DOL starter, 6.6 A, Sensor input 2, 230/277 V AC, AS-Interface \$ , S-7.4 for 31 modules, HAN Q4/2, with manual override switch



Part no. RAM05-D202A31-412RS1 199071

Part no. AMOS 020231 412851  Product height Product height Product height Product height Product winth Product W		
Frotuct Langit/Depoit Product Langit/Depoit Product Langit/Depoit Product virieth Product Tradename Product Traden	Product name	Eaton Moeller® series Rapid Link DOL starter
Product Length/Depth Product Length/Depth Product whight Product weight I a billiogram Cutifications	Part no.	RAM05-D202A31-412RS1
Product height Product width 20 millimetre Product width 1 k klagarim Certifications Certificati	EAN	4015081971299
Product width Product weight 1 & kilogram Certifications 2	Product Length/Depth	120 millimetre
Product weight  Cartifications  Cliffications  Product Tredename  Product Tredename  Product Type  Dot starter  None  Assigned motor rating for normal internally and externally ventilated 4 pole, three phase assembly assem	Product height	270 millimetre
Certifications  Circ Coc Coc Coc Coc Coc Coc Coc Coc Coc Co	Product width	220 millimetre
CE	Product weight	1.8 kilogram
Product Type  Dult startar  None  Catalog Notes  Assigned motor rating for normal internally and externally ventilated 4 pole, thr phase asynchronous motors with 1500 rpm at 50 ftz or 1500 min at 60 ftz.  Froatures  Parameterization: Keypad Diagnostics and rease on device and via AS-interface Parameterization: Gives Connect mobile (App)  Fitted with:  Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Thermistor monitoring PTC Key switch position AIT0 Key switch position AIT0 Thermistor monitoring PTC Key switch pos	Certifications	CE CCC RoHS IEC/EN 60947-4-2
Product Sub Type Catalog Notes Catalog Catalog Notes Catalog Catalog Catalog Catalog Catalog Catalog	Product Tradename	Rapid Link
Catalog Notes  Assigned motor rating: for normal internally and externally ventilated 4 pole, thr phase asynchronous motors with 1500 rpm at 50 Hz or 1800 min at 60 Hz  Features  Peremeterization: Keypad Diagnostics and resect on device and via A5-Interface Parameterization. Fieldbus Parameterization: Grives/Connect mobile (App)  Fitted with:  Thermistor monitoring PTC Key switch position of PTC Key switch past on of Key switch past on of Key switch past on the original of the orig	Product Type	DOL starter
phase asynchronous motors with 1500 rpm at 50 Hz or 1800 min at 60 Hz  Features    Parameterization: Knypad   Diagnostics and rest on device and via AS-Interface   Parameterization: reference   Parameterization: divesConnect mobile (App)	Product Sub Type	None
Diagnostics and reset on device and by a SA-Interface Parameterization. Fieldbus Parameterizion. Fieldbus P	Catalog Notes	Assigned motor rating: for normal internally and externally ventilated 4 pole, throphase asynchronous motors with 1500 rpm at 50 Hz or 1800 min at 60 Hz
Electronie motor protection Key switch position ALTO Electronie motor protection Key switch position OFF/RESET Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation Manual override switch       Functions     For actuation of motors with mechanical brake External reset possible Temperature compensated overload protection       Class     CLASS 10 A       Degree of protection     1P65 NEMA 12       Electromagnetic compatibility     Class A       Lifespan, electrical     10,000,000 Operations (at AC-3)       Lifespan, mechanical     10,000,000 Operations (at AC-3)       Model     Direct starter       Overload release current setting - min     0.3 A       Overload release current setting - max     6.6 A       Overvoltage category     III       Product category     Motor starter       Protocol     AS-Interface profile cable: S-7.4 for 31 modules 	Features	Diagnostics and reset on device and via AS-Interface Parameterization: drivesConnect Parameterization: Fieldbus
External reset possible Temperature compensated overload protection  Class  CLASS 10 A  CLASS 10 A  Degree of protection  Degree of protection  Class A  Lifespan, electrical  Lifespan, electrical  Lifespan, mechanical  Model  Overload release current setting - min  Overload release current setting - max  Overload release current setting - min  Overload release cur	Fitted with:	Key switch position AUTO  Electronic motor protection  Key switch position HAND  Thermo-click  Key switch position OFF/RESET  Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation  Manual override switch
Degree of protection    P85   NEMA 12     Class A	Functions	External reset possible
