



Figure similar

spare part SIMATIC S7-300, temperature Control Unit FM 355-2 C, 4 channels, continuous, 4 AI+8 DI+4 AO incl. multi-language configuration package, manual and Getting Started (de, en, it) on CD-ROM

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	310 mA; Typ. 260 mA
from backplane bus 5 V DC, max.	75 mA; typ. 50 mA
Power loss	
Power loss, typ.	6.5 W
Power loss, max.	7.8 W
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131, type 2	Yes
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-3 to +5V
• for signal "1"	13 to 30V
Input current	
• for signal "1", typ.	7 mA
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Analog inputs	
Number of analog inputs	4
permissible input voltage for voltage input (destruction limit), max.	20 V
permissible input current for current input (destruction limit), max.	40 mA
Input ranges	
• Voltage	Yes
• Current	Yes
• Thermocouple	Yes
• Resistance thermometer	Yes
Input ranges (rated values), voltages	

• 0 to +10 V — Input resistance (0 to 10 V) • -1.75 V to +11.75 V — Input resistance (-1.75 V to +11.75 V)	Yes 100 kΩ Yes 100 kΩ
Input ranges (rated values), currents	
• 0 to 20 mA — Input resistance (0 to 20 mA) • 0 to 23.5 mA — Input resistance (0 to 23.5 mA) • -3.5 mA to +23.5 mA — Input resistance (-3.5 mA to +23.5 mA) • 4 mA to 20 mA — Input resistance (4 mA to 20 mA)	Yes 50 Ω Yes 50 Ω Yes 50 Ω Yes 50 Ω
Input ranges (rated values), thermocouples	
• Type B — Input resistance (Type B) • Type E — Input resistance (Type E) • Type J — Input resistance (type J) • Type K — Input resistance (Type K) • Type R — Input resistance (Type R) • Type S — Input resistance (Type S)	Yes 10 MΩ Yes 10 MΩ Yes 10 MΩ Yes 10 MΩ Yes 10 MΩ Yes 10 MΩ
Input ranges (rated values), resistance thermometer	
• Pt 100 — Input resistance (Pt 100)	Yes 10 MΩ
Thermocouple (TC)	
Temperature compensation	
— internal temperature compensation — external temperature compensation with Pt100	Yes Yes
Characteristic linearization	
• parameterizable — for thermocouples — for resistance thermometer	Yes Type B, E, J, K, R, S Pt100 (standard)
Cable length	
• shielded, max.	200 m; 50 m at 80 mV and thermocouples
Analog outputs	
Number of analog outputs	4
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	25 mA
Current output, no-load voltage, max.	18 V
Output ranges, voltage	
• 0 to 10 V • -10 V to +10 V	Yes Yes
Output ranges, current	
• 0 to 20 mA • 4 mA to 20 mA	Yes Yes
Connection of actuators	
• for voltage output two-wire connection • for current output two-wire connection	Yes Yes
Load impedance (in rated range of output)	
• with voltage outputs, min. • with voltage outputs, capacitive load, max. • with current outputs, max. • with current outputs, inductive load, max.	1 kΩ 1 μF 500 Ω 1 mH
Cable length	

shielded, max.	200 m; 50 m at 80 mV and thermocouples		
Analog value generation for the inputs			
Integration and conversion time/resolution per channel			
Resolution with overrange (bit including sign), max.	14 bit		
Analog value generation for the outputs			
Settling time			
for resistive load	0.1 ms		
for capacitive load	3.3 ms		
for inductive load	0.5 ms		
Encoder			
Connection of signal encoders			
for voltage measurement	Yes		
for current measurement as 4-wire transducer	Yes		
Connectable encoders			
2-wire sensor	Yes		
— permissible quiescent current (2-wire sensor), max.	1.5 mA		
Errors/accuracies			
Operational error limit in overall temperature range			
Voltage, relative to input range, (+/-)	0.6 %; ±0.6 to ±0.7 %		
Current, relative to input range, (+/-)	0.6 %; ±0.6 to ±0.7 %		
Resistance thermometer, relative to input range, (+/-)	0.6 %; ±0.6 to ±0.7 %		
Voltage, relative to output range, (+/-)	0.5 %		
Current, relative to output range, (+/-)	0.6 %		
Basic error limit (operational limit at 25 °C)			
Voltage, relative to input range, (+/-)	0.04 %; ±0.04 to ±0.5 %		
Current, relative to input range, (+/-)	0.04 %; ±0.04 to ±0.5 %		
Resistance thermometer, relative to input range, (+/-)	0.04 %; ±0.04 to ±0.5 %		
Voltage, relative to output range, (+/-)	0.4 %		
Current, relative to output range, (+/-)	0.5 %		
Interrupts/diagnostics/status information			
Substitute values connectable	Yes; Parameterizable		
Integrated Functions			
Counter	No		
Control technology			
Number of closed-loop controllers	4		
Potential separation			
Potential separation controller			
between the channels	No		
between the channels and backplane bus	Yes; Optocoupler		
Isolation			
Isolation tested with	500 V DC		
Connection method			
required front connector	2x 20-pin		
Dimensions			
Width	80 mm		
Height	125 mm		
Depth	120 mm		
Weights			
Weight, approx.	470 g		
Classifications			
		Version	Classification
	eClass	14	27-24-22-05
	eClass	12	27-24-22-05
	eClass	9.1	27-24-22-05
	eClass	9	27-24-22-05
	eClass	8	27-24-22-05
	eClass	7.1	27-24-22-05

eClass	6	27-24-22-05
ETIM	10	EC001422
ETIM	9	EC001422
ETIM	8	EC001422
ETIM	7	EC001422
IDEA	4	3567
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval	Test Certificates
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[Special Test Certificate](#)[Type Test Certificates/Test Report](#)

Maritime application	other
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[Confirmation](#)

Environment



[Environmental Confirmations](#)

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