SIEMENS

Data sheet



Fixed-mounted circuit breaker IEC 60947-2, frame size 1, 3-poles, In=2500A up to 690V AC 50/60Hz, breaking capacity M Icu=85/66kA at 500/690V, Trip unit ETU300 LSI optimized for standard applica- tions, without display Protection LT, ST, INST, N-protection required an external N-sensor, incl. trip alarm switch (1xCO), rear connection horizontal, without Com & metering function Manual operating mechanism with mechanical closing, without Spring charging motor, Ready-to-close signal. switch, Auxiliary switches 2NO+2NC, without Closing coil (CC), manual operating mechanism with mechanical closing, without Remote trip alarm reset coil (RR), without 2nd shunt trip, without 1st Shunt trip

Model		
product brand name	SENTRON	
product designation	Air circuit breaker	
suitability for use	circuit breaker	
size of the circuit-breaker	I	
number of poles	3	
position / of neutral conductor	no internal N-conductor	
fastening method	fixed-mounted circuit breakers	
design of the product	AC application	
type of the driving mechanism	manual operating mechanism with mechanical or electrical closing	
design of the electronic trip unit	ETU300 LSI	
Weight	46.5 kg	
Net Weight	33.5 kg	
General technical data		
insulation voltage / rated value	1000 V	
operating voltage / at AC / at 50/60 Hz / rated value	690 V	
power loss [W] / maximum	360 W	
Current		
continuous current / rated value / maximum	2500 A	
continuous current / rated value	2500 A	
operational current		
 at 40 °C / rated value 	2500 A	
 at 45 °C / rated value 	2500 A	
 at 50 °C / rated value 	2500 A	
• at 55 °C / rated value	2500 A	
 at 60 °C / rated value 	2500 A	
• at 65 °C / rated value	2500 A	
 at 70 °C / rated value 	2500 A	
Switching capacity and short-time withstand current, according to IEC 60947-2		
switching capacity class of the circuit breaker	M	
maximum short-circuit current breaking capacity (Icu)		
• at 500 V / rated value	85 kA	
at 690 V / rated value	66 kA	
operating short-circuit current breaking capacity (lcs)		
• at 500 V / rated value	85 kA	
• at 690 V / rated value	66 kA	
short-circuit current making capacity (Icm)		
• at 500 V / rated value	187 kA	
• at 690 V / rated value	145 kA	
short-time withstand current (Icw) / at 500 V AC		

• for 0.5 s / rated value	85 kA
• for 1 s / rated value	85 kA
• for 2 s / rated value	70 kA
• for 3 s / rated value	60 kA
short-time withstand current (Icw) / at 690 V AC	0014
• for 0.5 s / rated value	66 kA
• for 1 s / rated value	66 kA
for 2 s / rated valuefor 3 s / rated value	66 kA
Electronic release unit	60 kA
product feature	
upgradable	No
Bluetooth and USB interface	No
decoder for basic protection functions	Yes
display and function keys	No
SENTRON powerconfig configuration software	No
Basic protection functions	
product feature / for L-tripping	
• can be switched on/off	No
selectable characteristic function	No
decoder and infinite adjustability are selectable with eSet	No
set values setting current (Ir) / for L-tripping / with I2t	0.4;0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1.0
characteristic	
reference value setting current (Ir) / for L-tripping / with I2t characteristic	x In
set values delay time (tr) / for L-tripping / with I2t characteristic	0.75;1;2;5;8;10;14;17;21;25
reference value delay time (tr) / for L-tripping / with I2t	s
characteristic	
L: Overload protection N-conductor	
product feature / with neutral conductor protection / can be switched on/off	No
setting values setting current (InN) / for N-tripping	1
reference value setting current (InN) / for N-tripping	x In
S: delayed short-circuit protection ST	
product feature / for S-tripping	
independent of direction / can be switched on/off	Yes
 independent of direction / selectable characteristic function 	Yes
 decoder and infinite adjustability are selectable with eSet 	No
S: delayed short-circuit protection ST, settings values l0t	
set values setting current (Isd) / for S-tripping / with I0t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (Isd) / for S-tripping / with I0t characteristic	x lr
set values delay time (tsd) / for S-tripping / with I0t characteristic	0.08;0.15;0.22;0.3;0.4
reference value delay time (tsd) / for S-tripping / with I0t characteristic	s
S: delayed short-circuit protection ST, settings values I2t	
set values setting current (Isd) / for S-tripping / with I2t characteristic	1.5;2;2.5;3;4;5;6;8;10
reference value setting current (Isd) / for S-tripping / with I2t characteristic	x lr
set values delay time (tsd) / for S-tripping / with I2t characteristic	0.08;0.15;0.22;0.3;0.4
product feature / for I-tripping	
• can be switched on/off	No
 decoder and infinite adjustability are selectable (with eSet) 	No
set values setting current (li) / for I-tripping	1.5;2;3;4;5;6;8;10;12;15
reference value setting current (Ii) / for I-tripping	x In
G: ground fault GF	
product feature / for G-tripping	
• can be switched on/off	No
selectable characteristic function	No
Further protective functions	