Degree of protection    P85   NEMA 12     Class A		
NEMA 12  Electromagnetic compatibility  Lifespan, electrical  Lifespan, mechanical  Model  Overload release current setting - min  Overload release current setting - max  Overvoltage category  Product category  Protocol  Rated impulse withstand voltage (Uimp)  System configuration type  NEMA 12  Class A  Class A  10,000,000 Operations (at AC-3)  10,000,000 Oper	Class	
Electromagnetic compatibility  Lifespan, electrical  Lifespan, mechanical  Model  Direct starter  Overload release current setting - min  Overvoltage category  Product category  Protocol  Rated impulse withstand voltage (Uimp)  System configuration type  Class A  10,000,000 Operations (at AC-3)  10,000,000 Operations (at AC-3)  Direct starter  0.3 A  6.6 A  III  AS-Interface profile cable: S-7.4 for 31 modules ASI  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage	Degree of protection	
Lifespan, electrical  Lifespan, mechanical  10,000,000 Operations (at AC-3)  10,000,000 Operations (at AC-3)  Model  Direct starter  Overload release current setting - min  Overload release current setting - max  6.6 A  Overvoltage category  III  Product category  Motor starter  Motor starter  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  System configuration type  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage	Electromagnetic compatibility	
Lifespan, mechanical  Model  Direct starter  Overload release current setting - min  Overload release current setting - max  Motor starter  Motor starter  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  ASSI  Rated impulse withstand voltage (Uimp)  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage		10.000.000 Operations (at AC-3)
Model  Overload release current setting - min  Overload release current setting - max  Overvoltage category  III  Product category  Motor starter  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  System configuration type  Direct starter  0.3 A  0.4  0.5 A  III  AS-Interface profile cable: S-7.4 for 31 modules ASI  AC voltage  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage		
Overload release current setting - min Overload release current setting - max 6.6 A  Overvoltage category III  Product category Motor starter  Protocol AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  System configuration type Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage	Model	
Overload release current setting - max  6.6 A  Overvoltage category  III  Product category  Motor starter  Protocol  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  System configuration type  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage		
Overvoltage category  Product category  Motor starter  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  System configuration type  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage		
Product category  Protocol  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  4000 V  System configuration type  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage	-	
Protocol  AS-Interface profile cable: S-7.4 for 31 modules ASI  Rated impulse withstand voltage (Uimp)  4000 V  System configuration type  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage		
System configuration type  Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage	Protocol	AS-Interface profile cable: S-7.4 for 31 modules
Center-point earthed star network (TN-S network) AC voltage	Rated impulse withstand voltage (Uimp)	4000 V
Type DOL starter	System configuration type	Center-point earthed star network (TN-S network) AC voltage
	Туре	DOL starter

Mounting position	Vertical
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, 11 ms, Half-sinusoidal shock ms, 1000 shocks per shaft
Vibration	Resistance: 6 Hz, Amplitude 0.15 mm Resistance: 10 - 150 Hz, Oscillation frequency Resistance: According to IEC/EN 60068-2-6 Resistance: 57 Hz, Amplitude transition frequency on acceleration
Altitude	Max. 1000 m Above 1000 m with 1 % performance reduction per 100 m Max. 2000 m
Ambient operating temperature - min	-10 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-40 °C
Ambient storage temperature - max	70 °C
Climatic proofing	In accordance with IEC/EN 50178 < 95 %, no condensation
Current limitation	0.3 - 6.6 A, motor, main circuit Adjustable, motor, main circuit
Input current	6.6 A (at 150 % Overload)
Mains switch-on frequency	Maximum of one time every 60 seconds
Mains voltage tolerance Off-delay	380 - 480 V (-15 %/+10 %, at 50/60 Hz) 20 - 35 ms
On-delay On-delay	20 - 35 ms
