## SIEMENS

## Data sheet

## 3RA2125-4DA27-0AP6



FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 20-25A 220/240V AC 50/60HZ SCREW CONNECTION FOR SCREW MOUNTING OR 35 MM RAIL-MOUNTING 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	
<ul> <li>of the supplied contactor</li> </ul>	<u>3RT2027-1AP60</u>
<ul> <li>of the supplied circuit-breakers</li> </ul>	<u>3RV2021-4DA15</u>
<ul> <li>of the supplied link module</li> </ul>	<u>3RA2921-1AA00</u>
General technical data	
size of the circuit-breaker	SO
size of load feeder	SO
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
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current- dependent overload release	20 25 A
operating voltage	
rated value	690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current at AC-3 at 400 V rated value	22 A
operating power at AC-3	
• at 400 V rated value	11 000 W
• at 500 V rated value	15 000 W
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value	220 V
• at 50 Hz rated value	176 242 V
• at 60 Hz rated value	240 V

● at 60 Hz rated value	192 264 V
apparent holding power of magnet coil at AC	9.4 VA
inductive power factor with the holding power of the coil	0.28
Auxiliary circuit	0.20
number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	325 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	22.2 A
at 600 V rated value	21.9 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	2 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
- at 200/208 V rated value	5 hp
— at 220/230 V rated value	7.5 hp
— at 460/480 V rated value	15 hp
— at 575/600 V rated value	20 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Ig)	
<ul> <li>at 400 V according to IEC 60947-4-1 rated value</li> </ul>	153 000 A
<ul> <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	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
fastening method height	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm
fastening method height width	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
fastening method height width depth	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
fastening method height width depth required spacing	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm
fastening method height width depth required spacing • for grounded parts	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm
fastening method height width depth required spacing • for grounded parts — forwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — backwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         • upwards         • for live parts         — upwards         — upwards         — upwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 10 mm 10 mm 30 mm 30 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — upwards         — obackwards         — ownwards         • for live parts         — forwards         — backwards         — upwards         — backwards         — upwards         — downwards	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — the side	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — forwards         — backwards         — upwards         — downwards         — at the side         — downwards         — at the side         Connections/ Terminals	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 9 mm 10 mm 9 mm 10 mm 9 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — downwards         • for live parts         — forwards         — backwards         — upwards         — at the side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — backwards         — upwards         — downwards         — at the side         — downwards         — at the side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts stranded         connectable conductor cross-section for main contacts finely	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm 10 mm 30 mm 10 mm 2 mm 30 mm 10 mm 30 mm 10 mm 2 mm 30 mm 10 mm 30 mm 30 mm 10 mm 30
fastening method         height         width         depth         required spacing         • for grounded parts         forwards         backwards         backwards         backwards         upwards         at the side         downwards         • for live parts         forwards         backwards         upwards         backwards         upwards         backwards         backwards         backwards         backwards         backwards         backwards         backwards         upwards         at the side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts stranded         connectable conductor cross-section for main contacts finely stranded with core end processing	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm 10 mm 30 mm 10 mm 2 mm 30 mm 10 mm 30 mm 10 mm 2 mm 30 mm 10 mm 30 mm 30 mm 10 mm 30
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — downwards         • for live parts         — forwards         — backwards         — upwards         — backwards         — upwards         — downwards         — at the side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts stranded         connectable conductor cross-section for main contacts finely stranded with core end processing         Safety related data	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 0 mm 30 mm 10 mm 10 mm 30 mm 10 mm 10 mm 10 mm 10 mm 2 mm 30 mm 10 mm 10 mm 10 mm 10 mm 2 mm 10 mm <sup>2</sup> 1 6 mm <sup>2</sup>
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — forwards         — downwards         — backwards         — upwards         — downwards         — at the side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts stranded         connectable conductor cross-section for main contacts finely stranded with core end processing         Safety related data         B10 value with high demand rate according to SN 31920         proportion of dangerous failures with high demand rate	Snap-mounted to DIN rail or screw-mounted with additional push-in lug 193.1 mm 45 mm 97.1 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — upwards         — backwards         — upwards         — backwards         — upwards         — downwards         — at the side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts stranded         connectable conductor cross-section for main contacts finely stranded with core end processing         Safety related data         B10 value with high demand rate according to SN 31920         proportion of dangerous failures with high demand rate according to SN 31920	Snap-mounted to DIN rail or screw-mounted with additional push-in lug         193.1 mm         45 mm         97.1 mm         10 mm         0 mm         30 mm         9 mm         10 mm         0 mm         30 mm         9 mm         10 mm         0 mm         30 mm         9 mm         10 mm         9 mm         10 mm         9 mm         10 mm         9 mm         10 mm         10 mm         9 mm         10 mm         10 mm         10 mm         9 mm         10 mm         9 mm         10 mm², 2x (2.5 6 mm²)         1 6 mm²         1 000 000         73 %
fastening method         height         width         depth         required spacing         • for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — backwards         — of orwards         — backwards         — upwards         — backwards         — upwards         — downwards         — upwards         — downwards         — upwards         — downwards         — othe side         Connections/ Terminals         type of electrical connection for main current circuit         type of connectable conductor cross-sections for main contacts stranded         connectable conductor cross-section for main contacts finely stranded with core end processing         Safety related data         B10 value with high demand rate according to SN 31920         proportion of dangerous failures with high demand rate according to IEC 60529         protection class IP on the front according to IEC 60529	Snap-mounted to DIN rail or screw-mounted with additional push-in lug         193.1 mm         45 mm         97.1 mm         10 mm         0 mm         30 mm         9 mm         10 mm         0 mm         30 mm         9 mm         10 mm         0 mm         30 mm         9 mm         10 mm         9 mm         10 mm         10 mm         9 mm         10 mm         9 mm         10 mm         9 mm         10 mm         10 mm         10 mm         9 mm         10 mm         9 mm         10 mm², 2x (2.5 6 mm²)         1 6 mm²         1 000 000         73 %         IP20



## 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=3RA2125-4DA27-0AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4DA27-0AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DA27-0AP6

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

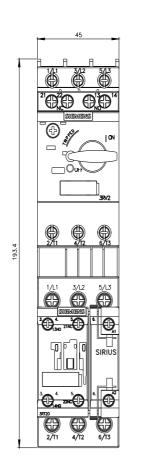
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2125-4DA27-0AP6&lang=en

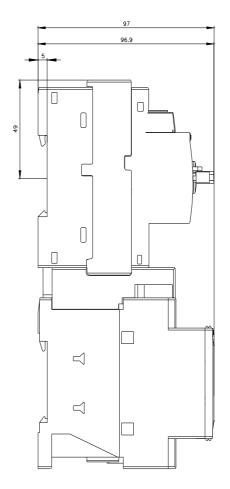
Characteristic: Tripping characteristics, I2t, Let-through current

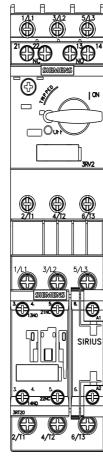
https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DA27-0AP6/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4DA27-0AP6&objecttype=14&gridview=view1







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