protection function • maintenance mode DAS+ Measuring functions measurement function • current measurement • communication communication function No Service Life mechanical service life (operating cycles) • without support / typical • with support / typical • with support / typical • at 690 V / without support / typical • at 690 V / with support / typical • at 690		
Measuring functions measurement function current measurement Yes	protection function	
measurement function	maintenance mode DAS+	Yes
current measurement Yes Communication Communication function Service Life mechanical service life (operating cycles) • without support / typical 15000 electrical endurance (operating cycles) • at 690 V / without support / typical 5000 electrical endurance (operating cycles) • at 690 V / without support / typical 5000 Immissions height 437 mm width 320 mm depih 357 mm Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit design of the auxiliary switch 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 2 number of CO contacts / for auxiliary contacts 0 Internal accessories product component • undervoltage release No • voltage trigger No • wort drive No • motor drive No • minimum 40 °C • maximum 80 °C Certificatos reference code	Measuring functions	
Communication function No communication function No Survice Life mechanical service life (operating cycles) • without support / typical 10000 • with support / typical 15000 electrical endurance (operating cycles) • at 690 V / without support / typical 5000 • at 690 V / without support / typical 5000 Dimensions height 437 mm width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit 757 mm Auxiliary circuit 420 mm design of the auxiliary switch 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 0 Internal accessories product component • undervoltage release No • voltage trigger No • voltage trigger No • motor drive No • motor drive No • motor drive No • motor drive No • maximum 40° C • maximum 70° C emaximum 80° C certificates reference code	measurement function	
communication function No Service Life mechanical service life (operating cycles) • without support / typical 15000 • with support / typical 15000 electrical endurance (operating cycles) • at 690 V / without support / typical 5000 • at 690 V / without support / typical 5000 • at 690 V / without support / typical 5000 Dimensions height 437 mm width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit 4 design of the auxiliary switch 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 2 number of CO contacts / for auxiliary contacts 0 internal accessories product component • undervoltage release No • voltage trigger No • motor drive No Environmental conditions protection class IP / on the front P20 ambient temperature / during operation • minimum 40°C maximum 80°C contificates reference code	 current measurement 	Yes
Service Life mechanical service life (operating cycles) • without support / typical 10000 • with support / typical 15000 electrical endurance (operating cycles) • at 690 V / without support / typical 15000 Dimensions height 437 mm width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit Auxillarry circuit design of the auxillary switch 2 NO + 2 NC number of NC contacts / for auxillary contacts 2 number of NO contacts / for auxillary contacts 2 number of CO contacts / for auxillary contacts 2 number of CO contacts / for auxillary contacts 0 internal accessories product component • undervoltage release No • voltage trigger No • trip indicator Yes • motor drive No Environmental conditions protection class IP / on the front IP20 ambient temperature / during operation • minimum 40 °C maximum 70 °C certificates reference code	Communication	
mechanical service life (operating cycles) • without support / typical • with support / typical electrical endurance (operating cycles) • at 690 V / without support / typical • at 690 V / with support / typical • at 690 V / with support / typical • at 690 V / with support / typical • at 690 V / with support / typical • at 690 V / with support / typical S000 Dimensions height	communication function	No
without support / typical 15000 with support / typical 15000 at 690 V / without support / typical 5000 at 690 V / with support / typical 5000 interpretation of the support / typical 5000 Author	Service Life	
electrical endurance (operating cycles) e at 690 V / without support / typical e at 690 V / with support / typical e at 690 V / with support / typical e at 690 V / with support / typical e to 690 V / with support / typical indepth indepth indextent indepth indepth indepth indepth indepth indepth indepth ind	mechanical service life (operating cycles)	
electrical endurance (operating cycles) • at 690 V / without support / typical • at 690 V / with support / typical • at 690 V / with support / typical beight ### A37 mm ### width ### 320 mm ### depth ### A37 mm ### as 77 mm ### as 70 mm ### a	without support / typical	10000
at 690 V / without support / typical at 690 V / with support / typical 15000 Dimensions height 437 mm width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit design of the auxiliary switch 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 0 Internal accessories product component undervoltage release No voltage trigger No voltage trigger No motor drive No certificates minimum 40 °C maximum 70 °C maximum 80 °C Certificates reference code	with support / typical	15000
at 690 V / with support / typical binemisions height 437 mm width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit Auxiliary circuit design of the auxiliary switch 1 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 0 number of Contacts / for auxiliary contacts product component undervoltage release No voltage trigger virpi indicator motor drive No Environmental conditions protection class IP / on the front minimum	electrical endurance (operating cycles)	
Dimensions	 at 690 V / without support / typical 	5000
height 437 mm width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit design of the auxiliary switch 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of NC contacts / for auxiliary contacts 2 number of CO contacts / for auxiliary contacts 0 Internal accessories product component	at 690 V / with support / typical	15000
width 320 mm depth 357 mm Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit design of the auxiliary switch 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	Dimensions	
