



Direct-on-line starter High Feature; Electronic switching; Electronic overload protection up to 4 kW / 400 V; Adjustment range 2.8 .. 9 A; PROFlenergy; Option: 3DI/LC module

<b>product brand name</b>	SIMATIC
<b>product category</b>	Motor starter
<b>product designation</b>	Direct-on-line starter
<b>product type designation</b>	ET 200SP
<b>General technical data</b>	
<b>trip class</b>	CLASS OFF / 5 / 10 adjustable
<b>equipment variant acc. to IEC 60947-4-2</b>	3
<b>product function</b>	Direct-on-line starter
• on-site operation	Yes
• intrinsic device protection	Yes
• remote firmware update	Yes
• for power supply reverse polarity protection	Yes
<b>power loss [W] for rated value of the current</b>	
• at AC in hot operating state per pole	1.5 W
<b>insulation voltage rated value</b>	500 V
<b>degree of pollution</b>	2
<b>overvoltage category</b>	III
<b>surge voltage resistance rated value</b>	6 kV
<b>maximum permissible voltage for safe isolation</b>	
• between main and auxiliary circuit	500 V
<b>shock resistance</b>	6g / 11 ms
<b>vibration resistance</b>	15 mm to 6 Hz; 2g to 500 Hz
<b>operating frequency maximum</b>	1 1/s
<b>mechanical service life (switching cycles) of the main contacts typical</b>	30 000 000
<b>type of assignment</b>	1
<b>utilization category</b>	
• acc. to IEC 60947-4-2	AC-53a: 9 A: (8-0,7: 70-32)
• acc. to IEC 60947-4-3	AC-51: 9 A: (1,2-10: 50-360); AC-55a: 4 A: (3-240: 40-6)
<b>reference code acc. to IEC 81346-2</b>	Q
<b>Substance Prohibitance (Date)</b>	15.04.2016 00:00:00
<b>product function</b>	
• direct start	Yes
• reverse starting	No
<b>product component motor brake output</b>	No
<b>product function short circuit protection</b>	Yes
<b>design of short-circuit protection</b>	fuse
<b>breaking capacity maximum short-circuit current (Icu)</b>	

<ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 500 V acc. to UL 60947 rated value</li> </ul>	55 kA 55 kA 100 kA
<b>breaking capacity maximum short-circuit current (I<sub>cu</sub>) in the IT network</b>	
<ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> </ul>	55 kA 55 kA
<b>Electromagnetic compatibility</b>	
EMC emitted interference acc. to IEC 60947-1	class A
<b>EMC immunity acc. to IEC 60947-1</b>	Class A
<b>conducted interference</b>	
<ul style="list-style-type: none"> <li>• due to burst acc. to IEC 61000-4-4</li> <li>• due to conductor-earth surge acc. to IEC 61000-4-5</li> <li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li> <li>• due to high-frequency radiation acc. to IEC 61000-4-6</li> </ul>	2 kV 2 kV 1 kV Class A
<b>field-based interference acc. to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge acc. to IEC 61000-4-2</b>	8 kV air discharge
<b>conducted HF interference emissions acc. to CISPR11</b>	Class A for industrial environment
<b>field-bound HF interference emission acc. to CISPR11</b>	Class A for industrial environment
<b>Safety related data</b>	
<b>MTBF</b>	46 y
<b>safe state</b>	Load circuit open
<b>protection class IP on the front acc. to IEC 60529</b>	IP20
<b>touch protection on the front acc. to IEC 60529</b>	finger-safe
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>design of the switching contact</b>	Hybrid
<b>adjustable current response value current of the current-dependent overload release</b>	2.8 ... 9 A
<b>minimum load [%]</b>	50 %; from smallest adjustable rated current
<b>type of the motor protection</b>	solid-state
operating voltage rated value	48 ... 500 V
<b>relative symmetrical tolerance of the operating voltage</b>	10 %
<b>operating frequency 1 rated value</b>	50 Hz
<b>operating frequency 2 rated value</b>	60 Hz
<b>relative symmetrical tolerance of the operating frequency</b>	5 %
<b>relative positive tolerance of the operating frequency</b>	5 %
<b>relative negative tolerance of the operating frequency</b>	5 %
operational current at AC at 400 V rated value	9 A
<b>ampacity when starting maximum</b>	90 A
operating power for 3-phase motors at 400 V at 50 Hz	1.5 ... 4 kW
<b>Inputs/ Outputs</b>	
<b>number of digital inputs</b>	4
<ul style="list-style-type: none"> <li>• note</li> </ul>	4 via 3DI/LC module
<b>Supply voltage</b>	
<b>type of voltage of the supply voltage</b>	DC
<b>supply voltage 1 at DC rated value</b>	
<ul style="list-style-type: none"> <li>• minimum permissible</li> <li>• maximum permissible</li> </ul>	20.4 V 28.8 V
<b>supply voltage at DC rated value</b>	24 V
<b>consumed current for rated value of supply voltage</b>	
<ul style="list-style-type: none"> <li>• in standby mode of operation</li> <li>• during operation</li> <li>• at switching on of motor</li> </ul>	85 mA 140 mA 230 mA
<b>power loss [W] for rated value of supply voltage</b>	

