## **SIEMENS**

Data sheet 3RM1002-1AA04



Direct starter, 3RM1, 500 V, 0.09 - 0.75 kW, 0.4 - 2 A, 24 V DC, screw terminals

product brand name	SIRIUS
product category	Motor starter
product designation	Direct-on-line starter
design of the product	with electronic overload protection
product type designation	3RM1
General technical data	
equipment variant according to IEC 60947-4-2	3
product function	Direct-on-line starter
<ul> <li>intrinsic device protection</li> </ul>	Yes
<ul> <li>for power supply reverse polarity protection</li> </ul>	No
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>	0.1 W
without load current share typical	1.68 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
between control and auxiliary circuit	250 V
shock resistance	6g / 11 ms
vibration resistance	1 6 Hz, 15 mm; 20 m/s², 500 Hz
operating frequency maximum	1 1/s
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
Weight	0.32 kg
product function	
direct start	Yes
reverse starting	No
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>	2 kV
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	1 kV

• due to high-frequency radiation according to IEC 61000-4-6	10 V
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 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 Electrical Safety	Class B for the domestic, business and commercial environments
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
Main circuit	iiigei-saie
number of poles for main current circuit	3
design of the switching contact	Hybrid
design of the switching contact as NO contact for signaling function	OUT, electronic, 24 V DC, 15 mA
adjustable current response value current of the current- dependent overload release	0.4 2 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	
<ul> <li>at AC at 400 V rated value</li> </ul>	2 A
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	2 A
• at AC-53a at 400 V at ambient temperature 40 °C rated value	2 A
ampacity when starting maximum	16 A
operating power for 3-phase motors at 400 V at 50 Hz	0.09 0.75 kW
Inputs/ Outputs	
input voltage at digital input	
at DC rated value	24 V
<ul><li>with signal &lt;0&gt; at DC</li></ul>	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>	11 mA
with signal <0> at DC	1 mA
number of CO contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15 at 230 V maximum	3 A
operational current of auxiliary contacts at DC-13 at 24 V maximum  Control circuit/ Control	1 A
	DC
type of voltage of the control supply voltage control supply voltage at DC rated value	19.2 30 V
relative negative tolerance of the control supply voltage at	19.2 50 V 20 %
DC relative positive tolerance of the control supply voltage at	25 %
DC	
control supply voltage 1 at DC rated value	24 V
operating range factor control supply voltage rated value at DC	
• initial value	0.8
• full-scale value	1.25
control current at DC	
• in standby mode of operation	25 mA
during operation	70 mA
inrush current peak	
• at 24 V	0.28 A; values at 25 °C
• at DC at 24 V	300 mA
at DC at 24 V at switching on of motor	130 mA
duration of inrush current peak	

