.4, 3RW403.-..B.4, 3RW404.-..B.4	3RW402.-..B.5, 3RW403.-..B.5, 3RW404.-..B.5	3RW405.-.BB.4, 3RW407.-.BB.4	3RW405.-.BB.5, 3RW407.-.BB.5
Power electronics					
Rated operational voltage Tolerance	V AC %	200 ... 480 -15/+10	400 ... 600	200 ... 460	400 ... 600
Maximum blocking voltage (thyristor)	V AC	1 600		1 400	1 800
Rated frequency Tolerance	Hz %	50/60 ± 10			
Uninterrupted duty at 40 °C (% of I_e)	%	115			
Minimum load (% of smallest adjustable rated motor current I_M)	%	20 (at least 2 A)			
Maximum cable length between soft starter and motor	m	300			

Type		3RW4024	3RW4026	3RW4027	3RW4028
Power electronics					
Load rating with rated operational current I_e • According to IEC and UL/CSA[1], for individual mounting, AC-53a					
- At 40 °C	A	12.5	25.3	32.2	38
- At 50 °C	A	11	23	29	34
- At 60 °C	A	10	21	26	31
Smallest adjustable rated motor current I_M For the motor overload protection	A	5	10	17	23
Power loss • In operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	2	8	13	19
• During starting with current limit set to 300% I_M (40 °C)	W	68	188	220	256
Permissible rated motor current and starts per hour at 40 °C / 50 °C					
• **For normal starting (CLASS 10)**					
- Rated motor current I_M[2], ramp-up time 3 s	A	12.5/11	25/23	32/29	38/34
- Starts per hour[3]	1/h	50/50	23/23	23/23	19/19
- Rated motor current I_M[2], ramp-up time 4 s	A	12.5/11	25/23	32/29	38/34
- Starts per hour[3]	1/h	36/36	15/15	16/16	12/12

1) Measurement at 60 °C according to UL/CSA not required.

2) Current limit on soft starter set to 300% I_M, T_u = 40 °C / 50 °C. Maximum adjustable rated motor current I_M dependent on CLASS setting.

3) For intermittent duty S4 with ON period = 30%, T_u = 40 °C / 50 °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode. Factors for permissible switching frequency in other mounting position, direct mounting, side-by-side mounting, and implementation of optional auxiliary fan, see Manual in the chapter "Configuring".

General data

Type		3RW4036	3RW4037	3RW4038	3RW4046	3RW4047
Power electronics						
Load rating with rated operational current I_e						
• According to IEC and UL/CSA[1], for individual mounting, AC-53a						
- At 40 °C	A	45	63	72	80	106
- At 50 °C	A	42	58	62.1	73	98
- At 60 °C	A	39	53	60	66	90
Smallest adjustable rated motor current I_M						
For the motor overload protection	A	23	26	35	43	46
Power loss						
• In operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	6	12	15	12	21
• During starting with current limit set to 300% I_M (40 °C)	W	316	444	500	576	768
Permissible rated motor current and starts per hour at 40 °C / 50 °C						
• **For normal starting (CLASS 10)**						
- Rated motor current I_M[2], ramp-up time 3 s	A	45/42	63/58	72/62	80/73	106/98
- Starts per hour[3]	1/h	38/38	23/23	22/22	22/22	15/15
- Rated motor current I_M[2], ramp-up time 4 s	A	45/42	63/58	72/62	80/73	106/98
- Starts per hour[3]	1/h	26/26	15/15	15/15	15/15	10/10

1) Measurement at 60 °C according to UL/CSA not required.

2) Current limit on soft starter set to 300% I_M, T_u = 40 °C / 50 °C. Maximum adjustable rated motor current I_M dependent on CLASS setting.

3) For intermittent duty S4 with ON period = 30%, T_u = 40 °C / 50 °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode. Factors for permissible switching frequency in other mounting position, direct mounting, side-by-side mounting, and implementation of optional auxiliary fan, see Manual in the chapter "Configuring".

Type		3RW4055	3RW4056	3RW4073	3RW4074	3RW4075	3RW4076
Power electronics							
Load rating with rated operational current I_e							
• According to IEC and UL/CSA[1], for individual mounting, AC-53a							
- At 40 °C	A	134	162	230	280	356	432
- At 50 °C	A	117	145	205	248	315	385
- At 60 °C	A	100	125	180	215	280	335
Smallest adjustable rated motor current I_M							
For the motor overload protection	A	59	87	80	130	131	207
Power loss							
• In operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	60	75		90	125	165
• During starting with current limit set to 350%[2] I_M (40 °C)	W	1043	1355	2448	3257	3277	3600
Permissible rated motor current and starts per hour at 40 °C / 50 °C							
• **For normal starting (CLASS 10)**							
- Rated motor current I_M[2], ramp-up time 10 s	A	134/117	162/145	230/205	280/248	356/315	432/385
- Starts per hour[3]	1/h	20/20	8/8	14/14	20/20	16/16	17/17
- Rated motor current I_M[2], ramp-up time 20 s	A	134/117	162/145	230/205	280/248	356/315	432/385
- Starts per hour[3]	1/h	7/7	1.4/1.4	3/3	8/8	5/5	5/5

1) Measurement at 60 °C according to UL/CSA not required.

2) Current limit on soft starter set to 350% I_M, T_u = 40 °C / 50 °C. Maximum adjustable rated motor current I_M dependent on CLASS setting.

3) For intermittent duty S4 with ON period = 70%, T_u = 40 °C / 50 °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode.

Motor feeders with soft starters

The type of coordination according to which the motor feeder with soft starter is mounted depends on the application-specific requirements. Normally, fuseless mounting (combination of motor starter protector and soft starter) is sufficient.

If type of coordination "2" is to be fulfilled, then semiconductor fuses must be fitted in the motor feeder.

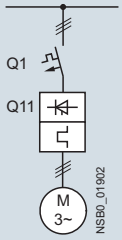
ToC 1 Type of coordination "1" according to IEC 60947-4-1: After a short-circuit incident, the unit is defective and therefore unsuitable for further use (protection of persons and system guaranteed).

ToC 2 Type of coordination "2" according to IEC 60947-4-1: After a short-circuit incident the unit is suitable for further use (protection of persons and system guaranteed).

The type of coordination refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

The types of coordination are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Fuseless version

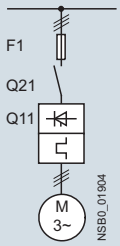


Soft starters ToC 1		Motor starter protectors[1]		
	Rated current	400 V + 10%		Rated current
Q11		Q1	I_q	
Type	A	Type	kA	A
Type of coordination "1"				
3RW4024	12.5	3RV2021-4AA/ 3RV2011-4AA (in size S00)	55	16
3RW4026	25	3RV2021-4DA	55	25
3RW4027	32	3RV2021-4EA	55	32
3RW4028	38	3RV2021-4FA	55	40
3RW4036	45	3RV2031-4WA10	10	45
3RW4037	63	3RV2031-4JA10	10	63
3RW4038	72	3RV2031-4KA10	10	75
3RW4046	80	3RV2042-4RA10	11	84
3RW4047	106	3RV2042-4MA10	11	100
3RW4055	134	3VA2216-5MN32	55	160
3RW4056	162	3VA2220-5MN32	55	200
3RW4073	230	3VA2325-7MN32	100	250
3RW4074	280	3VA2440-7MN32	110	400
3RW4075	356	3VA2450-7MN32	110	500
3RW4076	432	3VA2450-7MN32	110	500

[1] The rated motor current must be considered when selecting the devices.

General data

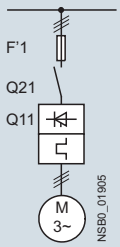
Fused version (line protection only)



Soft starters ToC 1		Line protection, maximum			Line contactor
	Rated current		Rated current	Size	(optional)
Q11 Type	A	F1 Type	A		Q21 Type
Type of coordination "1"[1]: I_q = 65 kA at 600 V + 5%					
3RW4024	12.5	3NA3820-6	50	00	3RT2025/ 3RT2018 (in size S00)
3RW4026	25	3NA3822-6	63	00	3RT2026
3RW4027	32	3NA3824-6	80	00	3RT2027
3RW4028	38	3NA3824-6	80	00	3RT2028
3RW4036	45	3NA3130-6	100	1	3RT2036
3RW4037	63	3NA3132-6	125	1	3RT2037
3RW4038	72	3NA3132-6	125	1	3RT2038
3RW4046	80	3NA3136-6	160	1	3RT2038
3RW4047	106	3NA3136-6	160	1	3RT2046
3RW4055	134	3NA3244-6	250	2	3RT1055-6A.36
3RW4056	162	3NA3244-6	250	2	3RT1056-6A.36
3RW4073	230	2 x 3NA3354-6	2 x 355	3	3RT1065-6A.36
3RW4074	280	2 x 3NA3354-6	2 x 355	3	3RT1066-6A.36
3RW4075	356	2 x 3NA3365-6	2 x 500	3	3RT1075-6A.36
3RW4076	432	2 x 3NA3365-6	2 x 500	3	3RT1076-6A.36

[1] The type of coordination "1" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

Fused version with 3NE1 SITOR fuses (semiconductor and line protection)



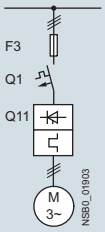
For matching fuse bases, see Catalog LV 10:

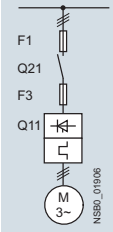
- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

Soft starters ToC 2		All-range fuses			Line contactor
	Rated current		Rated current	Size	(optional)
Q11 Type	A	F'1 Type	A		Q21 Type
Type of coordination "2"[1]: I_q = 65 kA at 600 V + 5%					
3RW4024	12.5	3NE1814-0	20	000	3RT2025/ 3RT2018 (in size S00)
3RW4026	25	3NE1803-0	35	000	3RT2026
3RW4027	32	3NE1020-2	80	00	3RT2027
3RW4028	38	3NE1020-2	80	00	3RT2028
3RW4036	45	3NE1020-2	80	00	3RT2036
3RW4037	63	3NE1820-0	80	000	3RT2037
3RW4038	72	3NE1820-0	80	000	3RT2038
3RW4046	80	3NE1021-0	100	00	3RT2038
3RW4047	106	3NE1022-0	125	00	3RT2046
3RW4055	134	3NE1227-2	250	1	3RT1055-6A.36
3RW4056	162	3NE1227-2	250	1	3RT1056-6A.36
3RW4073	230	3NE1331-2	350	2	3RT1065-6A.36
3RW4074	280	3NE1333-2	450	2	3RT1066-6A.36
3RW4075	356	3NE1334-2	500	2	3RT1075-6A.36
3RW4076	432	3NE1435-2	560	3	3RT1076-6A.36

[1] The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

Fused version with 3NE3 SITOR fuses (semiconductor protection by fuse, line and overload protection by motor starter protector; alternatively, installation with contactor and overload relay possible)





For matching fuse bases, see Catalog LV 10:

- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

Soft starters	ToC 2	Semiconductor fuses, minimum			Semiconductor fuses, minimum			Semiconductor fuses, minimum		
Q11 Type	Rated current A	F3 Type	Rated current A	Size	F3 Type	Rated current A	Size	F3 Type	Rated current A	Size
Type of coordination "2"[1]: I_q = 65 kA at 600 V + 5%										
3RW4024	12.5	--	--	--	3NE4101	32	0	3NE8015-1	25	00
3RW4026	25	--	--	--	3NE4102	40	0	3NE8017-1	50	00
3RW4027	32	--	--	--	3NE4118	63	0	3NE8018-1	63	00
3RW4028	38	--	--	--	3NE4118	63	0	3NE8020-1	80	00
3RW4036	45	--	--	--	3NE4120	80	0	3NE8020-1	80	00
3RW4037	63	--	--	--	3NE4121	100	0	3NE8021-1	100	00
3RW4038	72	3NE3221	100	1	--	--	--	3NE8022-1	125	00
3RW4046	80	3NE3222	125	1	--	--	--	3NE8022-1	125	00
3RW4047	106	3NE3224	160	1	--	--	--	3NE8024-1	160	00
3RW4055	134	3NE3227	250	1	--	--	--	--	--	--
3RW4056	162	3NE3227	250	1	--	--	--	--	--	--
3RW4073	230	3NE3232-0B	400	1	--	--	--	--	--	--
3RW4074	280	3NE3233	450	1	--	--	--	--	--	--
3RW4075	356	3NE3335	560	2	--	--	--	--	--	--
3RW4076	432	3NE3337-8	710	2	--	--	--	--	--	--

Soft starters	ToC 2	Cylindrical fuses		Line contactor	Motor starter protectors		Line protection, maximum		
Q11 Type	Rated current A	F3 Type	Rated current A	(optional) Q21 Type	400 V + 10% Q1 Type	Rated current A	F1 Type	Rated current A	Size
Type of coordination "2"[1]: I_q = 65 kA at 600 V + 5%									
3RW4024	12.5	3NC2240	40	3RT2025/ 3RT2018 (in size S00)	3RV2021-4AA/ 3RV2011-4AA (in size S00)	16	3NA3820-6	50	00
3RW4026	25	3NC2263	63	3RT2026	3RV2021-4DA	25	3NA3822-6	63	00
3RW4027	32	3NC2280	80	3RT2027	3RV2021-4EA	32	3NA3824-6	80	00
3RW4028	38	3NC2280	80	3RT2028	3RV2021-4FA	40	3NA3824-6	80	00
3RW4036	45	3NC2280	80	3RT2036	3RV2031-4WA10	45	3NA3130-6	100	1
3RW4037	63	--	--	3RT2037	3RV2031-4JA10	63	3NA3132-6	125	1
3RW4038	72	--	--	3RT2038	3RV2031-4KA10	75	3NA3132-6	125	1
3RW4046	80	--	--	3RT2038	3RV2042-4RA10	84	3NA3136-6	160	1
3RW4047	106	--	--	3RT2046	3RV2042-4MA10	100	3NA3136-6	160	1
3RW4055	134	--	--	3RT1055-6A.36	3VA2216-5MN32	160	3NA3244-6	250	2
3RW4056	162	--	--	3RT1056-6A.36	3VA2220-5MN32	200	3NA3244-6	250	2
3RW4073	230	--	--	3RT1065-6A.36	3VA2325-7MN32	250	2 x 3NA3354-6	2 x 355	3
3RW4074	280	--	--	3RT1066-6A.36	3VA2440-7MN32	400	2 x 3NA3354-6	2 x 355	3
3RW4075	356	--	--	3RT1075-6A.36	3VA2450-7MN32	500	2 x 3NA3365-6	2 x 500	3
3RW4076	432	--	--	3RT1076-6A.36	3VA2450-7MN32	500	2 x 3NA3365-6	2 x 500	3

[1] The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

Inline circuit ***IE3/IE4 ready***

Selection and ordering data

For normal starting (CLASS 10)


3RW402.


3RW403.


3RW404.

3RW ambient temperature 40 °C Rated values of three-phase motors				3RW ambient temperature 50 °C Rated values of three-phase motors					Size	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V							
A	kW	kW	kW	A	hp	hp	hp	hp		d					
Rated operational voltage U_e 200 ... 480 V															
12.5	3	**5.5**	--	11	3	3	**7.5**	--	**S0**	2	**3RW4024-□BB□4**		1	1 unit	42G
25	5.5	**11**	--	23	5	5	**15**	--	**S0**	2	**3RW4026-□BB□4**		1	1 unit	42G
32	7.5	**15**	--	29	7.5	7.5	**20**	--	**S0**	2	**3RW4027-□BB□4**		1	1 unit	42G
38	11	**18.5**	--	34	10	10	**25**	--	**S0**	2	**3RW4028-□BB□4**		1	1 unit	42G
45	11	**22**	--	42	10	15	**30**	--	**S2**	2	**3RW4036-□BB□4**		1	1 unit	42G
63	18.5	**30**	--	58	15	20	**40**	--	**S2**	2	**3RW4037-□BB□4**		1	1 unit	42G
72	22	**37**	--	62	20	20	**40**	--	**S2**	2	**3RW4038-□BB□4**		1	1 unit	42G
80	22	**45**	--	73	20	25	**50**	--	**S3**	2	**3RW4046-□BB□4**		1	1 unit	42G
106	30	**55**	--	98	30	30	**75**	--	**S3**	2	**3RW4047-□BB□4**		1	1 unit	42G
Rated operational voltage U_e 400 ... 600 V															
12.5	--	5.5	**7.5**	11	--	--	7.5	**10**	**S0**	5	**3RW4024-□BB□5**		1	1 unit	42G
25	--	11	**15**	23	--	--	15	**20**	**S0**	5	**3RW4026-□BB□5**		1	1 unit	42G
32	--	15	**18.5**	29	--	--	20	**25**	**S0**	5	**3RW4027-□BB□5**		1	1 unit	42G
38	--	18.5	**22**	34	--	--	25	**30**	**S0**	5	**3RW4028-□BB□5**		1	1 unit	42G
45	--	22	**30**	42	--	--	30	**40**	**S2**	5	**3RW4036-□BB□5**		1	1 unit	42G
63	--	30	**37**	58	--	--	40	**50**	**S2**	5	**3RW4037-□BB□5**		1	1 unit	42G
72	--	37	**45**	62	--	--	40	**60**	**S2**	5	**3RW4038-□BB□5**		1	1 unit	42G
80	--	45	**55**	73	--	--	50	**60**	**S3**	5	**3RW4046-□BB□5**		1	1 unit	42G
106	--	55	**75**	98	--	--	75	**75**	**S3**	5	**3RW4047-□BB□5**		1	1 unit	42G

Article No. supplement for connection types

- With screw terminals **1**
- With spring-type terminals[2] **2**

Article No. supplement for rated control supply voltage U_s

- 24 V AC/DC **0**
- 110 ... 230 V AC/DC **1**

[1] Soft starter U_e 200 to 480 V with screw terminals: Standard delivery time SD = 1 day (d).

[2] Main connection from size S2: screw terminals.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

For normal starting (CLASS 10)


3RW402.


3RW403.


3RW404.

3RW ambient temperature 40 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	3RW ambient temperature 50 °C Rated values of three-phase motors Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V	Size	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
A	kW	kW	kW	A	hp	hp	hp	hp		d					
Rated operational voltage U_e 200 ... 480 V, with thermistor motor protection, rated control supply voltage U_s 24 V AC/DC															
12.5	3	**5.5**	--	11	3	3	**7.5**	--	**S0**	5	**3RW4024-□TB04**		1	1 unit	42G
25	5.5	**11**	--	23	5	5	**15**	--	**S0**	5	**3RW4026-□TB04**		1	1 unit	42G
32	7.5	**15**	--	29	7.5	7.5	**20**	--	**S0**	5	**3RW4027-□TB04**		1	1 unit	42G
38	11	**18.5**	--	34	10	10	**25**	--	**S0**	5	**3RW4028-□TB04**		1	1 unit	42G
45	11	**22**	--	42	10	15	**30**	--	**S2**	5	**3RW4036-□TB04**		1	1 unit	42G
63	18.5	**30**	--	58	15	20	**40**	--	**S2**	5	**3RW4037-□TB04**		1	1 unit	42G
72	22	**37**	--	62	20	20	**40**	--	**S2**	5	**3RW4038-□TB04**		1	1 unit	42G
80	22	**45**	--	73	20	25	**50**	--	**S3**	5	**3RW4046-□TB04**		1	1 unit	42G
106	30	**55**	--	98	30	30	**75**	--	**S3**	5	**3RW4047-□TB04**		1	1 unit	42G
Rated operational voltage U_e 400 ... 600 V, with thermistor motor protection, rated control supply voltage U_s 24 V AC/DC															
12.5	--	5.5	**7.5**	11	--	--	7.5	**10**	**S0**	5	**3RW4024-□TB05**		1	1 unit	42G
25	--	11	**15**	23	--	--	15	**20**	**S0**	5	**3RW4026-□TB05**		1	1 unit	42G
32	--	15	**18.5**	29	--	--	20	**25**	**S0**	5	**3RW4027-□TB05**		1	1 unit	42G
38	--	18.5	**22**	34	--	--	25	**30**	**S0**	5	**3RW4028-□TB05**		1	1 unit	42G
45	--	22	**30**	42	--	--	30	**40**	**S2**	5	**3RW4036-□TB05**		1	1 unit	42G
63	--	30	**37**	58	--	--	40	**50**	**S2**	5	**3RW4037-□TB05**		1	1 unit	42G
72	--	37	**45**	62	--	--	40	**60**	**S2**	5	**3RW4038-□TB05**		1	1 unit	42G
80	--	45	**55**	73	--	--	50	**60**	**S3**	5	**3RW4046-□TB05**		1	1 unit	42G
106	--	55	**75**	98	--	--	75	**75**	**S3**	5	**3RW4047-□TB05**		1	1 unit	42G

Article No. supplement for connection types

- With screw terminals **1**
- With spring-type terminals[2] **2**

[1] Soft starter U_e 200 to 480 V with screw terminals: Standard delivery time SD = 1 day (d).

[2] Main connection from size S2: screw terminals.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

Inline circuit ***IE3/IE4 ready***

For normal starting (CLASS 10)

3RW405.

3RW407.

