

# For Operation in the Control Cabinet

## 3RW Soft Starters

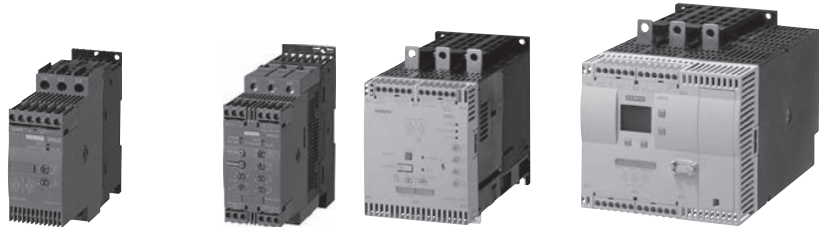
### General Data

#### Overview

The advantages of the SIRIUS soft starters at a glance:

- Soft starting and smooth ramp-down<sup>1)</sup>
- Stepless starting
- Reduction of current peaks
- Avoidance of mains voltage fluctuations during starting
- Reduced load on the power supply network

- Reduction of the mechanical load in the operating mechanism
- Considerable space savings and reduced wiring compared with conventional starters
- Maintenance-free switching
- Very easy handling
- Fits perfectly in the SIRIUS modular system



		SIRIUS 3RW30 Standard applications	SIRIUS 3RW40 Standard applications	SIRIUS 3RW44 High-Feature applications
Rated current up to 50 °C	A	3 ... 98	11 ... 385	26 ... 1076
Rated operational voltage	V	200 ... 480	200 ... 600	200 ... 690
Motor rating at 460 V				
• Inline circuit	Hp	1.5 ... 75	7.5 ... 300	15 ... 900
• Inside-delta circuit	Hp	--	--	22 ... 1600
Ambient temperature	°C	-25 ... +60	-25 ... +60	0 ... +60
Soft starting/ramp-down		✓ <sup>1)</sup>	✓	✓
Voltage ramp		✓	✓	✓
Starting/stopping voltage	%	40 ... 100	40 ... 100	20 ... 100
Starting and ramp-down time <sup>7)</sup>	s	0 ... 20	0 ... 20	1 ... 360
Torque control		--	--	✓
Starting/stopping torque	%	--	--	20 ... 100
Torque limit	%	--	--	20 ... 200
Ramp time	s	--	--	1 ... 360
Integral bypass contact system		✓	✓	✓
Intrinsic device protection		--	✓	✓
Motor overload protection		--	✓	✓
Thermistor motor protection		--	✓ <sup>2)</sup>	✓
Integrated remote RESET		--	✓ <sup>3)</sup>	✓
Adjustable current limiting		--	✓	✓
Inside-delta circuit		--	--	✓
Breakaway pulse		--	--	✓
Creep speed in both directions of rotation		--	--	✓
Pump ramp-down		--	--	✓ <sup>4)</sup>
DC braking		--	--	✓ <sup>4)</sup> 5)
Combined braking		--	--	✓ <sup>4)</sup> 5)
Motor heating		--	--	✓
Communication		--	--	With PROFIBUS DP (optional)
External display and operator module		--	--	(optional)
Operating measured value display		--	--	✓
Error logbook		--	--	✓
Event list		--	--	✓
Slave pointer function		--	--	✓
Trace function		--	--	✓ <sup>6)</sup>
Programmable control inputs and outputs		--	--	✓
Number of parameter sets		1	1	3
Parameterization software (Soft Starter ES)		--	--	✓
Power semiconductors (thyristors)		2 controlled phases	2 controlled phases	3 controlled phases
Screw terminals		✓	✓	✓
Spring-type terminals		✓	✓	✓
UL/CSA		✓	✓	✓
CE marking		✓	✓	✓
Soft starting under heavy starting conditions		--	--	✓ <sup>4)</sup>

#### Configuring support

Win-Soft Starter, Electronic Application Selector, Technical Assistance Tel.: 1-800-333-7421

✓ Function is available; -- Function is not available.

<sup>1)</sup> Only soft starting available for 3RW30.

