

# Switching Devices – Soft Starters and Solid-State Switching Devices

## SIRIUS 3RW Soft Starters Basic Performance Soft Starters

### 3RW30 soft starters > General data

#### Overview

##### More information

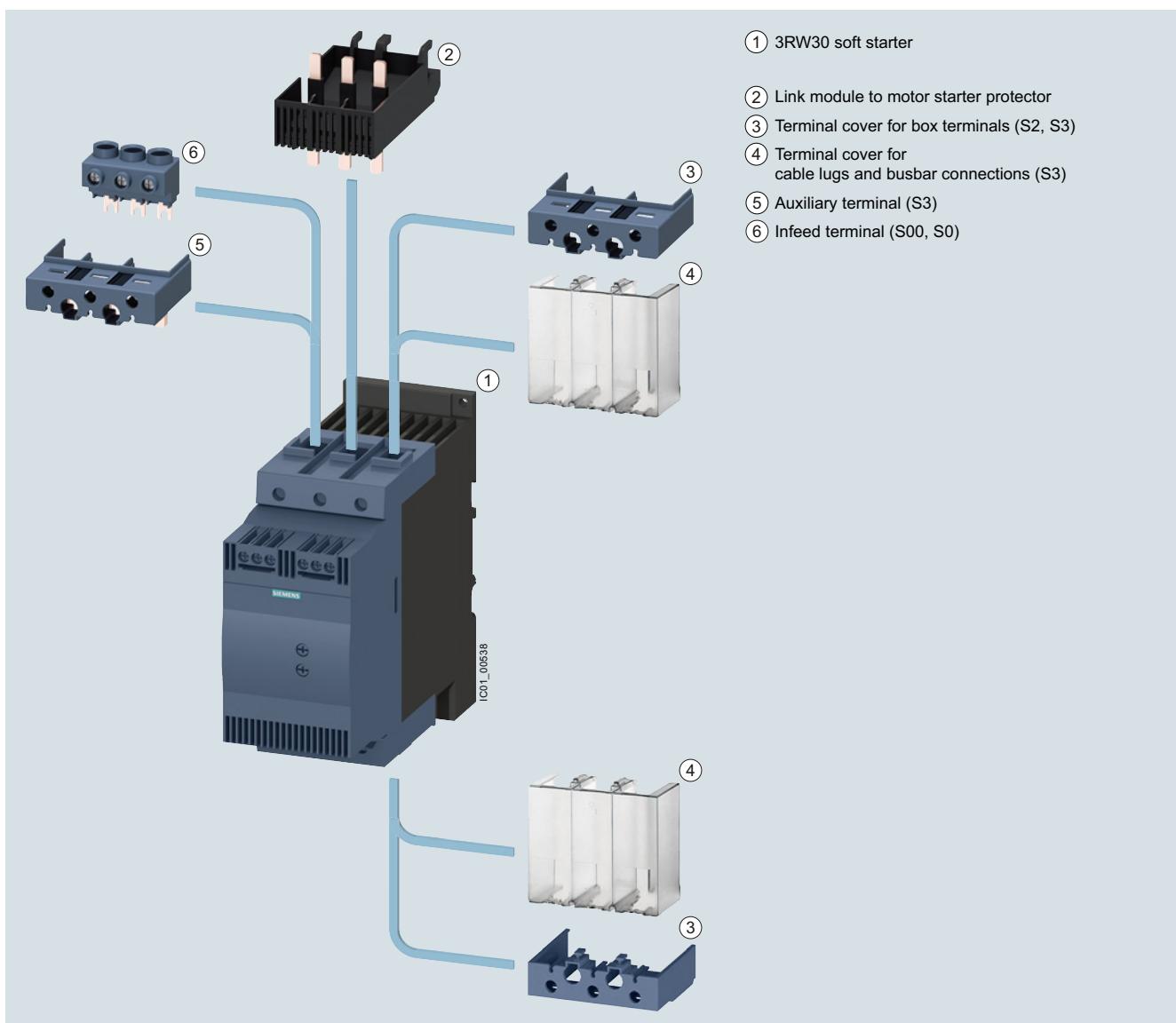
Homepage, see [www.siemens.com/soft-starter](http://www.siemens.com/soft-starter)  
 Industry Mall, see [www.siemens.com/product?3RW](http://www.siemens.com/product?3RW)  
 TIA Selection Tool Cloud (TST Cloud), see  
<https://www.siemens.com/tstcloud/?node=3rw30>

Simulation Tool for Soft Starters (STS), see page 6/8 or  
<https://support.industry.siemens.com/cs/ww/en/view/101494917>  
 SIRIUS Soft Starter ES (TIA Portal) for diagnostics, see page 14/5



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

Thanks to two-phase control, not only is the current kept at minimum values in all three phases throughout the entire starting time, but disturbing direct current components are also eliminated. 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 e.g. with wye-delta starters.



