

Miniature circuit breaker 415 V 4-pole 10 kA D 50

Model	
product brand name	Betagard
product designation	Miniature circuit breaker
General technical data	
number of poles	4
design of pole	4P
tripping characteristic class	D
overvoltage category	3
degree of pollution	2
Voltage	
type of voltage of the operating voltage	AC
type of voltage	Use only in alternating current or direct current circuits. Mixed use is not permitted.
insulation voltage (U <sub>i</sub> )	
<ul style="list-style-type: none"> <li>with single-phase operation at AC rated value</li> <li>with multi-phase operation at AC rated value</li> </ul>	440 V 440 V
<ul style="list-style-type: none"> <li>operational current                             <ul style="list-style-type: none"> <li>at 30 °C rated value</li> <li><b>at 40 °C rated value</b></li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>at 60 °C rated value</li> </ul> </li> <li>operational current at AC rated value</li> </ul>	50 A 48 A 46 A 45 A 43.5 A 50 A
Supply voltage	
supply voltage at AC	415 V
value range of the supply voltage frequency	50/60 Hz
operating voltage	
<ul style="list-style-type: none"> <li>with multi-phase operation at AC maximum</li> </ul>	440 V
Protection class	
protection class IP	IP20, with connected conductors
Breaking Capacity	
switching capacity current	
<ul style="list-style-type: none"> <li>according to EN 60898 rated value</li> <li>according to IEC 60947-2 rated value</li> </ul>	10 kA 10 kA
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	4.1 W
suitability for operation	Infrastructure / Industry
Product details	
product feature touch protection	Yes
product component neutral conductor switching	No
product feature halogen-free	Yes
product feature sealable	Yes
product feature silicon-free	Yes
Connections	
connectable conductor cross-section solid	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
connectable conductor cross-section stranded	

<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
<b>connectable conductor cross-section finely stranded with core end processing</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.75 mm <sup>2</sup> 25 mm <sup>2</sup>
<b>tightening torque with screw-type terminals</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	2.5 N·m 3 N·m

#### Mechanical Design

height	90 mm
width	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	4
mounting position	any
Net Weight	99 999 kg

#### Environmental conditions

<b>ambient temperature during operation</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 70 °C
<b>ambient temperature during storage</b> <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 75 °C

#### Approvals Certificates

Environment	General Product Approval
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[Environmental Confirmations](#)

[Environmental Confirmations](#)



[Confirmation](#)



Test Certificates	other
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[Miscellaneous](#)

[Confirmation](#)



#### Further information

- Information on the packaging  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- Information for data generation and storage  
<https://support.industry.siemens.com/cs/ww/en/view/109995012>
- Information- and Downloadcenter (Catalogs, Brochures,...)  
<https://www.siemens.com/lowvoltage/catalogs>
- Industry Mall (Online ordering system)  
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SL7450-8RC>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/5SL7450-8RC>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)  
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SL7450-8RC](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SL7450-8RC)
- CAX-Online-Generator  
<https://www.siemens.com/cax>
- Tender specifications  
<https://www.siemens.com/specifications>
- Characteristic curves  
[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





