YASKAWA

Data sheet
SM 334 (334-0KE00)

Technical data

Order no.	334-0KE00
Type	SM 334
General information	
Note	-
Features	4x AI 2x AO 12 Bit Input: RTD / output voltage 0...10 V Parameterizable For 20 pole front connector
SPEED-Bus	-
Current consumption/power loss	
Current consumption from backplane bus	95 mA
Power loss	2 W
Technical data analog inputs	
Number of inputs	4
Cable length, shielded	100 m
Rated load voltage	DC 24 V
Reverse polarity protection of rated load voltage	-
Current consumption from load voltage L+ (without load)	40 mA
Voltage inputs	yes
Min. input resistance (voltage range)	100 kOhm
Input voltage ranges	0 V ... +10 V
Operational limit of voltage ranges	+/-0.7%
Operational limit of voltage ranges with SFU	-
Basic error limit voltage ranges	+/-0.5%
Basic error limit voltage ranges with SFU	-
Destruction limit voltage	max. 30V
Current inputs	-
Max. input resistance (current range)	-
Input current ranges	-
Operational limit of current ranges	-
Operational limit of current ranges with SFU	-
Basic error limit current ranges	-
Radical error limit current ranges with SFU	-
Destruction limit current inputs (electrical current)	-
Destruction limit current inputs (voltage)	-
Resistance inputs	yes
Resistance ranges	10000 Ohm
Operational limit of resistor ranges	+/-3.5%
Operational limit of resistor ranges with SFU	-
Basic error limit	+/-2.8%
Basic error limit with SFU	-
Destruction limit resistance inputs	max. 25V
Resistance thermometer inputs	yes

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Resistance thermometer ranges	Pt100
Operational limit of resistance thermometer ranges	+/-1.0%
Operational limit of resistance thermometer ranges with SFU	-
Basic error limit thermoresistor ranges	+/-0.8%
Basic error limit thermoresistor ranges with SFU	-
Destruction limit resistance thermometer inputs	max. 25V
Thermocouple inputs	-
Thermocouple ranges	-
Operational limit of thermocouple ranges	-
Operational limit of thermocouple ranges with SFU	-
Basic error limit thermocouple ranges	-
Basic error limit thermocouple ranges with SFU	-
Destruction limit thermocouple inputs	-
Programmable temperature compensation	-
External temperature compensation	-
Internal temperature compensation	-
Temperature error internal compensation	-
Technical unit of temperature measurement	°C
Resolution in bit	12
Measurement principle	Sigma-Delta
Basic conversion time	350 ms
Noise suppression for frequency	50 Hz/60 Hz
Initial data size	8 Byte
Technical data analog outputs	
Number of outputs	2
Cable length, shielded	100 m
Rated load voltage	DC 24 V
Reverse polarity protection of rated load voltage	yes
Current consumption from load voltage L+ (without load)	40 mA
Voltage output short-circuit protection	yes
Voltage outputs	yes
Min. load resistance (voltage range)	1 kOhm
Max. capacitive load (current range)	1 µF
Max. inductive load (current range)	25 mA
Output voltage ranges	0 V ... +10 V
Operational limit of voltage ranges	+/-1%
Basic error limit voltage ranges	+/-0.8%
Destruction limit against external applied voltage	max. 16V (30V / 10s)
Current outputs	-
Max. in load resistance (current range)	-
Max. inductive load (current range)	-
Typ. open circuit voltage current output	-
Output current ranges	-
Operational limit of current ranges	-
Basic error limit current ranges	-
Destruction limit against external applied voltage	-
Settling time for ohmic load	0.8 ms
Settling time for capacitive load	0.8 ms

Settling time for inductive load	0.3 ms
Resolution in bit	12
Conversion time	0.5 ms per channel
Substitute value can be applied	-
Output data size	4 Byte
Status information, alarms, diagnostics	
Status display	none
Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	none
Supply voltage display	none
Group error display	none
Channel error display	none
Isolation	
Between channels	-
Between channels of groups to	-
Between channels and backplane bus	yes
Between channels and power supply	yes
Max. potential difference between circuits	-
Max. potential difference between inputs (Ucm)	DC 1 V
Max. potential difference between Mana and Mintern (Uiso)	DC 75 V/ AC 50 V
Max. potential difference between inputs and Mana (Ucm)	DC 1 V
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	4
Parameter bytes	21
Diagnostic bytes	0
Housing	
Material	PPE
Mounting	Rail System 300
Mechanical data	
Dimensions (WxHxD)	40 mm x 125 mm x 120 mm
Net weight	210 g
Weight including accessories	-
Gross weight	-
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	yes
KC certification	yes

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