<sup>2)</sup> Optional up to size S3 (device variant).

<sup>3)</sup> Available for 3RW40 2. to 3RW40 4., optional for 3RW40 5. and 3RW40 7..

<sup>4)</sup> Calculate soft starter and motor with size allowance where required.

<sup>5)</sup> Not possible in inside-delta circuit.

<sup>6)</sup> Trace function with Soft Starter ES software.

<sup>7)</sup> Actual motor start times are load dependent.

You can find further information on the Internet at:

[www.usa.siemens.com/softstarters](http://www.usa.siemens.com/softstarters)

### More information

#### Application examples for normal starting (Class 10)

**Normal starting Class 10** (up to 20 s with 300 %  $I_{n \text{ motor}}$ ).  
The soft starter rating can be selected to be as high as the rating of the motor used.

Application	Conveyor belt	Roller conveyor	Compressor	Small fan	Pump	Hydraulic pump
<b>Starting parameters</b>						
• Voltage ramp and current limiting						
- Starting voltage	% 70	60	50	40	40	40
- Starting time	s 10	10	20	20	10	10

#### Note:

These tables present sample set values and device sizes. They are intended only for the purposes of information and are not binding. The set values depend on the application in question and must be optimized during start-up. Actual start times are load dependent.

The soft starter dimensions should be checked where necessary with the Win-Soft Starter software or with the help of Technical Assistance.

#### Configuration

The 3RW solid-state motor controllers are designed for easy starting conditions. In the event of deviating conditions or increased switching frequency, it may be necessary to choose a larger device. For accurate dimensioning, use the Win-Soft Starter selection and simulation program.

If necessary, an overload relay for heavy starting must be selected where long starting times are involved. PTC sensors are recommended.

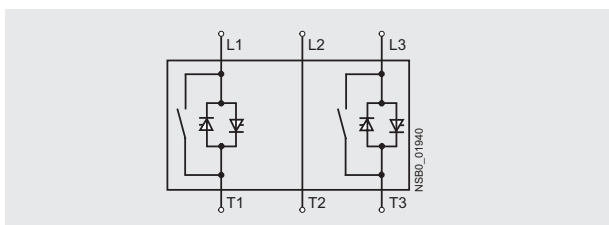
In the motor feeder between the SIRIUS 3RW soft starter and the motor, no capacitive elements are permitted (e. g. no reactive-power compensation equipment). In addition, neither static systems for reactive-power compensation nor dynamic PFC (Power Factor Correction) must be operated in parallel during 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, controls and overload relays) should be dimensioned for direct starting, following the local short-circuit conditions. Fuses, controls and overload relays must be ordered separately. Please observe the maximum switching frequencies specified in the technical specifications.

#### Note:

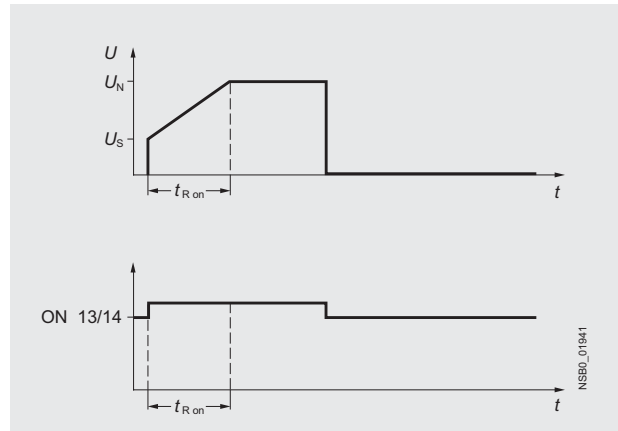
When induction motors are switched on, voltage drops normally appear on starters of all types (direct starters, wye-delta starters, soft starters). The infeed transformer must always be dimensioned such that the voltage dip when starting the motor remains within the permissible tolerance. If the infeed 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.

#### Power electronics schematic circuit diagram



A bypass contact system is already integrated in the 3RW30 soft starter and therefore does not have to be ordered separately.