3RW30 Basic Performance soft starters with accessories (see page 6/105)

## Switching Devices – Soft Starters and Solid-State Switching Devices

SIRIUS 3RW Soft Starters  
Basic Performance Soft Starters

3RW30 soft starters &gt; General data

## Benefits



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 in the SIRIUS modular system	Link modules to motor starter protectors
Hybrid switching devices and two-phase motor control	Minimum power loss and optimized motor control by avoiding DC components

## Technical specifications

## More information

Equipment 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](http://www.siemens.com/lowvoltage/lv10)

Type	3RW301.	3RW302.	3RW303.	3RW304.	
<b>Mechanics and environment</b>					
<b>Mounting dimensions (W x H x D)</b>					
• Screw terminals • Spring-loaded 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
<b>Permissible ambient temperature</b>					
During operation During storage	°C °C	-25 ... +60; (derating from +40) -40 ... +80			
<b>Weight</b>	kg	0.58	0.69	1.20	1.71
<b>Permissible mounting position<sup>1)</sup></b> (auxiliary fan not possible)					
<b>Installation type<sup>1)</sup></b>	Stand-alone installation				
<b>Permissible installation altitude</b>	m	5 000 (Derating from 1 000, see characteristic curve on page 6/8)			
<b>Degree of protection</b>		IP20 for 3RW301. and 3RW302.; IP00 for 3RW303. and 3RW304.			

<sup>1)</sup> In the case of deviations, please observe derating, see Equipment Manual in the chapter "Configuring".

# Switching Devices – Soft Starters and Solid-State Switching Devices

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### 3RW30 soft starters > General data

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

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

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

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

<sup>2)</sup> At 300%  $I_M$ ,  $T_u = 40/50$  °C.

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

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

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

<sup>2)</sup> At 300%  $I_M$ ,  $T_u = 40/50$  °C.

<sup>3)</sup> For intermittent duty S4 with ON period = 30%,  $T_u = 40/50$  °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 [Equipment Manual in the chapter "Configuring"](#).

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

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

<sup>2)</sup> At 300%  $I_M$ ,  $T_u = 40/50$  °C.

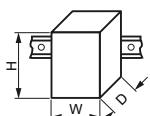
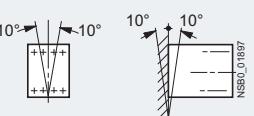
<sup>3)</sup> For intermittent duty S4 with ON period = 30%,  $T_u = 40/50$  °C, stand-alone installation vertical. The quoted switching frequencies do not apply for automatic mode.

