# **SIEMENS**

Data sheet 3RM1302-2AA04



Fail-safe reversing starter, 3RM1, 500 V, 0.09 - 0.75 kW, 0.4 - 2 A, 24 V DC, spring-type terminals

equipment variant according to IEC 60947-4-2  product function intrinsic device protection for power supply reverse polarity protection  Yes  suitability for operation device connector 3ZY12 Yes  insulation voltage rated value  overvoltage category III  surge voltage resistance rated value  between main and auxiliary circuit between main and auxiliary circuit between control and auxiliary circuit between			
product designation design of the product design of the product product type designation product type designation general technical data equipment variant according to IEC 60947-4-2 3 product function intrinsic device protection protection intrinsic protection protection intrinsic protection intrinsic protection protection protection intrinsic protection protection protection protection protection protection protection intrinsic protection protection protection intrinsic protecti	product brand name	SIRIUS	
design of the product ype designation 3RM1  Product type designation 3RM1  Requipment variant according to IEC 60947-4-2 9 all-safe reversing starter 9 intrinsic device protection 9 for power supply reverse polarity protection 9 for power supply reverse polarity protection 9 for yes 1 suitability for operation device connector 3ZY12 1 yes 1 susulation voltage rated value 9 for your youtage resistance rated value 1 for your youtage resistance rated value 9 for your youtage resistance rated value 1 for your youtage resistance rated value 9 for youtage resistance rated value 1 for your youtage resistance rated value 9 for youtage resistance rated value 1 for your youtage resistance 2 for your your your your your your your yo	product category	Motor starter	
product type designation separate technical data quipment variant according to IEC 60947-4-2 product function intrinsic device protection for power supply reverse polarity protection for power supply reverse supply reverses power p	product designation	Failsafe reversing starters	
equipment variant according to IEC 60947-4-2  guipment variant according to IEC 60947-4-2  a fall-safe reversing starter  intrinsic device protection  for power supply reverse polarity protection  for power supply reverse polarity protection  ves  suitability for operation device connector 32Y12  yes  suitability for operation device connector 32Y12  yes  surge voltage resistance rated value  overvoltage resistance rated value  surge voltage resistance rated value  maximum permissible voltage for protective separation  between main and auxiliary circuit  between main and auxiliary circuit  between control and auxiliary circuit  bo V  250 V  500 V  600 V	design of the product	With electronic overload protection and safety-related disconnection	
equipment variant according to IEC 60947-4-2 product function  intrinsic device protection insulation voltage rated value  suitability for operation device connector 32Y12 yes insulation voltage rated value  surge voltage resistance rated value  surge voltage resistance rated value in between main and auxiliary circuit in between main and auxiliary circuit in between main and auxiliary circuit in between control and auxiliary	product type designation	3RM1	
product function intrinsic device protection for power supply reverse polarity protection for power supply reverse polarity protection yes suitability for operation device connector 3ZY12 Yes insulation voltage rated value overvoltage category Ill surge voltage resistance rated value maximum permissible voltage for protective separation between main and auxiliary circuit between main and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit between resistance fig /11 ms vibration resistance fig /12 ms vibration resistance fig /13 ms vibration resistance fig /14 ms  1 1/s  machanical service life (operating cycles) typical figereuency maximum figereuency dea according to IEC 81346-2  Q Substance Prohibitance (Date)  young figure fig /25 ms  young figure fig /25 ms  young figure fig /25 ms  young figure figure fig /25 ms  young figure figure fig /25 ms  young figure figure figure fig /25 ms  young figure	General technical data		
intrinsic device protection for power supply reverse polarity protection for power supply reverse polarity protection  for power supply reverse polarity protection  ves  suitability for operation device connector 3ZY12  insulation voltage rated value  500 V  overvoltage category  III  surge voltage resistance rated value  • between main and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • betwe	equipment variant according to IEC 60947-4-2	3	
For power supply reverse polarity protection   Yes	product function	fail-safe reversing starter	
suitability for operation device connector 3ZY12 Yes insulation voltage rated value 500 V overvoltage category III surge voltage resistance rated value 6 kV maximum permissible voltage for protective separation • between main and auxiliary circuit 500 V • between control and auxiliary circuit 250 V • between control and auxiliary circuit 250 V • between control and auxiliary circuit 250 V • between control and suxiliary circuit 250	<ul> <li>intrinsic device protection</li> </ul>	Yes	
insulation voltage rated value  overvoltage category  surge voltage resistance rated value  obetween main and auxiliary circuit  obetween control and auxiliary circuit  obetween control and auxiliary circuit  obetween control and auxiliary circuit  obetween main and auxiliary circuit  obetween control auxiliary circuit  obetween control and auxiliary circuit  obetween control and auxiliary circuit  obetween control on It is  obetween control on	<ul> <li>for power supply reverse polarity protection</li> </ul>	Yes	
overvoltage category  surge voltage resistance rated value  maximum permissible voltage for protective separation  • between main and auxiliary circuit  • between control and auxiliary circuit  • coperating frequency maximum  • coperating frequency maximum  • to H2, 15 mm; 20 m/s², 500 Hz  • 11/8  • 18 000 000  • direct start  • reverse starting  • direct start  • reverse starting  • Ro  • Auto to interference according to IEC 60947-1  • Class A  • Conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-conductor surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to thigh-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radi	suitability for operation device connector 3ZY12	Yes	
