## **SIEMENS**

Data sheet 3KD2230-2ME20-0



Switch disconnector 32 A, Size 1, 3-pole Front operating mechanism center Basic unit without handle Box terminal

| Model   |                           |  |  |
|---|---------------------------|--|--|
| product brand name  | SENTRON                   |  |  |
| product designation   | 3KD switch disconnector   |  |  |
| design of the product   | Switch                    |  |  |
| display version / for switch position indicator door-coupling rotary operating mechanism                    | ON-OFF                    |  |  |
| design of the actuating element   | Without handle            |  |  |
| type of the driving mechanism   | Front operating mechanism |  |  |
| type of the driving mechanism / motor drive   | No                        |  |  |
| General technical data  |                           |  |  |
| number of poles   | 3                         |  |  |
| type of device  | fixed mounting            |  |  |
| size of switch disconnector   | 1                         |  |  |
| mechanical service life (switching cycles) / typical  | 15 000                    |  |  |
| electrical endurance (switching cycles)   |                           |  |  |
| <ul><li>at AC-23 A / at 690 V</li></ul>   | 6 000                     |  |  |
| • at DC-23 A / at 440 V   | 1 500                     |  |  |
| I2t value   |                           |  |  |
| <ul> <li>with closed switch / at 1000 V / for combination<br/>switch +gG/aM SITOR fuse / maximum</li> </ul> | 2 331 A <sup>2</sup> ·s   |  |  |
| <ul> <li>of the fuse / at 500 V / maximum permissible</li> </ul>  | 26 505 A <sup>2</sup> ·s  |  |  |
| <ul> <li>of the gG fuse / at 690 V / maximum permissible</li> </ul>   | 24 005 A <sup>2</sup> ·s  |  |  |
| <ul> <li>of the gG/aM SITOR fuse / at 1000 V / maximum<br/>permissible</li> </ul>                           | 6 000 A <sup>2</sup> ·s   |  |  |
| of the molded case circuit breaker / at 415 V / maximum permissible   | 480 000 A <sup>2</sup> ·s |  |  |
| position / of the switch operating mechanism  | after the first pole      |  |  |
| overvoltage in percent / relative to the operating voltage / at AC / at 400, 500, 690 V / at 50/60 Hz       | 10 %                      |  |  |
| overvoltage category  | III                       |  |  |
| degree of pollution   | 3                         |  |  |
| Voltage   |                           |  |  |
| operating voltage / with current paths in series  |                           |  |  |
| <ul> <li>with degree of pollution 2 / at DC / rated value</li> </ul>  | 440 V / 3                 |  |  |
| <ul> <li>with degree of pollution 3 / at DC / rated value</li> </ul>  | 440 V / 3                 |  |  |
| insulation voltage  |                           |  |  |
| rated value   | 1 000 V                   |  |  |
| surge voltage resistance / rated value  | 8 kV                      |  |  |
| Protection class  |                           |  |  |

