## **SIEMENS**

## **Data sheet**

fixed-mounted circuit breaker 4-pole, size I, IEC In=2000A to 690V, AC50/60Hz Icu=85kA at 500V rear connection horizontal

| Model                                                                                              | AC50/60Hz Icu=85kA at 500V rear connection norizontal |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| product brand name                                                                                 | SENTRON                                               |
| product designation                                                                                | ACB                                                   |
| design of the product                                                                              | IEC 60947-2                                           |
| design of the actuating element                                                                    | Pushbutton                                            |
| type of the driving mechanism                                                                      | Manual operating mechanism with mechanical closing    |
| type of the driving mechanism / motor drive                                                        | No                                                    |
| design of the overcurrent release                                                                  | ETU25B                                                |
| General technical data                                                                             |                                                       |
| number of poles                                                                                    | 4                                                     |
| size of the circuit-breaker                                                                        | 1                                                     |
| utilization category                                                                               | В                                                     |
| circuit-breaker / Design                                                                           | 3WL1                                                  |
| Voltage                                                                                            | OWEI                                                  |
|                                                                                                    | 1 000 V                                               |
| Rated insulation voltage Ui insulation voltage / rated value                                       | 1 000 V                                               |
|                                                                                                    | 1 000 V                                               |
| operating voltage  ● at AC / at 50/60 Hz / rated value                                             | 690 V                                                 |
|                                                                                                    | 090 V                                                 |
| Protection class                                                                                   | IDOO                                                  |
| protection class IP protection class IP / on the front                                             | IP20                                                  |
| p                                                                                                  | IP20                                                  |
| protection function of the overcurrent release                                                     | LSI                                                   |
| Dissipation                                                                                        |                                                       |
| power loss [W]                                                                                     | 00.14/                                                |
| <ul> <li>for rated value of the current / at AC / in hot<br/>operating state / per pole</li> </ul> | 80 W                                                  |
| • maximum                                                                                          | 240 W                                                 |
| Current                                                                                            |                                                       |
| continuous current / rated value / maximum                                                         | 2 000 A                                               |
| continuous current / rated value                                                                   | 2 000 A                                               |
| adjustable current response value current                                                          |                                                       |
| <ul> <li>of the current-dependent overload release / full-<br/>scale value</li> </ul>              | 2 000 A                                               |
| <ul> <li>of instantaneous short-circuit trip unit / initial value</li> </ul>                       | 40 000 A                                              |
| <ul> <li>of instantaneous short-circuit trip unit / full-scale<br/>value</li> </ul>                | 40 000 A                                              |
| Main circuit                                                                                       |                                                       |
| operating frequency                                                                                |                                                       |
| • 1 / rated value                                                                                  | 50 Hz                                                 |
| • 2 / rated value                                                                                  | 60 Hz                                                 |
| operational current                                                                                |                                                       |
| <ul> <li>at 40 °C / rated value</li> </ul>                                                         | 2 000 A                                               |
| <ul> <li>at 50 °C / rated value</li> </ul>                                                         | 2 000 A                                               |
| • at 55 °C / rated value                                                                           | 2 000 A                                               |
| <ul> <li>at 60 °C / rated value</li> </ul>                                                         | 1 930 A                                               |
| <ul> <li>at 65 °C / rated value</li> </ul>                                                         | 1 930 A                                               |
| • at 70 °C / rated value                                                                           | 1 780 A                                               |
| Auxiliary circuit                                                                                  |                                                       |

| number of NC contacts / for auxiliary contacts                                                                                             | 2                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| number of NO contacts / for auxiliary contacts                                                                                             | 2                                    |
| Suitability                                                                                                                                |                                      |
| suitability for use                                                                                                                        | Plant / motor protection             |
| Adjustable parameters                                                                                                                      |                                      |
| adjustable current response value current / of the current-dependent overload release / initial value                                      | 800 A                                |
| Product details                                                                                                                            |                                      |
| product component                                                                                                                          |                                      |
| <ul> <li>trip indicator</li> </ul>                                                                                                         | Yes                                  |
| <ul> <li>voltage trigger</li> </ul>                                                                                                        | No                                   |
| undervoltage release                                                                                                                       | No                                   |
| design of the auxiliary switch                                                                                                             | 2 NO + 2 NC                          |
| product extension / optional / motor drive                                                                                                 | Yes                                  |
| Product function                                                                                                                           |                                      |
| product function                                                                                                                           |                                      |
| <ul> <li>grounding protection</li> </ul>                                                                                                   | No                                   |
| <ul> <li>phase failure detection</li> </ul>                                                                                                | Yes                                  |
| Display and operation                                                                                                                      |                                      |
| display version                                                                                                                            | without display                      |
| Short circuit                                                                                                                              |                                      |
| breaking capacity operating short-circuit current (Ics)                                                                                    |                                      |
| • at 415 V / rated value                                                                                                                   | 85 kA                                |
| <ul><li>at 500 V / rated value</li></ul>                                                                                                   | 85 kA                                |
| <ul><li>at 690 V / rated value</li></ul>                                                                                                   | 66 kA                                |
| breaking capacity maximum short-circuit current (Icu)                                                                                      |                                      |
| at 415 V / rated value                                                                                                                     | 85 kA                                |
| <ul><li>at 500 V / rated value</li></ul>                                                                                                   | 85 kA                                |
| <ul><li>at 690 V / rated value</li></ul>                                                                                                   | 66 kA                                |
| Connections                                                                                                                                |                                      |
| arrangement of electrical connectors / for main current circuit                                                                            | Main connection rear side horizontal |
| type of electrical connection / for main current circuit                                                                                   | busbar connection                    |
| Mechanical Design                                                                                                                          |                                      |
| height                                                                                                                                     | 439.5 mm                             |
| width                                                                                                                                      | 410 mm                               |
| depth                                                                                                                                      | 337 mm                               |
| fastening method                                                                                                                           | fixed mounting                       |
| Environmental conditions                                                                                                                   |                                      |
|                                                                                                                                            |                                      |
| ambient temperature / during operation                                                                                                     |                                      |
| ambient temperature / during operation  • minimum                                                                                          | -20 °C                               |
|                                                                                                                                            | -20 °C<br>70 °C                      |
| • minimum                                                                                                                                  |                                      |
| minimum     maximum                                                                                                                        |                                      |
| minimum     maximum     ambient temperature / during storage                                                                               | 70 °C                                |
| minimum     maximum  ambient temperature / during storage     minimum                                                                      | -40 °C                               |
| minimum     maximum  ambient temperature / during storage     minimum     maximum                                                          | -40 °C                               |
| <ul> <li>minimum</li> <li>maximum</li> <li>ambient temperature / during storage</li> <li>minimum</li> <li>maximum</li> </ul> Certificates  | -40 °C                               |
| minimum     maximum     ambient temperature / during storage     minimum     maximum  Certificates reference code                          | -40 °C<br>-40 °C<br>70 °C            |
| minimum     maximum  ambient temperature / during storage     minimum     maximum  Certificates  reference code     acc. to DIN EN 61346-2 | 70 °C  -40 °C  70 °C  Q              |

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1120-4CB42-1AA2

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

https://support.industry.siemens.com/cs/ww/en/ps/3WL1120-4CB42-1AA2

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3WL1120-4CB42-1AA2

**Tender specifications** 

http://www.siemens.com/specifications





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