## Switching Devices – Soft Starters and Solid-State Switching Devices

SIRIUS 3RW Soft Starters

Basic Performance Soft Starters

## 3RW30 soft starters &gt; General data

Type	3RW3003-1CB54	3RW3003-2CB54
<b>Mechanics and environment</b>		
<b>Mounting dimensions (W x H x D)</b>		
• Screw terminals • Spring-loaded terminals	 mm mm	22.5 x 100 x 120 -- 22.5 x 101.6 x 120
<b>Permissible ambient temperature</b>		
During operation	°C	-25 ... +60; (derating from +40)
During storage	°C	-40 ... +80
<b>Weight</b>	kg	0.207 0.188
<b>Permissible mounting position</b>		
<b>Permissible installation altitude</b>	m	5 000 (Derating from 1 000, see characteristic curve on page 6/8)
<b>Degree of protection</b> acc. to IEC 60529		IP20 (IP00 terminal compartment)
<b>Control electronics</b>		
<b>Rated values</b>		
Rated control supply voltage	V	24 ... 230 AC/DC
• Tolerance	%	± 10
Rated frequency at AC	Hz	50/60
• Tolerance	%	± 10
<b>Power electronics</b>		
<b>Rated operational voltage</b>	V AC	200 ... 400
Tolerance	%	± 10
<b>Rated frequency</b>	Hz	50/60
Tolerance	%	± 10
<b>Uninterrupted duty</b> (% of $I_e$ )	%	100
<b>Minimum load<sup>1)</sup></b> (% of $I_e$ ); at 40 °C	%	9
<b>Maximum conductor length</b> between soft starter and motor	m	100 <sup>2)</sup>
<b>Load rating with rated operational current <math>I_e</math></b>		
• According to IEC and UL/CSA, individual mounting at 40/50/60 °C, AC-53a	A	3/2.6/2.2
• According to IEC and UL/CSA, side-by-side mounting at 40/50/60 °C, AC-53a	A	2.6/2.2/1.8
<b>Power loss</b>		
• In operation after completed starting with uninterrupted rated operational current (40 °C) approx.	W	6.5
• With utilization of maximum switching frequency	W	3
<b>Permissible starts per hour (cannot be increased by using a fan)</b>		
• 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
<b>Dead time after uninterrupted duty</b>		
with $I_e$ before restart	s	0

<sup>1)</sup> 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  $I_e$ .

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

# Switching Devices – Soft Starters and Solid-State Switching Devices

## SIRIUS 3RW Soft Starters Basic Performance Soft Starters

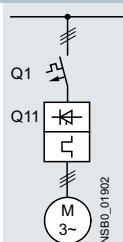
### 3RW30 soft starters > General data

#### **Motor feeders according to IEC with 3RV2 motor starter protectors (without semiconductor protection)**

Type of coordination "1", CLASS 10,  
short-circuit breaking capacity  $I_q$  in kA, [see table](#)

Note:

For general recommendations for constructing motor feeders  
with soft starters, [see page 6/10](#).



Soft starters	Motor starter protectors	
Q11	for 400 V systems	
Type	Q1	$I_q$ kA
<b>Type of coordination "1"</b>	<b>Inline circuit</b>	
<b>3RW3003</b>	3RV2011-1EA10	50
<b>3RW3013</b>	3RV2011-1FA10	5
<b>3RW3014</b>	3RV2011-1HA10	5
<b>3RW3016</b>	3RV2011-1JA10	5
<b>3RW3017</b>	3RV2011-1KA10	5
<b>3RW3018</b>	3RV2021-4BA10	5
<b>3RW3026</b>	3RV2021-4DA10	55
<b>3RW3027</b>	3RV2021-4EA10	55
<b>3RW3028</b>	3RV2021-4FA10	55
<b>3RW3036</b>	3RV2031-4WA10	10
<b>3RW3037</b>	3RV2031-4JA10	10
<b>3RW3038</b>	3RV2031-4KA10	10
<b>3RW3046</b>	3RV2041-4RA10	11
<b>3RW3047</b>	3RV2041-4MA10	11

Note:

The specified short-circuit breaking capacities  $I_q$  in kA are covered by combination tests. Smaller motor starter protectors/circuit breakers than those specified can be used at any time as smaller ones trip more quickly in the event of a short circuit (unchanged short-circuit breaking capacity) and thus protect the soft starter in any case. The dimensioning of the short-circuit components must, however, be suitable for the connected three-phase motor and the line protection for the cables used.

**Switching Devices – Soft Starters and Solid-State Switching Devices**

SIRIUS 3RW Soft Starters  
Basic Performance Soft Starters

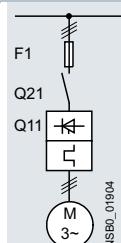
**3RW30 soft starters > General data*****Motor feeders according to IEC with 3NA3 fuses***

gG class full-range fuses for cable and line protection according to IEC 60269-2, without semiconductor protection

Type of coordination "1",  
short-circuit breaking capacity  $I_q = 65 \text{ kA}$

**Note:**

For general recommendations for constructing motor feeders with soft starters, see page 6/10.



