

fixed-mounted circuit breaker 4-pole, size I, IEC In=1600A to 690V, AC50/60Hz Icu=55kA at 500V rear connection horizontal Overcurrent release ETU 25 LSI protection adjustable 0.4-1 in 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 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/motorized operating mechanism with mechanical and electrical closing
type of the driving mechanism / motor drive	Yes
design of the overcurrent release	ETU25B
General technical data	
number of poles	4
size of the circuit-breaker	1
utilization category	B
circuit-breaker / Design	3WL1
Voltage	
Rated insulation voltage Ui	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	LSI
Dissipation	
power loss [W]	
• for rated value of the current / at AC / in hot operating state / per pole	50 W
• maximum	150 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	1 490 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	32 000 A
• of instantaneous short-circuit trip unit / maximum	32 000 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 current-dependent overload release / initial value	640 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	No
Product function	
product function	
• grounding protection	No
• 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	55 kA
• at 500 V / rated value	55 kA
• at 690 V / rated value	42 kA
maximum short-circuit current breaking capacity (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	70 °C
ambient temperature / during storage	
• minimum	-40 °C
• maximum	70 °C
General Product Approval	
EMC	
Declaration of Conformity	



[Confirmation](#)



Test Certificates

Marine / Shipping

[Special Test Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)





[CCS / China Classification Society](#)



[Environmental Confirmations](#)

[Confirmation](#)

[Miscellaneous](#)

[Miscellaneous](#)

[Transport Information](#)

Further information

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3WL1116-2CB42-4AA2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WL1116-2CB42-4AA2>

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

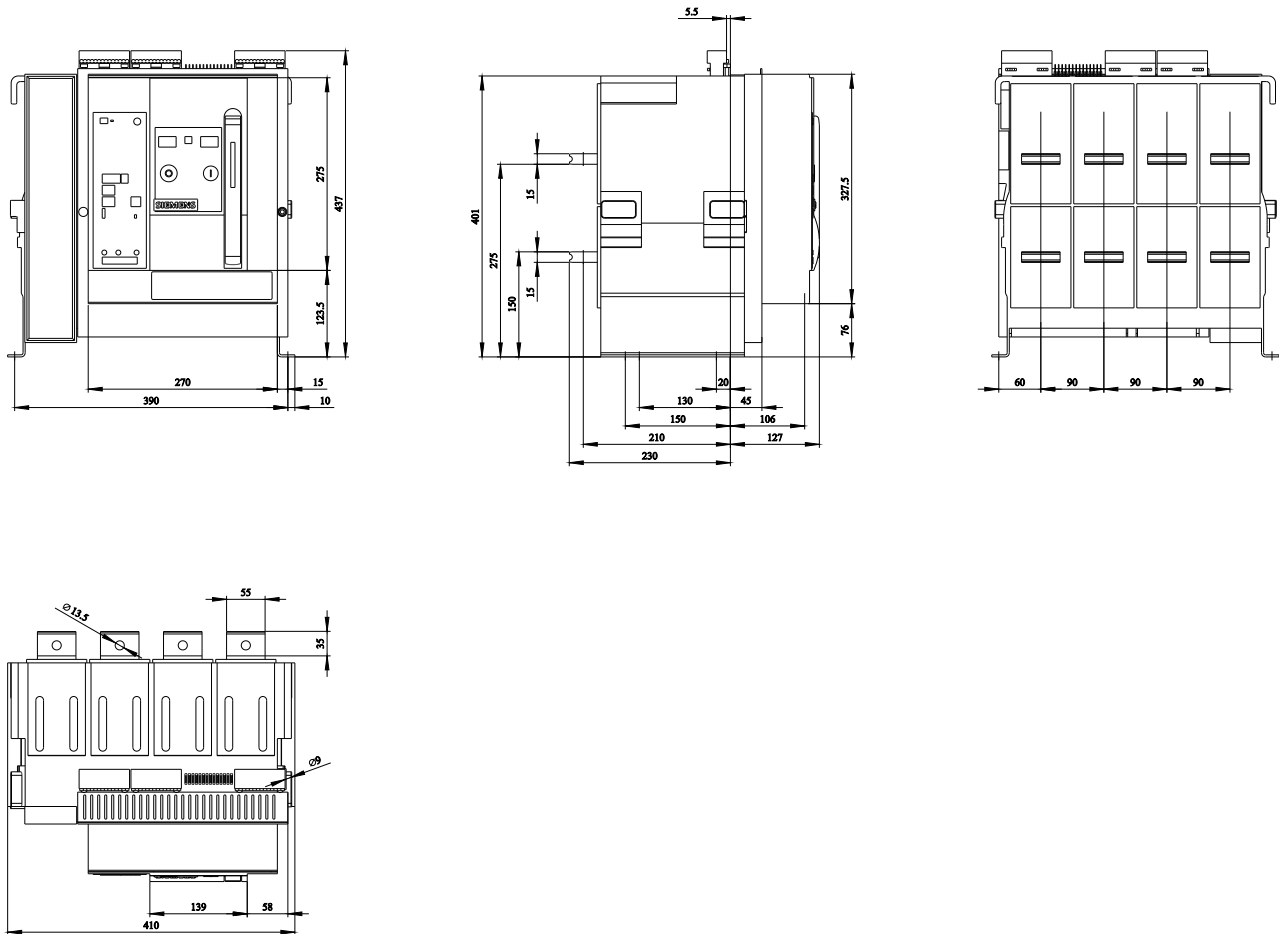
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3WL1116-2CB42-4AA2

