DATASHEET - EMS2-RO-Z-2,4-24VDC



Reversing starter, 24 V DC, 0,18 - 2,4 A, Screw terminals

Powering Business Worldwide

1/5

Part no. EMS2-RO-Z-2,4-24VDC Catalog No. 197161

Alternate Catalog

EMS2-RO-Z-2,4-24VDC

4100401

EL-Nummer (Norway)

Delivery program

Delivery program			
Product range			Electronic motor starter
Basic function			Reversing starters (complete devices)
Description			DOL starting Reversing start Motor protection Circuit design: safety output stage with bypass, three-phase disconnect.
Motor ratings			
Max. rating for three-phase motors, 50 - 60 Hz			
AC-53a			
380 V 400 V 415 V	P	kW	0.06 - 0.75
Setting range of overload releases	l _r	A_x	0,18 - 2,4
Actuating voltage			24 V DC
Connection technique			Screw terminals
Connection to SmartWire-DT			no

Technical data

Operational voltage range

Operating voltage range min.

Operating voltage range max.

General

Standards			IEC/EN 60947-4-2 UL508
Ambient temperature			
Storage		°C	
Min. ambient temperature, storage		°C	- 40
Ambient temperature, storage max.		°C	+ 80
Open		°C	
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	+70
Weight		kg	0.22
Mounting			Top-hat rail IEC/EN 60715, 35 mm
Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Mounting position			Vertical Motor feeder at bottom
Terminal capacity			
Screw terminals			
Terminal capacity main cable			
		mm^2	0.2 - 2.5
		AWG	24 - 14
Terminal capacity control circuit cables			
		mm^2	0.14 - 2.5
		AWG	26 - 14
tightening torque		N/m	0.5 - 0.6
Main conducting paths			
Rated operational voltage	U _e	V AC	500

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550

Rated operational current			
AC-51	l _e	Α	2.4
AC-53a	I _e	Α	2.4
			AC-53a: Please note possible derating.
Setting range of overload releases	I _r	A_x	0,18 - 2,4
Release class		CLASS	10
Heat dissipation	P_V	W	1.1 - 3.3
Control section			
Rated control voltage	U_s	V DC	24
Control voltage range		V	19,2 - 30 V DC
Residual ripple on the input voltage		%	≦ 5
Rated control current	I_s	mA	40
Actuating circuit (ON, L, R)			
Rated actuation voltage	U_c	V	24
Switching level "Low"		V	-3 - +9.6 V DC
Switching level "confirm Off"		V	< 5 V DC
Switching level "High"		V	19.2 - 30 V DC
Rated actuating current	Ic	mA	5
Relay outputs			
Contacts			
CO = changeover			1 CO
Rated operational current			
AC-15			
230 V	l _e	Α	3
DC-13			
24 V	I _e	Α	2
Electromagnetic compatibility (EMC)			
Radio interference suppression			EN 55011 EN 61000-6-3, Class A (emitted interference, radiated)
Technical safety parameters:			

Design verification as per IEC/EN 61439

Notes

Design verincation as per 126/218 01459			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	2.4
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	3.3
Static heat dissipation, non-current-dependent	P _{vs}	W	1
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
			If necessary, Allow for derating
EC/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.

motor protection

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])

