## **SIEMENS**

Data sheet 3RP2513-1AW30



Timing relay, electronic ansprechverzögert 1 change-over contact, 1 time range 5...100 s 12-240 V AC/DC at 50/60 Hz AC with LED, Screw terminal

product designation design of the product product type designation 3RP25  Ceneral technical data  product component • relay output • semi-conductor output product extension required remote control No power loss [W] maximum 2 W insulation voltage for overvoltage category III according to IEC 80684 with degree of pollution 3 rated value  test voltage for isolation test degree of pollution surge voltage resistance rated value protection class IP shock resistance acc. to IEC 60068-2-7 ibritation resistance acc. to IEC 60068-2-7 mechanical service life (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value  15 % **-  **Terenework time  250 ms  **reference code acc. to IEC 81346-2	product brand name	SIRIUS	
product type designation  General technical data  product component  • relay output  • semi-conductor output  product extension required remote control  product extension optional remote control  power loss [W] maximum  2 W  insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value  test voltage for isolation test  degree of pollution  3 surge voltage resistance rated value  protection class IP  shock resistance acc. to IEC 60068-2-27  11g / 15 ms  vibration resistance acc. to IEC 60068-2-6  nechanical service life (switching cycles) typical  electrical endurance (switching cycles) typical  electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  5 A  reference code acc. to IEC 81346-2  K relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  control supply voltage 1 at AC  • at 50 Hz  ves Semi-conductor output  Yes  No  No  No  No  No  No  No  No  No  N	product designation	timing relay	
product component  • relay output  • semi-conductor output  product extension required remote control  product extension optional remote control  power loss [W] maximum  insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value  test voltage for isolation test  degree of pollution  surge voltage resistance rated value  protection class IP  shock resistance acc. to IEC 60068-2-27  sibration resistance acc. to IEC 60068-2-6  mechanical service life (switching cycles) typical  electrical endurance (switching cycles) typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  recovery time  250 ms  reference code acc. to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  • at 50 Hz  12 240 V	design of the product	slow-operating	
product component  • relay output  • semi-conductor output  Product extension required remote control  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  test voltage for isolation test  degree of pollution  3 surge voltage resistance rated value  4 000 V  protection class IP  IP20  shock resistance acc. to IEC 60068-2-27  11g / 15 ms  vibration resistance acc. to IEC 60068-2-6  mechanical service life (switching cycles) typical  electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  5 A  recovery time  250 ms  reference code acc. to IEC 81346-2  K  relative repeat accuracy  1 %; i/-  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage 1 at AC  • at 50 Hz  Va W  300 V  2 W  300 V  2 W  300 V  2 W  300 V	product type designation	3RP25	
• relay output • semi-conductor output 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 test voltage for isolation test 2.5 kV degree of pollution 3 surge voltage resistance rated value 4 000 V protection class IP shock resistance acc. to IEC 60068-2-27 11g / 15 ms vibration resistance acc. to IEC 60068-2-27 11g / 15 ms vibration resistance acc. to IEC 60068-2-8 10 55 Hz / 0.35 mm mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time 5 100 s relative setting accuracy relating to full-scale value 5 %; +/- thermal current 5 A recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 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)  6 AC/DC control supply voltage 1 at AC  • at 50 Hz  7 eat 50 Hz	General technical data		
• semi-conductor output product extension required remote control No product extension optional remote control No power loss [W] maximum insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution 3 surge voltage resistance rated value 4 000 V protection class IP shock resistance acc. to IEC 60068-2-27 11g / 15 ms vibration resistance acc. to IEC 60068-2-6 10 55 Hz / 0.35 mm mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A recovery time 250 ms reference code acc. to IEC 81346-2 reflative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC • at 50 Hz  No  No No No No No No No No No No No N	product component		
