SIEMENS

Data sheet 3RB2066-1GC2



Overload relay 55...250 A for motor protection Size S10/S12, Class 10E Contactor mounting/stand-alone installation Main circuit: busbar connection Auxiliary circuit: Screw terminal Manual-Automatic-Reset

product brand name	SIRIUS	
product designation	solid-state overload relay	
product type designation	3RB2	
General technical data		
size of overload relay	S10, S12	
size of contactor can be combined company-specific	S10, S12	
insulation voltage with degree of pollution 3 at AC rated value	1 000 V	
surge voltage resistance rated value	8 kV	
maximum permissible voltage for protective separation		
 in networks with ungrounded star point between auxiliary and auxiliary circuit 	300 V	
 in networks with grounded star point between auxiliary and auxiliary circuit 	300 V	
 in networks with ungrounded star point between main and auxiliary circuit 	600 V	
 in networks with grounded star point between main and auxiliary circuit 	690 V	
shock resistance	15g / 11 ms	
• according to IEC 60068-2-27	15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 8g / 11 ms	
vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles	
thermal current	250 A	
recovery time after overload trip		
with automatic reset typical	3 min	
with remote-reset	0 min	
with manual reset	0 min	
reference code according to IEC 81346-2	F	
Substance Prohibitance (Date)	07/01/2006	
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1	
Weight	1.603 kg	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
 during operation 	-25 +60 °C	
 during storage 	-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 current response value current of the current-	55 250 A	

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dependent overload release	
operating voltage	4.000 V
• rated value	1 000 V
at AC-3e rated value maximum	1 000 V
operating frequency rated value	50 60 Hz
operational current rated value	250 A
operational current at AC-3e at 400 V rated value	250 A
operating power	
 for 3-phase motors at 400 V at 50 Hz 	30 132 kW
 for AC motors at 500 V at 50 Hz 	45 160 kW
• for AC motors at 690 V at 50 Hz	55 250 kW
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
operational 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
operational 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 10E
trip class	CLASS 10E electronic
trip class design of the overload release	
trip class design of the overload release UL/CSA ratings	
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	electronic
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	electronic 250 A
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required	electronic 250 A 250 A 250 A B600 / R300 gG: 500 A, Class L: 700 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 2 required	electronic 250 A 250 A 250 A B600 / R300 gG: 500 A, Class L: 700 A gG: 500 A
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	electronic 250 A 250 A B600 / R300 gG: 500 A, Class L: 700 A gG: 500 A fuse gG: 6 A
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method	electronic 250 A 250 A 250 A B600 / R300 gG: 500 A, Class L: 700 A gG: 500 A fuse gG: 6 A any Contactor mounting/stand-alone installation
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— solid or stranded	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)	
 for AWG cables for auxiliary contacts 	2x (20 14)	
tightening torque		
 for main contacts with screw-type terminals 	20 22 N·m	
 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m	
design of the thread of the connection screw		
• for main contacts	M10	
of the auxiliary and control contacts	he auxiliary and control contacts M3	
Electrical Safety		
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover	
touch protection on the front according to IEC 60529	the front according to IEC 60529 finger-safe, for vertical contact from the front with box terminal/cover	
Communication/ Protocol		
type of voltage supply via input/output link master	No	
Electromagnetic compatibility		
conducted interference		
 due to burst according to IEC 61000-4-4 	burst according to IEC 61000-4-4 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3	
 due to conductor-earth surge according to IEC 61000-4-5 	2 kV (line to earth) corresponds to degree of severity 3	
 due to conductor-conductor surge according to IEC 61000-4-5 	1 kV (line to line) corresponds to degree of severity 3	
 due to high-frequency radiation according to IEC 61000- 4-6 	10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz	
field-based interference according to IEC 61000-4-3	10 V/m	
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge	
Display		
display version for switching status	r switching status Slide switch	
Approvals Certificates		
General Product Approval		EMV













EMV	For use in hazard- ous locations	Test Certificates	Maritime application

<u>KC</u>



Special Test Certificate

Type Test Certificates/Test Report





Maritime application other Environment







Confirmation

Miscellaneous

Environmental Confirmations

Further information

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=3RB2066-1GC2

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB2066-1GC2

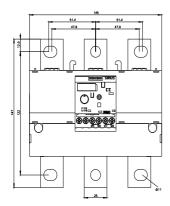
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

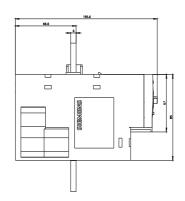
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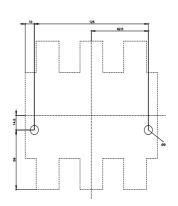
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

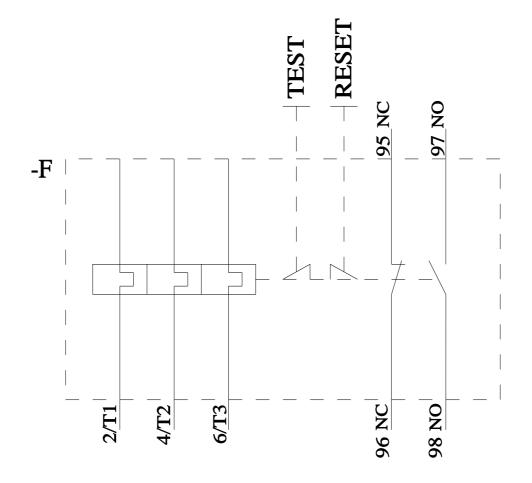
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2066-1GC2&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RB2066-1GC2/char









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