# **SIEMENS**

Product data sheet 3RV1021-0BA10



CIRCUIT-BREAKER, 0.14...0.2 A N-RELEASE 2.6 A, SIZE S0, MOTOR PROTECTION, CLASS 10, SCREW CONNECTION STANDARD BREAKING CAPACITY

General technical data:		
Product brand name		SIRIUS
Product designation		circuit breaker
Size of the circuit-breaker		S0
Trip class		CLASS 10
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Protection class IP / frontal/front side		IP20
Ambient temperature		
during storage	°C	-50 80
during the operating phase	°C	-20 70
during transport	°C	8050
Resistance against shock		25g / 11 ms
Insulation voltage / rated value	V	690
Impulse voltage resistance / rated value	kV	6
Real loss power / total / typical	W	5
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		Q
according to DIN EN 61346-2		Q

Type of the driving mechanism / Motor drive design of the operating mechanism  Product function  • Overfload protection • Phase disturbance recognition  Product component • auxiliary switch • Indervoltage release mechanism • trip indicator  Product extension / optional / Motor drive  Main circuit:  Number of poles / for main current circuit Type of voltage Operating current / at AC-3 at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / main ximmum • of the current-dependent overfload release  Adjustable response current • of the current-dependent overfload release  Adjustable response current • of the current-dependent overfload release  Axiliary circuit  Number of NC contacts / for auxiliary contacts / instantaneous switching Number of of digital inputs  Number of odigital inputs  Product extension / apxiliary switch  Axiliary circuits  Number of poles / for auxiliary contacts / instantaneous switching Number of of digital inputs  Product extension / auxiliary switch  Axiliary circuits  Number of of contacts / for auxiliary contacts / instantaneous switching Number of of digital inputs  Product extension / auxiliary switch  Axiliary circuits  Number of digital inputs  Axiliary circuits  Number of digital inputs  Axiliary capacity limit short-circuit current (icu)  • et 400 V / rated value  Axiliary capacity limit short-circuit current (icu)  • et 400 V / rated value  Axiliary capacity limit short-circuit current (icu)  • et 400 V / rated value  Axiliary capacity limit short-circuit current (icu)  • et 400 V / rated value  Axiliary capacity limit short-circuit current (icu)  • et 400 V / rated value  Axiliary capacity limit short-circuit current (icu)	Mechanical switching cycle as operating period / of the main contacts / typical		100,000
Product function  Overload protection Phase disturbance recognition  Product component  auxiliary switch Overloader recognition  Product component  Indicator  No  No  No  No  No  No  No  No  No	Type of the driving mechanism / Motor drive		No
Overload protection     Phase disturbance recognition  Product component     * auxiliary switch     * Undervoltage release mechanism     * Undervoltage release mechanism     * *** No     ** AC/DC  Operating voltage / at 3 AC / rated value / maximum     *** No     *** Operating current / at AC-3 / at 400 V / rated value     *** AVO V / rated value     *** No     *** No     *** No     *** Operating current / at AC-3 / at 400 V / rated value     *** No     ** No     *** No     ** No     *** No     *** No     *** No     *** No     *** No     *	design of the operating mechanism		selector switch
Product component  * auxiliary switch  * Undervoltage release mechanism  * University of poles / for main current circuit  * Operating ourrent / at AC-3 / at 400 V / rated value  * Service power / at AC-3  * at 400 V / rated value  * Service power / at AC-3 / according to IEC 60947-6-2 / maximum  * of the current-dependent overfoad release  * Adjustable response current  * of the current-dependent overfoad release  * AD 0.2  * Operating outrent / at AC-3 / according to IEC 60947-6-2 / maximum  * Of the current-dependent overfoad release  * AD 0.4 2.6  * Adjustable response current  * of the current-dependent overfoad release  * AD 0.4 2.6  * Adjustable response current  * of the current-dependent overfoad release  * AD 0.14 0.2  * Continuous current / rated value  * AD 0.2  * Description of NC contacts / for auxiliary contacts / instantaneous switching  * Number of NC contacts / for auxiliary contacts / instantaneous switching  * Number of digital inputs  * Description of the current of digital inputs  * Description of digital inputs  * Description of the current of the current of digital inputs  * Description of the current of digital inputs  * Description of the current of the current of digital inputs  * Description of the current of the current of digital inputs  * Description of the current of the current of digital inputs  * Description of the current of the current of the current of digital inputs  * Description of the current of the current of the current of digital inputs  * Description of the current of the	Product function		