surge voltage resistance rated value  maximum permissible voltage for protective separation  • between main and auxiliary circuit  • between main and auxiliary circuit  • between control and auxiliary circuit  • between main and auxiliary	insulation voltage rated value	500 V	
maximum permissible voltage for protective separation  • between main and auxiliary circuit  • between control and auxiliary circuit  500 V  • between control and auxiliary circuit  500 V  shock resistance  6g / 11 ms  vibration resistance  1 6 Hz, 15 mm; 20 m/s², 500 Hz  operating frequency maximum  1 1/s  mechanical service life (operating cycles) typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  703/01/2017  product function  • direct start  • reverse starting  Product function short circuit protection  No  loctomagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC emitted interference according to IEC 60947-1  class A  Conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-carth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-6  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  6 kV contact discharge / 8 kV air discharge  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	overvoltage category	III	
between main and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit  500 V  500 K resistance  6g / 11 ms  6g / 11 ms  vibration resistance  1 6 Hz, 15 mm; 20 m/s², 500 Hz  operating frequency maximum  mechanical service life (operating cycles) typical  7 for 600 000  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  7 o3/01/2017  product function  6 direct start 7 reverse starting 8 No  1 class A  EMC emitted interference according to IEC 60947-1  EMC emitted interference according to IEC 60947-1  Class A  conducted interference 6 due to burst according to IEC 61000-4-4 6 due to conductor-earth surge according to IEC 61000-4-5 6 due to conductor-conductor surge according to IEC 61000-4-3 8 due to high-frequency radiation according to IEC 61000-4-3 8 due to chased interference according to IEC 61000-4-3 8 due to due to chased interference according to IEC 61000-4-3 8 due to chased interference according to IEC 61000-4-3 8 due to chased interference according to IEC 61000-4-3 8 due to chased interference according to IEC 61000-4-3 8 due to chased interference according to IEC 61000-4-3 8 dectrostatic discharge according to IEC 61000-4-2 8 6 kV contact discharge / 8 kV air discharge conducted HF interference emissions according to Class B for the domestic, business and commercial environments	surge voltage resistance rated value	6 kV	
between control and auxiliary circuit  shock resistance  6g / 11 ms  1 6 Hz, 15 mm; 20 m/s², 500 Hz  operating frequency maximum  1 1/s  mechanical service life (operating cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  o3/01/2017  product function  e direct start  reverses starting  product function short circuit protection  etcetromagnetic compatibility  EMC emitted interference according to IEC 60947-1  class A  EMC immunity according to IEC 60947-1  class A  conducted interference  e due to burst according to IEC 61000-4-4  e due to conductor-carth surge according to IEC 61000-4-5  e due to chanductor-conductor surge according to IEC 61000-4-5  e due to high-frequency radiation according to IEC 61000-4-3  electromagnetic discharge according to IEC 61000-4-2  field-based interference according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	maximum permissible voltage for protective separation		
shock resistance 6g / 11 ms  vibration resistance 1 6 Hz, 15 mm; 20 m/s², 500 Hz  operating frequency maximum 1 1/s  mechanical service life (operating cycles) typical 15 000 000  reference code according to IEC 81346-2 Q  Substance Prohibitance (Date) 03/01/2017  product function  edirect start No	<ul> <li>between main and auxiliary circuit</li> </ul>	500 V	
vibration resistance  operating frequency maximum  1 1/s  mechanical service life (operating cycles) typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  odirect start  oreverse starting  product function short circuit protection  edirect start  oreverse starting  Product function short circuit protection  No  Rectromagnetic compatibility  EMC emitted interference according to IEC 60947-1  canducted interference  odue to burst according to IEC 61000-4-4  odue to conductor-cardh surge according to IEC 61000-4-5  odue to conductor-conductor surge according to IEC 61000-4-5  odue to high-frequency radiation according to IEC 61000-4-3  odue to ciph-frequency radiation according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  odue to filed-based interference according to IEC 61000-4-2  odue to reference according to IEC 61000-4-3  odue to high-frequency radiation according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  odue to filed-based interference emissions according to IEC 61000-4-2  odue to filed-based interference emissions according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  odue to domestic, business and commercial environments	between control and auxiliary circuit	250 V	
mechanical service life (operating cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) product function	shock resistance	6g / 11 ms	
mechanical service life (operating cycles) typical  reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  product function	vibration resistance	1 6 Hz, 15 mm; 20 m/s², 500 Hz	
reference code according to IEC 81346-2  Substance Prohibitance (Date)  product function	operating frequency maximum	1 1/s	
Substance Prohibitance (Date)  product function  • direct start  • reverse starting  product function short circuit protection  **No  **Teverse starting  Product function short circuit protection  **No  **Iectromagnetic compatibility  **EMC emitted interference according to IEC 60947-1  EMC emitted interference according to IEC 60947-1  **Conducted interference**  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to high-frequency radiation according to IEC 61000-4-3  • due to high-frequency radiation according to IEC 61000-4-3  **Field-based interference according to IEC 61000-4-2  • kV contact discharge / 8 kV air discharge  **Conducted HF interference emissions according to Class B for the domestic, business and commercial environments	mechanical service life (operating cycles) typical	15 000 000	
