## SIEMENS

## Data sheet

## 3RP2535-1AW30



Timing relay, OFF delay with control signal 1 change-over contact, 15 time ranges 0.05 s...100 h 12-240 V DC, Wide voltage range at 50/60 Hz AC with LED, Screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	OFF delay with control signal
product type designation	3RP25
General technical data	
product component	
<ul> <li>relay output</li> </ul>	Yes
<ul> <li>semi-conductor output</li> </ul>	No
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	2.5 kV
degree of pollution	3
surge voltage resistance rated value	4 000 V
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
vibration resistance according to IEC 60068-2-6	10 55 Hz / 0.35 mm
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.05 s 100 h
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
minimum ON period	35 ms
recovery time	250 ms
reference code according to IEC 81346-2	К
relative repeat accuracy	1 %; +/-
influence of the surrounding temperature	1% in the whole temperature range to the set runtime
power supply influence	1% in the whole voltage range to the set runtime
Substance Prohibitance (Date)	09/12/2014
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	12 240 V
• at 60 Hz	12 240 V
control supply voltage frequency 1	50 60 Hz
control supply voltage 1	
• at DC	12 240 V
operating range factor control supply voltage rated value at DC	

initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated	
value at AC at 50 Hz	
<ul> <li>initial value</li> </ul>	0.85
<ul> <li>full-scale value</li> </ul>	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul> <li>initial value</li> </ul>	0.8
full-scale value	1.1
inrush current peak	
• at 24 V	0.4 A
• at 240 V	5 A
duration of inrush current peak	
• at 24 V	0.3 ms
• at 240 V	0.5 ms
Switching Function	
switching function	
ON-delay	No
5	No
<ul> <li>ON-delay/instantaneous contact</li> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> <li>OFE dolay</li> </ul>	No
OFF delay	No
switching function	No
<ul> <li>flashing symmetrically with interval start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with interval start</li> </ul>	No
<ul> <li>flashing symmetrically with nuclear start</li> </ul>	No
start/instantaneous	
<ul> <li>flashing symmetrically with pulse start</li> </ul>	No
<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
<ul> <li>flashing asymmetrically with pulse start</li> </ul>	No
switching function	
<ul> <li>star-delta circuit with delay time</li> </ul>	No
star-delta circuit	No
switching function with control signal	
additive ON-delay	No
passing break contact	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
OFF delay	Yes
OFF delay/instantaneous	No
pulse delayed	No
pulse delayed/instantaneous	No
pulse-shaping	No
pulse-shaping/instantaneous	No
additive ON-delay/instantaneous	No
ON-delay/OFF-delay/instantaneous	No
passing make contact	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control</li> </ul>	No
signal/instantaneous contact	No
retrotriggerable with switched-on control signal	No
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
retriggerable with deactivated control signal	No
design of the control terminal non-floating	Yes
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	
<ul> <li>delayed switching</li> </ul>	0