product extension required remote control 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 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 acc. to IEC 60068-2-27 11g / 15 ms vibration resistance acc. to IEC 60068-2-6 10 55 Hz / 0.35 mm mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A recovery time 250 ms reference code acc. to IEC 81346-2 relative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  Control circuit/ Control type of voltage 1 at AC • at 50 Hz  a00 V  100 00  100 00	• relay output	Yes	
product extension optional remote control power loss [W] maximum   2 W	semi-conductor output	No	
power loss [W] maximum  insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value  test voltage for isolation test  degree of pollution  surge voltage resistance rated value  protection class IP  shock resistance acc. to IEC 60068-2-27  shock resistance acc. to IEC 60068-2-6  nechanical service life (switching cycles) typical  electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  frecovery time  reference code acc. to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  other accounts and control supply voltage  and use of the surrounding table to the set of the set runtime  AC/DC  control supply voltage 1 at AC  other at 50 Hz  and voltage of the control supply voltage  control supply voltage 1 at AC  other accounts and value  2 W  300 V  2 Stov  4 000 V  1 19, 1 5 ms  1 19, 1 5 ms  1 10, 1 000 000  1 10, 1	product extension required remote control	No	
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value  test voltage for isolation test  degree of pollution  surge voltage resistance rated value  protection class IP  shock resistance acc. to IEC 60068-2-27  tipz / 15 ms  vibration resistance acc. to IEC 60068-2-6  mechanical service life (switching cycles) typical  electrical endurance (switching cycles) at AC-15 at 230 V  typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  5 A  reference code acc. to IEC 81346-2  k  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz  a 000 V  2.5 kV  degree of pollution 3 rated value  1 000 V  1 1920  3 3  3 3  3 4 2 2.5 kV  4 000 V  1 1920  1 1920  3 5 Hz / 0.35 mm  1 10 000 000  1 10 000 000  1 10 000 00	product extension optional remote control	No	
test voltage for isolation test  degree of pollution  surge voltage resistance rated value  protection class IP  shock resistance acc. to IEC 60068-2-27  vibration resistance acc. to IEC 60068-2-6  nechanical service life (switching cycles) typical  electrical endurance (switching cycles) at AC-15 at 230 V typical  electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  frecovery time  reference code acc. to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control supply voltage 1 at AC  • at 50 Hz  e 100 V  protection 1 as 3  a 3  3  3  3  4000 V  protection 2 by N  protection 3 by N  protection 4 by N  protection	power loss [W] maximum	2 W	
degree of pollution surge voltage resistance rated value  protection class IP shock resistance acc. to IEC 60068-2-27 lip / 15 ms vibration resistance acc. to IEC 60068-2-6 lip / 15 ms wibration resistance acc. to IEC 60068-2-6 lip / 15 ms mechanical service life (switching cycles) typical lectrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time surget final current sharp final c		300 V	
surge voltage resistance rated value  protection class IP  shock resistance acc. to IEC 60068-2-27  vibration resistance acc. to IEC 60068-2-6  nechanical service life (switching cycles) typical  electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  5 A  recovery time  reference code acc. to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  control circuit/ Control  type of voltage of the control supply voltage  • at 50 Hz  vibration resistance acc. to IEC 80068-2-27  11g / 15 ms  10 000 000  10 000 000  10 000 000  10 000 00	test voltage for isolation test	2.5 kV	
protection class IP shock resistance acc. to IEC 60068-2-27 11g / 15 ms vibration resistance acc. to IEC 60068-2-6 10 55 Hz / 0.35 mm mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A recovery time reference code acc. to IEC 81346-2 relative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  Control circuit/ Control type of voltage of the control supply voltage etc. 12 240 V	degree of pollution	3	
shock resistance acc. to IEC 60068-2-27  vibration resistance acc. to IEC 60068-2-6  mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time relative setting accuracy relating to full-scale value thermal current frecovery time reference code acc. to IEC 81346-2 relative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  control circuit/ Control type of voltage of the control supply voltage electrical endurance (switching cycles) typical 10 000 000 100 000	surge voltage resistance rated value	4 000 V	