Soft starters	gG class fuse	Line contactor (optional)	
Q11 Type	for systems up to 480 V F1 Type	for systems up to 400 V Q21 Type	for systems up to 480 V Q21 Type
<b>Type of coordination "1"</b>	<b>Inline circuit</b>		
<b>3RW3003<sup>1)</sup></b>	3NA3805 <sup>2)</sup>	3RT2015	3RT2015
<b>3RW3013</b>	3NA3803-6	3RT2015	3RT2015
<b>3RW3014</b>	3NA3805-6	3RT2015	3RT2016
<b>3RW3016</b>	3NA3807-6	3RT2016	3RT2017
<b>3RW3017</b>	3NA3810-6	3RT2018	3RT2025
<b>3RW3018</b>	3NA3814-6	3RT2026	3RT2026
<b>3RW3026</b>	3NA3822-6	3RT2026	3RT2027
<b>3RW3027</b>	3NA3824-6	3RT2027	3RT2028
<b>3RW3028</b>	3NA3824-6	3RT2028	3RT2035
<b>3RW3036</b>	3NA3130-6	3RT2036	3RT2036
<b>3RW3037</b>	3NA3132-6	3RT2037	3RT2037
<b>3RW3038</b>	3NA3132-6	3RT2038	3RT2038
<b>3RW3046</b>	3NA3136-6	3RT2045	3RT2045
<b>3RW3047</b>	3NA3136-6	3RT2047	3RT2047

<sup>1)</sup>  $I_q = 50 \text{ kA}$  at 400 V.

<sup>2)</sup> 3NA3805-1 (NH00), 5SB261 (DIAZED), 5SE2201-6 (NEOZED).

**Note:**

The specified short-circuit breaking capacities  $I_q$  in kA are covered by combination tests. Smaller fuses than those specified can be used at any time as smaller ones trip more quickly in the event of a short circuit (unchanged short-circuit breaking capacity) and thus protect the soft starter in any case. The dimensioning of the short-circuit components must, however, be suitable for the connected three-phase motor and the line protection for the cables used.

# Switching Devices – Soft Starters and Solid-State Switching Devices

## SIRIUS 3RW Soft Starters Basic Performance Soft Starters

### 3RW30 soft starters > General data

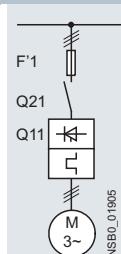
#### **Motor feeders according to IEC with 3NE1 SITOR fuses**

gR class full-range fuses for semiconductor protection, cable and line protection

Type of coordination "2",  
short-circuit breaking capacity  $I_q = 65 \text{ kA}$

Note:

For general recommendations for constructing motor feeders with soft starters, see page 6/10.



Soft starters	gG class fuse	Line contactor (optional)	
Q11	for systems up to 480 V	for systems up to 400 V	for systems up to 480 V
Type	F'1	Q21	Q21
<b>Type of coordination "2"</b>			
<b>3RW3003<sup>1)</sup></b>	3NE1813-0 <sup>2)</sup>	3RT2015	3RT2015
<b>3RW3013</b>	3NE1813-0	3RT2015	3RT2015
<b>3RW3014</b>	3NE1813-0	3RT2015	3RT2016
<b>3RW3016</b>	3NE1813-0	3RT2016	3RT2017
<b>3RW3017</b>	3NE1813-0	3RT2018	3RT2025
<b>3RW3018</b>	3NE1814-0	3RT2026	3RT2026
<b>3RW3026</b>	3NE1803-0	3RT2026	3RT2027
<b>3RW3027</b>	3NE1020-2	3RT2027	3RT2028
<b>3RW3028</b>	3NE1020-2	3RT2028	3RT2035
<b>3RW3036</b>	3NE1020-2	3RT2036	3RT2036
<b>3RW3037</b>	3NE1820-0	3RT2037	3RT2037
<b>3RW3038</b>	3NE1820-0	3RT2038	3RT2038
<b>3RW3046</b>	3NE1021-0	3RT2045	3RT2045
<b>3RW3047</b>	3NE1022-0	3RT2047	3RT2047

1)  $I_q = 50 \text{ kA}$  at 400 V.

2) No SITOR fuse required!

Alternatively: 3NA3803 (NH00), 5SB221 (DIAZED), 5SE2206 (NEOZED).

Note:

The specified short-circuit breaking capacities  $I_q$  in kA are covered by combination tests. Smaller fuses than those specified can be used at any time as smaller ones trip more quickly in the event of a short circuit (unchanged short-circuit breaking capacity) and thus protect the soft starter in any case. The dimensioning of the short-circuit components must, however, be suitable for the connected three-phase motor and the line protection for the cables used.

