

The background of the entire page is a dark blue grid with yellow circuit diagrams overlaid. Various Siemens SIRIUS modular components, including circuit breakers, contactors, and terminal blocks, are arranged across the grid. Some components are highlighted with yellow circles and lines, suggesting they are part of a specific circuit or system.

SIEMENS

Ingenuity for life

SIRIUS modular system

Selection guide

[siemens.com/sirius-modular-system](https://www.siemens.com/sirius-modular-system)

Everything for the control cabinet: SIRIUS modular system

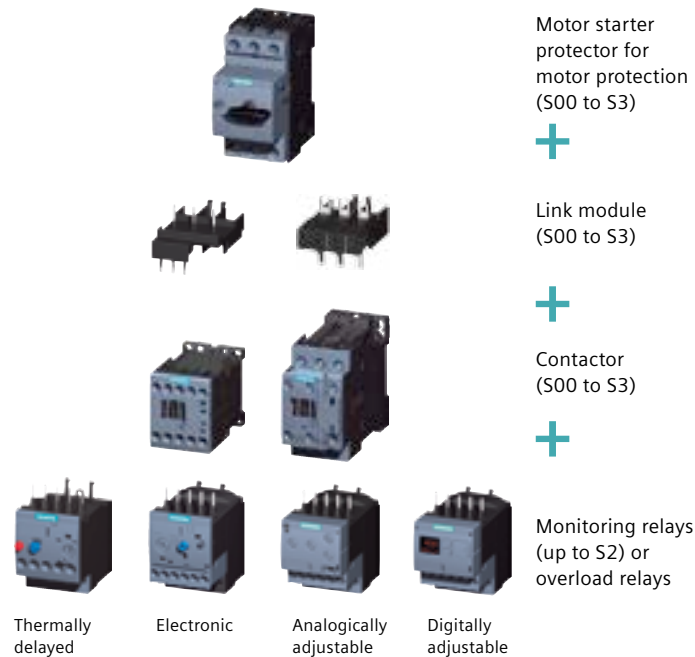
Efficiently combined

Advantages at a glance:

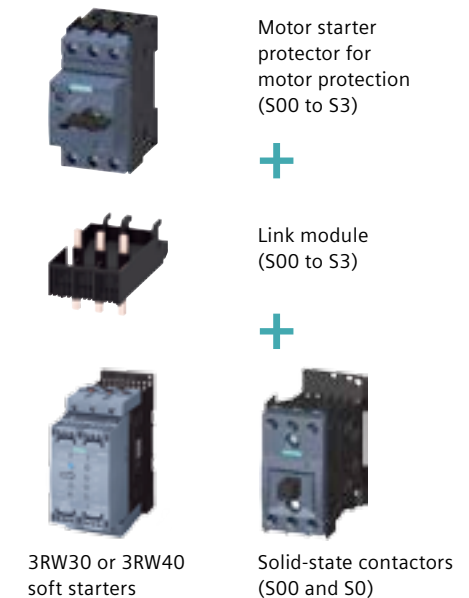
- **Load feeders:** easy to implement up to 250 kW/ 400 V from standard devices with motor starter protectors for motor protection, contactors, overload relays and monitoring relays
- **Modular design:** a host of combination options in standardized design
- **Variants and sizes:** 7 compact sizes
- **Installation:** quick and easy installation of feeders thanks to link modules
- **Accessories:** low variance with uniform accessories
- **Connection types:** screw and spring-type terminals available
- **IE3/IE4 ready:** familiar reliability even when changing over to IE3/IE4 motors
- **Application monitoring:** mountable monitoring relay for simple application monitoring beyond the motor

Possible combinations depending on requirement:

Load feeders: Direct start (p. 3–5)



Load feeders: Soft start, solid-state contactors (p. 6–7)



For frequently switching AC drives on and off, our motor starter protectors can also be combined with solid-state contactors or reversing contactors and an overload relay.

Load feeders for direct start

Load feeders start loads by a combination of protection and switching functions. A load feeder assembly consisting of motor starter protector, contactor, overload relay or monitoring relay offers suitable combinations for every application.



