DATASHEET - MSC-R-12-M12(24VDC)/BBA



Reversing starter, 380 V 400 V 415 V: 5.5 kW, Ir= 8 - 12 A, 24 V DC, DC voltage



MSC-R-12-M12(24VDC)/BBA Part no. 103007 Catalog No. **Alternate Catalog EL-Nummer** 4315468

XTSR012B012BTDNL-A

(Norway)

No.

Delivery program

Basic function			Reversing starters (complete devices)	
Basic device			MSC	
			IE3 🗸	
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.	
Connection to SmartWire-DT			no	
Motor ratings				
Motor rating				
AC-3				
380 V 400 V 415 V	Р	kW	5.5	
Rated operational current				
AC-3				
380 V 400 V 415 V	l _e	А	11.3	
Rated short-circuit current 380 - 415 V	Ιq	kA	100	
Setting range				
Setting range of overload releases	l _r	A	8 - 12	
Coordination			Type of coordination "1"	
Contact sequence				
Actuating voltage			24 V DC	
			DC voltage	
Motor-protective circuit-breakers PKZM0-12				
Contactor DILM12-01()				
DOL starter wiring set Mechanical connection element and electrical electric contact module PKZM0-XRM12				
Notes				
The reversing starter (complete units) consists of a PKZM0 motor protective circuit breaker and two DILM contactors.				
These combinations are mounted on the busbar adapters.				
The connection of the main circuit between the motor protective circuit breaker and the contactor is established with an electrical contact module.				
Complete units with mechanical interlock, starters up to 12 A also feature electrical interlock.				
Further information Technical data PKZM0	! -	Page → PKZM0		

Technical data			
General			
Standards			UL 508 (on request) CSA C 22.2 No. 14 (on request)
Altitude		m	Max. 2000
Ambient temperature			-25 - +55
Main conducting paths			
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			111/3
Rated operational voltage	U _e	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	le	А	12
Additional technical data			
Motor protective circuit breaker PKZM0, PKE			PKZM0 motor-protective circuit-breakers, see motor-protective circuit-breakers/ PKZM0 product group DILM contactors, see contactor product group DILET timing relay, ETR, see contactors, electronic timing relays product group
Power consumption			
DC operated	Sealing	W	4.5
Rating data for approved types			
Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			
AC		V	600
AC		А	15
DC		V	250
DC		А	1

Design verification as per IEC/EN 61439

Design vermeation as per reorem 01405			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	12
Heat dissipation per pole, current-dependent	P _{vid}	W	3.4
Equipment heat dissipation, current-dependent	P _{vid}	W	10.2
Static heat dissipation, non-current-dependent	P _{vs}	w	2.6
Heat dissipation capacity	P _{diss}	w	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			

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 7.0

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])

