## DATASHEET - RAM05-W200A32-512RS1

Reversing starter, 6.6 A, Sensor input 2, AS-Interface  $(\!\!B, S-7.A.E.$  for 62 modules, HAN Q5, with manual override switch



Part no.

## RAM05-W200A32-512RS1 199107

Product name	Eaton Moeller® series Rapid Link Reversing starter
Part no.	RAM05-W200A32-512RS1
EAN	4015081971657
Product Length/Depth	120 millimetre
Product height	270 millimetre
Product width	220 millimetre
Product weight	1.8 kilogram
Certifications	IEC/EN 60947-4-2 UL approval UL 60947-4-2 CE CCC RoHS
Product Tradename	Rapid Link
Product Type	Reversing starter
Product Sub Type	None
Catalog Notes	Assigned motor rating: for normal internally and externally ventilated 4 pole, three phase asynchronous motors with 1500 rpm at 50 Hz or 1800 min at 60 Hz
Features	Parameterization: drivesConnect mobile (App) Parameterization: Fieldbus Diagnostics and reset on device and via AS-Interface Parameterization: Keypad Parameterization: drivesConnect
Fitted with:	Manual override switch Thermistor monitoring PTC Key switch position AUTO Key switch position OFF/RESET Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation Electronic motor protection Thermo-click Key switch position HAND Short-circuit release
Functions	External reset possible Temperature compensated overload protection
Class	CLASS 10 A
Degree of protection	IP65 NEMA 12
Electromagnetic compatibility	Class A
Lifespan, electrical	10,000,000 Operations (at AC-3)
Lifespan, mechanical	10,000,000 Operations (at AC-3)
Model	Reversing starter
Overload release current setting - min	0.3 A
Overload release current setting - max	6.6 A
Overvoltage category	III III III III III III III III III II
Product category	Motor starter
Protocol	AS-Interface profile cable: S-7.4 for 62 modules ASI
Rated impulse withstand voltage (Uimp)	4000 V
System configuration type	Center-point earthed star network (TN-S network) AC voltage Phase-earthed AC supply systems are not permitted.
Туре	Reversing starter
Voltage type	DC

Mundue auditor	Version
Mounting position	Vertical
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, 11 ms, Half-sinusoidal shock 11 ms, 1000 shocks per shaft
Vibration	Resistance: According to IEC/EN 60068-2-6 Resistance: 57 Hz, Amplitude transition frequency on acceleration Resistance: 10 - 150 Hz, Oscillation frequency Resistance: 6 Hz, Amplitude 0.15 mm
Altitude	Max. 1000 m Max. 2000 m Above 1000 m with 1 % performance reduction per 100 m
Ambient operating temperature - min	-10 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-40 °C
Ambient storage temperature - max	70 °C
Climatic proofing	< 95 %, no condensation In accordance with IEC/EN 50178
Current limitation	Adjustable, motor, main circuit 0.3 - 6.6 A, motor, main circuit
Input current	6.6 A (at 150 % Overload)
Mains switch-on frequency	Maximum of one time every 60 seconds
Mains voltage tolerance	380 - 480 V (-15 %/+10 %, at 50/60 Hz)
Off-delay	20 - 35 ms
On-delay	20 - 35 ms
Output frequency	50/60 Hz
Overload cycle	AC-53a
Rated frequency - max	63 Hz
Rated frequency - min	47 Hz
Rated operational current (Ie)	6.6 A
Rated operational current (Ie) at 150% overload	6.6 A 6.6 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V Rated operational power at 380/400 V, 50 Hz - max	3 kW
Rated operational power at 380/400 V, 50 Hz - min	0.09 kW
Rated operational power at AC-3, 220/230 V, 50 Hz	0 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	3 kW
Rated operational voltage	400 V AC, 3-phase 480 V AC, 3-phase
Supply frequency	50/60 Hz, fLN, Main circuit
Assigned motor power at 460/480 V, 60 Hz, 3-phase	3 HP
Rated conditional short-circuit current (Iq)	10 kA
Rated conditional short-circuit current (Iq), type 2, 380 V, 400 V, 415 V	0 A
Short-circuit protection (external output circuits)	Type 1 coordination via the power bus' feeder unit, Main circuit
Rated control supply voltage (Us) at AC, 50 Hz - min	0 V
Rated control supply voltage (Us) at AC, 50 Hz - max	0 V
Rated control supply voltage (Us) at AC, 60 Hz - min	0 V
Rated control supply voltage (Us) at AC, 60 Hz - max	0 V
Rated control supply voltage (Us) at DC - min	0 V
Rated control supply voltage (Us) at DC - max	
Rated control voltage (Uc)	24 V DC (-15 %/+20 %, external via AS-Interface® plug)
Connection	Connections pluggable in power section
Interfaces	Specification: S-7.A.E. (AS-Interface®) Number of slave addresses: 62 (AS-Interface®) Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA

Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Cable length	10 m, Radio interference level, maximum motor cable length
10.2.2 Corrosion resistance	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of assemblies	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## **Technical data ETIM 8.0**

Low-voltage industrial components (EG000017) / Motor starter/Motor starter combination (EC001037)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ecl@ss10.0.1-27-37-09-05	
[AJZ718013])	

[AJZ/16013])		
Type of motor starter		Reversing starter
With short-circuit release		Yes
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	0 - 0
Voltage type for actuating		DC
Rated operation power at AC-3, 230 V, 3-phase	kW	0
Rated operation power at AC-3, 400 V	kW	3
Rated power, 460 V, 60 Hz, 3-phase	kW	2.238
Rated power, 575 V, 60 Hz, 3-phase	kW	0
Rated operation current le	А	6.6
Rated operation current at AC-3, 400 V	А	6.6
Overload release current setting	А	0.3 - 6.6
Rated conditional short-circuit current, type 1, 480 Y/277 V	А	10,000
Rated conditional short-circuit current, type 1, 600 Y/347 V	А	0
Rated conditional short-circuit current, type 2, 230 V	А	0
Rated conditional short-circuit current, type 2, 400 V	А	0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as normally closed contact		0
Ambient temperature, upper operating limit	°C	55
Temperature compensated overload protection		Yes
Release class		CLASS 10 A