* all 24 V at switching and motor of motor 2 alms  * all 25 V at switching and control circuit  * in switching state OFF		
## DCC at 24 V at switching on of motor  power loss [Vi] in auxillary and control circuit  ## in switching state OF  ## with bypass octoral  ## in switching state OF  ## with bypass octoral  ## in switching state OF  ## with bypass octoral  ## SEPORT STATE S	• at 24 V	85 ms
power lose (W) in auxiliary and control circuit  in switching state OR  - with bypass circuit  in witching state ON  - with bypass circuit  in witching state ON  - with bypass circuit  Response times  OFF-daily time  OF-daily time OF-DAILY  I and OF-Cred Value  I and OF		
I is switching state ON I is switching swit		20 ms
- with typass circuit  In switching state ON  - with typass circuit  ON-delay time  OF-delay time  OF-delay time  OF-delay time  OF-delay time  OR-delay tim		
Instituting state oN	_	
	•	0.6 W
Response limes	_	
ON-fedelay time 66 90 ms Power flictronics  operational current  • at 40 °C rated value 2A • at 50 °C rated value 2A • at 50 °C rated value 2A • at 60 °C rated value 3A •	• •	1.68 W
Content Electronics		
power Electronics operational current  • at 40 °C rated value • at 50 °C rated value • at 50 °C rated value • at 60 °C rated value  Installation mounting juitinensions  mounting position  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail height 100 mm  depth 110 mm  required spacing • with side-by-side mounting • one of space of standard stan		
operational current		60 90 ms
e at 40 °C rated value e at 50 °C rated value 2 A 2 A 5 c 50 °C rated value 2 A 5 at 50 °C rated value 2 A 6 at 50 °C rate 50 °C		
at 50 °C rated value at 55 °C rated value 2 A 2 A 2 A 2 A 55 °C rated value 2 A 2 A 2 A 2 A 2 A 2 A 2 A 3 55 °C rated value 2 A 2 A 2 A 2 A 2 A 2 A 2 A 3 55 °C rated value 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 3 55 °C rated value 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A	•	
a t 55 °C rated value  a t 50 °C rated value  bestaltation munting dimensions  mounting position  fastening method  screw and snap-on mounting onto 35 mm DIN rail  height  100 mm  width  22.5 mm  depth  required spacing  • with side by side mounting  • with side by side mounting  - forwards  - backwards  - upwards  - downwards  - of orgorounded parts  - forwards  - owards		
e at 60 °C rated value  Institution mounting of immanions  mounting position  serve and snap-on mounting onto 35 mm DIN rail height  width  22.5 mm depth  e with side-by-side mounting  - forwards  - backwards  - downwards  - downwards  - forwards  - on m  - ownwards  - ownwards  - ownwards  - backwards  - ownwards  - ownwards  - ownwards  - ownwards  - ownwards  - backwards  - ownwards  - ownwards  - ownwards  - ownwards  - backwards  - ownwards  - ownwards  - ownwards  - ownwards  - backwards  - ownwards  - ownwards		
mounting position vertical, horizontal, standing (observe derailing) fastening method serve and snap-on mounting onto 35 mm DIN rail height 100 mm width 22.5 mm depth 141.8 mm required spacing • with side-by-side mounting — forwards 0 mm — backwards 0 mm — downwards 50 mm — downwards 50 mm — downwards 0 mm — or forwards 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 — backwards 0 mm — at the side 0 mm — backwards 0 mm — backwards 0 mm — at the side 0 mm — backwards 0 mm — backwards 0 mm — at the side 0 mm — backwards 0 mm — at the side 0 mm — backwards 0 mm — backwards 0 mm — backwards 0 mm — at the side 0 mm — backwards 0 mm —		
mounting position  fastening method  serew and snap-on mounting onto 35 mm DIN rall  height  100 mm  vidth  22.5 mm  depth  evith side-by-side mounting  forwards  backwards  ba		2 A
Assening method   Screw and snap-on mounting onto 35 mm DIN rail   Neight   100 mm   Width   22.5 mm   Neight   100 mm   Neight   141.6 mm   141.6 mm   Neight   141		
height width 22.5 mm depth 141.6 mm  required spacing  • with side-by-side mounting  - forwards 0 mm - backwards 0 mm - downwards 50 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 - backwards 0 mm - at the side 0 mm - backwards 0 mm - wards 50 mm - downwards 6 mm - downwards 7 mm - downwards		ž i
width     22.5 mm       depth     141.8 mm       required spacing     • with side-by-side mounting       - forwards     0 mm       - backwards     50 mm       - upwards     50 mm       - downwards     50 mm       - at the side     0 mm       - backwards     0 mm       - backwards     0 mm       - backwards     0 mm       - upwards     50 mm       - at the side     3.5 mm       - downwards     50 mm       Ambient conditions     50 mm       installation altitude at height above sea level maximum     4 000 m; For derating see manual       ambient temperature     • during operation       • during trasport     -40 +70 °C       • during trasport     -40 +70 °C       environmental category during operation according to IEC 60721     366 (ino lee 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     No       • PROFINET IO protocol     No       • PROFILE all protocol     No       • PROFILE all protocol     No       • PROFILE all protocol     No       • PROFILE ground prot		
