MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6BK1136-6AB00-0CU0

FAILSAFE COMPACT SERVO DRIVE

Used with the applicable SIMATIC MICRO-DRIVE F-TM ServoDrive HF configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens D 34 August 2021, SIMATIC MICRO-DRIVE, pages 2/9 and 2/10

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Technical specifications

Article number	**6BK1136-6AB00-0CU0**
	F-TM ServoDrive HF
General information	
Product type designation	F-TM ServoDrive HF
Product description	control of EC and stepper motors
Product function	
• I&M data	Yes
• Isochronous mode	No
• Four-quadrant operation	Yes
• Speed control with encoder	Yes
• Speed control without encoder	Yes; for stepper motors
• Safety Functions	Yes; Drive controller with hardwired STO
Protection function	
• Undervoltage protection	Yes
• Overvoltage protection	Yes
• Overload protection	Yes
• Ground-fault protection	No
• Short-circuit protection	Yes
Installation type/mounting	
Type of ventilation	Convection cooling
Supply voltage	
Design of the power supply	24 ... 48 V DC, SELV / PELV
Output voltage	
Rated value, min.	24 V
Rated value, max.	48 V
Output current	
Current output (rated value)	5 A
Output current, max.	15 A
Output frequency	599 Hz
Encoder supply	
Number of outputs	1
Digital inputs	
Number of digital inputs	1; input for message signal
Number of safety inputs	1; For STO, antivalent (2-pin) - 24 V DC
Encoder	
Connectable encoders	
• Incremental encoder (symmetrical)	Yes; up to 500 Hz per channel
• Absolute encoder (SSI)	Yes; BiSS-C
• BiSS-C encoder	Yes
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	No
Diagnoses	
• Monitoring the supply voltage	Yes
• Wire-break	Yes
• Short-circuit	Yes
• Telegram error at SSI encoder	Yes; BiSS-C
• Group error	Yes
Diagnostics indication LED	
• RUN LED	Yes
• ERROR LED	Yes

Article number	**6BK1136-6AB00-0CU0**
	F-TM ServoDrive HF
Integrated Functions	
Position detection	
• Incremental acquisition	Yes
• Absolute acquisition	Yes
Potential separation	
Potential separation channels	
• between the channels and back-plane bus	Yes
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
cULus	available soon
RCM (formerly C-TICK)	available soon
KC approval	available soon
EAC (formerly Gost-R)	available soon
China RoHS compliance	Yes
Standard for EMC according to EN 61800-3	Yes
Standard for drive acc. to EN 61800-5-1	Yes
Standard for drive acc. to EN 61800-5-2	Yes
Highest safety class achievable in safety mode	
• Performance level according to ISO 13849-1	Category 3, performance level d, according to EN ISO 13849-1:2015
• SIL acc. to IEC 61508	3
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	-30 °C; No condensation, splash water, icing, salt spray or oil mist permitted.
• horizontal installation, max.	60 °C; No condensation, splash water, icing, salt spray or oil mist permitted. Note the derating data!
• vertical installation, min.	-30 °C; No condensation, splash water, icing, salt spray or oil mist permitted.
• vertical installation, max.	50 °C; No condensation, splash water, icing, salt spray or oil mist permitted. Note the derating data!
Ambient temperature during storage/transportation	
• Storage, min.	-30 °C
• Storage, max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	3 000 m

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Technical specifications

Article number	**6BK1136-6AB00-0CU0**
	F-TM ServoDrive HF
Cables	
Cable length for motor, shielded, max.	10 m
Dimensions	
Width	20 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	55 g
Other	
Brake design	holding brake control via the process image
Braking chopper	Yes

Accessories

Description	Article No.
ET 200SP BaseUnit type U0	
• For constructing a new potential group (white)	**6ES7193-6BP00-0DU0**
• For continuing an existing potential group (gray)	**6ES7193-6BP00-0BU0**
Shield connection for ET 200SP Includes 5 shield connections	**6ES7193-6SC00-1AM0**