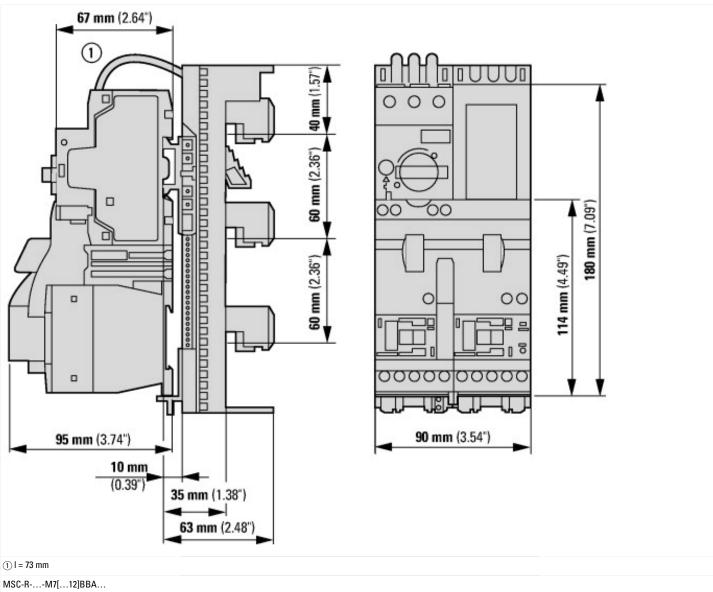
With adms-circuit relaxable Ye Ye Rade circuit supply voltage to AL SMIZ V 0 Rade circuit supply voltage to AL SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 Rade circuit supply voltage to ST SMIZ V 0 <t< th=""><th>Kind of motor starter</th><th></th><th>Reversing starter</th></t<>	Kind of motor starter		Reversing starter
Bailed centrel apply veltage Us at AC 60/2. V 0 0 Bailed centrel apply veltage Us at AC 60/2. V 2 24 Values type for actualing C C C Bailed genation power at AC 3.00 V. 3-phase KV 5 Bailed genation power at AC 3.400 V. KV 0 Bailed genation power at AC 3.400 V. KV 0 Bailed genation power at AC 3.400 V. A 13 Bailed genetion current type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/277 V. A 0 Bailed canditional abort-circuit current, type 1.400 V/270 V. A 0	With short-circuit release		-
hated control supply values us DC 0 Voltage type for actuating 0C Rated operation power at AC-3, 400 V 6 Rated operation current stath 1-3 Rated conditional short-circuit current, type 1, 460 V/277 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 500 V/97 V 6 Rated conditional short-circuit current, type 1, 600 V/97 V 6 Rated conditional short-circuit current, type 1, 600 V/97 V 6 <	Rated control supply voltage Us at AC 50HZ	V	0 - 0
Number of aucliang C Rated aperation power at AC3.200 X.5 phase IAW 3 Rated aperation power at AC3.400 V IAW 5 Rated aperation power at AC3.400 V IAW 0 Rated aperation power at AC3.400 V IAW 0 Rated aperation current to AC3.400 V IAW 0 Rated aperation current at AC3.400 V IAW 0 Rated conditional short-circuit current, type 1,400 V/27 V IAW 0 Rated conditional short-circuit current, type 1,400 V/27 V IAW 0 Rated conditional short-circuit current, type 2,200 V IAW 0 Number of aucliary contracts as normally closed contract IAW 0 Number of aucliary contracts as normally closed contract IAW 0 Type of electrical contencing hyper operating limit Vision 0 Type of electrical contencing hyper operating limit IAW 0 Type of electrical contencing hyper operating limit Screw connection Type of electrical contencing hyperating limit IAW 0 Type of electrical contencing hyperagerating hyperagerating limit IAW <	Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rate dependion power at AC-3, 201 V, Splase KW 3 Rate dependion power at AC-3, 200 V, Splase KW 5 Rate dependion power at AC-3, 200 V, Splase KW 0 Rate dependion power at AC-3, 200 V, Splase KW 0 Rate dependion power at AC-3, 200 V, Splase KW 0 Rate dependion strent at AC-3, 200 V, Splase KW 0 Rate dependion strent at AC-3, 200 V, Splase KW 0 Rate dependion strent at AC-3, 200 V, Splase KW 0 Rate dependion strent AC-3, 200 V, Splase KW 0 Rate dependion strent AC-3, 200 V, Splase KW 0 Rate dependion strent AC-3, 200 V, Splase KW 0 Rate dependion strent AC-3, 200 V, Splase KW 0 Rate dependion strent AC-3, 200 V, Splase KW 0 Rate dependion strent AC-3, 200 V, Splase KW 0 Number of sublisery contacts as normally closed contact KW 0 Number of sublisery contacts as normally closed contact KW Screw connection Rate dependion strent AC-3, 200 V, Splase Screw connection	Rated control supply voltage Us at DC	V	24 - 24
