### DATASHEET - MSC-R-10-M17(230V50HZ)



Reversing starter, 380 V 400 V 415 V: 3 kW, Ir= 6.3 - 10 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage



Part no.	MSC-R-10-M17(230V50HZ)
Catalog No.	101049
Alternate Catalog	XTSR010B018CFNL
No.	
EL-Nummer	4315474
(Norway)	

### **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	Ρ	kW	3
Rated operational current			
AC-3			
380 V 400 V 415 V	l <sub>e</sub>	А	6.6
Rated short-circuit current 380 - 415 V	Ι <sub>q</sub>	kA	50
Setting range			
Setting range of overload releases	I <sub>r</sub>	A	6.3 - 10
Coordination			Type of coordination "1" Type of coordination "2"
Contact sequence			
Actuating voltage			230 V 50 Hz, 240 V 60 Hz
			AC voltage
Motor-protective circuit-breakers PKZM0-10			
Contactor DILM17-01()			
DOL starter wiring set Mechanical connection element and electrical electric contact module PKZM0-XF	RM32		

#### Notes

The reversing starter (complete unit) consists of a PKZM0 motor-protective circuit-breaker and two DILM contactors.

With the adapter-less top-hat rail mounting of starters up to 12 A, only the motor-protective circuit-breaker on the top-hat rail requires an adapter. The contactors are provided with mechanical support via a mechanical connection element.

Control wire guide with max. 6 conductors up to 2.5mm external diameter or 4 conductors up to 3.5mm external diameter.

From 16 A, the motor-protective circuit-breakers and contactors are mounted on the top-hat rail adapter plate.

The connection of the main circuit between PKZ and contactor is established with electrical contact modules.

Complete units with mechanical interlock, starters up to 12 A also feature electrical interlock.

When using the auxiliary contacts DILA-XHIT... (-> 101042) the plug-in electrical connector can be removed without the removal of the front mounting auxiliary contact.

