## SIEMENS

## Data sheet

## 3RM1307-3AA04



Failsafe reversing starter, 3RM1, 500 V, 0.55 - 3 kW, 1.6 - 7 A, 24 V DC, screw/spring-loaded terminals (push-in)

product brand name	SIRIUS
product category	Motor starter
product designation	Failsafe reversing starters
design of the product	With electronic overload protection and safety-related disconnection
product type designation	3RM1
General technical data	
equipment variant according to IEC 60947-4-2	3
product function	fail-safe reversing starter
<ul> <li>intrinsic device protection</li> </ul>	Yes
<ul> <li>for power supply reverse polarity protection</li> </ul>	Yes
suitability for operation device connector 3ZY12	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.13 W
<ul> <li>without load current share typical</li> </ul>	1.37 W
insulation voltage rated value	500 V
overvoltage category	III
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
<ul> <li>between main and auxiliary circuit</li> </ul>	500 V
<ul> <li>between control and auxiliary circuit</li> </ul>	250 V
shock resistance	6g / 11 ms
operating frequency maximum	1 1/s
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7
product function	
direct start	No
reverse starting	Yes
product function short circuit protection	No
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	class A
EMC immunity according to IEC 60947-1	Class A
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	3 kV / 5 kHz
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	4 kV signal lines 2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	2 kV
<ul> <li>due to high-frequency radiation according to IEC 61000- 4-6</li> </ul>	10 V

field based interference according to IEC (1000-1-2	
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
conducted HF interference emissions according to CISPR11	Class B for the domestic, business and commercial environments
field-bound HF interference emission according to CISPR11	Class B for the domestic, business and commercial environments
Safety related data	
diagnostics test interval by internal test function maximum	600 s
safe state	
	Load circuit open
function test interval maximum	1a
stop category according to EN 60204-1	
failure rate [FIT] at rate of recognizable hazardous failures (λdd)	1 400 FIT
failure rate [FIT] at rate of non-recognizable hazardous	16 FIT
failures (λdu)	
B10d value	2 500 000
average diagnostic coverage level (DCavg)	99 %
MTTFd	75 a
SIL Claim Limit (subsystem) according to EN 62061	SILCL 3
performance level (PL) according to EN ISO 13849-1	е
category according to EN ISO 13849-1	4
safety device type according to IEC 61508-2	Туре В
Safe failure fraction (SFF)	99.4 %
hardware fault tolerance according to IEC 61508	1
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
hardware fault tolerance according to IEC 61508 relating to ATEX	0
PFDavg with low demand rate according to IEC 61508 relating to ATEX	0.0005
PFHD with high demand rate according to EN 62061 relating to ATEX	5E-8 1/h
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL2
T1 value for proof test interval or service life according to IEC 61508 relating to ATEX	3 a
Main circuit	
number of poles for main current circuit	3
design of the switching contact	Hybrid
adjustable current response value current of the current- dependent overload release	1.6 7 A
minimum load [%]	20 %; from set rated current
type of the motor protection	solid-state
operating voltage rated value	48 500 V
relative symmetrical tolerance of the operating voltage	10 %
operating frequency 1 rated value	50 Hz
operating frequency 2 rated value	60 Hz
relative symmetrical tolerance of the operating frequency	10 %
operational current	
• at AC at 400 V rated value	7 A
• at AC-3 at 400 V rated value	7 A
<ul> <li>at AC-53a at 400 V at ambient temperature 40 °C rated value</li> </ul>	7 A
ampacity when starting maximum	56 A
operating power for 3-phase motors at 400 V at 50 Hz	0.55 3 kW
derating temperature	40 °C
Inputs/ Outputs	
input voltage at digital input	
• at DC rated value	24 V
• with signal <0> at DC	0 5 V
• for signal <1> at DC	15 30
input current at digital input	
<ul> <li>for signal &lt;1&gt; at DC</li> </ul>	8 mA