#### Status graphs



#### Win-Soft Starter selection and simulation program

With this software, you can simulate and select all Siemens soft starters, taking into account various parameters such as mains properties, motor and load data, and special application requirements.

The software is a valuable tool, which makes complicated, lengthy manual calculations for determining the required soft starters superfluous.

The Win-Soft Starter selection and simulation program can be downloaded from:

<http://www.siemens.de/sanftstarter> > Software

More information can be found on the Internet at:

<http://www.sea.siemens.com/softstarters>

# For Operation in the Control Cabinet

## 3RW Soft Starters

### 3RW40

#### for standard applications

#### Overview

SIRIUS 3RW40 soft starters have all the same advantages as the 3RW30 soft starters.

The SIRIUS 3RW40 soft starters are characterized above all by their small space requirements. Integrated bypass contacts mean that minimal power is used at the power semiconductors (thyristors) after the motor has started up. This cuts down on heat losses, enabling a more compact design and making external bypass circuits superfluous.

At the same time this soft starter comes with additional integrated functions such as adjustable current limiting, motor overload and intrinsic device protection, and optional thermistor motor protection on some models.

Internal intrinsic device protection prevents the thermal overloading of the thyristors and the power section defects this can cause. As an option the thyristors can also be protected by semiconductor fuses from short-circuiting.

Thanks to integrated status monitoring and fault monitoring, this compact soft starter offers many different diagnostics options. Up to four LEDs and relay outputs permit differentiated monitoring and diagnostics of the operating mechanism by indicating the operating state as well as for example mains or phase failure, missing load, non-permissible tripping time/class setting, thermal overloading or device faults.

Soft starters rated up to 300 Hp (at 460 V) for standard applications in three-phase systems are available. Extremely small sizes, low power losses and simple start-up are just three of the many advantages of the SIRIUS 3RW40 soft starters.

#### **"Increased safety" type of protection EEx e according to ATEX directive 94/9/EC**

The 3RW40 soft starter sizes S0 to S12 are suitable for the starting of explosion-proof motors with "increased safety" type of protection EEx e.

See "Appendix" → "Standards and approvals" → "Type overview of approved devices for potentially explosive areas (ATEX explosion protection)".

#### Application

The SIRIUS 3RW40 solid-state 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 300 Hp (at 460 V) but also avoids the current and torque peaks which occur e. g. with wye-delta starters.

#### Application areas

- Pumps
- Heat pumps
- Hydraulic pumps
- Presses
- Conveyors
- Roller conveyor
- Screw conveyors
- Escalators
- Small fans
- Centrifugal blowers
- Bow thrusters
- Stirrers
- Extruders
- Lathes
- Milling machines

# For Operation in the Control Cabinet

## 3RW Soft Starters

**3RW40**  
for standard applications

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### Selection and ordering data