product function	reference code according to IEC 81346-2	Q	
<ul> <li>direct start</li> <li>reverse starting</li> <li>No</li> <li>reverse starting</li> <li>No</li> <li>rectromagnetic compatibility</li> <li>EMC emitted interference according to IEC 60947-1</li> <li>class A</li> <li>EMC immunity according to IEC 60947-1</li> <li>class A</li> <li>conducted interference</li> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-3</li> <li>due to high-frequency radiation according to IEC 61000-4-3</li> <li>field-based interference according to IEC 61000-4-2</li> <li>field-based interference emissions according to IEC 61000-4-2</li> <li>conducted HF interference emissions according to</li> <li>Class B for the domestic, business and commercial environments</li> </ul>	Substance Prohibitance (Date)	03/01/2017	
reverse starting     Product function short circuit protection     No  relectromagnetic compatibility  EMC emitted interference according to IEC 60947-1     Class A  EMC immunity according to IEC 60947-1     Class A  conducted interference     • due to burst according to IEC 61000-4-4     • due to conductor-earth surge according to IEC 61000-4-5     • due to conductor-conductor surge according to IEC 61000-4-5     • due to high-frequency radiation according to IEC 61000-4-6  field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	product function		
product function short circuit protection  No  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  Class A  Conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to high-frequency radiation according to IEC 61000-4-6  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	direct start	No	
EMC emitted interference according to IEC 60947-1 class A  EMC immunity according to IEC 60947-1 Class A  conducted interference  • due to burst according to IEC 61000-4-4 3 kV / 5 kHz  • due to conductor-earth surge according to IEC 61000-4-5 4 kV signal lines 2 kV  • due to conductor-conductor surge according to IEC 61000-4-5 4 kV signal lines 2 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 6 kV contact discharge / 8 kV air discharge  conducted HF interference emissions according to Class B for the domestic, business and commercial environments	reverse starting	Yes	
EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  Class A  Conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  field-based interference according to IEC 61000-4-2  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	product function short circuit protection	No	
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  field-based interference according to IEC 61000-4-2  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class A  Class A  2 kV  5 kHz  4 kV signal lines 2 kV  2 kV  10 V  6 kV contact discharge / 8 kV air discharge	Electromagnetic compatibility		
conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • due to high-frequency radiation according to IEC 61000-4-6  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	EMC emitted interference according to IEC 60947-1	class A	
<ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> <li>due to high-frequency radiation according to IEC 61000-4-3</li> <li>delectrostatic discharge according to IEC 61000-4-2</li> <li>delectrostatic discharge according to IEC 61000-4-3</li> <li>dele</li></ul>	EMC immunity according to IEC 60947-1	Class A	
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> <li>field-based interference according to IEC 61000-4-3</li> <li>electrostatic discharge according to IEC 61000-4-2</li> <li>for kV contact discharge / 8 kV air discharge</li> <li>conducted HF interference emissions according to</li> <li>Class B for the domestic, business and commercial environments</li> </ul>	conducted interference		
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> <li>field-based interference according to IEC 61000-4-3</li> <li>electrostatic discharge according to IEC 61000-4-2</li> <li>for kV contact discharge / 8 kV air discharge</li> <li>conducted HF interference emissions according to</li> <li>Class B for the domestic, business and commercial environments</li> </ul>	<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	3 kV / 5 kHz	
61000-4-5  • due to high-frequency radiation according to IEC 61000- 4-6  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	• due to conductor-earth surge according to IEC 61000-4-5	4 kV signal lines 2 kV	
4-6  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments		2 kV	
electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to  Class B for the domestic, business and commercial environments		10 V	
conducted HF interference emissions according to  Class B for the domestic, business and commercial environments	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	
		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	
safety device type according to IEC 61508-2	Type B
B10d value	2 500 000
Safety Integrity Level (SIL) according to IEC 61508	3
SIL Claim Limit (subsystem) according to EN 62061	SILCL 3
· · · · · · · · · · · · · · · · · · ·	
performance level (PL) according to EN ISO 13849-1	e
category according to EN ISO 13849-1	4
stop category according to EN 60204-1	0
Safe failure fraction (SFF)	99 %
average diagnostic coverage level (DCavg)	99 %
diagnostics test interval by internal test function maximum	600 s
function test interval maximum	1a
failure rate [FIT]	
<ul> <li>at rate of recognizable hazardous failures (λdd)</li> </ul>	1 400 FIT
<ul> <li>at rate of non-recognizable hazardous failures (λdu)</li> </ul>	16 FIT
PFHD with high demand rate according to EN 62061	2E-8 1/h
PFDavg with low demand rate according to IEC 61508	0
MTTFd	75 a
hardware fault tolerance according to IEC 61508	1
safe state	Load circuit open
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	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	
at AC at 400 V rated value	2 A
at AC at 400 V rated value      at AC-3 at 400 V rated value	2 A
• at AC-53a at 400 V at ambient temperature 40 °C rated	2 A 2 A
value	16.0
ampacity when starting maximum	16 A
operating power for 3-phase motors at 400 V at 50 Hz	0.09 0.75 kW
nputs/ 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	
• for signal <1> at DC	8 mA
• with signal <0> at DC	1 mA
with signal <0> at DC     number of CO contacts for auxiliary contacts	1 mA