| protection class IP  | IP20     |
|--|----------|
| protection class IP  |          |
| with closed switch / with cover or cable lug cover   | IP20     |
| • on the front   | IP20     |
| Dissipation  | 20       |
| power loss [W]   |          |
| with conventional rated thermal current / per pole   | 0.4 W    |
| with conventional rated thermal current / per pole     with conventional rated thermal current / per device  | 1.2 W    |
| for rated value of the current / at AC / in hot  | 0.4 W    |
| operating state / per pole   | 0.4 **   |
| Current  |          |
| operational current  |          |
| • at 35 °C / rated value   | 32 A     |
| • at 40 °C / rated value   | 32 A     |
| • at 45 °C / rated value   | 32 A     |
| • at 50 °C / rated value   | 32 A     |
| • at 55 °C / rated value   | 32 A     |
| <ul> <li>at 60 °C / rated value</li> </ul>   | 32 A     |
| • at 65 °C / rated value   | 32 A     |
| • at 70 °C / rated value   | 32 A     |
| at AC / rated value  | 32 A     |
| • at AC-23 A / at 690 V / rated value  | 32 A     |
| <ul><li>at AC-23 A / at 500 V / rated value</li></ul>  | 32 A     |
| <ul><li>at AC-23 A / at 400 V / rated value</li></ul>  | 32 A     |
| <ul><li>at AC-22 A / at 690 V / rated value</li></ul>  | 32 A     |
| <ul><li>at AC-22 A / at 500 V / rated value</li></ul>  | 32 A     |
| <ul><li>at AC-22 A / at 400 V / rated value</li></ul>  | 32 A     |
| <ul> <li>at AC-20 A / at 1000 V / maximum</li> </ul>   | 32 A     |
| <ul><li>at AC-21 A / at 500 V / rated value</li></ul>  | 32 A     |
| <ul><li>at AC-21 A / at 690 V / rated value</li></ul>  | 32 A     |
| <ul> <li>at DC-20 A / at 1000 V / maximum</li> </ul>   | 32 A / 1 |
| <ul><li>at DC-23 A / at 440 V / rated value / note</li></ul>   | 32 A / 3 |
| <ul><li>at DC-23 A / at 220 V / rated value / note</li></ul>   | 32 A / 2 |
| <ul><li>at DC-22 A / at 440 V / rated value / note</li></ul>   | 32 A / 3 |
| • at DC-22 A / at 220 V / rated value / note   | 32 A / 2 |
| <ul><li>at DC-21 A / at 440 V / rated value / note</li></ul>   | 32 A / 3 |
| at DC-21 A / at 220 V / rated value  | 32 A / 2 |
| continuous current / of upstream fuse / at 500 V and 690 V / rated value   | 100 A    |
| continuous current / of upstream fuse / at 1000 V / rated value  | 100 A    |
| continuous current / of upstream molded case circuit breaker / at 415 V / rated value  | 100 A    |
| operational current / at DC / rated value  | 32 A     |
| let-through current / of the fuse / at 500 V / maximum permissible   | 12 500 A |
| let-through current / of the gG fuse / at 690 V / maximum permissible  | 14 700 A |
| let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible  | 4 700 A  |
| let-through current / of the molded case circuit breaker / at 415 V / maximum permissible  | 20 000 A |
| Main circuit   |          |
| operating power  |          |
| at AC-23 A / at 500 V / rated value  | 18.5 kW  |
| operational current / rated value  | 32 A     |
| Auxiliary circuit  |          |
| number of connected NC contacts / for auxiliary contacts   | 0        |
| number of connected NO contacts / for auxiliary contacts   | 0        |
| number of connected CO contacts / for auxiliary contacts   | 0        |
| in the second se |          |

| number of CO contacts / for auxiliary contacts                                   | 4   |
|--|---|
| number of NC contacts / for auxiliary contacts                                   | 0   |
| number of NO contacts / for auxiliary contacts                                   | 0   |
| 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>   | Yes   |
| <ul><li>safety switch</li></ul>  | Yes   |
| <ul> <li>maintenance/repair switch</li> </ul>                                    | Yes   |
| Product details  |   |
| product feature / interlock  | No  |
| product component  |   |
| • trip indicator   | No  |
| voltage trigger  | No  |
| undervoltage release   | No  |
| undervoltage release with leading contact  | No  |
| product extension / auxiliary switch   | Yes   |
| product extension / optional   |   |
| motor drive  | No  |
| voltage trigger  | No  |
| Short circuit  |   |
| short-time withstand current (lcw) / at 1000 V AC/440 V                          | 3 kA  |
| DC / limited to 1 s / rated value  |   |
| short-circuit current making capacity (lcm) / for switch disconnector            |   |
| <ul> <li>at 1000 V AC / without fuse link / rated value /<br/>minimum</li> </ul> | 7 kA  |
| <ul> <li>at DC 440 V / without fuse link / rated value /<br/>minimum</li> </ul>  | 7 kA  |
| without fuse link / rated value / minimum  | 7 kA  |
| conditional short-circuit current / with line-side fuse protection               |   |
| <ul> <li>at 415 V / by molded case circuit breaker / rated<br/>value</li> </ul>  | 36 kA   |
| <ul> <li>at 500 V / by gG fuse / rated value</li> </ul>                          | 100 kA  |
| <ul><li>at 690 V / by gG fuse / rated value</li></ul>                            | 100 kA  |
| Connections  |   |
| type of connectable conductor cross-sections / with flexible busbar              | 2x (0,8x9 mm²)                                |
| type of connectable conductor cross-sections                                     |   |
| for copper busbar  | '1 x (2 x 9 mm²)                              |
| type of connectable conductor cross-sections / for copper conductor              |   |
| • solid  | 1x (1 16 mm²)                                 |
| finely stranded / with core end processing                                       | 1x (1 35 mm²)                                 |
| • stranded   | 1x (6 35 mm²)                                 |
| type of electrical connection / for main current circuit                         | box terminal                                  |
| Mechanical Design  |   |
| height   | 119 mm  |
| width  | 94 mm   |
| depth  | 68 mm   |
| fastening method   | Screw fixing and standard rail mounting 35 mm |
| fastening method   | 2.2.2   |
| 4-hole front mounting  | No  |
| front mounting with central attachment   | No  |
| • rail mounting  | Yes   |
| mounting position  | any   |
| net weight   | 782 g   |
| HOL WOIGHT   | 102 g   |

