

Expansion module

MBM

Input/output module
digital 4-way



Protection IP20

Ordering data		Art.-No.
4 digital inputs and outputs		55882
3-wire screw terminal block		55832
3-wire spring clamp terminal block		55852
Technical data		
System supply	via system connection from the bus node	
Load weight ¹⁾	1.00	
Galvanic separation	opto-coupler	
Inputs		
Inputs	4	
Input signals	24 V DC, guide line to EN 61131-2	
Input delay time	approx. 1 ms	
Sensor supply	24 V DC (18...30.2 V DC) to EN 61131-2, I-total max. 0.7 A overload protected	
Status indicator	per input 1 yellow LED with label	
Connection	3-wire via terminal block	
Outputs		
Outputs	4	
Supply voltage	24 V DC (18...30.2 V DC) to EN 61131-2, I-total 2 A	
Switching current per output	typ. 0.5 A, 100 % ED, short-circuit protected	
Filament lamp load	2 W	
Max. switching frequency	at ohmic: 100 Hz, at inductive load: 1...4 Hz (independent of the current load per output)	
Status indicator	per output 1 yellow LED with label	
Special function	output status in the case of a bus fault - parameters definable	
Connection	3-wire via terminal block and additional common terminal block	
Diagnostic		
Status indicator	green LED with label	
Sensor supply	green LED with label and return signal to the bus node	
Overload sensor supply	red LED with label and return signal to the bus node	
General data		
Temperature range	0...+55 °C	
Mounting method	DIN-rail mounting to EN60715	
Dimensions H x W x D	116 x 56 x 60 mm	
Accessories		Art.-No.
Terminal block fastener		55896
Spare labels	1 piece = 8 labels	55589
Manual	german/english	digital expansions – up-to-date files can be downloaded under www.murrelektronik.com
Notes		
		Dimension drawing, contact layouts and accessories from page 2.3.10. ¹⁾ Follow project advice.

Expansion module

Protection IP20

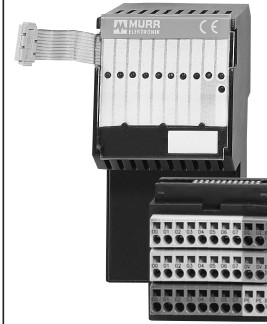
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Input module
digital 8-way



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Input module
digital 16-way



Ordering data	Art.-No.	Art.-No.
8 digital inputs	55920	
16 digital inputs		55921
1-wire screw terminal block		55943
1-wire spring clamp terminal block		55953
2-wire screw terminal block	p-switching 55834	
3-wire screw terminal block	p-switching 55944	
2-wire spring clamp terminal block	p-switching 55854	
3-wire spring clamp terminal block	p-switching 55954	
Common screw terminal block f. 3-wire connection		55990
Spring clamp terminal block f. 3-wire connection		55995
Technical data		
System supply	via system connection from the bus node	
Load weight ¹⁾	1.37	1.28
Galvanic separation	opto-coupler	
Inputs		
Inputs	8	16
Input characteristics	p-switching	
Input signals	24 V DC, guide line to EN 61131-2	
Input delay time	approx. 1 ms	
Sensor supply	24 V DC (18...30.2 V DC), to EN 61131-2, I _{total} max. 0.7 A overload protected	
Status indicator	per input 1 yellow LED with label	
Connection	2- or 3-wire, dependent on terminal block	3-wire via terminal block and additional common terminal block
Diagnostic		
Status indicator	green LED with label	
Sensor supply	green LED with label and return signal to the bus node	
Overload sensor supply	red LED with label and return signal to the bus node	
General data		
Temperature range	0...+55 °C	
Mounting method	DIN-rail mounting to EN60715	
Dimensions H x W x D	116 x 56 x 60 mm	
Accessories		
Terminal block fastener		Art.-No. 55896
Spare labels	1 piece = 8 labels	55966
Manual	german/english	digital expansions – up-to-date files can be downloaded under www.murrelektronik.com
Notes		
Dimension drawing, contact layouts and accessories from page 2.3.10. ¹⁾ Follow project advice.		