<ul style="list-style-type: none"> <li>• in switching state OFF with bypass circuit</li> </ul>	2 W
<ul style="list-style-type: none"> <li>• in switching state ON with bypass circuit</li> </ul>	3.4 W
inrush current peak at 24 V	25 A; Observe the manual for group configuration
duration of inrush current peak at 24 V	0.145 ms
<b>Response times</b>	
<b>ON-delay time</b>	20 ms
<b>OFF-delay time</b>	35 ... 50 ms
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	Vertical, horizontal (observe derating)
<b>fastening method</b>	pluggable in BaseUnit
<b>height</b>	142 mm
<b>width</b>	30 mm
<b>depth</b>	150 mm
required spacing with side-by-side mounting	
<ul style="list-style-type: none"> <li>• upwards</li> </ul>	50 mm
<ul style="list-style-type: none"> <li>• downwards</li> </ul>	50 mm
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	4 000 m; For derating see manual
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +60 °C; For derating see manual
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
environmental category during operation acc. to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices)
relative humidity during operation	10 ... 95 %
air pressure acc. to SN 31205	900 ... 1 060 hPa
<b>Communication/ Protocol</b>	
<b>protocol is supported</b>	
<ul style="list-style-type: none"> <li>• PROFIBUS DP protocol</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• PROFINET protocol</li> </ul>	Yes
<b>product function bus communication</b>	Yes
protocol is supported AS-Interface protocol	No
<b>product function</b>	
<ul style="list-style-type: none"> <li>• supports PROFIenergy measured values</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• supports PROFIenergy shutdown</li> </ul>	Yes
<b>address space memory of address range</b>	
<ul style="list-style-type: none"> <li>• of the inputs</li> </ul>	4 byte
<ul style="list-style-type: none"> <li>• of the outputs</li> </ul>	2 byte
type of electrical connection of the communication interface	Plug contact to Base Unit
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• 1 for digital input signals</li> </ul>	Pluggable module - accessory
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main energy infeed</li> </ul>	Plug contact to Base Unit
<ul style="list-style-type: none"> <li>• for load-side outgoing feeder</li> </ul>	Plug contact to Base Unit
<ul style="list-style-type: none"> <li>• for supply voltage line-side</li> </ul>	Plug contact to Base Unit
<b>wire length for motor unshielded maximum</b>	200 m
<b>UL/CSA ratings</b>	
full-load current (FLA) for 3-phase AC motor at 480 V rated value	9 A
<b>yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>• for single-phase AC motor</li> </ul>	
<ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> </ul>	0.33 hp
<ul style="list-style-type: none"> <li>— at 230 V rated value</li> </ul>	1 hp
<ul style="list-style-type: none"> <li>• for 3-phase AC motor</li> </ul>	
<ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> </ul>	2 hp
<ul style="list-style-type: none"> <li>— at 220/230 V rated value</li> </ul>	2 hp

— at 460/480 V rated value

5 hp

operating voltage at AC at 60 Hz acc. to CSA and UL rated value

480 V

### Certificates/ approvals

General Product Approval

EMC

Declaration of Conformity



Declaration of Conformity

Test Certificates

Marine / Shipping

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



other

[Confirmation](#)



### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1308-0AD00-0CP0>

Cax online generator

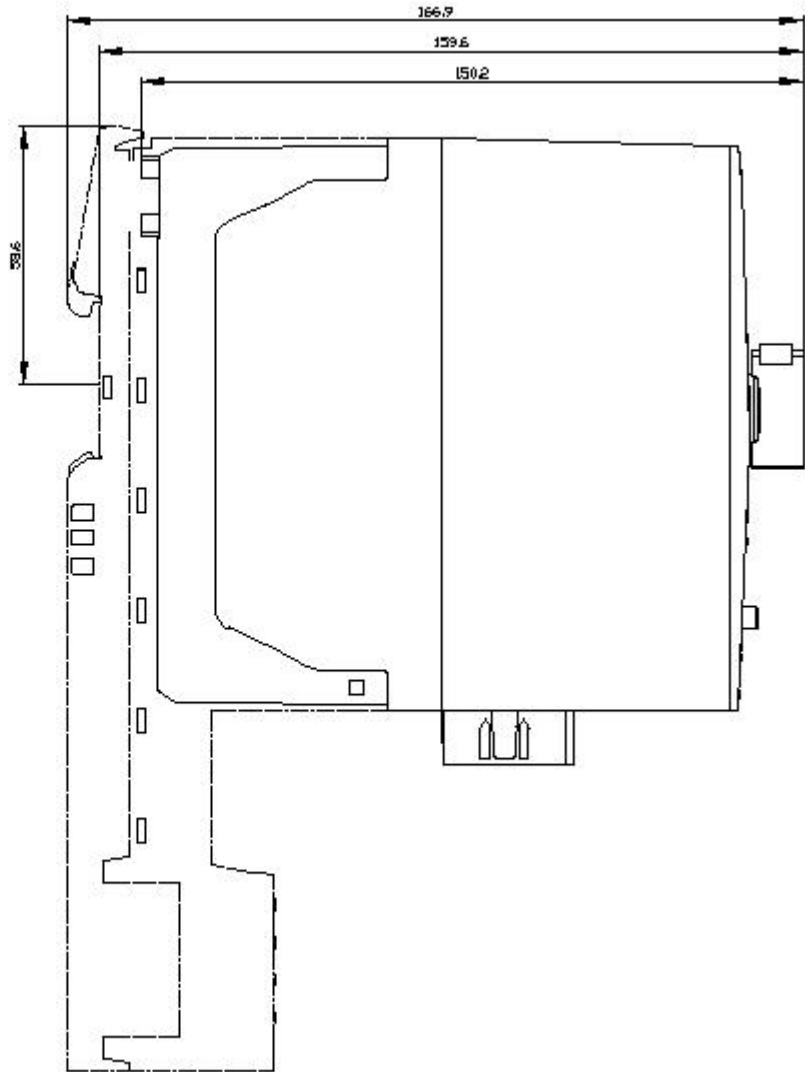
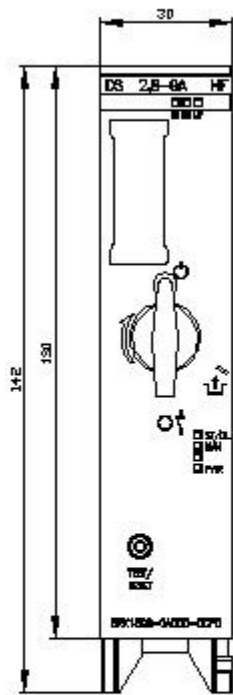
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1308-0AD00-0CP0>

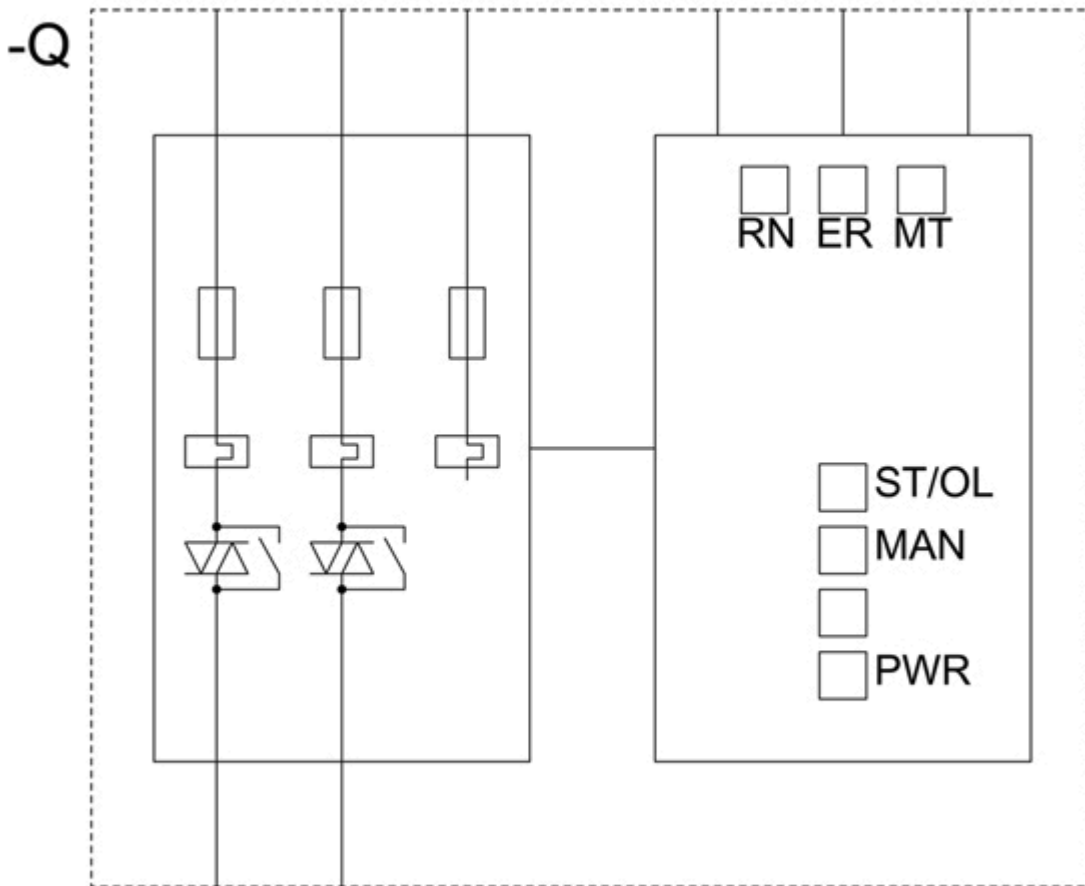
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1308-0AD00-0CP0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RK1308-0AD00-0CP0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1308-0AD00-0CP0&lang=en)





last modified:

1/31/2021