Rated operation power at AC-3.400 V 55 Rated operation cover, 460 V, 60 Hz, 3-phase KW 0 Rated operation covers 40, 57 V, 60 Hz, 3-phase KW 0 Rated operation covers 40, 57 V, 60 Hz, 3-phase KW 0 Rated operation covers 40, 40 HZ, 3-phase KW 0 Rated operation covers 40, 40 HZ, 400 HZ KW 0 Rated operation covers 40, 400 HZ KW 0 Rated operation covers 40, 400 HZ KW 0 Rated conditional short-circuit coverent, type 1, 200 YAV KM 0 Rated conditional short-circuit coverent, type 2, 200 Y KM 0 Number of auxiliary contacts as normally open contact KW 0 Number of auxiliary contacts as normally open contact KW 8 Yee of electrical connection for auxiliary- and control coverent circuit Yee Screw connection Yee of electrical connection for auxiliary- and control coverent circuit Yee Screw connection Yee of electrical connection for auxiliary- and control coverent circuit Yee Screw connection Yee of electrical connection for auxiliary- and control coverent circuit Yee	Voltage type for actuating		DC
Rated power, 460 V, 60 H2, 2-phase KW 0 Rated power, 575 V, 60 H2, 2-phase KW 0 Rated operation current 1 C A Rated operation current 2 C A Operation current 3, 40.3, 40.0 V C A Rated conditional short-circuit current, type 1, 80.0737 V C A Rated conditional short-circuit current, type 1, 80.0737 V C A Rated conditional short-circuit current, type 2, 200 V C A Number of auxiliary contacts as normally open contact C B Number of auxiliary contacts as normally open contact C B Topperature componsated overload protection C B Rate of contact and protection of main circuit C S Type of electrical connection of rauxiliary and control current circuit C S Strabe for mergency stop S S S Number of factoric life C N N Strabe for mergency stop S S S Number of factoric nof main circuit S S S Strabe for mergency stop N N N <td>Rated operation power at AC-3, 230 V, 3-phase</td> <td>kW</td> <td>3</td>	Rated operation power at AC-3, 230 V, 3-phase	kW	3
Rated power, 575 V, 60 Hz, 3-phase Image: Constraint outure in the	Rated operation power at AC-3, 400 V	kW	5.5
Rated operation current to AC-3, 400 V IA I 3 Rated operation current to AC-3, 400 V IAA I 2 Overload pleases current setting IAA I 2 Rated conditional short-circuit current, type 1, 480 Y277 V IAA I 2 Rated conditional short-circuit current, type 1, 480 Y274 V IAA I 2 Rated conditional short-circuit current, type 1, 480 Y274 V IAA I 2 Rated conditional short-circuit current, type 1, 480 Y274 V IAA I 2 Rated conditional short-circuit current, type 1, 480 Y274 V IAA I 2 Rated conditional short-circuit current, type 1, 480 Y274 V IAA I 2 Rated conditional short-circuit current, type 1, 480 Y274 V IIAA I 2 Number of auxiliary contacts as normally open contact IIAA I 2 I 2 Number of auxiliary contacts as normally closed contact IIAA I 2 I 2 Top of electrical connection or auxiliary and control current circuit IIAA I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 I 2 <td< td=""><td>Rated power, 460 V, 60 Hz, 3-phase</td><td>kW</td><td>0</td></td<>	Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated operation current at AC 3, 400 V/27/ V A 8.12 Ore food release current setting A 8.12 Rated conditional short-circuit current, type 1, 600 V/37/ V A 0 Rated conditional short-circuit current, type 1, 600 V/37/ V A 0 Rated conditional short-circuit current, type 1, 600 V/37/ V A 0 Rated conditional short-circuit current, type 1, 600 V/37/ V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally open contact M 0 Number of auxiliary contacts as normally open contact M 0 Release class C S S Release class M C N Release class C S S S Release class M N S	Rated power, 575 V, 60 Hz, 3-phase	kW	0
Overload release current setting Image: A im	Rated operation current le	А	11.3