operational current of auxiliary contacts at DC-13 at 24 V	1 A
maximum	
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	19.2 30 V
relative negative tolerance of the control supply voltage at DC	20 %
relative positive tolerance of the control supply voltage at DC	25 %
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	
<ul> <li>in standby mode of operation</li> </ul>	13 mA
during operation	57 mA
inrush current peak	
• at DC at 24 V	300 mA
at DC at 24 V at switching on of motor	140 mA
duration of inrush current peak	
• 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	
in switching state OFF	
— with bypass circuit	0.35 W
in switching state ON	
— with bypass circuit	1.37 W
Response times	
ON-delay time	65 76 ms
OFF-delay time	30 43 ms
Power Electronics	
operational current	
• at 40 °C rated value	2 A
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> </ul>	2 A
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> </ul>	2 A 2 A
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>at 60 °C rated value</li> </ul>	2 A
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>at 60 °C rated value</li> </ul> Installation/ mounting/ dimensions	2 A 2 A 2 A
at 40 °C rated value     at 50 °C rated value     at 55 °C rated value     at 60 °C rated value  Installation/ mounting/ dimensions  mounting position	2 A 2 A 2 A vertical, horizontal, standing (observe derating)
at 40 °C rated value     at 50 °C rated value     at 55 °C rated value     at 60 °C rated value     linstallation/ mounting/ dimensions     mounting position     fastening method	2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail
at 40 °C rated value     at 50 °C rated value     at 55 °C rated value     at 60 °C rated value     at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height	2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing	2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting	2 A 2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting  — forwards	2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting  — forwards — backwards	2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm  0 mm 0 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting  — forwards  — backwards  — upwards	2 A 2 A 2 A 2 A vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm  0 mm 0 mm 50 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting  — forwards — backwards	2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm  0 mm 0 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting  forwards  backwards  upwards  downwards  at the side	2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 50 mm
at 40 °C rated value  at 50 °C rated value  at 55 °C rated value  at 60 °C rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  with side-by-side mounting  forwards  backwards  upwards  downwards	2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail  100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 50 mm
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 60 °C rated value</li> <li>at 60 °C rated value</li> </ul> Installation/ mounting/ dimensions mounting position fastening method height <ul> <li>width</li> <li>depth</li> </ul> required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>for grounded parts</li> </ul>	2 A 2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 50 mm 0 mm
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<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>at 60 °C rated value</li> </ul> Installation/ mounting/ dimensions mounting position fastening method height <ul> <li>width</li> <li>depth</li> </ul> required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> for grounded parts <ul> <li>forwards</li> <li>backwards</li> </ul> - at the side <ul> <li>for grounded parts</li> <li>backwards</li> </ul> - backwards <ul> <li>backwards</li> </ul>	2 A 2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail  100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 0 mm 0 mm 0 mm
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 60 °C rated value</li> <li>at 60 °C rated value</li> </ul> Installation/ mounting/ dimensions mounting position fastening method height <ul> <li>width</li> <li>depth</li> </ul> required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> for grounded parts <ul> <li>forwards</li> <li>backwards</li> <li>upwards</li> </ul> - forwards <ul> <li>backwards</li> <li>upwards</li> </ul> - forwards <ul> <li>backwards</li> <li>upwards</li> </ul> - upwards <ul> <li>backwards</li> <li>upwards</li> </ul> - backwards <ul> <li>upwards</li> </ul>	2 A 2 A 2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail  100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 0 mm 0 mm 0 mm
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<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 60 °C rated value</li> <li>at 60 °C rated value</li> </ul> Installation/ mounting/ dimensions mounting position fastening method height <ul> <li>width</li> <li>depth</li> </ul> required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> for grounded parts <ul> <li>forwards</li> <li>backwards</li> <li>at the side</li> </ul> for grounded parts <ul> <li>for wards</li> <li>at the side</li> <li>downwards</li> <li>at the side</li> <li>downwards</li> </ul> Ambient conditions <ul> <li>installation altitude at height above sea level maximum</li> </ul>	2 A 2 A 2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail  100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 0 mm 0 mm 0 mm 50 mm 0 mm
<ul> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 60 °C rated value</li> <li>at 60 °C rated value</li> </ul> Installation/ mounting/ dimensions mounting position fastening method height <ul> <li>width</li> <li>depth</li> </ul> required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> for grounded parts <ul> <li>for grounded parts</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>hackwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> Ambient conditions <ul> <li>installation altitude at height above sea level maximum</li> </ul> ambient temperature	2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail  100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 0 mm 0 mm 50 mm 50 mm 4 mm 50 mm 4 mm 50 mm 4 mm 50 mm
at 40 °C rated value at 50 °C rated value at 55 °C rated value at 60 °C rated value linstallation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards — at the side for grounded parts — forwards — backwards — upwards — at the side of ror grounded parts — forwards — backwards — upwards — backwards — upwards — hackwards — upwards — hackwards — upwards — hackwards — upwards — installation altitude at height above sea level maximum ambient temperature of during operation	2 A 2 A 2 A 2 A 2 A  vertical, horizontal, standing (observe derating) screw and snap-on mounting onto 35 mm DIN rail 100 mm 23 mm 142 mm  0 mm 0 mm 50 mm 0 mm 0 mm 50 mm 4 mm 50 mm 4 mm 50 mm 4 mm 50 mm

