SIEMENS

## Data sheet 3RK1308-0CA00-0CP0

Figure similar

Fail-safe direct-on-line starter High Feature; Electronic switching; Electronic overload protection up to 0.09 kW / 400 V; Adjustment range 0.1 .. 0.4 A; PROFIenergy; Option: 3DI/LC module

| | |
|---|---|
| **product brand name** | SIMATIC |
| **product category** | Motor starter |
| **product designation** | Direct-on-line starter |
| **product type designation** | ET 200SP |
| **General technical data** | |
| **equipment variant according to IEC 60947-4-2** | 3 |
| **product function** | Fail-safe direct-on-line starter |
| ● on-site operation | Yes |
| ● intrinsic device protection | Yes |
| ● remote firmware update | Yes |
| ● for power supply reverse polarity protection | Yes |
| **insulation voltage rated value** | 500 V |
| **degree of pollution** | 2 |
| **overvoltage category** | III |
| **surge voltage resistance rated value** | 6 kV |
| **maximum permissible voltage for protective separation** | |
| ● between main and auxiliary circuit | 500 V |
| **shock resistance** | 6g / 11 ms |
| **vibration resistance** | 15 mm to 6 Hz; 2g to 500 Hz |
| **operating frequency maximum** | 1 1/s |
| mechanical service life (operating cycles) of the main contacts typical | 30 000 000 |
| **type of assignment** | 1 |
| **reference code according to IEC 81346-2** | Q |
| **Substance Prohibitance (Date)** | 04/15/2016 |
| **product function** | |
| ● direct start | Yes |
| ● reverse starting | No |
| **product component motor brake output** | No |
| **product function short circuit protection** | Yes |
| **design of short-circuit protection** | fuse |
| **maximum short-circuit current breaking capacity (Icu)** | |
| ● at 400 V rated value | 55 kA |
| ● at 500 V rated value | 55 kA |
| ● at 500 V according to UL 60947 rated value | 100 kA |
| **maximum short-circuit current breaking capacity (Icu) in the IT network** | |
| ● at 400 V rated value | 55 kA |
| ● at 500 V rated value | 55 kA |
| **Electromagnetic compatibility** | |

| | |
|---|---|
| EMC emitted interference according to IEC 60947-1 | class A |
| EMC immunity according to IEC 60947-1 | Class A |
| **conducted interference** | |
| ● due to burst according to IEC 61000-4-4 | 3 kV |
| ● due to conductor-earth surge according to IEC 61000-4-5 | 4 kV |
| ● due to conductor-conductor surge according to IEC 61000-4-5 | 2 kV |
| ● due to high-frequency radiation according to IEC 61000-4-6 | Class A |
| **field-based interference according to IEC 61000-4-3** | 20 V/m |
| **electrostatic discharge according to IEC 61000-4-2** | 8 kV air discharge |
| **conducted HF interference emissions according to CISPR11** | Class A for industrial environment |
| **field-bound HF interference emission according to CISPR11** | Class A for industrial environment |
| **Safety related data** | |
| **safety device type according to IEC 61508-2** | Type B |
| **safe state** | Load circuit open |
| **B10d value** | 10 100 000 |
| Safety Integrity Level (SIL) according to IEC 61508 | 3 |
| performance level (PL) according to EN ISO 13849-1 | e |
| category according to EN ISO 13849-1 | 4 |
| **stop category according to EN 60204-1** | 0 |
| **diagnostics test interval by internal test function maximum** | 600 s |
| **PFH according to IEC 61508 relating to SIL** | 3.6E-9 1/h |
| **PFDavg with low demand rate according to IEC 61508** | 4.1E-7 |
| **hardware fault tolerance according to IEC 61508** | 1 |
| **protection class IP on the front according to IEC 60529** | IP20 |
| **touch protection on the front according to IEC 60529** | finger-safe |
| **Main circuit** | |
| **number of poles for main current circuit** | 3 |
| **design of the switching contact** | Hybrid |
| **adjustable current response value current of the current-dependent overload release** | 0.1 ... 0.4 A |
| **minimum load [%]** | 50 %; from smallest adjustable rated current |
| **type of the motor protection** | solid-state |
| operating voltage rated value | 48 ... 500 V |
| **relative symmetrical tolerance of the operating voltage** | 10 % |
| **operating frequency 1 rated value** | 50 Hz |
| **operating frequency 2 rated value** | 60 Hz |
| **relative symmetrical tolerance of the operating frequency** | 5 % |
| **relative positive tolerance of the operating frequency** | 5 % |
| **relative negative tolerance of the operating frequency** | 5 % |
| operational current at AC at 400 V rated value | 0.4 A |
| **ampacity when starting maximum** | 4 A |
| operating power for 3-phase motors at 400 V at 50 Hz | 0.06 ... 0.12 kW |
| **Inputs/ Outputs** | |
| **number of digital inputs** | 5 |
| ● note | 4 via 3DI/LC module |
| ● safety-related | 1 |
| **type of input characteristic** | Type 1 in accordance with EN 61131-2 |
| **input voltage at digital input** | |
| ● at DC rated value | 24 V |
| ● with signal <0> at DC | 0 ... 5 V |
| ● for signal <1> at DC | 15 ... 30 |
| input current at digital input for signal <1> typical | 0.009 A |
| **Supply voltage** | |
| **type of voltage of the supply voltage** | DC |
| **supply voltage 1 at DC rated value** | |
| ● minimum permissible | 20.4 V |
| ● maximum permissible | 28.8 V |
| **supply voltage at DC rated value** | 24 V |
| **consumed current for rated value of supply voltage** | |

