SIEMENS

Data sheet 3RM1207-1AA04



Reversing starter, 3RM1, 500 V, 0.55 - 3 kW, 1.6 - 7 A, 24 V DC, screw terminals

product brand name	SIRIUS
product category	Motor starter
product designation	Reversing starter
design of the product	with electronic overload protection
product type designation	3RM1
General technical data	
equipment version according to IEC 60947-4-2	3
product function	Reversing starter
intrinsic device protection	Yes
for power supply reverse polarity protection	No
suitability for operation device connector 3ZY12	Yes
power loss [W] for rated value of the current	
at AC in hot operating state per pole	1.13 W
without load current share typical	1.68 W
insulation voltage rated value	500 V
overvoltage category	
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
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 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
Weight	0.327 kg
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	
 due to burst according to IEC 61000-4-4 	3 kV / 5 kHz
due to conductor-earth surge according to IEC 61000-4-5	2 kV

due to conductor-conductor surge according to IEC 1000 4 5	1 kV
61000-4-5 ■ 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	Class B for the domestic, business and commercial environments
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
Main circuit	
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	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
at AC-53a at 400 V at ambient temperature 40 °C rated value	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
input current at digital input	
• for signal <1> at DC	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	0.0
maximum	3 A
	1A
maximum	
maximum operational current of auxiliary contacts at DC-13 at 24 V	
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum	
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control	1 A
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage	1 A DC
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at	1 A DC 19.2 30 V
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at	1 A DC 19.2 30 V 20 %
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC	DC 19.2 30 V 20 %
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at	DC 19.2 30 V 20 %
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC	DC 19.2 30 V 20 % 25 % 24 V
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC • initial value	DC 19.2 30 V 20 % 25 % 24 V
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC • initial value • full-scale value	DC 19.2 30 V 20 % 25 % 24 V
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC • initial value • full-scale value control current at DC	DC 19.2 30 V 20 % 25 % 24 V 0.8 1.25
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC initial value full-scale value control current at DC in standby mode of operation	1 A DC 19.2 30 V 20 % 25 % 24 V 0.8 1.25
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC • initial value • full-scale value control current at DC • in standby mode of operation • during operation	1 A DC 19.2 30 V 20 % 25 % 24 V 0.8 1.25
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC initial value full-scale value control current at DC in standby mode of operation during operation inrush current peak	DC 19.2 30 V 20 % 25 % 24 V 0.8 1.25 25 mA 70 mA
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC o initial value full-scale value control current at DC o in standby mode of operation during operation inrush current peak at 24 V at DC at 24 V	DC 19.2 30 V 20 % 25 % 24 V 0.8 1.25 25 mA 70 mA 0.28 A; values at 25 °C
maximum operational current of auxiliary contacts at DC-13 at 24 V maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value relative negative tolerance of the control supply voltage at DC relative positive tolerance of the control supply voltage at DC control supply voltage 1 at DC rated value operating range factor control supply voltage rated value at DC initial value full-scale value control current at DC in standby mode of operation during operation inrush current peak at 24 V	DC 19.2 30 V 20 % 25 % 24 V 0.8 1.25 25 mA 70 mA 0.28 A; values at 25 °C 300 mA

