## DATASHEET - RAM05-W212A32-5120S1

Reversing starter, 6.6 A, Sensor input 2, Actuator output 1, 230/277 V AC, AS-Interface ( $^{
m R}$ , S-7.A.E. for 62 modules, HAN Q5



Part no.

## RAM05-W212A32-5120S1 198540

Product name	Eaton Moeller® series Rapid Link Reversing starter
Part no.	RAM05-W212A32-5120S1
EAN	4015081964154
Product Length/Depth	120 millimetre
Product height	270 millimetre
Product width	220 millimetre
Product weight	1.64 kilogram
Certifications	RoHS CE CCC IEC/EN 60947-4-2 UL 60947-4-2 UL approval
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) Diagnostics and reset on device and via AS-Interface Parameterization: Keypad Parameterization: drivesConnect Parameterization: Fieldbus
Fitted with:	1 Actuator output         Short-circuit release         Key switch position HAND         Key switch position AUTO         Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation         Key switch position OFF/RESET         Thermo-click         Thermistor monitoring PTC         Electronic motor protection
Functions	For actuation of motors with mechanical brake 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	
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	Phase-earthed AC supply systems are not permitted. AC voltage Center-point earthed star network (TN-S network)
Туре	Reversing starter
Voltage type	DC

Mounting position	Vertical
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, 11 ms, Half-sinusoidal shoc
	ms, 1000 shocks per shaft
Vibration	Resistance: 57 Hz, Amplitude transition frequency on acceleration Resistance: 6 Hz, Amplitude 0.15 mm Resistance: 10 - 150 Hz, Oscillation frequency Resistance: According to IEC/EN 60068-2-6
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	In accordance with IEC/EN 50178 < 95 %, no condensation
Current limitation	0.3 - 6.6 A, motor, main circuit
	Adjustable, 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 Rated frequency - min	63 Hz 47 Hz
Rated operational current (Ie)	6.6 A
Rated operational current (le) at 150% overload	6.6 A
Rated operational current (le) at AC-3, 380 V, 400 V, 415 V	6.6 A
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	480 V AC, 3-phase 400 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
Braking current	$\leq$ 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake
Braking voltage	230/277 V AC -15 % / +10 %, Actuator for external motor brake
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	0 V
Rated control voltage (Uc)	230/277 V AC (external brake 50/60 Hz) 24 V DC (-15 %/+20 %, external via AS-Interface® plug)

<b>0</b>	
Connection	Connections pluggable in power section
Interfaces	Specification: S-7.A.E. (AS-Interface®) Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA Number of slave addresses: 62 (AS-Interface®)
Number of autiliant contacts (normally closed contacts)	0
Number of auxiliary contacts (normally closed contacts)	
Number of auxiliary contacts (normally open contacts)	1
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])

		Reversing starter
		Yes
V	/	0 - 0
V	/	0 - 0
V	/	0 - 0
		DC
k	κW	0
k	κW	3
k	W	2.238
k	κW	0
Д	4	6.6
Д	4	6.6
Д	4	0.3 - 6.6
Д	4	65,000
Д	4	0
Д	4	0
A	4	0
		<ul> <li>V</li> <li>V</li> <li>V</li> <li>V</li> <li>KW</li> <li>KW</li> <li>kW</li> <li>kW</li> <li>kW</li> <li>k</li> <li>A</li> <li>A<!--</td--></li></ul>

Number of auxiliary contacts as normally open contact		1
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 of main circuit		Plug-in connection
Type of electrical connection for auxiliary- and control current circuit		Plug-in connection
Rail mounting possible		No
With transformer		No
Number of command positions		2
Suitable for emergency stop		No
Coordination class according to IEC 60947-4-3		Class 1
Number of indicator lights		0
External reset possible		Yes
With fuse		No
Degree of protection (IP)		IP65
Degree of protection (NEMA)		12
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		Yes
Supporting protocol for Modbus		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		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 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	220
Height	mm	270
Depth	mm	120
Depth	mm	120