Data sheet
FM 250S (250-1BS00)

Technical data

Order no.	250-1BS00
Type	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	yes
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	yes
Current consumption from load voltage L+ (without load)	5 mA

Total current per group, horizontal configuration, 40°C	2 A
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	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 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

UL certification	yes
KC certification	-