SIEMENS

Data sheet

6ES7135-6FB00-0BA1



SIMATIC ET 200SP, Analog output module, AQ 2xU Standard, Pack quantity: 1 unit, suitable for BU type A0, A1, Color code CC00, Module diagnostics, 16 bit

Product type designation HW functional status From FS03 From FS03 FW update possible usable BaseUnits Color code for module-specific color identification plate Product function • I&M data • Isochronous mode • Output range scalable Rogineering with • STEP 7 TIA Portal configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • Oversampling • MSO CIR - Configuration in RUN Reparameterization possible in RUN Reparameterization possible in RUN Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Power loss Power lo	General information	
Firmware version FW update possible usable BaseUnits Color code for module-specific color identification plate Product function I & M data Sochronous mode Output range scalable Engineering with STEP 7 TIA Portal configurable/integrated from version FROFIBUS from GSD version/GSD revision FROFIBUS from GSD version/GSD revision FROFIRET from GSD version/GSD revision FROFIRET from GSD version/GSD revision MSO CIR - Configuration in RUN Reparameterization possible in RUN Calibration possible in RUN No Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) Reverse polarity protection In WA Address area	Product type designation	AQ 2xU ST
FW update possible usable BaseUnits Color code for module-specific color identification plate Product function I & M data I	HW functional status	From FS03
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Product function • I&M data • Isochronous mode • Output range scalable Engineering with • STEP 7 TIA Portal configurable/integrated from version • STEP 7 Tonfigurable/integrated from version • STEP 7 configurable/integrated from version • STEP 7 tonfigurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • Oversampling • Oversampling • MSO CIR - Configuration in RUN Reparameterization possible in RUN Calibration possible in RUN Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) Reverse polarity protection Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	usable BaseUnits	BU type A0, A1
■ I&M data ■ Isochronous mode ■ Output range scalable Engineering with ■ STEP 7 TIA Portal configurable/integrated from version ■ STEP 7 TIA Portal configurable/integrated from version ■ STEP 7 Tonfigurable/integrated from version ■ PROFIBUS from GSD version/GSD revision ■ PROFIBUS from GSD version/GSD revision ■ PROFINET from GSD version/GSD revision Operating mode ■ Oversampling ■ No ■ MSO ■ No CIR - Configuration in RUN Reparameterization possible in RUN Reparameterization possible in RUN No Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) Reverse polarity protection Input current Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	Color code for module-specific color identification plate	CC00
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Output range scalable Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Operating mode Oversampling MSO CIR - Configuration in RUN Reparameterization possible in RUN Calibration possible in RUN No Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Yes Input current Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	I&M data	Yes; I&M0 to I&M3
Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision Operating mode Oversampling No MSO CIR - Configuration in RUN Reparameterization possible in RUN Reparameterization possible in RUN No Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible	 Isochronous mode 	No
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version • STEP 7 configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision Operating mode • Oversampling • MSO CIR - Configuration in RUN Reparameterization possible in RUN Calibration possible in RUN No Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) Reverse polarity protection Input current Current consumption, max. Power loss Power loss, typ. 1 W Address area	Engineering with	
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PROFINET from GSD version/GSD revision Operating mode Oversampling MSO No CIR - Configuration in RUN Reparameterization possible in RUN Calibration possible in RUN No Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Yes Input current Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	 STEP 7 configurable/integrated from version 	V5.5 SP3 / -
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Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Input current Current consumption, max. Power loss Power loss, typ. 1 W Address area	Calibration possible in RUN	No
permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Yes Input current Current consumption, max. Power loss Power loss, typ. 1 W Address area	Supply voltage	
permissible range, upper limit (DC) Reverse polarity protection Yes Input current Current consumption, max. Power loss Power loss, typ. 1 W Address area	Rated value (DC)	24 V
Reverse polarity protection Input current Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	permissible range, lower limit (DC)	19.2 V
Input current Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	permissible range, upper limit (DC)	28.8 V
Current consumption, max. 80 mA Power loss Power loss, typ. 1 W Address area	Reverse polarity protection	Yes
Power loss Power loss, typ. 1 W Address area	Input current	
Power loss, typ. 1 W Address area	Current consumption, max.	80 mA
Address area	Power loss	
	Power loss, typ.	1 W
	Address area	
Address space per module	Address space per module	
• Address space per module, max. 4 byte; + 1 byte for QI information	Address space per module, max.	4 byte; + 1 byte for QI information
Hardware configuration	Hardware configuration	
Automatic encoding	Automatic encoding	
Mechanical coding element Yes	 Mechanical coding element 	Yes
Type of mechanical coding element Type A	 Type of mechanical coding element 	Type A
Analog outputs	Analog outputs	

Number of analog outputs	2	
Voltage output, short-circuit current, max.	45 mA	
Cycle time (all channels), min.	1 ms	
Analog output with oversampling	No	
Output ranges, voltage		
• 0 to 10 V	Yes; 15 bit	
• 1 V to 5 V	Yes; 13 bit	
• -5 V to +5 V	Yes; 15 bit incl. sign	
• -10 V to +10 V	Yes; 16 bit incl. sign	
Connection of actuators	V	
for voltage output two-wire connection	Yes	
for voltage output four-wire connection	No	
Load impedance (in rated range of output)	010	
with voltage outputs, min.	2 kΩ	
with voltage outputs, capacitive load, max.	1 μF	
Destruction limits against externally applied voltages and cur		
Voltages at the outputs	30 V	
Cable length	200	
• shielded, max.	200 m	
Analog value generation for the outputs		
Integration and conversion time/resolution per channel		
Resolution with overrange (bit including sign), max.	16 bit	
Settling time		
for resistive load	0.1 ms	
for capacitive load	1 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	0.05 %	
output range), (+/-)		
Operational error limit in overall temperature range	0.5.0/	
Voltage, relative to output range, (+/-)	0.5 %	
Current, relative to output range, (+/-) Pagin error limit (experience limit et 25 °C)	0.5 %	
Basic error limit (operational limit at 25 °C)	0.2.0/	
Voltage, relative to output range, (+/-) Current, relative to output range, (+/-)	0.3 % 0.3 %	
Current, relative to output range, (+/-)	0.5 %	
Interrupts/diagnostics/status information		
Diagnostics function	Yes	
Substitute values connectable	Yes	
Alarms	V.	
Diagnostic alarm	Yes	
Diagnoses	V	
Monitoring the supply voltage Short circuit	Yes	
Short-circuit Group error	Yes	
Group error Overflow/underflow	Yes Yes	
Overnow/undernow Diagnostics indication LED	1 53	
Monitoring of the supply voltage (PWR-LED)	Vec: green PM/P LED	
Monitoring of the supply voltage (PWR-LED) Channel status display	Yes; green PWR LED Yes; green LED	
for channel diagnostics	No	
for module diagnostics	Yes; green/red DIAG LED	
	166, greenined DIAO LED	
Potential separation		
Potential separation channels	N-	
between the channels	No V	
between the channels and backplane bus between the channels and the payor symply of the	Yes	
 between the channels and the power supply of the electronics 	Yes	
Isolation		
	707 V DC (hung heat)	
Isolation tested with	707 V DC (type test)	
Ambient conditions		
Ambient temperature during operation		
 horizontal installation, min. 	-30 °C; < 0 °C as of FS03	

 horizontal installation, max. 	60 °C
 vertical installation, min. 	-30 °C; < 0 °C as of FS03
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	31 g

last modified: 1/16/2021 **C**