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Data sheet 6ES7145-4FF00-0AB0

Siemens EcoTech

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



Figure similar

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

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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
Settling time	
● for resistive load	0.1 ms
● for capacitive load	6 ms
Errors/accuracies	
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 %
Operational error limit in overall temperature range	
● Voltage, relative to output range, (+/-)	0.2 %
Basic error limit (operational limit at 25 °C)	
● Voltage, relative to output range, (+/-)	0.15 %
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
● Diagnostic alarm	Yes; Parameterizable
● Hardware interrupt	No
Diagnoses	
● Diagnostic information readable	Yes
● Wire break	No
● short-circuit	Yes; per channel, not in zero range
Diagnostics indication LED	
● Group error SF (red)	Yes
Potential separation	
Potential separation analog outputs	
● between the channels	No
● between the channels and backplane bus	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weights	
Weight, approx.	150 g
Classifications	

	Version	Classification
eClass	16	27-24-26-01
eClass	14	27-24-26-01
eClass	12	27-24-26-01
eClass	9.1	27-24-26-01
eClass	9	27-24-26-01
eClass	8	27-24-26-01
eClass	7.1	27-24-26-01
eClass	6	27-24-26-01
ETIM	10	EC001596
ETIM	9	EC001596
ETIM	8	EC001596
ETIM	7	EC001596
IDEA	4	3562
UNSPSC	15	32-15-17-05

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Approvals / Certificates

General Product Approval









General Product Approval		Test Certificates		Maritime application	
		Special Test Certific-ate	Type Test Certific-ates/Test Report		

Maritime application				other	
				Miscellaneous	Confirmation

other		Railway		Environment	
	Miscellaneous	Confirmation	Special Test Certific-ate	Environmental Con-firmations	

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