• Wint again do allow         10k           marther of Costinate transitionary contracts at AC-15 at 240         3.A           arrantime         arrantime           arrant	● with signal <0> at DC	1 mA
operational current of auxiliary contacts at AC-15 at 220 V         3 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           Operational current of auxiliary contacts at DC-13 at 24 V         1 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           operational current of auxiliary contacts at DC-13 at 24 V         1 A           operating ange tactor control supply voltage at DC at 10 voltage at DC at 10 voltage at DC at 10 voltage at 20 %         25 %           operating ange tactor control supply voltage at 20 %         24 V           operation durrent at DC         1 an A           in landing most of operation         1 an A           in landing path OP         30 mA           in DC at 24 V         24 victor 40 mA           in DC at 24 V at switching on of motor         10 mA           in Bottor path auxiliary on the current         30 mA           in Bottor path auxiliary contact current         1 an mA           in Bottor PC         30 mA		
maximumoveraitedoperational crout of auxiliary contact at DC-13 at ZV VAOutradie at Contatio supply voltageDCcontrol supply voltage at DC rated value19230 Vpelative regative tolerance of the control supply voltage at DC20%relative regative tolerance of the control supply voltage at DC20%control supply voltage at DC rated value20%control supply voltage at DC rated value20%control supply voltage at DC rated value0.8control supply voltage rated value0.8supply supply voltage rated value0.9supply supply voltage rated value0.9supply voltage rated value <t< th=""><th></th><th></th></t<>		
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Control supply oftage at DC rated value         19.2,		
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DC         Vertical providing of at DC relativation           operating range factor control supply voltage rated value at CC         24 V           operating range factor control supply voltage rated value at CC         0.8           • initial value         0.28 A: values at 25 °C           • at CC at 24 V         300 mA           • at CC at 24 V         300 mA           • at CC at 24 V at switching on of motor         80 ms           • at CC at 24 V at switching on of motor         80 ms           • at Co 21 24 V at switching on of motor         80 ms           • at Co C at 24 V at switching on of motor         80 ms           • at Co C rated value         0.35 W           • at		20 %
operating factor control supply voltage rated value at CC         0.8           • initial value         0.8           • initial value         1.25           • initial value         0.28 A; values at 25 °C           • at 24 V         3.00 mA           • at DC at 24 V         3.00 mA           • at DC at 24 V         3.00 mA           • at DC at 24 V         85 ms           • at DC at 24 V         85 ms           • at DC at 24 V         80 ms           power loss [W] in auxillary and control circuit         80 ms           • at DC at 24 V at switching on of motor         80 ms           power loss [W] in auxillary and control circuit         0.35 W           • in switching state ON         1.37 W           Response times         OM-dalay time           OPdelay time         50 76 ms           OF-delay time         50 76 ms           OF-delay time         51 A           • at 0° C rated value         61 A           • at 0° C rated value         52 A		25 %
bC         0.8           • full-scale value         0.8           • full-scale value         1.25           control current at DC         -           • in stanthy mode of operation         57 mA           • during operation         57 mA           • all CA V         0.28 A, values at 25 °C           • all CA V         0.30 mA           • all CA V         85 ms           • all CA V         80 ms           • all CA V         90 ms           • all CA V V         80 ms           • all CA V V         80 ms           • all CA V V         80 ms           • all CA TAV         80 ms	control supply voltage 1 at DC rated value	24 V
• full-scale value1.25control current at DCI a mA• during operation57 mA• during operation pack0.28 A; values at 25 °C• at 24 V300 mA• at DC at 24 V at switching on of motor300 mA• at DC at 24 V at switching on of motor85 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching on of motor80 ms• at DC at 24 V at switching state OFF.35 W- with bypas circuit.35 W- with bypas circuit.37 WPower Electronics.76 msOFF-delay time65 76 msOFF-delay time.52 A• at 60 °C rated value61 A• at 60 °C rated value52 A• at 60 °C rated value.40 AInstation mounting position		
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• in standby mode of operation13 mA• during operationFm A• in 24 V028 A, values at 25 °C• at DC at 24 V300 nA• at DC at 24 V300 nA• at DC at 24 V85 ms• at DC at 24 V85 ms• at DC at 24 V80 ms• at DC at 24 V st switching on of motor90 ms• power loss (M) in axuillary and control circuit90 ms• in switching stato OFF0.35 W• with bypass circuit0.35 W• in switching stato OFF0.35 W• with bypass circuit65 76 msOFf-delay time65 76 msOFf-delay time65 76 msOFf-delay time5.2 A• at 40 °C rated value6.1 A• at 60 °C rated value5.2 A• at 60 °C rated value5.2 A• at 60 °C rated value5.2 A• at 60 °C rated value30 mm• at 60 °C rated value5.2 A• at 60 °C rated value5.2 A• at 60 °C rated value6.6 A• tablahold on wounding of montonic• with side-by-side mounting•• with side-by-side mounting•• with side-by-side mounting•• with side-by-side mounting•• at 60 °C rated value0 mm• at 60 °C rated value0 mm• at 60 °C rated value0 mm• with side-by-side mounting•• or words0 mm<	• full-scale value	1.25