required spacing  • with side-by-side mounting  — forwards — backwards — upwards — downwards — of many side by side by side by side mounting  — the side — downwards — of many side by side by side mounting — the side — of many side by side		
required spacing  with side-by-side mounting  — forwards — backwards — upwards — downwards — downwards — at the side — for grounded parts — for grounded parts — forwards — backwards — upwards — backwards — omm — forwards — backwards — upwards — backwards — upwards — backwards — upwards — at the side — 3.5 mm — downwards — 50 mm  Ambient conditions Installation altitude at height above sea level maximum  ambient temperature — during operation — during storage — during transport — during transport — environmental category during operation according to IEC 60721 relative humidity during operation air pressure according to SN 31205 — good — 1000 hPa  Communication/Protocol  PROFINET IO protocol — PROFINET IO protocol — PROFINET IO protocol — PROFINET IO protocol — PROFINET Feminals  type of electrical connection — for main current circuit — for maildiny and control circuit — for guildiny and control circuit — for gui		
• with side-by-side mounting  - forwards - backwards - upwards - downwards - downwards - at the side - for grounded parts - forwards - backwards - forwards - forwards - forwards - forwards - forwards - backwards - backwards - upwards - backwards - upwards - at the side - 3.5 mm - at the side - 3.5 mm - at the side - downwards - So mm  Ambient conditions  installation allitude at height above sea level maximum  ambient amperature - during storage - during transport - during storage - during transport - during storage - during transport - whome to be compared to the side of the	·	141.6 mm
- backwards - upwards - downwards - downwards - at the side - of or grounded parts - forwards - backwards - upwards - backwards - upwards - upwards - upwards - upwards - upwards - at the side - downwards - at the side - downwards - to mm - upwards - at the side - downwards - bo mm  Ambient conditions  installation altitude at height above sea level maximum ambient temperature - during operation - 25 +60 °C - during storage - 40 +70 °C - during transport - during roperation according to IEC 386 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 relative humidity during operation air pressure according to SN 31205 900 1 060 hPa  Communication/ Protocol  protocol is supported - PROFilsafe protocol  protocol is supported AS-Interface protocol No  product function bus communication - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary and control circuit - for main current circuit - for auxiliary and control circuit - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary and control circuit - for finely stranded with core end processing - x (0,5 4 mm²), 2x (0,5 2,5 mm²) - x (0,5 4 mm²), 2x (0,5 2,5 mm²) - x (0,5 4 mm²), 2x (0,5 1,5 mm²)	-	
- upwards 50 mm - downwards 50 mm - at the side 0 mm - forwards 0 mm - forwards 0 mm - backwards 0 mm - backwards 0 mm - at the side 3.5 mm - downwards 50 mm - at the side 3.5 mm - downwards 50 mm - at the side 3.5 mm - downwards 50 mm  Ambient conditions - installation altitude at height above sea level maximum 4 000 m; For derating see manual ambient temperature - during operation - 25 +60 °C - during storage 40 +70 °C - environmental category during operation according to IEC 60721 relative humidity during operation 10 95 % air pressure according to SN 31205 - good 1 060 hPa  Communication! Protocol  Protocol is supported - PROFINET IO protocol - PROFISafe protocol - PROFIsafe protocol - No - protocol is supported A-Interface protocol - From incurrent circuit - for main current circuit - for maxiliary and control circuit - screw-type terminals - wire length for motor unshielded maximum - type of connectable conductor cross-sections for main contacts - solid - finely stranded with core end processing - 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) - 1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
- downwards - at the side of or grounded parts - forwards - backwards - backwards - upwards - at the side of omm - at the side - downwards - at the side - at the side - downwards - at the side - a		
- at the side  • for grounded parts  - forwards  0 mm  - backwards 0 mm  - upwards - downwards 50 mm  Ambient conditions  installation altitude at height above sea level maximum  4 000 m; For derating see manual  ambient temperature  • during operation • during storage • during transport  environmental category during operation according to IEC 60721  relative humidity during operation air pressure according to SN 31205  grownundealind Protocol  PROFINET IO protocol  • PROFINET IO protocol  • PROFISafe protocol  product function bus communication  protocol is supported AS-Interface protocol  No  connections/ Terminals  type of electrical connection • for axixillary and control circuit • for axixillary and control circuit  • for axixillary and control circuit  • for axixillary and control circuit  • for connectable conductor cross-sections for main contacts  • solid • finely stranded with core end processing  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)	·	