<ul> <li>instantaneous contact</li> </ul>	
	0
number of NO contacts	
<ul> <li>delayed switching</li> </ul>	0
<ul> <li>instantaneous contact</li> </ul>	0
number of CO contacts	
delayed switching	1
instantaneous contact	0
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13 • at 24 V	1 A
• at 24 V • at 125 V	1 A 0.2 A
• at 250 V	0.1 A
operating frequency with 3RT2 contactor maximum	5 000 1/h
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17
contact ronability of daxinary contacto	V, 5 mA)
contact rating of auxiliary contacts according to UL	R300 / B300
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	
product function	
<ul> <li>at the relay outputs switchover delayed/without</li> </ul>	No
delay	
non-volatile	No
Electromagnetic compatibility	
EMC emitted interference according to IEC 61812-1	ambience A (industrial sector)
EMC immunity according to IEC 61812-1	corresponds to degree of severity 3
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
<ul> <li>due to conductor-earth surge according to IEC</li> </ul>	2 kV
61000-4-5	4 107
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front according to IEC	IP20
60529	
type of insulation	Basic insulation
category according to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary	Yes
product component removable terminal for auxiliary and control circuit	
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	Yes screw-type terminals
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	screw-type terminals
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid	screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing	screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
<pre>product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections</pre>	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14)
<ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection for auxiliary and control circuit</li> <li>type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> </li> </ul>	screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
<pre>product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections</pre>	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup>
<pre>product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections</pre>	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup>
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing • solid • finely stranded with core end processing • AWG number as coded connectable conductor cross	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup>
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing <b>AWG number as coded connectable conductor cross</b> <b>section</b>	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 4 mm <sup>2</sup>
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing <b>AWG number as coded connectable conductor cross</b> <b>section</b> • solid • stranded <b>tightening torque</b>	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup> 20 12
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12 20 12
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing <b>AWG number as coded connectable conductor cross</b> <b>section</b> • solid • stranded <b>tightening torque</b>	screw-type terminals $1x (0.5 4.0 \text{ mm}^2), 2x (0.5 2.5 \text{ mm}^2)$ $1x (0.5 4 \text{ mm}^2), 2x (0.5 1.5 \text{ mm}^2)$ 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) $0.5 4 \text{ mm}^2$ $0.5 4 \text{ mm}^2$ 20 12 20 14 0.6 0.8  N·m
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw	screw-type terminals $1x (0.5 4.0 \text{ mm}^2), 2x (0.5 2.5 \text{ mm}^2)$ $1x (0.5 4 \text{ mm}^2), 2x (0.5 1.5 \text{ mm}^2)$ 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) $0.5 4 \text{ mm}^2$ $0.5 4 \text{ mm}^2$ 20 12 20 14 0.6 0.8  N·m
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit <b>type of connectable conductor cross-sections</b> • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded <b>connectable conductor cross-section</b> • solid • finely stranded with core end processing <b>AWG number as coded connectable conductor cross</b> <b>section</b> • solid • stranded <b>tightening torque</b> <b>design of the thread of the connection screw</b> <b>Installation/ mounting/ dimensions</b>	screw-type terminals $1x (0.5 4.0 \text{ mm}^2), 2x (0.5 2.5 \text{ mm}^2)$ $1x (0.5 4 \text{ mm}^2), 2x (0.5 1.5 \text{ mm}^2)$ 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) $0.5 4 \text{ mm}^2$ 20 12 20 12 20 14 0.6 0.8  N·m M3
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12 20 12 20 14 0.6 0.8 N·m M3
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm DIN rail
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height	screw-type terminals 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14) 0.5 4 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12 20 12 20 14 0.6 0.8 N·m M3 any screw and snap-on mounting onto 35 mm DIN rail 100 mm

