


FLM DIO 4/4 M12-2A

Order No.: 2736369



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The local bus device has digital inputs and outputs. Functions: 4 digital inputs, 3 ms filter time, 4 digital outputs of 2 A each, 500 kbaud/2 Mbaud selection, channel-specific diagnostics, short-circuit and overload protection, M12 fast connection technology.

Commercial data	
EAN	
sales group	L081
Pack	1 Pcs.
Customs tariff	85176200
Gross weight in pieces	0.3797 KG
Net weight per piece	0.3706 KG
Catalog page information	Page 299 (CAT-8-2013)

Product notes

WEEE/RoHS-compliant since:
06/02/2008



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Technical data	
General data	
Width	70 mm
Height	178 mm
Depth	50 mm
Drill hole spacing	168 mm

Weight	315 g
Mounting type	Wall mounting
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (storage/transport)	95 %
Air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP65/67
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	To I/O 500 V AC

Interface

Name	Fieldline local bus
Connection method	M12 plug-in connector, B-coded
Designation connection point	Copper cable
Transmission speed	500 kbaud/2 Mbaud, can be selected
	500 kBit/s / 2 MBit/s
Number of positions	5

Power supply for module electronics

Connection method	M12 male plug-in connector
Name	U_L
Supply voltage	24 V DC
Supply voltage range	18 V DC ... 30 V DC IEC 61131-2 (including ripple)

Fieldline potential routing

Voltage supply U_L	24 V DC
Power supply at U_L	max. 4 A
Current consumption from U_L	max. 50 mA (At 2 Mbaud)
	typ. 45 mA (At 2 Mbaud)
	max. 50 mA (At 500 kBaud)
	typ. 40 mA (At 500 kBaud)
Voltage supply U_S	24 V DC
Power supply at U_S	max. 4 A
Current consumption from U_S	typ. 5 mA (plus power supply for sensors)
	max. 600 mA
Voltage supply U_{A11}	24 V DC

Power supply at U_{A11}	max. 4 A
Current consumption at U_{A11}	typ. 3 mA
	max. 4 A
Voltage supply U_{A12}	24 V DC
Power supply at U_{A12}	max. 4 A
Current consumption at U_{A12}	typ. 3 mA
	max. 4 A

Digital inputs

Input name	Digital inputs
Connection method	M12 male plug-in connector
	2, 3, 4-wire
Number of inputs	4
Protective circuit	Protection against polarity reversal
Filter time	3 ms
Input characteristic curve	IEC 61131-2 type 1
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	13 V DC ... 30 V DC

Digital outputs

Output name	Digital outputs
Connection method	M12 male plug-in connector
	2, 3-wire
Number of outputs	4
Protective circuit	Short-circuit protection
Output voltage	24 V DC
Maximum output current per channel	2 A

Certificates / Approvals



Certification	cULus Recognized
Certification Ex:	cULus Recognized

Certifications applied for:

Accessories

Item	Designation	Description
Cable/conductor		
1518368	SAC-5P- 2,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free cable end, on Socket straight M12-SPEEDCON, A-coded, Cable length: 2 m
1507117	SAC-5P- 2,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Free cable end, on Socket straight M12, B-coded, Cable length: 2 m
1518371	SAC-5P- 5,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free cable end, on Socket straight M12-SPEEDCON, A-coded, Cable length: 5 m
1507120	SAC-5P- 5,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Free cable end, on Socket straight M12, B-coded, Cable length: 5 m
1518384	SAC-5P-10,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free cable end, on Socket straight M12-SPEEDCON, A-coded, Cable length: 10 m
1507133	SAC-5P-10,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Free cable end, on Socket straight M12, B-coded, Cable length: 10 m
1518397	SAC-5P-15,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free cable end, on Socket straight M12-SPEEDCON, A-coded, Cable length: 15 m
1507146	SAC-5P-15,0-900/M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Free cable end, on Socket straight M12, B-coded, Cable length: 15 m
1507162	SAC-5P-M12MSB/ 0,3-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 0.3 m
1507175	SAC-5P-M12MSB/ 0,5-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 0.5 m
1507188	SAC-5P-M12MSB/ 1,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 1 m
1507065	SAC-5P-M12MSB/ 2,0-900	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Free cable end, Cable length: 2 m

