# **SIEMENS**

Data sheet 3RB3016-1RB0

Overload relay 0.1...0.4 A Electronic For motor protection Size S00, Class 10E Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset



product brand name	SIRIUS
Product designation	solid-state overload relay
Product type designation	3RB3

Size of overload relay	S00
Size of contactor can be combined company-specific	S00
Power loss [W] for rated value of the current	
• at AC in hot operating state	0.1 W
• at AC in hot operating state per pole	0.03 W
Insulation voltage with degree of pollution 3 at AC 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

Protection class IP on the front Protection class IP of the terminal P20 Shock resistance 15g / 11 ms 15g / 15 ms 15g / 10 ms 15g / 11 ms 15g / 10 ms 16g / 12 ms	<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	690 V
Shock resistance  • acc. to IEC 60068-2-27  15g / 11 ms; Signaling contact 97 / 98 in position "Tripped"; 9g / 11 ms  Vibration resistance  1-6-Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles  1-6-Hz overload trip with automatic reset typical  • after overload trip with automatic reset typical  • after overload trip with manual reset  10 min  Type of protection according to ATEX directive  2014/3/IEU  Certificate of suitability according to ATEX directive  2014/3/IEU  Reference code acc, to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level  • maximum  2 000 m  Ambient temperature  • during operation  • during storage  • during transport  -40 +80 °C  Temperature compensation  -25 +60 °C  40 +80 °C  Temperature compensation  -25 +60 °C  Altino circuit  Number of poles for main current circuit  3 adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value  • at AC-3 rated value maximum  690 V  Operating frequency rated value  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for Ac motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz	• protection class IP on the front	IP20
15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms; Signaling contact 97 / 90 in position	Protection class IP of the terminal	IP20
Vibration resistance 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s², 10 cycles thermal current  Recovery time  • after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset 10 min  Type of protection according to ATEX directive 2014/34/EU  Certificate of suitability according to ATEX directive 2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level • maximum  Ambient temperature • during operation • during storage • during transport  -40 +80 °C • during transport  Temperature compensation Relative humidity during operation  Aight circuit  Number of poles for main current circuit adjustable pick-up value current of the current-dependent overload release  Operating voltage • rated value • at AC-3 rated value maximum  Operating power • for three-phase motors at 400 V at 50 Hz • for AC motors at 500 V at 50 Hz • for AC motors at 500 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz  Auxiliary circuit	Shock resistance	15g / 11 ms
Thermal current  Recovery time  • after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset • D min  Type of protection according to ATEX directive 2014/34/EU  Certificate of suitability according to ATEX directive 2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level • maximum • during operation • during storage • during transport • during storage • during transport  Temperature compensation • 25 +60 °C  Relative humidity during operation  10 95 %  Main circuit  Number of poles for main current circuit adjustable pick-up value current of the current-dependent overload release  Operating voltage • ated value • at AC-3 rated value maximum  690 V  Operating frequency rated value  0 at AC-3 rated value maximum  690 V  Operating gurrent rated value • for three-phase motors at 400 V at 50 Hz • for AC motors at 500 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz	• acc. to IEC 60068-2-27	
Recovery time  • after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset  Type of protection according to ATEX directive 2014/3/4/EU  Certificate of suitability according to ATEX directive 2014/3/4/EU  PTB 09 ATEX 3001  PTB 09 ATEX 3001  PTB 09 ATEX 3001  Ambient conditions  Installation altitude at height above sea level • maximum  2 000 m  Ambient temperature • during operation • during storage • during storage • during transport  40 +80 °C  40 +80 °C  Temperature compensation  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  Operating voltage • rated value • at AC-3 rated value maximum  Operating frequency rated value  Operating frequency rated value  Operating frequency rated value  0 4 A  Operating power  • for three-phase motors at 400 V at 50 Hz • for AC motors at 690 V at 50 Hz  • for AC motors at 690 V at 50 Hz	Vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles
after overload trip with automatic reset typical after overload trip with remote-reset after overload trip with manual reset  o min  Type of protection according to ATEX directive 2014/34/EU  Certificate of suitability according to ATEX directive 2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level  maximum  and a maximum  and a maximum  2000 m  Ambient temperature  during storage  during transport  -40 +80 °C  -40 +80 °C  -40 +80 °C  -25 +60 °C  Relative humidity during operation  -25 +60 °C  Relative humidity during operation  -25 +60 °C  Relative humidity during operation  -25 +60 °C  -30 +95 %  Main circuit  Number of poles for main current circuit adjustable pick-up value current of the current-dependent overload release  Operating voltage  at AC-3 rated value maximum  -490 V  -40 +80 °C  -5060 °C  Relative humidity during operation  -4080 °C  -4080	thermal current	0.4 A
after overload trip with remote-reset after overload trip with manual reset  o min  Type of protection according to ATEX directive 2014/34/EU  Certificate of suitability according to ATEX directive 2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level maximum  ambient temperature during operation during storage during transport  -40 +80 °C  -40 +80 °C  -40 +80 °C  Relative humidity during operation -25 +60 °C  Relative humidity during operation -26 +60 °C  Relative humidity during operation -27 +60 °C  -28 +60 °C  -29 +60 °C  -20 +60 °C  -20 +60 °C  -20 +60 °C  -21 +60 °C  -22 +60 °C  -23 +60 °C  -25 +60 °C  -26 +60 °C  -26 +60 °C  -27 +60 °C  -28 +60 °C  -29 +60 °C  -20 +80 °C  -40	Recovery time	