Product component  auxiliary switch  No  No  Product extension / optional / Motor drive  No  Main circuit:  Number of poles / for main current circuit  3  Type of voitage  Operating current / at AC-3 / at 400 V / rated value  Service power / at AC-3 / at 400 V / rated value  AV  Operating group / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  of the non-delayed short-circuit release  AJustable response current  of the non-delayed short-circuit release  AJustable response current  of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of Change-over switches / for auxiliary contacts  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (icu)	Overload protection		Yes
* auxiliary switch  * Undervoltage release mechanism  * trip indicator  Product extension / optional / Motor drive  No  Main circuitt  Number of poles / for main current circuit  Type of voltage  Operating voltage / at 3 AC / rated value / maximum  V 690  Operating current / at AC-3 / at 400 V / rated value  Service power / at AC-3  * at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  * of the non-delayed short-circuit release  Adjustable response current  * of the non-delayed short-circuit release  Adjustable response current  * of the current-dependent overload release  A 0.2  Continuous current / rated value  A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of Ocontacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O Short-circuit:  Breaking capacity limit short-circuit current (icu)	Phase disturbance recognition		Yes
Undervoltage release mechanism It in indicator  Product extension / optional / Motor drive  No  Main circuit:  Number of poles / for main current circuit  Type of voltage Operating voltage / at 3 AC / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value Service power / at AC-3 - at 400 V / rated value Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum Arrangement of electrical connectors / for main current circuit Adjustable response current - of the non-delayed short-circuit release Adjustable response current - of the non-delayed short-circuit release A 2.6 2.6  Adjustable response current - of the current-dependent overload release A 0.14 0.2  Continuous current / rated value Product extension / auxiliary switch Yes  Auxiliary circuit: Number of NC contacts / for auxiliary contacts / instantaneous switching Number of AD contacts / for auxiliary contacts / instantaneous switching Number of change-over switches / for auxiliary contact  Inputs/ Outputs: Number of digital inputs  0  Short-circuit: Breaking capacity limit short-circuit current (Icu)	Product component		
* trip indicator No  Product extension / optional / Motor drive No  Main circuit:  Number of poles / for main current circuit 3 Type of voltage AC/DC  Operating voltage / at 3 AC / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value   A 0.2  Service power / at AC-3  * at 400 V / rated value KW 0.06  Switching frequency / at AC-3 / according to IEC 60947-6-2 / waximum Arrangement of electrical connectors / for main current circuit of the non-delayed short-circuit release A 0.14 0.2  Continuous current / rated value A 0.2  Product extension / auxiliary switch Yes  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs 0  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	auxiliary switch		No
Product extension / optional / Motor drive  Main circuit:  Number of poles / for main current circuit  7 yee of voltage  Operating current / at AC-3 / at 400 V / rated value  Service power / at AC-3 / at 400 V / rated value  Service power / at AC-3 / according to IEC 60947-6-2 / I/h 15  Switching frequency / at AC-3 / according to IEC 60947-6-2 / I/h 15  Adjustable response current  of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Undervoltage release mechanism		No
Number of poles / for main current circuit  Type of voltage  Operating voltage / at 3 AC / rated value / maximum  V 690  Operating current / at AC-3 / at 400 V / rated value  A 0.2  Service power / at AC-3  • at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  • of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  • of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	• trip indicator		No
Number of poles / for main current circuit  Type of voltage  Operating voltage / at 3 AC / rated value / maximum  V 690  Operating current / at AC-3 / at 400 V / rated value  A 0.2  Service power / at AC-3  • at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  Adjustable response current  • of the non-delayed short-circuit release  Adjustable response current  • of the current-dependent overload release  Continuous current / rated value  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (icu)	Product extension / optional / Motor drive		No