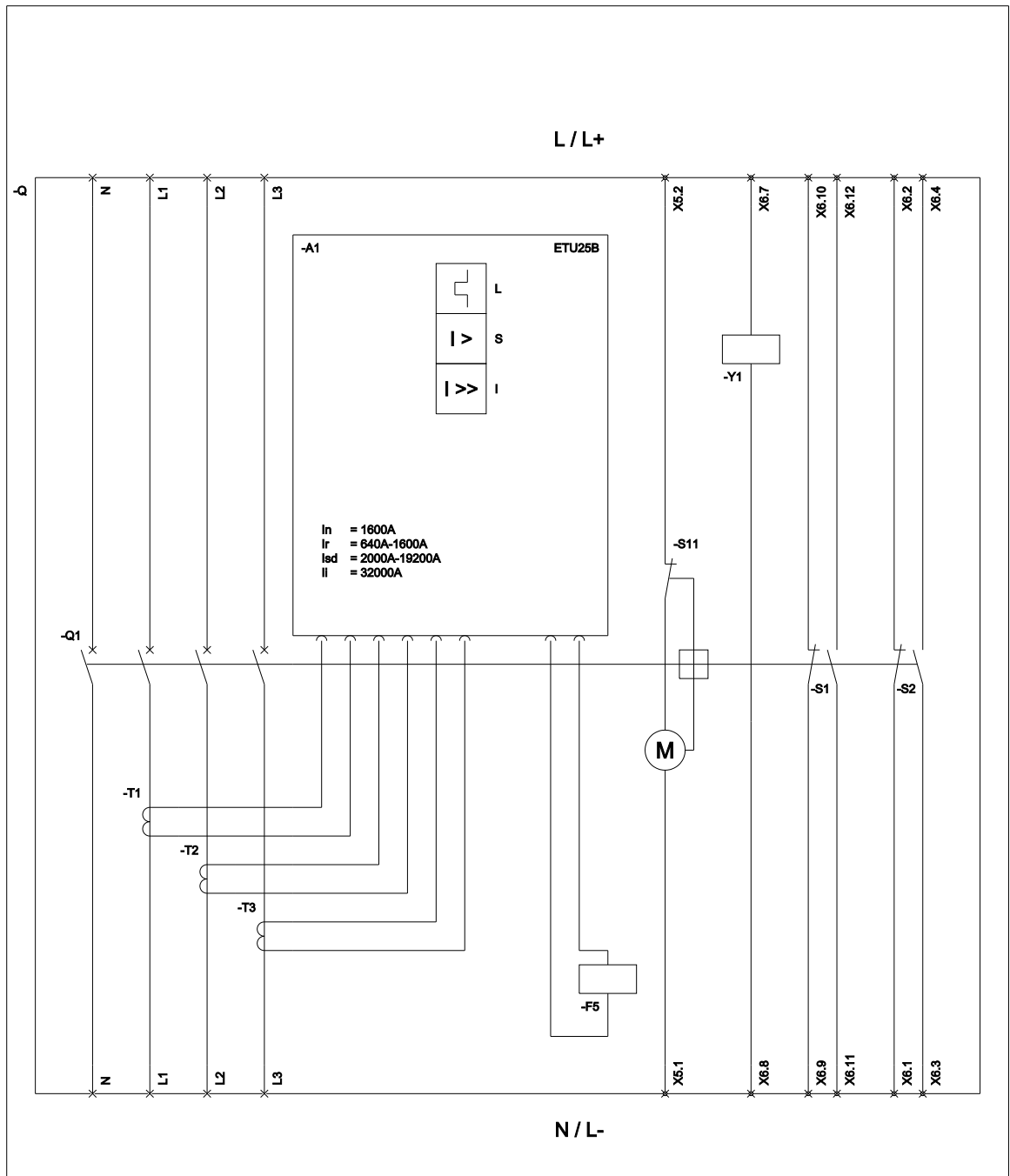
CAX-Online-Generator

<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);
 S11 (Internal motor shutdown switch, if spring is tensioned / Interner Motorabstellschalter, wenn Feder gespannt); F5 (Maglatch for trip unit / Auslösemagnet);
 S1 - S8 (Auxiliary switch / Hilfschalter); Y1 (Closing coil / Einschaltmagnet);

last modified:

3/19/2020