after overload trip with manual reset  Type of protection according to ATEX directive 2014/34/EU  Certificate of suitability according to ATEX directive 2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level  maximum  2 000 m  Ambient temperature  during operation  during storage  during transport  Temperature compensation  Relative humidity during operation  10 95 %  Main circuit  Number of poles for main current circuit  adjustable pick-up value current of the current-dependent overload release  Operating requency rated value  at AC-3 rated value maximum  Operating frequency rated value  Operating frequency rated value  Operating frequency rated value  Operating power  for three-phase motors at 400 V at 50 Hz  for AC motors at 690 V at 50 Hz  or in AC motors at 690 V at 5	<ul> <li>after overload trip with automatic reset typical</li> </ul>	3 min
Type of protection according to ATEX directive 2014/34/EU  Certificate of suitability according to ATEX directive 2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level  • maximum  Ambient temperature  • during operation  • during storage  • during transport  Temperature compensation  Relative humidity during operation  10 95 %  Main circuit  Number of poles for main current circuit  adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value  • at AC-3 rated value maximum  Operating frequency rated value  Operating grower  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 690 V at 50 Hz	<ul> <li>after overload trip with remote-reset</li> </ul>	0 min
2014/34/EU Certificate of suitability according to ATEX directive 2014/34/EU Reference code acc. to DIN EN 81346-2 F Ambient conditions Installation altitude at height above sea level • maximum Ambient temperature • during operation • during storage • during transport  -40 +80 °C  -40 +80 °C  -40 +80 °C  -40 +80 °C  -4140 °C  -4240 °C  -4340 °C  -4440 °C  -45460 °C  Relative humidity during operation -25460 °C  Operating voltage • rated value current of the current-dependent overload release Operating voltage • rated value - at AC-3 rated value maximum - 690 V Operating frequency rated value - 090 V Operating frequency rated value - 000 V Operating current rated value - 000 V -	<ul> <li>after overload trip with manual reset</li> </ul>	0 min
2014/34/EU  Reference code acc. to DIN EN 81346-2  F  Ambient conditions  Installation altitude at height above sea level  • maximum  2 000 m  Ambient temperature  • during operation  • during storage  • during transport  -25 +60 °C  40 +80 °C  • during transport  -25 +60 °C  Relative humidity during operation  -25 +60 °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  Operating voltage  • rated value  • at AC-3 rated value maximum  690 V  Operating frequency rated value  Operating current rated value  0.4 A  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  O.04 0.18 kW  Auxiliary circuit		Ex II (2) G [Ex e] [Ex d] [Ex px]; Ex II (2) D [Ex t] [Ex p]
Installation altitude at height above sea level  • maximum  Ambient temperature  • during operation • during storage • during transport  Temperature compensation Relative humidity during operation  Main circuit  Number of poles for main current circuit 3 adjustable pick-up value current of the current-dependent overload release  Operating voltage • rated value • at AC-3 rated value maximum  Operating frequency rated value  Operating gower  • for three-phase motors at 400 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz  Out in the summer of contract of the current of th		PTB 09 ATEX 3001
Installation altitude at height above sea level  • maximum  Ambient temperature  • during operation  • during storage  • during transport  -40 +80 °C  • during transport  -40 +80 °C  Temperature compensation  -25 +60 °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  Operating voltage  • rated value  • at AC-3 rated value maximum  Operating frequency rated value  Operating gourrent rated value  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  One 0.18 kW  Auxiliary circuit	Reference code acc. to DIN EN 81346-2	F
Installation altitude at height above sea level  • maximum  Ambient temperature  • during operation  • during storage  • during transport  -40 +80 °C  • during transport  -40 +80 °C  Temperature compensation  -25 +60 °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  Operating voltage  • rated value  • at AC-3 rated value maximum  Operating frequency rated value  Operating gourrent rated value  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  One 0.18 kW  Auxiliary circuit	Ambient conditions	
maximum     Amblent temperature     during operation     during storage     during transport     during trans		
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>40 +80 °C</li> <li>during transport</li> <li>40 +80 °C</li> </ul> Temperature compensation <ul> <li>25 +60 °C</li> </ul> Relative humidity during operation <ul> <li>10 95 %</li> </ul> Main circuit Number of poles for main current circuit <ul> <li>adjustable pick-up value current of the current-dependent overload release</li> </ul> Operating voltage <ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> </ul> Operating frequency rated value <ul> <li>0.4 A</li> </ul> Operating current rated value <ul> <li>0.4 A</li> </ul> Operating power <ul> <li>for three-phase motors at 400 V at 50 Hz</li> <li>0.04 0.09 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.04 0.12 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.06 0.18 kW</li> </ul> Auxiliary circuit Auxiliary circuit	-	2 000 m
