Specifications



Photo is representative





Eaton 198532

Eaton Moeller® series Rapid Link - Reversing starter, 6.6 A, Sensor input 2, 230/277 V AC, AS-Interface®, S-7.4 for 31 modules, HAN Q5, with manual override switch

General specifications	
PRODUCT NAME	Eaton Rapid Link Reversing starter
CATALOG NUMBER	198532
EAN	4015081964079
PRODUCT LENGTH/DEPTH	120 mm
PRODUCT HEIGHT	270 mm
PRODUCT WIDTH	220 mm
PRODUCT WEIGHT	1.8 kg
CERTIFICATIONS	CCC IEC/EN 60947-4-2 CE RoHS UL 60947-4-2 UL approval UL 60947-4-2
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
MODEL CODE	RAMO5-W202A31-512RS1



Features & Functions	
	Parameterization: Fieldbus
FEATURES	Parameterization: drivesConnect mobile (App) Parameterization: Keypad Diagnostics and reset on device and via AS-Interface
	Parameterization: drivesConnect
FITTED WITH:	Key switch position HAND Short-circuit release Thermistor monitoring PTC Manual override switch Key switch position OFF/RESET Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation Key switch position AUTO Thermo-click Electronic motor protection
FUNCTIONS	For actuation of motors with mechanical brake Temperature compensated overload protection External reset possible

General	
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	Ш
PRODUCT CATEGORY	Motor starter
PROTOCOL	AS-Interface profile cable: S-7.4 for 31 modules ASI
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4000 V
SYSTEM CONFIGURATION TYPE	AC voltage Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network)
ТҮРЕ	Reversing starter
VOLTAGE TYPE	DC

Ambient conditions, mechanical	
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: 10 - 150 Hz, Oscillation frequency Resistance: 57 Hz, Amplitude transition frequency on acceleration Resistance: 6 Hz, Amplitude 0.15 mm

Climatic environmental conditions	
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

Main circuit	
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 - MIN	47 Hz
RATED FREQUENCY - MAX	63 Hz
RATED OPERATIONAL CURRENT (IE)	6.6 A
RATED OPERATIONAL CURRENT (IE) AT 150% OVERLOAD	6.6 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	6.6 A
RATED OPERATIONAL POWER AT 380/400 V, 50 HZ - MIN	0.09 kW
RATED OPERATIONAL POWER AT 380/400 V, 50 HZ - MAX	3 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
SYSTEM CONFIGURATION TYPE	AC voltage Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network)

Motor rating

ASSIGNED MOTOR
POWER AT 460/480 V, 60 3 HP
HZ, 3-PHASE

Braking function	
BRAKING CURRENT	≤ 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

Short-circuit rating	
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

Control 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)	24 V DC (-15 %/+20 %, external via AS-Interface® plug) 230/277 V AC (external

Communication	
CONNECTION	Connections pluggable in power section
INTERFACES	Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA Specification: S-7.4 (AS-Interface®) Number of slave addresses: 31 (AS-Interface®)

Contacts	
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0

brake 50/60 Hz)

Cable	
CABLE LENGTH	10 m, Radio interference level, maximum motor cable length

Design verification		Resources	
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.		eaton-rapid-link- generation-change-ramo4- to-ramo5-ap040198-en- us.pdf
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.		
10.2.3.2 VERIFICATION OF RESISTANCE OF	Meets the product		eaton-rapid-link-5-rasp5- profinet-communication- ap040215-en-us.pdf
TO NORMAL HEAT 10.2.3.3 RESIST. OF	standard's requirements.	to-rasp5-ap040197-en- us.pdf eaton-rapid-link-5- configuration-rockwell-pk ap040195-en-us.pdf Electromagnetic compatibility (EMC) eaton-rapid-link-firmware update-rasp4-ap040219- en-us.pdf eaton-rapid-link- generation-change-ra-sp- to-rasp5-ap040196-en- us.pdf eaton-powerxl-da1-dc1- de1-internal-motor- protection-ap040016-en- us.pdf eaton-rapid-link- generation-change-ra-mo to-ramo4-ap040081-en- us.pdf eaton-rapid-link-	stick-3-ap040190-en-
INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.		eaton-rapid-link- generation-change-rasp4- to-rasp5-ap040197-en-
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.		<u>Electromagnetic</u>
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be evaluated.		eaton-rapid-link-firmware- update-rasp4-ap040219-
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.		eaton-rapid-link-
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.		to-rasp5-ap040196-en-
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.		de1-internal-motor-
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.		<u>us.pdf</u>
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.		generation-change-ra-mo- to-ramo4-ap040081-en-
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	ls the panel builder's responsibility.		generation-change-ra-sp-
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.		·
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.		<u>db1-de1-rapidlink5-</u> <u>firmware-update-</u>
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.	BROCHURES	eaton-powerxl-variable- frequency-drives-material-
10.9.4 TESTING OF ENCLOSURES MADE OF	Is the panel builder's responsibility.		handling-brochure- br040017en-en-us.pdf

INSULATING MATERIAL			
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.		

	eaton-rapid-link-5- brochure-br040014en-en- us.pdf
CATALOGUES	eaton-rapid-link-5-drive- system-catalog- ca040002en-en-us
	Product Range Catalog Drives Engineering
	DA-DC-00003964.pdf
DECLARATIONS OF	DA-DC-00004523.pdf
CONFORMITY	DA-DC-00004184.pdf
	DA-DC-00004525.pdf
	eaton-bus-adapter- rapidlink-reversing-starter- dimensions-002.eps
DRAWINGS	eaton-bus-adapter- rapidlink-reversing-starter- dimensions-003.eps
ECAD MODEL	ETN.RAMO5-W202A31- 512RS1.edz
INSTALLATION INSTRUCTIONS	<u>IL034084ZU</u>
INSTALLATION VIDEOS	Rapid Link 5
MANUALS AND USER GUIDES	eaton-rapid-link-5- mn034004en-us.pdf
MCAD MODEL	ramo5 v10.dwg
	ramo5_v10.stp
SOFTWARE, FIRMWARE, AND APPLICATIONS	eaton-rapidlink5-firmware- release-note-mz034006en- us.pdf

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	



Eaton Corporation plc

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