• for grounded parts		
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backwards upwards at the side downwards    Ambient conditions		
- upwards - at the side - downwards 50 mm  Ambient conditions  installation altitude at height above sea level maximum 4 000 m; For derating see manual  ambient temperature • during operation • during storage • during transport environmental category during operation according to IEC 60721 safe humidity during operation air pressure according to SN 31205 900 1 060 hPa  Communication/ Protocol  PROFINET IO protocol • PROFINET IO protocol • PROFISate protocol  Product function bus communication product function bus communication  protocol is supported AS-Interface protocol No  Connections/ Terminals  type of electrical connection • for main current circuit • for main current circuit • for main current circuit • for auxilliary and control circuit  wire length for motor unshielded maximum type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
- at the side - downwards 50 mm  Ambient conditions  installation altitude at height above sea level maximum 4 000 m; For derating see manual ambient temperature  • during operation • 25 +60 °C • during storage • 40 +70 °C • during transport • 40 +70 °C environmental category during operation according to IEC 60721 (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 • PROFISafe protocol  protocol is supported AS-interface protocol  No protocol is supported AS-interface protocol  No Connections/ Terminals  type of electrical connection screw-type terminals for main circuit, screw-type terminals for control circuit • for main current circuit • for auxiliary and control circuit  vire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing  1 x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1 x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
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ambient temperature  • during operation • during storage • during storage • during transport • environmental category during operation according to IEC 60721  relative humidity during operation air pressure according to SN 31205 900 1 060 hPa  Communication/ Protocol  Protocol Is supported • PROFINET IO protocol • PROFIsafe protocol • PROFIsafe protocol • PROFIsafe protocol  No  product function bus communication No protocol is supported AS-Interface protocol  No  Connections/ Terminals  type of electrical connection • for main current circuit • for auxilliary and control circuit  • for auxilliary and control circuit  wire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts • solid  type of inely stranded with core end processing  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>during transport</li> <li>environmental category during operation according to IEC 60721</li> <li>genvironmental category during operation according to IEC (sand must not get into the devices), 3M6</li> <li>relative humidity during operation</li> <li>air pressure according to SN 31205</li> <li>goo 1 060 hPa</li> </ul> Communication/ Protocol <ul> <li>PROFINET IO protocol</li> <li>PROFISafe protocol</li> <li>No</li> <li>PROFISafe protocol</li> <li>No</li> <li>protocol is supported AS-Interface protocol</li> <li>No</li> <li>protocol is supported AS-Interface protocol</li> <li>No</li> </ul> Connections/ Terminals <ul> <li>type of electrical connection</li> <li>of or main current circuit</li> <li>of or auxiliary and control circuit</li> <li>screw-type terminals</li> <li>wire length for motor unshielded maximum</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>1x (0,5 4 mm²), 2x (0,5 2,5 mm²)</li> <li>1x (0,5 4 mm²), 2x (0,5 1,5 mm²)</li> </ul>		4 000 m; For derating see manual
<ul> <li>during storage</li> <li>during transport</li> <li>during transport</li> <li>during transport</li> <li>environmental category during operation according to IEC</li> <li>60721</li> <li>grelative humidity during operation</li> <li>air pressure according to SN 31205</li> <li>goo 1 060 hPa</li> </ul> Communication/ Protocol <ul> <li>PROFINET IO protocol</li> <li>PROFISafe protocol</li> <li>PROFISafe protocol</li> <li>No</li> <li>protocol is supported AS-Interface protocol</li> <li>No</li> </ul> Protocol is supported AS-Interface protocol <ul> <li>No</li> </ul> Protocol is supported AS-Interface protocol <ul> <li>For main current circuit</li> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>for auxiliary and control circuit</li> <li>screw-type terminals</li> </ul> wire length for motor unshielded maximum <ul> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>1x (0,5 4 mm²), 2x (0,5 2,5 mm²)</li> <li>1x (0,5 4 mm²), 2x (0,5 1,5 mm²)</li> </ul>	•	05 +00.00
