

withdrawable circuit breaker without guide frame 3-pole, size II, IEC
 $I_n=2000\text{A}$ to 690V, AC50/60Hz $I_{cu}=80\text{kA}$ at 500V rear connection
 horizontal Overcurrent release ETU 27 LSING protection adjustable 0.4-1
 in Ground fault/N protection integrated Motorized/manual operating
 mechanism with spring charging motor AC 50/60 Hz 110-127 V AC or 110-
 125 V DC Activation 50/60 Hz 110 V AC, 110 V DC With 1st auxiliary
 release Shunt release "F", F1 50/60 Hz 110 V AC/110 V DC, 100% on-load
 factor With 2nd auxiliary release "R", F3 Undervoltage, instant. 110-127 V
 AC, 110-125 V DC 4NO+4NC

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	ETU27B
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	106.7 W
• maximum	320 W
Current	
operational current	
• at 40 °C / rated value	2 000 A
• at 45 °C / rated value	2 000 A
• at 50 °C / rated value	2 000 A
• at 55 °C / rated value	2 000 A
• at 60 °C / rated value	2 000 A
• at 65 °C / rated value	2 000 A
• at 70 °C / rated value	2 000 A
continuous current / rated value / maximum	2 000 A
continuous current / rated value	2 000 A
adjustable current response value current	
• of the current-dependent overload release / full-scale value	2 000 A
• of instantaneous short-circuit trip unit / minimum	40 000 A
• of instantaneous short-circuit trip unit / maximum	40 000 A
Main circuit	
operating frequency	
• 1 / rated value	50 Hz

• 2 / rated value	60 Hz
Auxiliary circuit	
number of NC contacts / for auxiliary contacts	4
number of NO contacts / for auxiliary contacts	4
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	
• trip indicator	Yes
• voltage trigger	Yes
• undervoltage release	Yes
design of the auxiliary switch	4 NO + 4 NC
product extension / optional / motor drive	No
Product function	
product function	
• grounding protection	Yes
• phase failure detection	Yes
Display and operation	
display version	without display
Short circuit	
operating short-circuit current breaking capacity (Ics)	
• at 415 V / rated value	80 kA
• at 500 V / rated value	80 kA
• at 690 V / rated value	75 kA
maximum short-circuit current breaking capacity (Icu)	
• at 415 V / rated value	80 kA
• at 500 V / rated value	80 kA
• at 690 V / rated value	75 kA
Connections	
arrangement of electrical connectors / for main current circuit	without guide frame
type of electrical connection / for main current circuit	Blade contacts
Mechanical Design	
height	411.5 mm
width	451 mm
depth	337 mm
fastening method	drawer unit
Environmental conditions	
ambient temperature / during operation	
• minimum	-20 °C
• maximum	70 °C
ambient temperature / during storage	
• minimum	-40 °C
• maximum	70 °C
General Product Approval	
 Confirmation    	
EMC	
Declaration of Conformity	
Test Certificates	
Marine / Shipping	

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping

other



[CCS / China Classification Society](#)



[Environmental Confirmations](#)

[Confirmation](#)

[Miscellaneous](#)

other

Dangerous Good

[Miscellaneous](#)

[Transport Information](#)

Further information

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1220-3DG35-5FM4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WL1220-3DG35-5FM4>

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

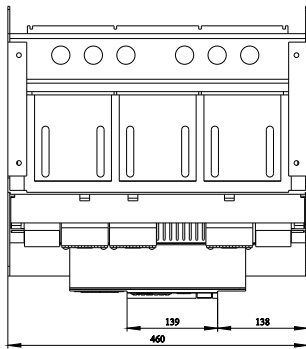
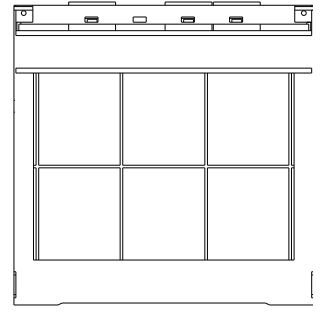
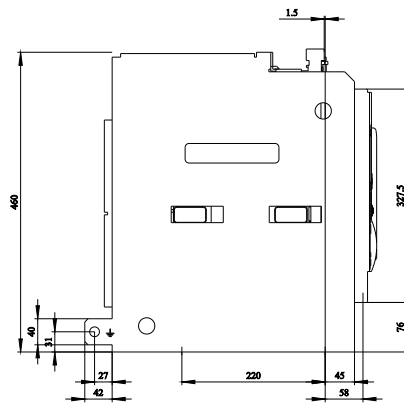
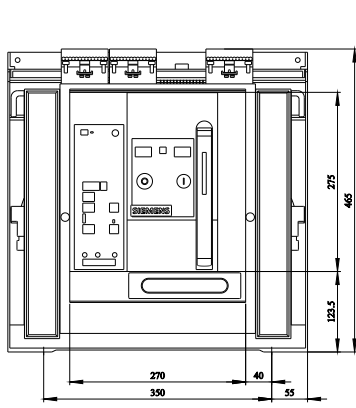
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1220-3DG35-5FM4

