

Data sheet

FM 050 (050-1BA10)

Technical data

Type	Order no.	050-1BA10
Module ID	Туре	FM 050
Current consumption/power loss	Module ID	08C2 3801
Current consumption/power loss		
Features 1 Counter 32 Bit (AB) DC 5 V (difference signal) Current consumption/power loss Current consumption from backplane bus 75 mA Power loss 0.85 W Technical data digital inputs Number of inputs - 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 - Input voltage for signal "0" Differential signal RS422 Input voltage for signal "1" Differential signal RS422 Input voltage for signal "1" Differential signal RS422 Input voltage hysteresis - Frequency range - Input resistance 120 Ohm Input current for signal "1" - Connection of Two-Wire-BEROs possible - Max. permissible BERO quiescent current - Input delay of "9" to "1" 0.8 µs Number of simultaneously utilizable inputs horizontal configuration - Input characteristic curve - Initial data size 8 Byte Technical data digital outputs Number of outputs - Cable length, unshielded - Carrent consumption from load voltage L+ (without load) -	General information	
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Technical data digital outputs Number of outputs - Cable length, shielded - Cable length, unshielded - Rated load voltage - Current consumption from load voltage L+ (without load)	Input characteristic curve	-
Number of outputs Cable length, shielded Cable length, unshielded Rated load voltage Current consumption from load voltage L+ (without load) -	Initial data size	8 Byte
Cable length, shielded - Cable length, unshielded - Rated load voltage - Current consumption from load voltage L+ (without load) -	Technical data digital outputs	
Cable length, unshielded - Rated load voltage - Current consumption from load voltage L+ (without load) -	Number of outputs	-
Rated load voltage - Current consumption from load voltage L+ (without load) -	Cable length, shielded	-
Current consumption from load voltage L+ (without load) -	Cable length, unshielded	-
	Rated load voltage	-
Output delay of "0" to "1" -	Current consumption from load voltage L+ (without load)	-
	Output delay of "0" to "1"	-



Output delay of "1" to "0"	A YASKAWA COMPANY
Minimum load current	-
Lamp load	-
Parallel switching of outputs for redundant control of a load	-
Parallel switching of outputs for increased power	-
Actuation of digital input	-
Switching frequency with resistive load	-
Switching frequency with inductive load	-
Switching frequency on lamp load	-
Internal limitation of inductive shut-off voltage	-
Short-circuit protection of output	-
Trigger level	-
Number of operating cycle of relay outputs	-
Switching capacity of contacts	-
Output data size	10 Byte
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Technical data counters	
Number of counters	1
Counter width	32 Bit
Maximum input frequency	500 kHz
Maximum count frequency	2 MHz
Mode incremental encoder	yes
Mode pulse / direction	yes
Mode pulse	-
Mode frequency counter	-
Mode period measurement	-
Gate input available	-
Latch input available	-
Reset input available	yes
Counter output available	-
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)	-
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Max. potential difference between inputs and Mana (Ucm)	-	A YASKAWA COMPANY
Max. potential difference between inputs and Mintern (Uiso)	-	
Max. potential difference between Mintern and outputs	-	
Insulation tested with	DC 500 V	
Datasizes		
Input bytes	8	
Output bytes	10	
Parameter bytes	23	
Diagnostic bytes	20	
Housing		
Material	PPE / PPE GF10	
Mounting	Profile rail 35 mm	
Mechanical data		
Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 mm	
Weight	60 g	
Environmental conditions		
Operating temperature	0 °C to 60 °C	
Storage temperature	-25 °C to 70 °C	
Certifications		
UL certification	yes	
KC certification	yes	