Attac conditional short-circuit current, type 1, 600 Y/347 V A 0 Rated conditional short-circuit current, type 2, 200 V A 0 Rated conditional short-circuit current, type 2, 200 V A 0 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally closed contact C 0 Release class C 0 Temperature compensated overload protection C 0 Release class C 0 Release class C 0 Release class C 0 Release class C 0 Number of curviting possible C 0 With transformer C 0 Number of command positions C 0 Stable for emergency stop Cordination class according to EUC 00947-43 C Number of indicator lights C No Degree of protection (NEMA) C No Supporting protecol for RDFIBUS C No Supporting protecol for RDFIBUS No No Supporting rotecol for RDFIBUS No <t< td=""><td>Rated operation current at AC-3, 400 V</td><td>А</td><td>12</td></t<>	Rated operation current at AC-3, 400 V	А	12
Atted conditional short-circuit current, type 1, 200 V/S47 V A 0 Rated conditional short-circuit current, type 2, 200 V A 0 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally contact 0 0 Anbient temperature, upper operating limit 0 0 Release class 0 0 0 Release class CLASS 10 0 0 Release class Serew connection 0	Overload release current setting	А	8 - 12
Rated conditional short-circuit current, type 2, 280 V A 0 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Ambient fauxiliary contacts as normally closed contact 0 0 Ambient of auxiliary contacts as normally closed contact C 6 Ambient tamperature, upper operating limit C 6 Release class C 6 Type of electrical connection of main circuit CASS 10 C Ralease class C Screw connection Subtable for emergency stop C Ves Number of diricator lights C Screw connection Suitable for emergency stop C No Number of indicator lights C Screw connection Suitable for emergency stop C Screw connection Kith fuse No No Subtable for emergency stop C Screw connection Koth fuse Screw connection Screw connection Subtable for emergency stop No Screw connection Subtable for emergency stop Screw co	Rated conditional short-circuit current, type 1, 480 Y/277 V	А	0
Act d conditional short-circuit current, type 2, 400 V A C C Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Ambient temperature, upper operating limit C 60 60 Temperature compensated overload protection C 60 60 Release class C Screw connection CLASS 10 Yope of electrical connection of main circuit Screw connection Screw connection Yope of electrical connection of main circuit Screw connection Screw connection With transformer Screw connection Screw connection Number of command positions Screw connection Screw connection Suitable for emergency stop Screw connection Screw connection Number of indicator lights Screw connection Screw connection Suitable for emergency stop Screw connection Screw connection Suitable for emergency stop Screw connection Screw connection Suitable for emergency stop Screw connection Screw connection <td< td=""><td>Rated conditional short-circuit current, type 1, 600 Y/347 V</td><td>А</td><td>0</td></td<>	Rated conditional short-circuit current, type 1, 600 Y/347 V	А	0
Number of auxiliary contacts as normally open contact Image: source open s	Rated conditional short-circuit current, type 2, 230 V	А	0
Number of auxiliary contacts as normally closed contact Image: Second Seco	Rated conditional short-circuit current, type 2, 400 V	А	0
Ambient temperature, upper operating limit Image: temperature compensated overload protection Image: temperature compensated protection Image: temperature compensate protection Image: temperature compensate protection	Number of auxiliary contacts as normally open contact		0