depth 357 mm Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit design of the auxiliary switch 2 NO + 2 NC number of NC contacts / for auxiliary contacts 2 number of CO contacts / for auxiliary contacts 0 Internal accessories product component • undervoltage release No • voltage trigger No • trip indicator Yes • motor drive No Environmental conditions protection class IP / on the front IP20 ambient temperature / during operation • maximum -40 °C • maximum -40 °C ambient temperature / during storage • minimum -40 °C maximum -40 °C emaximum -40 °C emaximum -40 °C emaximum -40 °C eminimum -40 °C emi	height	437 mm
Main connection arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal Auxiliary circuit design of the auxiliary switch number of NC contacts / for auxiliary contacts 2 number of NO contacts / for auxiliary contacts 0 Internal accessories product component	width	320 mm
arrangement of electrical connectors / for main current circuit main connection on the rear, horizontal 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 0 Internal accessories product component • undervoltage release No • voltage trigger No • motor drive No Environmental conditions protection class IP / on the front IP20 ambient temperature / during operation • minimum -40 °C ambient temperature / during storage • minimum -40 °C ambient temperature / during storage • minimum -40 °C ambient temperature / during storage • minimum -40 °C emaximum -4	depth	357 mm
Auxiliary circuit design of the auxiliary switch number of NC contacts / for auxiliary contacts number of NO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts product component undervoltage release voltage trigger no trip indicator notor drive No Environmental conditions protection class IP / on the front ambient temperature / during operation minimum momentum maximum ambient temperature / during storage minimum maximum -40 °C -	Main connection	
design of the auxiliary switch number of NC contacts / for auxiliary contacts number of NO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of NO contacts / for auxiliary contacts	arrangement of electrical connectors / for main current circuit	main connection on the rear, horizontal
number of NC contacts / for auxiliary contacts number of NO contacts / for auxiliary contacts number of CO contacts / for au	Auxiliary circuit	
number of NO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts Internal accessories	design of the auxiliary switch	2 NO + 2 NC
number of CO contacts / for auxiliary contacts Internal accessories product component • undervoltage release • voltage trigger • trip indicator • motor drive Internal accessories Protection class IP / on the front • minimum • minimum • maximum To °C ambient temperature / during storage • minimum • minimum • minimum • A0 °C -40 °C	number of NC contacts / for auxiliary contacts	2
Internal accessories product component • undervoltage release • voltage trigger • trip indicator • motor drive Environmental conditions protection class IP / on the front ambient temperature / during operation • minimum • minimum • maximum 70 °C ambient temperature / during storage • minimum • minimum • 40 °C • maximum 70 °C Certificates reference code	number of NO contacts / for auxiliary contacts	2
product component • undervoltage release • voltage trigger • trip indicator • motor drive Environmental conditions protection class IP / on the front ambient temperature / during operation • minimum • maximum ambient temperature / during storage • minimum • maximum -40 °C ambient temperature / during storage • minimum • maximum -40 °C ambient temperature / during storage • minimum • maximum -40 °C • maximum -40 °C • maximum -40 °C • maximum -40 °C	number of CO contacts / for auxiliary contacts	0
 undervoltage release voltage trigger trip indicator trip indicator motor drive No 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 ambient temperature / during storage minimum maximum 80 °C Certificates reference code	Internal accessories	
 voltage trigger trip indicator motor drive No 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 ambient temperature / during storage minimum maximum 80 °C Certificates reference code	product component	
 trip indicator motor drive Mo Environmental conditions protection class IP / on the front ambient temperature / during operation minimum maximum maximum o °C ambient temperature / during storage minimum -40 °C ambient temperature / during storage minimum and °C Certificates reference code 	undervoltage release	No
 motor drive Environmental conditions protection class IP / on the front ambient temperature / during operation minimum maximum maximum 70 °C ambient temperature / during storage minimum -40 °C maximum 80 °C Certificates reference code 	 voltage trigger 	No
Environmental conditions protection class IP / on the front ambient temperature / during operation • minimum • maximum 70 °C ambient temperature / during storage • minimum • maximum 70 °C ambient temperature / during storage • minimum • maximum 80 °C Certificates reference code	• trip indicator	Yes
protection class IP / on the front ambient temperature / during operation • minimum • maximum 70 °C ambient temperature / during storage • minimum • maximum -40 °C ambient temperature / during storage • minimum • maximum 80 °C Certificates reference code	 motor drive 	No
ambient temperature / during operation • minimum • maximum 70 °C ambient temperature / during storage • minimum • maximum 40 °C -40 °C -40 °C -40 °C • maximum 80 °C Certificates reference code	Environmental conditions	
 minimum -40 °C maximum 70 °C ambient temperature / during storage minimum -40 °C maximum 80 °C Certificates reference code	protection class IP / on the front	IP20
 maximum ambient temperature / during storage minimum -40 °C maximum 80 °C Certificates reference code 	ambient temperature / during operation	
ambient temperature / during storage • minimum • maximum 80 °C Certificates reference code	• minimum	-40 °C
• minimum	• maximum	70 °C
● maximum 80 °C Certificates reference code	ambient temperature / during storage	
Certificates reference code	• minimum	-40 °C
reference code	• maximum	80 °C
	Certificates	
	reference code	
• according to IEC 81346-2 Q	• according to IEC 81346-2	Q
Test Certificates other	Test Certificates other	