environmental category during operation according to IEC 60721	3K6 (no ice formation, only occasional condensation), 36 (sand must not get into the devices), 3M6	C3 (no salt mist), 3S2	
relative humidity during operation	10 95 %		
air pressure according to SN 31205	900 1 060 hPa		
Communication/ Protocol			
protocol is supported			
<ul> <li>PROFINET IO protocol</li> </ul>	No		
PROFIsafe protocol	No		
product function bus communication	No		
protocol is supported AS-Interface protocol	No		
Connections/ Terminals			
type of electrical connection	spring-loaded terminals (push-in) for main circuit, spring- (push-in) for control circuit	loaded terminals	
for main current circuit	spring-loaded terminals (push-in)		
for auxiliary and control circuit	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)		
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm²)		
<ul> <li>finely stranded without core end processing</li> </ul>	1x (0.5 4 mm²)		
connectable conductor cross-section for main contacts			
solid or stranded	0.5 4 mm²		
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²		
finely stranded without core end processing	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		
finely stranded without core end processing	0.5 1.5 mm²		
type of connectable conductor cross-sections			
for auxiliary contacts			
— solid	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0,5 1,0 mm²), 2x (0,5 1,0 mm²)		
finely stranded without core end processing	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)		
for AWG cables for auxiliary contacts	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 230 V rated value	0.125 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	0.33 hp		
— at 220/230 V rated value	0.33 hp		
— at 460/480 V rated value	0.75 hp		
operating voltage at AC rated value	480 V		
operational current at AC at 480 V according to UL 508	2 A		
Certificates/ approvals			
General Product Approval		EMC	
The state of the s			