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Inrush current peak     0.28 A: values at 25 °C       • at DC at 24 V     0.28 A: values at 25 °C       • at DC at 24 V     300 mA       • at DC at 24 V     300 mA       • at DC at 24 V     85 ms       • at DC at 24 V     80 ms       • at St Crister Value     0.35 W       • at 80 °C rated value     65 76 ms       OFF-delay time     95 76 ms       • at 80 °C rated value     5.1 A       • at 80 °C rated value     5.1 A       • at 80 °C rated value     5.2 A       • at 80 °C rated value     5.2 A       • at 80 °C rated value     5.2 mn       depth     100 mm       with side-by-side mounting     wit		57 mA
• at 24 V0.28 A; values at 25 °C• at DC at 24 V300 mA• at DC at 24 V at witching on of motor100 mA• at 24 V80 ms• at 24 V80 ms• at DC at 24 V80 ms• at DC at 24 V at witching on of motor80 ms• at DC at 24 V at witching on of motor80 ms• at DC at 24 V at witching on of motor80 ms• at DC at 24 V at witching on of motor80 ms• at DC at 24 V at witching on of motor80 ms• in witching state OFF with bypass circuit0.35 W• in switching state ON with bypass circuit0.35 W• in switching state ON with bypass circuit0.35 W• at 40 °C rated value65 76 ms• OFF-delay time90 43 msPower Electronics-• at 40 °C rated value6.1 A• at 50 °C rated value5.2 A• at 50 °C rated value4.6 A• at 50 °C rated value4.6 A• at 50 °C rated value4.6 A• tat 50 °C rated value5.2 mm• owith doe-by-side mounting-• with side-by-side mounting-• with side-by-side mounting-• owith side-by-side mounting- <t< th=""><th></th><th></th></t<>		
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duration of inrush current peak     85 ms       • at 24 V     85 ms       • at DC at 24 V     80 ms       • at DC at 24 V at switching on of motor     80 ms       power loss [W] in auxiliary and control circuit     0.35 W       • in switching state OFF     0.35 W       - with bypass circuit     0.35 W       • in switching state ON     0.35 W       - with bypass circuit     0.37 W       Power Electronics     00	• at DC at 24 V	
duration of inrush current peak     85 ms       • at 24 V     85 ms       • at DC at 24 V     80 ms       • at DC at 24 V at switching on of motor     80 ms       power loss [W] in auxiliary and control circuit     0.35 W       • in switching state OFF     0.35 W       - with bypass circuit     0.35 W       • in switching state ON     0.35 W       - with bypass circuit     0.37 W       Power Electronics     00	<ul> <li>at DC at 24 V at switching on of motor</li> </ul>	140 mA
• at 24 V85 ms• at DC at 24 V80 ms• at DC at 24 V at switching on of motor80 mspower loss [W] in auxiliary and control circuit80 ms• in switching state OFF0.35 W- with bypass circuit0.35 W- with bypass circuit0.35 W- with bypass circuit0.37 WResponse times50 msOM-delay time65 76 msOFF-delay time30 43 msPower Electronics61 Aoperational current61 A• at 40 °C rated value6.1 A• at 50 °C rated value5.2 A• at 60 °C rated value4.6 AInstallation/ mounting/ dimensionsscrew and snap-on mounting onto 35 mm DIN railmounting positionvertical, horizontal, standing (observe derating)festening method22.5 mmdepth141.6 mmrequired spacing0 mm• with side50 mm• ut in side0 mm• ut in side50 mm- backwards0 mm- forwards0 mm- times50 mm- forwards0 mm- in the side0 mm- in the side0 mm- at the side0 mm- at the side0 mm- backwards0 mm- at the side0 mm- at the side50 mm- at the side50 mm- a		
• at DC at 24 V at switching on of motor     80 ms       power loss [W] in auxiliary and control circuit	-	85 ms
power loss [M] In auxiliary and control circuit	• at DC at 24 V	80 ms
	<ul> <li>at DC at 24 V at switching on of motor</li> </ul>	80 ms
with bypass circuit0.35 Wwith bypass circuit1.37 WResponse circuitON-delay timeOS-delay time </th <th>power loss [W] in auxiliary and control circuit</th> <th></th>	power loss [W] in auxiliary and control circuit	
• in switching state ON	<ul> <li>in switching state OFF</li> </ul>	
with bypass circuit1.37 WResponse timesON-delay time65 76 msOFF-delay time30 43 msPower Electronicsoperational current7 A• at 40 °C rated value6.1 A• at 55 °C rated value5.2 A• at 60 °C rated value4.6 AInstallation/ mounting/ dimensionsvertical, horizontal, standing (observe derating)fastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth22.5 mmdepth141.6 mmrequired spacing0 mm- forwards0 mm- downwards50 mm- downwards50 mm- at the side0 mm- at the side0 mm- forwards50 mm- upwards50 mm- hackwards50 mm- upwards50 mm- hackwards0 mm- hackwards0 mm- hackwards50 mm- hackwards0 mm	— with bypass circuit	0.35 W
Response times       65 76 ms         OFF-delay time       30 43 ms         Power Electronics       9         operational current       6.1 A         • at 50 °C rated value       6.1 A         • at 55 °C rated value       5.2 A         • at 60 °C rated value       4.6 A         Installation/mounting/ dimensions       wertical, horizontal, standing (observe derating)         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       22.5 mm         depth       141.6 mm         required spacing       •         • with side-by-side mounting       0 mm         - forwards       0 mm         - downwards       50 mm         - downwards       50 mm         - odwnwards       50 mm         - of rowards       0 mm         - forwards       0 mm         - forwards       0 mm         - of rowards       0 mm         - upwards       50 mm         - upwards       0 mm         - forwards       0 mm         - forwards       0 mm         - forwards       0 mm         - forwards       0 mm </th <th><ul> <li>in switching state ON</li> </ul></th> <th></th>	<ul> <li>in switching state ON</li> </ul>	