Temperature compensated overload protection Image: status Image: st	Number of auxiliary contacts as normally closed contact		0
Release class CASS 10 Type of electrical connection of main circuit Serve connection Type of electrical connection for auxiliary- and control current circuit Serve connection Rail mounting possible Yes With transformer No Number of command positions Cass 1 Suitable for emergency stop Serve connection Coordination class according to IEC 60947-4-3 Serve connection Number of indicator lights Serve connection Number of indicator lights Serve connection Suitable for emergency stop Serve connection Number of indicator lights Serve connection Suitable for emergency stop Serve connection Suitable for emergency stop Serve connection Number of indicator lights Serve connection Suitable for emergency stop <	Ambient temperature, upper operating limit	°C	60
Type of electrical connection of main circuit Screw connection Type of electrical connection for auxiliary- and control current circuit Screw connection Rail mouning possible Ves With transformer No Number of command positions O Suitable for emergency stop O Coordination class according to IEC 60047-4-3 O Number of indicator lights O Number of indicator lights O State according to IEC 60047-4-3 O Number of indicator lights O State according to IEC 60047-4-3 No State according to IEC 60047-4-3	Temperature compensated overload protection		Yes
Type of electrical connection for auxiliary- and control current circuit Serew connection Rail mounting possible Vis With transformer No Number of command positions 0 Suitable for emergency stop No Coordination class according to EC 60947-4-3 Common	Release class		CLASS 10
Rail mounting possible Yes Rail mounting possible Yes With transformer No Number of command positions Image: Second S	Type of electrical connection of main circuit		Screw connection
With transformer No Number of command positions 0 <td>Type of electrical connection for auxiliary- and control current circuit</td> <td></td> <td>Screw connection</td>	Type of electrical connection for auxiliary- and control current circuit		Screw connection
Number of command positions Image: Command positions Image: Command positions Suitable for emergency stop Image: Command positions No Coordination class according to IEC 60947-4-3 Image: Command positions Class 1 Number of indicator lights Image: Command positions Image: Command positions Image: Command positions External reset possible Image: Command positions Image: Command positions Image: Command positions With fuse Image: Command positions Image: Command positions Image: Command positions Degree of protection (IPC) Image: Command positions Image: Command positions Image: Command positions Supporting protocol for CPC/IP Image: Command positions Image: Command positions Image: Command positions Supporting protocol for CPA Image: Command positions Image: Command positions Image: Command positions Supporting protocol for CPA Image: Command positions Image: Command positions Image: Command positions Supporting protocol for CASI Image: Command positions Image: Command positions Image: Command positions Supporting protocol for CASI Image: Command positions Image: Command positions Image: Command positions	Rail mounting possible		Yes