| | |
|---|---|
| ● in standby mode of operation | 95 mA |
| ● during operation | 160 mA |
| ● at switching on of motor | 250 mA |
| **power loss [W] for rated value of supply voltage** | |
| ● in switching state OFF with bypass circuit | 2.3 W |
| ● in switching state ON with bypass circuit | 3.8 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 |
| **Response times** | |
| **ON-delay time** | 35 ms |
| **OFF-delay time** | 35 ... 50 ms |
| **OFF-delay time with safety-related request** | |
| ● when switched off via control inputs maximum | 55 ms |
| ● when switched off via supply voltage maximum | 120 ms |
| **Power Electronics** | |
| **operational current** | |
| ● at 40 °C rated value | 0.4 A |
| ● at 50 °C rated value | 0.4 A |
| ● at 55 °C rated value | 0.4 A |
| ● at 60 °C rated value | 0.4 A |
| **Installation/ mounting/ dimensions** | |
| **mounting position** | Vertical, horizontal (observe derating) |
| **fastening method** | pluggable in BaseUnit |
| **height** | 142 mm |
| **width** | 30 mm |
| **depth** | 150 mm |
| required spacing with side-by-side mounting | |
| ● upwards | 50 mm |
| ● downwards | 50 mm |
| **Ambient conditions** | |
| installation altitude at height above sea level maximum | 4 000 m; For derating see manual |
| **ambient temperature** | |
| ● during operation | -25 ... +60 °C; For derating see manual |
| ● during storage | -40 ... +70 °C |
| ● during transport | -40 ... +70 °C |
| environmental category during operation according 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 according to SN 31205 | 900 ... 1 060 hPa |
| **Communication/ Protocol** | |
| **protocol is supported** | |
| ● PROFIBUS DP protocol | Yes |
| ● PROFINET protocol | Yes |
| **product function bus communication** | Yes |
| protocol is supported AS-Interface protocol | No |
| **product function** | |
| ● supports PROFIenergy measured values | Yes |
| ● supports PROFIenergy shutdown | Yes |
| **address space memory of address range** | |
| ● of the inputs | 4 byte |
| ● of the outputs | 2 byte |
| type of electrical connection of the communication interface | Plug contact to Base Unit |
| **Connections/ Terminals** | |
| **type of electrical connection** | |
| ● 1 for digital input signals | Pluggable module - accessory |
| ● 2 for digital input signals | Plug contact to Base Unit |
| **type of electrical connection** | |
| ● for main energy infeed | Plug contact to Base Unit |
| ● for load-side outgoing feeder | Plug contact to Base Unit |
| ● for supply voltage line-side | Plug contact to Base Unit |
| **wire length for motor unshielded maximum** | 200 m |

| UL/CSA ratings | |
|---|---|
| full-load current (FLA) for 3-phase AC motor at 480 V rated value | 0.4 A |
| operating voltage at AC at 60 Hz according to CSA and UL rated value | 480 V |

## Certificates/ approvals

**General Product Approval**

Confirmation

**EMC**

| For use in hazardous locations | Functional Safety/Safety of Machinery | Declaration of Conformity | Test Certificates | Marine / Shipping |
|---|---|---|---|---|
| | Type Examination Certificate | | Type Test Certificates/Test Report | |

