## **SIEMENS**

Data sheet 3LD2184-2GP21



SENTRON switch disconnector 3LD in molded-plastic enclosure , repair and maintenance switch with EMC plate, 3-pole lu: 25A, AC23A 400V at 50/60Hz: 9,5kW, used with frequency converter: AC20 400V at 0-550Hz: 5,5kW, 1NO + 1NC 20-150ms leading, molded-plastic encapsulation for metric cable gland, knob-operated mechanism, black, lockable in 0- and I-position, incl. cable shield clamps

| Model  |  |  |
|--|--|--|
| product brand name   | SENTRON  |  |
| product designation  | 3LD Switch disconnector                            |  |
| design of the product  | Switch   |  |
| display version / for switch position indicator manual operation   | 1 ON - 0 OFF                                       |  |
| type of switch   | Molded-plastic enclosure for metric threaded joint |  |
| design of the actuating element  | selector switch                                    |  |
| color / of the actuating element   | black  |  |
| design of handle   | knob-operated mechanism, black                     |  |
| type of the driving mechanism / motor drive  | No   |  |
| General technical data   |  |  |
| number of poles  | 3  |  |
| number of poles / note   | PE isolated from cable shield                      |  |
| size of switch disconnector  | 2  |  |
| mechanical service life (switching cycles) / typical   | 100 000  |  |
| electrical endurance (switching cycles)  |  |  |
| <ul><li>at AC-23 A / at 690 V</li></ul>  | 6 000  |  |
| <ul> <li>between converter and motor / when used as repair<br/>switch / at AC-20 A / at 690 V / at 0-550 Hz</li> </ul> | 100 000  |  |
| operating frequency / maximum  | 50 1/h   |  |
| degree of pollution  | 3  |  |
| Voltage  |  |  |
| insulation voltage / rated value   | 690 V  |  |
| surge voltage resistance / rated value   | 6 kV   |  |
| operating voltage  |  |  |
| <ul> <li>between converter and motor / at AC / at 0-550 Hz /<br/>rated value</li> </ul>                                | 690 V  |  |
| Protection class   |  |  |
| protection class IP  | IP65   |  |
| degree of protection NEMA rating   | 1, 3R, 4X  |  |
| protection class IP / on the front   | IP65   |  |
| Dissipation  |  |  |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                            | 1.1 W  |  |
| Current  |  |  |
| operational current / rated value  | 25 A   |  |
| operational current  |  |  |
| at AC / rated value  | 25 A   |  |
| Main circuit   |  |  |

| operating frequency / between converter and motor / when used as repair switch                     |                                       |
|--|---------------------------------------|
| • initial value  | 0 Hz                                  |
| • full-scale value   | 550 Hz                                |
| operational current  | 000112                                |
| at AC-21 / at 690 V / rated value  | 25 A                                  |
| at AC-21 / at 690 V / fated value     at AC-21 A / at 240 V / rated value                          | 25 A                                  |
|  |                                       |
| • at AC-21 A / at 400 V / rated value  | 25 A                                  |
| • at AC-21 A / at 440 V / rated value  | 25 A                                  |
| at AC-23 A / at 400 V / rated value  | 20 A                                  |
| operating power  |                                       |
| <ul><li>at AC-23 A / at 240 V / rated value</li></ul>  | 5 kW                                  |
| <ul> <li>at AC-23 A / at 440 V / rated value</li> </ul>  | 9.5 kW                                |
| <ul> <li>at AC-23 A / at 690 V / rated value</li> </ul>  | 10 kW                                 |
| <ul><li>at AC-3 / at 240 V / rated value</li></ul>   | 4 kW                                  |
| <ul><li>at AC-3 / at 400 V / rated value</li></ul>   | 8 kW                                  |
| • at AC-3 / at 690 V / rated value   | 7.5 kW                                |
| operating active power [W] / between converter and motor / when used as repair switch / at AC-20 A |                                       |
| • at 400 V / at 0-550 Hz / rated value   | 5.5 kW                                |
| • at 690 V / at 0-550 Hz / rated value   | 11 kW                                 |
|  | I I I I I I I I I I I I I I I I I I I |
| continuous current / between converter and motor / when used as repair switch / at AC-20           |                                       |
| <ul><li>at 230 V / rated value</li></ul>   | 17.5 A                                |
| • at 400 V / rated value   | 13.2 A                                |
| • at 690 V / rated value   | 14 A                                  |
| Auxiliary circuit  |                                       |
| number of CO contacts / for auxiliary contacts   | 0                                     |
| number of NC contacts / for auxiliary contacts   | 1                                     |
| number of NO contacts / for auxiliary contacts   | 1                                     |
| operating voltage / of auxiliary contacts / at AC / maximum  | 600 V                                 |
| continuous current / of the auxiliary contact / rated value  | 10 A                                  |
| insulation voltage / of the auxiliary switch / rated value   | 500 V                                 |
|  | 300 V                                 |
| Suitability  |                                       |
| suitability for use  |                                       |
| <ul><li>main switch</li></ul>  | Yes                                   |
| <ul> <li>switch disconnector</li> </ul>  | Yes                                   |
| <ul> <li>EMERGENCY OFF switch</li> </ul>   | No                                    |
| <ul><li>safety switch</li></ul>  | No                                    |
| <ul> <li>maintenance/repair switch</li> </ul>  | Yes                                   |
| Product details  |                                       |
| product feature / can be locked in ON position   | Yes                                   |
| special product feature  | inclusive EMC shield plate            |
| product feature / can be locked into OFF position  | Yes                                   |
|  | 1 CS                                  |
| accessories  |                                       |
| product extension / optional   |                                       |
| <ul> <li>motor drive</li> </ul>  | No                                    |
| voltage trigger  | No                                    |
| number of connectable NC contacts / for auxiliary contacts / attachable / maximum                  | 2                                     |
| number of connectable NO contacts / for auxiliary contacts / attachable / maximum                  | 4                                     |
| number of connectable CO contacts / for auxiliary contacts / attachable / maximum                  | 0                                     |
| number of bracket locks / maximum  | 3                                     |
| hasp thickness / of the bracket locks  | 4.5 8.5 mm                            |
| Short circuit  |                                       |
|  |                                       |
| conditional short-circuit current / with line-side fuse protection                                 |                                       |
| at 690 V / by gG fuse / rated value  | 50 kA                                 |
| let-through current / with closed switch   |                                       |
|  |                                       |