Suitable for emergency stopImage: Solution class according to IEC 60947-4-3Image: Solution class according to IEC 60947-4-3 <th< td=""><td>With transformer</td><td></td><td>No</td></th<>	With transformer		No
Coordination class according to IEC 60947-4-3 Class 1 Number of indicator lights 0 External reset possible No With fuse No Degree of protection (IP) P20 Supporting protocol for TCP/IP Other Supporting protocol for PROFIBUS No Supporting protocol for INTERBUS No Supporting protocol for INTERBUS No Supporting protocol for ASI No Supporting protocol for ASI No Supporting protocol for MODBUS No	Number of command positions		0
Number of indicator lightsImage: Constraint of the set possibleImage: Constraint of the set possibleExternal reset possibleNoWith fuseNoDegree of protection (IP)P20Degree of protection (NEMA)OtherSupporting protocol for TCP/IPNoSupporting protocol for PROFIBUSNoSupporting protocol for INTERBUSNoSupporting protocol for INTERBUSNoSupporting protocol for ASINoSupporting protocol for ASINoSupporting protocol for MODBUSNo	Suitable for emergency stop		No
External reset possibleNoWith fuseNoDegree of protection (IP)IP20Degree of protection (NEMA)OtherSupporting protocol for TCP/IPNoSupporting protocol for PROFIBUSNoSupporting protocol for CANNoSupporting protocol for INTERBUSNoSupporting protocol for ASINoSupporting protocol for ASINoSupporting protocol for MODBUSMo	Coordination class according to IEC 60947-4-3		Class 1
With fuseNoDegree of protection (IP)IP20Degree of protection (NEMA)OtherSupporting protocol for TCP/IPNoSupporting protocol for PROFIBUSNoSupporting protocol for CANNoSupporting protocol for INTERBUSNoSupporting protocol for ASINoSupporting protocol for ASINoSupporting protocol for MOBBUSNoSupporting protocol for ASINoSupporting protocol for ASINoSupporting protocol for MOBBUSNoSupporting protocol for ASINoSupporting protocol for MOBBUSNoSupporting protocol for MOBUSNoSupp	Number of indicator lights		0
Degree of protection (IP)P20Degree of protection (NEMA)OtherSupporting protocol for TCP/IPNoSupporting protocol for PROFIBUSNoSupporting protocol for CANNoSupporting protocol for INTERBUSNoSupporting protocol for ASINoSupporting protocol for ASINoSupporting protocol for MDBUSNoSupporting protocol for ASINoSupporting protocol for MDBUSNoSupporting protocol for ASINoSupporting protocol for MDBUSNo	External reset possible		No
Degree of protection (NEMA)OtherSupporting protocol for TCP/IPNoSupporting protocol for PROFIBUSNoSupporting protocol for CANNoSupporting protocol for INTERBUSNoSupporting protocol for ASINoSupporting protocol for MODBUSMo	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 No Supporting protocol for MODBUS Mo	Degree of protection (IP)		
Supporting protocol for PROFIBUS No Supporting protocol for CAN No Supporting protocol for INTERBUS No Supporting protocol for ASI No Supporting protocol for MODBUS Mo	Degree of protection (NEMA)		
Supporting protocol for CAN No Supporting protocol for INTERBUS No Supporting protocol for ASI No Supporting protocol for MODBUS Mo	Supporting protocol for TCP/IP		No
Supporting protocol for INTERBUS No Supporting protocol for ASI No Supporting protocol for MODBUS Mo	Supporting protocol for PROFIBUS		
Supporting protocol for ASI No Supporting protocol for MODBUS No	Supporting protocol for CAN		No
Supporting protocol for MODBUS No	Supporting protocol for INTERBUS		No
	Supporting protocol for ASI		No
Supporting protocol for Data-Highway No	Supporting protocol for MODBUS		
	Supporting protocol for Data-Highway		No

