## SIEMENS



## Model

| Product brand name |
| :--- |
| Product designation |
| Design of the product |
| Display version / for switch position indicator manual <br> operation |
| Design of the operating mechanism |
| Design of handle |
| Type of the driving mechanism / motor drive |

General technical data

| Number of poles | 3 |
| :--- | :--- |
| Number of poles / Note | $\mathrm{N}+\mathrm{PE}$ |
| Type of device | fixed mounting |
| Type of switch | Molded-plastic enclosure for metric threaded joint |
| Size of switch disconnector | 2 |
| Electrical endurance (switching cycles) <br> $\bullet$ at AC-23 A / at 690 V | 6000 |
| I2t value / with closed switch / at $690 \mathrm{~V} /$ for <br> combination switch + gG fuse / maximum | 4 kA2.s |


| Let-through I2t value / with closed switch / at 440 V / for combination switch +gG fuse / maximum | $4 \mathrm{kA2}$. ${ }^{\text {s }}$ |
| :---: | :---: |
| Mechanical service life (switching cycles) / typical | 100000 |
| Operating frequency / maximum | 50 1/h |
| Type of fuse / according to UL | RK5 |
| Voltage |  |
| Insulation voltage / rated value | 690 V |
| Surge voltage resistance / rated value | 6 kV |
| Current / at AC / rated value | 25 A |
| Operating voltage <br> - at AC / at $50 / 60 \mathrm{~Hz}$ / rated value <br> - at AC / at $50 / 60 \mathrm{~Hz}$ / acc. to UL 508 / rated value | $\begin{aligned} & 690 \mathrm{~V} \\ & 600 \mathrm{~V} \end{aligned}$ |
| Active power [hp] / at AC <br> - at 480 V / acc. to UL 508 / rated value <br> - at 600 V / acc. to UL 508 / rated value | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ |

## Protection class

Protection class IP
Degree of protection NEMA rating

## IP65

Protection class IP / on the front
1, 4X, 12
IP65

## Dissipation

Power loss [W]

- for rated value of the current / at AC / in hot operating state / per pole
- per conductor / typical
1.1 W


## Current

Operating current

- at $\mathrm{AC}-23 \mathrm{~A} /$ at $690 \mathrm{~V} /$ rated value
- at $\mathrm{AC}-23 \mathrm{~A} /$ at $400 \mathrm{~V} /$ rated value
- at AC-22 A / at $690 \mathrm{~V} /$ rated value
- at AC-21 / at $690 \mathrm{~V} /$ rated value
- at AC-21 A / at $240 \mathrm{~V} /$ rated value 25 A
- AC-21 A/at $240 \mathrm{~V} /$ rated value
- at $\mathrm{AC}-21 \mathrm{~A} /$ at $440 \mathrm{~V} /$ rated value 25 A
- at AC-22 A / at $240 \mathrm{~V} /$ rated value
- at AC-22 A / at $440 \mathrm{~V} /$ rated value 25 A
- at AC-23 A / at $240 \mathrm{~V} /$ rated value 20 A
- at $\mathrm{AC}-23 \mathrm{~A} /$ at $440 \mathrm{~V} /$ rated value
- at AC / acc. to UL 508 / rated value 20 A 25 A

Operating current / of upstream fuse / rated value 25 A

Continuous current / of upstream fuse / according to 50 A

Let-through current / with closed switch

- at $440 \mathrm{~V} /$ for combination switch +gG fuse / maximum
- at $690 \mathrm{~V} /$ for combination switch + gG fuse / maximum permissible
Short-time withstand current (Icw)
- limited to $1 \mathrm{~s} /$ rated value
- at $690 \mathrm{~V} /$ limited to $1 \mathrm{~s} /$ rated value
3.5 kA
3.5 kA