3RW40 28-1BB14



3RW40 38-1BB14



3RW40 47-1BB14

Ambient temperature 50 °C					Size	Order No.	List Price \$ per PU	PS*	Weight per PU approx.
Rated operational current $I_e^{1)}$	Rated power of induction motors for rated operational voltage $U_e$				A				kg
	200 V	230 V	460 V	575 V					
	hp	hp	hp	hp					
<b>Rated operational voltage <math>U_e</math> 200 ... 480 V</b>									
• With screw terminals									
11	3	3	7.5	--	S0	3RW40 24-1BB□4		1 unit	0.770
23	5	5	15	--	S0	3RW40 26-1BB□4		1 unit	0.770
29	7.5	7.5	20	--	S0	3RW40 27-1BB□4		1 unit	0.770
34	10	10	25	--	S0	3RW40 28-1BB□4		1 unit	0.770
• With spring-type terminals									
11	3	3	7.5	--	S0	3RW40 24-2BB□4		1 unit	0.770
23	5	5	15	--	S0	3RW40 26-2BB□4		1 unit	0.770
29	7.5	7.5	20	--	S0	3RW40 27-2BB□4		1 unit	0.770
34	10	10	25	--	S0	3RW40 28-2BB□4		1 unit	0.770
• With screw or spring-type terminals									
42	10	15	30	--	S2	3RW40 36-□BB□4		1 unit	1.350
58	15	20	40	--	S2	3RW40 37-□BB□4		1 unit	1.350
62	20	20	40	--	S2	3RW40 38-□BB□4		1 unit	1.350
• With screw or spring-type terminals									
73	20	25	50	--	S3	3RW40 46-□BB□4		1 unit	1.900
98	30	30	75	--	S3	3RW40 47-□BB□4		1 unit	1.900
<b>Rated operational voltage <math>U_e</math> 400 ... 600 V</b>									
• With screw terminals									
11	--	--	7.5	10	S0	3RW40 24-1BB□5		1 unit	0.770
23	--	--	15	20	S0	3RW40 26-1BB□5		1 unit	0.770
29	--	--	20	25	S0	3RW40 27-1BB□5		1 unit	0.770
34	--	--	25	30	S0	3RW40 28-1BB□5		1 unit	0.770
• With spring-type terminals									
11	--	--	7.5	10	S0	3RW40 24-2BB□5		1 unit	0.770
23	--	--	15	20	S0	3RW40 26-2BB□5		1 unit	0.770
29	--	--	20	25	S0	3RW40 27-2BB□5		1 unit	0.770
34	--	--	25	30	S0	3RW40 28-2BB□5		1 unit	0.770
• With screw or spring-type terminals									
42	--	--	30	40	S2	3RW40 36-□BB□5		1 unit	1.350
58	--	--	40	50	S2	3RW40 37-□BB□5		1 unit	1.350
62	--	--	40	60	S2	3RW40 38-□BB□5		1 unit	1.350
• With screw or spring-type terminals									
73	--	--	50	60	S3	3RW40 46-□BB□5		1 unit	1.900
98	--	--	75	75	S3	3RW40 47-□BB□5		1 unit	1.900

#### Order No. supplement for connection types

- With screw terminals
- With spring-type terminals<sup>2)</sup>

#### Order No. supplement for rated control supply voltage $U_s$

- 24 V AC/DC
- 110 ... 230 V AC/DC

<sup>1)</sup> Stand-alone installation without auxiliary fan.

<sup>2)</sup> Power connection: screw terminals.

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#### Note:

*Selection of the soft starter depends on the rated motor current. The SIRIUS 3RW40 solid-state soft starters are designed for easy starting conditions.  $J_{Load} < 10 \times J_{Motor}$ . In the event of deviating conditions or increased switching frequency, it may be necessary to choose a larger device. Siemens recommends the use of the selection and simulation program Win-Soft Starter. For information about rated currents for ambient temperatures other than 50°C, see technical information on page 7/56*

