SIEMENS

Data sheet

3RA2815-1AW10



solid-state time-delayed auxiliary switch, off delayed, without control signal, relay: 1 CO, time range 0.05-100 s, 24-240 V AC/DC, 50/60 Hz, varistor for attenuation of the contactor coils integrated, screw terminal, can be snapped on at the front on contactors 3RT2 and auxiliary contactors 3RH2

product brand name	SIRIUS		
product designation	Solid-state time-delay auxiliary switch		
product type designation	3RA28		
General technical data			
size of contactor can be combined company-specific	S00, S0, S2, S3		
product component semi-conductor output	No		
product extension required remote control	No		
product extension optional remote control	No		
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V		
test voltage for isolation test	1.5 kV		
degree of pollution	3		
surge voltage resistance rated value	4 kV		
test voltage for surge voltage test	4 800 V		
protection class IP of the terminal	IP20		
shock resistance according to IEC 60068-2-27	15g / 11 ms		
vibration resistance according to IEC 60068-2-6	10 59 Hz: 0.35 mm, 60 150 Hz: 2g		
mechanical service life (operating cycles) typical	10 000 000		
mechanical service life (operating cycles)			
 with contactor 3R.2 of frame size S00 	10 000 000		
 with contactor 3R.2 of frame size S0 	10 000 000		
 with contactor 3R.2 of frame size S2 	10 000 000		
 with contactor 3R.2 of frame size S3 	10 000 000		
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000		
electrical endurance (operating cycles)			
 with contactor 3R.2 of frame size S00 	100 000		
 with contactor 3R.2 of frame size S0 	100 000		
 with contactor 3R.2 of frame size S2 	100 000		
 with contactor 3R.2 of frame size S3 	100 000		
adjustable time	0.05 100 s		
relative setting accuracy relating to full-scale value	15 %		
minimum ON period	200 ms		
recovery time	150 ms		
reference code according to IEC 81346-2	К		
relative repeat accuracy	1 %		
influence of the surrounding temperature	±1 %		
power supply influence	±1 %		
Substance Prohibitance (Date)	10/01/2009		
Product Function			
product function star-delta circuit	No		

Control circuit/ Control			
type of voltage of the control supply voltage	AC/DC		
control supply voltage 1 at AC			
• at 50 Hz	24 240 V		
• at 60 Hz	24 240 V		
control supply voltage frequency 1	50 60 Hz		
control supply voltage 1			
• at DC	24 240 V		
operating range factor control supply voltage rated value at			
DC			
● initial value	0.85		
• full-scale value	1.1		
operating range factor control supply voltage rated value at AC at 50 Hz			
initial value	0.85		
• full-scale value	1.1		
operating range factor control supply voltage rated value at			
AC at 60 Hz			
• initial value	0.85		
• full-scale value	1.1		
design of the surge suppressor	with varistor		
Switching Function			
switching function			
• ON-delay	No		
 ON-delay/instantaneous contact 	No		
 passing make contact 	No		
 passing make contact/instantaneous contact 	No		
OFF delay	Yes		
switching function			
 flashing symmetrically with interval start/instantaneous 	No		
flashing symmetrically with interval start	No		
 flashing symmetrically with pulse start/instantaneous 	No		
 flashing symmetrically with pulse start 	No		
 flashing asymmetrically with interval start 	No		
flashing asymmetrically with pulse start	No		
switching function			
 constant clock cycle with pulse start 	No		
constant clock cycle with interval start	No		
switching function			
variably clocked with pulse start	No		
variably clocked with pulse clart	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	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			
 retrotriggerable with deactivated control signal/instantaneous contact 	No		
signal/instantaneous contact			

