

DIOLINE bus coupler CANopen



Identification	Type	DL-CO-L
	Part-No.	746409
Use/Area of application		
Description	CANopen compact station with local-bus expansion (max. 8 modules) for use on rail vehicles	
Bus interface		
Bus system	CANopen DS 301 and DS 401	
Module type	Slave I/O module	
Data capacity in process image	Dependent on connected I/O modules (local bus) max. 8 byte inputs / 8 byte outputs digital max. 24 byte inputs / 24 byte outputs analog	
Addressing	Node ID: 1-127 via rotary switch	
Transfer rate	10/20/50/125/250/500/800/1000 kBit/s	
Transmission medium	twisted two-wire line	
Connection type, incoming bus	X1: SUB-D socket connector, 9-pin fastening bolt M3	
Connection type, continuing bus	X2: SUB-D plug connector, 9-pin fastening bolt M3	
cut-in bus termination	120 Ω	
Electronic module supply		
Voltage range, incl. ripple	DC 16.8-30 V	
Ripple	max. 10 %	
Rated current (at U_N)	nom. 50 mA + local bus 1.6 A fusible link, in case of short circuit internal or local-bus interface	
Current consumption via local bus	max. 1 A	
External fuse	B2 to B16	
Connection	X3: cage clamp clamp-type terminal, 5-pin	
Diagnostics		
Diagnosis indications	Logic supply (UL), LED green Module status (MS), LED red/green Network status (NS), LED red/green Local-bus status (LB), LED red/green	

DIOLINE bus coupler CANopen

Electrical isolation

Isolating voltage AC 500 V bus and electronics

Technical data

Dimensions (w × h × d) 83.0×141.5×48.0 mm
 Weight (kg/piece) 0.260 (kg/piece)
 Protection class IP 20
 Field installation DIN rail mounting
 Installation position As desired
 Installation space: top: 5 mm (for assembly)
 bottom: 5 mm (for assembly)
 side: 0 mm
 Operating temperature -40 °C to +70 °C (+85 °C for 10 min)
 corresponds to EN 50155 category Tx
 Storage temperature range min/max -40 °C to +85 °C

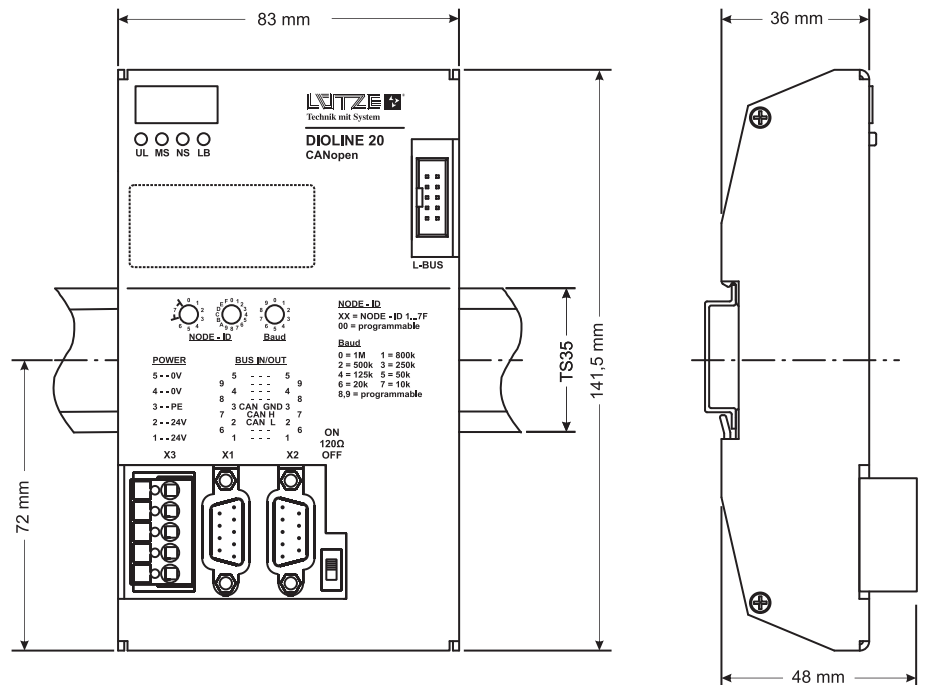
Standards

Electronic equipment on railway vehicles: EN50155:2007-07
 Electromagnetic compatibility: EN50121-3-2: 2006-07
 Insulation coordination: EN50124-1:2001-03
 Vibrations and shocks: EN61373:1999-04