Three-phase motor		Setting range CLASS 10		Mot. starter prot.	Contactors		Overload relays		Monitoring relays			
Power [kW]	Current [A]	Setting range [A]			Solenoid voltage	Aux. switch	Thermally delayed CLASS 10	Electronic CLASS 10E				
								Setting range [A]	Meas. range [A]	2-phase Basic, analogically adjustable Supply voltage 24 – 240 V AC/DC	3-phase Standard, digitally adjustable	
Size, width		S00, 45 mm										
0.09	0.32	0.22–0.32	3RV2011-0DA	0			3RU2116-0D	0	0.1–0.4	3RB3016-1R	0	
0.12	0.5	0.35–0.5	3RV2011-0FA	0			3RU2116-0F	0				
0.18	0.63	0.45–0.63	3RV2011-0GA	0			3RU2116-0G	0	0.32–1.25	3RB3016-1N	0	
0.25	1	0.7–1	3RV2011-0JA	0			3RU2116-0J	0				
0.37	1.25	0.9–1.25	3RV2011-0KA	0	230 V AC, 50/60 Hz	1NO 3RT2015-AP01	3RU2116-0K	0				
0.55	1.6	1.1–1.6	3RV2011-1AA	0		1NC 3RT2015-AP02	3RU2116-1A	0				
0.75	2	1.4–2	3RV2011-1BA	0	24 V DC	1NO 3RT2015-BB41	3RU2116-1B	0	1–4	3RB3016-1P	0	
1.1	3.2	2.2–3.2	3RV2011-1DA	0		1NC 3RT2015-BB42	3RU2116-1D	0				
1.5	4	2.8–4	3RV2011-1EA	0			3RU2116-1E	0				
2.2	6.3	4.5–6.3	3RV2011-1GA	0			3RU2116-1G	0				
3	8	5.5–8	3RV2011-1HA	0			3RU2116-1H	0				
4	10	7–10	3RV2011-1JA	0	230 V AC, 50/60 Hz	1NO 3RT2016-AP01	3RU2116-1J	0	3–12	3RB3016-1S	0	
						1NC 3RT2016-AP02						
					24 V DC	1NO 3RT2016-BB41						
						1NC 3RT2016-BB42						
5.5	12.5	9–12.5	3RV2011-1KA	0	230 V AC, 50/60 Hz	1NO 3RT2017-AP01	3RU2116-1K	0		1.6–16	3RR2141-AW30	3RR2241-FW30
						1NC 3RT2017-AP02						
					24 V DC	1NO 3RT2017-BB41						
						1NC 3RT2017-BB42						
7.5	16	11–16	3RV2011-4AA	0	230 V AC, 50/60 Hz	1NO 3RT2018-AP01	3RU2116-4A	0	4–16	3RB3016-1T	0	
						1NC 3RT2018-AP02						
					24 V DC	1NO 3RT2018-BB41						
						1NC 3RT2018-BB42						

Screw terminals: 1 Spring-type term. to 32 A: 2	Screw terminals: 1 Spring-type term.: 2	Screw terminals: B Spring-type term.: C	Screw terminals: B Spring-type term.: E	Screw terminals: 1 Spring-type term.: 2
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			Mot. starter prot.	Contactors			Overload relays		Monitoring relays		
Three-phase motor		Setting range CLASS 10		Solenoid voltage	Aux. switch		Thermally delayed CLASS 10	Electronic CLASS 10E		2-phase Basic, analogically adjustable	3-phase Standard, digitally adjustable
Power [kW]	Current [A]	[A]					Setting range [A]		Meas. range [A]	Supply voltage 24 – 240 V AC/DC	
Size, width			S0, 55 mm								
7.5	16	10–16	3RV2021-4AA	0	*2	230 V AC, 50 Hz	1NO+1NC 3RT2025-	AP00	3RU2126-4A	0	
7.5	20	13–20	3RV2021-4BA	0		24 V DC	1NO+1NC 3RT2025-	BB40	3RU2126-4B	0	
11	22	16–22	3RV2021-4CA	0	*2	230 V AC, 50 Hz	1NO+1NC 3RT2026-	AP00	3RU2126-4C	0	
11	25	18–25	3RV2021-4DA	0		24 V DC	1NO+1NC 3RT2026-	BB40	3RU2126-4D	0	
15	28	23–28	3RV2021-4NA	0	*2	230 V AC, 50 Hz	1NO+1NC 3RT2027-	AP00	3RU2126-4N	0	10–40
15	32	27–32	3RV2021-4EA	0		24 V DC	1NO+1NC 3RT2027-	BB40	3RU2126-4E	0	
18.5	36	30–36	3RV2021-4PA	1	*2	230 V AC, 50 Hz	1NO+1NC 3RT2028-	AP00	3RU2126-4P	0	4–40
18.5	40	34–40	3RV2021-4FA	1		24 V DC	1NO+1NC 3RT2028-	BB40	3RU2126-4F	0	