#### For further information

→ PKZM0
→ 072896
→ DILM
→ 276537
→ 281199

# **Technical data**

Rated impulse withstand voltage     Vacpure     VAC     6000       Overvoltage category/pollution degree     III/3     III/3       Rated operational voltage     Ve     20 415       Rated operational current     Ve     Ve     III/3       Open, 3-pole: 50-60 Hz     Ve     Ve     III/3       380 V 400 V     Ie     Ve     III/3       Additional technical data     Ie     III/3     III/3       Additional technical data     III/3     III/3     III/3       Duel voltage coils 0 Hz     Ie     III/3     III/3       Dull voltage coils 0 Hz     Ie     III/3     III/3	General			
Atisude     سابع المراك الم	Standards			
Abient temperatureSet of a set o	Mounting position			
Main conducting pathsVamp $ImpMaxVACModeModeRated impulse withstand voltageU_{imp}ImpMaxVACImpMaxModeOvervoltage category/pollution degreeU_{e}ImpMaxImpMaxImpMaxRated operational currentU_{e}ImpMaxImpMaxImpMaxOpen, 3-pole: 50 - 60 Hz300 V 400 VImpMaxImpMaxImpMaxAdditional technical dataImpMaxImpMaxImpMaxAdditional technical dataImpMaxImpMaxImpMaxDulk contactorsImpMaxImpMaxImpMaxPower consumption of the coli in a cold state and 1.0 x U_SToul-voltage coli 50 HzImpMaxImpMaxAuxiliary contactorsImpMaxImpMaxImpMaxPilot DulySealingImpMaxImpMaxPilot DulyImpMaxImpMaxImpMaxPilot DulyImpMaxImpMaxImpMaxAdcImpMaxImpMaxImpMaxAdcImpMaxImpMaxImpMaxPilot DulyImpMaxImpMaxImpMaxAdcImpMaxImpMaxImpMaxAdcImpMaxImpMaxImpMaxDuly data point degreeImpMaxImpMaxImpMaxPilot DulyImpMaxImpMaxImpMax$	Altitude		m	Max. 2000
Rate impulse withstand voltage     Mamp     Vac Impulse withstand voltage     Mamp     Vac Impulse withstand voltage     Mamp	Ambient temperature			-25 - +55
Devoltage category/pollution degree     Mage     Magee     Magee </td <td>Main conducting paths</td> <td></td> <td></td> <td></td>	Main conducting paths			
Reted operational voltage     Percent 2     30 - 415       Reted operational current     Image: Provide the second operational current     Image: Provide the second operational current       geory 3-pole: 50 - 60 Hz     Image: Provide the second operational current     Image: Provide the second operational current       geory 400 V     Image: Provide the second operational current     Image: Provide the second operational current       Additional technical data     Image: Provide the second operational current technical current     Provide transport technical current       Additional technical data     Image: Provide the second operational current technical current     Provide transport technical current technical current technical current       Auditional technical data     Image: Provide technical current technical current technical current technical current technical current     Provide technical current te	Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Reted operational current     Image: Constraint of the constraint	Overvoltage category/pollution degree			111/3
Open, 3-pole: 50 – 60 Hz     Image: Constraint of the constraint o	Rated operational voltage	Ue	V	230 - 415
380 V 400 V     Ie     A     0       Additional technical data     Additional technical data     Additional technical data       Motor protective circuit breaker PKZM0, PKE     Image: Controp of the circuit breaker see motor-protective circuit-breakers, see motor-protective circuit-breakers, see contactor product group blkT circuit breakers, see contactor s	Rated operational current			
Additional technical data     Additional technical data     Motor protective circuit breaker PKZM0, PKE	Open, 3-pole: 50 – 60 Hz			
Motor protective circuit breaker PKZM0, PKE   FKZM0 motor-protective circuit-breakers, see motor-proteciters, electinformanteres, election circuit-breakers, see motor-pr	380 V 400 V	Ι <sub>e</sub>	А	10
ILM contactors FXZM0 product group   DILM contactors, see contactor product group   Power consumption of the coil in a cold state and 1.0 x Ug FXZM0 product group   Dual-voltage coil 50 Hz Sealing W   Audiary contacts Sealing W   Pilot Duty Sealing W   Pilot Duty AC operated FXZM0 product group   General Use V A600   Ac Coperated V Pailot Sealing   Ac Coperated V Sealing   Ac Coperated V Sealing   D Coperated V Sealing   Ac Coperated V Sealing	Additional technical data			
Power consumption of the coil in a cold state and 1.0 × Ug     Sealing     Ve     1       Dual-voltage coil 50 Hz     Sealing     Ve     1       Rating data for approved types     File     File     File       Akiliary contacts     File	Motor protective circuit breaker PKZM0, PKE			PKZM0 product group DILM contactors, see contactor product group
Dual-voltage coil 50 Hz     Sealing     W     2.1       Rating data for approved types     E	DILM contactors			
Rating data for approved types     Auxiliary contacts   Auxiliary contacts     Pilot Duty   Model     AC operated   Model     DC operated   Model     AC   Model     Model	Power consumption of the coil in a cold state and 1.0 x $\mathrm{U}_{S}$			
Auxiliary contacts Main   Pilot Duty Pilot Duty   AC operated Page   D operated Page   General Use V   AC V	Dual-voltage coil 50 Hz	Sealing	W	2.1
Pilot DutyImage: Second Se	Rating data for approved types			
AC operatedAG00DC operatedP300General UseIACIACIACIDCIDCI	Auxiliary contacts			
DC operated Model   General Use Model   AC Model   AC AC   DC operated Model   DC operated Model   Model Model	Pilot Duty			
General Use V 60   AC AC AC   DC V 50	AC operated			A600
AC     V     600       AC     A     15       DC     V     250	DC operated			P300
AC A 15 DC V 250	General Use			
DC V 250	AC		V	600
	AC		А	15
DC A 1	DC		V	250
	DC		А	1