vibration resistance acc. to IEC 60068-2-6  mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time frelative setting accuracy relating to full-scale value thermal current frecovery time reference code acc. to IEC 81346-2 relative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  control circuit/ Control type of voltage of the control supply voltage output 10 000 000  100 000  5 100 s  5 100 s  5 %; +/-  5 A  K  recovery time 250 ms  reference code acc. to IEC 81346-2     K  relative repeat accuracy 1 %; +/- influence of the surrounding temperature 1% in the whole temperature range to the set runtime  2	protection class IP	IP20	
mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time felative setting accuracy relating to full-scale value thermal current fecovery time ference code acc. to IEC 81346-2 relative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  Control circuit/ Control type of voltage of the control supply voltage ference control supply voltage 1 at AC  at 50 Hz  100 000 1	shock resistance acc. to IEC 60068-2-27	11g / 15 ms	
electrical endurance (switching cycles) at AC-15 at 230 V typical  adjustable time	vibration resistance acc. to IEC 60068-2-6	10 55 Hz / 0.35 mm	
adjustable time 5 100 s relative setting accuracy relating to full-scale value 5 %; +/- thermal current 5 A recovery time 250 ms reference code acc. to IEC 81346-2 K 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) 12.09.2014  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		10 000 000	
relative setting accuracy relating to full-scale value thermal current 5 A  recovery time 250 ms  reference code acc. to IEC 81346-2 K relative repeat accuracy 1 %; +/-  influence of the surrounding temperature power supply influence 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)  Control circuit/ Control  type of voltage of the control supply voltage control supply voltage 1 at AC  • at 50 Hz  • at 50 Hz		100 000	
thermal current  recovery time  250 ms  reference code acc. to IEC 81346-2  K  relative repeat accuracy influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz  • at 50 Hz  • 12 240 V	adjustable time	5 100 s	
reference code acc. to IEC 81346-2  relative repeat accuracy influence of the surrounding temperature power supply influence Substance Prohibitance (Date)  Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC  • at 50 Hz  • at 50 Hz  K  I %; +/-  1% in the whole temperature range to the set runtime 1% in the whole voltage range to the set runtime 12.09.2014  AC/DC  AC/DC	relative setting accuracy relating to full-scale value	5 %; +/-	
reference code acc. to IEC 81346-2  relative repeat accuracy influence of the surrounding temperature power supply influence  Substance Prohibitance (Date)  Control circuit/ Control type of voltage of the control supply voltage output  at 50 Hz  K  I %; +/-  1% in the whole temperature range to the set runtime 1% in the whole voltage range to the set runtime 12.09.2014  AC/DC  Control supply voltage 1 at AC  • at 50 Hz  • at 50 Hz	thermal current	5 A	
relative repeat accuracy influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  o at 50 Hz  1 %; +/-  1% in the whole temperature range to the set runtime  12.09.2014  Control circuit/ Control  type of voltage of the control supply voltage  AC/DC  12 240 V	recovery time		
influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz  1% in the whole temperature range to the set runtime  1% in the whole voltage range to the set runtime  12.09.2014  AC/DC  AC/DC	reference code acc. to IEC 81346-2		
power supply influence  Substance Prohibitance (Date)  1% in the whole voltage range to the set runtime  12.09.2014  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz  1% in the whole voltage range to the set runtime  AC/DC  12.09.2014	relative repeat accuracy	1 %; +/-	
Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz  • at 50 Hz  12.09.2014  AC/DC  AC/DC	influence of the surrounding temperature		
type of voltage of the control supply voltage  control supply voltage 1 at AC  at 50 Hz  AC/DC  12 240 V	power supply influence	1% in the whole voltage range to the set runtime	
type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz  AC/DC  12 240 V	Substance Prohibitance (Date)	12.09.2014	
control supply voltage 1 at AC	Control circuit/ Control		
• at 50 Hz 12 240 V	type of voltage of the control supply voltage	AC/DC	
	control supply voltage 1 at AC		
• at 60 Hz 12 240 V	● at 50 Hz	1-11-11	
	● at 60 Hz	12 240 V	
control supply voltage frequency 1 50 60 Hz	control supply voltage frequency 1	50 60 Hz	
control supply voltage 1	control supply voltage 1		
• at DC 12 240 V	• at DC	12 240 V	
operating range factor control supply voltage rated	operating range factor control supply voltage rated		