Output frequency	50/60 Hz
Overload cycle	AC-53a
Rated frequency - max	63 Hz
Rated frequency - min	47 Hz
Rated operational current (Ie)	6.6 A
Rated operational current (le) at 150% overload	6.6 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	6.6 A
Rated operational power at 380/400 V, 50 Hz - max	3 kW
Rated operational power at 380/400 V, 50 Hz - min	0.09 kW
Rated operational power at AC-3, 220/230 V, 50 Hz	0 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	3 kW
Rated operational voltage	400 V AC, 3-phase 480 V AC, 3-phase
Supply frequency	50/60 Hz, fLN, Main circuit
Assigned motor power at 460/480 V, 60 Hz, 3-phase	3 HP
Braking current	$\leq$ 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake
Braking voltage	230/277 V AC -15 % / +10 %, Actuator for external motor brake
Rated conditional short-circuit current (Iq)	10 kA
Rated conditional short-circuit current (Iq), type 2, 380 V, 400 V, 415 V	0 A
Short-circuit protection (external output circuits)	Type 1 coordination via the power bus' feeder unit, Main circuit
Rated control supply voltage (Us) at AC, 50 Hz - min	0 V
Rated control supply voltage (Us) at AC, 50 Hz - max	0 V
Rated control supply voltage (Us) at AC, 60 Hz - min	0 V
Rated control supply voltage (Us) at AC, 60 Hz - max	0 V
Rated control supply voltage (Us) at DC - min	0 V
Rated control supply voltage (Us) at DC - max	0 V
Rated control voltage (Uc)	24 V DC (-15 %/+20 %, external via AS-Interface® plug) 230/277 V AC (external brake 50/60 Hz)

Connection	Connections pluggable in power section
Interfaces	Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA  Number of slave addresses: 31 (AS-Interface®)  Specification: S-7.4 (AS-Interface®)
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Cable length	10 m, Radio interference level, maximum motor cable length
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 8.0**

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])

Type of motor starter		Direct online starter (DOL)
With short-circuit release		Yes
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	0 - 0
Voltage type for actuating		DC
Rated operation power at AC-3, 230 V, 3-phase	kW	0
Rated operation power at AC-3, 400 V	kW	3
Rated power, 460 V, 60 Hz, 3-phase	kW	2.238
Rated power, 575 V, 60 Hz, 3-phase	kW	0
Rated operation current le	Α	6.6
Rated operation current at AC-3, 400 V	Α	6.6
Overload release current setting	А	0.3 - 6.6
Rated conditional short-circuit current, type 1, 480 Y/277 V	Α	10,000
Rated conditional short-circuit current, type 1, 600 Y/347 V	А	0
Rated conditional short-circuit current, type 2, 230 V	А	0
Rated conditional short-circuit current, type 2, 400 V	А	0

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 INTERBUS-Safety No Supporting protocol for PROFIsafe No Supporting protocol for SafetyBUS p No Supporting protocol for other bus systems No Width mm 220 Height			
Ambient temperature, upper operating limit  **C  **Pis  **Imagenature compensated overload protection  **CLASS 18 A  **Pis et electrical connection of main circuit  **Type of electrical connection of main circuit  **Type of electrical connection for auxiliary- and control current circuit  **Rail mounting possible  **No  **No  **No  **No  **No  **No  **No  **No  **Suitable for ommand positions  **In  **In  **No  **No  **No  **Currentation files according to IEC 60047-4-3  **No  **Currentation files according to IEC 60047-4-3  **No  **No  **Supporting protection file for files for files according to IEC 60047-4-3  **No  **No  **Supporting protection files for files for files for files according to IEC 60047-4-3  **No  **Supporting protection files for files files for files for files for files files files files for files fi	Number of auxiliary contacts as normally open contact		0
Temperature compensated overlead protection         Yes           Riclease class         CLASS 10 A           Type of electrical connection of main circuit         Plug-in connection           Type of electrical connection for auxiliary and central current circuit         Plug-in connection           Rail mounting possible         No           With transformer         No           Number of connection of seasons         1           Suitable for emergency stop         Class 1           Coordination class according to IEC 0987-4-3         Class 1           With frase         0           External reset possible         Yes           With frase         No           Supporting protector IP         IPB5           Degree of protector IVEMA)         12           Supporting protector for TCPIP         No           Supporting protector for PCPIPBUS         No           Supporting protect for MTERBUS         No           Supporting protect for MTERBUS         No           Supporting protect for Modulus         No           Supporting protect for Exercicus         No	Number of auxiliary contacts as normally closed contact		0
