

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

3RW5516-1HA15

HIGH PERFORMANCE SOFT STARTER

Used with the applicable SIRIUS 3RW55 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens IC 10 2026: SIRIUS 3RW55 technical and ordering data

Switching devices – Soft starters and solid-state switching devices
SIRIUS 3RW soft starters

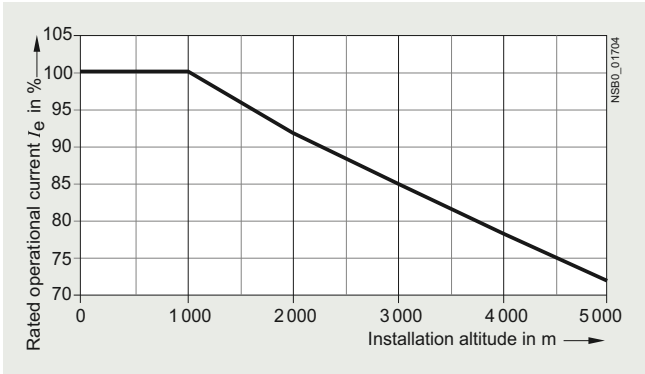
General data

Constraints

The 3RW soft starters 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 are based on IEC 60947-4-1.

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



Installation altitude for SIRIUS 3RW soft starters

The selection and ordering data were determined for the following constraints (stand-alone installation without auxiliary fan)



Applications		High Performance		General Performance	Basic Performance		
SIRIUS soft starters		3RW55/3RW55-F		3RW52	3RW50	3RW40	3RW30
Constraints							
Maximum starting time	s	20		10			3
Maximum starting current in % of motor current	I_e	300					
Maximum number of starts per hour	1/h	5					20

Switching devices – Soft starters and solid-state switching devices

SIRIUS 3RW soft starters
High Performance soft starters

3RW55 soft starters > General data

Overview

More information

Homepage, see www.siemens.com/sirius-soft-starter
 SiePortal, see www.siemens.com/product_catalog_siep?3RW55
 TIA Selection Tool Cloud (TST Cloud), see www.siemens.com/tstcloud/?node=3rw55
 SiePortal topic page, see <https://support.industry.siemens.com/cs/ww/en/view/109747404>
 Simulation Tool for Soft Starters (STS), see page 6/9 or <https://support.industry.siemens.com/cs/ww/en/view/101494917>

SIRIUS Soft Starter ES (TIA Portal), see page 6/9 or <https://support.industry.siemens.com/cs/ww/en/ps/24230/dl>
 SIRIUS 3RW soft starter block library for SIMATIC PCS 7, see page 6/10 or <https://support.industry.siemens.com/cs/ww/en/view/109770336>
 Decision support for motor start - Starting and operating three-phase asynchronous motors efficiently, see www.siemens.com/motorstart-guide
 SIRIUS Sim, see page 6/10 or <https://support.industry.siemens.com/cs/ww/en/view/109763750>
 Conversion tool, see www.siemens.com/conversion-tool

