

Withdrawable circuit breaker without guide frame, IEC 60947-2, frame size 2, 3-poles, $I_n=2000\text{A}$ up to 690V AC 50/60Hz, breaking capacity H $I_{cu}=100/85\text{kA}$ at 500/690V, Trip unit ETU300 LSI optimized for standard applications, without display Protection LT, ST, INST, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), without Com & metering function with manual and motorized operating mechanism (M) 24-30 V DC, Storage status and ready-to-close signaling switches, Auxiliary switches 2NO+2NC, Closing coil (CC) 100% OP 24-30 V DC, applicable for continuous duty, without Remote trip alarm reset coil (RR), without 2nd shunt trip, Shunt trip (ST) 100% OP 24-30 V DC, suitable for continuous duty, Option B16 = Option plug with reduced rated current $I_n=1600\text{A}$, rated current $I_n < I_n \text{ max.}$,

Model	
product brand name	SENTRON
product designation	Air circuit breaker
suitability for use	circuit breaker
size of the circuit-breaker	II
number of poles	3
position / of neutral conductor	no internal N-conductor
fastening method	withdrawable circuit breaker without guide frame
design of the product	AC application
type of the driving mechanism	manual operating mechanism/spring charging motor with spring charge signaling switch
design of the electronic trip unit	ETU300 LSI
Weight	60.969 kg
Net Weight	47.969 kg
General technical data	
insulation voltage / rated value	1000 V
operating voltage / at AC / at 50/60 Hz / rated value	690 V
Current	
continuous current / rated value / maximum	2000 A
continuous current / rated value	1600 A
Switching capacity and short-time withstand current, according to IEC 60947-2	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I_{cu})	
• at 500 V / rated value	100 kA
• at 690 V / rated value	85 kA
operating short-circuit current breaking capacity (I_{cs})	
• at 500 V / rated value	100 kA
• at 690 V / rated value	85 kA
short-circuit current making capacity (I_{cm})	
• at 500 V / rated value	220 kA
• at 690 V / rated value	187 kA
short-time withstand current (I_{cw}) / at 500 V AC	
• for 0.5 s / rated value	100 kA
• for 1 s / rated value	85 kA
• for 2 s / rated value	66 kA
• for 3 s / rated value	55 kA

short-time withstand current (I _{cw}) / at 690 V AC	
<ul style="list-style-type: none"> • for 0.5 s / rated value • for 1 s / rated value • for 2 s / rated value • for 3 s / rated value 	<p>85 kA</p> <p>85 kA</p> <p>66 kA</p> <p>55 kA</p>
Electronic release unit	
product feature	
<ul style="list-style-type: none"> • upgradable • Bluetooth and USB interface • decoder for basic protection functions • display and function keys • SENTRON powerconfig configuration software 	<p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>No</p>
Basic protection functions	
product feature / for L-tripping	
<ul style="list-style-type: none"> • can be switched on/off • selectable characteristic function • decoder and infinite adjustability are selectable with eSet 	<p>No</p> <p>No</p> <p>No</p>
set values setting current (I _r) / for L-tripping / with I2t characteristic	0.4;0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1
reference value setting current (I _r) / for L-tripping / with I2t characteristic	x I _n
set values delay time (t _r) / for L-tripping / with I2t characteristic	0.75;1;2;5;8;10;14;17;21;25
reference value delay time (t _r) / for L-tripping / with I2t characteristic	s
L: Overload protection N-conductor	
product feature / with neutral conductor protection / can be switched on/off	No
setting values setting current (I _{nN}) / for N-tripping	1
reference value setting current (I _{nN}) / for N-tripping	x I _n
S: delayed short-circuit protection ST	
product feature / for S-tripping	
<ul style="list-style-type: none"> • independent of direction / can be switched on/off • independent of direction / selectable characteristic function • decoder and infinite adjustability are selectable with eSet 	<p>Yes</p> <p>Yes</p> <p>No</p>
S: delayed short-circuit protection ST, settings values I0t	
set values setting current (I _{sd}) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I0t characteristic	x I _r
set values delay time (t _{sd}) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (t _{sd}) / for S-tripping / with I0t characteristic	s
S: delayed short-circuit protection ST, settings values I2t	
set values setting current (I _{sd}) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (I _{sd}) / for S-tripping / with I2t characteristic	x I _r
set values delay time (t _{sd}) / for S-tripping / with I2t characteristic	0.08;0.15;0.22;0.3;0.4
product feature / for I-tripping	
<ul style="list-style-type: none"> • can be switched on/off • decoder and infinite adjustability are selectable (with eSet) 	<p>No</p> <p>No</p>
set values setting current (I _i) / for I-tripping	1.5;2;3;4;5;6;8;10;12;15
reference value setting current (I _i) / for I-tripping	x I _n
G: ground fault GF	
product feature / for G-tripping	
<ul style="list-style-type: none"> • selectable characteristic function 	No
Further protective functions	
protection function	
<ul style="list-style-type: none"> • maintenance mode DAS+ 	Yes
Measuring functions	

measurement function	
• current measurement	Yes
Communication	
communication function	No
Service Life	
mechanical service life (operating cycles)	
• without support / typical	10000
• with support / typical	20000
electrical endurance (operating cycles)	
• at 690 V / without support / typical	7500
• at 690 V / with support / typical	20000
Dimensions	
height	468 mm
width	460 mm
depth	471 mm
Auxiliary circuit	
design of the auxiliary switch	2 NO + 2 NC
number of NC contacts / for auxiliary contacts	2
number of NO contacts / for auxiliary contacts	2
number of CO contacts / for auxiliary contacts	0
Internal accessories	
product component	
• undervoltage release	No
• voltage trigger	Yes
• trip indicator	Yes
• motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP20
ambient temperature / during operation	
• minimum	-40 °C
• maximum	70 °C
ambient temperature / during storage	
• minimum	-40 °C
• maximum	80 °C
Certificates	
reference code / according to IEC 81346-2	Q
Approvals / Certificates	
Environment	General Product Approval