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 Situated for emergency stop Coordination class according to EC 80947-4.3 Number of indicator lights Exertal reset possible With flag Operating protection (PP) Operating protection (PR) Supporting protect	Ambient temperature, upper operating limit	°C	55
Type of electrical connection of main circuit         Plug-in connection           Type of electrical connection for auxiliary- and control current circuit         No           Rall mounting possible         No           Number of command positions         1           Suitable for emergency stop         No           Coordination class according to IEE 60947-4-3         No           Number of indicator lights         0           Enternal reset possible         Yes           With fisse         No           Degree of protection (IP)         12           Degree of protection (IP)         12           Supporting protector of tr TCPIP         No           Supporting protector of tr PROFIBIUS         No           Supporting protector for PROFIBIUS         No           Supporting protector for PROFIBIUS         No           Supporting protector for AS         No           Supporting protector for AS         No           Supporting protector for AS         No           Supporting protector for AS Hithway         No           Supporting protector for SUONET         No           Supporting protector for SUONET         No           Supporting protector for PROFINET GAA         No           Supporting protector for PROFINET GAA         N	Temperature compensated overload protection		Yes
Type of electrical connection for auxiliary- and control current circuit         Plug-in connection           Rall mounting possible         No           With transformer         1           No         Suntable for emergency stop           Coordination class according to IEE 68947-4-3         Class 1           Mumber of indicator sights         0           Cetternal reset possible         Yes           With fuse         No           Degree of protection (IPP         1965           Degree of protection (NMA)         12           Supporting protected for PROFIBUS         No           Supporting protected for REBUS         No           Supporting protected for AMA         No           Supporting protected for AMA         No           Supporting protected for AMA         No           Supporting protected for Madbus         No           Supporting protected for Data-Highway         No           Supporting protected for Data-Highway         No           Supporting protected for BROFINET (I)         No           Supporting protected for BROFINET (BA         No           Supporting protected for BROFINET (BA         No           Supporting protected for PROFINET CBA         No           Supporting protected for PROFINET CBA	Release class		CLASS 10 A
Rall mounting possible         No           With tearsformer         1           Number of commend positions         1           Stutbale for emergency stop         No           Coordination class a ecording to IEC 69947-4-3         Class 1           Number of indicator lights         9           External react possible         Yes           With fuse         No           Degree of protection (IP)         1985           Begree of protection (IPEMA)         1           Supporting protocol for CPPIP         No           Supporting protocol for CPPIP         No           Supporting protocol for MTERBUS         No           Supporting protocol for Modbus         9           Supporting protocol for Modbus         9           Supporting protocol for Modbus         9           Supporting protocol for Dela-Highway         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET	Type of electrical connection of main circuit		Plug-in connection
