



Figure similar

SIMATIC DP, Electronic modules for ET 200 PRO 4 AO U High Feature, +-10 V; 0...10V; 1...5V, Channel diagnostics; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately

Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes; against destruction
Input current	
from supply voltage 1L+, max.	65 mA
from backplane bus 3.3 V DC, max.	10 mA
Actuator supply	
Number of outputs	4
Short-circuit protection	Yes; per module
Output current	
• up to 55 °C, max.	1 A
Power loss	
Power loss, typ.	1.7 W
Address area	
Address space per module	
• Address space per module, max.	8 byte
Analog outputs	
Number of analog outputs	4
Voltage output, short-circuit protection	Yes; per channel, electronic to chassis
Voltage output, short-circuit current, max.	50 mA
Cycle time (all channels) max.	3 ms
Output ranges, voltage	
• 0 to 10 V	Yes
• 1 V to 5 V	Yes
• -10 V to +10 V	Yes
Connection of actuators	
• for voltage output two-wire connection	Yes
• for voltage output four-wire connection	Yes
Load impedance (in rated range of output)	
• with voltage outputs, min.	1 000 Ω
• with voltage outputs, capacitive load, max.	1 μF
Destruction limits against externally applied voltages and currents	
• Voltages at the outputs towards MANA	16 V; Permanent
Cable length	
• shielded, max.	30 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	15 bit; at -10 to +10 V; 14 bit at 1 to 5 V; 15 bit at 0 to 10 V
• Conversion time (per channel)	0.7 ms

<b>Settling time</b>	
<ul style="list-style-type: none"> <li>• for resistive load</li> </ul>	0.1 ms
<ul style="list-style-type: none"> <li>• for capacitive load</li> </ul>	6 ms
<b>Errors/accuracies</b>	
Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.1 %
Temperature error (relative to output range), (+/-)	0.01 %/K
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.05 %
<b>Operational error limit in overall temperature range</b>	
<ul style="list-style-type: none"> <li>• Voltage, relative to output range, (+/-)</li> </ul>	0.2 %
<b>Basic error limit (operational limit at 25 °C)</b>	
<ul style="list-style-type: none"> <li>• Voltage, relative to output range, (+/-)</li> </ul>	0.15 %
<b>Interrupts/diagnostics/status information</b>	
Substitute values connectable	Yes
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>	Yes; Parameterizable
<ul style="list-style-type: none"> <li>• Hardware interrupt</li> </ul>	No
<b>Diagnoses</b>	
<ul style="list-style-type: none"> <li>• Diagnostic information readable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Wire-break</li> </ul>	No
<ul style="list-style-type: none"> <li>• Short-circuit</li> </ul>	Yes; per channel, not in zero range
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> </ul>	Yes
<b>Potential separation</b>	
<b>Potential separation analog outputs</b>	
<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	Yes
<b>Isolation</b>	
Isolation tested with	707 V DC (type test)
<b>Dimensions</b>	
Width	45 mm
Height	130 mm
Depth	35 mm
<b>Weights</b>	
Weight, approx.	150 g

**last modified:** 9/6/2023 