Screw terminals: 1 Spring-type term. to 32 A: 2	Screw terminals: 1 Spring-type term.: 2	Screw terminals: B Spring-type term.: C	Screw terminals: B Spring-type term.: E	Screw terminals: 1 Spring-type term.: 2
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Size, width			S2, 55 mm								
18.5	36	28–36	3RV203	-4PA10	*3	230 V AC, 50 Hz	1NO+1NC 3RT2035-	AP00	3RU2136-4EB0		
18.5	40	32–40	3RV203	-4UA10		20 – 33 V AC/DC	1NO+1NC 3RT2035-	NB30	3RU2136-4FB0		
22	45	35–45	3RV203	-4VA10	*3	230 V AC, 50 Hz	1NO+1NC 3RT2036-	AP00	3RU2136-4GB0		
22	52	42–52	3RV203	-4WA10		20 – 33 V AC/DC	1NO+1NC 3RT2036-	NB30	3RU2136-4HB0		
30	59	49–59	3RV203	-4XA10	*3	230 V AC, 50 Hz	1NO+1NC 3RT2037-	AP00	3RU2136-4QB0		20–80
30	65	54–65	3RV203	-4JA10		20 – 33 V AC/DC	1NO+1NC 3RT2037-	NB30	3RU2136-4JB0		
37	73	62–73	3RV203	-4KA10	*3	230 V AC, 50 Hz	1NO+1NC 3RT2038-	AP00	3RU2136-4KB0		8–80
37	80	70–80	3RV203	-4RA10		20 – 33 V AC/DC	1NO+1NC 3RT2038-	NB30	3RU2136-4RB0		
Size, width			S3, 70 mm								
22	50	36–50	3RV204	-4HA10		230 V AC, 50 Hz	1NO+1NC 3RT2045-	AP00	3RU2146-4HB0		
30	63	45–63	3RV204	-4JA10	*4	20 – 33 V AC/DC	1NO+1NC 3RT2045-	NB30	3RU2146-4JB0		
37	75	57–75	3RV204	-4KA10					3RU2146-4KB0		
45	84	65–84	3RV204	-4RA10	*4	230 V AC, 50 Hz	1NO+1NC 3RT2046-	AP00	3RU2146-4LB0		32–115
45	93	75–93	3RV204	-4YA10		20 – 33 V AC/DC	1NO+1NC 3RT2046-	NB30			
45/55	100	80–100	3RV204	-4MA10	*4	230 V AC, 50 Hz	1NO+1NC 3RT2047-	AP00	3RU2146-4MB0		
						20 – 33 V AC/DC	1NO+1NC 3RT2047-	NB30			

Standard switching cap. 65 kA: 1 Increased switching cap. 100 kA: 2	Screw terminals: 1 Spring-type term. in aux. circuit: 3	Contactor mounting Straight-through transf.	Screw terminals: B0 Spring-type term.: D0 Screw term.: W1 Spring-type term.: X1	Screw terminals: 1 Spring-type term.: 3
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Necessary accessories: link module from motor starter protector to contactor				
Size		Screw terminals	Spring-type terminals (only for S00 and S0)	
S00 up to max. 32 A	AC/DC	*1 3RA1921-1DA00	3RA2911-2AA00	
S0 up to max. 32 A	AC	*2 3RA2921-1AA00	3RA2921-2AA00	
S0 up to max. 32 A	DC	*2 3RA2921-1BA00	3RA2921-2AA00	
S2 up to max. 65 A	AC/DC	*3 3RA2931-1AA00	–	
S3	AC/DC	*4 3RA1941-1AA00	–	