Type of electrical connection for auxiliary- and control current circuit         Image: Second S			
Anit mounting possible         Notestimic           With ison of command positions         Notestimic           Subble for merging stop         Notestimic           Coordination class according to IEC 00047-4-3         Class 1           Number of indicator lights         0           External react possible         Notestimic           Vith fuse         Notestimic           Degree of protection (IPF)         Notestimic           Supporting protocol for TOPIPIP         Notestimic           Supporting protocol for FRDERBUS         Notestimic           Supporting protocol for FRDERBUS         Notestimic           Supporting protocol for SADR         Notestimic <t< td=""><td>Type of electrical connection of main circuit</td><td></td><td>Plug-in connection</td></t<>	Type of electrical connection of main circuit		Plug-in connection
With transformer         Nomber         Nomber         Nomber           Subble for emergency stop         2         3           Subble for emergency stop         0         0           Cordination class according to EC 609/1-3         0         0           Number of inclustor lights         0         0           External reser possible         0         0           Degree of protection (IPL)         0         0           Degree of protection (IPL)         0         0           Supporting protection for ICREPU         0         0           Supporting protection for INTERBUS         0         0           Supporting protection for PROFINET CBA         0         0           Supporting protection for PROFINET CBA         0         0 <td>Type of electrical connection for auxiliary- and control current circuit</td> <td></td> <td>Plug-in connection</td>	Type of electrical connection for auxiliary- and control current circuit		Plug-in connection
Number of commargency stop         Image: Provide stop of the stop of	Rail mounting possible		No
Suble for emergency stop         Non-         Non-           Coordination class according to EC 608474-3         Class 1           Number of indicator lights         Coordination class according to EC 608474-3         Class 1           Submer of indicator lights         Solonal Class 1         Solonal Class 1           Starral reset possible         Solonal Class 1         Solonal Class 1           Degree of protection (IPC ALA)         Solonal Class 1         Solonal Class 1           Supporting protocol for FOP/FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOP/FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOP/FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOP/FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOB-FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOB-FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOB-FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOB-FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOB-FIRE         Solonal Class 1         Solonal Class 1           Supporting protocol for FOB-FIRE         Solonal Clas	With transformer		No
Conditation lights according to IEC 80947.4-3       Is a 1         Number of indicator lights       0         External reset possible       Vis 4         Degree of protection (IP)       Is 3         Degree of protection (IPA)       Is 3         Degree of protection (NEMA)       Is 3         Supporting protocol for POP/IPUS       No         Supporting protocol for CAN       No         Supporting protocol for NTRBUS       No         Supporting protocol for No       No         S	Number of command positions		2
Number of indicator lights         Image: set possible         Image: set possibl	Suitable for emergency stop		No
Extend less to solve       No         With luse       No         Degree of protection (IP)       PB5         Bagree of protection (NEMA)       I         Supporting protect for TCP/IP       No         Supporting protect for FROFIBUS       No         Supporting protect for AAN       No         Supporting protect for FROFINET CBA       No	Coordination class according to IEC 60947-4-3		Class 1
With tase       No         Degree of protection (NEMA)       P65         Supporting protect for TAPD/FBUS       No         Supporting protect for FAPD/FBUS       No         Supporting protect for Mothus       No         Supporting protect for Mothus       No         Supporting protect for Mothus       No         Supporting protect for SUED/FAT       No         Supporting protect for FAD/FAUP       No         Supporting protect for F	Number of indicator lights		0
Degree of protection (IP)         P65           Supporting protocol for CP/IP         I           Supporting protocol for CP/IP         No           Supporting protocol for ASI         No           Supporting protocol for ASI         No           Supporting protocol for Adotus         No           Supporting protocol for ADACOMENT         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONE	External reset possible		Yes
Description         Image: Constraint of the system         Image: Constraint of the system           Supporting protocol for TCP/IP         Mo         Mo           Supporting protocol for TCP/IP         Mo         Mo           Supporting protocol for CAN         Mo         Mo           Supporting protocol for CAN         Mo         Mo           Supporting protocol for CAN         Mo         Mo           Supporting protocol for Mothos         Mo         Mo           Supporting protocol for Mothos         Mo         Mo           Supporting protocol for Supportin	With fuse		No
Supporting protocol for TCP/IP         No           Supporting protocol for PROFIBUS         No           Supporting protocol for CAN         No           Supporting protocol for INTERBUS         No           Supporting protocol for ASI         No           Supporting protocol for ASI         Supporting protocol for Data-Highway           Supporting protocol for Data-Highway         Supporting protocol for Data-Highway           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for PROFINET CBA <td< td=""><td>Degree of protection (IP)</td><td></td><td>IP65</td></td<>	Degree of protection (IP)		IP65
Supporting protocol for PR0FIBUS         No           Supporting protocol for CAN         No           Supporting protocol for ASI         No           Supporting protocol for Modbus         No           Supporting protocol for Data-Highway         No           Supporting protocol for PR0FINET IO         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for Ads-Interface Safety at Work         No           Supporting protocol for Ads-Interface Safety at Work         No           Supporting protocol for PR0FINET OB         No           Supporting protocol for Ads-Interface Safety at Work	Degree of protection (NEMA)		12
Supporting protocol for CAN         No           Supporting protocol for INTERBUS         No           Supporting protocol for ASI         Yes           Supporting protocol for Data-Highway         No           Supporting protocol for Data-Highway         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET         No	Supporting protocol for TCP/IP		No
Autom         No           Supporting protocol for NITERBUS         Yes           Supporting protocol for ASI         No           Supporting protocol for Modous         No           Supporting protocol for Data-Highway         No           Supporting protocol for Data-Highway         No           Supporting protocol for DoviceNet         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for INTERBUS-Safety at Work         No           Supporting protocol for PROFINET         No           Supporting protocol for PROFINER         No           Supporting protocol for FORDERS         No           Supporting protocol for FORDERS         No           Supporting protocol for PROFINER         No           Supporting protocol for SafetyBUS p         No <td>Supporting protocol for PROFIBUS</td> <td></td> <td>No</td>	Supporting protocol for PROFIBUS		No