# Design verification as per IEC/EN 61439

•			
Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	А	10
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	2.6
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	7.8
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	2.1
Heat dissipation capacity	P <sub>diss</sub>	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])

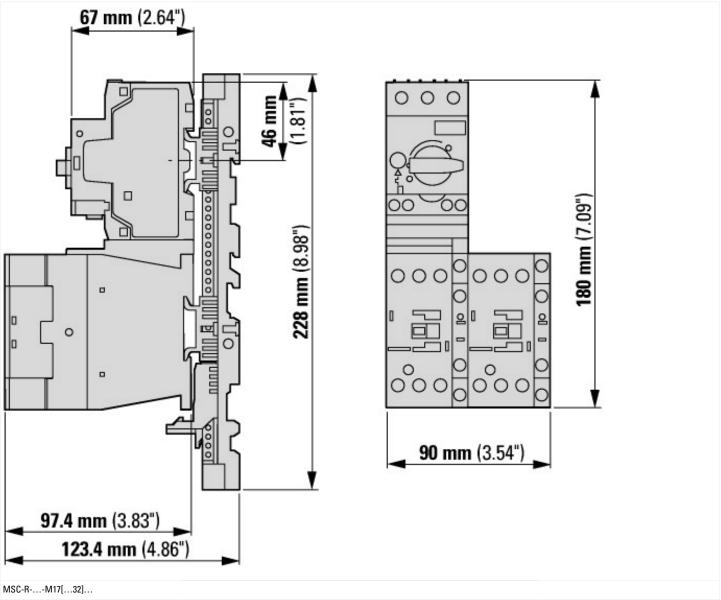
With short-circuit release     Ye       Rated control supply voltage Us at AC 50HZ     20     230     230       Rated control supply voltage Us at AC 50HZ     20     20     -0       Rated control supply voltage Us at AC 50HZ     20     0     -0       Rated control supply voltage Us at AC 50HZ     20     20     -0       Rated control supply voltage Us at AC 50HZ     20     0     -0       Rated control supply voltage Us at AC 50HZ     20     0     -0       Rated porestion power at AC-3, 230 (X -> phase     22     -0     -0       Rated operation power at AC-3, 400 V     20     0     -0       Rated power, 575 V, 60 Hz, -> phase     20     0     -0       Rated conditional short-circuit current, type 1, 400 Y/277 V     20     0     -0       Rated conditional short-circuit current, type 2, 200 V     20     -0     -0       Rated conditional short-circuit current, type 2, 400 V     20     -0     -0       Number of auxiliary contacts as normally cobea contact     0     -0     -0       Number of auxiliary contacts as normally cobea contact     0     -0	[AJZ/10013])		
Rated control supply voltage Us at AC 50HZImage: Control supply voltage Us at AC 60HZImage: Control supply Voltage Volta	Kind of motor starter		Reversing starter
Rade control supply voltage Us at AC 60HZ     0     0     0       Raded control supply voltage Us at DC     0     0     0       Rated control supply voltage Us at DC     0     0     0       Rated control supply voltage Us at DC     0     0     0       Rated operation power at AC-3, 230 V, 3-phase     0     0     0       Rated operation power at AC-3, 400 V     0     0     0       Rated power, 575 V, 60 H, 2, 3-phase     0     0     0       Rated power, 575 V, 80 H, 2, 3-phase     0     0     0       Rated operation current ta AC-3, 400 V     A     8.5     10       Overload release current setting     A     8.3     10       Rated conditional short-circuit current, type 1, 400 Y/277 V     A     0     0       Rated conditional short-circuit current, type 2, 230 V     A     0     0       Number of auxiliary contacts as normally open contact     0     0     0       Number of auxiliary contacts as normally closed contact     0     0     0       Number of auxiliary contacts as normally closed contact     Ves     0	With short-circuit release		Yes
Rated control supply voltage Us at DC     I     0       Voltage type for actuating     AC       Rated operation power at AC-3, 230 V, 3-phase     KW     2       Rated operation power at AC-3, 400 V     KW     4       Rated operation power at AC-3, 400 V     KW     0       Rated operation current tele     KW     0       Rated power, 575 V, 60 Hz, 3-phase     KW     0       Rated operation current tele     CA     8       Overload release current setting     SA     3       Rated conditional short-circuit current, type 1,480 V/277 V     GA     0       Rated conditional short-circuit current, type 2,230 V     AA     50000       Rated conditional short-circuit current, type 2,230 V     AA     50000       Number of auxiliary contacts as normally open contact     G     0       Number of auxiliary contacts an normally closed contact     G     G       Number of auxiliary contacts an normally closed contact     G     G       Number of auxiliary contacts an normally closed contact     G     G       Number of auxiliary contacts an normally closed contact     G     G       Nup of e	Rated control supply voltage Us at AC 50HZ	V	230 - 230