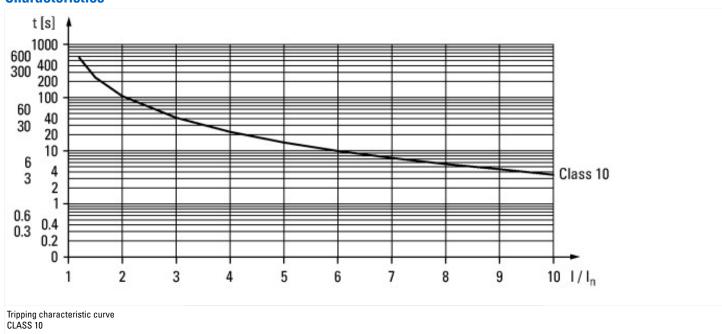
Kind of motor starter Reversing starter With short-circuit release No Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 60HZ V 24 - 24 Rated control supply voltage Us at DC V 24 - 24 Voltage type for actuating DC Rated operation power at AC-3, 230 V, 3-phase kW 0.37 Rated operation power at AC-3, 400 V W 0.5 0.0 Rated operation current at AC-3, 400 V W 0.5 Rated operation current at AC-3, 400 V W 0.0 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 0.18 - 3 Rated operation current at AC-3, 400 V A 0.18 - 3 Rated operation current at AC-3, 400 V A 0.18 - 3 Rated operation patron patron at Current, type 1, 480 Y/277 V A 0.18 - 3 Rated conditional short-circuit current, type 2, 400 V A	[AJZ/18013])		
Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at AC 50HZ V 0 - 0 Rated control supply voltage Us at DC V 24 - 24 Voltage type for actuating DC DC Rated operation power at AC-3, 230 V, 3-phase WW 0.75 Rated operation power at AC-3, 400 V WW 0.75 Rated operation current Early application power at AC-3, 400 V WW 0.75 Rated operation current Early application power at AC-3, 400 V AW 0.75 Rated operation current Early application power at AC-3, 400 V AW 0.75 Rated operation current Early application power at AC-3, 400 V A 2.4 Rated operation current Early application Early application at Secure Early application	Kind of motor starter		Reversing starter
Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at DC V 24 - 24 Voltage type for actuating DC Rated operation power at AC-3, 230 V, 3-phase kW 0.37 Rated operation power at AC-3, 400 V kW 0.75 Rated power, 575 V, 60 Hz, 3-phase kW 0 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 2.4 Overload release current setting A 2.4 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally open contact B 0 Number of auxiliary contacts as normally closed contact C 60 Release class C CASS 10 Release class C C C Release class C	With short-circuit release		No
Rated control supply voltage Us at DC V 24-24 Voltage type for actuating DC Rated operation power at AC-3, 230 V, 3-phase WW 0.37 Rated operation power at AC-3, 400 V WW 0.5 Rated power, 460 V, 60 Hz, 3-phase WW 0 Rated power, 575 V, 60 Hz, 3-phase WW 0 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 0.8-3 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0.8-3 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0.9 Rated conditional short-circuit current, type 2, 400 V A 0.9 Rated conditional short-circuit current, type 2, 400 V A 0.9 Number of auxiliary contacts as normally open contact B 0.9 Number of auxiliary contacts as normally closed contact Yes 0.9 Release class Yes 0.0 Release class Yes 0.0 Release class Yes 0.0 Release class Yes 0.0<	Rated control supply voltage Us at AC 50HZ	V	0 - 0
Voltage type for actuating DC Rated operation power at AC-3, 230 V, 3-phase kW 0.37 Rated operation power at AC-3, 400 V kW 0.75 Rated power, 480 V, 60 Hz, 3-phase kW 0 Rated power, 575 V, 80 Hz, 3-phase kW 0 Rated operation current at AC-3, 400 V A 2.4 Rated operation current at AC-3, 400 V A 2.4 Volveload release current setting A 0.8 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 1, 500 Y/37 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally open contact Yes 6 Ambient temperature, upper operating limit °C 60 Temperature compensated overload protection Yes Screw connection Release class Cerea Conditional short-circuit current circuit Screw connection Rail mounting possible Yes Screw connection <td>Rated control supply voltage Us at AC 60HZ</td> <td>V</td> <td>0 - 0</td>	Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated operation power at AC-3, 230 V, 3-phase Rated operation power at AC-3, 400 V Rated power, 460 V, 60 Hz, 3-phase Rated power, 575 V, 60 Hz, 3-phase Rat	Rated control supply voltage Us at DC	V	24 - 24
Rated operation power at AC-3, 400 V Rated power, 480 V, 60 Hz, 3-phase Rated power, 480 V, 60 Hz, 3-phase Rated operation current le Rated operation current at AC-3, 400 V Rated operation current at AC-3, 400 V Rated operation current at AC-3, 400 V Rated conditional short-circuit current, type 1, 480 V/277 V Rated conditional short-circuit current, type 1, 480 V/277 V Rated conditional short-circuit current, type 2, 200 V Rated conditional short-circuit current, type 2, 200 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, type 3, 200 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, type 3, 200 V Rated conditional short-circuit current, type 4, 200 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current type 4, 400 V Rated conditional short-circuit current type 4, 400 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-c	Voltage type for actuating		DC
Rated power, 460 V, 60 Hz, 3-phase kW 0 Rated power, 575 V, 60 Hz, 3-phase kW 0 Rated operation current le A 24 Rated operation current at AC-3, 400 V A 24 Rated operation current at AC-3, 400 V A 24 Overload release current setting A 0.18 - 3 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 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally closed contact 1 Number of auxiliary contacts as normally closed contact 1 Release class CLASS 10 Type of electrical connection of main circuit Yep of electrical connection of main circuit Yep of electrical connection for auxiliary-and control current circuit Rail mounting possible Yes With transformer No.	Rated operation power at AC-3, 230 V, 3-phase	kW	0.37
Rated power, 575 V, 60 Hz, 3-phase Rated operation current le Rated operation current at AC-3, 400 V A 2.4 Overload release current setting 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 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 C 60 Release class 1 CLASS 10 CLASS 10 Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible Vith transformer Number of command positions Suitable for emergency stop Cudination class according to IEC 60947-4-3	Rated operation power at AC-3, 400 V	kW	0.75