3RW ambient temperature 40 °C Rated values of three-phase motors				3RW ambient temperature 50 °C Rated values of three-phase motors					Size	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V							
A	kW	kW	kW	A	hp	hp	hp	hp		d					
Rated operational voltage U_e 200 ... 460 V															
134	37	**75**	--	117	30	40	**75**	--	**S6**	5	**3RW4055-□BB□4**		1	1 unit	42G
162	45	**90**	--	145	40	50	**100**	--		5	**3RW4056-□BB□4**		1	1 unit	42G
230	75	**132**	--	205	60	75	**150**	--	**S12**	5	**3RW4073-□BB□4**		1	1 unit	42G
280	90	**160**	--	248	75	100	**200**	--		5	**3RW4074-□BB□4**		1	1 unit	42G
356	110	**200**	--	315	100	125	**250**	--		5	**3RW4075-□BB□4**		1	1 unit	42G
432	132	**250**	--	385	125	150	**300**	--		5	**3RW4076-□BB□4**		1	1 unit	42G
Rated operational voltage U_e 400 ... 600 V															
134	--	75	**90**	117	--	--	75	**100**	**S6**	5	**3RW4055-□BB□5**		1	1 unit	42G
162	--	90	**110**	145	--	--	100	**150**		5	**3RW4056-□BB□5**		1	1 unit	42G
230	--	132	**160**	205	--	--	150	**200**	**S12**	5	**3RW4073-□BB□5**		1	1 unit	42G
280	--	160	**200**	248	--	--	200	**250**		5	**3RW4074-□BB□5**		1	1 unit	42G
356	--	200	**250**	315	--	--	250	**300**		5	**3RW4075-□BB□5**		1	1 unit	42G
432	--	250	**315**	385	--	--	300	**400**		5	**3RW4076-□BB□5**		1	1 unit	42G

Article No. supplement for connection types[2]

- With spring-type terminals **2 6**
- With screw terminals **3 4**

Article No. supplement for rated control supply voltage U_s[3]

- 115 V AC
- 230 V AC

[1] Soft starter U_e 200 to 460 V with screw terminals: Standard delivery time SD = 1 day (d), soft starter U_e 400 to 600 V with screw terminals: Standard delivery time SD = 2 days (d).

[2] Main circuit connection: busbar connection.

[3] Control by way of the internal 24 V DC supply and direct control via PLC possible.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

Selection and ordering data

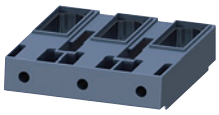
Three-phase infeed terminals

Conductor cross-section: Solid or stranded	Conductor cross-section: Finely stranded with end sleeve	Conductor cross-section: AWG cables, solid or stranded	Tightening torque	For soft starters size	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
mm²	mm²	AWG	Nm		d					
2.5 … 25	2.5 … 16	10 … 4	3 … 4	**S0** (3RW402.)	▶	**3RV2925-5AB**		1	1 unit	41E


3RV2925-5AB

Box terminal blocks for soft starters

For soft starters: Type	Size	Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
			d					
For round and ribbon cables (2 units required for each device)								
3RW405.	**S6**	• Up to 70 mm²	▶	**3RT1955-4G**		1	1 unit	41B
		• Up to 120 mm²	▶	**3RT1956-4G**		1	1 unit	41B
		Auxiliary conductor connection for box terminals	5	**3TX7500-0A**		1	1 unit	41B
3RW407.	**S12**	• Up to 240 mm² (with auxiliary conductor connection)	▶	**3RT1966-4G**		1	1 unit	41B


3RT1956-4G

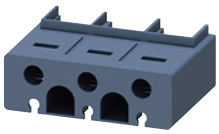
Auxiliary terminals

Auxiliary terminals, 3-pole								
3RW404.	**S3**		5	**3RT2946-4F**		1	1 unit	41B


3RT2946-4F

Covers for soft starters

Terminal covers for box terminals								
Additional touch protection to be fitted at the box terminals (2 units required per device)								
3RW403.	**S2**		2	**3RT2936-4EA2**		1	1 unit	41B
3RW404.	**S3**		▶	**3RT2946-4EA2**		1	1 unit	41B
3RW405.	**S6**		▶	**3RT1956-4EA2**		1	1 unit	41B
3RW407.	**S12**		▶	**3RT1966-4EA2**		1	1 unit	41B


3RT2936-4EA2

Terminal covers for cable lugs and busbar connections								
3RW404.	**S3**	For complying with the voltage clearances and as touch protection if box terminal is removed (2 units required per device)	5	**3RT1946-4EA1**		1	1 unit	41B
3RW405.	**S6**		▶	**3RT1956-4EA1**		1	1 unit	41B
3RW407.	**S12**		▶	**3RT1966-4EA1**		1	1 unit	41B
Also fits in case of S6 and S12 on mounted box terminals								


3RT1946-4EA1

Sealing covers								
3RW402. to 3RW404.	**S0, S2, S3**		▶	**3RW4900-0PB10**		1	1 unit	42G
3RW405. and 3RW407.	**S6, S12**		▶	**3RW4900-0PB00**		1	1 unit	42G

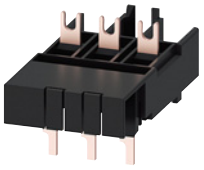
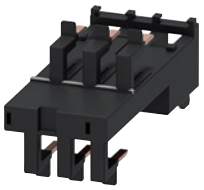

3RW4900-0PB10

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Accessories

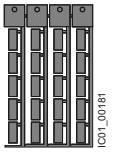
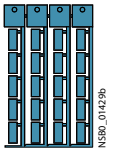
For motor starter protectors Size	For soft starters Size	Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Standard mounting rail adapters								
 3RA2932-1CA00								
S2	**S2**	For mechanical fixing of motor starter protector and soft starter; for snapping onto standard mounting rail or for screw fixing **Single-unit packaging**	►	**3RA2932-1CA00**		1	1 unit	41B

For soft starters Type	Size	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Fans (to increase switching frequency and for device mounting in positions different to the standard position)							
 3RW4928-8VB00, 3RW4947-8VB00							
3RW402.	**S0**	►	**3RW4928-8VB00**		1	1 unit	42G
3RW403., 3RW404.	**S2, S3**	►	**3RW4947-8VB00**		1	1 unit	42G

For soft starters Type	Size	Motor starter protectors Size	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Link modules to motor starter protectors[1]								
 3RA2921-1BA00								
• With screw terminals								
3RW402.	**S0**	**S00/S0**	2	**3RA2921-1BA00**		1	1 unit	41B
3RW4036.	**S2**	**S2**	►	**3RA2931-1AA00**		1	1 unit	41B
3RW4046., 3RW4047.	**S3**	**S3**	►	**3RA1941-1AA00**		1	1 unit	41B
 3RA2921-2GA00								
• With spring-type terminals								
3RW402.	**S0**	**S0**	►	**3RA2921-2GA00**		1	1 unit	41B

[1] Can be used in size S0 up to maximum 32 A.
Can be used in size S2 up to maximum 65 A in combination with 3RA2932-1CA00 standard mounting rail adapter (specially for soft starters).
Can be used in size S3 only with mounting plate.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

	Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Tools for opening spring-type terminals in sizes S00 and S0							
			Spring-type terminals				
 3RA2908-1A	**Screwdrivers** For all SIRIUS devices with spring-type terminals Length approx. 200 mm, 3.0 mm x 0.5 mm, titanium gray/black, partially insulated	2	**3RA2908-1A**		1	1 unit	41B
Blank labels							
 3RT2900-1SB20	**Unit labeling plates**[1] For SIRIUS devices • 20 mm x 7 mm, titanium gray	20	**3RT2900-1SB20**		100	340 units	41B
 3RT1900-1SB20	• 20 mm x 7 mm, pastel turquoise	20	**3RT1900-1SB20**		100	340 units	41B

[1] PC labeling systems for individual inscription of unit labeling plates are available from: murrplastik Systemtechnik GmbH, see page 16/16.

General data

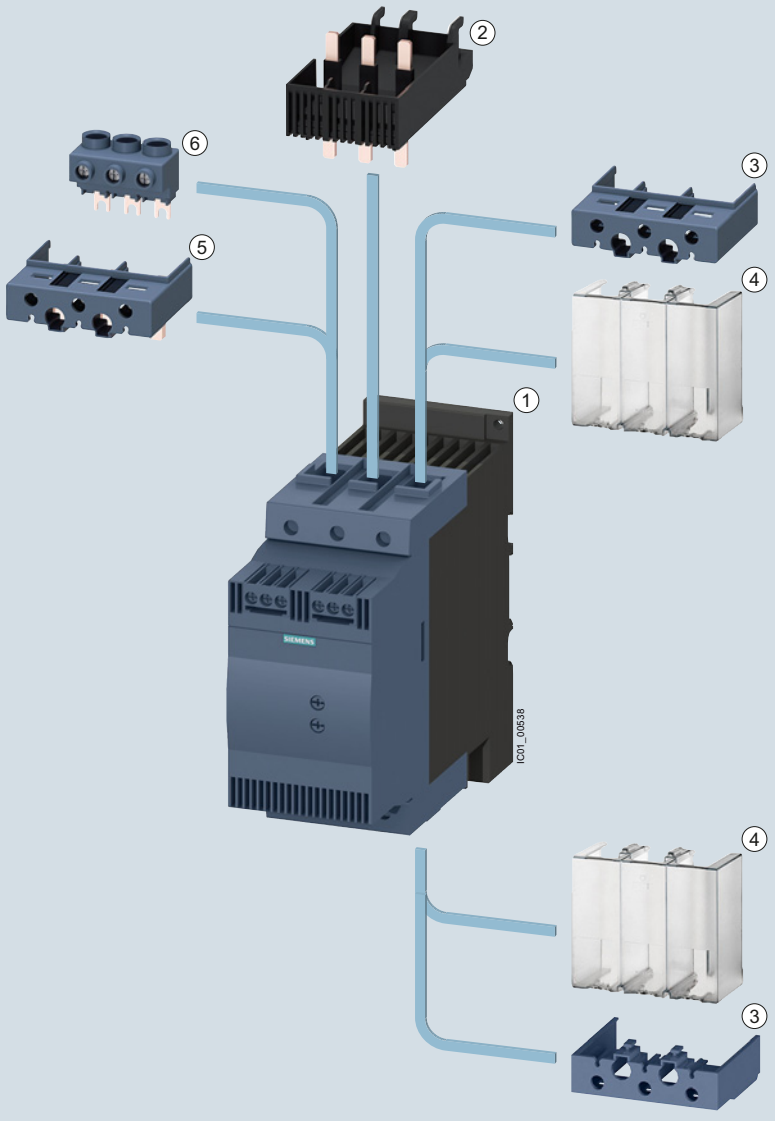
Overview

More information

Homepage, see www.siemens.com/soft-starter
Industry Mall, see www.siemens.com/product?3RW
Online configurator, see www.siemens.com/sirius/configurators
Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917

The SIRIUS 3RW30 Basic Performance soft starters are suitable for soft starting of three-phase asynchronous motors.

Due to two-phase control, the current is kept at minimum values in all three phases throughout the entire starting time and disturbing direct current components are eliminated in addition. This not only enables the two-phase starting of motors up to 55 kW (at 400 V) but also avoids the current and torque peaks which occur, for example, with wye-delta starters.



1 3RW30 soft starter

2 Link module to motor starter protector
3 Terminal cover for box terminals (S2, S3)
4 Terminal cover for cable lugs and busbar connections (S3)
5 Auxiliary terminal (S3)
6 Infeed terminal (S00, S0)

3RW30 Basic Performance soft starters, accessories, see page 6/69.

Benefits


3RW301.


3RW302.


3RW303.


3RW304.

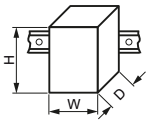
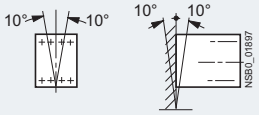
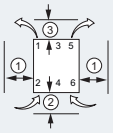
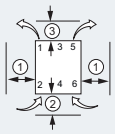

3RW3003-2CB54

Product characteristics / function	Performance features / benefits
Small and compact design	Space-saving, clearly arranged control panel layout
Parameterization using potentiometers	Simple and fast commissioning
Integrated bypass contact system	Reduction of power loss during operation
"Polarity balancing" control method	Avoidance of direct current components in two-phase controlled soft starters.