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>40 +80 °C</li> <li>during transport</li> <li>40 +80 °C</li> </ul> Temperature compensation <ul> <li>25 +60 °C</li> </ul> Relative humidity during operation <ul> <li>10 95 %</li> </ul> Main circuit Number of poles for main current circuit <ul> <li>adjustable pick-up value current of the current-dependent overload release</li> </ul> Operating voltage <ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> </ul> Operating frequency rated value <ul> <li>0.4 A</li> </ul> Operating current rated value <ul> <li>0.4 A</li> </ul> Operating power <ul> <li>for three-phase motors at 400 V at 50 Hz</li> <li>0.04 0.09 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.04 0.12 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.06 0.18 kW</li> </ul> Auxiliary circuit Auxiliary circuit	Ambient temperature	
during transport     -40 +80 °C Temperature compensation     -25 +60 °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  Operating voltage     • rated value     • at AC-3 rated value maximum     690 V Operating frequency rated value     50 60 Hz Operating current rated value     0.4 A  Operating power     • for three-phase motors at 400 V at 50 Hz     • for AC motors at 500 V at 50 Hz     • for AC motors at 690 V at 50 Hz One continue to the current of the	during operation	-25 +60 °C
<ul> <li>during transport</li> <li>-40 +80 °C</li> <li>Temperature compensation</li> <li>-25 +60 °C</li> <li>Relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit Number of poles for main current circuit <ul> <li>adjustable pick-up value current of the current-dependent overload release</li> <li>Operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>50 60 Hz</li> </ul> Operating current rated value <ul> <li>0.4 A</li> </ul> Operating power <ul> <li>for three-phase motors at 400 V at 50 Hz</li> <li>for AC motors at 500 V at 50 Hz</li> <li>0.04 0.09 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.06 0.18 kW</li> </ul> Auxiliary circuit Auxiliary circuit	during storage	-40 +80 °C
Relative humidity during operation  10 95 %  Main circuit  Number of poles for main current circuit  adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value  • at AC-3 rated value maximum  690 V  Operating frequency rated value  Operating current rated value  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  One considerable with the current of t	during transport	-40 +80 °C
Number of poles for main current circuit  adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value • at AC-3 rated value maximum  Operating frequency rated value  Operating current rated value  • for three-phase motors at 400 V at 50 Hz • for AC motors at 690 V at 50 Hz • for AC motors at 690 V at 50 Hz  Outliary circuit  Auxiliary circuit	Temperature compensation	-25 +60 °C
Number of poles for main current circuit  adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value  • at AC-3 rated value maximum  690 V  Operating frequency rated value  50 60 Hz  Operating current rated value  0.4 A  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  Auxiliary circuit	Relative humidity during operation	10 95 %
Number of poles for main current circuit  adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value  • at AC-3 rated value maximum  690 V  Operating frequency rated value  50 60 Hz  Operating current rated value  0.4 A  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  Auxiliary circuit	Main circuit	
adjustable pick-up value current of the current-dependent overload release  Operating voltage  • rated value  • at AC-3 rated value maximum  690 V  Operating frequency rated value  50 60 Hz  Operating current rated value  0.4 A  Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  Auxiliary circuit		3
dependent overload release  Operating voltage  • rated value • at AC-3 rated value maximum  Operating frequency rated value  Operating current rated value  Operating power  • for three-phase motors at 400 V at 50 Hz • for AC motors at 500 V at 50 Hz  Auxiliary circuit  Operating voltage  690 V  690 V  0.04 60 Hz  0.4 A  0.04 0.09 kW  0.04 0.09 kW  0.04 0.12 kW		
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>Operating frequency rated value</li> <li>50 60 Hz</li> <li>Operating current rated value</li> <li>0.4 A</li> <li>Operating power</li> <li>for three-phase motors at 400 V at 50 Hz</li> <li>for AC motors at 500 V at 50 Hz</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.04 0.12 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>Auxiliary circuit</li> </ul>		
<ul> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>Operating frequency rated value</li> <li>50 60 Hz</li> <li>Operating current rated value</li> <li>0.4 A</li> <li>Operating power</li> <li>for three-phase motors at 400 V at 50 Hz</li> <li>for AC motors at 500 V at 50 Hz</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.04 0.12 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.06 0.18 kW</li> </ul> Auxiliary circuit	Operating voltage	
Operating frequency rated value  Operating current rated value  Operating power  of for three-phase motors at 400 V at 50 Hz  of for AC motors at 500 V at 50 Hz  of for AC motors at 690 V at 50 Hz  Output	• rated value	690 V
Operating current rated value  Operating power  of for three-phase motors at 400 V at 50 Hz  of for AC motors at 500 V at 50 Hz  of for AC motors at 690 V at 50 Hz  Auxiliary circuit  O.4 A  O.04 0.09 kW  O.04 0.12 kW  O.06 0.18 kW	• at AC-3 rated value maximum	690 V
Operating power  • for three-phase motors at 400 V at 50 Hz  • for AC motors at 500 V at 50 Hz  • for AC motors at 690 V at 50 Hz  Auxiliary circuit	Operating frequency rated value	50 60 Hz
<ul> <li>for three-phase motors at 400 V at 50 Hz</li> <li>for AC motors at 500 V at 50 Hz</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.04 0.12 kW</li> <li>for AC motors at 690 V at 50 Hz</li> <li>0.06 0.18 kW</li> </ul> Auxiliary circuit	Operating current rated value	0.4 A
for AC motors at 500 V at 50 Hz     for AC motors at 690 V at 50 Hz  Auxiliary circuit  0.04 0.12 kW  0.06 0.18 kW	Operating power	
• for AC motors at 690 V at 50 Hz  0.06 0.18 kW  Auxiliary circuit	• for three-phase motors at 400 V at 50 Hz	0.04 0.09 kW
Auxiliary circuit	• for AC motors at 500 V at 50 Hz	0.04 0.12 kW
<u> </u>	• for AC motors at 690 V at 50 Hz	0.06 0.18 kW
Design of the auxiliary switch integrated	Auxiliary circuit	
	Design of the auxiliary switch	integrated

