### 3LD2866-1GP51-0US2

**Data sheet** 



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 125 A, Operating power / at AC-23 A at 400 V: 45 kW, molded-plastic encapsulation for inch cable gland, 1 NC, 1 NO, rotary operating mechanism, black

| product brand name  | SENTRON  |
|---|--|
| product designation   | Switch disconnector                              |
| design of the product   | Main switch                                      |
| display version for switch position indicator manual                                | 1 ON - 0 OFF                                     |
| operation   |  |
| type of switch  | Molded-plastic enclosure for inch threaded joint |
| 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   |
| eneral technical data   |  |
| number of poles   | 3  |
| number of poles note  | PE   |
| size of switch disconnector   | 4  |
| 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  |
| oltage  |  |
| 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  |
| rotection class   |  |
| protection class IP   | IP65   |
| degree of protection NEMA rating  | 1, 4X, 12  |
| protection class IP on the front  | IP65   |
| issipation  |  |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 12 W   |
| ain circuit   |  |
| operational current   |  |
| at AC-21 at 690 V rated value   | 125 A  |
| • at AC-21 A at 240 V rated value   | 125 A  |
| • at AC-21 A at 400 V rated value   | 125 A  |

| <ul> <li>at AC-21 A at 440 V rated value</li> </ul>  | 125 A  |
|--|--|
| • at AC-23 A at 400 V rated value  | 80 A   |
| operating power  |  |
| <ul> <li>at AC-23 A at 240 V rated value</li> </ul>  | 22 kW  |
| <ul> <li>at AC-23 A at 400 V rated value</li> </ul>  | 45 kW  |
| <ul> <li>at AC-23 A at 440 V rated value</li> </ul>  | 45 kW  |
| <ul> <li>at AC-23 A at 690 V rated value</li> </ul>  | 37 kW  |
| <ul> <li>at AC-3 at 240 V rated value</li> </ul>   | 22 kW  |
| <ul> <li>at AC-3 at 400 V rated value</li> </ul>   | 37 kW  |
| <ul> <li>at AC-3 at 690 V rated value</li> </ul>   | 30 kW  |
| 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  | 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  | 165  |
|  | V  |
| product feature can be locked into OFF position  | Yes  |
| 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  | 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   |  |
| at 690 V by gG fuse rated value  | 20 kA  |
| let-through current with closed switch   |  |
| • at 240 V for combination switch + gG fuse maximum  | 10 kA  |
| • at 440 V for combination switch + gG fuse maximum  | 10 kA  |
| <ul> <li>at 690 V for combination switch + gG fuse maximum<br/>permissible</li> </ul>  | 10 kA  |
| I2t value with closed switch   |  |
| • at 240 V for combination switch + gG fuse maximum  | 104 kA2.s  |
|  |  |
| <ul> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>  | 104 kA2.s  |
| <ul> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>   |  |
| -  | 104 kA2.s  |
| • at 690 V for combination switch + gG fuse maximum  | 104 kA2.s  |
| at 690 V for combination switch + gG fuse maximum  design of the fuse link   | 104 kA2.s<br>104 kA2.s   |
| at 690 V for combination switch + gG fuse maximum  design of the fuse link      for short-circuit protection of the main circuit required  | 104 kA2.s<br>104 kA2.s<br>fuse gL/gG: 125 A                              |
| <ul> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>   | 104 kA2.s<br>104 kA2.s<br>fuse gL/gG: 125 A<br>fuse gL/gG: 10 A          |
| at 690 V for combination switch + gG fuse maximum  design of the fuse link     for short-circuit protection of the main circuit required     for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1  | 104 kA2.s<br>104 kA2.s<br>fuse gL/gG: 125 A<br>fuse gL/gG: 10 A          |
| at 690 V for combination switch + gG fuse maximum  design of the fuse link     for short-circuit protection of the main circuit required     for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value  according UL  operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL   | 104 kA2.s<br>104 kA2.s<br>fuse gL/gG: 125 A<br>fuse gL/gG: 10 A<br>125 A |
| at 690 V for combination switch + gG fuse maximum  design of the fuse link     for short-circuit protection of the main circuit required     for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value  according UL  operational current at AC according to UL 508/UL 60947-4-1 rated value  operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value  active power [hp] at AC at 480 V according to UL 508/UL | 104 kA2.s<br>104 kA2.s<br>fuse gL/gG: 125 A<br>fuse gL/gG: 10 A<br>125 A |
| at 690 V for combination switch + gG fuse maximum  design of the fuse link     for short-circuit protection of the main circuit required     for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value  according UL  operational current at AC according to UL 508/UL 60947-4-1 rated value  operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value  | 104 kA2.s<br>104 kA2.s<br>fuse gL/gG: 125 A<br>fuse gL/gG: 10 A<br>125 A |

