## **SIEMENS**

## **Data sheet**

## 3RK1308-0BA00-0CP0



Reversing starter High Feature; Electronic switching; Electronic overload protection up to 0.09 kW / 400 V; Adjustment range 0.1 .. 0.4 A; PROFlenergy; Option: 3DI/LC module

Figure similar

product category product designation Reversing starter Product type designation ET 200SP  Ceneral technical data  trip class equipment variant acc. to IEC 60947-4-2 3 product function • on-site operation • intrinsic device protection • remote firmware update • for power supply reverse polarity protection  • at AC in hot operating state per pole insulation voltage rated value of the current • at AC in hot operating state per pole insulation voltage rated value degree of pollution overvoltage category Ill surge voltage resistance rated value • between main and auxiliary circuit shock resistance operating frequency maximum mechanical service life (switching cycles) of the main contacts typical  type of assignment reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) product function • direct start • reverse starting product component motor brake output  No	product brand name	SIMATIC		
product type designation ET 200SP  General technical data  trip class CLASS OFF / 5 / 10 adjustable equipment variant acc. to IEC 60947-4-2 3 product function Reversing starter  • on-site operation Yes • intrinsic device protection Yes • remote firmware update Yes • for power supply reverse polarity protection Yes  power loss [W] for rated value of the current • at AC in hot operating state per pole Insulation voltage rated value Soo V Soo	product category	Motor starter		
trip class equipment variant acc. to IEC 60947-4-2 groduct function on-site operation intrinsic device protection intrinsic protection	product designation	Reversing starter		
trip class  equipment variant acc. to IEC 60947-4-2  product function  • on-site operation  • intrinsic device protection  • remote firmware update  • for power supply reverse polarity protection  • at AC in hot operating state per pole  insulation voltage resistance rated value  degree of pollution  • between main and auxiliary circuit  shock resistance  • between main and auxiliary circuit  shock resistance  operating frequency maximum  mechanical service life (switching cycles) of the main contacts typical  type of assignment  reference code acc. to IEC 81346-2  Queverse starting  CLASS OFF / 5 / 10 adjustable  Reversing starter  3 Reversing starter  Yes  9 On-3 (Asserting starter)  2 Oo.02 W  0.02 W  0.02 W  0.02 W  111  118  119  119  119  119  119  11	product type designation	ET 200SP		
equipment variant acc. to IEC 60947-4-2  product function  on-site operation intrinsic device protection of remote firmware update of ropower supply reverse polarity protection  at AC in hot operating state per pole insulation voltage rated value degree of pollution overvoltage category surge voltage resistance rated value maximum permissible voltage for safe isolation obetween main and auxiliary circuit shock resistance vibration resistance vibration resistance operating frequency maximum mechanical service life (switching cycles) of the main contacts typical type of assignment reference code acc. to IEC 81346-2 Substance Prohibitiance (Date) of circular services and surger of the surger of t	General technical data			
product function  on-site operation  on-site operation  intrinsic device protection  remote firmware update  of ro power supply reverse polarity protection  at AC in hot operating state per pole  insulation voltage rated value  degree of pollution  overvoltage category  surge voltage resistance rated value  maximum permissible voltage for safe isolation  obetween main and auxiliary circuit  shock resistance  vibration resistance  operating frequency maximum  mechanical service life (switching cycles) of the main contacts typical  type of assignment  reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  one direct start  one reverse starting  Reversing starter  Yes  Yes  Reversing starter  Yes  Yes  Reversing starter  Yes  Yes	trip class	CLASS OFF / 5 / 10 adjustable		
on-site operation     intrinsic device protection     remote firmware update     for power supply reverse polarity protection     power loss [W] for rated value of the current	equipment variant acc. to IEC 60947-4-2	3		
intrinsic device protection remote firmware update for power supply reverse polarity protection  power loss [W] for rated value of the current  at AC in hot operating state per pole insulation voltage rated value  degree of pollution  covervoltage category  surge voltage resistance rated value  maximum permissible voltage for safe isolation between main and auxiliary circuit  shock resistance  operating frequency maximum mechanical service life (switching cycles) of the main contacts typical type of assignment reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function direct start referes starting  Yes	product function	Reversing starter		
remote firmware update     for power supply reverse polarity protection  power loss [W] for rated value of the current     at AC in hot operating state per pole insulation voltage rated value  degree of pollution 2 overvoltage category surge voltage resistance rated value  between main and auxiliary circuit shock resistance vibration resistance  vibration resistance  poperating frequency maximum amechanical service life (switching cycles) of the main contacts typical type of assignment reference code acc. to IEC 81346-2 Substance Prohibitance (Date) product function e direct start freererse starting  e 0.02 W  0.03 W  0.04 V  0.05 V  0.06 kV  0.07 V  0.08 V  0.09 V	<ul> <li>on-site operation</li> </ul>	Yes		
• for power supply reverse polarity protection  power loss [W] for rated value of the current  • at AC in hot operating state per pole insulation voltage rated value  degree of pollution 2 overvoltage category III surge voltage resistance rated value  maximum permissible voltage for safe isolation • between main and auxiliary circuit  shock resistance vibration resistance operating frequency maximum mechanical service life (switching cycles) of the main contacts typical  type of assignment reference code acc. to IEC 81346-2 Substance Prohibitance (Date) product function • direct start • reverse starting  Yes	<ul> <li>intrinsic device protection</li> </ul>	Yes		