Rated operation current le Rated operation current at AC-3, 400 V Overload release current setting A 0.18 - 3 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 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Abbient temperature, upper operating limit C 0 Release class Ves Release class Ves Release class Ves Release class Ves Vith transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated operation current at AC-3, 400 V Overload release current setting Rated conditional short-circuit current, type 1, 480 Y/277 V A O 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, 230 V A Rated conditional short-circuit current, type 2, 400 V A Rumber of auxiliary contacts as normally open contact Number of auxiliary contacts as normally pone contact Temperature compensated overload protection Release class Release class Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated power, 575 V, 60 Hz, 3-phase	kW	0
Overload release current setting A 0.18 - 3 Rated conditional short-circuit current, type 1, 600 Y/347 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally closed contact 1 1 Number of auxiliary contacts as normally closed contact °C 60 Temperature compensated overload protection Yes VEX Release class CLASS 10 Screw connection Type of electrical connection of main circuit Screw connection Screw connection Type of electrical connection for auxiliary- and control current circuit Screw connection Screw connection Rail monting possible Yes With transformer No Number of command positions No No Suitable for emergency stop No No Coordination class according to IEC 60947-4-3 No No	Rated operation current le	А	2.4
Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 400 V A 0 Number of auxiliary contacts as normally open contact 1 Number of auxiliary contacts as normally closed contact 1 Ambient temperature, upper operating limit °C 60 Release class Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Wumber of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated operation current at AC-3, 400 V	А	2.4
Rated conditional short-circuit current, type 1, 600 Y/347 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 240 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, type 2, 200 V Rated Conditional short-circuit current circuit current circ	Overload release current setting	А	0.18 - 3
Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit CC 60 Temperature compensated overload protection Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated conditional short-circuit current, type 1, 480 Y/277 V	Α	0
Rated conditional short-circuit current, type 2, 400 V Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit °C 60 Temperature compensated overload protection Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated conditional short-circuit current, type 1, 600 Y/347 V	А	0
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit CC 60 Temperature compensated overload protection Release class CLASS 10 Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated conditional short-circuit current, type 2, 230 V	А	0
Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit °C 60 Temperature compensated overload protection Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Rated conditional short-circuit current, type 2, 400 V	А	0
Ambient temperature, upper operating limit "C 60 Temperature compensated overload protection Release class CLASS 10 Type of electrical connection of main circuit Screw connection Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Number of auxiliary contacts as normally open contact		1
Temperature compensated overload protection Release class CLASS 10 Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Number of auxiliary contacts as normally closed contact		1
Release class CLASS 10 Type of electrical connection of main circuit Screw connection Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop No Coordination class according to IEC 60947-4-3	Ambient temperature, upper operating limit	°C	60
Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop No Coordination class according to IEC 60947-4-3	Temperature compensated overload protection		Yes
Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3	Release class		CLASS 10
Rail mounting possible With transformer No Number of command positions Suitable for emergency stop No Coordination class according to IEC 60947-4-3	Type of electrical connection of main circuit		Screw connection
With transformer No Number of command positions Suitable for emergency stop No Coordination class according to IEC 60947-4-3	Type of electrical connection for auxiliary- and control current circuit		Screw connection
Number of command positions Suitable for emergency stop No Coordination class according to IEC 60947-4-3	Rail mounting possible		Yes
Suitable for emergency stop Coordination class according to IEC 60947-4-3	With transformer		No
Coordination class according to IEC 60947-4-3	Number of command positions		
·	Suitable for emergency stop		No
	Coordination class according to IEC 60947-4-3		
Number of indicator lights 4	Number of indicator lights		4
External reset possible Yes	External reset possible		Yes
With fuse No	With fuse		No
Degree of protection (IP)	Degree of protection (IP)		IP20
Degree of protection (NEMA) Other	Degree of protection (NEMA)		Other
Supporting protocol for TCP/IP No	Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS No	Supporting protocol for PROFIBUS		No
Supporting protocol for CAN No	Supporting protocol for CAN		No