1507191	SAC-5P-M12MSB/ 2,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 2 m
1507078	SAC-5P-M12MSB/ 5,0-900	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Free cable end, Cable length: 5 m
1507201	SAC-5P-M12MSB/ 5,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 5 m
1507081	SAC-5P-M12MSB/10,0-900	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Free cable end, Cable length: 10 m
1507214	SAC-5P-M12MSB/10,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 10 m
1507094	SAC-5P-M12MSB/15,0-900	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Free cable end, Cable length: 15 m
1507227	SAC-5P-M12MSB/15,0-900/ M12FSB	Bus system cable, INTERBUS, 5-position, PUR halogen-free, Green RAL 6017, shielded, Plug straight M12, B-coded, on Socket straight M12, B-coded, Cable length: 15 m
1518407	SAC-5P-MS/ 0,3-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 0.3 m
1518410	SAC-5P-MS/ 0,5-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 0.5 m
1518423	SAC-5P-MS/ 1,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 1 m
1518326	SAC-5P-MS/ 2,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Free cable end, Cable length: 2 m
1518436	SAC-5P-MS/ 2,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 2 m
1518339	SAC-5P-MS/ 5,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Free cable end, Cable length: 5 m
1518449	SAC-5P-MS/ 5,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 5 m
1518342	SAC-5P-MS/10,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Free cable end, Cable length: 10 m
1518452	SAC-5P-MS/10,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 10 m

1518355	SAC-5P-MS/15,0-186 SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Free cable end, Cable length: 15 m
1518465	SAC-5P-MS/15,0-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 15 m

Marking

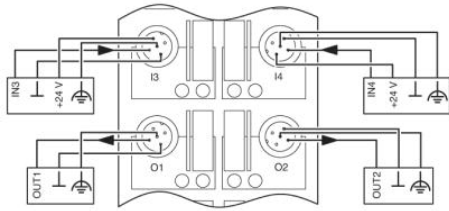
0809735	ZBF 12:UNBEDRUCKT	Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm
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Plug/Adapter

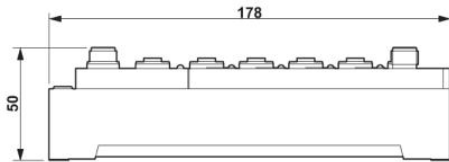
1518481	SAC-5P-MS/ 0,13-186/FS SCO	Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug straight M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 0.13 m
1518478	SAC-5P-MSB/0,13-PUR/FSB SCO SH	Sensor/Actuator cable, 5-position, PUR halogen-free, Black-gray RAL 7021, shielded, Plug straight M12-SPEEDCON, B-coded, on Socket straight M12-SPEEDCON, B-coded, Cable length: 0.13 m
1513606	SACC-M12FRB-5SC SH	Plug-in connector, 5-position, shielded, Socket, angledLink:M12, B-coded, Spring-cage conn., Knurl material: Nickel-plated brass, External cable diameter 4 mm ... 8 mm
1508200	SACC-M12FS-5SC M	Plug-in connector, 5-position, Socket, straightLink:M12, A-coded, Spring-cage conn., Knurl material: Zinc die-cast, nickel-plated, External cable diameter 4 mm ... 8 mm
1507777	SACC-M12FSB-5CON-PG9 SH AU	Bus system plug-in connector, female, straight, 5-pos., M12, shielded, gold-plated contacts, B-coded, screw connection, metal knurl, cable screw connection Pg9
1513596	SACC-M12FSB-5SC SH	Plug-in connector, 5-position, shielded, Socket, straightLink:M12, B-coded, Spring-cage conn., Knurl material: Nickel-plated brass, External cable diameter 4 mm ... 8 mm
1513583	SACC-M12MRB-5SC SH	Plug-in connector, 5-position, shielded, Plug angledLink:M12, B-coded, Spring-cage conn., Knurl material: Nickel-plated brass, External cable diameter 4 mm ... 8 mm
1508187	SACC-M12MS-5SC M	Plug-in connector, 5-position, Plug straightLink:M12, A-coded, Spring-cage conn., Knurl material: Zinc die-cast, nickel-plated, External cable diameter 4 mm ... 8 mm
1507764	SACC-M12MSB-5CON-PG9 SH AU	Bus system plug-in plug, male straight, 5-pos., M12, shielded, gold-plated contacts, B-coded, screw connection, metal knurl, cable screw connection Pg9
1513570	SACC-M12MSB-5SC SH	Plug-in connector, 5-position, shielded, Plug straightLink:M12, B-coded, Spring-cage conn., Knurl material: Nickel-plated brass, External cable diameter 4 mm ... 8 mm

Drawings

Connection diagram



Dimensioned drawing



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