

Data sheet FM 250S (250-1BS00)

Technical data

Order no.	250-1BS00
Туре	FM 250S
General information	
Note	
Features	1 SSI channel Direct power supply to the SSI transducer Baud rate: 100/300/600 kBit/s (default: 300 kBit/s) 2 configurable digital outputs, one may be used as hold input
Current consumption/power loss	
Current consumption from backplane bus	120 mA
Power loss	1 W
Technical data digital inputs	
Number of inputs	2
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 24 V
Reverse polarity protection of rated load voltage	√
Current consumption from load voltage L+ (without load)	
Rated value	-
Input voltage for signal "0"	Differential signal RS422
Input voltage for signal "1"	Differential signal RS422
Input voltage hysteresis	-
Frequency range	
Input resistance	-
Input current for signal "1"	-
Connection of Two-Wire-BEROs possible	-
Max. permissible BERO quiescent current	-
Input delay of "0" to "1"	-
Input delay of "1" to "0"	-
Number of simultaneously utilizable inputs horizontal configuration	-
Number of simultaneously utilizable inputs vertical configuration	-
Input characteristic curve	-
Initial data size	4 Byte
Technical data digital outputs	
Number of outputs	2
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 24 V
Reverse polarity protection of rated load voltage	✓
Current consumption from load voltage L+ (without load)	5 mA



Total current per group, horizontal configuration, 40°C	2 A	A YASKAWA COMPANY
Total current per group, horizontal configuration, 60°C	2 A	
Total current per group, vertical configuration	2 A	
Output voltage signal "1" at min. current	L+ (-0.8 V)	
Output voltage signal "1" at max. current	L+ (-125 mV)	
Output current at signal "1", rated value	1 A	
Output current, permitted range to 40°C	-	
Output current, permitted range to 60°C	-	
Output current at signal "0" max. (residual current)	-	
Output delay of "0" to "1"	max. 100 μs	
Output delay of "1" to "0"	max. 350 μs	
Minimum load current	-	
Lamp load	5 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	-	
Switching frequency with resistive load	max. 1000 Hz	
Switching frequency with inductive load	max. 0.5 Hz	
Switching frequency on lamp load	max. 10 Hz	
Internal limitation of inductive shut-off voltage	L+ (-52 V)	
Short-circuit protection of output	yes, electronic	
Trigger level	1.8 A	
Number of operating cycle of relay outputs	-	
Switching capacity of contacts	-	
Output data size	4 Byte	
Status information, alarms, diagnostics		
Status display	yes	
Interrupts	no	
Process alarm	no	
Diagnostic interrupt	no	
Diagnostic functions	no	
Diagnostics information read-out	none	
Supply voltage display	yes	
Group error display	yes	
Channel error display	none	
Isolation		
Between channels	-	
Between channels of groups to	-	
Between channels and backplane bus	√.	
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 inputs and Mana (Ucm)	-	
Max. potential difference between inputs and Mintern (Uiso)	-	
Max. potential difference between Mintern and outputs	-	
Insulation tested with	DC 500 V	



Datasizes		
Input bytes	4	
Output bytes	4	
Parameter bytes	6	
Diagnostic bytes	0	
Housing		
Material	PPE / PA 6.6	
Mounting	Profile rail 35 mm	
Mechanical data		
Dimensions (WxHxD)	25.4 mm x 76 mm x 78 mm	
Weight	100 g	
Environmental conditions		
Operating temperature	0 °C to 60 °C	
Storage temperature	-25 °C to 70 °C	
Certifications		
UL508 certification	yes	