Expansion module

Protection IP20

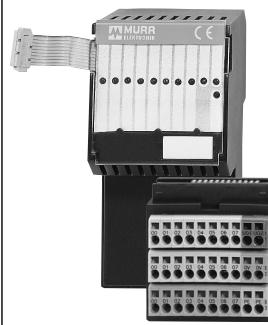
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Output module
digital 8-way



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Output module
digital 16-way



Ordering data	Art.-No.	Art.-No.
8 digital outputs 0.5 A	55922	
16 digital outputs 0.5 A		55923
1-wire screw terminal block (2 x 8 Bit)		55948
2-wire screw terminal block (1 x 8 Bit)	55835	
3-wire screw terminal block (2 x 4 Bit)	55946	
3-wire screw terminal block (1 x 8 Bit)	55945	
1-wire spring clamp terminal block (2 x 8 Bit)		55958
2-wire spring clamp terminal block (1 x 8 Bit)	55855	
3-wire spring clamp terminal block (2 x 4 Bit)	55956	
3-wire spring clamp terminal block (1 x 8 Bit)	55955	
Common screw terminal block f. 3-wire connection		55991
Spring clamp terminal block f. 3-wire connection		55996
Technical data		
System supply	via system connection from the bus node	
Load weight ¹⁾	1.44	1.31
Galvanic separation	opto-coupler	
Outputs		
Outputs	8	16
Supply voltage	24 V DC (18...30.2 V DC), I-total ≤ 4 A	
Switching current per output	typ. 0.5 A, short-circuit protected	
Filament lamp load	2 W	
Max. switching frequency	at ohmic: 100 Hz, at inductive load: 1...4 Hz (independent of the current load per output)	
Status indicator	per output 1 yellow LED with label	
Special function	output status in the case of a bus fault - parameters definable	
Connection	2- or 3-wire, dependent on terminal block	3-wire via terminal block and additional common terminal block
Diagnostic		
Status indicator	green LED with label	
Output supply	green LED with label and return signal to the bus node	
Output overload	red LED with label and return signal to the bus node	
General data		
Temperature range	0...+55 °C	
Mounting method	DIN-rail mounting to EN60715	
Dimensions H x W x D	116 x 56 x 60 mm	
Functional description		
Using the correct terminal blocks, it is possible to split the power supply of Art.-No. 55922 into two groups, each containing 4 outputs or one group of 8.		
Accessories		
Terminal block fastener	Art.-No. 55896	Art.-No. 55896
Spare labels 1 piece = 8 labels	Art.-No. 55963	Art.-No. 55969
Manual german/english	digital expansions — up-to-date files can be downloaded under www.murrelektronik.com	
Notes		
Dimension drawing, contact layouts and accessories from page 2.3.10. ¹⁾ Follow project advice.		

Expansion module

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Output module
relay 4-way



Protection IP20

Ordering data		Art.-No.
4 N/O relays		55925
1-wire screw terminal block	(4 x 1 Bit)	55941
3-wire screw terminal block	(1 x 4 Bit)	55592
1-wire spring clamp terminal block	(4 x 1 Bit)	55951
3-wire spring clamp terminal block	(1 x 4 Bit)	55597
Technical data		
System supply	via system connection from the bus node	
Load weight ¹⁾	1.36	
Galvanic separation	opto-coupler/relay	
Outputs		
Supply voltage	24 V DC (18...30.2 V DC) to EN 61131-2	
Current usage	≤ 50 mA	
Contact material	AgNi 0.15 + htv	
Switching capability 24 V	AC1: 5 A/ AC15: 2 A/ DC13: 1.3 A	
Switching capability 110 V	AC1: 5 A/ AC15: 2 A/ DC13: 250 mA	
Switching capability 230 V	AC1: 5 A/ AC15: 2 A/ DC13: 100 mA	
Min. load per output	1 mA	
Status indicator	per output 1 yellow LED with label	
Special function	output status in the case of a bus fault - parameters definable	
Connection	1-/3-wire via terminal block	
Diagnostic		
Status indicator	green LED with label	
Relay supply	green LED with label and return signal to the bus node	
General data		
Temperature range	0...+55 °C	
Mounting method	DIN-rail mounting to EN60715	
Dimensions H x W x D	116 x 56 x 60 mm	

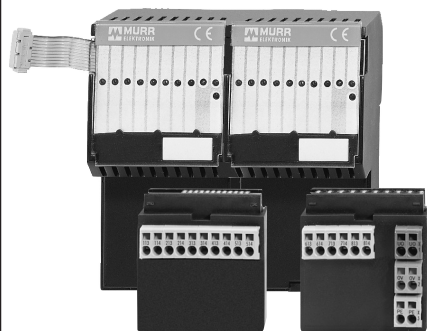
Accessories		Art.-No.
Terminal block fastener		55896
Spare labels	1 piece = 8 labels	55961
Manual	german/english	digital expansions – up-to-date files can be downloaded under www.murrelektronik.com

Notes	
Dimension drawing, contact layouts and accessories from page 2.3.10. ¹⁾ Follow project advice.	