Number of NC contacts for auxiliary contacts	1
• Note	for contactor disconnection
Number of NO contacts for auxiliary contacts	1
• Note	for message "tripped"
Number of CO contacts	
• for auxiliary contacts	0
<ul> <li>operating current of auxiliary contacts at AC-15 at 24 V</li> </ul>	4 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 110 V</li> </ul>	4 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 120 V</li> </ul>	4 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 125 V</li> </ul>	4 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 230 V</li> </ul>	3 A
<ul> <li>operating current of auxiliary contacts at DC-13 at 24 V</li> </ul>	2 A
<ul> <li>Operating current of auxiliary contacts at DC-13 at 60 V</li> </ul>	0.55 A
<ul> <li>Operating current of auxiliary contacts at DC-13 at 110 V</li> </ul>	0.3 A
<ul> <li>operating current of auxiliary contacts at DC-13 at 125 V</li> </ul>	0.3 A
<ul> <li>Operating current of auxiliary contacts at DC-13 at 220 V</li> </ul>	0.11 A
Protective and monitoring functions	
Trip class	CLASS 10E
Design of the overload release	electronic
JL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	0.4 A
• at 600 V rated value	0.4 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	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 35 A, RK5: 3 A
— with type of assignment 2 required	gG: 4 A
— with type of assignment 2 required	