power loss [W] for rated value of the current  • at AC in hot operating state per pole insulation voltage rated value  500 V  degree of pollution 2 overvoltage category III surge voltage resistance rated value 6 kV  maximum permissible voltage for safe isolation • 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 11/s mechanical service life (switching cycles) of the main contacts typical type of assignment 1 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) product function • direct start • reverse starting  0.02 W  0.02 W  0.02 W  1II  500 V  50	<ul> <li>remote firmware update</li> </ul>	Yes		
<ul> <li>at AC in hot operating state per pole</li> <li>insulation voltage rated value</li> <li>500 V</li> <li>degree of pollution</li> <li>2</li> <li>overvoltage category</li> <li>III</li> <li>surge voltage resistance rated value</li> <li>6 kV</li> <li>maximum permissible voltage for safe isolation</li> <li>between main and auxiliary circuit</li> <li>500 V</li> <li>shock resistance</li> <li>6g / 11 ms</li> <li>vibration resistance</li> <li>operating frequency maximum</li> <li>1 1/s</li> <li>mechanical service life (switching cycles) of the main contacts typical</li> <li>type of assignment</li> <li>reference code acc. to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>product function</li> <li>direct start</li> <li>reverse starting</li> <li>0.02 W</li> <li>iII</li> <li>500 V</li> <li>500 V<td><ul> <li>for power supply reverse polarity protection</li> </ul></td><td>Yes</td></li></ul>	<ul> <li>for power supply reverse polarity protection</li> </ul>	Yes		
insulation voltage rated value  degree of pollution  overvoltage category  surge voltage resistance rated value  maximum permissible voltage for safe isolation  • between main and auxiliary circuit  shock resistance  fog / 11 ms  vibration resistance  operating frequency maximum  mechanical service life (switching cycles) of the main contacts typical  type of assignment  reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function  • direct start  • reverse starting	power loss [W] for rated value of the current			
degree of pollution     2       overvoltage category     III       surge voltage resistance rated value     6 kV       maximum permissible voltage for safe isolation <ul> <li>between main and auxiliary circuit</li> <li>500 V     </li></ul> 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 (switching cycles) of the main contacts typical     30 000 000       type of assignment     1       reference code acc. to IEC 81346-2     Q       Substance Prohibitance (Date)     15.04.2016 00:00:00       product function     Yes       o irect start     Yes       o reverse starting     Yes	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.02 W		
overvoltage category surge voltage resistance rated value maximum permissible voltage for safe isolation • between main and auxiliary circuit  shock resistance  vibration resistance  15 mm to 6 Hz; 2g to 500 Hz  operating frequency maximum 11/s mechanical service life (switching cycles) of the main contacts typical  type of assignment  reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function • direct start • reverse starting  III  6 kV  80 V  80 00 V  80 00 V  80 00 Hz  90 000 000  90 0	insulation voltage rated value	500 V		
surge voltage resistance rated value maximum permissible voltage for safe isolation • between main and auxiliary circuit  shock resistance 6g / 11 ms  vibration resistance 15 mm to 6 Hz; 2g to 500 Hz  operating frequency maximum 11/s mechanical service life (switching cycles) of the main contacts typical  type of assignment 1 reference code acc. to IEC 81346-2 Substance Prohibitance (Date) product function • direct start • reverse starting  6 kV	degree of pollution	2		
maximum permissible voltage for safe isolation	overvoltage category	III		
between main and auxiliary circuit     shock resistance	surge voltage resistance rated value	6 kV		
shock resistance vibration resistance 15 mm to 6 Hz; 2g to 500 Hz  operating frequency maximum 1 1/s mechanical service life (switching cycles) of the main contacts typical  type of assignment 1 reference code acc. to IEC 81346-2  Substance Prohibitance (Date) product function	maximum permissible voltage for safe isolation			
vibration resistance15 mm to 6 Hz; 2g to 500 Hzoperating frequency maximum1 1/smechanical service life (switching cycles) of the main contacts typical30 000 000type of assignment1reference code acc. to IEC 81346-2QSubstance Prohibitance (Date)15.04.2016 00:00:00product functionYes• direct startYes• reverse startingYes	between main and auxiliary circuit	500 V		
operating frequency maximum  mechanical service life (switching cycles) of the main contacts typical  type of assignment  reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function  otinect start  reverse starting  1 1/s  30 000 000  1 1/s  1 1/s  1 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 2 3 3 2 3 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 3 2 3	shock resistance	6g / 11 ms		
mechanical service life (switching cycles) of the main contacts typical  type of assignment  reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function  otinect start  reverse starting  a 0 000 000   1  Yes	vibration resistance	15 mm to 6 Hz; 2g to 500 Hz		
type of assignment  reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function  otinect start reverse starting  otinect start Yes	operating frequency maximum	1 1/s		
reference code acc. to IEC 81346-2  Substance Prohibitance (Date)  product function  • direct start  • reverse starting  Q  15.04.2016 00:00:00  Yes	, , ,	30 000 000		
Substance Prohibitance (Date)  product function  • direct start  • reverse starting  15.04.2016 00:00:00  Yes  Yes	type of assignment	1		
product function	reference code acc. to IEC 81346-2	Q		
<ul> <li>direct start</li> <li>reverse starting</li> <li>Yes</li> <li>Yes</li> </ul>	Substance Prohibitance (Date)	15.04.2016 00:00:00		
• reverse starting Yes	product function			
	direct start	Yes		
product component motor brake output No	reverse starting	Yes		
	product component motor brake output	No		
product function short circuit protection Yes	product function short circuit protection	Yes		
design of short-circuit protection fuse	design of short-circuit protection	fuse		
breaking capacity maximum short-circuit current (Icu)	breaking capacity maximum short-circuit current (Icu)			
• at 400 V rated value 55 kA	<ul> <li>at 400 V rated value</li> </ul>	55 kA		
• at 500 V rated value 55 kA	<ul><li>at 500 V rated value</li></ul>	55 kA		