640 A
640 A

## Main circuit

| Operating frequency |  |
| :---: | :---: |
| - initial value | 50 Hz |
| - Full-scale value | 60 Hz |
| Operating power |  |
| - at AC-23 A / at $240 \mathrm{~V} /$ rated value | 5 kW |
| - at AC-23 A / at $400 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value | 9.5 kW |
| - at AC-23 A / at $400 \mathrm{~V} /$ rated value | 9.5 kW |
| - at $\mathrm{AC}-23 \mathrm{~A} /$ at $440 \mathrm{~V} /$ rated value | 9.5 kW |
| - at $\mathrm{AC}-23 \mathrm{~A} /$ at $690 \mathrm{~V} /$ rated value | 9.5 kW |
| - at AC-3 / at $240 \mathrm{~V} /$ rated value | 4 kW |
| - at AC-3 / at $400 \mathrm{~V} /$ rated value | 7.5 kW |
| - at AC-3 / at $690 \mathrm{~V} /$ rated value | 7.5 kW |
| Operating current / rated value | 25 A |


| Auxiliary circuit | 0 |
| :--- | :--- |
| Number of CO contacts / for auxiliary contacts | 0 |
| Number of NC contacts / for auxiliary contacts | 0 |
| Number of NO contacts / for auxiliary contacts | 500 V |
| Operating voltage / of auxiliary contacts / at AC / <br> maximum | 10 A |
| Continuous current / of the auxiliary contact / rated <br> value | 500 V |
| Insulation voltage / of the auxiliary switch / rated <br> value |  |

## Suitability

Suitability for use

- Main switch
- switch disconnector
- EMERGENCY OFF switch
- safety switch
- maintenance/repair switch


## Yes

Yes
Yes
Yes
Yes

## Appearance

Color / of the actuating element

| Product details |  |
| :---: | :---: |
| - Product function / can be locked into OFF position | Yes |
| Number of bracket locks / maximum | 3 |
| Hasp thickness / of the bracket locks / minimum | 4 mm |
| Hasp thickness / of the bracket locks / maximum | 8 mm |
| Short circuit |  |
| Short-time withstand current (SCCR) / at $600 \mathrm{~V} / \mathrm{acc}$. to UL 508 | 5 kA |
| Conditional short-circuit current / with line-side fuse protection <br> - at $690 \mathrm{~V} /$ by gG fuse / rated value | 50 kA |
| Number of connectable NC contacts / for auxiliary contacts / attachable / maximum | 3 |
| Number of connectable NO contacts / for auxiliary contacts / attachable / maximum | 5 |
| Number of connectable CO contacts / for auxiliary contacts / attachable / maximum | 0 |
| Connections |  |
| AWG number / as coded connectable conductor cross section / solid <br> - maximum <br> - minimum | $\begin{aligned} & 8 \\ & 14 \end{aligned}$ |
| Type of electrical connection <br> - for main current circuit <br> - for auxiliary contacts | box terminal connection terminals |
| Requirements |  |
| Design of the fuse link <br> - for short-circuit protection of the main circuit / required <br> - for short-circuit protection of the auxiliary switch / required | fuse gL/gG: 25 A <br> fuse gL/gG: 10 A |
| Mechanical Design |  |
| Height | 152 mm |
| Width | 100 mm |
| Depth | 117 mm |
| Mounting type | Complete unit in enclosure |
| Mounting type <br> - front mounting with 4-hole attachment <br> - front mounting with central attachment <br> - rail mounting | No Yes No |
| Net weight | 446 g |

## Environmental conditions

Ambient temperature / during operation

- minimum
- maximum

Ambient temperature / during storage / minimum
$-25^{\circ} \mathrm{C}$
$55^{\circ} \mathrm{C}$
$-25^{\circ} \mathrm{C}$

## Certificates

Reference code

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

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S
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SF
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General Product Approval

| Test Certific- <br> ates | Shipping Ap- <br> proval | other |
| :--- | :--- | :--- |
| $\underline{\text { Miscellaneous }}$ | Lloyd's | Environmental Con- <br> Register |
|  |  |  |
| LRS |  |  |

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
http://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2164-0TB53
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-0TB53
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-OTB53
CAx-Online-Generator
http://www.siemens.com/cax

## Tender specifications

http://www.siemens.com/specifications