# For Operation in the Control Cabinet

## 3RW Soft Starters

### 3RW40 for standard applications



3RW40 28-1TB04



3RW40 38-1TB04



3RW40 47-1TB04

Ambient temperature 50 °C					Size	Order No.	List Price \$ per PU	PS*	Weight per PU approx.
Rated operational current $I_e$ <sup>1)</sup>	Rated power of induction motors for rated operational voltage $U_e$				A				kg
	200 V	230 V	460 V	575 V					
	hp	hp	hp	hp					
<b>Rated operational voltage <math>U_e</math> 200 ... 480 V, with thermistor motor protection, rated control supply voltage <math>U_s</math> 24 V AC/DC</b>									
• With screw terminals									
11	3	3	7.5	--	S0	3RW40 24-1TB04		1 unit	0.770
23	5	5	15	--	S0	3RW40 26-1TB04		1 unit	0.770
29	7.5	7.5	20	--	S0	3RW40 27-1TB04		1 unit	0.770
34	10	10	25	--	S0	3RW40 28-1TB04		1 unit	0.770
• With spring-type terminals									
11	3	3	7.5	--	S0	3RW40 24-2TB04		1 unit	0.770
23	5	5	15	--	S0	3RW40 26-2TB04		1 unit	0.770
29	7.5	7.5	20	--	S0	3RW40 27-2TB04		1 unit	0.770
34	10	10	25	--	S0	3RW40 28-2TB04		1 unit	0.770
• With screw or spring-type terminals									
42	10	15	30	--	S2	3RW40 36-□TB04		1 unit	1.350
58	15	20	40	--	S2	3RW40 37-□TB04		1 unit	1.350
62	20	20	40	--	S2	3RW40 38-□TB04		1 unit	1.350
• With screw or spring-type terminals									
73	20	25	50	--	S3	3RW40 46-□TB04		1 unit	1.900
98	30	30	75	--	S3	3RW40 47-□TB04		1 unit	1.900
<b>Rated operational voltage <math>U_e</math> 400 ... 600 V, with thermistor motor protection, rated control supply voltage <math>U_s</math> 24 V AC/DC</b>									
• With screw terminals									
11	--	--	7.5	10	S0	3RW40 24-1TB05		1 unit	0.770
23	--	--	15	20	S0	3RW40 26-1TB05		1 unit	0.770
29	--	--	20	25	S0	3RW40 27-1TB05		1 unit	0.770
34	--	--	25	30	S0	3RW40 28-1TB05		1 unit	0.770
• With spring-type terminals									
11	--	--	7.5	10	S0	3RW40 24-2TB05		1 unit	0.770
23	--	--	15	20	S0	3RW40 26-2TB05		1 unit	0.770
29	--	--	20	25	S0	3RW40 27-2TB05		1 unit	0.770
34	--	--	25	30	S0	3RW40 28-2TB05		1 unit	0.770
• With screw or spring-type terminals									
42	--	--	30	40	S2	3RW40 36-□TB05		1 unit	1.350
58	--	--	40	50	S2	3RW40 37-□TB05		1 unit	1.350
62	--	--	40	60	S2	3RW40 38-□TB05		1 unit	1.350
• With screw or spring-type terminals									
73	--	--	50	60	S3	3RW40 46-□TB05		1 unit	1.900
98	--	--	75	75	S3	3RW40 47-□TB05		1 unit	1.900

#### Order No. supplement for connection types

- With screw terminals
- With spring-type terminals<sup>2)</sup>

1) Stand-alone installation without auxiliary fan.

2) Power connection: screw terminals.

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#### Note:

*Selection of the soft starter depends on the rated motor current. The SIRIUS 3RW40 solid-state soft starters are designed for easy starting conditions.  $J_{Load} < 10 \times J_{Motor}$ . In the event of deviating conditions or increased switching frequency, it may be necessary to choose a larger device. Siemens recommends the use of the selection and simulation program Win-Soft Starter. For information about rated currents for ambient temperatures > 40° C, see technical information on page 7/56*

# For Operation in the Control Cabinet

## 3RW Soft Starters

**3RW40**  
for standard applications



3RW40 56-6BB44



3RW40 76-6BB44

Ambient temperature 50 °C		Rated power of induction motors for rated operational voltage $U_e$				Size	Order No.	List Price \$ per PU	PS*	Weight per PU approx.
Rated operational current $I_e$ <sup>1)</sup>	200 V		230 V		460 V		575 V		kg	
	A	hp	hp	hp	hp	hp	hp	hp		
<b>Rated operational voltage <math>U_e</math> 200 ... 460 V</b>										
• With screw or spring-type terminals										
117	30	40	<b>75</b>	--	<b>S6</b>	<b>3RW40 55-□BB□4</b> <b>3RW40 56-□BB□4</b>		1 unit	4.900	
145	40	50	<b>100</b>	--						
• With screw or spring-type terminals										
205	60	75	<b>150</b>	--	<b>S12</b>	<b>3RW40 73-□BB□4</b> <b>3RW40 74-□BB□4</b> <b>3RW40 75-□BB□4</b> <b>3RW40 76-□BB□4</b>		1 unit	8.900	
248	75	100	<b>200</b>	--						
315	100	125	<b>250</b>	--						
385	125	150	<b>300</b>	--						
<b>Rated operational voltage <math>U_e</math> 400 ... 600 V</b>										
• With screw or spring-type terminals										
117	--	--	75	<b>100</b>	<b>S6</b>	<b>3RW40 55-□BB□5</b> <b>3RW40 56-□BB□5</b>		1 unit	4.900	
145	--	--	100	<b>150</b>						
• With screw or spring-type terminals										
205	--	--	150	<b>200</b>	<b>S12</b>	<b>3RW40 73-□BB□5</b> <b>3RW40 74-□BB□5</b> <b>3RW40 75-□BB□5</b> <b>3RW40 76-□BB□5</b>		1 unit	8.900	
248	--	--	200	<b>250</b>						
315	--	--	250	<b>300</b>						
385	--	--	300	<b>400</b>						