required spacing					
<ul> <li>with side-by-sid</li> </ul>	e mounting				
— forwards	emounting	0.	nm		
— backwards			nm		
			nm		
— upwards — downwards	_				
	5		nm		
— at the side		01	nm		
<ul> <li>for grounded particular</li> </ul>	irts				
— forwards			nm		
<ul> <li>backwards</li> </ul>			nm		
— upwards		0 ו	nm		
— at the side		0 ו	nm		
- downwards	S	0 ו	nm		
<ul> <li>for live parts</li> </ul>					
— forwards		0 1	nm		
— backwards		0 1	nm		
— upwards		0 1	nm		
- downwards	S	0 1	nm		
— at the side		0 1	nm		
Ambient conditions					
installation altitude at	height above sea leve	l maximum 2 (	)00 m		
ambient temperature	-		500 m		
		2	5 +60 °C		
<ul> <li>during operation</li> </ul>	1				
during storage			0 +85 °C		
during transport			0 +85 °C		
relative humidity durin		10	95 %		
Certificates/ approvals	S				
General Product Ap	proval				EMC
6	Confirmation		Ē	rnr	A
SP	<u>Confirmation</u>	$(\mathbf{x})$	(UL)	FAL	Æ
<b>()</b>	Confirmation		(Jul)	EAC	
(SP)	Confirmation			EAC	RCM
St.	<u>Confirmation</u>			EHC	RCM
	<u>Confirmation</u>	CCC	<b>U</b> L	EHC	RCM
CSA Declaration of Confe		CCC Test Certificates	Marine / Shipping	EAC	RCM
Declaration of Confe			UL Marine / Shipping	EAC	RCM
Declaration of Confe	ormity	Test Certificates		EAC	RCM
Declaration of Confe	ormity UK	Test Certificates		ERC	RCM
CE	ormity UK	Test Certificates		<b>L</b> lovds Register	RCM
Declaration of Confe EG-Konf.	ormity	Test Certificates		EFFC Hoved's Register us	RCM
CE	ormity UK	Test Certificates		Effective Register LINS	RCM
CE	ormity UK	Test Certificates		EFFC Hoyds Register LIN	RCM
CE EG-Konf.	ormity UK	Test Certificates	B U R E A U VERITAS	<b>Liovds</b> Register Lits	RCM
CE	ormity UK	Test Certificates		Liovels Register Lits	RCM
CE EG-Konf.	ormity UK	Test Certificates	<b>EUREAU</b> VERITAS	<b>Effic</b> Lloyds Kegister Lits	RCM
CE EG-Konf.	ormity UK	Test Certificates	B U R E A U VERITAS	<b>Effic</b> Lloyds Register us	RCM
CE EG-Konf.	ormity UK	Test Certificates	<b>EUREAU</b> VERITAS	<b>Effic</b> <u>Hoyds</u> <u>Register</u> us	RCM
CE EG-Konf.	ormity UK	Test Certificates	<b>EUREAU</b> VERITAS	Effic Hoveds Register us	RCM
CE EG-Konf.	ormity UK	Test Certificates Type Test Certificates ates/Test Report	<b>EUREAU</b> VERITAS	Effic Register uts	RCM Prs
CE EG-Konf.	ormity UK	Test Certificates Type Test Certificates ates/Test Report	<b>EUREAU</b> VERITAS	<b>Effic</b> Register Lrs	Image: Constraint of the constraint
CE EG-Konf.	ormity UK	Test Certificates Type Test Certificates ates/Test Report	<b>EUREAU</b> VERITAS	Effic Keyster Lits	RCM Prs
CE EG-Konf.	ormity UK	Test Certificates Type Test Certificates ates/Test Report	<b>EUREAU</b> VERITAS	Effic Keyster us	Image: Constraint of the constraint
GG-Konf. Marine / Shipping	ormity UK CA	Test Certificates Type Test Certificates ates/Test Report	<b>EUREAU</b> VERITAS	Effic Kegister us	Image: Constraint of the constraint
<b>EG-Konf.</b> Marine / Shipping	ormity UK CA	Test Certificates	<b>EUREAU</b> VERITAS	<b>Effic</b> <b>Loyds</b> <b>Loyds</b> <b>Loyds</b>	Image: Constraint of the constraint

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10 Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2535-1AW30

Cax online generator

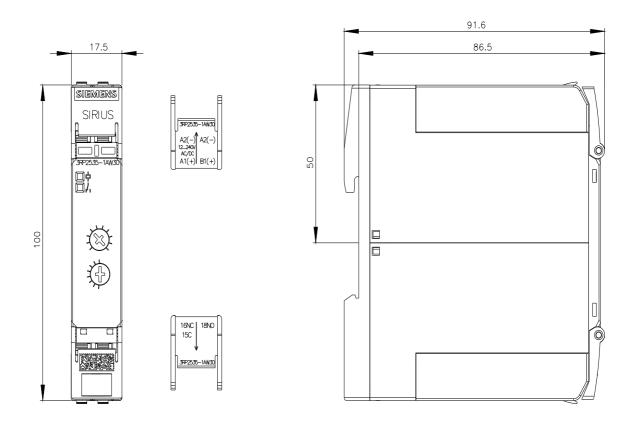
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2535-1AW30

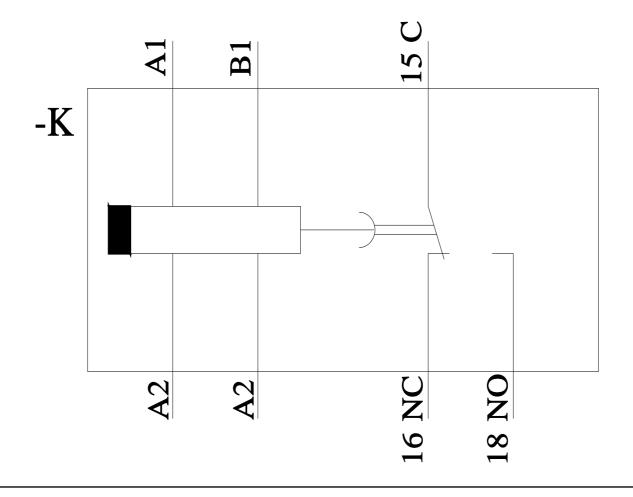
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RP2535-1AW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2535-1AW30&lang=en

## Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2535-1AW30/manual





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