ON-delay time       65 76 ms         OFF-delay time       30 43 ms         Power Electronics       •         operational current       •         • at 40 °C rated value       7 A         • at 50 °C rated value       6.1 A         • at 50 °C rated value       4.6 A         Installation/ mounting/ dimensions       •         mounting position       vertical, horizontal, standing (observe derating)         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       22.5 mm         depth       141.6 mm         required spacing       0 mm         - forwards       0 mm         - downwards       50 mm         - at the side       0 mm         - at the side       0 mm         - inforwards       0 mm         - at the side       0 mm         - inforwards       0 mm         - at the side       0 mm         - inforwards       0 mm         - inforwards       0 mm         - at the side       0 mm         - at the side       35 mm	— with bypass circuit	1.37 W
OFF-delay time       30 43 ms         Power Electronics           operational current <ul> <li>at 40 °C rated value</li> <li>7 A</li> <li>at 55 °C rated value</li> <li>6.1 A</li> <li>at 55 °C rated value</li> <li>4.6 A</li> </ul> installation/ mounting/ dimensions <ul> <li>vertical, horizontal, standing (observe derating)</li> <li>fastening method</li> <li>screw and snap-on mounting onto 35 mm DIN rail</li> <li>height</li> <li>100 mm</li> <li>with side-by-side mounting</li> <li>forwards</li> <li>0 mm</li> <li>depth</li> <li>141.6 mm</li> </ul> required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>0 mm</li> <li>backwards</li> <li>0 mm</li> <li>adcommands</li> <li>50 mm</li> <li>adcommands</li> <li>50 mm</li> <li>adcommands</li> <li>0 mm</li> <li>for grounded parts</li> <li>forwards</li> <li>0 mm</li> <li>backwards</li> <li>0 mm</li> <li>backwards</li> <li>0 mm</li> <li>backwards</li> <li>0 mm</li> <li>adcommands</li> <li>adcommands</li></ul>	Response times	
Power Electronics           operational current           • at 40 °C rated value           • at 50 °C rated value           • at 50 °C rated value           • at 50 °C rated value           • at 60 °C rated value           # stallation/ mounting/ dimensions           mounting position           vertical, horizontal, standing (observe derating)           fastening method           height           100 mm           width           22.5 mm           depth           required spacing           • with side-by-side mounting           - forwards         0 mm           - wind side         0 mm           - upwards         50 mm           - at the side         0 mm           - at the side         0 mm           - forwards         0 mm           - backwards         0 mm           - backwards         0 mm           - at the side         0 mm           - backwards         0 mm           - backwards	ON-delay time	65 76 ms
operational current         7 A           • at 40 °C rated value         7 A           • at 50 °C rated value         6.1 A           • at 55 °C rated value         5.2 A           • at 60 °C rated value         4.6 A           Installation/ mounting/ dimensions         mounting position           mounting position         vertical, horizontal, standing (observe derating)           fastening method         screw and snap-on mounting onto 35 mm DIN rail           height         100 mm           width         22.5 mm           depth         141.6 mm           required spacing         •           • with side-by-side mounting         0 mm           - forwards         0 mm           - backwards         0 mm           - upwards         50 mm           - at the side         0 mm           - forwards         0 mm           - forwards         0 mm           - forwards         0 mm           - at the side         0 mm           - backwards         0 mm           - forwards         0 mm           - backwards         0 mm           - at the side         35 mm	OFF-delay time	30 43 ms
• at 40 °C rated value7 A• at 50 °C rated value6.1 A• at 55 °C rated value5.2 A• at 60 °C rated value4.6 AInstallation/ mounting/ dimensionsmounting positionvertical, horizontal, standing (observe derating)fastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth22.5 mmdepth141.6 mmrequired spacing- forwards0 mm- backwards50 mm- at the side0 mm- at the side0 mm- forwards0 mm- at the side0 mm- at the side0 mm- torwards0 mm- at the side0 mm- at the side3.5 mm	Power Electronics	
• at 50 °C rated value6.1 A• at 55 °C rated value5.2 A• at 60 °C rated value4.6 AInstallation/ mounting/ dimensionsvertical, horizontal, standing (observe derating)fastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth22.5 mmdepth141.6 mmrequired spacing0 mm- forwards0 mm- backwards0 mm- upwards50 mm- at the side0 mm- forwards0 mm- at the side0 mm- at the side0 mm- forwards0 mm- at the side0 mm- torwards0 mm- at the side0 mm- torwards0 mm- torwards0 mm- at the side0 mm- torwards0 mm- torward	operational current	
• at 55 °C rated value5.2 A• at 60 °C rated value4.6 AInstallation/ mounting/ dimensionsvertical, horizontal, standing (observe derating)fastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth22.5 mmdepth141.6 mmrequired spacing0 mm• with side-by-side mounting0 mm- forwards0 mm- backwards0 mm- downwards50 mm- at the side0 mm- forwards0 mm- at the side0 mm- horkwards0 mm- at the side0 mm- backwards0 mm- at the side0 mm- backwards0 mm- at the side0 mm- backwards0 mm- backwards0 mm- at the side0 mm- backwards0 mm- at the side3.5 mm	• at 40 °C rated value	7 A
• at 60 °C rated value       4.6 A         Installation/ mounting/ dimensions       vertical, horizontal, standing (observe derating)         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       22.5 mm         depth       141.6 mm         required spacing       • with side-by-side mounting         • forwards       0 mm         - forwards       0 mm         - backwards       0 mm         - at the side       0 mm         - forwards       0 mm         - at the side       0 mm         - at the side       0 mm         - backwards       0 mm         - at the side       0 mm         - backwards       0 mm         - at the side       0 mm	• at 50 °C rated value	6.1 A