at 500 V acc. to UL 60947 rated value	100 kA		
breaking capacity maximum short-circuit current (Icu)	100 KA		
in the IT network			
at 400 V rated value	55 kA		
● at 500 V rated value	55 kA		
Electromagnetic compatibility			
EMC emitted interference acc. to IEC 60947-1	class A		
EMC immunity acc. to IEC 60947-1	Class A		
conducted interference			
• due to burst acc. to IEC 61000-4-4	2 kV		
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV		
due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV		
<ul> <li>due to high-frequency radiation acc. to IEC 61000- 4-6</li> </ul>	Class A		
field-based interference acc. to IEC 61000-4-3	10 V/m		
electrostatic discharge acc. to IEC 61000-4-2	8 kV air discharge		
conducted HF interference emissions acc. to CISPR11	Class A for industrial environment		
field-bound HF interference emission acc. to CISPR11	Class A for industrial environment		
Safety related data			
MTBF	47 y		
safe state	Load circuit open		
protection class IP on the front acc. to IEC 60529	IP20		
touch protection on the front acc. 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	0.1 0.4 A		
current-dependent overload release			
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	4		
• note	4 via 3DI/LC module		
Supply voltage			
type of voltage of the supply voltage	DC		
supply voltage 1 at DC rated value	20.414		
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	05.4		
in standby mode of operation	85 mA		
during operation	140 mA		
at switching on of motor	230 mA		
power loss [W] for rated value of supply voltage	O.W.		
<ul><li>in switching state OFF with bypass circuit</li><li>in switching state ON with bypass circuit</li></ul>	2 W 3.4 W		