| <ul> <li>at 240 V / for combination switch + gG fuse /<br/>maximum</li> </ul>            | 3.5 kA  |  |
|--|---|--|
| at 440 V / for combination switch + gG fuse / maximum                                    | 3.5 kA  |  |
| at 690 V / for combination switch + gG fuse / maximum permissible                        | 4 kA  |  |
| I2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum   | 4 kA2.s   |  |
| I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum   | 4 kA2.s   |  |
| I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum   | 4 kA2.s   |  |
| design of the fuse link  |   |  |
| for short-circuit protection of the main circuit / required                              | fuse gL/gG: 25 A  |  |
| <ul> <li>for short-circuit protection of the auxiliary switch /<br/>required</li> </ul>  | fuse gL/gG: 10 A  |  |
| operational current / of upstream fuse / rated value                                     | 25 A  |  |
| according UL   |   |  |
| operational current / at AC / according to UL 508/UL 60947-4-1 / rated value             | 25 A  |  |
| operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value | 600 V   |  |
| active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value    | 10  |  |
| active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value    | 15  |  |
| short-time withstand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1        | 5 kA  |  |
| continuous current / of upstream fuse / according to UL / rated value                    | 50 A  |  |
| type of fuse / according to UL   | RK5   |  |
| Connections  |   |  |
| AWG number / as coded connectable conductor cross section / solid                        |   |  |
| maximum  | 8   |  |
| minimum  | 14  |  |
| type of connectable conductor cross-sections / for copper                                |   |  |
| conductor  |   |  |
| • solid  | 1x (1,516mm²)   |  |
| <ul> <li>finely stranded / with core end processing</li> </ul>                           | 1x (1,510mm²)   |  |
| <ul><li>stranded</li></ul>   | 1x (1,516mm²)   |  |
| type of connectable conductor cross-sections / for auxiliary contacts                    |   |  |
| • solid  | lateral auxiliary switch 2x (0,75 $\dots$ 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 $\dots$ 2,5mm²) |  |
| • finely stranded / with core end processing   | lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²                      |  |
| • stranded   | lateral auxiliary switch 2x (0,75 $\dots$ 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 $\dots$ 2,5mm²) |  |
| type of electrical connection  |   |  |
| for main current circuit   | box terminal  |  |
| for auxiliary contacts   | connection terminals  |  |
| Mechanical Design  |   |  |
| height   | 164 mm  |  |
| width  | 100 mm  |  |
| depth  | 117 mm  |  |
| type of device   | fixed mounting  |  |
| fastening method   | Complete unit in analogura with EMC chiefd plate  |  |
|  | Complete unit in enclosure with EMC shield plate  |  |
| fastening method   | Complete unit in enclosure with EMC shield plate  |  |
| fastening method  • 4-hole front mounting  | No  |  |
| 4-hole front mounting  |   |  |
| <ul><li>4-hole front mounting</li><li>front mounting with central attachment</li></ul>   | No<br>Yes   |  |
| 4-hole front mounting  | No  |  |

| Environmental conditions               |        |                           |  |
|--|--------|---------------------------|--|
| ambient temperature / during operation |        |                           |  |
| • minimum                              | -25 °C |                           |  |
| • maximum                              | 55 °C  |                           |  |
| ambient temperature / during storage   |        |                           |  |
| • minimum                              | -25 °C |                           |  |
| • maximum                              | 55 °C  |                           |  |
| General Product Approval               |        | Declaration of Conformity |  |

Confirmation











Test Certificates other

<u>Miscellaneous</u> <u>Environmental Confirmations</u>

**Miscellaneous** 

## 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=3LD2184-2GP21

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2184-2GP21

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2184-2GP21

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