**Switching Devices – Soft Starters and Solid-State Switching Devices**

**SIRIUS 3RW Soft Starters**  
**Basic Performance Soft Starters**

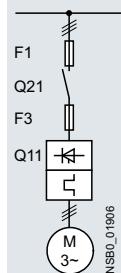
**3RW30 soft starters > General data****Motor feeders according to IEC with 3NE8 / 3NE4 / 3NE3 / 3NC fuses**

aR class partial-range fuses for semiconductor protection

Type of coordination "2",  
short-circuit breaking capacity  $I_q = 65 \text{ kA}$

**Note:**

For general recommendations for constructing motor feeders  
with soft starters, see page 6/10.



Soft starters	gG class fuse	aR class fuse	Cylindrical fuses	Line contactor (optional)
Q11	for systems up to 480 V	for systems up to 480 V	for systems up to 480 V	for systems up to 400 V
Type	F1	F3	F3	Q21
<b>Type of coordination "2"</b>				
<b>ToC 2</b> <b>Inline circuit</b>				
<b>3RW3003<sup>1)</sup></b>	3NA3805 <sup>2)</sup>	--	3NE8015-1	3NC1010
<b>3RW3013</b>	3NA3803-6	--	3NE4101	3NC2220
<b>3RW3014</b>	3NA3805-6	--	3NE4101	3RT2015
<b>3RW3016</b>	3NA3807-6	--	3NE4101	3NC2220
<b>3RW3017</b>	3NA3810-6	--	3NE4101	3NC2250
<b>3RW3018</b>	3NA3814-6	--	3NE4101	3RT2026
<b>3RW3026</b>	3NA3822-6	--	3NE4102	3NC2263
<b>3RW3027</b>	3NA3824-6	--	3NE4118	3RT2026
<b>3RW3028</b>	3NA3824-6	--	3NE4118	3RT2027
<b>3RW3036</b>	3NA3130-6	--	3NE4120	3NC2280
<b>3RW3037</b>	3NA3132-6	--	3NE4121	3RT2036
<b>3RW3038</b>	3NA3132-6	3NE3221	--	3RT2037
<b>3RW3046</b>	3NA3136-6	3NE3222	3NE8022-1	3RT2038
<b>3RW3047</b>	3NA3136-6	3NE3224	3NE8024-1	3RT2045
			--	3RT2047

<sup>1)</sup>  $I_q = 50 \text{ kA}$  at 400 V.

<sup>2)</sup> 3NA3805-1 (NH00), 5SB261 (DIAZED).

**Note:**

The specified short-circuit breaking capacities  $I_q$  in kA are covered by combination tests. Smaller fuses than those specified can be used at any time as smaller ones trip more quickly in the event of a short circuit (unchanged short-circuit breaking capacity) and thus protect the soft starter in any case. The dimensioning of the short-circuit components must, however, be suitable for the connected three-phase motor and the line protection for the cables used.

For CLASS 10 applications, as an alternative to the gG class full-range fuses for cable and line protection 3NA3 (F1), 3RV2 motor starter protectors/circuit breakers can also be used, possibly with reduced short-circuit breaking capacity (see page 6/100). In these cases, optional line contactors can be dispensed with.

# Switching Devices – Soft Starters and Solid-State Switching Devices

## SIRIUS 3RW Soft Starters Basic Performance Soft Starters

### 3RW30 soft starters > Inline circuit **IE3/IE4 ready**

#### Selection and ordering data

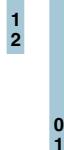
*For simple starting conditions*



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

#### Article No. supplement for connection types

- Screw terminals
- Spring-loaded terminals<sup>2)</sup>



#### Control supply voltage $U_s$

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

#### 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**    -- | A      0.5    **0.5**    --    --    22.5 mm

- With screw terminals
- With spring-loaded terminals

► **3RW3003-1CB54**  
► **3RW3003-2CB54**

1    1 unit    42G  
1    1 unit    42G

<sup>1)</sup> Soft starter  $U_e$  200 to 480 V with screw terminals:  
Standard delivery time SD = 1 day (d).