Action of the number of the section of the	Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated operation power at AC-3, 230 V, 3-phase     kW     2.2       Rated operation power at AC-3, 400 V     4     4       Rated power, 460 V, 60 Hz, 3-phase     KW     0       Rated operation power at AC-3, 400 V     KW     0       Rated operation current Ie     KW     0       Rated operation current ta AC-3, 400 V     KM     0       Overload release current at AC-3, 400 V     KM     0       Overload release current ta C-3, 400 V/ XPT V     KM     0       Rated conditional short-circuit current, type 1, 480 Y/277 V     KMA     0       Rated conditional short-circuit current, type 1, 480 Y/277 V     KAA     0       Rated conditional short-circuit current, type 2, 230 V     KAA     0       Rated conditional short-circuit current, type 2, 400 V     KAA     0       Number of auxiliary contacts as normally closed contact     0     0       Number of current, type 2, 400 V     KMA     0     0       Rated conditional short-circuit current, type 2, 400 V     KMA     0     0       Number of auxiliary contacts as normally closed contact     KMA     0     0       Rated conditional sh	Rated control supply voltage Us at DC	V	0 - 0
Rated operation power at AC-3, 400 V     KW     4       Rated operation power at AC-3, 400 V     KW     0       Rated operation current le     KW     0       Rated operation current le     AA     5       Rated operation current at AC-3, 400 V     GA     0       Overload release current setting     GA     0       Overload release current setting     GA     0       Rated conditional short-circuit current, type 1, 480 Y/277 V     GA     0       Rated conditional short-circuit current, type 1, 600 Y/347 V     GA     0       Rated conditional short-circuit current, type 2, 200 V     GA     0       Rated conditional short-circuit current, type 2, 400 V     GA     0       Number of auxiliary contacts as normally closed contact     G     0       Number of auxiliary contacts as normally closed contact     Fe     0       Type of electrical connection of main circuit     Yes     Screw connection       Type of electrical connection of main circuit     Yes     Screw connection       Rated conditional short-circuit     Screw connection     Screw connection       Mith transformer     No     Screw co	Voltage type for actuating		AC
Rated power, 40 V, 60 Hz, 3-phase     KW     0       Rated power, 45 V, 60 Hz, 3-phase     KW     0       Rated power, 57 V, 60 Hz, 3-phase     KW     0       Rated power, 45 V, 60 Hz, 3-phase     KW     0       Rated power, 45 V, 60 Hz, 3-phase     K     S       Rated operation current 1     S     0       Rated operation current at AC-3, 400 V     K     N       Overload release current setting     K     S       Rated conditional short-circuit current, type 1, 480 Y/277 V     K     N       Rated conditional short-circuit current, type 2, 230 V     K     N     N       Rated conditional short-circuit current, type 2, 400 V     K     N     N       Number of auxiliary contacts as normally open contact     N     N     N       Number of auxiliary contacts as normally closed contact     Yes     S     N       Release class     C     G     CLASS 10     Screw connection       Type of electrical connection of main circuit     Yes     Screw connection     Screw connection       Yes     Non-Contaction     No     Non-Contaction     No <td>Rated operation power at AC-3, 230 V, 3-phase</td> <td>kW</td> <td>2.2</td>	Rated operation power at AC-3, 230 V, 3-phase	kW	2.2
Rated power, 575 V, 60 Hz, 3-phase     KW     0       Rated operation current le     AA     8       Rated operation current a AC-3, 400 V     AA     0       Overload release current setting     GA     3.3 10       Rated operation current is exting     GA     0       Rated conditional short-circuit current, type 1, 480 Y/277 V     AA     0       Rated conditional short-circuit current, type 2, 230 V     AA     0       Rated conditional short-circuit current, type 2, 230 V     AA     0       Number of auxiliary contacts as normally open contact     MO     0       Number of auxiliary contacts as normally closed contact     MO     0       Release class     F     G     0       Release class     Cass 10     Sourcection       Release class     Cass 10     Sourcection       Release class     Cass 10     Sourcection       Rationunting possible     F     Source connection       With transformer     No     Source connection	Rated operation power at AC-3, 400 V	kW	4
