

## Technical specifications

Article number	<b>6BK1136-6SB00-0BU0</b> F-TM StepDrive ST	Article number	<b>6BK1136-6SB00-0BU0</b> F-TM StepDrive ST
<b>General information</b>		<b>Diagnostics indication LED</b>	
Product type designation	F-TM StepDrive ST	• RUN LED	Yes
Product description	control of stepper motors	• ERROR LED	Yes
<b>Product function</b>		<b>Integrated Functions</b>	
• I&M data	Yes	<b>Position detection</b>	
• Isochronous mode	No	• Incremental acquisition	Yes
• Four-quadrant operation	Yes	• Absolute acquisition	No
• Speed control with encoder	No	<b>Potential separation</b>	
• Speed control without encoder	No	<b>Potential separation channels</b>	
• Safety Functions	Yes; Drive controller with hardwired STO	• between the channels and back-plane bus	Yes
<b>Protection function</b>		<b>Degree and class of protection</b>	
• Undervoltage protection	Yes	IP degree of protection	IP20
• Overvoltage protection	Yes	<b>Standards, approvals, certificates</b>	
• Overload protection	Yes	CE mark	Yes
• Ground-fault protection	No	cULus	Available soon
• Short-circuit protection	Yes	RCM (formerly C-TICK)	Available soon
<b>Installation type/mounting</b>		KC approval	Available soon
Type of ventilation	Convection cooling	EAC (formerly Gost-R)	Available soon
<b>Supply voltage</b>		China RoHS compliance	Yes
Design of the power supply	24 ... 48 V DC, SELV / PELV	Standard for EMC according to EN 61800-3	Yes, according to second environment Category C2 acc. EN 61800-3
<b>Output voltage</b>		Standard for drive acc. to EN 61800-5-1	Yes
Rated value, min.	24 V	Standard for drive acc. to EN 61800-5-2	Yes
Rated value, max.	48 V	<b>Highest safety class achievable in safety mode</b>	
<b>Output current</b>		• Performance level according to ISO 13849-1	Category 3, performance level d, according to EN ISO 13849-1:2015
Current output (rated value)	5 A	• SIL acc. to IEC 61508	SIL 3 according to DIN EN 61800-5-2:2017
Output current, max.	10 A	<b>Ambient conditions</b>	
Output frequency	1 000 Hz	Pollution degree during storage and transport	2
<b>Encoder supply</b>		<b>Ambient temperature during operation</b>	
Number of outputs	1	• horizontal installation, min.	-30 °C; No condensation, splash water, icing, salt spray or oil mist permitted.
<b>5 V encoder supply</b>		• horizontal installation, max.	60 °C; No condensation, splash water, icing, salt spray or oil mist permitted. Note the derating data!
• 5 V	Yes	• vertical installation, min.	-30 °C; No condensation, splash water, icing, salt spray or oil mist permitted.
• Short-circuit protection	Yes	• vertical installation, max.	50 °C; No condensation, splash water, icing, salt spray or oil mist permitted. Note the derating data!
• Output current, max.	150 mA	<b>Ambient temperature during storage/transportation</b>	
<b>Digital inputs</b>		• Storage, min.	-40 °C
Number of digital inputs	1; input for message signal	• Storage, max.	70 °C
Number of safety inputs	1; For STO, antivalent (2-pin) - 24 V DC	<b>Altitude during operation relating to sea level</b>	
<b>Encoder</b>		• Installation altitude above sea level, max.	3 000 m
<b>Connectable encoders</b>			
• Incremental encoder (symmetrical)	Yes; up to 500 Hz per channel		
<b>Interrupts/diagnostics/status information</b>			
<b>Alarms</b>			
• Diagnostic alarm	Yes		
• Hardware interrupt	No		
<b>Diagnoses</b>			
• Monitoring the supply voltage	Yes		
• Wire-break	Yes		
• Short-circuit	Yes		
• Group error	Yes		

**SIMATIC MICRO-DRIVE drive system**

TM Drives

**F-TM StepDrive ST****Technical specifications**

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<b>Cables</b>	
Cable length for motor, shielded, max.	10 m
<b>Dimensions</b>	
Width	20 mm
Height	73 mm
Depth	58 mm
<b>Weights</b>	
Weight, approx.	55 g
<b>Other</b>	
Brake design	holding brake control via the process image
Braking chopper	No

**Accessories**

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

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