<sup>2)</sup> Main connection from size S2: screw terminals.

#### Note:

For the constraints for the motor outputs specified here, see  
page 6/8.

**Switching Devices – Soft Starters and Solid-State Switching Devices**
**SIRIUS 3RW Soft Starters**  
**Basic Performance Soft Starters**
**3RW30 soft starters > Accessories****Selection and ordering data****More information**

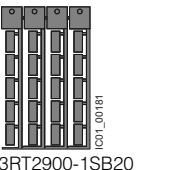
Equipment Manual "SIRIUS 3RW30/3RW40 Soft Starters", see  
<https://support.industry.siemens.com/cs/ww/en/view/38752095>

Conductor cross-section Solid or stranded	Finely stranded with end sleeve	AWG cables, solid or stranded	Tightening torque	For soft starters size	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
mm <sup>2</sup>	mm <sup>2</sup>	AWG	Nm	d						
<b>Three-phase infeed terminals</b>										
	2.5 ... 25	2.5 ... 16	10 ... 4	3 ... 4	S00 (3RW301.), S0 (3RW302.)	<b>3RV2925-5AB</b>		1	1 unit	41E
<b>Auxiliary terminals</b>										
	For soft starters Type	Size		SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
<b>Auxiliary terminals, 3-pole</b>										
	3RW304. S3			5	<b>3RT2946-4F</b>		1	1 unit	41B	
<b>Covers for soft starters</b>										
	<b>Terminal covers for box terminals</b> Additional touch protection to be fitted at the box terminals (two units required per device)									
	3RW303. S2 3RW304. S3			SD	<b>3RT2936-4EA2 3RT2946-4EA2</b>		1 1	1 unit 1 unit	41B 41B	
<b>Terminal covers for cable lugs and busbar connections</b> For complying with the voltage clearances and as touch protection if box terminal is removed (two units required per device)										
	3RW304. S3			5	<b>3RT1946-4EA1</b>		1	1 unit	41B	
<b>Mounting rails for mounting contactors for the customer assembly of 3RA21 load feeders with busbar adapters for 60 mm systems</b>										
	--	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.							
8US1998-7CB45			For pushing onto the device adapter, including fixing screws	2	<b>8US1998-7CB45</b>		1	10 units	14O	
<b>Standard mounting rail adapters</b>										
	S2	S2	For mechanical fixing of motor starter protector and soft starter; for snapping onto standard mounting rail or for screw fixing	2	<b>3RA2932-1CA00</b>		1	1 unit	41B	

# Switching Devices – Soft Starters and Solid-State Switching Devices

## SIRIUS 3RW Soft Starters Basic Performance Soft Starters

### 3RW30 soft starters > Accessories

For soft starters Type	Size	Motor starter protectors Size	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>Link modules to motor starter protectors<sup>1)</sup></b>								
	3RW301. 3RW302. 3RW3036 3RW304.	<b>S00</b> <b>S0</b> <b>S2</b> <b>S3</b>	<b>S00</b> <b>S00/S0</b> <b>S2</b> <b>S3</b>	2 2 ► ►	<b>Screw terminals</b>  <b>3RA2921-1BA00</b> <b>3RA2921-1BA00</b> <b>3RA2931-1AA00</b> <b>3RA1941-1AA00</b>	1 1 1 1	1 unit 1 unit 1 unit 1 unit	41B 41B 41B 41B
	3RW301. 3RW302.	<b>S00</b> <b>S0</b>	<b>S00</b> <b>S0</b>	2 2	<b>Spring-loaded terminals</b>  <b>3RA2911-2GA00</b> <b>3RA2921-2GA00</b>	1 1	1 unit 1 unit	41B 41B
<sup>1)</sup> Can be used in size S0 up to 32 A. Can be used in size S2 up to 65 A in combination with 3RA2932-1CA00 standard mounting rail adapter (especially for soft starters). Can be used in size S3 only on mounting plate.								
Version	Functionality Functions	Use	SD d	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
<b>Covers and push-in lugs (only for 3RW3003)</b>								
	<b>Sealable covers</b> For securing against unauthorized adjustment of setting knobs	For devices with 1 or 2 CO contacts	5	<b>3RP1902</b>	1	5 units	41H	
	<b>Push-in lugs</b> for screw fixing	-- For devices with 1 or 2 CO contacts	5	<b>3RP1903</b>	1	10 units	41H	
Version		SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
<b>Tools for opening spring-loaded terminals in sizes S00 and S0</b>								
	<b>Screwdrivers</b> For all SIRIUS devices with spring-loaded terminals Length approx. 200 mm, 3.0 mm x 0.5 mm, titanium gray/black, partially insulated		2	<b>Spring-loaded terminals</b>  <b>3RA2908-1A</b>	1	1 unit	41B	
<b>Blank labels</b>								
	<b>Unit labeling plates<sup>1)</sup></b> For SIRIUS devices 20 mm x 7 mm, titanium gray		20	<b>3RT2900-1SB20</b>	100	340 units	41B	

