## **SIEMENS**

Data sheet 3LD2504-3VK51



SENTRON, Switch disconnector 3LD, main switch, 6-pole, lu: 63 A, Operating power / at AC-23 A at 400 V: 22 kW, front-mounted, rotary operating mechanism, black, 4-hole mounting of the handle

| Model   |                                   |  |
|---|-----------------------------------|--|
| product brand name  | SENTRON                           |  |
| product designation   | Switch disconnector               |  |
| design of the product   | Main switch                       |  |
| display version for switch position indicator manual operation                      | 1 ON - 0 OFF                      |  |
| type of switch  | front mounted                     |  |
| design of the actuating element   | Short rotary knob                 |  |
| color of the actuating element  | black                             |  |
| design of handle  | rotary operating mechanism, black |  |
| type of the driving mechanism motor drive   | No                                |  |
| General technical data  |                                   |  |
| number of poles   | 6                                 |  |
| size of switch disconnector   | 3                                 |  |
| mechanical service life (operating cycles) typical                                  | 100 000                           |  |
| electrical endurance (operating cycles)   |                                   |  |
| • at AC-23 A at 690 V   | 6 000                             |  |
| 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   |                                   |  |
| at AC rated value   | 690 V                             |  |
| operating frequency rated value   |                                   |  |
| • minimum   | 50 Hz                             |  |
| • maximum   | 60 Hz                             |  |
| Protection class  |                                   |  |
| protection class IP   | IP65                              |  |
| degree of protection NEMA rating  | 1, 3R, 4X, 12                     |  |
| 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 | 4.5 W                             |  |
| Main circuit  |                                   |  |
| operational current   |                                   |  |
| • at AC-21 at 690 V rated value   | 63 A                              |  |
| • at AC-21 A at 240 V rated value   | 63 A                              |  |
| • at AC-21 A at 400 V rated value   | 63 A                              |  |
| • at AC-21 A at 440 V rated value   | 63 A                              |  |

| 140.00 4 1400 1/ 1 1   | 40.4             |
|--|------------------|
| at AC-23 A at 400 V rated value  | 43 A             |
| operating power  | 44100            |
| • at AC-23 A at 240 V rated value  | 11 kW            |
| at AC-23 A at 400 V rated value  | 22 kW            |
| <ul> <li>at AC-23 A at 440 V rated value</li> </ul>  | 22 kW            |
| <ul> <li>at AC-23 A at 690 V rated value</li> </ul>  | 19 kW            |
| <ul> <li>at AC-3 at 240 V rated value</li> </ul>   | 11 kW            |
| <ul> <li>at AC-3 at 400 V rated value</li> </ul>   | 19 kW            |
| at AC-3 at 690 V rated value   | 15 kW            |
| Auxiliary circuit  |                  |
| number of CO contacts for auxiliary contacts   | 0                |
| number of NC contacts for auxiliary contacts   | 0                |
| number of NO contacts for auxiliary contacts   | 0                |
| operating voltage of auxiliary contacts at AC maximum  | 500 V            |
| continuous current of the auxiliary contact rated value  | 10 A             |
| insulation voltage of the auxiliary switch rated value   | 500 V            |
| Suitability  |                  |
| suitability for use main switch  | Yes              |
| suitability for use switch disconnector  | Yes              |
| suitability for use EMERGENCY OFF switch   | No               |
| suitability for use safety switch  | Yes              |
| suitability for use maintenance/repair switch  | Yes              |
| Product details  |                  |
| product feature can be locked into OFF position  | Yes              |
| accessories  |                  |
| product extension optional   |                  |
| motor drive  | No               |
|  | No               |
| voltage trigger  number of connectable NC contacts for auxiliary contacts.   | 3                |
| number of connectable NC contacts for auxiliary contacts<br>attachable maximum   | 3                |
| number of connectable NO contacts for auxiliary contacts attachable maximum  | 3                |
| number of connectable CO contacts for auxiliary contacts attachable maximum  | 0                |
| number of bracket locks maximum  | 3                |
| hasp thickness of the bracket locks  | 4 8 mm           |
| Short circuit  |                  |
| conditional short-circuit current with line-side fuse protection   |                  |
| •  | 50 kA            |
| at 690 V by gG fuse rated value    Interpretation   Interpretation | OV IV            |
| let-through current with closed switch   | 6 kA             |
| at 240 V for combination switch + gG fuse maximum     at 440 V for combination switch + gC fuse maximum  | 6 kA             |
| • at 440 V for combination switch + gG fuse maximum  | 6 kA             |
| <ul> <li>at 690 V for combination switch + gG fuse maximum<br/>permissible</li> </ul>  | 6 kA             |
| I2t value with closed switch   |                  |
| • at 240 V for combination switch + gG fuse maximum  | 21 kA2.s         |
| • at 440 V for combination switch + gG fuse maximum  | 21 kA2.s         |
| • at 690 V for combination switch + gG fuse maximum  | 21 kA2.s         |
| design of the fuse link  |                  |
| for short-circuit protection of the main circuit required  | fuse gL/gG: 63 A |
| • for short-circuit protection of the auxiliary switch required  | fuse gL/gG: 10 A |
| operational current of upstream fuse rated value   | 63 A             |
| according UL   |                  |
| operational current at AC according to UL 508/UL 60947-4-1 rated value   | 63 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  | 40               |
| active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value  | 50               |
| short-time withstand current (SCCR) at 600 V according to  | 5 kA             |
|  |                  |