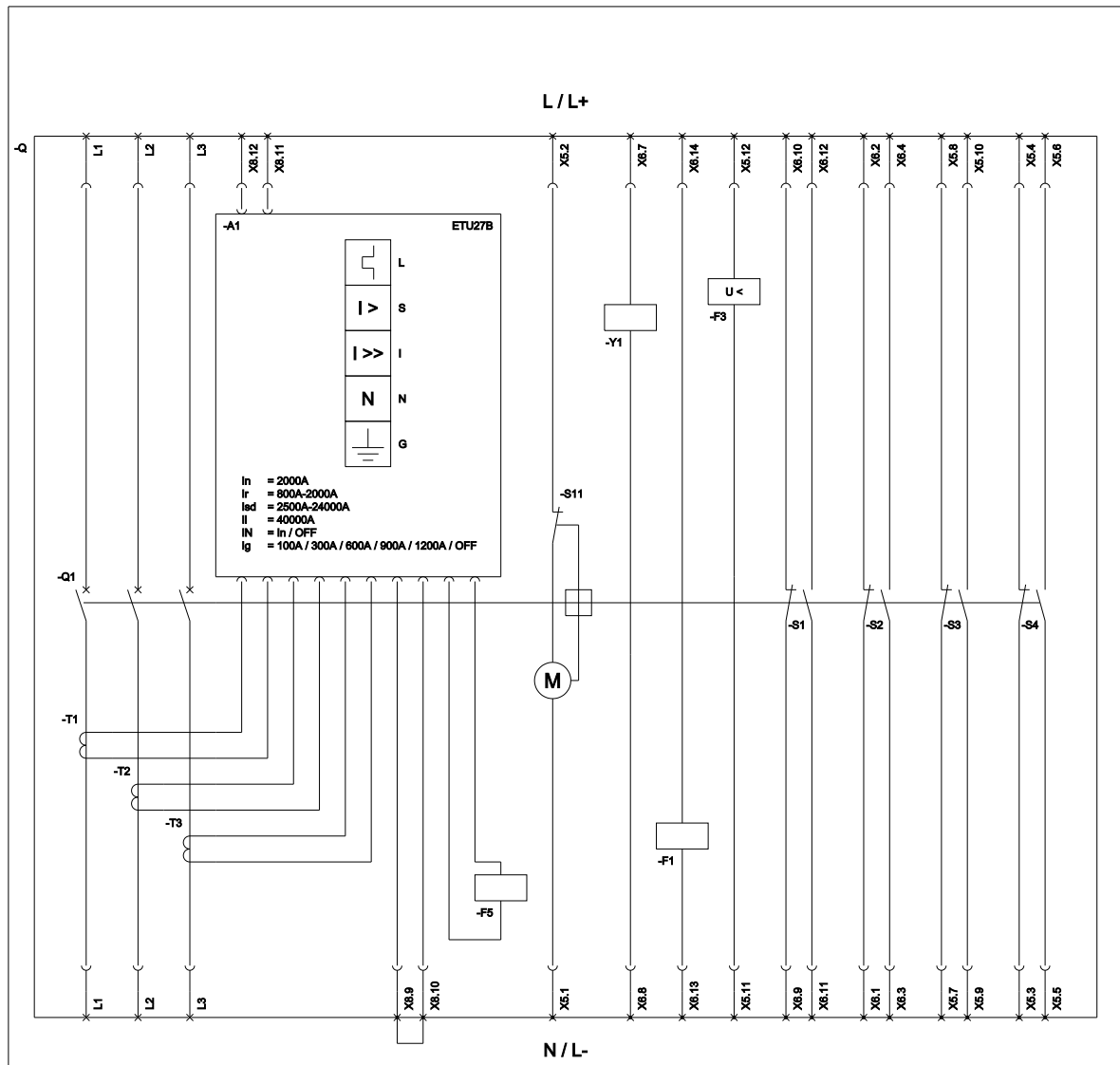
CAX-Online-Generator

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

Tender specifications

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





L (Long Time Delay / Überlastschutz); S (Short Time Delay / Kurzschlusschutz, kurzzeitsensitiv); I (Instantaneous / Kurzschlusschutz, unversögert); N (Neutral Protection / Neutralleiterschutz);
 G (Ground Fault Protection / Erdschlusschutz); S11 (Internal motor shutdown switch, if spring is tensioned / Interner Motorschalterschalter, wenn Feder gespannt); F1 (1st auxiliary release / Erster Hilfsentlaster);
 F3 (Undervoltage release / Unterspannungsentlaster); F5 (Maglatch for trip unit / Auslösemagnet); S1 - S8 (Auxiliary switch / Hilfschalter); Y1 (Closing coil / Hineinschaltmagnet);

last modified:

1/12/2023