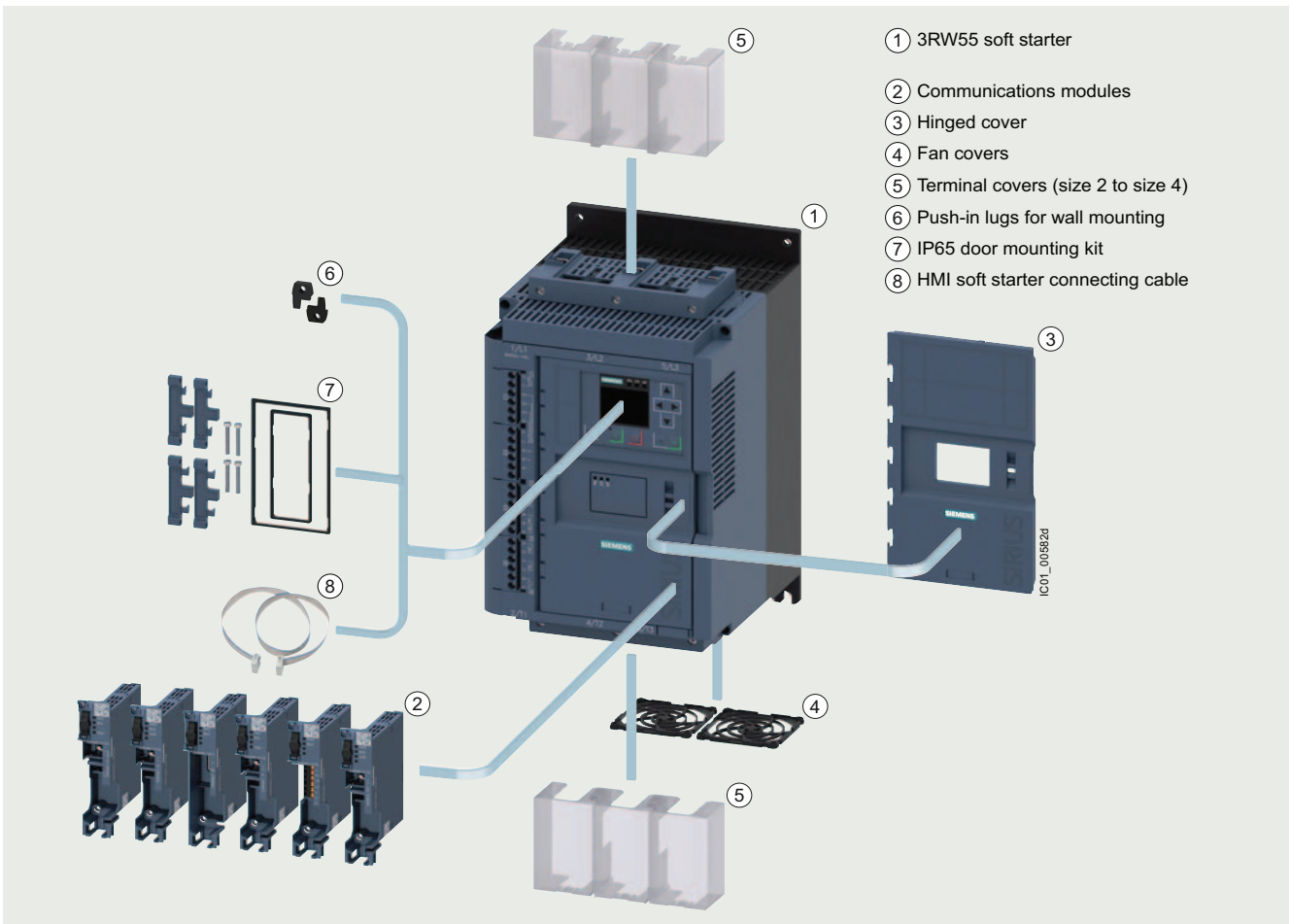


SIRIUS 3RW55 soft starters device family

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 of between 5.5 kW and 1 200 kW (at 400 V).

The functions have been specially designed to offer maximum user friendliness. The HMI (with color display, local interface and a slot for micro SD memory card) and plug-in communications modules (PROFINET, PROFIBUS, EtherNet/IP and Modbus) ensure maximum flexibility.

With their modern hybrid switching technology, the SIRIUS 3RW55 soft starters offer efficient switching for long-term, energy-saving use.