General data

Technical specifications

More information	
Manual "SIRIUS 3RW30/3RW40 Soft Starters", see https://support.industry.siemens.com/cs/ww/en/view/38752095 FAQs, see https://support.industry.siemens.com/cs/ww/en/ps/16213/faq	Catalog LV 10, see www.siemens.com/lowvoltage/lv10

Type			3RW301.	3RW302.	3RW303.	3RW304.
Mechanics and environment						
Mounting dimensions (W x H x D) • Screw terminals • Spring-type terminals		mm mm	45 x 95 x 151 45 x 117 x 151	45 x 125 x 151 45 x 150 x 151	55 x 144 x 168 55 x 144 x 168	70 x 160 x 186 70 x 160 x 186
Permissible ambient temperature During operation During storage		 °C °C	 -25 ... +60; (derating from +40) -40 ... +80			
Weight		kg	0.58	0.69	1.20	1.71
Permissible mounting position[1] (auxiliary fan not available)						
Installation type[1]	Stand-alone installation		 ① ≥ 15 mm (≥ 0.59 in) ② ≥ 40 mm (≥ 1.56 in) ③ ≥ 60 mm (≥ 2.36 in)		 ① ≥ 30 mm (≥ 1.18 in) ② ≥ 40 mm (≥ 1.56 in) ③ ≥ 60 mm (≥ 2.36 in)	
Permissible installation altitude		m	5 000 (Derating from 1 000, see characteristic curve on page 6/7)			
Degree of protection			IP20 for 3RW301. and 3RW302.; IP00 for 3RW303. and 3RW304.			

[1] In the case of deviations, please observe derating, see Manual in the chapter "Configuring".

Type	Terminal		3RW301., 3RW302.		3RW303., 3RW304.	
Control electronics						
Rated values Rated control supply voltage • Tolerance	A1/A2	 V %	 24 ± 20	 110 ... 230 -15/+10	 24 ± 20	 110 ... 230 -15/+10
Rated frequency • Tolerance		Hz %	50/60 ± 10			

Type		3RW301.	3RW302.	3RW303.	3RW304.
Power electronics					
Rated operational voltage Tolerance	V AC %	200 ... 480 -15/+10			
Rated frequency Tolerance	Hz %	50/60 ± 10			
Uninterrupted duty at 40 °C (% of I_e)	%	115			
Minimum load (% of I_e)	%	10 (at least 1 A)			
Maximum cable length between soft starter and motor	m	300			

Type		3RW3013	3RW3014	3RW3016	3RW3017	3RW3018
Power electronics						
Load rating with rated operational current I_e						
• According to IEC and UL/CSA[1], for individual mounting, AC-53a						
- At 40 °C	A	3.6	6.5	9	12.5	17.6
- At 50 °C	A	3.3	6	8	12	17
- At 60 °C	A	3	5.5	7	11	14
Power loss						
• in operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	0.25	0.5	1	2	4
• during starting with 300% I_M (40 °C)	W	24	52	80	80	116
Permissible rated motor current and starts per hour						
• For normal starting (CLASS 10) at 40 °C/50 °C						
- Rated motor current I_M[2], ramp-up time 3 s	A	3.6/3.3	6.5/6.0	9/8	12.5/12.0	17.6/17.0
- Starts per hour[3]	1/h	200/150	87/60	50/50	85/70	62/46
- Rated motor current I_M[2], ramp-up time 4 s	A	3.6/3.3	6.5/6.0	9/8	12.5/12.0	17.6/17.0
- Starts per hour[3]	1/h	150/100	64/46	35/35	62/47	45/32

1) Measurement at 60 °C according to UL/CSA not required.

2) At 300% I_M, T_u = 40 °C / 50 °C.

3) For intermittent duty S4 with ON period = 30%, T_u = 40 °C / 50 °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode.

Type		3RW3026	3RW3027	3RW3028
Power electronics				
Load rating with rated operational current I_e				
• According to IEC and UL/CSA[1], for individual mounting, AC-53a				
- At 40 °C	A	25.3	32.2	38
- At 50 °C	A	23	29	34
- At 60 °C	A	21	26	31
Power loss				
• in operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	8	13	19
• during starting with 300% I_M (40 °C)	W	188	220	256
Permissible rated motor current and starts per hour				
• For normal starting (CLASS 10) at 40 °C/50 °C				
- Rated motor current I_M[2], ramp-up time 3 s	A	25/23	32/29	38/34
- Starts per hour[3]	1/h	23/23	23/23	19/19
- Rated motor current I_M[2], ramp-up time 4 s	A	25/23	32/29	38/34
- Starts per hour[3]	1/h	15/15	16/16	12/12

1) Measurement at 60 °C according to UL/CSA not required.

2) At 300% I_M, T_u = 40 °C / 50 °C.

3) For intermittent duty S4 with ON period = 30%, T_u = 40 °C / 50 °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode. Factors for permissible switching frequency with deviating mounting position, direct mounting, side-by-side mounting, see Manual in the chapter "Configuring".

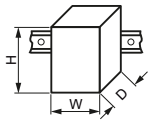
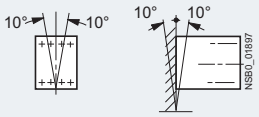
Type		3RW3036	3RW3037	3RW3038	3RW3046	3RW3047
Power electronics						
Load rating with rated operational current I_e						
• According to IEC and UL/CSA[1], for individual mounting, AC-53a						
- At 40 °C	A	45	65	72	80	106
- At 50 °C	A	42	58	62.1	73	98
- At 60 °C	A	39	53	60	66	90
Power loss						
• in operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	6	12	15	12	21
• during starting with 300% I_M (40 °C)	W	316	444	500	576	768
Permissible rated motor current and starts per hour						
• For normal starting (CLASS 10) at 40 °C/50 °C						
- Rated motor current I_M[2], ramp-up time 3 s	A	45/42	63/58	72/62	80/73	106/108
- Starts per hour[3]	1/h	38/38	23/23	22/22	22/22	15/15
- Rated motor current I_M[2], ramp-up time 4 s	A	45/42	63/58	72/62	80/73	106/98
- Starts per hour[3]	1/h	26/26	15/15	15/15	15/15	10/10

1) Measurement at 60 °C according to UL/CSA not required.

2) At 300% I_M, T_u = 40 °C / 50 °C.

3) For intermittent duty S4 with ON period = 30%, T_u = 40 °C / 50 °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode.

General data

Type		3RW3003-1CB54	3RW3003-2CB54
Mechanics and environment			
Mounting dimensions (W x H x D) 			
• Screw terminals	mm	22.5 x 100 x 120	--
• Spring-type terminals	mm	--	22.5 x 101.6 x 120
Permissible ambient temperature			
During operation	°C	-25 ... +60; (derating from +40)	
During storage	°C	-40 ... +80	
Weight	kg	0.207	0.188
Permissible mounting position 			
Permissible installation altitude	m	5 000 (Derating from 1 000, see characteristic curve on page 6/7)	
Degree of protection acc. to IEC 60529		IP20 (IP00 terminal compartment)	
Control electronics			
Rated values			
Rated control supply voltage	V	24 ... 230 AC/DC	
• Tolerance	%	± 10	
Rated frequency at AC	Hz	50/60	
• Tolerance	%	± 10	
Power electronics			
Rated operational voltage	V AC	200 ... 400	
Tolerance	%	± 10	
Rated frequency	Hz	50/60	
Tolerance	%	± 10	
Uninterrupted duty (% of I_e)	%	100	
Minimum load[1] (% of I_e); at 40 °C	%	9	
Maximum conductor length between soft starter and motor	m	100[2]	
Load rating with rated operational current I_e			
• According to IEC and UL/CSA for individual mounting at 40/50/60 °C, AC-53a	A	3/2.6/2.2	
• According to IEC and UL/CSA for side-by-side-mounting at 40/50/60 °C, AC-53a	A	2.6/2.2/1.8	
Power loss			
• In operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	6.5	
• With utilization of maximum switching frequency	W	3	
Permissible starts per hour (cannot be increased by using a fan)			
• For intermittent duty S4 T_u = 40 °C, stand-alone installation vertical	1/h	1 500	
• ON period = 70% for 300% I_e	1/s	0.2	
Dead time after uninterrupted duty			
With I_e before restart	s	0	

1) The rated motor current (specified on the motor's name plate) should at least amount to the specified percentage of the SIRIUS soft starter unit's rated operational current I_e.

2) If this value is exceeded, problems with line capacities may arise, which can result in false firing.

Motor feeders with soft starters

The type of coordination according to which the motor feeder with soft starter is mounted depends on the application-specific requirements. Normally, fuseless mounting (combination of motor starter protector and soft starter) is sufficient.

If type of coordination "2" is to be fulfilled, then semiconductor fuses must be fitted in the motor feeder.

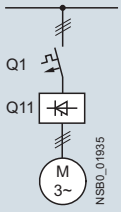
ToC 1 Type of coordination "1" according to IEC 60947-4-1: After a short-circuit incident, the unit is defective and therefore unsuitable for further use (protection of persons and system guaranteed).

ToC 2 Type of coordination "2" according to IEC 60947-4-1: After a short-circuit incident the unit is suitable for further use (protection of persons and system guaranteed).

The type of coordination refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

The types of coordination are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Fuseless version

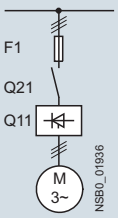


Soft starters ToC 1		Motor starter protectors[1]		
	Rated current	400 V + 10%		Rated current
Q11		Q1	I_q	
Type	A	Type	kA	A
Type of coordination "1"				
3RW3003	3	3RV2011-1EA	50	4
3RW3013	3.6	3RV2011-1FA	5	5
3RW3014	6.5	3RV2011-1HA	5	8
3RW3016	9	3RV2011-1JA	5	10
3RW3017	12.5	3RV2011-1KA	5	12.5
3RW3018	17.6	3RV2021-4BA	5	20
3RW3026	25	3RV2021-4DA	55	25
3RW3027	32	3RV2021-4EA	55	32
3RW3028	38	3RV2021-4FA	55	40
3RW3036	45	3RV2031-4WA10	10	45
3RW3037	63	3RV2031-4JA10	10	63
3RW3038	72	3RV2031-4KA10	10	75
3RW3046	80	3RV2042-4RA10	11	84
3RW3047	106	3RV2042-4MA10	11	100

[1] The rated motor current must be considered when selecting the devices.