Accessories

3RV motor starter protectors/circuit breakers

Size	Mountable accessories	Design	Screw terminals	Spring-type terminals
S00, S0, S2, S3	Transverse auxiliary switch	1CO	3RV2901-1D	–
	Lateral (left) auxiliary switch	1NO+1NC	3RV2901-1E	3RV2901-2E
	Signaling switch	1NO+1NC	3RV2901-1A	3RV2901-2A
	Shunt release	2NO	3RV2901-1B	3RV2901-2B
	Undervoltage release	1NO+1NC	3RV2921-1M	3RV2921-2M
	Door-coupling rotary op. mech. 130 mm shaft	210 ... 240 V AC	3RV2902-1DP0	3RV2902-2DP0
		24 V DC	3RV2902-1DB0	3RV2902-2DB0
		230 V AC	3RV2902-1AP0	3RV2902-2AP0
		24 V DC	3RV2902-1AB4	–
		Black		3RV2926-0B
	Red/yellow		3RV2926-0C	
S00, S0	Molded-plas. encl. f. surf. mounting	54 mm wide	3RV1923-1CA00	
		72 mm wide	3RV1923-1DA00	
S2	IP55, black	82 mm wide	3RV1933-1DA00	
S00, S0	Molded-plas. encl. f. surf. mounting	54 mm wide	3RV1923-1FA00	
		72 mm wide	3RV1923-1GA00	
S2	IP55, EMERG. STOP	82 mm wide	3RV1933-1GA00	

3RV29 infeed system

For sizes S00 and S0, the simplest method is to connect the components via the associated SIRIUS 3RV29 infeed system in each case.

3-phase busbar for 2 motor starter protectors size S00/S0

With infeed on the left (incl. 3RV2917-6A end cover) 3RV2917-1A
 With infeed on the right (incl. 3RV2917-6A end cover) 3RV2917-1E
 For system expansion (incl. 3RV2917-5BA00 expansion plug) 3RV2917-4A

Plug-in connectors for contact with motor starter protectors

Size S00 Screw terminals 3RV2917-5CA00
 Spring-type terminals 3RV2917-5AA00
 Size S0 Screw terminals 3RV1927-5AA00
 Spring-type terminals 3RV2927-5AA00

Contactor base for contactors size S00, S0 3RV2927-7AA00

Contactors

Auxiliary switch blocks, on front S00, S0, S2, S3	Screw terminals	Spring-type terminals
1NC	3RH2911-1HA01	3RH2911-2HA01
1NO+1NC	3RH2911-1HA11	3RH2911-2HA11
2NO+2NC	3RH2911-1HA22	3RH2911-2HA22
1NO	3RH2911-1HA10	3RH2911-2HA10
2NO	3RH2911-1HA20	3RH2911-2HA20

Surge suppressors

Size S00	Plug-in	
Without LED	Varistor	3RT2916-1BD00
With LED	127 ... 240V AC	3RT2916-1JL00
Without LED	RC element	3RT2916-1CD00
Without LED	Suppr. diode 24 V DC	3RT2916-1DG00
Size S0		
Without LED	Varistor	3RT2926-1BD00
With LED	127 ... 240V AC	3RT2926-1JL00
Without LED	RC element	3RT2926-1CD00
Without LED	Diode assy. 24 V DC	3RT2926-1ER00
Size S2		
Without LED	Varistor	3RT2936-1BD00
With LED	127 ... 240V AC	3RT2936-1JL00
Without LED	RC element	3RT2936-1CD00
Size S3		
Without LED	Varistor	3RT2936-1BD00
With LED	127 ... 240V AC	3RT2936-1JL00
Without LED	RC element	3RT2946-1CD00

Coil terminal module

	Size S0 – S3	Size S0
Connection from below	3RT2926-4RB11	3RT2926-4RB12

Overload relays and monitoring relays

Terminal supports f. stand-alone inst.	Screw terminals	Spring-type terminals
S00	3RU2916-3AA01	3RU2916-3AC01
S0	3RU2926-3AA01	3RU2926-3AC01
S2	3RU2936-3AA01	–
S3	3RU2946-3AA01	–

Wiring kit for contactors

Reversing contactor assembly

S00	3RA2913-2AA1	3RA2913-2AA2
S0	3RA2923-2AA1	3RA2923-2AA2 (main circuit only)
S2	3RA2933-2AA1	3RA2933-2AA2 (main circuit only)
S3	3RA2943-2AA1	3RA2943-2AA2 (main circuit only)

Contactor assy. f. wye-delta start

S00	3RA2913-2BB1	3RA2913-2BB2
S0	3RA2923-2BB1	3RA2923-2BB2 (main circuit only)
S2	3RA2933-2BB1	3RA2933-2BB2*
S3	3RA2943-2BB1	3RA2943-2BB2*