a d DC at 24 V at swetching an of motor by a d DC at 24 V at swetching an of motor by a d DC at 24 V at swetching an of motor by a d DC at 24 V at swetching an of motor by a d DC at 24 V at swetching and or motor by a d DC at 24 V at swetching and or motor by a d DC at 24 V at swetching and or motor by a d DC at 24 V at swetching and or motor control at a swetching at 30 DC control at 30 DC co		
## ADC at 24 vs a switching on of motor power loss [V] in avuillary and control cleuit ## in switching state OF ## with bipsase circuit ## of the switching state OF ## with bipsase circuit ## of the switching state OF	• 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 grower Electronics OPF-delay time OP-delay time In a time of the control of time of the control of time of		
In switching state OF		80 ms
- with typass circuit In switching state ON - with bypass circuit ON-delay time OF-delay time OF-delay time OF-delay time OPower Electronics Operational current - 1 of 0° Crated value - 1 of 5° Crated value - 2 of 5° Crated value - 3 of 5° Crated value - 4 of 5° Crated value - 4 of 5° Crated value - 2 of 5° Crated value - 2 of 5° Crated value - 3 of 5° Crated value - 4 of 5° Crated value - 4 of 5° Crated value - 4 of 5° Crated value - 6° Cra		
Institutioning state on Institution In	_	
	• •	0.6 W
Response limins	_	
ON-fireduly time 60 90 ms Power Electronics operational current • at 40 °C rated value 7 A • at 50 °C rated value 5.2 A • at 60 °C rated value 7 A • at 60 °C rated value 7 A • at 60 °C rated value 7 A • at 60 °C rated value 8 A • at 60 °C rated value 9 A • with side-dy-side mounting 4 A • with side-dy-side mounting 4 A • at 60 °C rated value 9 A • with side-dy-side mounting 4 A • at 60 °C rated value 9 A • at 70 °C °C °C rated value 9 A • at 70 °C		1.68 W
CPE-cleary time Constructions Construction		
operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value •		
operational current		60 90 ms
at 40 °C rated value at 50 °C rated value 5.2 A 5.3 C rated value 5.2 A 5.2 A 5.3 C rated value 5.2 A 5.2 A 5.3 C rated value 5.2 A 5.3 C rated value 5.2 A 5.3 C rated value 5.3 C rated value 5.4 6 A 5.2 A 5.3 C rated value 5.4 6 A 5.2 A 5.3 C rated value 5.4 6 A 5.2 A 5.3 C rated value 5.4 6 A 5.2 A 5.3 C rated value 5.3 C rated value 5.3 C rated value 5.4 6 A 5.2 A 5.3 C rated value 5.5 C rated value 5.5 C rated value 5.5 C rated value 6.5 C rated value 6.6 C r		
at 50 °C rated value at 55 °C rated value at 55 °C rated value 4.6 A Installation/ mounting fulnesions mounting position fastening method screw and snap-on mounting onto 35 mm DiN rail height 100 mm width 2.2.5 mm depth 141.6 mm required spacing with side by-side mounting — forwards — backwards — upwards — downwards — at the side — on mm — on m	•	
at 65°C rated value 4.6 A 4.6 A Installation munuting dimensions mounting position fastening method neight 100 mm width 22.5 mm depth 41.6 mm required spacing • with side by side mounting — forwards — abakwards — upwards — downwards — downwards — of organded parts — forwards — upwards — ownwards — omm — at the side — ownwards — ownwar		
### at 80 °C rated value from returning onto 35 mm DIN rail ### at 80 °C rated value from returning onto 35 mm DIN rail ### at 80 °C rated value from returning onto 35 mm DIN rail ### at 80 °C rated value from returning onto 35 mm DIN rail ### at 80 °C rated value from returning onto 35 mm DIN rail ### at 80 °C returning value from returning onto 35 mm DIN rail ### at 80 °C rated value from returning va		
mounting position fastening method serve and snap-on mounting (observe derating) fastening method height 100 mm 22.5 mm depth 141.8 mm required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — downwards — of orgrounded parts — forwards — on mm • of main — at the side • of orgrounded parts — forwards — backwards — at the side • of orgrounded parts — forwards — backwards — at the side • of orgrounded parts — forwards — backwards — upwards — backwards — upwards — backwards — upwards — backwards — upwards — backwards — on mm • of mm • of mm • of the side — downwards — backwards — upwards — of mm • of the side — downwards — backwards — upwards — of mm • of the side — downwards — backwards — upwards — of mm • of the side — downwards — of mm • of the side — of		
mounting position vertical, horizontal, standing (observe derating)		4.6 A
fastening method height 100 mm width 22.5 mm depth 141.6 mm required spacing • with side-by-side mounting — forwards — backwards — upwards — of ormal of the side — of grounded parts — forwards — at the side • for grounded parts — forwards — backwards — upwards — of mm — of mm — of grounded parts — forwards — backwards — upwards — of mm — of grounded parts — forwards — upwards — of mm — of grounded parts — of grounded part		
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 - forwards 0 mm - forwards 0 mm - at the side 0 mm - torwards 0 mm - at the side 0 mm - backwards 0 mm - wards 55 mm - downwards 55 mm - downwards 55 mm - downwards 55 mm - downwards - downwards 50 mm - at the side 3.5 mm - downwards - downwar		
width 22.5 mm depth 141.8 mm required spacing • with side-by-side mounting — forwards 0 mm — backwards 50 mm — upwards 50 mm — at the side 0 mm — forwards 0 mm — backwards 0 mm — backwards 0 mm — upwards 50 mm — backwards 0 mm — upwards 50 mm — downwards 50 mm Ambient conditions 50 mm installation altitude at height above sea level maximum 4 000 m; For derating see manual ambient emporature • during operation • during transport -40 +70 °C • during transport -40 +70 °C environmental category during operation according to IEC 60721 386 (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 °% oir pressure according to SN 31205 900 1 080 hPa protocol is supported • PROFINET 10 protocol • PROFINET protocol No • PROFINET protocol No • PROFINET protocol No • PROFINET perminals type of electrical connection		
required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — of many and a side of the side		
required spacing with side-by-side mounting - forwards - backwards - upwards - downwards - downwards - at the side - for grounded parts - forwards - backwards - backwards - forwards - forwards - forwards - backwards - mount of the side - forwards - backwards - upwards - backwards - upwards - backwards - upwards - the side - upwards - downwards - at the side - downwards - at the side - so mm - downwards - downwards - downwards - at the side - so mm - downwards - the side - so mm - downwards - so mm -		