[Confirmation](#)



General Product Approval

EMV

Radio Equipment Type Approval Certificate

Test Certificates



[Miscellaneous](#)

[Miscellaneous](#)

[Special Test Certificate](#)

Maritime application

other



[Confirmation](#)



[Manufacturer Declaration](#)

Dangerous goods

[Transport Information](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (catalogues, leaflets,...)

<https://www.siemens.com/energy-automation>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1220-5AB30-2BA1-Z B16>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3WA1220-5AB30-2BA1-Z B16>

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

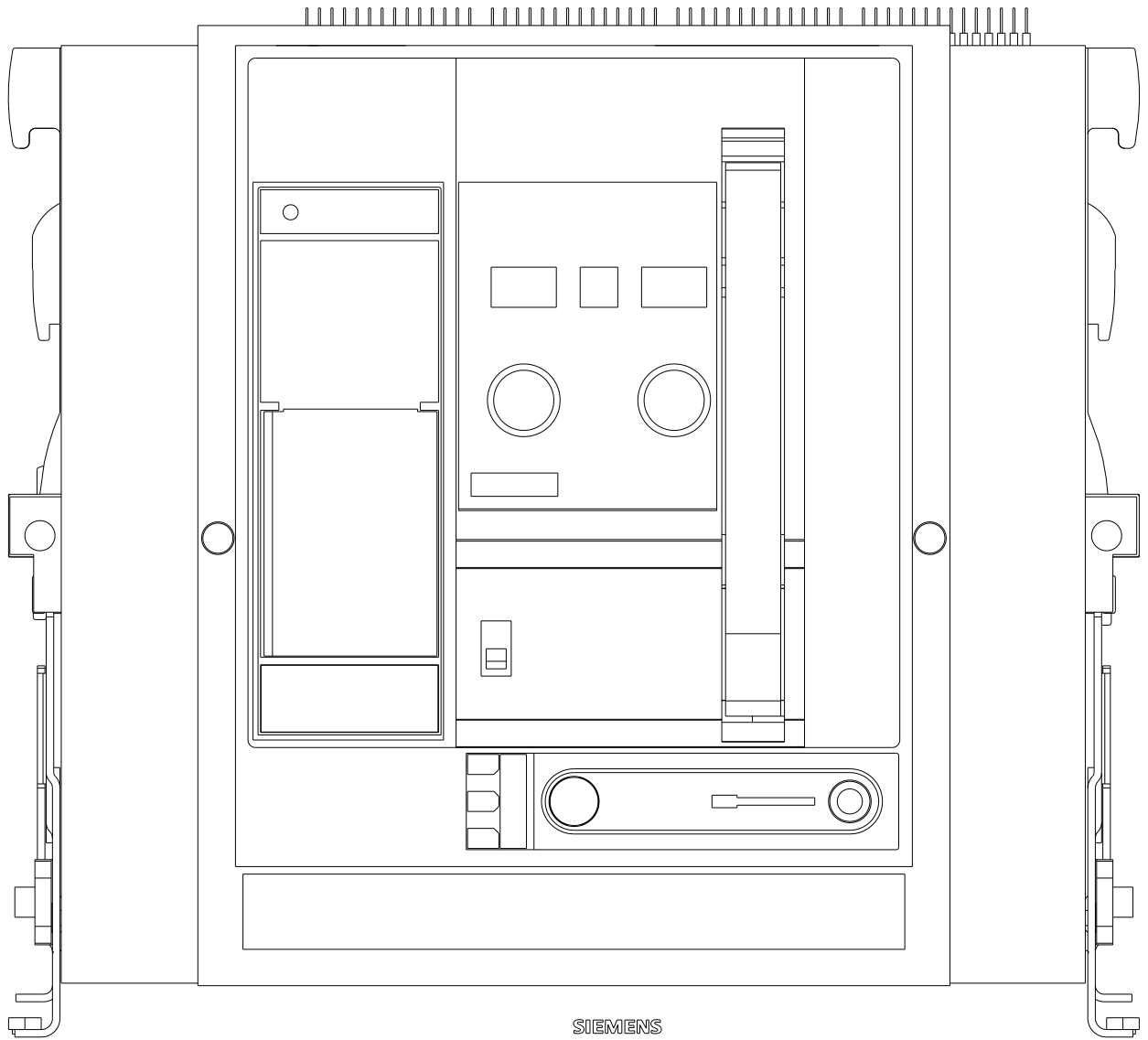
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WA1220-5AB30-2BA1-Z B16

CAx-Online-Generator

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



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