Supporting protocol for ASI Supporting protocol for MODBUS No Supporting protocol for Data-Highway No Supporting protocol for DeviceNet No Supporting protocol for SUCONET No Supporting protocol for PROFINET IO Supporting protocol for PROFINET CBA Supporting protocol for SERCOS No Supporting protocol for SERCOS Supporting protocol for Foundation Fieldbus Supporting protocol for Foundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for AS-Interface Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for DeviceNet Safety No Supporting protocol for INTERBUS-Safety No				
Supporting protocol for MODBUS Supporting protocol for Data-Highway Supporting protocol for DeviceNet Supporting protocol for DeviceNet Supporting protocol for SUCONET Supporting protocol for SUCONET Supporting protocol for PROFINET IO Supporting protocol for PROFINET CBA Supporting protocol for PROFINET CBA Supporting protocol for SERCOS Supporting protocol for Fundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for EtherNet/IP Supporting protocol for DeviceNet Safety at Work Supporting protocol for INTERBUS-Safety Supporting protocol for PROFINETBUS-Safety Supporting protocol for SafetyBUS P	Supporting protocol for INTERBUS		No	
Supporting protocol for Data-Highway Supporting protocol for DeviceNet Supporting protocol for SUCONET Supporting protocol for SUCONET Supporting protocol for PROFINET (O Supporting protocol for PROFINET CBA Supporting protocol for FROFINET CBA Supporting protocol for Fundation Fieldbus Supporting protocol for Fundation Fieldbus Supporting protocol for Fundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for DeviceNet Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for PROFISafe Supporting protocol for PROFISafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for Other bus systems Width Height Minum 1068	Supporting protocol for ASI		No	
Supporting protocol for DeviceNet Supporting protocol for SUCONET Supporting protocol for SUCONET Supporting protocol for LON Supporting protocol for PROFINET IO Supporting protocol for PROFINET CBA Supporting protocol for FROFINET CBA Supporting protocol for FROFINET CBA Supporting protocol for Foundation Fieldbus Supporting protocol for DeviceNet Safety at Work Supporting protocol for DeviceNet Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Midth Mm Mm 22.5 Height	Supporting protocol for MODBUS		No	
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Supporting protocol for PROFINET IO Supporting protocol for PROFINET CBA Supporting protocol for SERCOS Supporting protocol for Foundation Fieldbus 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 Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for OdericeNet Supporting protocol for SafetyBUS p Supporting protocol for OdericeNet Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for Oder bus systems Midth mm 22.5 Height mm 106.8	Supporting protocol for DeviceNet		No	
Supporting protocol for PR0FINET CBA Supporting protocol for PR0FINET CBA Supporting protocol for SERCOS Supporting protocol for Foundation Fieldbus Supporting protocol for Foundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for AS-Interface Safety at Work Supporting protocol for DeviceNet Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for INTERBUS-Safety Supporting protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for other bus systems Width Height Mm 1068	Supporting protocol for SUCONET		No	
Supporting protocol for PROFINET CBA Supporting protocol for SERCOS Supporting protocol for Foundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for EtherNet/IP Supporting protocol for DeviceNet Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for INTERBUS-Safety Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for Other bus systems Width Height No No No No No No No No No N	Supporting protocol for LON		No	
Supporting protocol for SERCOS Supporting protocol for Foundation Fieldbus Supporting protocol for EtherNet/IP Supporting protocol for AS-Interface Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for INTERBUS-Safety No Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Width Height No No No No No No No No No N	Supporting protocol for PROFINET IO		No	
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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 INTERBUS-Safety Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Midth Mid	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 Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Width Height No	Supporting protocol for Foundation Fieldbus		No	
Supporting protocol for DeviceNet Safety Supporting protocol for INTERBUS-Safety Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Width Height No Supporting protocol for Other bus Systems mm 106.8	Supporting protocol for EtherNet/IP		No	
Supporting protocol for INTERBUS-Safety Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Width Height No	Supporting protocol for AS-Interface Safety at Work		No	
Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for other bus systems No Width Meight Meight No	Supporting protocol for DeviceNet Safety		No	
Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Width Height No 22.5 Height No	Supporting protocol for INTERBUS-Safety		No	
Supporting protocol for other bus systems Width Height No 22.5 Mm 106.8	Supporting protocol for PROFIsafe		No	
Width mm 22.5 Height nm 106.8	Supporting protocol for SafetyBUS p		No	
Height mm 106.8	Supporting protocol for other bus systems		No	
	Width	mı	22.5	
Depth mm 113.6	Height	mı	106.8	
	Depth	mı	113.6	

Approvals

Product Standards	UL 60947-4-1; CSA C22.2 No. 60947-4-1-14; CE marking
UL File No.	E29096
UL Category Control No.	NLDX, NLDX7
CSA File No.	UL report applies to both US and Canada
North America Certification	UL listed, certified by UL for use in Canada
Specially designed for North America	No

Characteristics



Dimensions