With transformer         No           Number of command positions         1           Suitable for emergency stop         No           Coordination class according to IEC 8947-4-3         Class 1           Number of indicator lights         0           External reset possible         Yes           With fuse         No           Degree of protection (IPP)         IP85           Degree of protection (NEMA)         12           Supporting protocol for TCP/IPP         No           Supporting protocol for TCRIN         No           Supporting protocol for FROFIBUS         No           Supporting protocol for Mathes         No           Supporting protocol for Mathes         No           Supporting protocol for Mathes         No           Supporting protocol for Deat-Highway         No           Supporting protocol for Deat-Highway         No           Supporting protocol for Deat-Highway         No           Supporting protocol for EUCONET         No           Supporting protocol for FROFINET IO         No           Supporting protocol	Type of electrical connection for auxiliary- and control current circuit		Plug-in connection
Number of command positions         1           Suitable for emergency stop         6         No           Coordination class according to IEC 00847-4-3         Class 1           Number of indicator lights         0         0           Extranal reset possible         Yes           With fuse         No         1985           Degree of protection (IP)         1985         12           Supperding protection for EXPIP         No         10           Supperding protect for PROFIBUS         No         10           Supperding protect for FCAN         No         No           Supperding protect for FASI         Yes         No           Supperding protect for Modbus         No         No           Supperding protect for DavicaNet         No         No           Supperding protect for DavicaNet         No         No           Supperding protect for DavicaNet         No         No           Supperding protect for FORFINET IO         No         No           Supperding protected for PROFINET CBA         No         No           Supperding protected for FROFINET CBA         No         No           Supperding protected for FROFINET CBA         No         No           Supperding protected for FROFINET CBA	Rail mounting possible		No
Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights Cordination class according to IEC 60947-4-3 Number of indicator lights Cordination class according to IEC 60947-4-3 Number of indicator lights Cordination class according to IEC 60947-4-3 No Degree of protection (IP) Degree of protection (IP) Degree of protection (IP) Degree of protection (IPADA) Supporting protocol for TCP/IPP Supporting protocol for TCP/IPP No Supporting protocol for TCP/IPP No Supporting protocol for TCP/IPP No Supporting protocol for NEABUS Supporting protocol for INTERBUS No Supporting protocol for Modus Supporting protocol for Data-Highway No Supporting protocol for PROFINET IO No Supporting protocol for PROFINET GA Supporting protocol for FROFINET GA Supporting pr	With transformer		No
Coordination class according to IEC 68947-4-3         Class 1           Number of Indicator lights         9           External reset possible         Yes           With Luss         No           Degree of protection (IP)         1965           Degree of protection (NEMA)         12           Supporting protocol for TCPIPP         No           Supporting protocol for PROFIBUS         No           Supporting protocol for AAN         No           Supporting protocol for ABUS         No           Supporting protocol for ABUS         No           Supporting protocol for Ball-Highway         No           Supporting protocol for Ball-Highway         No           Supporting protocol for Evericabet         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET GBA         No           Supporting protocol for PROFINET GBA         No           Supporting protocol for Fence Selecty at Work         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for Evericabet Selecy         No           Supporting protocol for Evericabet Selecy         No           Supporting protocol for Evericabet Selecy	Number of command positions		1
Number of indicator lights         748           External reset possible         748           With fuse         10           Degree of protection (NEMA)         12           Supporting protection of TCP/IP         10           Supporting protection of TCP/IP         10           Supporting protect for PROFIBUS         10           Supporting protect of for CAN         10           Supporting protect of for INTERBUS         10           Supporting protect of for Modbus         10           Supporting protect of for Modbus         10           Supporting protect of for Data-Highway         10           Supporting protect of for Duta-Highway         10           Supporting protect of for PROFINET IO         10           Supporting protect of for PROFINET IO         10           Supporting protect of for PROFINET IO         10           Supporting protect of for PROFINET CBA         10           Supporting protect of for PROFINET Work         10           Supporting protect of the FRENCS         10	Suitable for emergency stop		No
