## **SIEMENS**

Data sheet 3RB3026-2SB0

OVERLOAD RELAY 3...12 A FOR MOTOR PROTECTION SIZE S0, CLASS 20 CONTACTOR ASS. MAIN CIRCUIT: SCREW CONN. AUX.CIRCUIT: SCREW CONN. MANUAL-AUTOM.-RESET



product brand name	SIRIUS
Product designation	solid-state overload relay

General technical data	
Size of overload relay	S0
Size of contactor can be combined company-specific	S0
Power loss [W] total typical	0.6 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	300 V
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	300 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	600 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	690 V
Protection class IP	
• on the front	IP20

• of the terminal	IP20
Shock resistance	
● acc. to IEC 60068-2-27	15g / 11 ms
Vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles
Thermal current	12 A
Recovery time	
<ul> <li>after overload trip with automatic reset typical</li> </ul>	3 min
<ul> <li>after overload trip with remote-reset</li> </ul>	0 min
<ul> <li>after overload trip with manual reset</li> </ul>	0 min
Type of protection	II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p]
Certificate of suitability relating to ATEX	PTB 09 ATEX 3001
Protection against electrical shock	finger-safe
Equipment marking acc. to DIN EN 81346-2	F
Ambient conditions	

Ambient conditions	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-25 +60 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
Temperature compensation	6025 °C
Relative humidity during operation	10 95 %

Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current- dependent overload release	3 12 A
Operating voltage	
• rated value	690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	12 A

Auxiliary circuit	
Design of the auxiliary switch	integrated
Number of NC contacts	
<ul> <li>for auxiliary contacts</li> </ul>	1
— Note	for contactor disconnection
Number of NO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	1
— Note	for message "tripped"
Number of CO contacts	
for auxiliary contacts	0
Operating current of auxiliary contacts at AC-15	

● at 24 V	4 A
● at 110 V	4 A
● at 120 V	4 A
● at 125 V	4 A
● at 230 V	3 A
Operating current of auxiliary contacts at DC-13	
● at 24 V	2 A
● at 60 V	0.55 A
• at 110 V	0.3 A
● at 125 V	0.3 A
● at 220 V	0.11 A

## Protective and monitoring functions Trip class CLASS 20E Design of the overload release electronic

UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	12 A
• at 600 V rated value	12 A
Contact rating of auxiliary contacts according to UL	B600 / R300

## Short-circuit protection

## Design of the fuse link

for short-circuit protection of the main circuit
 — with type of coordination 1 required
 gG: 63 A, RK5: 45 A

— with type of assignment 2 required gG: 50 A, J: 45 A

• for short-circuit protection of the auxiliary switch fuse gG: 6 A required

•	
Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	direct mounting
Height	87 mm
Width	45 mm
Depth	84 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

• for grounded parts

— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm

Connections/Terminals	
Product function	
<ul> <li>removable terminal for auxiliary and control</li> </ul>	Yes
circuit	
Type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	
• for main contacts	
— single or multi-stranded	1x (1 10 mm²), 2x (1 10 mm²)
— finely stranded with core end processing	1x (1 6 mm²), 2 x (1 6 mm²), 1x 10 mm²
<ul> <li>at AWG conductors for main contacts</li> </ul>	1x (16 8), 2x (16 8)
Type of connectable conductor cross-sections	
• for auxiliary contacts	
<ul> <li>single or multi-stranded</li> </ul>	1x (0,5 4 mm²), 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²), 1x (0.5 2.5 mm²)
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	1x (20 14), 2x (20 14)
Tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M4
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
Communication/ Protocol	

Communication/ Protocol	
Type of voltage supply via input/output link master	No
Electromagnetic compatibility	
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m

Electrostatic discharge acc. to IEC 61000-4-2

6 kV contact discharge / 8 kV air discharge

Display

Display version

• for switching status

Slide switch

Certificates/approvals

**General Product Approval** 

**EMC** 

For use in hazardous locations













**Declaration of** 

**Test Certificates** 

**Shipping Approval** 

Conformity

Typprüfbescheinigu ng/Werkszeugnis

spezielle Prüfbescheinigunge n







GL

**Shipping Approval** 

other

LRS



Umweltbestätigung

Bestätigungen

Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3026-2SB0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RB3026-2SB0}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RB3026-2SB0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB3026-2SB0&lang=en