| short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1 | 10 kA   |
|---|---|
| continuous current of upstream fuse according to UL rated value               | 200 A   |
| type of fuse according to UL  | RK5   |
| Connections   |   |
| AWG number as coded connectable conductor cross section solid maximum         |   |
| •   | 1   |
| •   | 12  |
| type of connectable conductor cross-sections for copper conductor             |   |
| • solid   | 1x (450mm²)   |
| <ul> <li>finely stranded with core end processing</li> </ul>                  | 1x (435mm²)   |
| • stranded  | 1x (450mm²)   |
| 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) |
| <ul> <li>finely stranded with core end processing</li> </ul>                  | 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   |   |
| for main current circuit  | box terminal  |
| for auxiliary contacts  | connection terminals  |
| Mechanical Design   |   |
| height  | 302 mm  |
| width   | 212 mm  |
| depth   | 181 mm  |
| type of device  | fixed mounting  |
| fastening method  | Complete unit in enclosure  |
| fastening method  |   |
| 4-hole front mounting   | No  |
| <ul> <li>front mounting with central attachment</li> </ul>                    | Yes   |
| rail mounting   | No  |
| net weight  | 1 856 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**









Confirmation



General Product Approval Test Certificates Marine / Shipping other



Miscellaneous



Miscellaneous



Miscellaneous

other Environment

<u>Confirmation</u> <u>Environmental Con-</u> <u>Environmental Con-</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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2866-1GP51-0US2

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2866-1GP51-0US2

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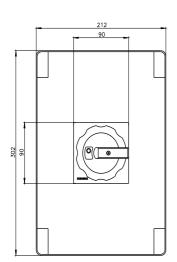
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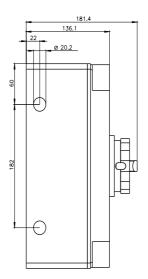
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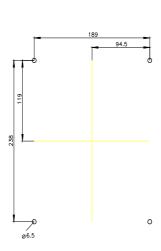
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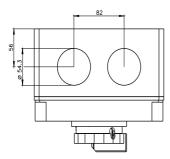
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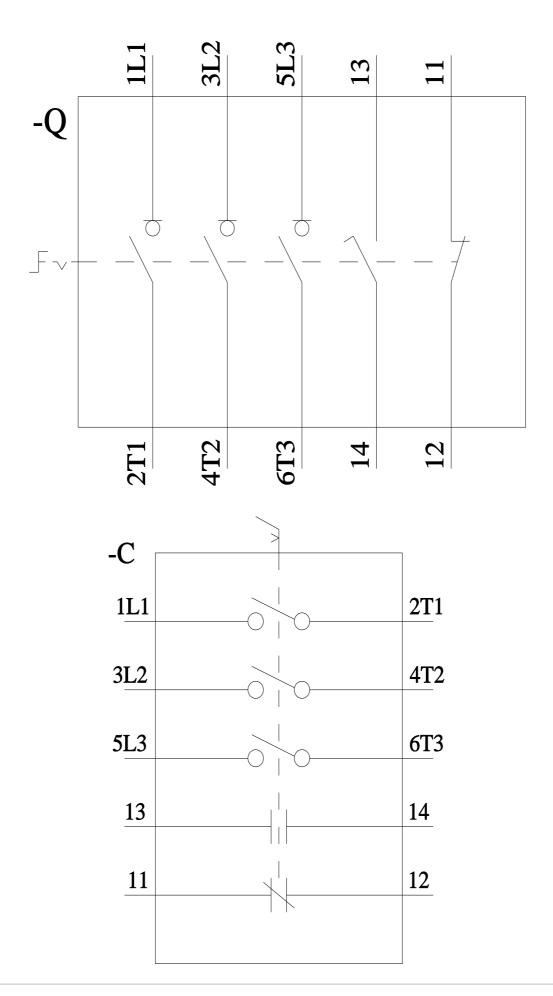
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