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relative humidity during operation  irressure according to SN 31205  protocol is supported  PROFINET IO protocol  Product function bus communication  protocol is supported AS-Interface protocol  No  Protocol is supported Supported No  Protocol is supported AS-Interface protocol  Protocol is supported AS-Interface protocol  Protocol is supported AS-Interface protocol  No  Connections/ Terminals  type of electrical connection  for main current circuit  for auxiliary and control circuit  wire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts  solid  finely stranded with core end processing  1 x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1 x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
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protocol is supported  • PROFINET IO protocol  • PROFIsafe protocol  product function bus communication  protocol is supported AS-Interface protocol  No  Connections/ Terminals  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  vire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts  • solid  • finely stranded with core end processing  No  No  Screw-type terminals for main circuit, screw-type terminals for control circuit  screw-type terminals  100 m  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
PROFINET IO protocol PROFIsafe protocol No PROFIsafe protocol Product function bus communication No Protocol is supported AS-Interface protocol No  Connections/ Terminals  type of electrical connection for main current circuit for auxiliary and control circuit  in for auxiliary and control circuit  wire length for motor unshielded maximum type of connectable conductor cross-sections for main contacts solid finely stranded with core end processing  No No No  Screw-type terminals for main circuit, screw-type terminals for control circuit screw-type terminals  screw-type terminals  100 m  1x (0,5 4 mm²), 2x (0,5 2,5 mm²) 1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
<ul> <li>▶ PROFIsafe protocol</li> <li>▶ Product function bus communication</li> <li>▶ No</li> <li>▶ protocol is supported AS-Interface protocol</li> <li>▶ No</li> <li>Connections/ Terminals</li> <li>type of electrical connection</li> <li>♠ for main current circuit</li> <li>♠ for auxiliary and control circuit</li> <li>★ of auxiliary and control circuit</li> <li>★ wire length for motor unshielded maximum</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>♠ solid</li> <li>♠ solid</li> <li>★ (0,5 4 mm²), 2x (0,5 2,5 mm²)</li> <li>★ (0,5 4 mm²), 2x (0,5 1,5 mm²)</li> </ul>		No
product function bus communication protocol is supported AS-Interface protocol  Connections/ Terminals  type of electrical connection	•	
protocol is supported AS-Interface protocol  Connections/ Terminals  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  wire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts  • solid  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  • finely stranded with core end processing  No  No  No  No  Screw-type terminals for main circuit, screw-type terminals for control circuit  screw-type terminals  100 m		
type of electrical connection  • for main current circuit  • for auxiliary and control circuit  wire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts  • solid  • finely stranded with core end processing  screw-type terminals for main circuit, screw-type terminals for control circuit  screw-type terminals  100 m  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)	·	
type of electrical connection  • for main current circuit  • for auxiliary and control circuit  wire length for motor unshielded maximum  type of connectable conductor cross-sections for main contacts  • solid  • finely stranded with core end processing  screw-type terminals for main circuit, screw-type terminals for control circuit  screw-type terminals  100 m  100 m  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
<ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>screw-type terminals</li> <li>wire length for motor unshielded maximum</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid</li> <li>1x (0,5 4 mm²), 2x (0,5 2,5 mm²)</li> <li>finely stranded with core end processing</li> <li>1x (0,5 4 mm²), 2x (0,5 1,5 mm²)</li> </ul>		screw-type terminals for main circuit, screw-type terminals for control circuit
<ul> <li>for auxiliary and control circuit</li> <li>wire length for motor unshielded maximum</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>1x (0,5 4 mm²), 2x (0,5 2,5 mm²)</li> <li>1x (0,5 4 mm²), 2x (0,5 1,5 mm²)</li> </ul>		
wire length for motor unshielded maximum       100 m         type of connectable conductor cross-sections for main contacts          • solid		
type of connectable conductor cross-sections for main contacts  • solid  1x (0,5 4 mm²), 2x (0,5 2,5 mm²)  • finely stranded with core end processing  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)	·	• •
<ul> <li>solid</li> <li>1x (0,5 4 mm²), 2x (0,5 2,5 mm²)</li> <li>finely stranded with core end processing</li> <li>1x (0,5 4 mm²), 2x (0,5 1,5 mm²)</li> </ul>		
• finely stranded with core end processing  1x (0,5 4 mm²), 2x (0,5 1,5 mm²)	•	1x (0.5 4 mm²), 2x (0,5 2.5 mm²)