<sup>1)</sup> PC labeling systems for individual inscription of unit labeling plates are available from: murplastik Systemtechnik GmbH (see page 16/15).

**Switching Devices – Soft Starters and Solid-State Switching Devices**

SIRIUS 3RW Soft Starters

Spare Parts

**For 3RW55/3RW55 Failsafe****Overview****More information**Homepage, see [www.siemens.com/soft-starter](http://www.siemens.com/soft-starter)Industry Mall, see [www.siemens.com/product?3RW](http://www.siemens.com/product?3RW)

Industry Online Support (SIOS) topic page, see

<https://support.industry.siemens.com/cs/ww/en/view/109747404>**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				
<b>Power semiconductor modules</b>								
	<b>Power semiconductor module</b>	3RW5524-.HA.4 (3x) 480 V, 47 A 3RW5525-.HA.4 (3x), 480 V, 77 A 3RW5526-.HA.4 (3x) 3RW5527-.HA.4 (3x) 480 V, 93 A 3RW5534-.HA.4 (3x), 480 V, 143 A 3RW5535-.HA.4 (3x) 3RW5536-.HA.4 (3x) 480 V, 171 A 3RW5543-.HA.4 (3x) 480 V, 210 A 3RW5544-.HA.4 (3x) 480 V, 250 A 3RW5545-.HA.4 (3x), 480 V, 370 A 3RW5546-.HA.4 (3x) 3RW5547-.HA.4 (3x), 480 V, 570 A 3RW5548-.HA.4 (3x)	►	<b>3RW5952-0SF04</b> <b>3RW5952-0SH04</b> <b>3RW5952-0SJ04</b> <b>3RW5953-0SL04</b> <b>3RW5953-0SM04</b> <b>3RW5954-0SN04</b> <b>3RW5954-0SP04</b> <b>3RW5954-0SR04</b> <b>3RW5954-0ST04</b> <b>3RW5955-0SU04</b> <b>3RW5955-0SV04</b> <b>3RW5955-0SW04</b> <b>3RW5955-0SX04</b> <b>3RW5955-0SY04</b> <b>3RW5952-0SF06</b> <b>3RW5952-0SH06</b> <b>3RW5952-0SJ06</b> <b>3RW5953-0SL06</b> <b>3RW5953-0SM06</b> <b>3RW5954-0SN06</b> <b>3RW5954-0SP06</b> <b>3RW5954-0SR06</b> <b>3RW5954-0ST06</b> <b>3RW5955-0SU06</b> <b>3RW5955-0SV06</b> <b>3RW5955-0SW06</b> <b>3RW5955-0SX06</b> <b>3RW5955-0SY06</b>	1	1 unit	42S	
3RW5952-0SF04								
								
3RW5953-0SM06								
								
3RW5954-0ST06								
<b>Bypass units</b>								
	<b>Bypass unit</b>	3RW552-.HA.., 3RW553-.HA.. 3RW5543-.HA.., 3RW5544-.HA.., 3RW5545-.HA.. 3RW5546-.HA.., 3RW5547-.HA.., 3RW5548-.HA.. 3RW5552, 3RW5553, 3RW5554 3RW5556, 3RW5558	-- 210 A to 315 A 370 A to 570 A 630 A to 840 A 1 100 A and 1 280 A	►	<b>3RW5953-0BY00</b> <b>3RW5954-0BP00</b> <b>3RW5954-0BT00</b> <b>3RW5955-0BW00</b> <b>3RW5955-0BY00</b>	1	1 unit	42S
3RW5953-0BY00								