SIRIUS 3RW55 High Performance soft starter with accessories (see page 6/37 onwards)

Switching devices – Soft starters and solid-state switching devices

SIRIUS 3RW soft starters

High Performance soft starters

3RW55 soft starters > General data

Benefits



Product characteristics/function	Performance features/benefits
Automatic parameterization	Extremely easy commissioning and reliability even under changing load conditions
Hybrid switching technology and 3-phase motor control	Minimum power loss and optimum/symmetrical motor control
TIA integration – communications modules optional	Efficient configuration and maximum flexibility in automation engineering
Removable HMI with color display, local interface, slot for micro SD memory 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
Certified according to ATEX/IECEX Directive	Suitable for the starting of explosion-proof motors
System redundancy S2	Simple and straight-forward integration into fault-tolerant automation systems
Direct integration in Insights Hub via the OPC UA server	Worldwide data availability for optimal plant operation

Switching devices – Soft starters and solid-state switching devices

SIRIUS 3RW soft starters
High Performance soft starters

3RW55 soft starters > General data

Technical specifications

More information

Technical specifications, see
<https://support.industry.siemens.com/cs/ww/en/ps/25099/td>
 Equipment 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 6/9 or
<https://support.industry.siemens.com/cs/ww/en/view/101494917>

Article number

3RW551.

-HA.4

-HA.5

3RW552., 3RW553.

-HA.4

-HA.6

3RW554.

-HA.4

-HA.6

3RW555.

-HA.4

-HA.6

Installation/fixing/dimensions

Width x height x depth

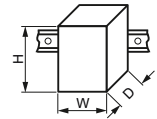
mm

170 x 275 x 152

185 x 306 x 203

210 x 393 x 203

478 x 764 x 241



Type of mounting

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, maximum¹⁾

m

5 000

2 000

5 000

2 000

5 000

2 000

Degree of protection IP on the front according to IEC 60529

IP20

IP00; IP20 with cover

IP00

Touch protection on the front according to IEC 60529

Finger-safe for vertical touching from the front

Finger-safe for vertical touching from the front with cover

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Ambient conditions

Ambient temperature

• During operation²⁾

°C

-25 ... +60

• During storage and transport

°C

-40 ... +80

-25 ... +80

-40 ... +80

Environmental category according to IEC 60721

• During operation

3K6 (no ice formation, only occasional 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 into the devices), 1M4

• During transport

2K2, 2C1, 2S1, 2M2 (max. height of fall 0.3 m)

¹⁾ Derating from 1 000 m, see characteristic curve on page 6/8.

²⁾ Observe derating above 40 °C.

For normal starting (Class 10E)

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 42S



3RW551.-1HA.5



3RW551.-3HA.5

At 40 °C					At 50 °C					Screw terminals (only for control circuit)		Spring-loaded terminals (only for control circuit)	
Operational current A	Operating power for three-phase motors				Operational current A	Operating power [hp] for three-phase motors				Article No.	Price per PU	Article No.	Price per PU
	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				
	kW	kW	kW	kW		hp	hp	hp	hp				
Operational voltage 200 ... 600 V													
Control supply voltage 24 V AC/DC													
13	3	5.5	7.5	--	11.5	2	3	7.5	10	3RW5513-1HA05		3RW5513-3HA05	
18	4	7.5	11	--	15.9	3	5	10	10	3RW5514-1HA05		3RW5514-3HA05	
25	5.5	11	15	--	22.3	5	7.5	15	20	3RW5515-1HA05		3RW5515-3HA05	
32	7.5	15	18.5	--	28.4	7.5	10	20	25	3RW5516-1HA05		3RW5516-3HA05	
38	11	18.5	22	--	33.5	10	10	20	30	3RW5517-1HA05		3RW5517-3HA05	
Control supply voltage 110 ... 250 V AC													
13	3	5.5	7.5	--	11.5	2	3	7.5	10	3RW5513-1HA15		3RW5513-3HA15	
18	4	7.5	11	--	15.9	3	5	10	10	3RW5514-1HA15		3RW5514-3HA15	
25	5.5	11	15	--	22.3	5	7.5	15	20	3RW5515-1HA15		3RW5515-3HA15	
32	7.5	15	18.5	--	28.4	7.5	10	20	25	3RW5516-1HA15		3RW5516-3HA15	
38	11	18.5	22	--	33.5	10	10	20	30	3RW5517-1HA15		3RW5517-3HA15	

Note:

For the constraints for the motor outputs specified here,
 see [page 6/8](#).