• with side-by-side mounting - forwards - backwards - upwards - downwards - downwards - at the side - at the side - for grounded parts - forwards - backwards - upwards - forwards - on mm - backwards - upwards - backwards - upwards - backwards - upwards - backwards - upwards - at the side - 3.5 mm - at the side - downwards - work and the side - work an	·	141.6 mm
- forwards 0 mm - backwards 0 mm - upwards 50 mm - downwards 50 mm - at the side 0 mm - forwards 0 mm - forwards 0 mm - forwards 0 mm - at the side 0 mm - backwards 0 mm - backwards 0 mm - backwards 0 mm - backwards 50 mm - downwards 50 mm - at the side 3.5 mm - downwards 50 mm - downwards 50 mm - difference of the side 10 mm - which is side 10 mm - downwards 50 mm - downwards 50 mm - downwards 50 mm - downwards 50 mm - during operation 2.5 +60 °C - during storage 4.0 +70 °C - during transport 4.0 +70 °C - environmental category during operation according to IEC 80721 Side (no lee formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 - environmental category during operation 10 95 % air pressure according to SN 31205 900 1 060 hPa - PROFINET IO protocol protocol is supported 4. PROFINET IO protocol No PROFINET IO protocol Supported 8. PROFINET IO protocol No PROFINET IO protocol		
- backwards - upwards - downwards - downwards - at the side - for grounded parts - forwards - backwards - upwards - backwards - upwards - upwards - upwards - upwards - downwards - upwards - at the side - downwards - at the side - downwards - bom - at the side - downwards - bom - at the side - downwards - bom - downwards - commandations - proceed is supported - proceod is supported - proceod is supported - proceod is supported - beneficial protocol - protocol is supported - beneficial protocol - protocol is supported - beneficial protocol - protocol is supported - left-face protocol - protocol is supported As-Interface protocol - for main current circuit - for auxiliary and control circuit - for forned toms-beneficial conductor cross-sections for main contacts - solid - finely stranded with core end processing - finely stranded wi		
- upwards 50 mm 50 mm 50 mm 50 mm 50 mm 60		
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side • for grounded parts - upwards - backwards - upwards - at the side - downwards - at the side - downwards - at the side - downwards - bomm Ambient conditions Installation altitude at height above sea level maximum 4 000 m; For derating see manual Ambient temperature during operation 40 uning storage during storage during transport during transport environmental category during operation according to IEC (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 PROFISafe protocol No Protocol Sation protocol No Proto		
- at the side • for grounded parts - forwards - backwards 0 mm - 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 environmental category during operation according to IEC 87721 relative humidity during operation air pressure according to SN 31205 ground air pressure according to SN 31205 protocol is supported • 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 auxilliary and control circuit • for auxilliary and control circuit wire length for motor unshielded maximum type of connectable conductor cross-sections for main contatos • 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)	·	
• for grounded parts		
- forwards 0 mm 0 mm - backwards 0 mm - backwards 50 mm - at the side 3.5 mm - downwards 50 mm - at the side 3.5 mm - downwards 50 mm - MmInut conditions installation altitude at height above sea level maximum 4 000 m; For derating see manual minut temperature • during operation - 25 +60 °C - 40 +70 °C - 40 .		0 mm
backwards upwards at the side downwards downwards Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during storage during transport during managent according to IEC 60721 environmental category during operation according to IEC 60721 relative humidity during operation alt side in the devices, 3M6 alt reside in the devices, 3M6 alt reside in the devices, 3M6 proCrising to SN 31205 good 1 060 hPa Communication/ Protocol PROFINET IO protocol -		
- upwards - at the side - downwards 50 mm 3.5 mm 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 siar pressure according to SN 31205 giar pressure according to SN 31205 Communication/ Protocol PROFINET IO protocol • PROFINET IO protocol • PROFISE protocol PROFISE protocol Protocol is supported • PROFISE protocol • PROFISE proto		
- 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 • during transport • during transport 40 +70 °C • during transport 90 +70 °C environmental category during operation according to IEC (sand must not get into the devices), 3M6 relative humidity during operation 10 95 % air pressure according to SN 31205 900 1 080 hPa Communication/ Protocol protocol is supported • PROFINET IO protocol • PROFINET IO protocol • PROFIsafe protocol 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 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 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) 1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport • during transport • during transport • during operation according to IEC • during transport • during operation according to IEC • during transport • during operation according to IEC • during transport • during transport • during operation according to IEC • during transport • during operation according to IEC • or	·	
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport • during tran		
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport • during operation according to IEC 60721 (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 • PROFINET IO protocol • PROFINET IO protocol Product function bus communication No protocol is supported AS-Interface protocol No Connections/ Terminals type of electrical connection • for main current circuit • for axililary 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)		50 mm
ambient temperature • during operation • during storage • during transport • durin		