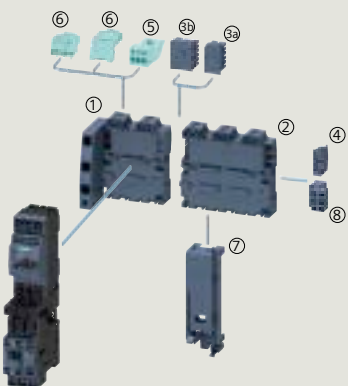
*main circuit only, set of cables for auxiliary circuit

Wye-delta function module, plug-in



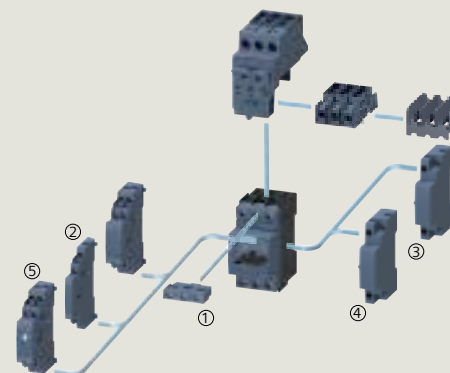
Comprising one basic module and two coupling modules, rated control supply voltage 24 ... 240 V AC/DC, time setting range 0.5 ... 60 s (10, 30, 60 s selectable)

S00, S0, S2, S3	3RA2816-0EW20
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3RV29 infeed system

- ① 3-phase busbar with infeed
- ② 3-phase busbar for system expansion
- ③ Expansion plug
- ④ Extra-wide expansion plug
- ⑤ End cover
- ⑥ Terminal block for device infeed
- ⑦ Plug-in connector
- ⑧ Contactor base
- ⑨ Terminal block



Mountable accessories for 3RV motor starter protectors

- ① Transverse auxiliary switch
- ② Lateral auxiliary switch with 2 contacts
- ③ Shunt release (cannot be used for 3RV21 motor starter protector)
- ④ Undervoltage release without/with leading contacts (cannot be used for 3RV21 motor starter protector)
- ⑤ Signaling switch (cannot be used for 3RV27 and 3RV28 circuit breakers)

Load feeders: Soft starters, solid-state contactors

Soft starters for current-limiting and torque-lim. starts reduce wear on the mech. power-transm. elements of the machine, relieve load on the power supply system and protect the line efficiently against high switch-on peak currents by means of reduced current consumption.

Solid-state contactors are intended for frequently switching AC drives up to 7.5 kW on and off and for reversing up to 3.0 kW. The devices are constructed with complete insulation and can be mounted directly on motor starter protectors.



			Mot. starter prot.			3RW30 soft starters Oper. voltage 3x200–480 V AC			3RW40 soft starters Oper. voltage 3x200–480 V AC			Solid-state contactors Oper. voltage 48–480 V AC		Solid-state reversing contactors Oper. voltage 48–480 V AC	
Three-phase motor		Setting range CLASS 10				Starts/h normal starting	Rated operat. current		Starts/h normal starting	Rated operat. current		Rated operat. current		Rated operat. current	
Power [kW]	Current [A]	[A]					[A]			[A]		[A]		[A]	
Size, width		S00, 45 mm			S00, 45 mm			S0, 45 mm							
0.25	1	0.7–1	3RV2011-0JA	0											
0.37	1.25	0.9–1.25	3RV2011-0KA	0											
0.55	1.6	1.1–1.6	3RV2011-1AA	0	*2	150	3.6	3RW3013-	BB	4					
0.75	2	1.4–2	3RV2011-1BA	0											
1.1	3.2	2.2–3.2	3RV2011-1DA	0											
1.5	4	2.8–4	3RV2011-1EA	0											
1.5	5	3.5–5	3RV2011-1FA	0		64	6.5	3RW3014-	BB	4	36	12.5	3RW4024-	BB	4
2.2	6.3	4.5–6.3	3RV2011-1GA	0											
3	8	5.5–8	3RV2011-1HA	0											
4	10	7–10	3RV2011-1JA	0		35	9	3RW3016-	BB	4					
5.5	12.5	9–12.5	3RV2011-1KA	0		62	12.5	3RW3017-	BB	4					
7.5	16	11–16	3RV2011-4AA	0		45	17.6	3RW3018-	BB	4	15	25	3RW4026-	BB	4
Size, width		S0, 45 mm			S0, 45 mm			S0, 45 mm							
7.5	16	11–16	3RV2021-4AA	0											
7.5	20	14–20	3RV2021-4BA	0		15	25	3RW3026-	BB	4					
11	22	17–22	3RV2021-4CA	0											
11	25	20–25	3RV2021-4DA	0	*2										
15	28	23–28	3RV2021-4NA	0		16	32	3RW3027-	BB	4	16	32	3RW4027-	BB	4
15	32	27–32	3RV2021-4EA	0											
18.5	36	30–36	3RV2021-4PA	1		12	38	3RW3028-	BB	4	12	38	3RW4028-	BB	4
18.5	40	34–40	3RV2021-4FA	1											