<ul><li>mounting position</li></ul>	any	
Mounting type	Contactor mounting	
Height	79 mm	
Width	45 mm	
Depth	73 mm	
Connections/Terminals		
Connections/ Terminals		
Draduct function		

Connections/ Terminals	
Product function	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	Yes
<ul> <li>Type of electrical connection for main current circuit</li> </ul>	screw-type terminals
<ul> <li>Type of electrical connection 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	
— solid	1x (0.5 4 mm²), 2x (0.5 1.5 mm²), 2x (0.75 4 mm²)
<ul><li>— single or multi-stranded</li></ul>	1x (0,5 4 mm²), 2x (0,5 1,5 mm²), 2x (0,75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 2.5 mm²)
<ul> <li>at AWG conductors for main contacts</li> </ul>	1x (20 12), 2x (20 12)
Type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
<ul><li>— single or multi-stranded</li></ul>	1x (0,5 4 mm²), 2x (0,5 2,5 mm²)
— finely stranded with core end processing	1x (0.5 2.5 mm²), 2x (0.5 1.5 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>	0.8 1.2 N·m
• for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Size of the screwdriver tip	Pozidriv PZ 2
Design of the thread of the connection screw	
• for main contacts	M3
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
Communication/ Dust and	

of the duxinary and control contacts	
Communication/ Protocol	
Type of voltage supply via input/output link master	No

Electromagnetic compatibility	
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3

