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

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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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