 retrotriggerable with switched-on control signal 	No		
retrotriggerable with switched-on control	No		
signal/instantaneous contact			
 retriggerable with deactivated control signal 	No		
design of the control terminal non-floating	No		
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	AgNi		
number of CO contacts			
delayed switching	1		
operational current of auxiliary contacts at AC-15			
• maximum	3 A		
• at 24 V	3 A		
• at 250 V	3 A		
operational current of auxiliary contacts as NC contact at AC-15			
• at 24 V	3 A		
• at 250 V	3 A		
operational current of auxiliary contacts as NO contact at AC-15			
• at 24 V	3 A		
• at 250 V	3 A		
operational current of auxiliary contacts at DC-13	1 0.1		
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	2 500 1/h		
contact rating of auxiliary contacts according to UL	B300 / R300		
Main circuit			
Main circuit type of voltage	AC/DC		
Main circuit type of voltage Inputs/ Outputs	AC/DC		
Main circuit type of voltage Inputs/ Outputs product function			
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay	No		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile			
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility	No No		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile	No		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1	No No		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference	No No Environment A (industrial area)		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 0 V/m		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 0 V/m		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 kV 10 V/m 8 kV		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 kV 10 V/m 8 kV		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 kV 10 V/m 8 kV IP20 Basic insulation		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ 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 • solid	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes screw-type terminals 0.5 4 mm ² , 2x (0.5 2.5 mm ²)		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ 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 • solid • finely stranded with core end processing	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes screw-type terminals 0.5 4 mm ² , 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²)		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ 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 • solid • finely stranded with core end processing • for AWG cables solid	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes screw-type terminals 0.5 4 mm², 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • for AWG cables solid • for AWG cables solid	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes screw-type terminals 0.5 4 mm ² , 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²)		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ 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 • solid • finely stranded with core end processing • for AWG cables solid	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes screw-type terminals 0.5 4 mm², 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)		
Main circuit type of voltage Inputs/ Outputs product function • at the relay outputs switchover delayed/without delay • non-volatile Electromagnetic compatibility EMC immunity according to IEC 61812-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit type of connectable conductor cross-sections • solid • finely stranded with core end processing • for AWG cables solid • for AWG cables solid	No No Environment A (industrial area) 2 kV network connection / 1 kV control connection 2 kV 1 kV 10 V/m 8 kV IP20 Basic insulation none Yes screw-type terminals 0.5 4 mm², 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)		

 finely stranded without core end processing 	0.25 1.5 mm ²		
AWG number as coded connectable conductor cross	0.20 1.0 mm		
section			
• solid	20 14		
• stranded	20 14		
Installation/ mounting/ dimensions			
mounting position	any (like contactor)		
fastening method	clip-on		
height	38 mm		
width	45 mm		
depth	74 mm		
required spacing			
 with side-by-side mounting — forwards 	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	0 mm		
 for grounded parts 			
— 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	05		
during operation	-25 +60 °C		
during storageduring transport	-40 +85 °C		
relative humidity during operation	-40 +85 °C 0 95 %		
Certificates/ approvals	0		
			Declaration of Con-
General Product Approval			formity
		EHC	UK CA
Declaration of Con- formity Test Certificates	Marine / Shipping		
EG-Konf.	ertific- ABS	BUREAU VERITAS	
Marine / Shipping		other	Railway
LIRS PRS	KMRS	<u>Confirmation</u>	Vibration and Shock

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}$

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2815-1AW10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2815-1AW10

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

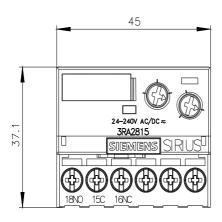
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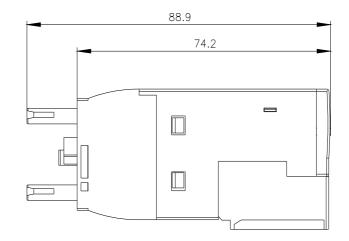
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

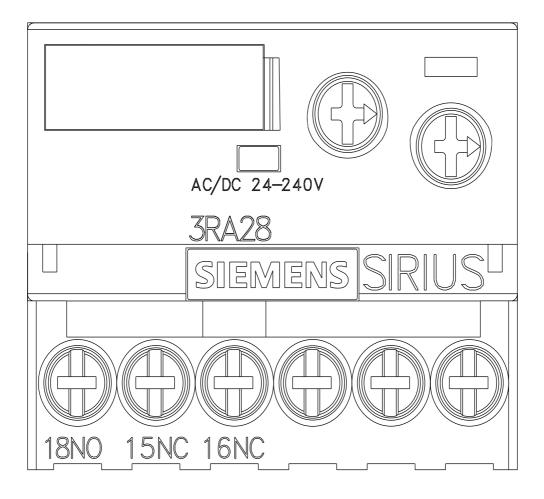
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2815-1AW10&lang=en

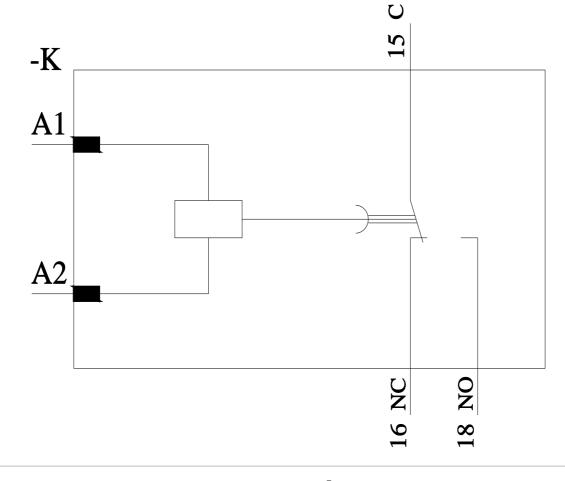
Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RA2815-1AW10/manual









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