



Figure similar

\*\*\*spare part\*\*\* SIMATIC S7-300, Control Unit FM 355 C, 4 channels, continuous, 4 AI+8 DI+4 AO incl. multi-language configuration package, manual and Getting Started (de, en, fr, 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.	30 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	

<ul style="list-style-type: none"> <li>• 0 to +10 V <ul style="list-style-type: none"> <li>— Input resistance (0 to 10 V)</li> </ul> </li> <li>• -1.75 V to +11.75 V <ul style="list-style-type: none"> <li>— Input resistance (-1.75 V to +11.75 V)</li> </ul> </li> <li>• -80 mV to +80 mV <ul style="list-style-type: none"> <li>— Input resistance (-80 mV to +80 mV)</li> </ul> </li> </ul>	<p>Yes</p> <p>100 k<math>\Omega</math></p> <p>Yes</p> <p>100 k<math>\Omega</math></p> <p>Yes</p> <p>10 M<math>\Omega</math></p>
<b>Input ranges (rated values), currents</b>	
<ul style="list-style-type: none"> <li>• 0 to 20 mA <ul style="list-style-type: none"> <li>— Input resistance (0 to 20 mA)</li> </ul> </li> <li>• 0 to 23.5 mA <ul style="list-style-type: none"> <li>— Input resistance (0 to 23.5 mA)</li> </ul> </li> <li>• -3.5 mA to +23.5 mA <ul style="list-style-type: none"> <li>— Input resistance (-3.5 mA to +23.5 mA)</li> </ul> </li> <li>• 4 mA to 20 mA <ul style="list-style-type: none"> <li>— Input resistance (4 mA to 20 mA)</li> </ul> </li> </ul>	<p>Yes</p> <p>50 <math>\Omega</math></p> <p>Yes</p> <p>50 k<math>\Omega</math></p> <p>Yes</p> <p>50 <math>\Omega</math></p> <p>Yes</p> <p>50 k<math>\Omega</math></p>
<b>Input ranges (rated values), thermocouples</b>	
<ul style="list-style-type: none"> <li>• Type B <ul style="list-style-type: none"> <li>— Input resistance (Type B)</li> </ul> </li> <li>• Type J <ul style="list-style-type: none"> <li>— Input resistance (type J)</li> </ul> </li> <li>• Type K <ul style="list-style-type: none"> <li>— Input resistance (Type K)</li> </ul> </li> <li>• Type R <ul style="list-style-type: none"> <li>— Input resistance (Type R)</li> </ul> </li> <li>• Type S <ul style="list-style-type: none"> <li>— Input resistance (Type S)</li> </ul> </li> </ul>	<p>Yes</p> <p>10 M<math>\Omega</math></p> <p>Yes</p> <p>10 M<math>\Omega</math></p> <p>Yes</p> <p>10 M<math>\Omega</math></p> <p>Yes</p> <p>10 M<math>\Omega</math></p> <p>Yes</p> <p>10 M<math>\Omega</math></p>
<b>Input ranges (rated values), resistance thermometer</b>	
<ul style="list-style-type: none"> <li>• Pt 100 <ul style="list-style-type: none"> <li>— Input resistance (Pt 100)</li> </ul> </li> </ul>	<p>Yes</p> <p>10 M<math>\Omega</math></p>
<b>Thermocouple (TC)</b>	
<b>Temperature compensation</b>	
<ul style="list-style-type: none"> <li>— internal temperature compensation</li> <li>— external temperature compensation with Pt100</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>Characteristic linearization</b>	
<ul style="list-style-type: none"> <li>• parameterizable <ul style="list-style-type: none"> <li>— for thermocouples</li> <li>— for resistance thermometer</li> </ul> </li> </ul>	<p>Yes</p> <p>Type B, J, K, R, S</p> <p>Pt100 (standard)</p>
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	200 m; 50 m at 80 mV and thermocouples
<b>Analog outputs</b>	
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
<b>Output ranges, voltage</b>	
<ul style="list-style-type: none"> <li>• 0 to 10 V</li> <li>• -10 V to +10 V</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>Output ranges, current</b>	
<ul style="list-style-type: none"> <li>• 0 to 20 mA</li> <li>• 4 mA to 20 mA</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>Connection of actuators</b>	
<ul style="list-style-type: none"> <li>• for voltage output two-wire connection</li> <li>• for current output two-wire connection</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>Load impedance (in rated range of output)</b>	
<ul style="list-style-type: none"> <li>• with voltage outputs, min.</li> <li>• with voltage outputs, capacitive load, max.</li> <li>• with current outputs, max.</li> <li>• with current outputs, inductive load, max.</li> </ul>	<p>1 k<math>\Omega</math></p> <p>1 <math>\mu</math>F</p> <p>500 <math>\Omega</math></p> <p>1 mH</p>
<b>Cable length</b>	

• shielded, max.	200 m; 50 m at 80 mV and thermocouples
<b>Analog value generation for the inputs</b>	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	14 bit; 12 bit or 14 bit, parameterizable
<b>Analog value generation for the outputs</b>	
Settling time	
• for resistive load	0.1 ms
• for capacitive load	3.3 ms
• for inductive load	0.5 ms
<b>Encoder</b>	
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
<b>Errors/accuracies</b>	
Operational error limit in overall temperature range	
• Voltage, relative to input range, (+/-)	0.6 %; $\pm 0.6$ to $\pm 1\%$
• Current, relative to input range, (+/-)	0.6 %; $\pm 0.6$ to $\pm 1\%$
• Resistance thermometer, relative to input range, (+/-)	0.6 %; $\pm 0.6$ to $\pm 1\%$
• 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, (+/-)	0.4 %; 80 mV: $\pm 0.6$ %; 250 to 1 000 mV: $\pm 0.4$ %; 2.5 to 10 V: $\pm 0.6$ %; 3.2 to 20 mA: $\pm 0.5$ %
• Current, relative to input range, (+/-)	0.4 %; $\pm 0.4$ to $\pm 0.6$ %
• Resistance thermometer, relative to input range, (+/-)	0.4 %; $\pm 0.4$ to $\pm 0.6$ %
• Voltage, relative to output range, (+/-)	0.3 %
• Current, relative to output range, (+/-)	0.5 %
<b>Interrupts/diagnostics/status information</b>	
Substitute values connectable	Yes; Parameterizable
<b>Integrated Functions</b>	
Control technology	
• Number of closed-loop controllers	4
<b>Potential separation</b>	
Potential separation controller	
• between the channels	No
• between the channels and backplane bus	Yes; Optocoupler
<b>Isolation</b>	
Isolation tested with	500 V DC
<b>Connection method</b>	
required front connector	2x 20-pin
<b>Dimensions</b>	
Width	80 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	470 g
<b>Classifications</b>	

	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	other
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[Special Test Certificate](#)

[Miscellaneous](#)

[Confirmation](#)

other	Environment
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[Miscellaneous](#)



[Environmental Confirmations](#)



last modified:

4/7/2025