 during operation during storage during transport during during operation according to IEC (sand must not get into the devices), 3M6 relative humidity during operation air pressure according to SN 31205 goo 1 060 hPa Communication/ Protocol protocol is supported PROFINET IO protocol PROFISafe protocol No 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 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) 		4 000 m; For derating see manual
 during storage during transport during transport during transport environmental category during operation according to IEC 60721 grelative humidity during operation air pressure according to SN 31205 goo 1 060 hPa Communication/ Protocol PROFINET IO protocol PROFIsafe protocol PROFIsafe protocol No protocol is supported AS-Interface protocol No protocol is supported AS-Interface protocol supported AS-Interface protocol type of electrical connection of or auxiliary and control circuit for auxiliary and control circuit screw-type terminals wire length for motor unshielded maximum type of connectable conductor cross-sections for main contacts solid solid finely stranded with core end processing 40 +70 °C 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 ak6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 no in type 6 no in type of connectable conductor cross-sections for main contacts solid 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) 1x (0,5 4 mm²), 2x (0,5 1,5 mm²) 	-	05 +00.00
• during transport environmental category during operation according to IEC 60721 relative humidity during operation air pressure according to SN 31205 PROFINET IO protocol protocol is supported • PROFINET IO protocol PROFISafe protocol protocol is supported AS-Interface protocol protocol is supported AS-Interface protocol protocol is supported No protocol is supported No protocol is supported No protocol is supported SI-Interface protocol protocol is supported AS-Interface protocol protocol is supported AS-Interface protocol protocol is supported AS-Interface protocol vipe 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 • solid • finely stranded with core end processing -40 +70 °C 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 -8K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 -10 95 % 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 -10 95 % 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 -10 95 % 3K6 (no ice formation only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 -10 95 % 3K6 (no ice formation of per into the devices), 3M6 -10 95 % 3K6 (no ice formation of per into the devices), 3M6 -10 95 % 3K6 (no ice formation of per into the devices), 3M6 -10 95 % 3K6 (no ice for devices), 3M6 -10 95 % 3K6 (no ice for devices), 3M6 -10 95 % 3K6 (no ice for devices), 3M6 -10 95 % -10 95 % -10 95 % -10 95 % -10 95 % -10 95 % -10 95 % -		
environmental category during operation according to IEC 60721 relative humidity during operation air pressure according to SN 31205 Communication/ Protocol protocol is supported PROFINET IO protocol PROFISafe protocol protocol is supported AS-Interface protocol No Protocol is supported AS-Interface protocol Vo Connections/ Terminals type of electrical connection of or 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 of ninely 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)		
relative humidity during operation 10 95 % air pressure according to SN 31205 protocol is supported PROFINET IO protocol Product function bus communication protocol is supported AS-Interface protocol No 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 10 95 % 900 1 060 hPa No No No Screw-type terminals screw-type terminals for main circuit, screw-type terminals for control circuit screw-type terminals 100 m		
relative humidity during operation air pressure according to SN 31205 protocol is supported PROFINET IO protocol PROFISATE 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 wire length for motor unshielded maximum type of connectable conductor cross-sections for main contacts solid finely stranded with core end processing 10 95 % 900 1 060 hPa No No No Sorew-type terminals No No Sorew-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)		
air pressure according to SN 31205 Communication/ Protocol protocol is supported PROFINET IO protocol PROFISATE protocol PROFISATE protocol No 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 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)		
protocol is supported PROFINET IO protocol PROFISATE protocol PROFISATE 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 For auxiliary and control circuit wire length for motor unshielded maximum type of connectable conductor cross-sections for main contacts Solid Sol		
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 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 Screw-type terminals for main circuit, screw-type terminals for control circuit screw-type terminals 100 m		
 PROFINET IO protocol PROFIsafe protocol 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 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 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) 1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
 ▶ 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 ★ for auxiliary and control circuit ★ screw-type terminals ★ wire length for motor unshielded maximum type of connectable conductor cross-sections for main contacts ♠ solid ♠ solid ↑ x (0,5 4 mm²), 2x (0,5 2,5 mm²) ♠ finely stranded with core end processing ↑ x (0,5 4 mm²), 2x (0,5 1,5 mm²) 		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 • 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 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 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) 1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		
 for main current circuit for auxiliary and control circuit screw-type terminals 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 1x (0,5 4 mm²), 2x (0,5 1,5 mm²) 		screw-type terminals for main circuit, screw-type terminals for control 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 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) 1x (0,5 4 mm²), 2x (0,5 1,5 mm²) 		
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) ● finely stranded with core end processing 1x (0,5 4 mm²), 2x (0,5 1,5 mm²)		•
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)	·	• •
 ◆ 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) 		
• 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)