General data

Fused version (line protection only)



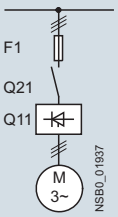
Soft starters ToC 1		Line protection, maximum			Line contactor
	Rated current		Rated current	Size	(optional)
Q11 Type	A	F1 Type	A		Q21 Type
Type of coordination "1"[1]: I_q = 65 kA at 480 V + 10%					
3RW3003[2]	3	3NA3805[3]	20	000	3RT2015
3RW3013	3.6	3NA3803-6	10	000	3RT2015
3RW3014	6.5	3NA3805-6	16	000	3RT2015
3RW3016	9	3NA3807-6	20	000	3RT2016
3RW3017	12.5	3NA3810-6	25	000	3RT2018
3RW3018	17.6	3NA3814-6	35	000	3RT2026
3RW3026	25	3NA3822-6	63	00	3RT2026
3RW3027	32	3NA3824-6	80	00	3RT2027
3RW3028	38	3NA3824-6	80	00	3RT2028
3RW3036	45	3NA3130-6	100	1	3RT2036
3RW3037	63	3NA3132-6	125	1	3RT2037
3RW3038	72	3NA3132-6	125	1	3RT2038
3RW3046	80	3NA3136-6	160	1	3RT2038
3RW3047	106	3NA3136-6	160	1	3RT2046

[1] The type of coordination "1" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

[2] I_q = 50 kA at 400 V.

[3] 3NA3805-1 (NH00), 5SB261 (DIAZED), 5SE2201-6 (NEOZED).

Fused version with 3NE1 SITOR fuses (semiconductor and line protection)



For matching fuse bases, see Catalog LV 10:

- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

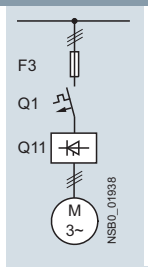
Soft starters ToC 2		All-range fuses			Line contactor
	Rated current		Rated current	Size	(optional)
Q11 Type	A	F'1 Type	A		Q21 Type
Type of coordination "2"[1]: I_q = 65 kA at 480 V + 10%					
3RW3003[2]	3	3NE1813-0[3]	16	000	3RT2015
3RW3013	3.6	3NE1813-0	16	000	3RT2015
3RW3014	6.5	3NE1813-0	16	000	3RT2015
3RW3016	9	3NE1813-0	16	000	3RT2016
3RW3017	12.5	3NE1813-0	16	000	3RT2018
3RW3018	17.6	3NE1814-0	20	000	3RT2026
3RW3026	25	3NE1803-0	35	000	3RT2026
3RW3027	32	3NE1020-2	80	00	3RT2027
3RW3028	38	3NE1020-2	80	00	3RT2028
3RW3036	45	3NE1020-2	80	00	3RT2036
3RW3037	63	3NE1820-0	80	000	3RT2037
3RW3038	72	3NE1820-0	80	000	3RT2038
3RW3046	80	3NE1021-0	100	00	3RT2038
3RW3047	106	3NE1022-0	125	00	3RT2046

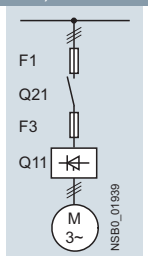
[1] The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

[2] I_q = 50 kA at 400 V.

[3] No SITOR fuse required!
Alternatively: 3NA3803 (NH00), 5SB221 (DIAZED), 5SE2206 (NEOZED).

Fused version with 3NE3 SITOR fuses (semiconductor protection by fuse, line and overload protection by motor starter protector; alternatively, installation with contactor and overload relay possible)





For matching fuse bases, see Catalog LV 10:

- "Fuse systems" → "SITOR Semiconductor Fuses" or www.siemens.com/sitor
- "Switch disconnectors"

Soft starters ToC 2		Semiconductor fuses, minimum			Semiconductor fuses, minimum			Semiconductor fuses, minimum		
	Rated current		Rated current	Size		Rated current	Size		Rated current	Size
Q11 Type	A	F3 Type	A		F3 Type	A		F3 Type	A	
Type of coordination "2"[1]: I_q = 65 kA at 480 V + 10%										
3RW3003[2]	3	--	--	--				3NE8015-1	25	00
3RW3013	3.6	--	--	--	3NE4101	32	0	3NE8015-1	25	00
3RW3014	6.5	--	--	--	3NE4101	32	0	3NE8015-1	25	00
3RW3016	9	--	--	--	3NE4101	32	0	3NE8015-1	25	00
3RW3017	12.5	--	--	--	3NE4101	32	0	3NE8015-1	25	00
3RW3018	17.6	--	--	--	3NE4101	32	0	3NE8003-1	35	00
3RW3026	25	--	--	--	3NE4102	40	0	3NE8017-1	50	00
3RW3027	32	--	--	--	3NE4118	63	0	3NE8018-1	63	00
3RW3028	38	--	--	--	3NE4118	63	0	3NE8020-1	80	00
3RW3036	45	--	--	--	3NE4120	80	0	3NE8020-1	80	00
3RW3037	63	--	--	--	3NE4121	100	0	3NE8021-1	100	00
3RW3038	72	3NE3221	100	1	--	--	--	3NE8022-1	125	00
3RW3046	80	3NE3222	125	1	--	--	--	3NE8022-1	125	00
3RW3047	106	3NE3224	160	1	--	--	--	3NE8024-1	160	00

Soft starters ToC 2		Cylindrical fuses		Line contactor	Motor starter protectors		Line protection, maximum		
	Rated current		Rated current	(optional)	400 V + 10%	Rated current		Rated current	Size
Q11 Type	A	F3 Type	A	Q21	Q1 Type	A	F1 Type	A	
Type of coordination "2"[1]: I_q = 65 kA at 480 V + 10%									
3RW3003[2]	3	3NC1010	10	3RT2015	3RV2011-1EA	4	3NA3805[3]	20	000
3RW3013	3.6	3NC2220	20	3RT2015	3RV2011-1FA	5	3NA3803-6	10	000
3RW3014	6.5	3NC2220	20	3RT2015	3RV2011-1HA	8	3NA3805-6	16	000
3RW3016	9	3NC2220	20	3RT2016	3RV2011-1JA	10	3NA3807-6	20	000
3RW3017	12.5	3NC2250	50	3RT2018	3RV2011-1KA	12.5	3NA3810-6	25	000
3RW3018	17.6	3NC2263	63	3RT2026	3RV2021-4BA	20	3NA3814-6	35	000
3RW3026	25	3NC2263	63	3RT2026	3RV2021-4DA	25	3NA3822-6	63	00
3RW3027	32	3NC2280	80	3RT2027	3RV2021-4EA	32	3NA3824-6	80	00
3RW3028	38	3NC2280	80	3RT2028	3RV2021-4FA	40	3NA3824-6	80	00
3RW3036	45	3NC2280	80	3RT2036	3RV2031-4WA10	45	3NA3130-6	100	1
3RW3037	63	--	--	3RT2037	3RV2031-4JA10	63	3NA3132-6	125	1
3RW3038	72	--	--	3RT2038	3RV2031-4KA10	75	3NA3132-6	125	1
3RW3046	80	--	--	3RT2038	3RV2042-4RA10	84	3NA3136-6	160	1
3RW3047	106	--	--	3RT2046	3RV2042-4MA10	100	3NA3136-6	160	1

1) The type of coordination "2" refers to soft starters in combination with the stipulated protective device (motor starter protector/fuse), not to any additional components in the feeder.

2) I_q = 50 kA at 400 V.

3) 3NA3805-1 (NH00), 5SB261 (DIAZED).

Selection and ordering data

For simple starting conditions


3RW301.


3RW302.


3RW303.


3RW304.


3RW3003-2CB54

3RW ambient temperature 40 °C Rated values of three-phase motors				3RW ambient temperature 50 °C Rated values of three-phase motors					Size	SD[1]	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Operational current I_e	Rating at operational voltage U_e 230 V	400 V	500 V	Operational current I_e	Rating at operational voltage U_e 200 V	230 V	460 V	575 V							
A	kW	kW	kW	A	hp	hp	hp	hp		d					
Rated operational voltage U_e 200 ... 480 V															
3.6	0.75	**1.5**	--	3	0.5	0.5	**1.5**	--	**S00**	2	**3RW3013-□BB□4**		1	1 unit	42G
6.5	1.5	**3**	--	6	1	1	**3**	--	**S00**	2	**3RW3014-□BB□4**		1	1 unit	42G
9	2.2	**4**	--	8	2	2	**5**	--	**S00**	2	**3RW3016-□BB□4**		1	1 unit	42G
12.5	3	**5.5**	--	12	3	3	**7.5**	--	**S00**	2	**3RW3017-□BB□4**		1	1 unit	42G
17.6	4	**7.5**	--	17	3	3	**10**	--	**S00**	2	**3RW3018-□BB□4**		1	1 unit	42G
25	5.5	**11**	--	23	5	5	**15**	--	**S0**	2	**3RW3026-□BB□4**		1	1 unit	42G
32	7.5	**15**	--	29	7.5	7.5	**20**	--	**S0**	2	**3RW3027-□BB□4**		1	1 unit	42G
38	11	**18.5**	--	34	10	10	**25**	--	**S0**	2	**3RW3028-□BB□4**		1	1 unit	42G
45	11	**22**	--	42	10	15	**30**	--	**S2**	2	**3RW3036-□BB□4**		1	1 unit	42G
63	18.5	**30**	--	58	15	20	**40**	--	**S2**	2	**3RW3037-□BB□4**		1	1 unit	42G
72	22	**37**	--	62	20	20	**40**	--	**S2**	2	**3RW3038-□BB□4**		1	1 unit	42G
80	22	**45**	--	73	20	25	**50**	--	**S3**	2	**3RW3046-□BB□4**		1	1 unit	42G
106	30	**55**	--	98	30	30	**75**	--	**S3**	2	**3RW3047-□BB□4**		1	1 unit	42G

Article No. supplement for connection types

- With screw terminals **1**
- With spring-type terminals[2] **2**

Article No. supplement for rated control supply voltage U_s

- 24 V AC/DC **0**
- 110 ... 230 V AC/DC **1**

Soft starters for easy starting conditions and high switching frequency, rated operational voltage U_e 200 ... 400 V, rated control supply voltage U_s 24 ... 230 V AC/DC															
3	0.55	**1.1**	--	2.6	0.5	**0.5**	--	--	22.5 mm						
• With screw terminals										▶	**3RW3003-1CB54**		1	1 unit	42G
• With spring-type terminals										▶	**3RW3003-2CB54**		1	1 unit	42G

[1] Soft starter U_e 200 to 480 V with screw terminals: Standard delivery time SD = 1 day (d).

[2] Main connection from size S2: screw terminals.

Note:

For the boundary conditions for the motor outputs specified here, see page 6/7.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Accessories

More information

Manual "SIRIUS 3RW30/3RW40 Soft Starters", see https://support.industry.siemens.com/cs/ww/en/view/38752095.