• due to conductor-earth surge acc. to IEC 61000-4-5

• due to conductor-conductor surge acc. to IEC 61000-4-5

• due to high-frequency radiation acc. to IEC 61000-4-6

Field-bound parasitic coupling acc. to IEC 61000-4-3

Electrostatic discharge acc. to IEC 61000-4-2

2 kV (line to earth) corresponds to degree of severity 3

1 kV (line to line) corresponds to degree of severity 3

10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz

10 V/m

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





Miscellaneous









#### **Declaration of Conformity**

#### **Test Certificates**

Type Test Certificates/Test Report Special Test Certificate ficate



Marine / Shipping



other

# Marine / Shipping

Lloyd's Register

LRS









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=3RB3016-1RB0

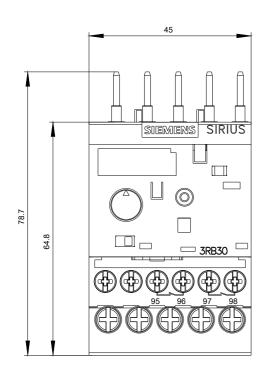
#### Cax online generator

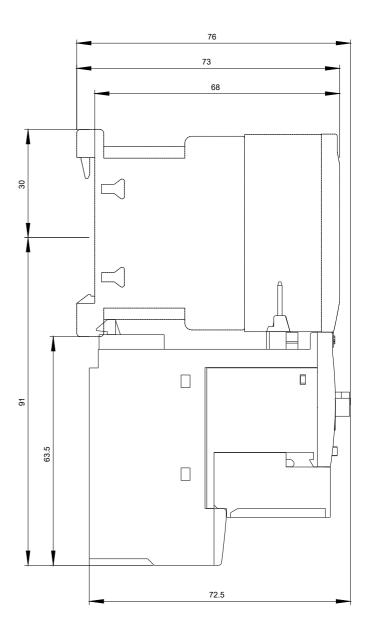
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RB3016-1RB0}\\$ 

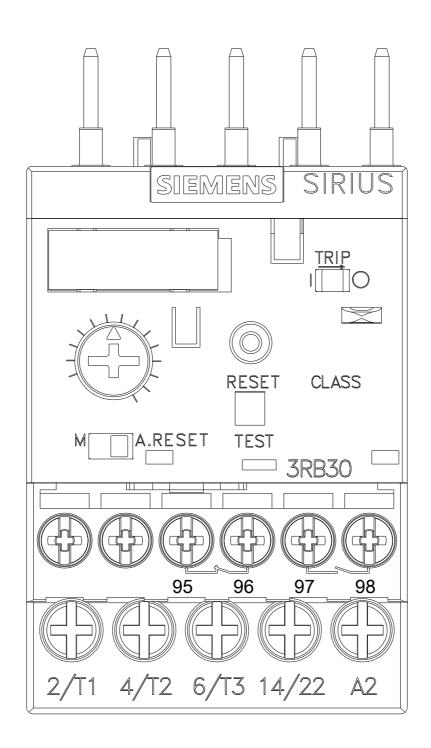
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RB3016-1RB0

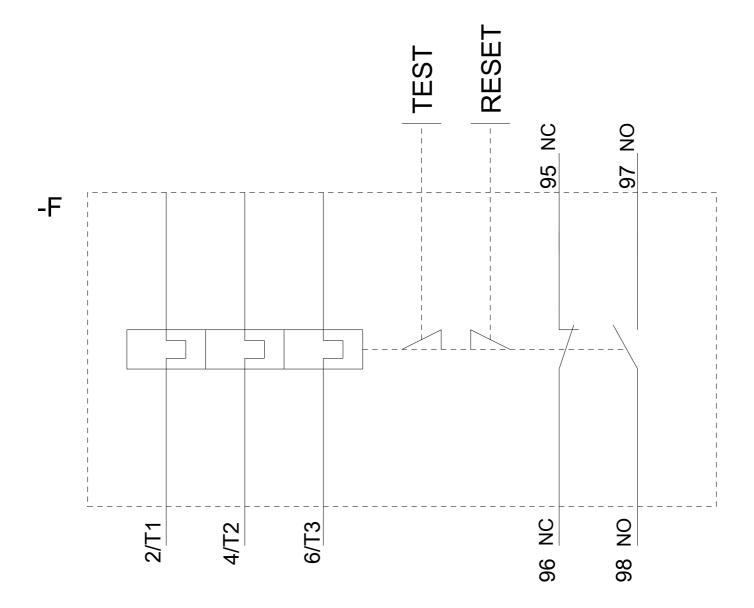
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB3016-1RB0&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RB3016-1RB0/char









last modified: 08/13/2020