

fixed-mounted circuit breaker 4-pole, size I, IEC In=2000A to 690V, AC50/60Hz Icu=55kA at 500V rear connection horizontal Overcurrent release ETU 45 LSING protection adjustable 0.4-1 in with display and cubicle bus with ground fault protection Opt.: Comm./measuring func./ZSS With manual operating mechanism with storage with mechanical request without 1st auxiliary release without 2nd auxiliary release 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 operating mechanism with mechanical closing
type of the driving mechanism / motor drive	No
design of the overcurrent release	ETU45B
General technical data	
number of poles	4
size of the circuit-breaker	1
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	80 W
• maximum	240 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
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	3 000 A
• of instantaneous short-circuit trip unit / maximum	24 000 A
Main circuit	
operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Auxiliary circuit	
number of NC contacts / for auxiliary contacts	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 L-trip / with I4t characteristic / initial value	800 A
• of the L-trip / with I4t characteristic / full-scale value	2 000 A
adjustable current response value current / of the current-dependent overload release / initial value	800 A
Product details	
product component	
• trip indicator	Yes
• voltage trigger	No
• undervoltage release	No
design of the auxiliary switch	2 NO + 2 NC
product extension / optional / motor drive	Yes
Product function	
product function	
• grounding protection	Yes
• phase failure detection	Yes
Display and operation	
display version	WITH 4-LINE DISPLAY
Short circuit	
breaking capacity operating short-circuit current (Ics)	
• at 415 V / rated value	55 kA
• at 500 V / rated value	55 kA
• at 690 V / rated value	42 kA
breaking capacity maximum short-circuit current (Icu)	
• at 415 V / rated value	55 kA
• at 500 V / rated value	55 kA
• at 690 V / rated value	42 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	
• minimum	-20 °C
• maximum	55 °C
ambient temperature / during storage	
• minimum	-40 °C
• maximum	70 °C
General Product Approval	
EMC	
Declaration of Conformity	



[Confirmation](#)



Test Certificates

Marine / Shipping

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)





Dangerous Good

Transport Information

Further information

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1120-2FG42-1AA2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WL1120-2FG42-1AA2>

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

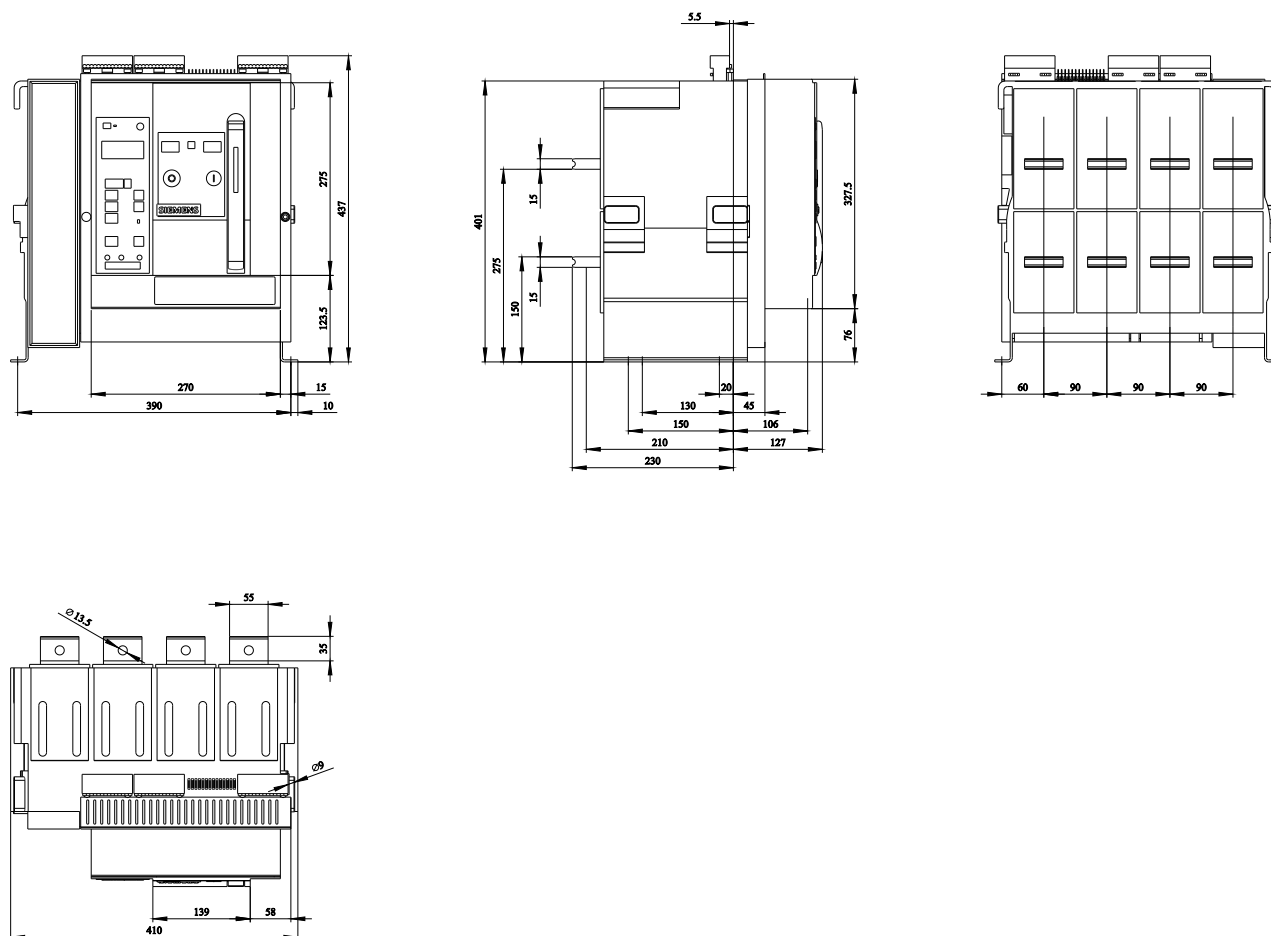
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1120-2FG42-1AA2