Three-phase infeed terminals

Conductor cross-section: Solid or stranded mm²	Conductor cross-section: Finely stranded with end sleeve mm²	Conductor cross-section: AWG cables, solid or stranded AWG	Tightening torque Nm	For soft starters size	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
2.5 … 25	2.5 … 16	10 ... 4	3 ... 4	S00 (3RW301.) S0 (3RW302.)	▶	**3RV2925-5AB**		1	1 unit	41E


3RV2925-5AB

Auxiliary terminals

For soft starters: Type	For soft starters: Size	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Auxiliary terminals, 3-pole							
3RW304.	**S3**	5	**3RT2946-4F**		1	1 unit	41B


3RT2946-4F

Covers for soft starters

Terminal covers for box terminals
Additional touch protection to be fitted at the box terminals (2 units required per device)

3RW303.	**S2**	2	**3RT2936-4EA2**		1	1 unit	41B
3RW304.	**S3**	▶	**3RT2946-4EA2**		1	1 unit	41B


3RT2936-4EA2

Terminal covers for cable lugs and busbar connections
For complying with the voltage clearances and as touch protection if box terminal is removed (2 units required per device)

3RW304.	**S3**	5	**3RT1946-4EA1**		1	1 unit	41B


3RT1946-4EA1

Mounting rails for mounting contactors for the customer assembly of 3RA21 load feeders with busbar adapters for 60 mm systems

For motor starter protectors: Size	For soft starters: Size	Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
--	**S0**	For the discrete configuration of direct-on-line starters, an additional mounting rail is needed for the contactor in addition to the existing mounting rail on the busbar adapter for the motor starter protector. For pushing onto the device adapter, including fixing screws	2	**8US1998-7CB45**		1	10 units	14O

8US1998-7CB45

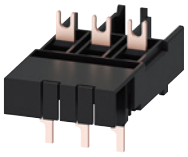
Standard mounting rail adapters

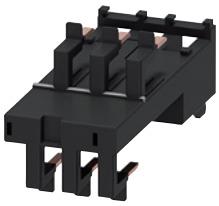
S2	**S2**	For mechanical fixing of motor starter protector and soft starter; for snapping onto standard mounting rail or for screw fixing **Single-unit packaging**	▶	**3RA2932-1CA00**		1	1 unit	41B


3RA2932-1CA00

Accessories

Link modules to motor starter protectors[1)]


3RA2921-1BA00


3RA2921-2GA00

For soft starters Type	Size	Motor starter protectors Size	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
• With screw terminals				**Screw terminals**				
3RW301.	**S00**	**S00**	2	**3RA2921-1BA00**		1	1 unit	41B
3RW302.	**S0**	**S00/S0**	2	**3RA2921-1BA00**		1	1 unit	41B
3RW3036.	**S2**	**S2**	▶	**3RA2931-1AA00**		1	1 unit	41B
3RW3046., 3RW3047.	**S3**	**S3**	▶	**3RA1941-1AA00**		1	1 unit	41B
• With spring-type terminals				**Spring-type terminals**				
3RW301.	**S00**	**S00**	▶	**3RA2911-2GA00**		1	1 unit	41B
3RW302.	**S0**	**S0**	▶	**3RA2921-2GA00**		1	1 unit	41B

1) Can be used in size S0 up to maximum 32 A.
Can be used in size S2 up to maximum 65 A in combination with 3RA2932-1CA00 standard mounting rail adapter (specially for soft starters).
Can be used in size S3 only on mounting plate.

Covers and push-in lugs (only for 3RW3003)


3RP1902


3RP1903

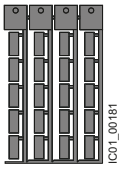
Version	Functionality Functions	Use	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Sealable covers	For securing against unauthorized adjustment of setting knobs	For devices with 1 or 2 CO contacts	5	**3RP1902**		1	5 units	41H
Push-in lugs for screw fixing	--	For devices with 1 or 2 CO contacts	5	**3RP1903**		1	10 units	41H

Tools for opening spring-type terminals in sizes S00 and S0

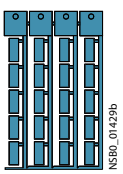

3RA2908-1A

Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
		Spring-type terminals				
Screwdrivers For all SIRIUS devices with spring-type terminals Length approx. 200 mm, 3.0 mm x 0.5 mm, titanium gray/black, partially insulated	2	**3RA2908-1A**		1	1 unit	41B

Blank labels



3RT2900-1SB20



3RT1900-1SB20

Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Unit labeling plates[1)] For SIRIUS devices						
• 20 mm x 7 mm, titanium gray	20	**3RT2900-1SB20**		100	340 units	41B
• 20 mm x 7 mm, pastel turquoise	20	**3RT1900-1SB20**		100	340 units	41B

1) PC labeling systems for individual inscription of unit labeling plates are available from: murrplastik Systemtechnik GmbH, see page 16/16.

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Overview

More information

Homepage, see www.siemens.com/soft-starter
Industry Mall, see www.siemens.com/product?3RW
Online configurator, see www.siemens.com/sirius/configurators
Simulation Tool for Soft Starters (STS), see page 6/7 or https://support.industry.siemens.com/cs/ww/en/view/101494917

Selection and ordering data

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Power semiconductor modules									
 3RW5952-0SF04	**Power semiconductor module**	3RW5524-.HA.4 (3x)	480 V, 47 A	1	**3RW5952-0SF04**		1	1 unit	42S
		3RW5525-.HA.4, 3RW5526-.HA.4 (3x)	480 V, 77 A	1	**3RW5952-0SH04**		1	1 unit	42S
		3RW5527-.HA.4 (3x)	480 V, 93 A	1	**3RW5952-0SJ04**		1	1 unit	42S
 3RW5953-0SM06		3RW5534-.HA.4, 3RW5535-.HA.4 (3x)	480 V, 143 A	1	**3RW5953-0SL04**		1	1 unit	42S
		3RW5536-.HA.4 (3x)	480 V, 171 A	1	**3RW5953-0SM04**		1	1 unit	42S
		3RW5543-.HA.4 (3x)	480 V, 210 A	1	**3RW5954-0SN04**		1	1 unit	42S
		3RW5544-.HA.4 (3x)	480 V, 250 A	1	**3RW5954-0SP04**		1	1 unit	42S
		3RW5545-.HA.4, 3RW5546-.HA.4 (3x)	480 V, 370 A	1	**3RW5954-0SR04**		1	1 unit	42S
		3RW5547-.HA.4, 3RW5548-.HA.4 (3x)	480 V, 570 A	1	**3RW5954-0ST04**		1	1 unit	42S
		3RW5521-.HA.6, 3RW5524-.HA.6 (3x)	690 V, 47 A	1	**3RW5952-0SF06**		1	1 unit	42S
		3RW5525-.HA.6, 3RW5526-.HA.6 (3x)	690 V, 77 A	1	**3RW5952-0SH06**		1	1 unit	42S
		3RW5527-.HA.6 (3x)	690 V, 93 A	1	**3RW5952-0SJ06**		1	1 unit	42S
		3RW5534-.HA.6, 3RW5535-.HA.6 (3x)	690 V, 143 A	1	**3RW5953-0SL06**		1	1 unit	42S
		3RW5536-.HA.6 (3x)	690 V, 171 A	1	**3RW5953-0SM06**		1	1 unit	42S
 3RW5954-0ST06		3RW5543-.HA.6 (3x)	690 V, 210 A	1	**3RW5954-0SN06**		1	1 unit	42S
		3RW5544-.HA.6 (3x)	690 V, 250 A	1	**3RW5954-0SP06**		1	1 unit	42S
		3RW5545-.HA.6, 3RW5546-.HA.6 (3x)	690 V, 370 A	1	**3RW5954-0SR06**		1	1 unit	42S
		3RW5547-.HA.6, 3RW5548-.HA.6 (3x)	690 V, 570 A	1	**3RW5954-0ST06**		1	1 unit	42S
Bypass units									
 3RW5953-0BY00	**Bypass unit**	3RW552, 3RW553	--	1	**3RW5953-0BY00**		1	1 unit	42S
		3RW5543, 3RW5544, 3RW5545	210 A to 315 A	1	**3RW5954-0BP00**		1	1 unit	42S
		3RW5546, 3RW5547, 3RW5548	370 A to 570 A	1	**3RW5954-0BT00**		1	1 unit	42S
Control units									
 3RW5950-1UY00	**Control unit**	3RW55..-.HA0.	24 V	1	**3RW5950-1UY00**		1	1 unit	42S
		3RW55..-.HA1.	110 - 250 V	1	**3RW5950-1UY10**		1	1 unit	42S

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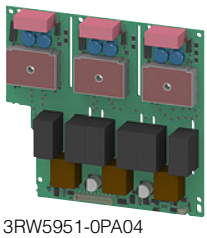
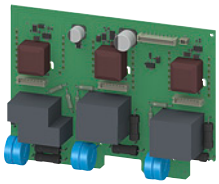
*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

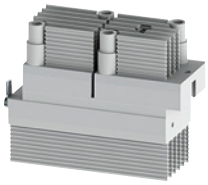
	Product designation	Manufacturer's Article No. of the soft starter	Type of product	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Printed-circuit boards									
 3RW5951-0PA04	**Printed circuit board**	3RW5513-.HA.4	480 V, 13 A	1	**3RW5951-0PA04**		1	1 unit	42S
		3RW5514-.HA.4	480 V, 18 A	1	**3RW5951-0PB04**		1	1 unit	42S
		3RW5515-.HA.4	480 V, 25 A	1	**3RW5951-0PC04**		1	1 unit	42S
		3RW5516-.HA.4	480 V, 32 A	1	**3RW5951-0PD04**		1	1 unit	42S
		3RW5517-.HA.4	480 V, 38 A	1	**3RW5951-0PE04**		1	1 unit	42S
		3RW552.-.HA.4, 3RW553.-.HA.4	480 V	1	**3RW5953-0PY04**		1	1 unit	42S
		3RW554.-.HA.4	480 V	1	**3RW5954-0PY04**		1	1 unit	42S
 3RW5954-0PY06		3RW5513-.HA.5	600 V, 13 A	1	**3RW5951-0PA05**		1	1 unit	42S
		3RW5514-.HA.5	600 V, 18 A	1	**3RW5951-0PB05**		1	1 unit	42S
		3RW5515-.HA.5	600 V, 25 A	1	**3RW5951-0PC05**		1	1 unit	42S
		3RW5516-.HA.5	600 V, 32 A	1	**3RW5951-0PD05**		1	1 unit	42S
		3RW5517-.HA.5	600 V, 38 A	1	**3RW5951-0PE05**		1	1 unit	42S
		3RW552.-.HA.6, 3RW553.-.HA.6	690 V	1	**3RW5953-0PY06**		1	1 unit	42S
		3RW554.-.HA.6	690 V	1	**3RW5954-0PY06**		1	1 unit	42S
Fans									
 3RW5983-0FF00	**Fans**	3RW551 (1x), 3RW552, 3RW553 (2x)	--	1	**3RW5983-0FF00**		1	1 unit	42S
		3RW554	--	1	**3RW5984-0FF00**		1	1 unit	42S
Terminals									
 3RW5982-0TB00	**Box terminal block**	3RW552 (2x)	--	1	**3RW5982-0TB00**		1	1 unit	42S
 3RW5980-1TR00	**Removable control terminals**	3RW551.-1HA.., 3RW552.-1HA.., 3RW553.-6HA.., 3RW554.-6HA.. (2x)	With screw terminals, contains 2 blocks each with 6 terminals	1	**3RW5980-1TR00**		1	1 unit	42S
		3RW551.-3HA.., 3RW552.-3HA.., 3RW553.-2HA.., 3RW554.-2HA.. (2x)	With spring-type terminals, contains 2 blocks each with 6 terminals	1	**3RW5980-2TR00**		1	1 unit	42S
Enclosure components									
 3RW5953-0GB00	**Enclosure base**	3RW552, 3RW553	--	1	**3RW5953-0GB00**		1	1 unit	42S
		3RW554		1	**3RW5954-0GB00**		1	1 unit	42S
 3RW5950-0GD20	**Cover for control cable duct**	3RW55	Titanium gray	1	**3RW5950-0GD20**		1	1 unit	42S