Installation/ mounting/ dimensions           mounting position         vertical, horizontal, standing (observe derating)           fastening method         screw and snap-on mounting onto 35 mm DIN rail           height         100 mm           width         22.5 mm           depth         141.6 mm           required spacing            • with side-by-side mounting         0 mm           - forwards         0 mm           - backwards         0 mm           - upwards         50 mm           - at the side         0 mm           - forwards         0 mm           - at the side         0 mm           - backwards         0 mm           - at the side         0 mm           - forwards         0 mm           - at the side         0 mm           - backwards         0 mm           - at the side         0 mm           - backwards         0 mm           - at the side         0 mm           - upwards         50 mm           - at the side         3.5 mm	● at 55 °C rated value	5.2 A
mounting position         vertical, horizontal, standing (observe derating)           fastening method         screw and snap-on mounting onto 35 mm DIN rail           height         100 mm           width         22.5 mm           depth         141.6 mm           required spacing            • with side-by-side mounting         0 mm           - forwards         0 mm           - backwards         0 mm           - upwards         50 mm           - at the side         0 mm           - forwards         0 mm           - at the side         0 mm           - backwards         0 mm           - at the side         0 mm           - upwards         50 mm           - at the side         0 mm           - backwards         0 mm           - forwards         0 mm           - at the side         0 mm           - backwards         0 mm           - at the side         3.5 mm	• at 60 °C rated value	4.6 A
fastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth22.5 mmdepth141.6 mmrequired spacing0 mm• with side-by-side mounting0 mm- forwards0 mm- backwards0 mm- upwards50 mm- at the side0 mm- forwards0 mm- forwards0 mm- at the side0 mm- forwards0 mm- forwards0 mm- forwards0 mm- at the side0 mm- forwards0 mm- forwards0 mm- forwards0 mm- forwards0 mm- forwards0 mm- hackwards0 mm-	Installation/ mounting/ dimensions	
height100 mmwidth22.5 mmdepth141.6 mmrequired spacing-• with side-by-side mounting0 mm- forwards0 mm- backwards0 mm- backwards50 mm- downwards50 mm- at the side0 mm- forwards0 mm- at the side0 mm- backwards0 mm- forwards0 mm- forwards0 mm- at the side0 mm- backwards0 mm- at the side3.5 mm	mounting position	vertical, horizontal, standing (observe derating)
widh22.5 mmdepth141.6 mmrequired spacing141.6 mm• with side-by-side mounting0 mm- forwards0 mm- backwards0 mm- backwards50 mm- downwards50 mm- at the side0 mm• for grounded parts0 mm- backwards0 mm- forwards50 mm- at the side0 mm- forwards0 mm- forwards0 mm- at the side0 mm- forwards0 mm- hackwards0 mm- backwards0 mm- hackwards0 mm- upwards50 mm- at the side3.5 mm	fastening method	screw and snap-on mounting onto 35 mm DIN rail
depth141.6 mmrequired spacing141.6 mm• with side-by-side mounting0- forwards0 mm- backwards0 mm- backwards50 mm- upwards50 mm- downwards50 mm- at the side0 mm• for grounded parts0 mm- backwards0 mm- backwards0 mm- forwards0 mm- forwards0 mm- forwards0 mm- backwards0 mm- backwards0 mm- backwards0 mm- backwards0 mm- upwards50 mm- at the side3.5 mm	height	100 mm
required spacing• with side-by-side mounting- forwards0 mm- backwards0 mm- upwards- downwards50 mm- downwards50 mm- at the side0 mm• for grounded parts- forwards- backwards- nupwards-	width	22.5 mm
• with side-by-side mounting- forwards0 mm- backwards0 mm- upwards50 mm- downwards50 mm- at the side0 mm• for grounded parts0 mm- forwards0 mm- backwards0 mm- forwards0 mm- at the side0 mm- forwards0 mm- forwards0 mm- backwards0 mm- backwards0 mm- upwards50 mm- at the side50 mm	depth	141.6 mm
- forwards0 mm- backwards0 mm- upwards50 mm- downwards50 mm- downwards0 mm- at the side0 mm• for grounded parts forwards0 mm- backwards0 mm- backwards0 mm- backwards0 mm- backwards0 mm- upwards50 mm- at the side50 mm	required spacing	
- backwards         0 mm           - upwards         50 mm           - downwards         50 mm           - downwards         0 mm           - at the side         0 mm           • for grounded parts         -           - forwards         0 mm           - backwards         0 mm           - backwards         0 mm           - backwards         0 mm           - backwards         0 mm           - upwards         50 mm           - at the side         3.5 mm	• with side-by-side mounting	
upwards50 mm downwards50 mm at the side0 mm• for grounded parts0 mm forwards0 mm backwards0 mm upwards50 mm at the side50 mm	— forwards	0 mm
- downwards50 mm- at the side0 mm• for grounded parts forwards0 mm- backwards0 mm- upwards50 mm- at the side3.5 mm	— backwards	0 mm
	— upwards	50 mm
• for grounded parts     0 mm       — forwards     0 mm       — backwards     0 mm       — upwards     50 mm       — at the side     3.5 mm	— downwards	50 mm
- forwards     0 mm       - backwards     0 mm       - upwards     50 mm       - at the side     3.5 mm	— at the side	0 mm
backwards0 mm upwards50 mm at the side3.5 mm	<ul> <li>for grounded parts</li> </ul>	
— upwards     50 mm       — at the side     3.5 mm	— forwards	0 mm
- at the side 3.5 mm	— backwards	0 mm
	— upwards	50 mm
- downwards 50 mm	— at the side	3.5 mm
		0.0 mm

Ambient conditions	
installation altitude at height above sea level maximum	4 000 m; For derating see manual
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
environmental category during operation according to IEC 60721	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
relative humidity during operation	10 95 %
air pressure according to SN 31205	900 1 060 hPa
Communication/ Protocol	
protocol is supported	
PROFINET IO protocol	No
PROFIsafe protocol	No
product function bus communication	No
protocol is supported AS-Interface protocol	No
Connections/ Terminals	
type of electrical connection	screw-type terminals for main circuit, spring-loaded terminals (push-in) for control circuit
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	spring-loaded terminals (push-in)
wire length for motor unshielded maximum	100 m
type of connectable conductor cross-sections for main contacts	
• solid	1x (0,5 4 mm²), 2x (0,5 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0,5 4 mm <sup>2</sup> ), 2x (0,5 1,5 mm <sup>2</sup> )
connectable conductor cross-section for main contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 4 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 1.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 1 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 1.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)
- finely stranded with core end processing	1x (0,5 1,0 mm <sup>2</sup> ), 2x (0,5 1,0 mm <sup>2</sup> )
<ul> <li>finely stranded without core end processing</li> </ul>	1x (0.5 1.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	1x (20 16), 2x (20 16)
AWG number as coded connectable conductor cross section	
for main contacts	20 12
<ul> <li>for auxiliary contacts</li> </ul>	20 16
UL/CSA ratings	
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	1 hp
— at 220/230 V rated value	1.5 hp
— at 460/480 V rated value	3 hp
operational current at AC at 480 V according to UL 508	6.1 A
Certificates/ approvals	
General Product Approval	
UK CE CA EG-Konf.	
EMC For use in hazard- other	

