



Reversing starter, 3p, 6.6A, 400V, +manual override switch, connection at bottom

**Part no.** RAMO-W00A11S-C32RS1  
**Article no.** 150159  
**Catalog No.** RAMO-W00A11S-C32RS1

## Delivery program

Product range			motor starter
Basic function			Reversing starter
Description			integrated PTC thermistor monitoring and Thermoclick with safe isolation Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation Connections pluggable in power section Connection of supply voltage via adapter cable on round or flexible busbar junction Diagnostics and reset on device and via AS-Interface with AUTO - OFF/RESET - HAND key switches with electronic motor protection for assigned motor rating from 0.09 to 3 kW (400 V)
Repair switch			with manual override switch
Rated operational voltage	$U_e$		400 V AC, 3-phase
Output voltage with $V_e$	$U_2$		400 V AC, 3-phase
Mains voltage (50/60Hz)	$U_{LN}$	V	380 (-10%) - 480 (+10%)
At 150% overload	$I_e$	A	6.6
Mains voltage (50/60Hz)	$U_{LN}$	V	380 (-10%) - 480 (+10%)
<b>assigned motor rating P</b>			
Note			at 400 V, 50 Hz
150 % Overload	P	kW	0,09 - 3
Note			at 440 - 480 V, 60 Hz
150 % Overload	P	HP	0,125 - 3
Note			for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with $1500 \text{ rpm}^{-1}$ at 50 Hz or $1800 \text{ min}^{-1}$ at 60 Hz
AS-Interface profile cable			S-7.4 for 31 modules

## Technical data

### General

Standards			IEC/EN 60947-4-2 IEC/EN 60947-5-1 IEC/EN 61000-6-2 IEC/EN 61000-6-4 Directive 2002/95/EG (RoHS) CE approval
Climatic proofing	$\rho_w$	%	< 95%, non-condensing IEC/EN 50178
Ambient temperature			
Storage	$\theta$	°C	-30 - +70
Overvoltage category			III
Rated impulse withstand voltage	$U_{imp}$	kV	4
Radio interference level			
Environment (EMC)			Device class A
maximum motor cable length	l	m	10
Mechanical shock resistance		g	1000 shocks per shaft, semi-sinusoidal 15 g/11 ms IEC/EN 60068-2-27
Vibration			Oscillation frequency: 10 - 150 Hz Amplitude 0.15 mm: 6 Hz Amplitude transition frequency on acceleration: 57 Hz IEC/EN 60068-2-6
Mounting position			Vertical
Altitude		m	0 - 1000 m above sea level above 1000 m with 1 % performance reduction per 100 m max. 2000 m
Degree of Protection			IP65 IEC/EN 60529

### Main circuit

Supply			
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Rated operational voltage	$U_e$		400 V AC, 3-phase
Mains voltage (50/60Hz)	$U_{LN}$	V	380 (-10%) - 480 (+10%)
Input current (150% overload)	$I_{LN}$	A	6.6
System configuration			AC voltage Center-point earthed star network (TN-S network) Phase-earthed AC supply systems are not permitted.
Supply frequency	$f_{LN}$	Hz	50/60
Frequency range	$f_{LN}$	Hz	47 - 63 Hz ( $\pm 0\%$ )
Mains switch-on frequency			Maximum of one time every 60 seconds
Rated conditional short-circuit current	$I_q$	kA	< 10
Short-circuit protection for output circuits, external			Type 1 coordination via the power bus' feeder unit
<b>Power section</b>			
Function			Reversing starter with relays, thyristors and bypass contacts, 2-phase controlled
On-delay	$t_{ON}$	ms	20 - 35
Off-delay	$t_{OFF}$	ms	20 - 35
Lifespan, mechanical	Operations		AC3: > 10.000.000
Lifespan, electrical	Operations		AC3: > 10.000.000
Overload cycle			AC-53a
Output voltage with $V_e$	$U_2$		400 V AC, 3-phase
Output Frequency	$f_2$	Hz	= $f_{LN}$
Rated operational current			
At 150% overload	$I_e$	A	6.6
Motor current limit	$I$	A	0.3 - 6.6 adjustable
Fitted with			with manual override switch
<b>Motor feeder</b>			
Note			for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with $1500 \text{ rpm}^{-1}$ at 50 Hz or $1800 \text{ min}^{-1}$ at 60 Hz
Note			at 400 V, 50 Hz
Note			at 440 - 480 V, 60 Hz

### Control section

External control voltage	$U_c$	V	24 V DC - 15 % / + 20 % via AS-Interface <sup>®</sup> plug
AS-Interface <sup>®</sup>			max. total power consumption from AS-Interface <sup>®</sup> power supply unit (30 V): 250 mA Specification: S-7.4 Number of slave addresses: 31