Supporting protocol for SUCONET Model 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 Foundation Fieldbus No Supporting protocol for Foundation Fieldbus No Supporting protocol for SERCOS No Supporting protocol for Foundation Fieldbus No Supporting protocol for Foundation Fieldbus No Supporting protocol for PROFINETAC No Supporting protocol for PROFINETACE No Supporting protocol for NTERBUS-Safety No Supporting protocol for SAfetyBUS p Mo			
Supporting protocol for LON Image: Supporting protocol for PROFINET IO Image: Supporting protocol for PROFINET CBA Image: Supporting protocol for PROFINET CBA Image: Supporting protocol for SERCOS Image: Supporting protocol for SERCOS Image: Supporting protocol for SerCOS Image: Supporting protocol for Foundation Fieldbus Image: Supporting protocol for Foundation Fieldbus Image: Supporting protocol for EtherNet/IP Image: Supporting protocol for DeviceNet Safety at Work Image: Supporting protocol for DeviceNet Safety at Work Image: Supporting protocol for SerCOS Image: Supporting protocol for SerCOS Image: Supporting protocol for SerCOS Image: Supporting protocol for DeviceNet Safety at Work Image: Supporting protocol for DeviceNet Safety Image: Supporting protocol for SerCOS	Supporting protocol for DeviceNet		No
Supporting protocol for PROFINET IO Image: Supporting protocol for PROFINET CBA No Supporting protocol for PROFINET CBA No No Supporting protocol for SERCOS No No Supporting protocol for Foundation Fieldbus No No Supporting protocol for Foundation Fieldbus No No Supporting protocol for AS-Interface Safety at Work Mo No Supporting protocol for DeviceNet Safety at Work No No Supporting protocol for PROFINET ISA No No Supporting protocol for PROFINET CBA No No Supporting protocol for AS-Interface Safety at Work No No Supporting protocol for PROFINET Safety No No Supporting protocol for PROFISA Image: Supporting protocol for SafetyBUS p No Supporting protocol for SafetyBUS p No No No Supporting protocol for other bus systems No No No Supporting protocol for SafetyBUS p No No No No Supporting protocol for other bus systems Mo No No <t< td=""><td>Supporting protocol for SUCONET</td><td></td><td>No</td></t<>	Supporting protocol for SUCONET		No
Suporting protocol for PROFINET CBA Supporting protocol for SRECOS Supporting protocol for Sundation Fieldbus Supporting protocol for Fhundation Fieldbus Supporting protocol for AS-Interface Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for NTERBUS-Safety Supporting protocol for SRECOS Supporting protocol for SafetyBUS p S	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 SafetyBUS p No Supporting protocol for SafetyBUS p No Supporting protocol for Other bus systems No Supporting protocol for SafetyBUS p No Supporting protocol for Other bus systems No Supporting protocol for Other bus systems No Supporting protocol for SafetyBUS p No Supporting protocol for Other bus systems No Supporting protocol for Other bus systems No Supporting protocol for SafetyBUS p No Supporting protocol for Other bus systems No Width Mm Supporting Protocol for Other bus systems	Supporting protocol for PROFINET IO		No
Supporting protocol for Foundation Fieldbus Image: Supporting protocol for EtherNet/IP No Supporting protocol for AS-Interface Safety at Work Image: Supporting protocol for AS-Interface Safety at Work No Supporting protocol for DeviceNet Safety Image: Supporting protocol for INTERBUS-Safety No Supporting protocol for PROFIsafe Image: Supporting protocol for SafetyBUS p No Supporting protocol for SafetyBUS p Image: Supporting protocol for other bus systems No Supporting protocol for other bus systems Image: Supporting protocol for Other bus systems No Width Image: Supporting protocol for Other bus systems Image: Supporting protocol for Other bus systems Supporting protocol for Other bus systems Width Image: Supporting protocol for Other bus systems Image: Supporting protocol for Other bus systems Supporting protocol for Other bus systems Width Image: Supporting protocol for Other bus systems Image: Supporting protocol for Other bus systems Supporting protocol for Other bus systems Width Image: Supporting protocol for Other bus systems Image: Supporting protocol for Other bus systems Supporting protocol for Other bus systems Supporting Protocol for Other bus systems Image: Supporting Protocol for Other bus systems Supporting Protocol for Other bus systems	Supporting protocol for PROFINET CBA		No
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 PROFIsafe Supporting protocol for SafetyBUS p Support	Supporting protocol for SERCOS		No
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 Support	Supporting protocol for Foundation Fieldbus		No
Supporting protocol for DeviceNet Safety Image: Supporting protocol for INTERBUS-Safety Image: Supporting protocol for PROFIsafe Image: Supporting protocol for SafetyBUS p Image: Supporting p Image: Supporting p Image: Support p Image:	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 mm	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 Height mm	Supporting protocol for DeviceNet Safety		No
Supporting protocol for SafetyBUS p No Width mm Height mm	Supporting protocol for INTERBUS-Safety		No
Supporting protocol for other bus systems Mo Width mm 90 Height mm 200	Supporting protocol for PROFIsafe		No
Width mm 90 Height mm 200	Supporting protocol for SafetyBUS p		No
Height mm 200	Supporting protocol for other bus systems		No
	Width	mm	90
Depth mm 154	Height	mm	200
	Depth	mm	154

Approvals

, pp. o taio	
Product Standards	UL60947-4-1A; CSA-C22.2 No. 14-10; IEC60947-4-1; CE marking
UL File No.	E123500
UL Category Control No.	NKJH
CSA File No.	12528
CSA Class No.	3211-04
North America Certification	UL listed, CSA certified
Specially designed for North America	No





Assets (links)

Declaration of CE Conformity 00002885

Instruction Leaflets IL03402006Z2018_04

Additional product information (links)

IL03402006Z (AWA1210-2248) Reversing starter to 12 A

IL03402006Z (AWA1210-2248) Reversing starter to 12 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402006Z2018_04.pdf
IL03402015Z (AWA1210-2324) Busbar adapter	
IL03402015Z (AWA1210-2324) Busbar adapter	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402015Z2018_05.pdf
Motor starters and "Special Purpose Ratings" for the North American market	http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf