

withdrawable circuit breaker without guide frame 3-pole, size II, IEC  
 $I_n=1600\text{A}$  to 690V, AC50/60Hz  $I_{cu}=100\text{kA}$  at 500V rear connection  
 horizontal Overcurrent release ETU 45 LSING protection adjustable 0.4-1  
 in with cubicle bus and Ground fault protection Opt.: Comm./measuring  
 func./ZSS Motorized/manual operating mechanism with spring charging  
 motor AC 50/60 Hz 208-240 V or 220-250 V DC Activation AC 50/60 Hz  
 230 V, 220 V DC With 1st auxiliary release Shunt release "F", F1 50/60 Hz  
 230 V AC/220 V DC, 100% on-load factor With 2nd auxiliary release "RC",  
 F4 Undervoltage, Delay 0.2-3.2s 208-240 V AC, 220-250 V DC, 100% ED  
 2NO+2NC

Model	
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/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	3
size of the circuit-breaker	2
utilization category	B
circuit-breaker / Design	3WL1
Voltage	
Rated insulation voltage $U_i$	1 000 V
insulation voltage / rated value	1 000 V
operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
Protection class	
protection class IP	IP20
protection class IP / on the front	IP20
protection function of the overcurrent release	LSING
Dissipation	
power loss [W]	
• for rated value of the current / at AC / in hot operating state / per pole	58.7 W
• maximum	175 W
Current	
operational current	
• at 40 °C / rated value	1 600 A
• at 45 °C / rated value	1 600 A
• at 50 °C / rated value	1 600 A
• at 55 °C / rated value	1 600 A
• at 60 °C / rated value	1 600 A
• at 65 °C / rated value	1 600 A
• at 70 °C / rated value	1 600 A
continuous current / rated value / maximum	1 600 A
continuous current / rated value	1 600 A
adjustable current response value current	
• of the current-dependent overload release / full-scale value	1 600 A
• of instantaneous short-circuit trip unit / minimum	2 400 A
• of instantaneous short-circuit trip unit / maximum	19 200 A
Main circuit	
operating frequency	

<ul style="list-style-type: none"> <li>• 1 / rated value</li> <li>• 2 / rated value</li> </ul>	50 Hz 60 Hz	
<b>Auxiliary circuit</b>		
number of NC contacts / for auxiliary contacts	2	
number of NO contacts / for auxiliary contacts	2	
<b>Suitability</b>		
suitability for use	Plant / motor protection	
<b>Adjustable parameters</b>		
adjustable current response value current		
<ul style="list-style-type: none"> <li>• of the L-trip / with I4t characteristic / initial value</li> <li>• of the L-trip / with I4t characteristic / full-scale value</li> </ul>	640 A 1 600 A	
adjustable current response value current / of the current-dependent overload release / initial value	640 A	
<b>Product details</b>		
product component		
<ul style="list-style-type: none"> <li>• trip indicator</li> <li>• voltage trigger</li> <li>• undervoltage release</li> </ul>	Yes Yes Yes	
design of the auxiliary switch	2 NO + 2 NC	
product extension / optional / motor drive	No	
<b>Product function</b>		
product function		
<ul style="list-style-type: none"> <li>• grounding protection</li> <li>• phase failure detection</li> </ul>	Yes Yes	
<b>Display and operation</b>		
display version	without display	
<b>Short circuit</b>		
breaking capacity operating short-circuit current (Ics)		
<ul style="list-style-type: none"> <li>• at 415 V / rated value</li> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> </ul>	100 kA 100 kA 85 kA	
breaking capacity maximum short-circuit current (Icu)		
<ul style="list-style-type: none"> <li>• at 415 V / rated value</li> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> </ul>	100 kA 100 kA 85 kA	
<b>Connections</b>		
arrangement of electrical connectors / for main current circuit	without guide frame	
type of electrical connection / for main current circuit	Blade contacts	
<b>Mechanical Design</b>		
height	411.5 mm	
width	451 mm	
depth	337 mm	
fastening method	drawer unit	
<b>Environmental conditions</b>		
ambient temperature / during operation		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-20 °C 70 °C	
ambient temperature / during storage		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-40 °C 70 °C	
<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>



[Confirmation](#)



Test Certificates

Marine / Shipping

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



**Marine / Shipping**

**other**



[CCS / China Classification Society](#)



[Environmental Confirmations](#)

[Miscellaneous](#)

[Confirmation](#)

**other**

**Dangerous Good**

[Miscellaneous](#)

[Transport Information](#)

**Further information**

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1216-4EG35-4GS2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WL1216-4EG35-4GS2>

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

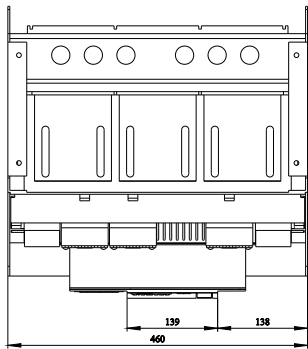
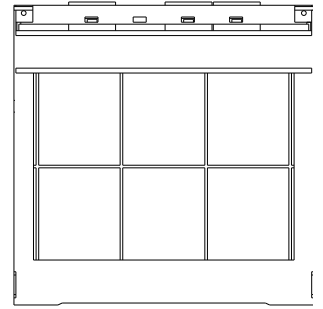
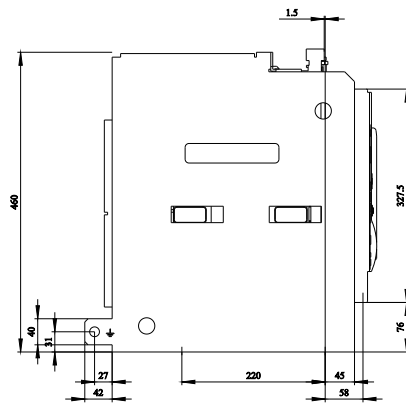
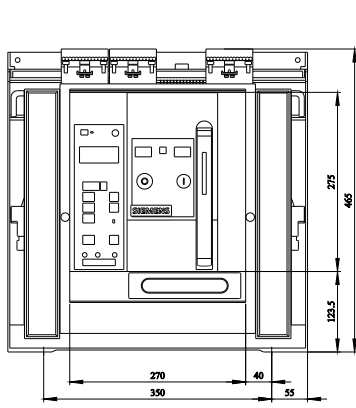
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3WL1216-4EG35-4GS2](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1216-4EG35-4GS2)

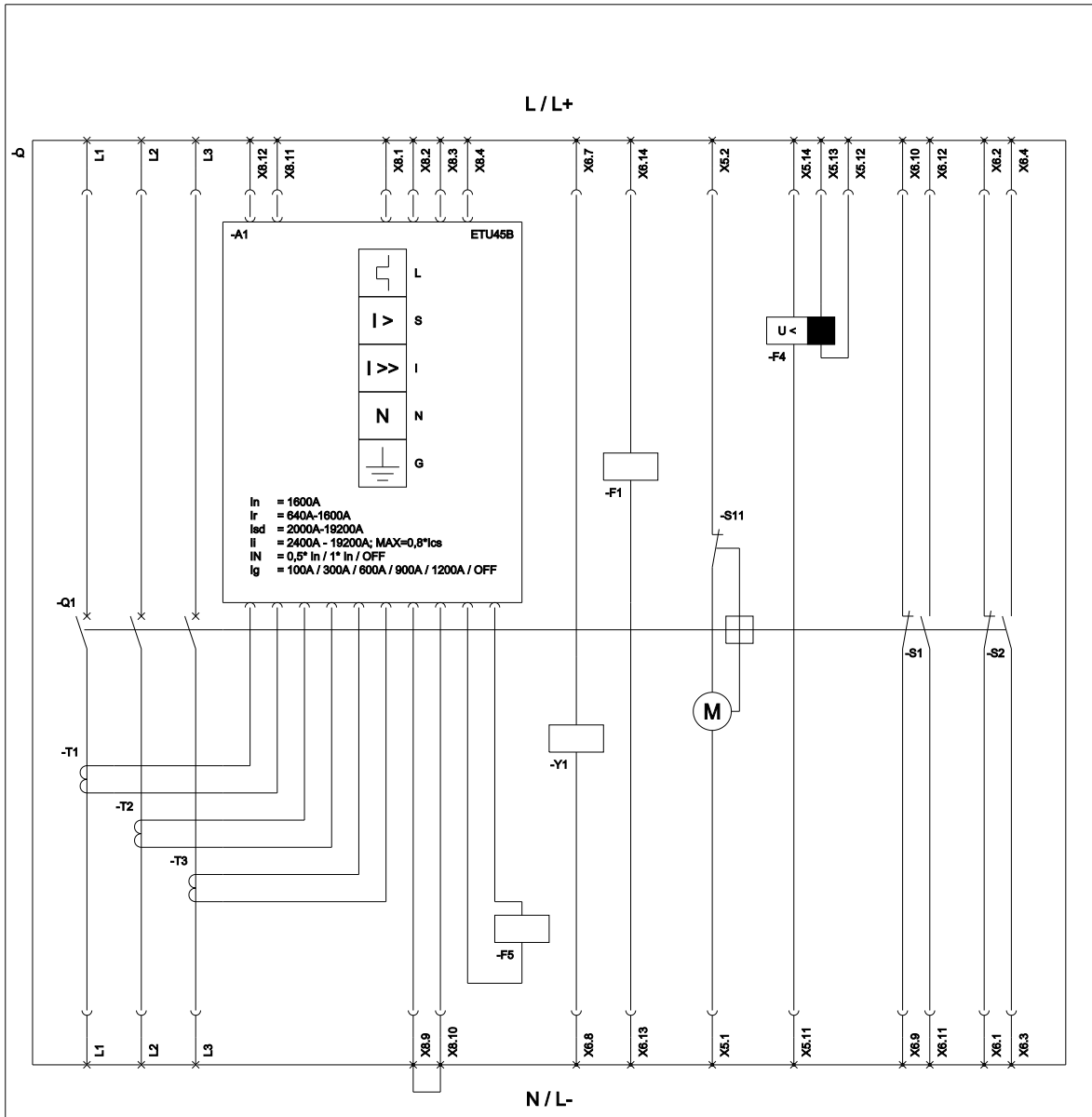
**CAX-Online-Generator**

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

**Tender specifications**

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





**L** (Long Time Delay / Überlastschutz); **S** (Short Time Delay / Kurzschlussschutz, kurzzeitverzögert); **I** (Instantaneous / Kurzschlussschutz, unverzögert); **N** (Neutral Protection / Neutralleitenschutz);  
**G** (Ground Fault Protection / Erdschlussschutz); **S11** (Internal motor shutdown switch, if spring is tensioned / Interner Motorabstellschalter, wenn Feder gespannt);  
**F1** (1st auxiliary release / Erster Hilfsauslöser); **F4** (Undervoltage release time delayed / Unterspannungsauslöser verzögerter); **F5** (Maglatch for trip unit / Auslösemagnet);  
**S1 - S8** (Auxiliary switch / Hilfschalter); **Y1** (Closing coil / Einschaltmagnet);

last modified:

11/21/2022

