## **SIEMENS**

## **Data sheet**

3RA2125-4ED27-0AK6

	FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 27-32A 110/120V AC 50/60HZ SCREW CONNECTION FOR SNAPPING ONTO 60 MM
	BUSBAR SYSTEMS TYPE OF COORDINATION 2 IQ = 150 KA ALSO FULFILLS TYPE OF COORDINATION 1 1NO+1NC (MSP) 1NO+1NC (CONTACTOR)
product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	uncot startor
of the supplied contactor	3RT2027-1AK60
of the supplied contactor      of the supplied circuit-breakers	3RV2021-4EA15
of the supplied busbar adapter	8US1251-5NT10
of the supplied busbar adapter      of the supplied link module	3RA2921-1AA00
General technical data	<u> </u>
size of the circuit-breaker	S0
size of load feeder	S0
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of assignment	2
Ambient conditions	-
ambient temperature	
during operation	-20 +60 °C
during storage	-50 +80 °C
during transport	-55 +80 °C
- daming transport	55 III 155 C
Main circuit	
Main circuit number of poles for main current circuit	3
number of poles for main current circuit	3 electromechanical
number of poles for main current circuit design of the switching contact adjustable current response value current of the current-	electromechanical
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release	electromechanical
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage	electromechanical 27 32 A
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage • rated value	electromechanical 27 32 A 690 V
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage  • rated value • at AC-3 rated value maximum	electromechanical 27 32 A  690 V 690 V
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage  • rated value • at AC-3 rated value maximum operating frequency rated value	electromechanical 27 32 A  690 V  690 V  50 60 Hz
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operational current at AC-3 at 400 V rated value	electromechanical 27 32 A  690 V  690 V  50 60 Hz
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operational current at AC-3 at 400 V rated value operating power at AC-3	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control  control supply voltage at AC	electromechanical 27 32 A  690 V  690 V  50 60 Hz  29 A  15 000 W  18 500 W
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V 96 132 V
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operating power at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  apparent holding power of magnet coil at AC	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V 96 132 V 9.4 VA
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control  control supply voltage at AC  • at 50 Hz rated value  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  apparent holding power of magnet coil at AC  inductive power factor with the holding power of the coil	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V 96 132 V 9.4 VA
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V 96 132 V 9.4 VA 0.28
number of poles for main current circuit design of the switching contact adjustable current response value current of the current- dependent overload release operating voltage	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V 96 132 V 9.4 VA 0.28
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current- dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operating power at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  apparent holding power of magnet coil at AC  inductive power factor with the holding power of the coil  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts	electromechanical 27 32 A  690 V 690 V 50 60 Hz 29 A  15 000 W 18 500 W  110 V 88 121 V 120 V 96 132 V 9.4 VA 0.28

response value current of instantaneous short-circuit trip unit	416 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	27 A
at 600 V rated value	27 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 230 V rated value	5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	20 hp
— at 575/600 V rated value	25 hp
Short-circuit protection	20 119
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	153 000 A
<ul> <li>at 400 V according to IEC 60947-4-1 rated value</li> <li>at 500 V according to IEC 60947-4-1 rated value</li> </ul>	
	100 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	for snapping onto 60 mm busbar systems
height	260 mm
width	45 mm
depth	155 mm
required spacing	
for grounded parts	
— forwards	10 mm
— backwards	0 mm
— upwards	30 mm
— at the side	9 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— backwards	0 mm
— upwards	30 mm
— downwards	10 mm
— at the side	9 mm
Connections/ Terminals	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts stranded	1 10 mm², 2x (2.5 6 mm²)
connectable conductor cross-section for main contacts finely stranded with core end processing	1 6 mm²
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures with high demand rate according to SN 31920	73 %
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Certificates/ approvals	
General Product Approval	For use in hazard- ous locations  Declaration of Conformity
Confirmation	











Test Certificates Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping other







Confirmation

Vibration and Shock

Railway

## **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=3RA2125-4ED27-0AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4ED27-0AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4ED27-0AK6

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2125-4ED27-0AK6&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4ED27-0AK6/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4ED27-0AK6&objecttype=14&gridview=view1

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