### Order No. supplement for connection types<sup>2)</sup>

- With screw terminals
- With spring-type terminals

### Order No. supplement for the rated control supply voltage $U_s$ <sup>3)</sup>

- 115 V AC
- 230 V AC

1) Stand-alone installation.

2) Power connection: busbar connection.

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

### Note:

*Selection of the soft starter depends on the rated motor current.*








*The SIRIUS 3RW40 solid-state soft starters are designed for easy starting conditions.  $J_{Load} < 10 \times J_{Motor}$ . In the event of deviating conditions or increased switching frequency, it may be necessary to choose a larger device. Siemens recommends the use of the selection and simulation program Win-Soft Starter. For information about rated currents for ambient temperatures  $> 40^\circ\text{C}$ , see technical information on page 7/56*

# For Operation in the Control Cabinet

## 3RW Soft Starters

### 3RW40 for standard applications

#### Accessories

For soft starters Type	Version Size		Order No.	List Price \$ per PU	PS*	Weight per PU approx. kg
<b>Box terminal blocks for soft starters</b>						
<b>For round and flat wires</b>						
 3RW40 5.	<b>S6</b>	<ul style="list-style-type: none"> <li>Up to 70 mm<sup>2</sup></li> <li>Up to 120 mm<sup>2</sup></li> </ul>	<b>3RT19 55-4G</b>		1 unit	0.230
3RW40 7.	<b>S12</b>	<ul style="list-style-type: none"> <li>Up to 240 mm<sup>2</sup></li> </ul>	<b>3RT19 56-4G</b>		1 unit	0.260
			<b>3RT19 66-4G</b>		1 unit	0.676
<b>Auxiliary terminals</b>						
<b>Auxiliary terminals, 3-pole</b>						
3RW40 4.	<b>S3</b>		<b>3RT19 46-4F</b>		1 unit	0.035
<b>Covers for soft starters</b>						
<b>Terminal covers for box terminals</b>						
Additional touch protection to be fitted at the box terminals (2 units required per device)						
 3RW40 3.	<b>S2</b>		<b>3RT19 36-4EA2</b>		1 unit	0.020
3RW40 4.	<b>S3</b>		<b>3RT19 46-4EA2</b>		1 unit	0.025
3RW40 5.	<b>S6</b>		<b>3RT19 56-4EA2</b>		1 unit	0.030
3RW40 7.	<b>S12</b>		<b>3RT19 66-4EA2</b>		1 unit	0.040
<b>Terminal covers for cable lugs and busbar connections</b>						
 3RW40 4.	<b>S3</b>	For complying with the phase clearances and as touch protection if box terminal is removed (2 units required per contactor)	<b>3RT19 46-4EA1</b>		1 unit	0.040
3RW40 5.	<b>S6</b>		<b>3RT19 56-4EA1</b>		1 unit	0.070
3RW40 7.	<b>S12</b>		<b>3RT19 66-4EA1</b>		1 unit	0.130
<b>Sealing covers</b>						
 3RW40 2. to 3RW40 4.	<b>S0, S2, S3</b>		<b>3RW49 00-0PB10</b>		1 unit	0.005
3RW40 5. and 3RW40 7.	<b>S6, S12</b>		<b>3RW49 00-0PB00</b>		1 unit	0.010
<b>Modules for RESET<sup>1)</sup></b>						
<b>Modules for remote RESET, electrical</b>						
Operating range 0.85 ... 1.1 x U <sub>s</sub> , power consumption 80 VA AC, 70 W DC, ON period 0.2 s ... 4 s, switching frequency 60/h						
 3RW40 5. and 3RW40 7.	<b>S6, S12</b>	<ul style="list-style-type: none"> <li>24 ... 30 V AC/DC</li> <li>110 ... 127 V AC/DC</li> <li>220 ... 250 V AC/DC</li> </ul>	<b>3RU19 00-2AB71</b>		1 unit	0.066
			<b>3RU19 00-2AF71</b>		1 unit	0.067
			<b>3RU19 00-2AM71</b>		1 unit	0.066
<b>Mechanical RESET comprising</b>						
 3RW40 5. and 3RW40 7.	<b>S6, S12</b>	<ul style="list-style-type: none"> <li>Resetting plungers, holders and formers</li> <li>Suitable pushbutton IP65, Ø 22 mm, 12 mm stroke</li> <li>Extension plunger</li> </ul>	<b>3RU19 00-1A</b>		1 unit	0.038
			<b>3SB30 00-0EA11</b>		1 unit	0.020
			<b>3SX13 35</b>		1 unit	0.004
<b>Cable releases with holder for RESET</b>						
For Ø 6.5 mm holes in the control panel; max. control panel thickness 8 mm						
 3RW40 5. and 3RW40 7.	<b>S6, S12</b>	<ul style="list-style-type: none"> <li>Length 400 mm</li> <li>Length 600 mm</li> </ul>	<b>3RU19 00-1B</b>		1 unit	0.063
			<b>3RU19 00-1C</b>		1 unit	0.073