Rated operation current le   8.5     Rated operation current at AC-3, 400 V   A     Overload release current setting   AA     Rated operation current at AC-3, 400 V   A     Deveload release current setting   AA     Rated operation current type 1, 480 Y/277 V   AA     Rated conditional short-circuit current, type 1, 600 Y/347 V   AA     Rated conditional short-circuit current, type 2, 230 V   AA     Number of auxiliary contacts as normally open contact   0000     Number of auxiliary contacts as normally closed contact   0     Ambient temperature, upper operating limit   CA     Release class   CLASS 10     Type of electrical connection of main circuit   Serve connection     Rail mounting possible   Yes     Rail mounting possible   Yes     With transformer   Yes     Number of command positions   Yes	Rated power, 460 V, 60 Hz, 3-phase	kW	0
Aread operation current at AC-3, 400 V     A     0       Overload release current setting     6.3 - 10       Rated conditional short-circuit current, type 1, 480 Y/277 V     6.4 A     0       Rated conditional short-circuit current, type 1, 600 Y/347 V     6.4 A     0       Rated conditional short-circuit current, type 2, 230 V     6.4 A     0000       Rated conditional short-circuit current, type 2, 400 V     6.4 A     0000       Number of auxiliary contacts as normally open contact     0     0       Number of auxiliary contacts as normally closed contact     6     0       Temperature, upper operating limit     C     6       Temperature compensated overload protection     Felesas Class     CLASS 10       Ratel anounting possible     Serve connection     Serve connection       Rati mounting possible     Yes     Serve connection	Rated power, 575 V, 60 Hz, 3-phase	kW	0
And Bated conditional short-circuit current, type 1, 480 Y/277 V     And And     6.3 - 10       Rated conditional short-circuit current, type 1, 480 Y/277 V     And     0       Rated conditional short-circuit current, type 1, 600 Y/347 V     And     0       Rated conditional short-circuit current, type 2, 230 V     And     50000       Rated conditional short-circuit current, type 2, 400 V     And     50000       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       Temperature compensated overload protection     Yes     Screw connection       Type of electrical connection of main circuit     Yes     Screw connection       Rati mounting possible     Yes     Screw connection       With transformer     Yes     Screw connection       With transformer     Yes     Screw connection	Rated operation current le	А	8.5
Rated conditional short-circuit current, type 1,480 Y/277 V   A   0     Rated conditional short-circuit current, type 1,600 Y/347 V   A   0     Rated conditional short-circuit current, type 2,230 V   A   50000     Rated conditional short-circuit current, type 2,400 V   A   0     Number of auxiliary contacts as normally open contact   0   0     Number of auxiliary contacts as normally closed contact   0   0     Release class   0   0   0     Type of electrical connection of main circuit   Yes   Yes   0     Type of electrical connection of main circuit   Yes   Yes   Yes     Rail mounting possible   Yes   Yes   Yes     With transformer   Yes   Yes   Yes     Number of command positions   Yes   Yes   Yes     Yes   Yes   Yes   Yes   Yes   Yes     Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes     Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   Yes   Ye	Rated operation current at AC-3, 400 V	А	10
Rated conditional short-circuit current, type 1, 600 Y/347 V   A   0     Rated conditional short-circuit current, type 2, 230 V   A   50000     Rated conditional short-circuit current, type 2, 400 V   A   50000     Number of auxiliary contacts as normally open contact   A   0     Number of auxiliary contacts as normally closed contact   O   0     Ambient temperature, upper operating limit   C   6     Release class   Yes   CLASS 10     Type of electrical connection of main circuit   C   Screw connection     Type of electrical connection for auxiliary - and control current circuit   Yes   Screw connection     With transformer   Yes   Screw connection     Number of command positions   Yes   Screw connection	Overload release current setting	А	6.3 - 10