12/4/2023

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## **Confirmation**

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RM1307-3AA04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RM1307-3AA04

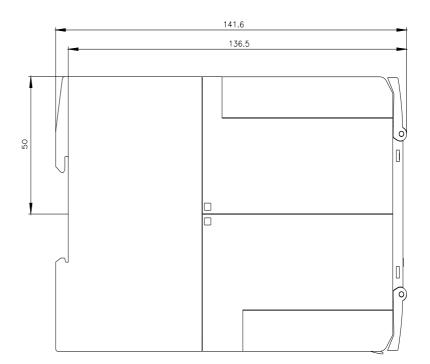
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

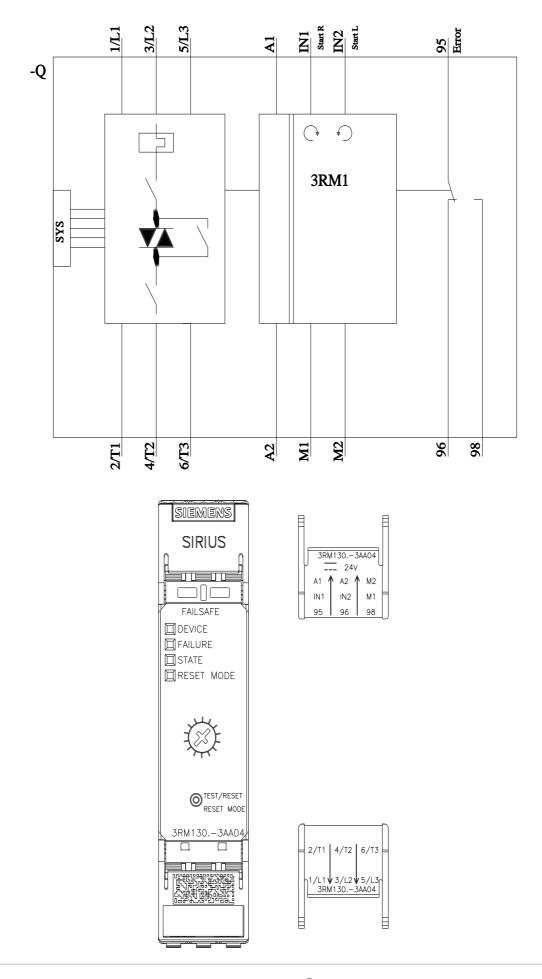
https://support.industry.siemens.com/cs/ww/en/ps/3RM1307-3AA04

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RM1307-3AA04&lang=en







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