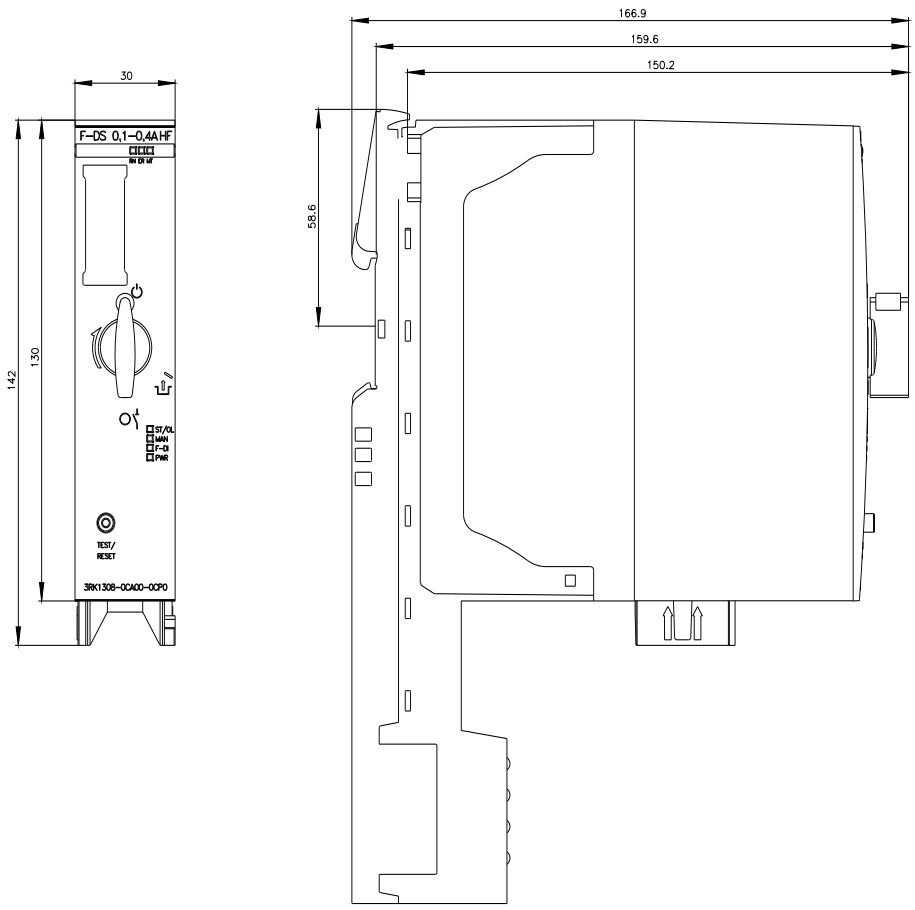
**Marine / Shipping**

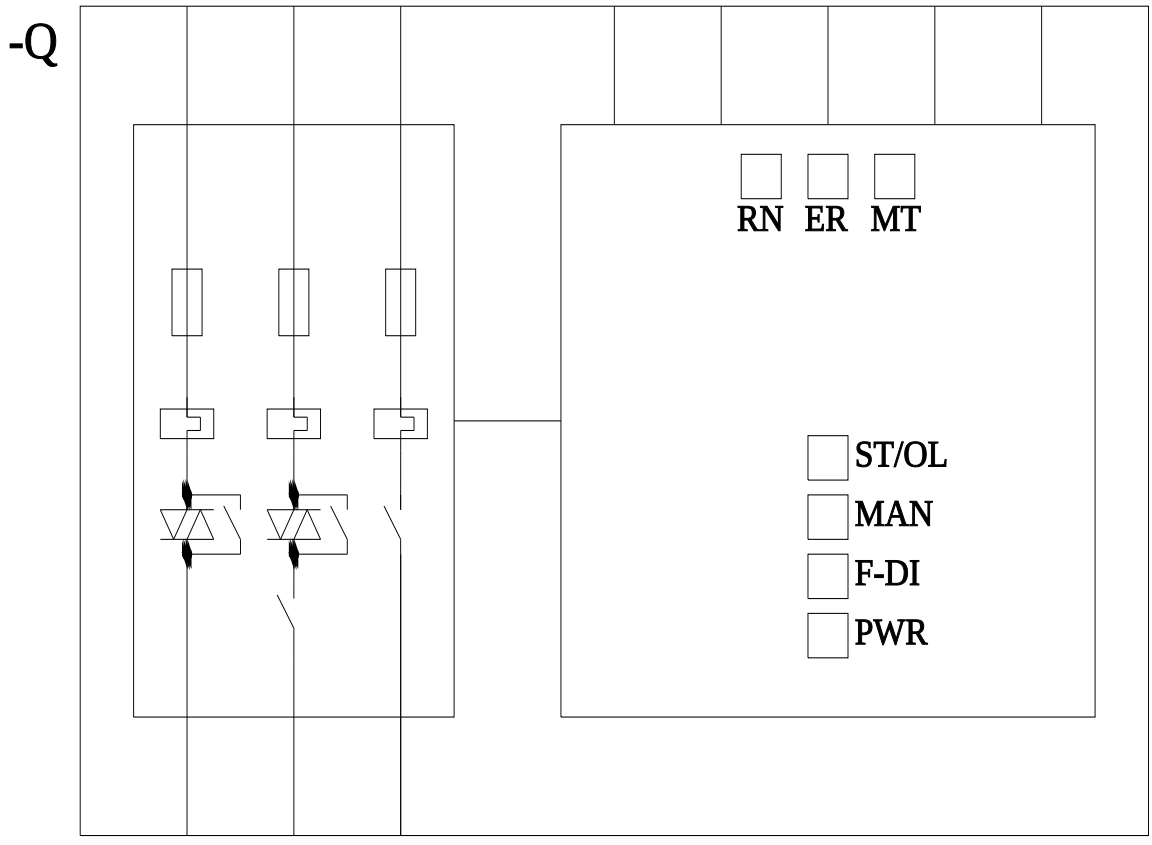
**other**

Confirmation

## Further information

**Siemens has decided to exit the Russian market (see here).**
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
**Siemens is working on the renewal of the current EAC certificates.**
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
**Information on the packaging**
https://support.industry.siemens.com/cs/ww/en/view/109813875
**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=3RK1308-0CA00-0CP0
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1308-0CA00-0CP0
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RK1308-0CA00-0CP0
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1308-0CA00-0CP0&lang=en




**last modified:** 10/22/2021

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3RK13080CA000CP0