Supporting protocol for ASI         Yes           Supporting protocol for Madbus         No           Supporting protocol for Data-Highway         No           Supporting protocol for DeviceNet         No           Supporting protocol for SUCONET         No           Supporting protocol for DROFINET IO         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for SUCONES         No           Supporting protocol for FROFINET CBA         No           Supporting protocol for FROFINET	Supporting protocol for CAN		No
Suporting protocol for Mathus         No           Suporting protocol for Data-Highway         No           Suporting protocol for SUCONET         No           Suporting protocol for SUCONET         No           Suporting protocol for PROFINET OBA         No           Suporting protocol for SPROFINET CBA         No           Suporting protocol for FORDINET CBA         No           Suporting protocol for Searce Safety at Work         No           Suporting protocol for PADE-Iselfor Safety At Work         N	Supporting protocol for INTERBUS		No
Suporting protocol for Data-Highway         No           Suporting protocol for DaviceNet         No           Suporting protocol for DROFINET DON         No           Suporting protocol for PROFINET CBA         No           Suporting protocol for FOROFINET CBA         No           Suporting protocol for Foundation Fieldbus         No           Suporting protocol for DaviceNet Sefecty at Work         No           Suporting protocol for PROFISATE         No           Suporting protocol for PROFISATE         No           Suporting protocol for DaviceNet Sefecty at Work         No           Suporting protocol for PROFISATE         No           Suporting	Supporting protocol for ASI		Yes
Suporting protocol for DeviceNet         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for FROFINET CBA         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for StereCOS         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for StereCOS         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for StereCos         No           Supporting protocol for Sterecol for	Supporting protocol for Modbus		No
Supporting protocol for SUCONET         No           Supporting protocol for LON         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for SERCOS         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for SERCOS         No           Supporting protocol for SerterNet/IP         No           Supporting protocol for SetterNet/IP         No           Supporting protocol for NOFINET CBA         No           Supporting protocol for SetterNet/IP         No           Supporting protocol for SetterNet/IP         No           Supporting protocol for No         No           Supporting protocol for SetterNetNetNetNetNetNetNetNetNetNetNetNetNetN	Supporting protocol for Data-Highway		No
Supporting protocol for LON       No         Supporting protocol for PROFINET IO       No         Supporting protocol for PROFINET CBA       No         Supporting protocol for SERCOS       No         Supporting protocol for SerCOS       No         Supporting protocol for Fundation Fieldbus       No         Supporting protocol for SterCOS       No         Supporting protocol for SterCOS       No         Supporting protocol for Fundation Fieldbus       No         Supporting protocol for SterCOS       No         Supporting protocol for DeviceNet Safety at Work       No         Supporting protocol for SterCOS	Supporting protocol for DeviceNet		No
Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for SERCOS         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for Fhundation Fieldbus         No           Supporting protocol for Fhundation Fieldbus         No           Supporting protocol for Sterces         No           Supporting protocol for NEREUS-Safety at Work         No           Supporting protocol for PROFISafe         No           Supporting protocol for PROFISafe         No           Supporting protocol for Sterces         No           Supporting protocol	Supporting protocol for SUCONET		No
Supporting protocol for PROFINET CBA Supporting protocol for PROFINET CBA Supporting protocol for SERCOS Supporting protocol for Foundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for AS-Interface Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for INTERBUS-Safety Supporting protocol for SAfetyBUS p	Supporting protocol for LON		No
Supporting protocol for SERCOS       No         Supporting protocol for Foundation Fieldbus       No         Supporting protocol for EtherNet/IP       No         Supporting protocol for AS-Interface Safety at Work       No         Supporting protocol for INTERBUS-Safety       No         Supporting protocol for PROFIsafe       No         Supporting protocol for SERCOS       No         Supporting protocol for PROFIsafe       No         Supporting protocol for SERCOS       No         Supporting protocol for SERCOS       No         Supporting protocol for PROFIsafe       No         Supporting protocol for other bus systems       No         Supporting protocol for other bus systems       No         Width       Tom         Height       Tom	Supporting protocol for PROFINET IO		No
Supporting protocol for Foundation Fieldbus       No         Supporting protocol for EtherNet/IP       No         Supporting protocol for AS-Interface Safety at Work       No         Supporting protocol for DeviceNet Safety       No         Supporting protocol for INTERBUS-Safety       No         Supporting protocol for PROFIsafe       No         Supporting protocol for SafetyBUS p       No         Supporting protocol for other bus systems       No         Width       mm         Height       mm	Supporting protocol for PROFINET CBA		No
Suporting protocol for EtherNet/IP Supporting protocol for AS-Interface Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for INTERBUS-Safety Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Supporting protocol for there Safety at More Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for there Safety at More Supporting protocol for SafetyBUS p Supporting Protocol	Supporting protocol for SERCOS		No
Supporting protocol for AS-Interface Safety at Work       Mo         Supporting protocol for DeviceNet Safety       Mo         Supporting protocol for INTERBUS-Safety       Mo         Supporting protocol for PROFIsafe       Mo         Supporting protocol for SafetyBUS p       Mo         Supporting protocol for SafetyBUS p       Mo         Width       mm         Height       Mo	Supporting protocol for Foundation Fieldbus		No
Supporting protocol for DeviceNet Safety       Mo         Supporting protocol for INTERBUS-Safety       Mo         Supporting protocol for PROFIsafe       Mo         Supporting protocol for SafetyBUS p       Mo	Supporting protocol for EtherNet/IP		No
Supporting protocol for INTERBUS-Safety     Mo       Supporting protocol for PROFIsafe     Mo       Supporting protocol for SafetyBUS p     Mo       Supporting protocol for SafetyBUS p     Mo       Width     mm       Height     Mo	Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for PROFIsafe     Mo       Supporting protocol for SafetyBUS p     Mo       Supporting protocol for other bus systems     Mo       Width     mm     220       Height     mm     270	Supporting protocol for DeviceNet Safety		No
Supporting protocol for SafetyBUS p     Mo       Supporting protocol for other bus systems     Mo       Width     mm     20       Height     mm     270	Supporting protocol for INTERBUS-Safety		No
Supporting protocol for other bus systemsModelWidthmmHeightmm20	Supporting protocol for PROFIsafe		No
Widthmm20Heightmm270	Supporting protocol for SafetyBUS p		No
Height mm 270	Supporting protocol for other bus systems		No
	Width	mm	220
Depth mm 120	Height	mm	270
	Depth	mm	120