Accessories

SUB-D refitting set M3 in UNC4/40
 Article number 746840
 Not contained in scope of delivery
 Screwless terminal, power supply
 Article number 745861
 Contained in scope of delivery

Dimensions



DIOLINE bus coupler MVB



Identification	Type	DL-MVB-L
	Part-No.	746416
Use/Area of application		
Description	MVB bus coupler with local-bus expansion (max. 10 modules) for use on rail vehicles	
Bus interface		
Bus system	MVB EMD, Class 1.3	
Module type	Slave I/O module	
Configuration	Download of an NSDB via the integrated RS232 interface. Baud rate: 9600 Bd Databits: 8 Stop bits: 1 Parity bits: 0 Handshake: No	
Data capacity in process image	Dependent on connected I/O modules (local bus)	
Addressing	via NSDB	
Transmission medium	2 x twisted two-wire cable according to IEC 61375 - 1 EMD	
Connection type, incoming bus	X1: SUB-D socket connector, 9-pin fastening bolt UNC4/40	
Connection type, continuing bus	X2: SUB-D socket connector, 9-pin fastening bolt UNC4/40	
Configuration interface	X4: SUB-D plug connector, 9-pin fastening bolt UNC4/40	
Electronic module supply		
Voltage range, incl. ripple	DC 16.8-30 V	
Ripple	max. 10 %	
Rated current (at U_N)	nom. 180 mA + local bus 2 A fusible link, in case of internal short circuit 1.25 A fusible link, in case of short-circuit of local-bus interface	
Current consumption via local bus	max. 1 A	
External fuse	B2 to B16	
Connection	X3: cage clamp clamp-type terminal, 5-pin	
Diagnostics		

DIOLINE bus coupler EN/IP



Identification	Type	DL-EN/IP-L
	Part-No.	746423
Use/Area of application		
Description	Ethernet/IP bus coupler with local expansion (max. 10 modules) for use in rail vehicles	
Bus interface		
Bus system	Ethernet according to IEEE 802.3 10/100 Base Tx	
Module type	Ethernet/IP Adapter	
Configuration	Network configuration via the integrated RS232 interface Baud rate: 9600 Bd Databits: 8 Stop bits: 1 Parity bits: 0 Handshake: N0	
Data capacity in process image	Dependent on connected I/O modules (local bus)	
Addressing	static: via the network configuration (IP-address) dynamic: DHCP / BOOTP	
Transmission medium	2 x twisted pair Cat. 5	
Termination	X1, X2: 4-pin M12 connector D-coded	
Configuration interface	X4: SUB-D plug connector, 9-pin fastening bolt UNC4/40	
Electronic module supply		
Voltage range, incl. ripple	DC 16.8-30 V	
Ripple	max. 10 %	
Rated current (at U_N)	nom. 130 mA + L-Bus optional 2 A fusible link, in case of internal short circuit optional 1.25 A fusible link, in case of short-circuit of local-bus interface	
Current consumption via local bus	max. 1 A	
External fuse	B2 without internal fuse B2 to B16 with internal fuses	
Connection	X3: cage clamp clamp-type terminal, 5-pin	
Diagnostics		

DIOLINE bus coupler EN/IP

Diagnosis indications	Module status (MS), LED red/green Network status (NS), LED red/green L-bus status (LB), LED red/green
Ethernet 1 / 2	Ethernet-Link (LNK), LED green Ethernet-Activity (ACT), LED yellow

Electrical isolation

Isolating voltage	AC 1500V Ethernet and electronics AC 500V RS232 and electronics
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Technical data

Dimensions (w x h x d)	123.0x141.5x48.0 mm
Weight (kg/piece)	0.430 (kg/piece)
Protection class	IP 20
Field instalation	DIN rail mounting
Installation postition	As desired Installation space: top: 5 mm (for assembly) bottom: 5 mm (for assembly) side: 0 mm
Operating temperature	-40 °C to +70 °C (+85 °C for 10 min) corresponds to EN 50155 category Tx
Storage temperature range min/max	-40 °C to +85 °C

PE connection

Connection tab	6.3 mm x 0.8 mm
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Standards

Electronic equipment on railway vehicles: EN50155:2007-07
Electromagnetic compatibility: EN50121-3-2: 2006-07
Insulation coordination: EN50124-1:2001-03
Vibrations and shocks: EN61373:1999-04

Accessories

SUB-D refitting set M4 in UNC40/3
Article number: 746850
Not contained in scope of delivery
Screwless terminal, power supply
Article number: 745861
Contained in scope of delivery

DIOLINE bus coupler EN/IP

Dimensions