| Environmental conditions               |        |                           |                   |
|--|--------|---------------------------|-------------------|
| ambient temperature / during operation |        |                           |                   |
| • minimum                              | -25 °C |                           |                   |
| maximum                                | 70 °C  |                           |                   |
| ambient temperature / during storage   |        |                           |                   |
| • minimum                              | -50 °C |                           |                   |
| • maximum                              | 80 °C  |                           |                   |
| Certificates                           |        |                           |                   |
| reference code                         |        |                           |                   |
| • acc. to DIN EN 61346-2               | Q      |                           |                   |
| • acc. to IEC 81346-2                  | Q      |                           |                   |
| General Product Approval               |        | Declaration of Conformity | Marine / Shipping |





Miscellaneous







Marine / Shipping

other



**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=3KD2230-2ME20-0

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

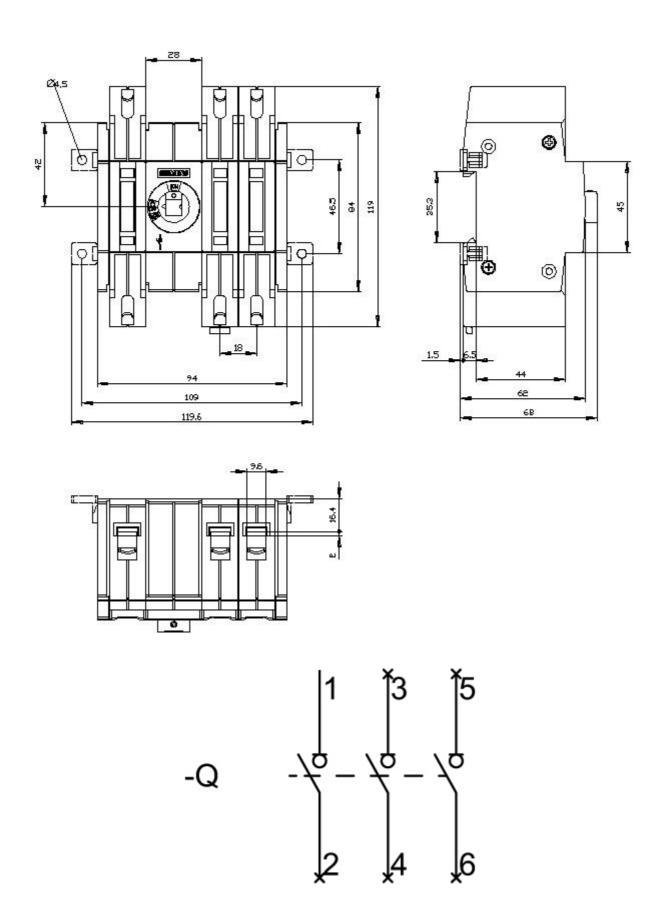
https://support.industry.siemens.com/cs/ww/en/ps/3KD2230-2ME20-0

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KD2230-2ME20-0

**Tender specifications** 

http://www.siemens.com/specifications



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