

DSS1E-X for ET200S High Feature direct soft starter Setting range 0.3...3 A Mechanical switching Electronic protection AC-3, up to 1.1 kW / 400 V expandable for Brake control module 2DI module Motor starter ES Circuit breaker signaling parameterizable DPV 1-capable PROFIENERGY-capable to PN



Product brand name	SIMATIC
Product designation	Motor starters
Design of the product	direct starter
Product type designation	ET 200S

General technical data	
Trip class	CLASS 10 and 10A adjustable
Product function	
<ul style="list-style-type: none"> <li>on-site operation</li> </ul>	Yes
Power loss [W] for rated value of the current	
<ul style="list-style-type: none"> <li>at AC in hot operating state</li> </ul>	9 W
<ul style="list-style-type: none"> <li>at AC in hot operating state per pole</li> </ul>	3 W
Power loss [W] for rated value of the current without load current share typical	2.4 W
Insulation voltage	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	500 V
Degree of pollution	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul style="list-style-type: none"> <li>between main and auxiliary circuit</li> </ul>	400 V

Protection class IP	IP20
Shock resistance	5g / 11 ms
Vibration resistance	2g
Type of assignment	1
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	A
Reference code acc. to DIN EN 81346-2	Q
Reference code acc. to DIN EN 61346-2	Q
Product function	
• direct start	Yes
• reverse starting	No
Product component Motor brake output	Yes
Product feature	
• brake control with 230 V AC	No
• brake control with 24 V DC	No
• brake control with 180 V DC	No
• brake control with 500 V DC	No
Product extension braking module for brake control	Yes
Product function Short circuit protection	Yes
Design of short-circuit protection	circuit-breakers
Maximum short-circuit current breaking capacity (Icu)	
• at 400 V rated value	50 kA

#### Electromagnetic compatibility

EMC emitted interference	
• acc. to IEC 60947-1	CISPR11, ambience A (industrial sector)
EMI immunity acc. to IEC 60947-1	corresponds to degree of severity 3, ambience A (industrial sector)
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV on voltage supply, inputs and outputs
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV (U > 24 V DC)
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV (U > 24 V DC)
Field-bound parasitic coupling acc. to IEC 61000-4-3	80 MHz ... 1 GHz 10 V/m, 1.4 GHz ... 2 Hz 3 V/m, 2 GHz ... 2.7 GHz 1 V/m

#### Safety related data

B10 value	
• with high demand rate acc. to SN 31920	1 000 000
Proportion of dangerous failures	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	75 %
Failure rate [FIT]	

<ul style="list-style-type: none"> <li>with low demand rate acc. to SN 31920</li> </ul>	100 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y
<b>Protection against electrical shock</b>	finger-safe

### Main circuit

<b>Number of poles for main current circuit</b>	3
<b>Design of the switching contact</b>	solid-state
<b>Adjustable pick-up value current of the current-dependent overload release</b>	0.3 ... 3 A
<b>Type of the motor protection</b>	solid-state
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	200 ... 400 V
<b>Operating frequency 1 rated value</b>	50 Hz
<b>Operating frequency 2 rated value</b>	60 Hz
<b>Relative positive tolerance of the operating frequency</b>	10 %
<b>Relative negative tolerance of the operating frequency</b>	10 %
<b>Operating range relative to the operating voltage at AC</b>	
<ul style="list-style-type: none"> <li>at 50 Hz</li> </ul>	200 ... 440 V
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>at AC-3</li> <li>— at 400 V rated value</li> </ul>	3 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>at AC-3</li> <li>— at 400 V rated value</li> </ul>	1.1 kW
Operating power for three-phase motors at 400 V at 50 Hz	0.1 ... 1.1 kW

### Inputs/ Outputs

<b>Product function</b>	
<ul style="list-style-type: none"> <li>digital inputs parameterizable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>digital outputs parameterizable</li> </ul>	No
<b>Number of digital inputs</b>	2
<b>Number of sockets</b>	
<ul style="list-style-type: none"> <li>for digital output signals</li> </ul>	0
<ul style="list-style-type: none"> <li>for digital input signals</li> </ul>	0

### Supply voltage

<b>Type of voltage of the supply voltage</b>	DC
<b>Supply voltage 1 at DC</b>	24 ... 24 V
<b>Supply voltage 1 at DC rated value</b>	
<ul style="list-style-type: none"> <li>minimum permissible</li> </ul>	20.4 V
<ul style="list-style-type: none"> <li>maximum permissible</li> </ul>	28.8 V