value at DC	
	0.8
initial value     full-scale value	1.1
	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated	
value at AC at 60 Hz	
initial value	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	Yes
ON-delay/instantaneous contact	No
passing make contact	No
passing make contact/instantaneous contact	No
OFF delay	No
switching function	
flashing symmetrically with interval	No
start/instantaneous	
<ul> <li>flashing symmetrically with interval start</li> </ul>	No
flashing symmetrically with pulse	No
start/instantaneous  • flashing symmetrically with pulse start	No
flashing asymmetrically with interval start	No
flashing asymmetrically with pulse start	No
switching function	
star-delta circuit with delay time	No
star-delta circuit	No
switching function with control signal	
additive ON-delay	No
passing break contact	No
passing break contact/instantaneous	No
OFF delay	No
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
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	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
Short-circuit protection	
design of the fuse link for short-circuit protection of the	fuse gL/gG: 4 A
auxiliary switch required	
Auxiliary circuit	

metarial of avitabina applicate	A-C-02
material of switching contacts	AgSnO2
number of NC contacts	
delayed switching	0
instantaneous contact	0
number of NO contacts	
delayed switching	0
• instantaneous contact	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 125 V	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 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 delay</li> </ul>	No
non-volatile	No
Electromagnetic compatibility	INO
EMC emitted interference acc. to IEC 61812-1	ambience A (industrial sector)
EMC immunity acc. to IEC 61812-1	corresponds to degree of severity 3
conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV network connection / 1 kV control connection
due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front acc. to IEC 60529	IP20
type of insulation	Basic insulation
category acc. to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
at AWG cables solid	1x (20 12), 2x (20 14)
<ul> <li>at AWG cables stranded</li> </ul>	1x (20 12), 2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
stranded	20 14
tightening torque	0.6 0.8 N·m
design of the thread of the connection screw	M3
Installation/ mounting/ dimensions	
mounting position	any

fastening method	screw and snap-on mounting onto 35 mm standard	mounting rail
height	100 mm	
width	17.5 mm	
depth	90 mm	
required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
<ul> <li>for grounded parts</li> </ul>		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— at the side	0 mm	
— downwards	0 mm	
for live parts		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
<ul> <li>during operation</li> </ul>	-25 +60 °C	
during storage	-40 +85 °C	
during transport	-40 +85 °C	
relative humidity during operation	10 95 %	
Certificates/ approvals		
General Product Approval		EMC



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

**Miscellaneous** 



Type Test Certificates/Test Report







Marine / Shipping

other







Confirmation

Further information

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=3RP2513-1AW30

Cax online generator

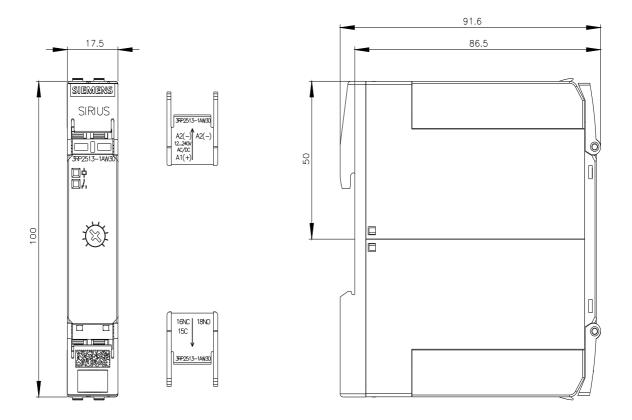
 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP2513-1AW30}$ 

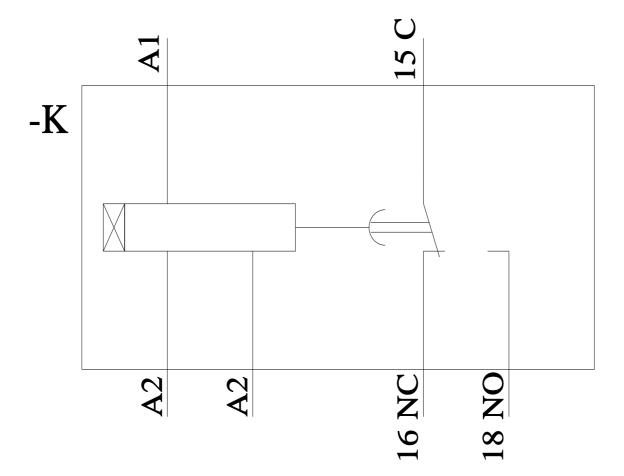
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RP2513-1AW30">https://support.industry.siemens.com/cs/ww/en/ps/3RP2513-1AW30</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2513-1AW30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2513-1AW30&lang=en</a>

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RP2513-1AW30/manual





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