Rated conditional short-circuit current, type 2, 230 V   A   50000     Rated conditional short-circuit current, type 2, 400 V   A   50000     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   6   6   0     Release class   V   6   0   0     Type of electrical connection of main circuit   V </td <td>Rated conditional short-circuit current, type 1, 480 Y/277 V</td> <td>А</td> <td>0</td>	Rated conditional short-circuit current, type 1, 480 Y/277 V	А	0
Rated conditional short-circuit current, type 2, 400 V   A   50000     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     Temperature compensated overload protection   Yes   CLASS 10     Release class   Screw connection   Screw connection     Type of electrical connection for auxiliary- and control current circuit   Yes   Screw connection     Rail mounting possible   Yes   Screw connection     With transformer   Yes   Screw connection     Screw connection   Screw connection	Rated conditional short-circuit current, type 1, 600 Y/347 V	А	0
Number of auxiliary contacts as normally open contact Image: Contact is a normally closed contact Image: Contact is a normal contact Image: Contact is a n	Rated conditional short-circuit current, type 2, 230 V	А	50000
Number of auxiliary contacts as normally closed contact   Image: contact as normal contact   Ima	Rated conditional short-circuit current, type 2, 400 V	А	50000
Ambient temperature, upper operating limit°C60Temperature compensated overload protectionImage: Second	Number of auxiliary contacts as normally open contact		0
Temperature compensated overload protection   Image: Class of the second seco	Number of auxiliary contacts as normally closed contact		0
Release class CLASS 10   Type of electrical connection of main circuit Screw connection   Type of electrical connection for auxiliary- and control current circuit Screw connection   Rail mounting possible Yes   With transformer No   Number of command positions Image: Strew connection control current circuit	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 mounting possible   Yes     With transformer   No     Number of command positions   Image: Strew connection	Temperature compensated overload protection		Yes
Type of electrical connection for auxiliary- and control current circuit Screw connection   Rail mounting possible Yes   With transformer No   Number of command positions Image: Command positions	Release class		CLASS 10
Rail mounting possible Yes   With transformer Mo   Number of command positions Mo	Type of electrical connection of main circuit		Screw connection
With transformer No   Number of command positions Image: Command positions	Type of electrical connection for auxiliary- and control current circuit		Screw connection
Number of command positions 0	Rail mounting possible		Yes
· · · · · · · · · · · · · · · · · · ·	With transformer		No
Suitable for emergency stop No	Number of command positions		0
	Suitable for emergency stop		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)		IP00
Degree of protection (NEMA)		Other
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 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	90
Height	mm	180
Depth	mm	95

## **Approvals**

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.	3211-24
North America Certification	UL listed, CSA certified
Specially designed for North America	No





### **Assets (links)**

Declaration of CE Conformity 00003118 Instruction Leaflets IL03402006Z2018\_04

## Additional product information (links)

IL03402006Z (AWA1210-2248) Reversing starter	IL03402006Z (AWA1210-2248) Reversing starter to 12 A		
IL03402006Z (AWA1210-2248) Reversing starter ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402006Z2018_04.pdf to 12 A			
IL03402011Z (AWA1210-2266) Reversing starter	to 32 A		
IL03402011Z (AWA1210-2266) Reversing starter to 32 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402011Z2018_06.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		