Expansion module

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Output module
relay 8-way



Protection IP20

Ordering data		Art.-No.
8 N/O relays		55927
1-wire screw terminal block	(left)	55949
1-wire screw terminal block	(right)	55831
1-wire spring clamp terminal block	(left)	55959
1-wire spring clamp terminals	(right)	55851
Technical data		
System supply	via system connection from the bus node	
Load weight ¹⁾	1.32	
Galvanic separation	opto-coupler/relay	
Outputs		
Supply voltage	24 V DC (18...30.2 V DC) to EN 61131-2	
Current usage	≤ 120 mA	
Contact material	AgSnO2	
Switching capability 24 V	AC1: 5 A/ AC15: 3 A/ DC13: 1 A	
Switching capability 110 V	AC1: 5 A/ AC15: 3 A/ DC13: 200 mA	
Switching capability 230 V	AC1: 5 A/ AC15: 3 A/ DC13: 100 mA	
Min. load per output	10 mA	
Status indicator	per output 1 yellow LED with label	
Special function	output status in the case of a bus fault - parameters definable	
Connection	1-wire via terminal block	
Diagnostic		
Status indicator	green LED with label	
Relay supply	green LED with label and return signal to the bus node	
General data		
Temperature range	0...+55 °C	
Mounting method	DIN-rail mounting to EN60715	
Dimensions H x W x D	116 x 112 x 60 mm	
Accessories		Art.-No.
Terminal block fastener		55896
Spare labels	1 piece = 8 labels	55939
Manual	german/english	digital expansions — up-to-date files can be downloaded under www.murrelektronik.com
Notes		
		Dimension drawing, contact layouts and accessories from page 2.3.10. ¹⁾ Follow project advice.

Expansion module

MBM

Input module
analog 4-way



Protection IP20

Ordering data		Art.-No.	Art.-No.
4 analog inputs		55891	55929
2-/3-/4-wire screw terminal block		55947	55947
2-/3-/4-wire spring clamp terminal block		55957	55957
Technical data			
System supply	via system connection from the bus node		
Load weight ¹⁾	1.80		
Galvanic separation	opto-coupler between system and inputs		
Inputs			
Supply voltage	24 V DC (18...30.2 V DC) to EN 61131-2		
Current usage	approx. 50 mA		
Response time	approx. 12 ms/module	approx. 80 ms/module	
Master connection	via terminal block		
Voltage inputs			
Type	differential input, load resistance 220 kOhm		
Input range	± 10 V DC		
Resolution	12 Bit + sign		
Current inputs			
Type	differential input, load approx. 270 Ohm		
Input range 1	± 20 mA		
Input range 2	4...20 mA with cable break recognition		
Resolution	12 Bit + sign		
PT 100 Inputs			
Type	4-wire connection, sensor supply 15 V DC/2.5 mA per channel		
Input range	-56...+456 °C, internally linearization		
Resolution	12 Bit		
Diagnostic			
Status indicator	green LED with label		
Input supply	green LED with label and return signal to the bus node		
General data			
Temperature range	0...+55 °C		
Mounting method	DIN-rail mounting to EN60715		
Dimensions H x W x D	116 x 76 x 60 mm		
Functional description			
Every single input can measure current, voltage or temperature.			
Accessories		Art.-No.	Art.-No.
Terminal block fastener		55896	55896
Spare labels	1 piece = 8 labels	55965	55965
Manual	german/english	analog expansions — up-to-date files can be downloaded under www.murrelektronik.com	
Notes			
Dimension drawing, contact layouts and accessories from page 2.3.10. ¹⁾ Follow project advice.			

Expansion module

Protection IP20

MBM

Output module
analog 4-way



MBM

Output module
analog 4-way



Ordering data

	Art.-No.	Art.-No.
4 analog outputs	55931	55930
3-wire screw terminal block	55942	55838
3-wire spring clamp terminal block	55952	55858

Technical data

System supply	via system connection from the bus node	
Load weight ¹⁾	1.23	1.56
Galvanic separation	opto-coupler	

General outputs

Supply voltage	24 V DC (18...30.2 V DC) to EN 61131-2	
Current usage	120 mA	
Response time	typ. 1 ms/module	
Actuator connection	via terminal block	

Voltage outputs

Characteristics	short-circuit protected, load resistance > 750 Ohm	
Range	0...10 V DC	± 10 V DC
Resolution	12 Bit/channel	11 Bit + sign/channel

Current outputs

Load	–	500 Ohm
Range	–	0...20 mA
Resolution	–	11 Bit/channel

Diagnostic

Status indicator	green LED with label	
Output supply	green LED with label and return signal to the bus node	

General data

Temperature range	0...+55 °C	
Mounting method	DIN-rail mounting to EN60715	
Dimensions H x W x D	116 x 76 x 60 mm	116 x 56 x 60 mm

Accessories

	Art.-No.	Art.-No.
Terminal block fastener	55896	55896
Spare labels 1 piece = 8 labels	55898	55898
Manual german/english	digital expansions – up-to-date files can be downloaded under www.murrelektronik.com	

Notes

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