Control circuit/ Control	
<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage at DC</b>	
• rated value	20.4 ... 28.8 V
<b>Control supply voltage 1</b>	
• at DC rated value	20.4 ... 28.8 V
• at DC	24 ... 24 V

Installation/ mounting/ dimensions	
<b>Mounting position</b>	vertical, horizontal
<b>Mounting type</b>	pluggable on terminal module
<b>Height</b>	290 mm
<b>Width</b>	65 mm
<b>Depth</b>	150 mm

Ambient conditions	
<b>Installation altitude at height above sea level</b>	
• maximum	2 000 m
<b>Ambient temperature</b>	
• during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity during operation	5 ... 95 %

Communication/ Protocol	
<b>Protocol is supported</b>	
• PROFIBUS DP protocol	Yes
• PROFINET protocol	Yes
<b>Design of the interface</b>	
• PROFINET protocol	Yes
<b>Product function Bus communication</b>	Yes
<b>Protocol is supported</b>	
• AS-Interface protocol	No
<b>Product function</b>	
• supports PROFIenergy measured values	Yes
• supports PROFIenergy shutdown	Yes
<b>address range memory of address range</b>	
• of the inputs	2 byte
• of the outputs	2 byte
<b>Type of electrical connection</b>	
• of the communication interface	via backplane bus
• for communication transmission	via backplane bus

Connections/ Terminals	
<b>Type of electrical connection</b>	

<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>	screw-type terminals
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• 1 for digital input signals</li> <li>• 2 for digital input signals</li> </ul>	using control module using control module
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• at the manufacturer-specific device interface</li> <li>• for main energy infeed</li> <li>• for load-side outgoing feeder</li> <li>• for main energy transmission</li> <li>• for supply voltage line-side</li> <li>• for supply voltage transmission</li> </ul>	plug screw-type terminals Screw-type terminals via energy bus via backplane bus via backplane bus

### UL/CSA ratings

<b>Operating voltage</b> <ul style="list-style-type: none"> <li>• at AC at 60 Hz acc. to CSA and UL rated value</li> </ul>	480 V
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### Certificates/ approvals

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>
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<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>other</b>
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)



