

- Oversampling No
- MSO No

CiR – Configuration in RUN

Reparameterization possible in RUN	Yes
Calibration possible in RUN	No

Supply voltage

Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes

Input current

Current consumption, max.	110 mA
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Power loss

Power loss, typ.	1.5 W
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Address area

Address space per module	
<ul style="list-style-type: none"> • Address space per module, max. 	4 byte; + 1 byte for QI information

Hardware configuration

Automatic encoding	
<ul style="list-style-type: none"> • Mechanical coding element • Type of mechanical coding element 	Yes Type A

Analog outputs

Number of analog outputs	2
Cycle time (all channels), min.	1 ms
Analog output with oversampling	No
Output ranges, current	
<ul style="list-style-type: none"> • 0 to 20 mA • -20 mA to +20 mA • 4 mA to 20 mA 	Yes; 15 bit Yes; 16 bit incl. sign Yes; 14 bit

Connection of actuators	
<ul style="list-style-type: none"> • for current output two-wire connection 	Yes

Load impedance (in rated range of output)	
<ul style="list-style-type: none"> • with current outputs, max. • with current outputs, inductive load, max. 	500 Ω 1 mH

Destruction limits against externally applied voltages and currents	
<ul style="list-style-type: none"> • Voltages at the outputs 	30 V

Cable length	
<ul style="list-style-type: none"> • shielded, max. 	1 000 m

Analog value generation for the outputs

Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> Resolution with overrange (bit including sign), max. 	16 bit
Settling time	
<ul style="list-style-type: none"> for resistive load 	0.1 ms; Typical value
<ul style="list-style-type: none"> for inductive load 	0.5 ms
Errors/accuracies	
Linearity error (relative to output range), (+/-)	0.03 %
Temperature error (relative to output range), (+/-)	0.005 %/K
Crosstalk between the outputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.05 %
Operational error limit in overall temperature range	
<ul style="list-style-type: none"> Voltage, relative to output range, (+/-) 	0.5 %
<ul style="list-style-type: none"> Current, relative to output range, (+/-) 	0.5 %
Basic error limit (operational limit at 25 °C)	
<ul style="list-style-type: none"> Voltage, relative to output range, (+/-) 	0.3 %
<ul style="list-style-type: none"> Current, relative to output range, (+/-) 	0.3 %
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm 	Yes
Diagnostic messages	
<ul style="list-style-type: none"> Monitoring the supply voltage 	Yes
<ul style="list-style-type: none"> Wire-break 	Yes
<ul style="list-style-type: none"> Group error 	Yes
<ul style="list-style-type: none"> Overflow/underflow 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> Monitoring of the supply voltage (PWR-LED) 	Yes; green PWR LED
<ul style="list-style-type: none"> Channel status display 	Yes; green LED
<ul style="list-style-type: none"> for channel diagnostics 	No
<ul style="list-style-type: none"> for module diagnostics 	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
<ul style="list-style-type: none"> between the channels 	No
<ul style="list-style-type: none"> between the channels and backplane bus 	Yes
<ul style="list-style-type: none"> between the channels and the power supply of the electronics 	Yes
Isolation	
Isolation tested with	707 V DC (type test)

Ambient conditions

Ambient temperature during operation

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|---------------------------------|--------|
| • horizontal installation, min. | -30 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | -30 °C |
| • vertical installation, max. | 50 °C |

Altitude during operation relating to sea level

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|---|--|
| • Installation altitude above sea level, max. | 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual |
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Dimensions

Width	15 mm
Height	73 mm
Depth	58 mm

Weights

Weight, approx.	31 g
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last modified: 06/11/2020