* You can order this quantity or a multiple thereof.
Illustrations are approximate

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
				d					
 3RW5954-0GF00	**Front cover**	3RW554	--	1	**3RW5954-0GF00**		1	1 unit	42S
 3RW5950-0GL30	**Hinged cover**	3RW55	With cutout for HMI module High Feature	1	**3RW5950-0GL30**		1	1 unit	42S
HMI modules									
 3RW5980-0HF00	**HMI module**	3RW55	High Feature	1	**3RW5980-0HF00**		1	1 unit	42S
 3RW5980-0HL00	**Interface cover**	3RW55	--	1	**3RW5980-0HL00**		1	1 unit	42S
Connection cables									
 3UF7931-0AA00-0	**Connection cables**	--	Length 0.1 m, flat	▶	**3UF7931-0AA00-0**		1	1 unit	42J
Transport packaging									
 3RW5953-0VY00	**Transport packaging**	3RW551	--	1	**3RW5951-0VY00**		1	1 unit	42S
		3RW552, 3RW553	--	1	**3RW5953-0VY00**		1	1 unit	42S
		3RW554	--	1	**3RW5954-0VY00**		1	1 unit	42S

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

Selection and ordering data

For soft starters Type	Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Power semiconductor modules							
 3RW4743-0LC00							
3RW4443	690 V, 203 A (2 units required per device)	1	**3RW4743-0LC00**		1	1 unit	42H
3RW4444, 3RW4445	690 V, 313 A (2 units required per device)	1	**3RW4745-0LC00**		1	1 unit	42H
3RW4446	690 V, 356 A (2 units required per device)	1	**3RW4746-0LC00**		1	1 unit	42H
3RW4447	690 V, 432 A (2 units required per device)	1	**3RW4747-0LC00**		1	1 unit	42H
3RW4453, 3RW4454, 3RW4455	690 V, 693 A (2 units required per device)	3	**3RW4755-0LC00**		1	1 unit	42H
3RW4456, 3RW4457, 3RW4458	690 V, 970 A (2 units required per device)	3	**3RW4758-0LC00**		1	1 unit	42H
3RW4465, 3RW4466	690 V, 1 214 A (2 units required per device)	3	**3RW4766-0LC00**		1	1 unit	42H
NTC power semiconductor modules							
 3RW4743-0NC00							
3RW4443	690 V, 203 A	1	**3RW4743-0NC00**		1	1 unit	42H
3RW4444, 3RW4445	690 V, 313 A	1	**3RW4745-0NC00**		1	1 unit	42H
3RW4446	690 V, 356 A	1	**3RW4746-0NC00**		1	1 unit	42H
3RW4447	690 V, 432 A	1	**3RW4747-0NC00**		1	1 unit	42H
3RW4453, 3RW4454, 3RW4455	690 V, 693 A	3	**3RW4755-0NC00**		1	1 unit	42H
3RW4456, 3RW4457, 3RW4458	690 V, 970 A	3	**3RW4758-0NC00**		1	1 unit	42H
3RW4465, 3RW4466	690 V, 1 214 A	3	**3RW4766-0NC00**		1	1 unit	42H
Bypass units							
 3RW4755-0KC00							
3RW4453, 3RW4454, 3RW4455	--	2	**3RW4755-0KC00**		1	1 unit	42H
3RW4456, 3RW4457	--	2	**3RW4766-0KC00**		1	1 unit	42H
3RW4458, 3RW4465, 3RW4466	--	2	**3RW4766-0KC01**		1	1 unit	42H
Control units with screw terminals							
 3RW4722-1SC44							
3RW4422-.BC4.	230 V	1	**3RW4722-1SC44**		1	1 unit	42H
3RW4423-.BC4.	230 V	1	**3RW4723-1SC44**		1	1 unit	42H
3RW4424-.BC4.	230 V	1	**3RW4724-1SC44**		1	1 unit	42H
3RW4425-.BC4.	230 V	1	**3RW4725-1SC44**		1	1 unit	42H
3RW4426-.BC4.	230 V	1	**3RW4726-1SC44**		1	1 unit	42H
3RW4427-.BC4.	230 V	1	**3RW4727-1SC44**		1	1 unit	42H
3RW4434-.BC4.	230 V	1	**3RW4734-6SC44**		1	1 unit	42H
3RW4435-.BC4.	230 V	1	**3RW4735-6SC44**		1	1 unit	42H
3RW4436-.BC4.	230 V	1	**3RW4736-6SC44**		1	1 unit	42H
3RW4443-.BC4.	230 V	1	**3RW4743-6SC44**		1	1 unit	42H
3RW4444-.BC4.	230 V	1	**3RW4744-6SC44**		1	1 unit	42H
3RW4445-.BC4.	230 V	1	**3RW4745-6SC44**		1	1 unit	42H
3RW4446-.BC4.	230 V	1	**3RW4746-6SC44**		1	1 unit	42H
3RW4447-.BC4.	230 V	1	**3RW4747-6SC44**		1	1 unit	42H
3RW4453-.BC4.	230 V	1	**3RW4753-6SC44**		1	1 unit	42H
3RW4454-.BC4.	230 V	1	**3RW4754-6SC44**		1	1 unit	42H
3RW4455-.BC4.	230 V	1	**3RW4755-6SC44**		1	1 unit	42H
3RW4456-.BC4.	230 V	1	**3RW4756-6SC44**		1	1 unit	42H
3RW4457-.BC4.	230 V	1	**3RW4757-6SC44**		1	1 unit	42H
3RW4458-.BC4.	230 V	1	**3RW4758-6SC44**		1	1 unit	42H
3RW4465-.BC4.	230 V	1	**3RW4765-6SC44**		1	1 unit	42H
3RW4466-.BC4.	230 V	1	**3RW4766-6SC44**		1	1 unit	42H

* You can order this quantity or a multiple thereof.
Illustrations are approximate

For soft starters	Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type		d					
TSE printed circuit boards							
 3RW4756-0WC70							
3RW4453.-.BC.4, 3RW4454.-.BC.4, 3RW4455.-.BC.4, 3RW4456.-.BC.4	460 V	2	**3RW4756-0WC70**		1	1 unit	42H
3RW4457.-.BC.4, 3RW4458.-.BC.4, 3RW4465.-.BC.4, 3RW4466.-.BC.4	460 V	2	**3RW4766-0WC70**		1	1 unit	42H
3RW4453.-.BC.5, 3RW4453.-.BC.6, 3RW4454.-.BC.5, 3RW4454.-.BC.6, 3RW4455.-.BC.5, 3RW4455.-.BC.6, 3RW4456.-.BC.5, 3RW4456.-.BC.6	690 V	2	**3RW4756-0WC50**		1	1 unit	42H
3RW4457-.BC.5, 3RW4457-.BC.6, 3RW4458-.BC.5, 3RW4458-.BC.6, 3RW4465-.BC.5, 3RW4465-.BC.6, 3RW4466-.BC.5, 3RW4466-.BC.6	690 V	2	**3RW4766-0WC50**		1	1 unit	42H
Firing printed circuit boards							
 3RW4727-0VC70							
3RW442.-.BC.4	460 V	2	**3RW4727-0VC70**		1	1 unit	42H
3RW443.-.BC.4, 3RW4443-.BC.4	460 V	2	**3RW4743-0VC70**		1	1 unit	42H
3RW4444-.BC.4, 3RW4445-.BC.4	460 V	2	**3RW4745-0VC70**		1	1 unit	42H
3RW4446-.BC.4, 3RW4447-.BC.4	460 V	2	**3RW4747-0VC70**		1	1 unit	42H
3RW445.-.BC.4, 3RW446.-.BC.4	460 V	2	**3RW4766-0VC70**		1	1 unit	42H
3RW442.-.BC.5	600 V	2	**3RW4727-0VC80**		1	1 unit	42H
3RW443.-.BC.5, 3RW4443-.BC.5	600 V	2	**3RW4743-0VC80**		1	1 unit	42H
3RW442.-.BC.6	690 V	2	**3RW4727-0VC50**		1	1 unit	42H
3RW443.-.BC.6, 3RW4444-.BC.5, 3RW4445-.BC.5	690 V	2	**3RW4745-0VC50**		1	1 unit	42H
3RW4443-.BC.6, 3RW4446-.BC.5, 3RW4447-.BC.5, 3RW4447-.BC.6	690 V	2	**3RW4746-0VC50**		1	1 unit	42H
3RW4444-.BC.6, 3RW4445-.BC.6, 3RW4446-.BC.6	690 V	2	**3RW4747-0VC50**		1	1 unit	42H
3RW445.-.BC.5, 3RW445.-.BC.6, 3RW446.-.BC.5, 3RW446.-.BC.6	690 V	2	**3RW4766-0VC50**		1	1 unit	42H
Fans							
 3RW4957-8VX.0, 3RW4966-8VX.0							
3RW442.-.BC3.[1], 3RW443.-.BC3.	115 V	►	**3RW4936-8VX30**		1	1 unit	42G
3RW442.-.BC4.[1], 3RW443.-.BC4.	230 V	►	**3RW4936-8VX40**		1	1 unit	42G
3RW444.-.BC3.	115 V	►	**3RW4947-8VX30**		1	1 unit	42G
3RW444.-.BC4.	230 V	►	**3RW4947-8VX40**		1	1 unit	42G
3RW445.-.BC3., 3RW446.-.BC3.[2]	115 V	►	**3RW4957-8VX30**		1	1 unit	42H
3RW445.-.BC4., 3RW446.-.BC4.[2]	230 V	►	**3RW4957-8VX40**		1	1 unit	42H
3RW446.-.BC3.[3]	115 V	►	**3RW4966-8VX30**		1	1 unit	42H
3RW446.-.BC4.[3]	230 V	►	**3RW4966-8VX40**		1	1 unit	42H

[1] The 3RW4422 and 3RW4423 soft starters do not need fans. These devices are adequately designed for natural convection.

[2] 3RW446. mounting on output side.