| UL 508/UL 60947-4-1   |   |
|---|---|
| continuous current of upstream fuse according to UL rated             | 175 A   |
| value   |   |
| type of fuse according to UL  | RK5   |
| Connections   |   |
| AWG number as coded connectable conductor cross section solid maximum |   |
| •   | 6   |
| •   | 14  |
| type of connectable conductor cross-sections for copper conductor     |   |
| • solid   | 1x (2,535mm²)   |
| <ul> <li>finely stranded with core end processing</li> </ul>          | 1x (2.516 mm²)  |
| • stranded  | 1x (2,535mm²)   |
| type of connectable conductor cross-sections for auxiliary contacts   |   |
| • solid   | lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 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 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) |
| type of electrical connection   |   |
| <ul> <li>for main current circuit</li> </ul>                          | box terminal  |
| <ul> <li>for auxiliary contacts</li> </ul>                            | connection terminals  |
| Mechanical Design   |   |
| height  | 106 mm  |
| width   | 90 mm   |
| depth   | 110.5 mm  |
| type of device  | fixed mounting  |
| fastening method  | Built-in unit fixed-mounted version   |
| fastening method  |   |
| <ul> <li>4-hole front mounting</li> </ul>                             | Yes   |
| <ul> <li>front mounting with central attachment</li> </ul>            | No  |
| rail mounting   | No  |
| net weight  | 744 g   |
| Environmental conditions  |   |
| ambient temperature during operation                                  |   |
| • minimum   | -25 °C  |
| • maximum   | 55 °C   |
| ambient temperature during storage                                    |   |
| • minimum   | -25 °C  |
| • maximum   | 55 °C   |
| Approvals Certificates  |   |
|   |   |

**General Product Approval** 

Marine / Shipping













other Environment

**Miscellaneous** Confirmation **Environmental Con-Environmental Con**firmations <u>firmations</u>

Further information

Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875

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

http://www.siemens.com/lowvoltage/catalogs

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2504-3VK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-3VK51

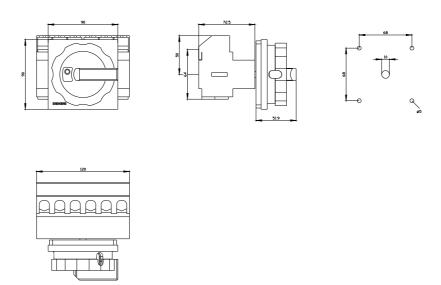
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-3VK51">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-3VK51</a>

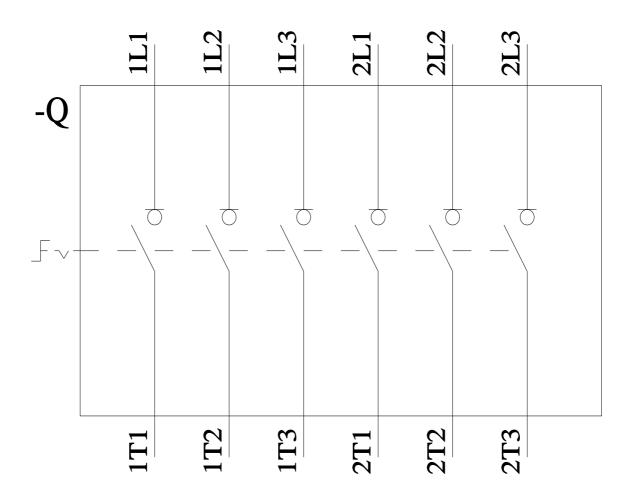
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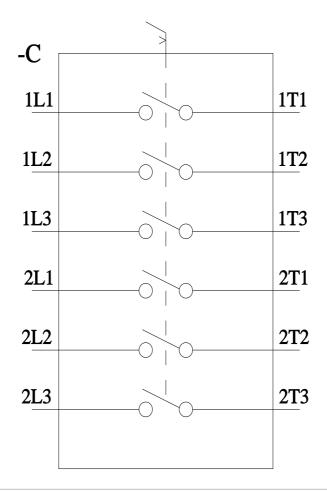
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