<sup>1)</sup> Remote RESET already integrated in the 3RW40 2. to 3RW40 4. soft starters.

# For Operation in the Control Cabinet

## 3RW Soft Starters

**3RW40**  
for standard applications

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For soft starters		Motor starter protectors		Order No.	List Price \$ per PU	PS*	Weight per PU approx. kg
Type	Size	Size	Size				

Link modules to motor starter protectors							
	3RW40 24, 3RW40 26	<b>S0</b>	<b>S0</b>	<b>3RA19 21-1A</b>		10 units	0.028
	3RW40 36	<b>S2</b>	<b>S2</b>	<b>3RA19 31-1A</b>		5 units	0.033
	3RW40 46, 3RW40 47	<b>S3</b>	<b>S3</b>	<b>3RA19 41-1A</b>		5 units	0.072

Fans (to increase switching frequency and for device mounting in positions different from the normal position)							
	3RW40 2.	<b>S0</b>		<b>3RW49 28-8VB00</b>		1 unit	0.010
	3RW40 3., 3RW40 4.	<b>S2</b> , <b>S3</b>		<b>3RW49 47-8VB00</b>		1 unit	0.020

Operating instructions <sup>1)</sup>							
For soft starters							
3RW40 2.	<b>S0</b>			<b>3ZX10 12-0RW40-1AA1</b>			
3RW40 3.	<b>S2</b>						
3RW40 4.	<b>S3</b>						
3RW40 5.	<b>S6</b>			<b>3ZX10 12-0RW40-2DA1</b>			
3RW40 7.	<b>S12</b>						


<sup>1)</sup> The operating instructions are included in the scope of supply.

They are also available on the Internet at:

[www.usa.siemens.com/softstarters](http://www.usa.siemens.com/softstarters)

### Spare parts

For soft starters		Version		Order No.	List Price \$ per PU	PS*	Weight per PU approx. kg
Type	Size	Size	Rated control supply voltage $U_s$				

Fans							
	<b>Fans</b>						
	3RW40 5.-. BB3.	<b>S6</b>	115 V AC	<b>3RW49 36-8VX30</b>		1 unit	0.300
	3RW40 5.-. BB4.	<b>S6</b>	230 V AC	<b>3RW49 36-8VX40</b>		1 unit	0.300
	3RW40 7.-. BB3.	<b>S12</b>	115 V AC	<b>3RW49 47-8VX30</b>		1 unit	0.500
3RW40 7.-. BB4.	<b>S12</b>	230 V AC	<b>3RW49 47-8VX40</b>		1 unit	0.500	