[3] For mounting on front side.

for 3RW44

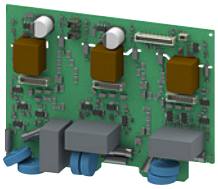
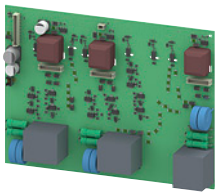
	For soft starters Type	Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Removable control terminals								
				Screw terminals				
	With screw terminals							
 3RW4766-6HC00	3RW44	4 blocks each with 6 terminals	1	**3RW4766-6HC00**		1	1 unit	42H
				Spring-type terminals				
	With spring-type terminals							
	3RW44	4 blocks each with 6 terminals	1	**3RW4766-2HC00**		1	1 unit	42H
Box terminal block								
 3RW4727-0RC00	3RW442.	--	5	**3RW4727-0RC00**		1	10 units	42H
Enclosure base								
 3RW4747-0UC00	3RW444.	--	3	**3RW4747-0UC00**		1	1 unit	42H

* You can order this quantity or a multiple thereof.
Illustrations are approximate

Selection and ordering data

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
				d					
Power semiconductor modules									
 3RW5952-0SF04	**Power semiconductor module**	3RW5224-..C.4 (3x)	480 V, 47 A	1	**3RW5952-0SF04**		1	1 unit	42S
		3RW5225-..C.4, 3RW5226-..C.4 (3x)	480 V, 77 A	1	**3RW5952-0SH04**		1	1 unit	42S
		3RW5227-..C.4 (3x)	480 V, 93 A	1	**3RW5952-0SJ04**		1	1 unit	42S
		3RW5234-..C.4, 3RW5235-..C.4 (3x)	480 V, 143 A	1	**3RW5953-0SL04**		1	1 unit	42S
		3RW5236-..C.4 (3x)	480 V, 171 A	1	**3RW5953-0SM04**		1	1 unit	42S
		3RW5224-..C.5 (3x)	600 V, 47 A	1	**3RW5952-0SF05**		1	1 unit	42S
		3RW5225-..C.5, 3RW5226-..C.5 (3x)	600 V, 77 A	1	**3RW5952-0SH05**		1	1 unit	42S
		3RW5227-..C.5 (3x)	600 V, 93 A	1	**3RW5952-0SJ05**		1	1 unit	42S
 3RW5953-0SM05		3RW5234-..C.5, 3RW5235-..C.5 (3x)	600 V, 143 A	1	**3RW5953-0SL05**		1	1 unit	42S
		3RW5236-..C.5 (3x)	600 V, 171 A	1	**3RW5953-0SM05**		1	1 unit	42S
		3RW5243 (3x)	600 V, 210 A	1	**3RW5924-0SN05**		1	1 unit	42S
		3RW5244, 3RW5245 (3x)	600 V, 315 A	1	**3RW5924-0SQ05**		1	1 unit	42S
		3RW5246, 3RW5247 (3x)	600 V, 470 A	1	**3RW5924-0SS05**		1	1 unit	42S
		3RW5248 (3x)	600 V, 570 A	1	**3RW5924-0ST05**		1	1 unit	42S
 3RW5954-0ST05									
Bypass units									
 3RW5953-0BY00	**Bypass unit**	3RW522, 3RW523	--	1	**3RW5953-0BY00**		1	1 unit	42S
		3RW5243, 3RW5244, 3RW5245	210 A to 315 A	1	**3RW5954-0BP00**		1	1 unit	42S
		3RW5246, 3RW5247, 3RW5248	370 A to 570 A	1	**3RW5954-0BT00**		1	1 unit	42S
Control units									
 3RW5920-1UA00	**Control unit**	3RW52..-.AC0.	24 V analog output	1	**3RW5920-1UA00**		1	1 unit	42S
		3RW52..-.AC1.	110 - 250 V analog output	1	**3RW5920-1UA10**		1	1 unit	42S
		3RW52..-.TC0.	24 V thermistor input	1	**3RW5920-1UT00**		1	1 unit	42S
		3RW52..-.TC1.	110 - 250 V thermistor input	1	**3RW5920-1UT10**		1	1 unit	42S

*** You can order this quantity or a multiple thereof.**
Illustrations are approximate

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
				d					
Printed-circuit boards									
 3RW5923-0PY04	**Printed circuit board**	3RW5213-..C.4	480 V, 13 A	1	**3RW5921-0PA04**		1	1 unit	42S
		3RW5214-..C.4	480 V, 18 A	1	**3RW5921-0PB04**		1	1 unit	42S
		3RW5215-..C.4	480 V, 25 A	1	**3RW5921-0PC04**		1	1 unit	42S
		3RW5216-..C.4	480 V, 32 A	1	**3RW5921-0PD04**		1	1 unit	42S
		3RW5217-..C.4	480 V, 38 A	1	**3RW5921-0PE04**		1	1 unit	42S
		3RW522.-..C.4, 3RW523.-..C.4	480 V	1	**3RW5923-0PY04**		1	1 unit	42S
		3RW524.-..C.4	480 V	1	**3RW5924-0PY04**		1	1 unit	42S
 3RW5924-0PY05		3RW5213-..C.5	600 V, 13 A	1	**3RW5921-0PA05**		1	1 unit	42S
		3RW5214-..C.5	600 V, 18 A	1	**3RW5921-0PB05**		1	1 unit	42S
		3RW5215-..C.5	600 V, 25 A	1	**3RW5921-0PC05**		1	1 unit	42S
		3RW5216-..C.5	600 V, 32 A	1	**3RW5921-0PD05**		1	1 unit	42S
		3RW5217-..C.5	600 V, 38 A	1	**3RW5921-0PE05**		1	1 unit	42S
		3RW522.-..C.5, 3RW523.-..C.5	600 V	1	**3RW5923-0PY05**		1	1 unit	42S
		3RW524.-..C.5	600 V	1	**3RW5924-0PY05**		1	1 unit	42S
Fans									
 3RW5983-0FF00	**Fans**	3RW5216/17 (1x), 3RW5526/27, 3RW553 (2x)	--	1	**3RW5983-0FF00**		1	1 unit	42S
		3RW524	--	1	**3RW5984-0FF00**		1	1 unit	42S
Terminals									
 3RW5982-0TB00	**Box terminal block**	3RW522 (2x)	--	1	**3RW5982-0TB00**		1	1 unit	42S
 3RW5980-1TR00	**Removable control terminals**	3RW521.-1.C.., 3RW522.-1.C.., 3RW523.-6.C.., 3RW524.-6.C..	With screw terminals, contains 2 blocks each with 6 terminals	1	**3RW5980-1TR00**		1	1 unit	42S
		3RW521.-3.C.., 3RW522.-3.C.., 3RW523.-2.C.., 3RW524.-2.C..	With spring-type terminals, contains 2 blocks each with 6 terminals	1	**3RW5980-2TR00**		1	1 unit	42S
Enclosure components									
 3RW5953-0GB00	**Enclosure base**	3RW552, 3RW553	--	1	**3RW5953-0GB00**		1	1 unit	42S
		3RW554	--	1	**3RW5954-0GB00**		1	1 unit	42S
 3RW5950-0GD20	**Cover for control cable duct**	3RW52	Titanium gray	1	**3RW5950-0GD20**		1	1 unit	42S

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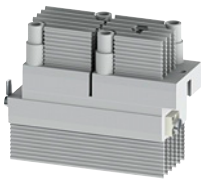
Illustrations are approximate

	Product designation	Manufacturer's Article No. of the soft starter	Type of product	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
				d					
Enclosure components									
 3RW5954-0GF00	**Front cover**	3RW524	--	1	**3RW5954-0GF00**		1	1 unit	42S
 3RW5950-0GL20	**Hinged cover**	3RW52	Without cutout	1	**3RW5950-0GL20**		1	1 unit	42S
Transport packaging									
 3RW5953-0VY00	**Transport packaging**	3RW521	--	1	**3RW5951-0VY00**		1	1 unit	42S
		3RW522, 3RW523	--	1	**3RW5953-0VY00**		1	1 unit	42S
		3RW524	--	1	**3RW5954-0VY00**		1	1 unit	42S

Selection and ordering data

For soft starters Type	Size	Version	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Power semiconductor modules								
 3RW4773-0LB00								
3RW4073	S12	600 V, 230 A	1	**3RW4773-0LB00**		1	1 unit	42G
3RW4074	S12	600 V, 280 A	1	**3RW4774-0LB00**		1	1 unit	42G
3RW4075	S12	600 V, 356 A	1	**3RW4775-0LB00**		1	1 unit	42G
3RW4076	S12	600 V, 432 A	1	**3RW4776-0LB00**		1	1 unit	42G
NTC power semiconductor modules								
 3RW4773-0NB00								
3RW4073	S12	600 V, 230 A	1	**3RW4773-0NB00**		1	1 unit	42G
3RW4074	S12	600 V, 280 A	1	**3RW4774-0NB00**		1	1 unit	42G
3RW4075	S12	600 V, 356 A	1	**3RW4775-0NB00**		1	1 unit	42G
3RW4076	S12	600 V, 432 A	1	**3RW4776-0NB00**		1	1 unit	42G
Control units with screw terminals								
 3RW4755-6SB40								
3RW4055-.BB3.	S6	115 V	1	**3RW4755-6SB30**		1	1 unit	42G
3RW4055-.BB4.	S6	230 V	1	**3RW4755-6SB40**		1	1 unit	42G
3RW4056-.BB3.	S6	115 V	1	**3RW4756-6SB30**		1	1 unit	42G
3RW4056-.BB4.	S6	230 V	1	**3RW4756-6SB40**		1	1 unit	42G
3RW4073-.BB3.	S12	115 V	1	**3RW4773-6SB30**		1	1 unit	42G
3RW4073-.BB4.	S12	230 V	1	**3RW4773-6SB40**		1	1 unit	42G
3RW4074-.BB3.	S12	115 V	1	**3RW4774-6SB30**		1	1 unit	42G
3RW4074-.BB4.	S12	230 V	1	**3RW4774-6SB40**		1	1 unit	42G
3RW4075-.BB3.	S12	115 V	1	**3RW4775-6SB30**		1	1 unit	42G
3RW4075-.BB4.	S12	230 V	1	**3RW4775-6SB40**		1	1 unit	42G
3RW4076-.BB3.	S12	115 V	1	**3RW4776-6SB30**		1	1 unit	42G
3RW4076-.BB4.	S12	230 V	1	**3RW4776-6SB40**		1	1 unit	42G
Firing printed circuit boards								
 3RW4756-0VB70								
3RW405-.BB.4	S6	460 V	2	**3RW4756-0VB70**		1	1 unit	42G
3RW405-.BB.5	S6	600 V	2	**3RW4756-0VB80**		1	1 unit	42G
3RW407-.BB.4	S12	460 V	2	**3RW4776-0VB70**		1	1 unit	42G
3RW407-.BB.5	S12	600 V	2	**3RW4776-0VB80**		1	1 unit	42G
Fans								
 3RW4936-8VX.0, 3RW4947-8VX.0								
3RW405.-.BB3.	S6	115 V	▶	**3RW4936-8VX30**		1	1 unit	42G
3RW405.-.BB4.	S6	230 V	▶	**3RW4936-8VX40**		1	1 unit	42G
3RW407.-.BB3.	S12	115 V	▶	**3RW4947-8VX30**		1	1 unit	42G
3RW407.-.BB4.	S12	230 V	▶	**3RW4947-8VX40**		1	1 unit	42G
Removable control terminals								
 3RW4776-6HB00								
With spring-type terminals								
3RW40	S6/S12	2 blocks each with 6 terminals	1	**3RW4776-2HB00**		1	1 unit	42G
With screw terminals								
3RW40	S6/S12	2 blocks each with 6 terminals	1	**3RW4776-6HB00**		1	1 unit	42G
Enclosure base								
 3RW4776-0UB00								
3RW407.	S12	--	3	**3RW4776-0UB00**		1	1 unit	42G

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Illustrations are approximate

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