External reset possible         Yes           With fuse         No           Degree of protection (IP)         IP65           Degree of protection (INEMA)         12           Supporting protocol for TCP/IP         No           Supporting protocol for PROFIBUS         No           Supporting protocol for CAN         No           Supporting protocol for CAN         No           Supporting protocol for NTERBUS         No           Supporting protocol for Modus         No           Supporting protocol for Modus         No           Supporting protocol for Data-Highway         No           Supporting protocol for DeviceNet         No           Supporting protocol for DeviceNet         No           Supporting protocol for PoliciANET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for SERCOS         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for EtherNet/IP         No           Supporting protocol for EtherNet/IP         No           Supporting protocol for EtherNet/IP         No           Supporting protocol for Texterlase Safety at Work         No	Coordination class according to IEC 60947-4-3		Class 1
With fuse         No           Degree of protection (IP)         IP85           Degree of protection (NEMA)         12           Supporting protect for TCP/IP         No           Supporting protect of or PROFIBUS         No           Supporting protect of or CAN         No           Supporting protect of or INTERBUS         No           Supporting protect of or Modus         Yes           Supporting protect for Modus         No           Supporting protect for Dat-Highway         No           Supporting protect for Dut-Highway         No           Supporting protect for SUCONET         No           Supporting protect for PROFINET IO         No           Supporting protect for PROFINET CBA         No           Supporting protect for PROFINET CBA         No           Supporting protect for Foundation Fieldbus         No           Supporting protect for Foundation Fieldbus         No           Supporting protect of for Foundation Fieldbus         No           Supporting protect for Fo	Number of indicator lights		0
Degree of protection (NEMA)         12           Supporting protocol for TCP/IP         10           Supporting protocol for TCP/IP         10           Supporting protocol for PCNIBUS         10           Supporting protocol for CAN         10           Supporting protocol for INTERBUS         10           Supporting protocol for ASI         10           Supporting protocol for Modbus         10           Supporting protocol for Data-Highway         10           Supporting protocol for DeviceNet         10           Supporting protocol for SUCONET         10           Supporting protocol for POFINET IO         10           Supporting protocol for PROFINET BA         10           Supporting protocol for PROFINET BA         10           Supporting protocol for SERCOS         10           Supporting protocol for Foundation Fieldbus         10           Supporting protocol for Foundation Fieldbus         10           Supporting protocol for EtherNet/IP         10           Supporting protocol for DeviceNet Safety         10           Supporting protocol for DeviceNet Safety         10           Supporting protocol for DeviceNet Safety         10           Supporting protocol for SafetyBUS 9         10           Supporting protocol for S	External reset possible		Yes
Degree of protection (NEMA)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for PROFIBUS  Supporting protocol for PROFIBUS  Supporting protocol for INTERBUS  Supporting protocol for INTERBUS  Supporting protocol for ASI Supporting protocol for ASI Supporting protocol for Modbus  Supporting protocol for Data-Highway  Supporting protocol for Data-Highway  Supporting protocol for DeviceNet  Supporting protocol for DeviceNet  Supporting protocol for LON  Supporting protocol for PROFINET IO  Supporting protocol for PROFINET IO  Supporting protocol for PROFINET IO  Supporting protocol for PROFINET GBA  Supporting protocol for SERCOS  Supporting protocol for Foundation Fieldbus  Supporting protocol for EtherNet/IP  Supporting protocol for EtherNet/IP  Supporting protocol for EtherNet/IP  Supporting protocol for DeviceNet Safety at Work  Supporting protocol for INTERBUS-Safety  No  Supporting protocol for PROFISafe  Supporting protocol for PROFISafe  Supporting protocol for PROFISafe  Supporting protocol for SafetyBUS p  Supporting protocol for SafetyBUS p  Supporting protocol for OsafetyBUS p  Supporting protocol for OsafetyBUS p  Supporting protocol for other bus systems  Width  mm 220  Height  mm 270	With fuse		No
Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for INTERBUS  Supporting protocol for INTERBUS  Supporting protocol for Modbus  Supporting protocol for Data-Highway  Supporting protocol for Data-Highway  Supporting protocol for Data-Highway  Supporting protocol for Data-Highway  Supporting protocol for SUCONET  Supporting protocol for SUCONET  Supporting protocol for PROFINET IO  Supporting protocol for PROFINET OB  Supporting protocol for PROFINET OB  Supporting protocol for FROFINET OB  Supporting protocol for FROFINET OB  Supporting protocol for Foundation Fieldbus  Supporting protocol for Foundation Fieldbus  Supporting protocol for Foundation Fieldbus  Supporting protocol for As-Interface Safety at Work  Supporting protocol for DeviceNet Safety  Supporting protocol for PROFINETS  Supporting protocol for PROFINETS  Supporting protocol for PROFINETS  Supporting protocol for SafetyBUS p  Supporting protocol for Open SafetyBUS p  Supporting protocol for SafetyBUS	Degree of protection (IP)		IP65
Supporting protocol for PROFIBUS  Supporting protocol for INTERBUS  Supporting protocol for INTERBUS  Supporting protocol for Modbus  Supporting protocol for Data-Highway  Supporting protocol for Data-Highway  Supporting protocol for Deta-Highway  Supporting protocol for SUCONET  Supporting protocol for SUCONET  Supporting protocol for PROFINET ID  Supporting protocol for PROFINET ID  Supporting protocol for PROFINET CBA  Supporting protocol for Foundation Fieldbus  Supporting protocol for Foundation Fieldbus  Supporting protocol for Foundation Fieldbus  Supporting protocol for As-Interface Safety at Work  Supporting protocol for DeviceNets Safety  Supporting protocol for DeviceNets Safety  Supporting protocol for DeviceNets Safety  Supporting protocol for Safety  Supporting protocol for DeviceNets Safety  Supporting protocol for SafetyBUS p  Supporting protocol for Sa	Degree of protection (NEMA)		12
Supporting protocol for CAN Supporting protocol for INTERBUS Supporting protocol for Modbus Supporting protocol for Modbus Supporting protocol for Data-Highway Supporting protocol for Deta-Highway Supporting protocol for DeviceNet Supporting protocol for SUCONET Supporting protocol for SUCONET Supporting protocol for RDFINET IO Supporting protocol for RDFINET IO Supporting protocol for RDFINET CBA Supporting protocol for RDFINET CBA Supporting protocol for SERCOS Supporting protocol for FROFINET SERCOS Supporting protocol for Cash-Highway Supporting protocol for PROFINET SERCOS Supporting protocol for PROFINET Sercos Supporting protocol for Se	Supporting protocol for TCP/IP		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 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 SafetyBUS p         No           Supporting protocol for Other bus systems         No           Width         mm         20           Midth         mm         20           Midth         mm         20           Midth         mm         20	Supporting protocol for PROFIBUS		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 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 PROFIsafe         No           Supporting protocol for PROFIsafe         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           Width         mm         20           Height         mm         20	Supporting protocol for CAN		No
Supporting protocol for Data-Highway  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 SERCOS  Supporting protocol for SERCOS  Supporting protocol for EnerNet/IP  Supporting protocol for EnerNet/IP  Supporting protocol for EnerNet/IP  Supporting protocol for PROFINET Safety at Work  Supporting protocol for PROFINET Safety  Supporting protocol for Sergeds  Supporting protocol	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 LON Supporting protocol for PROFINET IO Supporting protocol for PROFINET CBA Supporting protocol for SERCOS Supporting protocol for Sucones Supporting protocol for Sucones Supporting protocol for Fundation Fieldbus Supporting protocol for Fundation Fieldbus Supporting protocol for Sucones Supporting protocol for Sucones Supporting protocol for Sucones Supporting protocol for Sucones Supporting protocol for DeviceNet Safety at Work Supporting protocol for DeviceNet Safety Supporting protocol for DeviceNet Safety Supporting protocol for Sucones Supporting protocol for Su	Supporting protocol for ASI		Yes