Screw terminals: 1 Spring-type term. to 32 A: 2	Screw terminals: 1 Spring-type terminals: 2 Control supply voltage 24 V AC/DC: 0 110–230 V AC/DC: 1	Screw terminals: 1 Spring-type terminals: 2 Control supply voltage 24 V AC/DC: 0 110–230 V AC/DC: 1	Screw terminals: 1 Spring-type terminals: 2 Control supply voltage 24 V DC: 0 110–230 V AC, 50/60 Hz: 2	Screw terminals: 1 Spring-type terminals: – Control supply voltage 24 V DC: 0 110–230 V AC, 50/60 Hz: 2
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		Mot. starter prot.		3RW30 soft starters without overload protection		3RW40 soft starters with overload protection	
Three-phase motor		Setting range CLASS 10		Rated operational current			
Power [kW]	Current [A]						
Size, width		S2, 55 mm					
18.5	36	28–36	3RV203 □ -4PA10	*3	45	3RW3036-1BB □ 4	3RW4036-1BB □ 4
18.5	40	32–40	3RV203 □ -4UA10				
22	45	35–45	3RV203 □ -4VA10				
22	52	42–52	3RV203 □ -4WA10	*3	63	3RW3037-1BB □ 4	3RW4037-1BB □ 0
30	59	49–59	3RV203 □ -4XA10				
30	65	54–65	3RV203 □ -4JA10				
37	73	62–73	3RV203 □ -4KA10	*3	72	3RW3038-1BB □ 4	3RW4038-1BB □ 4
37	80	70–80	3RV203 □ -4RA10				
Size, width		S3, 70 mm					
22	50	36–50	3RV204 □ -4HA10	*4	80	3RW3046-1BB □ 4	3RW4046-1BB □ 4
30	63	45–63	3RV204 □ -4JA10				
37	75	57–75	3RV204 □ -4KA10				
45	84	65–84	3RV204 □ -4RA10	*4	106	3RW3047-1BB □ 4	3RW4047-1BB □ 4
45	93	75–93	3RV204 □ -4YA10				
45/55	100	80–100	3RV204 □ -4MA10				

Standard switching cap. 65 kA at 400 V: 1
Increased switching cap. 100 kA at 400 V: 2

24 V AC/DC: 0
110–230 V AC/DC: 1

24 V AC/DC: 0
110–230 V AC/DC: 1

Necessary accessories: link modules from motor starter protector to soft starter / solid-state device

Size	Screw terminals	Spring-type terminals only for S00, S0 with soft starters
S00	*2 3RA2921-1BA00	3RA2911-2GA00
S0 up to max. 32 A	*2 3RA2921-1BA00	3RA2921-2GA00
S2 up to max. 65 A	*3 3RA2931-1AA00	–
S3	*4 3RA1941-1AA00	–

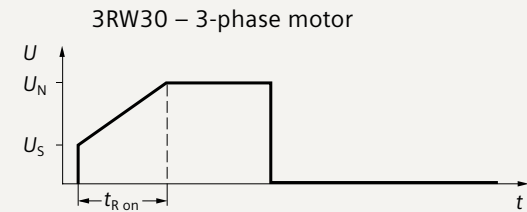
Advantages of the soft starters:

- Reduced mechanical and electrical load
- Space and cost savings thanks to compact design
- Fast and easy commissioning
- Matched with the SIRIUS modular system

3RW30 soft starter

The compact 3RW30 soft starter can be used in almost every standard application up to 55 kW. Setting is made via two potentiometers and can thus be implemented conveniently and easily.

3RW3 state diagram



3RW40 soft starter

The 3RW40 additionally has potentiometers for soft ramp-down, current limiting and motor overload protection. Integrated intrinsic device protection and motor protection functions offer additional advantages over the 3RW3.

3RW4 state diagram