## Design verification as per IEC/EN 61439

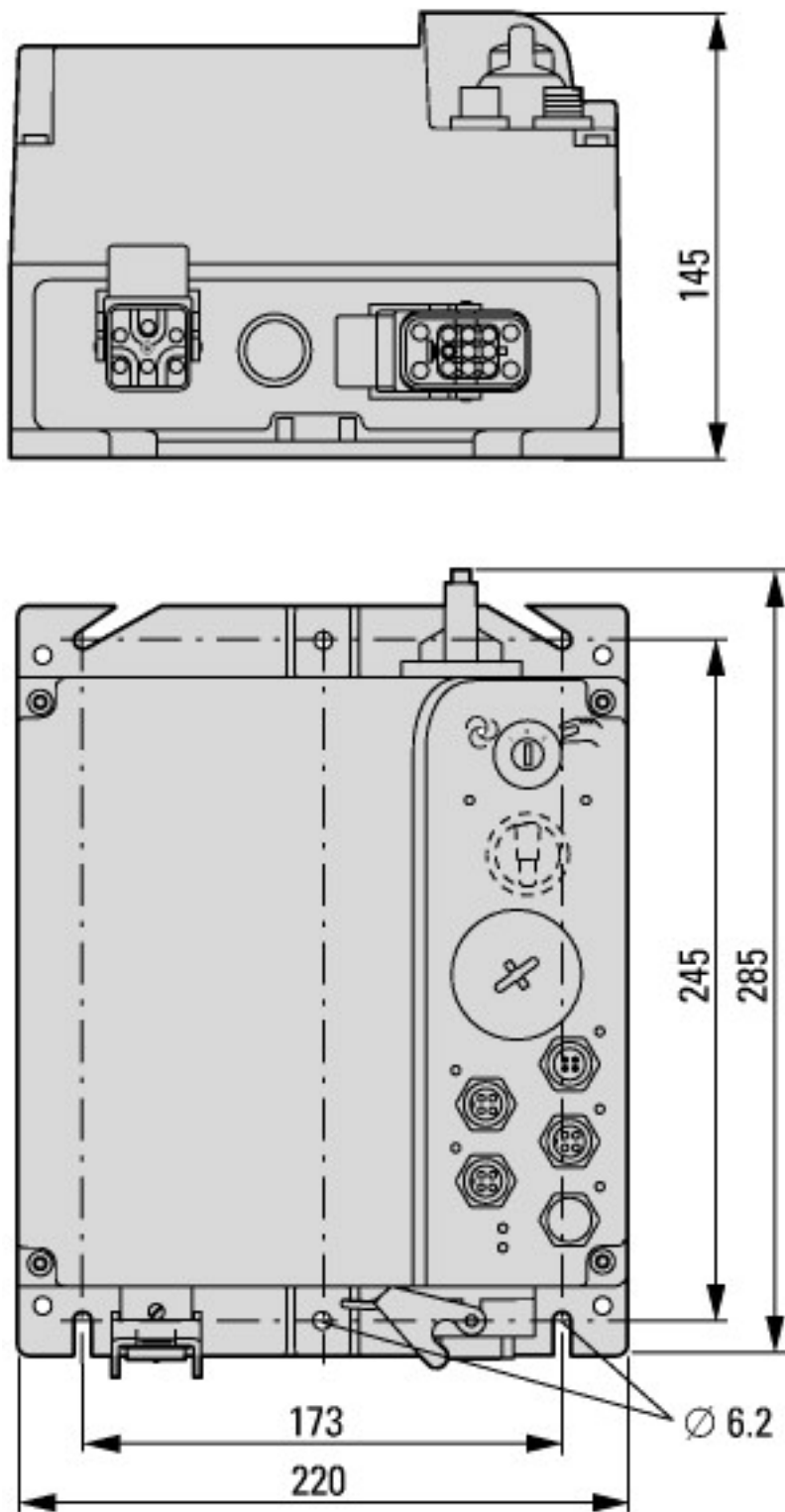
Technical data for design verification			
Operating ambient temperature min.		°C	-10
Operating ambient temperature max.		°C	55

## Technical data ETIM 6.0

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@ss8.1-27-37-09-05 [AJZ718010])			
Kind of motor starter			Repair switch
With short-circuit release			Yes
Rated control supply voltage $U_s$ at AC 50HZ		V	400 - 400
Rated control supply voltage $U_s$ at AC 60HZ		V	400 - 400
Rated control supply voltage $U_s$ at DC		V	0 - 0
Voltage type for actuating			AC
Rated operation power at AC-3, 230 V, 3-phase		kW	
Rated operation power at AC-3, 400 V		kW	3
Rated power, 460 V, 60 Hz, 3-phase		kW	
Rated power, 575 V, 60 Hz, 3-phase		kW	
Rated operation current $I_e$		A	6.6

Rated operation current at AC-3, 400 V	A	
Overload release current setting	A	0.3 - 6.6
Rated conditional short-circuit current, type 1, 480 Y/277 V	A	10000
Rated conditional short-circuit current, type 1, 600 Y/347 V	A	
Rated conditional short-circuit current, type 2, 230 V	A	
Rated conditional short-circuit current, type 2, 400 V	A	
Number of auxiliary contacts as normally open contact		
Number of auxiliary contacts as normally closed contact		
Ambient temperature, , upper operating limit	°C	
Temperature compensated overload protection		Yes
Release class		
Type of electrical connection of main circuit		-
Type of electrical connection for auxiliary- and control current circuit		-
Rail mounting possible		No
Degree of protection (IP)		IP65
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

## Dimensions



with manual override switch

## Additional product information (links)

### IL03406019Z Rapid Link: Motor Control Unit

IL03406019Z Rapid Link: Motor Control Unit [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03406019Z2015\\_07.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03406019Z2015_07.pdf)

### MN03406003Z Rapid Link 4.0

MN03406003Z Rapid Link 4.0 - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03406003Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03406003Z_DE.pdf)

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