Supporting protocol for SUCONET Supporting protocol for SUCONET Supporting protocol for LON Supporting protocol for PROFINET IO Supporting protocol for PROFINET OB Supporting protocol for PROFINET OB Supporting protocol for PROFINET OB Supporting protocol for FROOFINET OB 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 INTERBUS-Safety Supporting protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for Oberical Safety Supporting protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for Oberical Supporting Protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for Oberical Supporting Protocol for Oberical Supporting Protocol for Oberical Supporting Protocol for SafetyBUS P Supporting protocol for Oberical Supporting Protocol for SafetyBUS P Supporting protocol for SafetyBUS P Supporting protocol for Oberical Supporting Protocol for Oberical Supporting Protocol for Oberical Supporting Protocol for SafetyBUS P Supporting Protocol for Oberical Supporting Protocol for SafetyBUS P Supporting Protocol for SafetyBUS P Supporting Protocol for Oberical Supporting Protocol for Oberical Supporting Protocol for SafetyBUS P Supporting Protocol for SafetyBUS	Supporting protocol for Modbus		No
Supporting protocol for SUCONET  Supporting protocol for LON  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 INTERBUS-Safety  Supporting protocol for SafetyBUS p  Supporting protocol for SafetyBUS p  Supporting protocol for Other bus systems  Width  Height  Mo  RO  NO  NO  NO  NO  NO  NO  NO  NO  NO	Supporting protocol for Data-Highway		No
Supporting protocol for LON Supporting protocol for PROFINET IO Supporting protocol for PROFINET CBA Supporting protocol for SERCOS 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 other bus systems Width Midth Midt	Supporting protocol for DeviceNet		No
Supporting protocol for PROFINET CBA  Supporting protocol for PROFINET CBA  No  Supporting protocol for SERCOS  Supporting protocol for Foundation Fieldbus  Supporting protocol for Foundation Fieldbus  Supporting protocol for EtherNet/IP  No  Supporting protocol for AS-Interface Safety at Work  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 SafetyBUS p  No  Supporting protocol for other bus systems  Width  mm 220  Height	Supporting protocol for SUCONET		No
Supporting protocol for PROFINET CBA  Supporting protocol for SERCOS  No  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  No  Supporting protocol for INTERBUS-Safety  No  Supporting protocol for PROFIsafe  Supporting protocol for SafetyBUS p  No  Supporting protocol for SafetyBUS p  No  Supporting protocol for Other bus systems  Width  Height  No  20  Mmm  270	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 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  Height  No  Ho  Ho  Ho  Ho  Ho  Ho  Ho  Ho  Ho	Supporting protocol for PROFINET IO		No
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  No  Supporting protocol for PROFIsafe  Supporting protocol for SafetyBUS p  No  Supporting protocol for SafetyBUS p  No  Supporting protocol for other bus systems  No  Width  mm  220  Height	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 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 220 Height	Supporting protocol for SERCOS		No
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 Foundation Fieldbus		No
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Supporting protocol for INTERBUS-Safety  Supporting protocol for PROFIsafe  Supporting protocol for SafetyBUS p  Supporting protocol for SafetyBUS p  No  Supporting protocol for other bus systems  Width  mm  220  Height  Mo  270	Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p No Supporting protocol for other bus systems No Width mm 220 Height Table 100 Mo	Supporting protocol for DeviceNet Safety		No
Supporting protocol for SafetyBUS p No Supporting protocol for other bus systems No Width mm 220 Height 270	Supporting protocol for INTERBUS-Safety		No
Supporting protocol for other bus systems  Mo Width  mm 220  Height  mm 270	Supporting protocol for PROFIsafe		No
Width mm 220 Height 270	Supporting protocol for SafetyBUS p		No
Height mm 270	Supporting protocol for other bus systems		No
	Width	mm	220
Denth mm 120	Height	mm	270
20ри	Depth	mm	120