

WITHDRAWABLE CIRCUIT BREAKER WITHOUT  
GUIDE FRAME 4-POLE, SIZE II, IEC IN=2000A TO  
690V, AC50/60HZ ICU=80KA AT 500V REAR  
CONNECTION HORIZONTAL

Model		
product brandname		SENTRON
Product designation		ACB
Design of the operating mechanism		Pushbutton
Type of the driving mechanism		Manual/motorized operating mechanism with mechanical and electrical closing
Type of the driving mechanism / motor drive		Yes
Design of the overcurrent release		ETU45B
General technical data		
Number of poles		4
Size of the circuit-breaker		2
Electrical endurance (switching cycles) / typical		15 000
Usage category		B
circuit-breaker / Design		3WL1220
Mechanical service life (switching cycles) / typical		15 000
Voltage		
Rated insulation voltage $U_i$	V	1 000
Insulation voltage / rated value	V	1 000
Protection class		
Protection class IP		IP20
Protective function of the overcurrent release		LSIN
Dissipation		
Power loss [W]		
• for rated value of the current / at AC / in hot operating state / per pole	W	106.7
• maximum	W	320
Electricity		
Continuous current / rated value	A	2 000
Adjustable pick-up value current		
• of instantaneous short-circuit trip unit / initial value	A	3 000
• of instantaneous short-circuit trip unit / Full-scale value	A	24 000

<b>Short-time current resistance (I<sub>cw</sub>)</b>		
• limited to 0.5 s / rated value	kA	80
• limited to 1 s / rated value	kA	66
• limited to 2 s / rated value	kA	46
• limited to 3 s / rated value	kA	44
<b>Main circuit</b>		
<b>Operating frequency</b>		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
<b>Operating voltage</b>		
• at AC / at 50/60 Hz / rated value	V	690
<b>Operating current</b>		
• at 40 °C / rated value	A	2 000
• at 50 °C / rated value	A	2 000
• at 55 °C / rated value	A	2 000
• at 60 °C / rated value	A	2 000
• at 65 °C / rated value	A	2 000
• at 70 °C / rated value	A	2 000
<b>Auxiliary circuit</b>		
<b>Number of NC contacts / for auxiliary contacts</b>		4
<b>Number of NO contacts / for auxiliary contacts</b>		4
<b>Suitability</b>		
<b>Suitability for use</b>		Plant / motor protection
<b>Product details</b>		
<b>Product component</b>		
• Trip indicator		Yes
• Voltage trigger		Yes
• undervoltage release		No
Product extension / optional / motor drive		No
<b>Product function</b>		
<b>Product function</b>		
• Ground fault protection		No
<b>Display and operation</b>		
<b>Display version</b>		without display
<b>Short circuit</b>		
<b>Operational short-circuit current breaking capacity (I<sub>cs</sub>)</b>		
• at 415 V / rated value	kA	80
• at 500 V / rated value	kA	80

• at 690 V / rated value	kA	75
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• at 415 V / rated value	kA	80
• at 500 V / rated value	kA	80
• at 690 V / rated value	kA	75
<b>Short-circuit current making capacity (Icm)</b>		
• at 415 V / rated value	kA	176
• at 500 V / rated value	kA	176
• at 690 V / rated value	kA	165

## Connections

Arrangement of electrical connectors / for main current circuit		without guide frame
Type of electrical connection / for main current circuit		Blade contacts

## Mechanical Design





<b>Height</b>	mm	411.5
<b>Width</b>	mm	555
<b>Depth</b>	mm	337
<b>Mounting type</b>		drawer unit

## Environmental conditions

<b>Ambient temperature</b>		
• during operation / minimum	°C	-20
• during operation / maximum	°C	55
• during storage / minimum	°C	-40
• during storage / maximum	°C	70

## Certificates

<b>Equipment marking</b>		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

General Product Approval			Declaration of Conformity	Test Certificates	
 CCC	 VDE		 EG-Konf.	<a href="#">spezielle Prüfbescheinigungen</a> <a href="#">n</a>	<a href="#">sonstig</a>

Shipping Approval					
 ABS	 BUREAU VERITAS	 GL	 LRS	 PRS	 RMRS

other	
<a href="#">Umweltbestätigung</a>	<a href="#">sonstig</a>

#### Further information

##### Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3WL1220-3EB45-6FA4-Z F21+K07+S01>

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

<http://support.automation.siemens.com/WW/view/en/3WL1220-3EB45-6FA4-Z F21+K07+S01/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WL1220-3EB45-6FA4-Z F21+K07+S01](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1220-3EB45-6FA4-Z F21+K07+S01)

##### CAX-Online-Generator

<http://www.siemens.com/cax>

##### Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>

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