Type of voltage  Operating voltage / at 3 AC / rated value / maximum  V 690  Operating current / at AC-3 / at 400 V / rated value  A 0.2  Service power / at AC-3  * at 400 V / rated value  KW 0.06  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  Adjustable response current  • of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  • of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	Main circuit:		
Operating voltage / at 3 AC / rated value / maximum  Operating current / at AC-3 / at 400 V / rated value  A 0.2  Service power / at AC-3 / at 400 V / rated value  A 0.2  Service power / at AC-3 / at 400 V / rated value  KW 0.06  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  Adjustable response current  of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Number of poles / for main current circuit		3
Operating current / at AC-3 / at 400 V / rated value  Service power / at AC-3  • at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  Adjustable response current  • of the non-delayed short-circuit release  Adjustable response current  • of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Type of voltage		AC/DC
Service power / at AC-3  • at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / I/h 15  Maximum  Arrangement of electrical connectors / for main current circuit front side  Adjustable response current  • of the non-delayed short-circuit release A 2.6 2.6  Adjustable response current  • of the current-dependent overload release A 0.14 0.2  Continuous current / rated value A 0.2  Product extension / auxiliary switch Yes  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs 0  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Operating voltage / at 3 AC / rated value / maximum	V	690
• at 400 V / rated value  Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit  Adjustable response current • of the non-delayed short-circuit release  A	Operating current / at AC-3 / at 400 V / rated value	А	0.2
Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum  Arrangement of electrical connectors / for main current circuit front side  Adjustable response current  • of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  • of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	Service power / at AC-3		
maximum  Arrangement of electrical connectors / for main current circuit  Adjustable response current  of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  A 0.2  Product extension / auxiliary switch  Yes  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	• at 400 V / rated value	kW	0.06
Adjustable response current  • of the non-delayed short-circuit release  A 2.6 2.6  Adjustable response current  • of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)		1/h	15
of the non-delayed short-circuit release     A 2.6 2.6  Adjustable response current     of the current-dependent overload release     A 0.14 0.2  Continuous current / rated value     A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Arrangement of electrical connectors / for main current circuit		front side
Adjustable response current  • of the current-dependent overload release  A 0.14 0.2  Continuous current / rated value  A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Adjustable response current		
of the current-dependent overload release     A 0.14 0.2  Continuous current / rated value     A 0.2  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	of the non-delayed short-circuit release	Α	2.6 2.6
Continuous current / rated value  Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	Adjustable response current		
Product extension / auxiliary switch  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	of the current-dependent overload release	Α	0.14 0.2
Auxiliary circuit:  Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Continuous current / rated value	А	0.2
Number of NC contacts / for auxiliary contacts / instantaneous switching  Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	Product extension / auxiliary switch		Yes
Number of NO contacts / for auxiliary contacts / instantaneous switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  Short-circuit:  Breaking capacity limit short-circuit current (Icu)	Auxiliary circuit:		
switching  Number of change-over switches / for auxiliary contact  Inputs/ Outputs:  Number of digital inputs  O  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	-		0
Inputs/ Outputs:  Number of digital inputs  0  Short-circuit:  Breaking capacity limit short-circuit current (Icu)			0
Number of digital inputs  Short-circuit:  Breaking capacity limit short-circuit current (lcu)	Number of change-over switches / for auxiliary contact		0
Short-circuit: Breaking capacity limit short-circuit current (Icu)	Inputs/ Outputs:		
Breaking capacity limit short-circuit current (Icu)	Number of digital inputs		0
	Short-circuit:		
at 400 V / rated value     kA 100	Breaking capacity limit short-circuit current (Icu)		
	• at 400 V / rated value	kA	100

