

Data sheet

FM 050 (050-1BA00)

Technical data

Order no.	050-1BA00
Туре	FM 050
Module ID	08C1 3800
General information	
Note	
Features	1 Counter 32 Bit (AB) DC 24 V
Current consumption/power loss	
Current consumption from backplane bus	75 mA
Power loss	1 W
Technical data digital inputs	
Number of inputs	5
Cable length, shielded	100 m
Cable length, unshielded	-
Rated load voltage	DC 20.428.8 V
Reverse polarity protection of rated load voltage	-
Current consumption from load voltage L+ (without load)	20 mA
Rated value	DC 20.428.8 V
Input voltage for signal "0"	DC 05 V
Input voltage for signal "1"	DC 1528.8 V
Input voltage hysteresis	-
Frequency range	-
Input resistance	-
Input current for signal "1"	3 mA
Connection of Two-Wire-BEROs possible	yes
Max. permissible BERO quiescent current	0.5 mA
Input delay of "0" to "1"	0.8 µs
Input delay of "1" to "0"	0.8 µs
Number of simultaneously utilizable inputs horizontal configuration	5
Number of simultaneously utilizable inputs vertical configuration	5
Input characteristic curve	IEC 61131-2, type 1
Initial data size	12 Byte
Technical data digital outputs	
Number of outputs	1
Cable length, shielded	100 m
Cable length, unshielded	100 m
Rated load voltage	DC 20.428.8 V
Current consumption from load voltage L+ (without load)	-
Output delay of "0" to "1"	30 µs



Output delay of "1" to "0"	30 µs
Minimum load current	
Lamp load	10 W
Parallel switching of outputs for redundant control of a load	not possible
Parallel switching of outputs for increased power	not possible
Actuation of digital input	yes
Switching frequency with resistive load	max. 10 kHz
Switching frequency with inductive load	max. 0.5 Hz
Switching frequency on lamp load	max. 10 kHz
Internal limitation of inductive shut-off voltage	L+ (-52 V)
Short-circuit protection of output	yes, electronic
Trigger level	1 A
Number of operating cycle of relay outputs	
Switching capacity of contacts	
Output data size	10 Byte
Technical data counters	
Number of counters	1
Counter width	32 Bit
Maximum input frequency	100 kHz
Maximum count frequency	400 kHz
Mode incremental encoder	yes
Mode pulse / direction	yes
Mode pulse	-
Mode frequency counter	-
Mode period measurement	-
Gate input available	yes
Latch input available	yes
Reset input available	yes
Counter output available	yes
Status information, alarms, diagnostics	
Status display	yes
Interrupts	yes, parameterizable
Process alarm	yes, parameterizable
Diagnostic interrupt	yes, parameterizable
Diagnostic functions	yes, parameterizable
Diagnostics information read-out	possible
Module state	green LED
Module error display	red LED
Channel error display	none
Isolation	
Between channels	-
Between channels of groups to	-
Between channels and backplane bus	yes
Between channels and power supply	-
Max. potential difference between circuits	-
Max. potential difference between inputs (Ucm)	-
Max. potential difference between Mana and Mintern (Uiso)	



Max. potential difference between linputs and Mintern (Uiso)-Max. potential difference between Mintern and outputs-Insulation tested withDC 500 VDatasizesInput bytes12Output bytes10Parameter bytes25Diagnostic bytes20HousingMeterialPPE / PPE GF10MountingPofile rail 35 mmMeterial tableDimensions (WxHxD)12.9 mm x 109 mm x 76.5 mmNet weight60 gWeight including accessories-Gross weight-Environmental conditionsOperating temperature0 °C to 60 °CStorage temperature-25 °C to 70 °CCertificationyes	Max. potential difference between inputs and Mana (Ucm)	-
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Diagnostic bytes 20 Housing PPE / PPE GF10 Material PPE / PPE GF10 Mounting Profile rail 35 mm Mechanical data Image: Comparison of the train of the	Output bytes	10
Housing PPE / PPE GF10 Material Profile rail 35 mm Mechanical data Immensions (WxHxD) Dimensions (WxHxD) 12.9 mm x 109 mm x 76.5 mm Net weight 60 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications yes	Parameter bytes	25
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	Certifications	
KC certification yes	UL certification	yes
	KC certification	yes