 solid or stranded 	0.5 4 mm²
 finely stranded with core end processing 	0.5 4 mm²
connectable conductor cross-section for auxiliary contacts	
 solid or stranded 	0.5 2.5 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid	1x (0,5 2,5 mm²), 2x (1,0 1,5 mm²)
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1 mm²)
for AWG cables for auxiliary contacts	1x (20 14), 2x (18 16)
AWG number as coded connectable conductor cross section	
 for main contacts 	20 12
 for auxiliary contacts 	20 14
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

Approvals Certificates

General Product Approval

EMV













Test Certificates other Railway **Environment**

Type Test Certificates/Test Report



Confirmation

Special Test Certific-<u>ate</u>

Environmental Confirmations

Further information

Information on the packaging

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

Information for data generation and storage

https://support.industry.siemens.com/cs/ww/en/view/109995012

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=3RM1207-1AA04

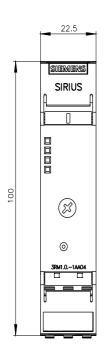
Cax online generator

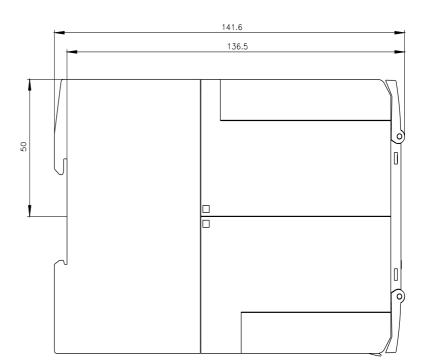
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RM1207-1AA04

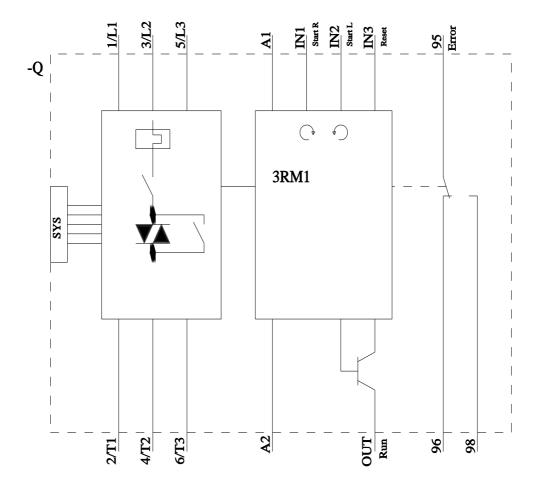
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RM1207-1AA04

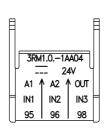
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RM1207-1AA04&lang=en

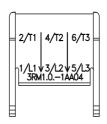












last modified: 5/1/2025 🖸