inrush current peak at 24 V	25 A; Observe the manual for	or group configuration			
duration of inrush current peak at 24 V	0.145 ms	or group cornigaration			
Response times	0.110 me				
	20 ms				
ON-delay time OFF-delay time	35 50 ms				
•	35 50 ms				
Installation/ mounting/ dimensions	V	1 ( )			
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 m	nanual			
ambient temperature					
<ul><li>during operation</li></ul>	-25 +60 °C; For derating s	see manual			
<ul> <li>during storage</li> </ul>	-40 +70 °C				
during transport	-40 +70 °C				
environmental category during operation acc. to IEC 60721		6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 and must not get into the devices)			
relative humidity during operation	10 95 %				
air pressure acc. 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 PROFlenergy measured values	Yes				
<ul> <li>supports PROFlenergy shutdown</li> </ul>	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 - accesso	nrv			
type of electrical connection	i laggable module - accesse	,, <u>,</u>			
• 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	200 111				
full-load current (FLA) for 3-phase AC motor at 480 V	0.4 A				
rated value operating voltage at AC at 60 Hz acc. to CSA and UL rated value	480 V				
Certificates/ approvals					
			Declaration of		
General Product Approval		EMC	Conformity		













**Declaration of** Conformity

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report









other

Confirmation



Profibus

## Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)
<a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1308-0BA00-0CP0">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1308-0BA00-0CP0</a>

Cax online generator

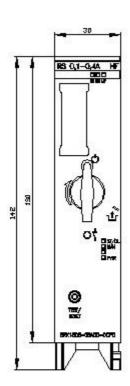
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1308-0BA00-0CP0

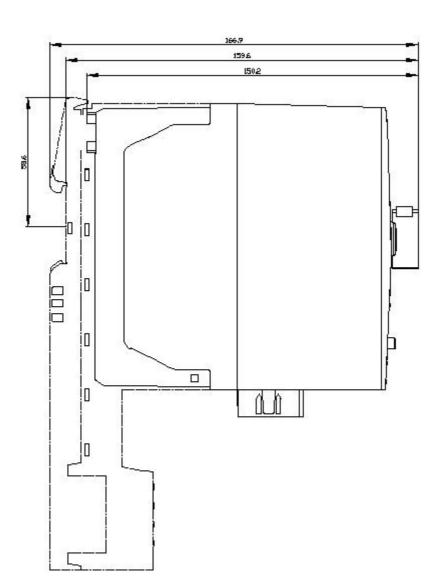
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

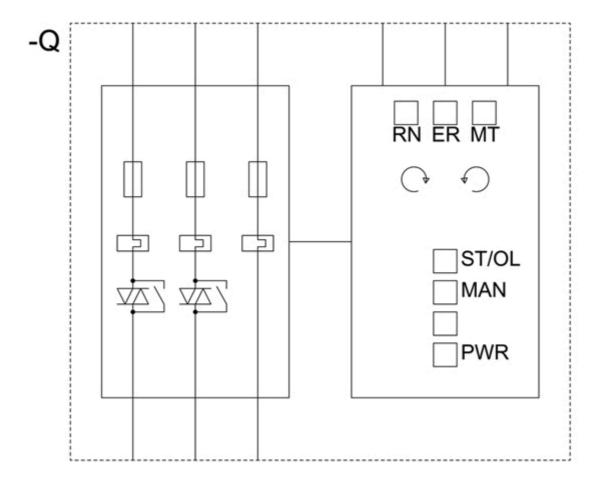
https://support.industry.siemens.com/cs/ww/en/ps/3RK1308-0BA00-0CP0

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RK1308-0BA00-0CP0&lang=en







last modified: 1/31/2021 🖸