<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	
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	1x (0,5 2,5 mm²), 2x (1,0 1,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 1 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	1x (20 14), 2x (18 16)
AWG number as coded connectable conductor cross section	
• for main contacts	20 12
<ul> <li>for auxiliary contacts</li> </ul>	20 14
UL/CSA ratings	
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 230 V rated value	0.125 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.333 hp
— at 220/230 V rated value	0.333 hp
— at 460/480 V rated value	0.75 hp
operational current at AC at 480 V according to UL 508	2 A
Approvals Certificates	

General Product Approval







Confirmation





EMV Test Certificates other Railway Environment



Type Test Certificates/Test Report

Confirmation

Special Test Certificate 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=3RM1002-1AA04

Cax online generator

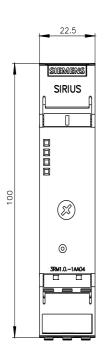
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RM1002-1AA04

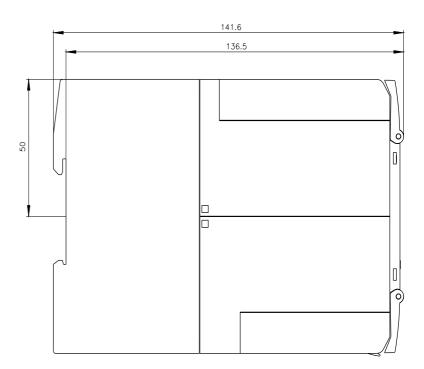
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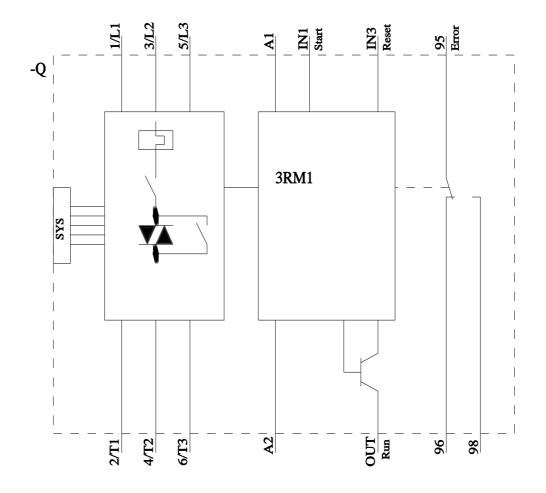
https://support.industry.siemens.com/cs/ww/en/ps/3RM1002-1AA04

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

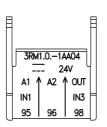
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RM1002-1AA04&lang=en

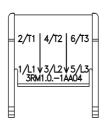












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