Profibus

### Further information

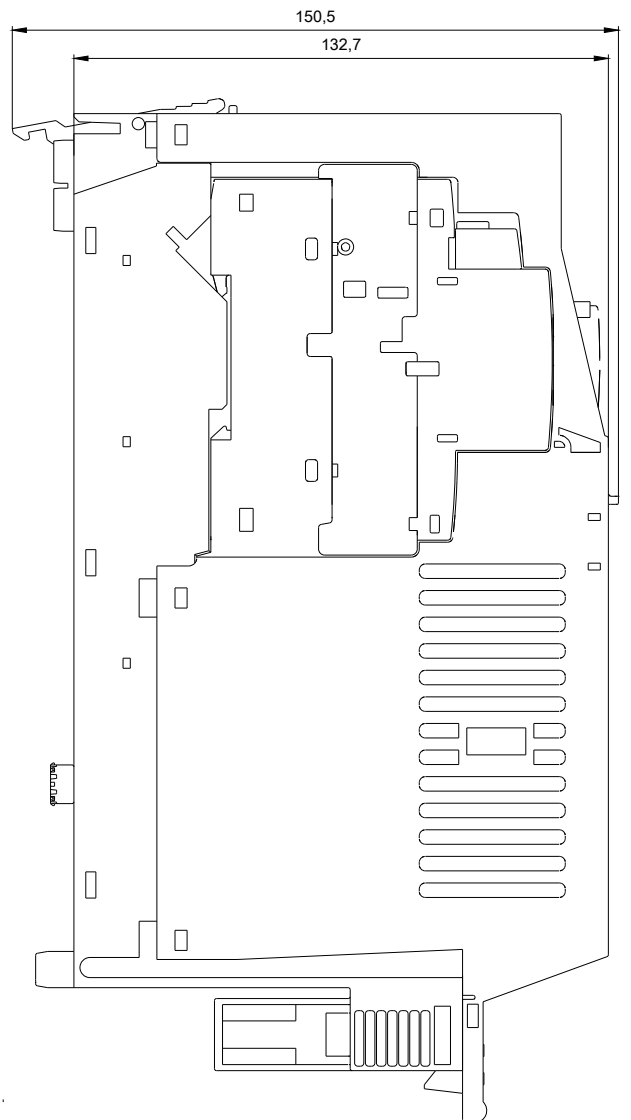
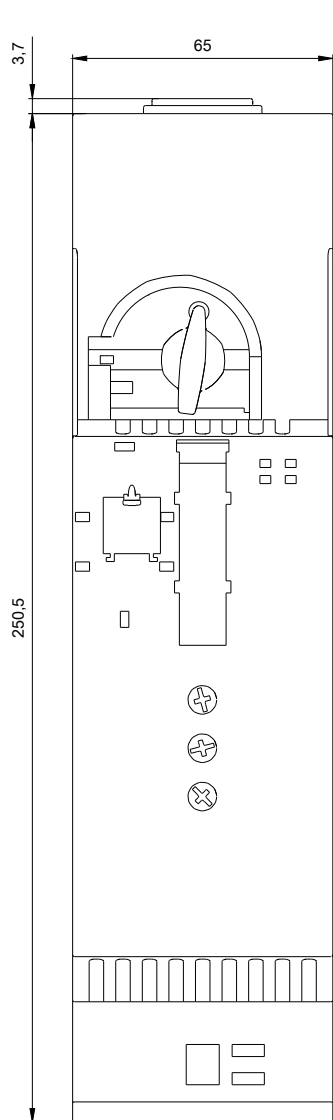
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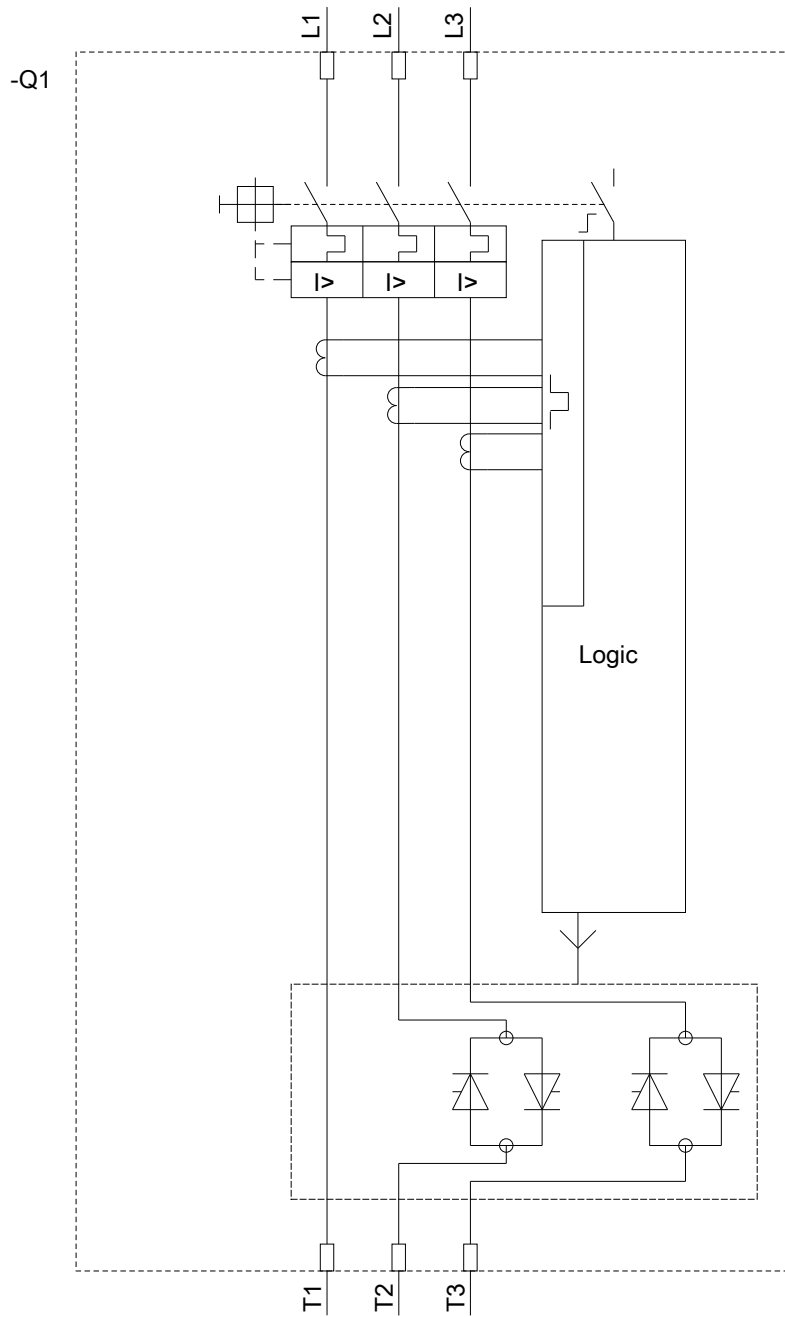
**Industry Mall (Online ordering system)**  
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1301-0AB20-0AB4>

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**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0AB20-0AB4>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
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