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	
thermal current	250 A	
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	
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- dependent overload release	55 250 A	
operating voltage		
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
design of the overload release	electronic
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	250 A
at 600 V rated value	250 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.	aC: E00 A Close I : 700 A
— with type of coordination 1 required	gG: 500 A, Class L: 700 A
 — with type of assignment 2 required 	gG: 500 A
a for abort aircuit protection of the qualificate qualitate required	
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	fuse gG: 6 A
Installation/ mounting/ dimensions	fuse gG: 6 A
Installation/ mounting/ dimensions mounting position	fuse gG: 6 A any
Installation/ mounting/ dimensions mounting position fastening method	fuse gG: 6 A any Contactor mounting/stand-alone installation
Installation/ mounting/ dimensions mounting position fastening method height	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm
Installation/ mounting/ dimensions mounting position fastening method height width	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm
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Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm
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Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection screw-type terminals
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• for main contacts	M10
 of the 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	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 	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	Slide switch
Approvals Certificates	
General Product Approval	

Confirmation











For use in hazard-EMV **Test Certificates** Marine / Shipping ous locations



<u>KC</u>



Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping other **Environment**







Confirmation

Miscellaneous

Environmental Confirmations

Further information

Information on the packaging

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

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

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

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

https://support.industry.siemens.com/cs/ww/en/ps/3RB2066-1GC

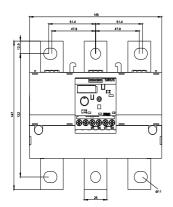
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

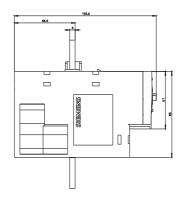
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2066-1GC2&lang=en

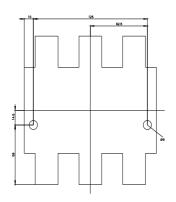
Characteristic: Tripping characteristics, I2t, Let-through current

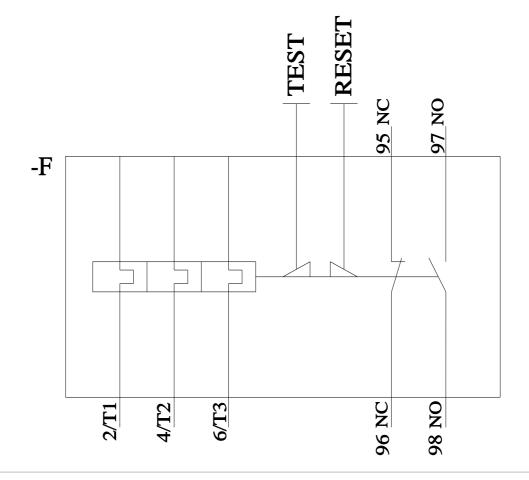
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB2066-1GC2&objecttype=14&gridview=view1









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