Confirmation











Special Test Certificate

#### 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=3RM1302-2AA04

## Cax online generator

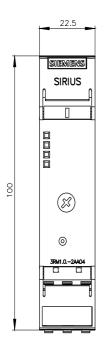
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RM1302-2AA04

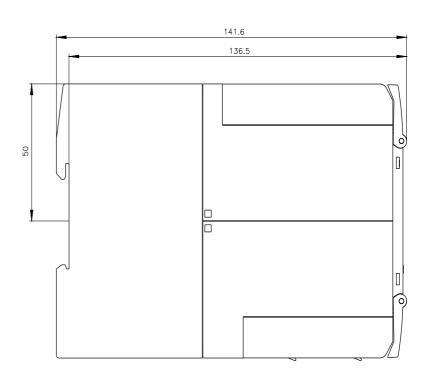
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

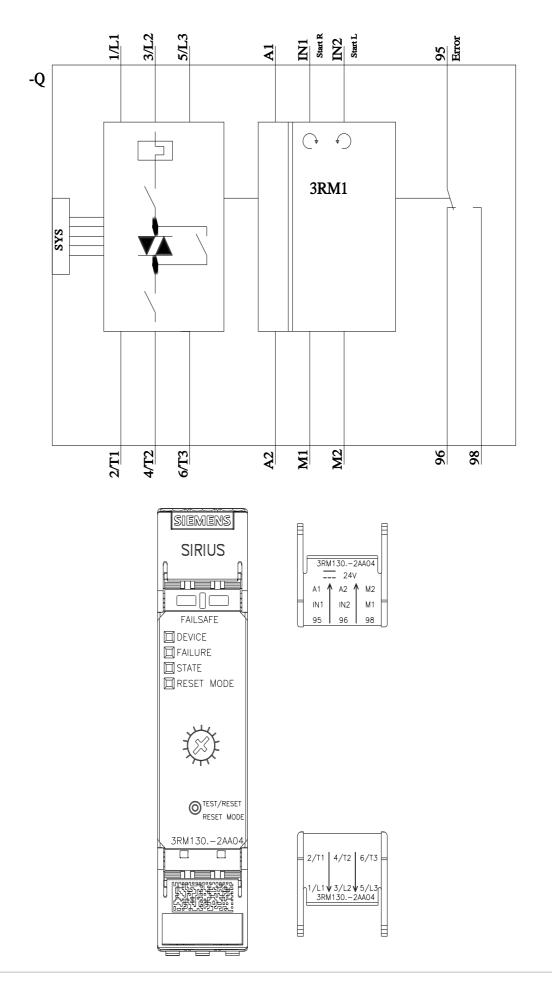
https://support.industry.siemens.com/cs/ww/en/ps/3RM1302-2AA04

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RM1302-2AA04&lang=en







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