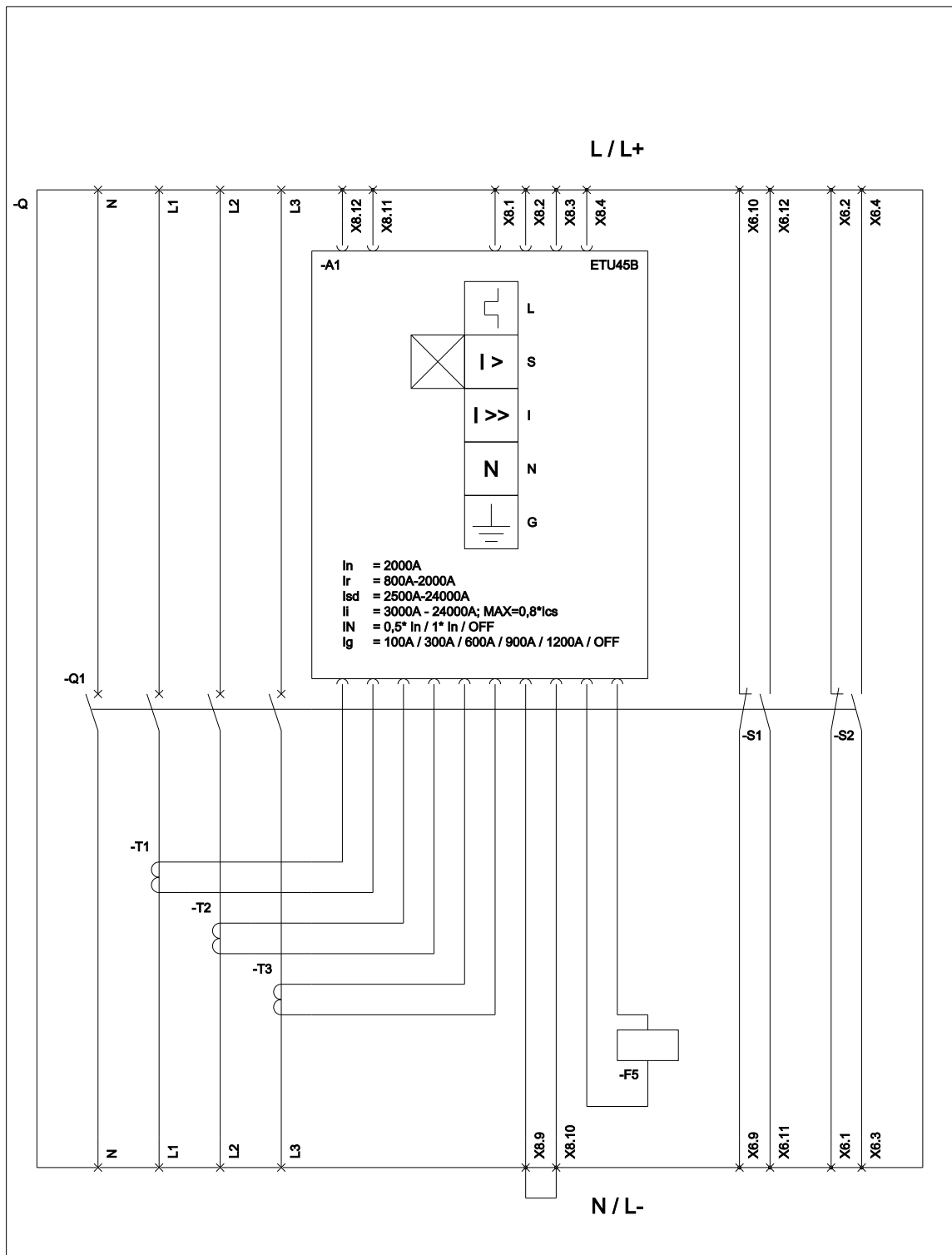
CAx-Online-Generator

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

Tender specifications

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





L (Long Time Delay / Überlastschutz); S (Short Time Delay / Kurzschlusschutz, kurzzeitverzögert); I (Instantaneous / Kurzschlusschutz, unverzögert);
N (Neutral Protection / Neutralleiterschutz); G (Ground Fault Protection / Erdschlusschutz); F5 (Maglatch for trip unit / Auslösemagnet);
S1 - S8 (Auxiliary switch / Hilfschalter);