• at 500 V / rated value	kA	100
• at 690 V / rated value	kA	100
Design of the overcurrent release and short-circuit release		thermomagnetic

Installation/mounting/dimensions:		
built in orientation		any
Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Width	mm	45
Height	mm	97
Depth	mm	96
distance, to be maintained, to the ranks assembly		
• backwards	mm	0
• sidewards	mm	0
Product function / removable terminal for auxiliary and control circuit		No

Connections:		
Design of the electrical connection		
for main current circuit		screw-type terminals
Type of the connectable conductor cross-section		
for main contacts		
• unifilar		2x (1 2.5 mm2), 2x (2.5 6 mm2)
• stranded wire		2x (1 2,5 mm2), 2x (2,5 6 mm2)
• stranded wire		
<ul> <li>with conductor end processing</li> </ul>		2x (1 2.5 mm2), 2x (2.5 6 mm2)
at AWG-conductors / for main contacts		2x (14 10)
Conductor cross section that can be connected / for main contacts		
• unifilar	mm²	1 6
stranded wire	mm²	1 6
stranded wire		
with conductor end processing	mm²	1 6
AWG number / as coded connectable conductor cross-section		
• for main contacts		14 10

Safety:	
Protection against electrical shock	finger-safe

## Further information:

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

http://www.siemens.com/industrial-controls/catalogs

#### Global Industry Mall (Online ordering system)

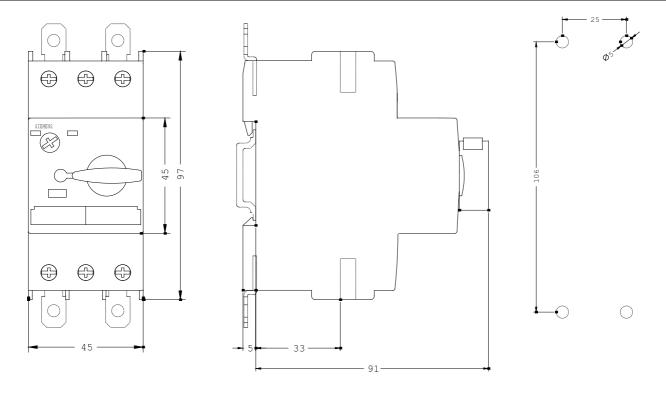
http://www.siemens.com/industrial-controls/mall

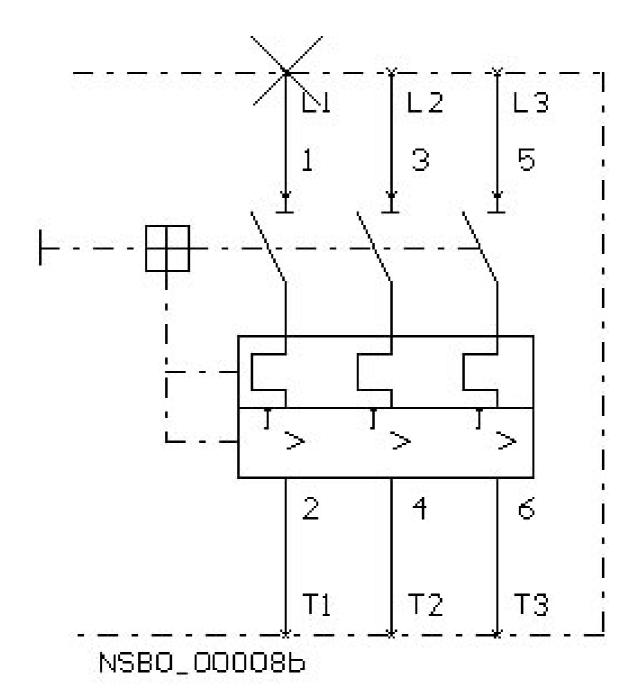
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RV1021-0BA10/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV1021-0BA10





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