Type Test Certificates/Test Report

Confirmation

Further information

Information on the packaging

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WA1125-4AB02-0AA0

 ${\bf Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)}$

https://support.industry.siemens.com/cs/ww/en/ps/3WA1125-4AB02-0AA0

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

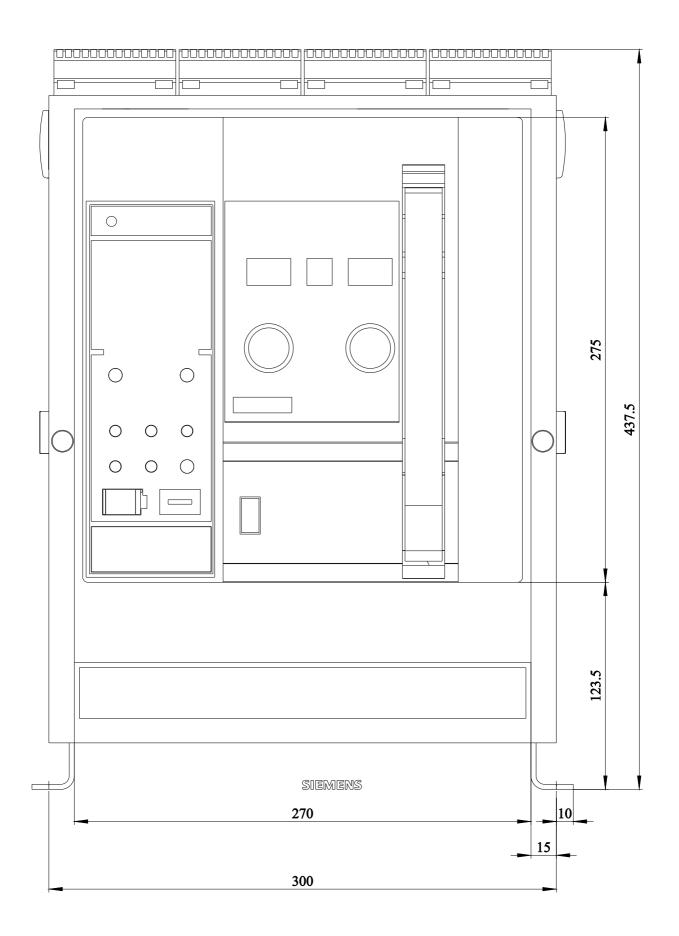
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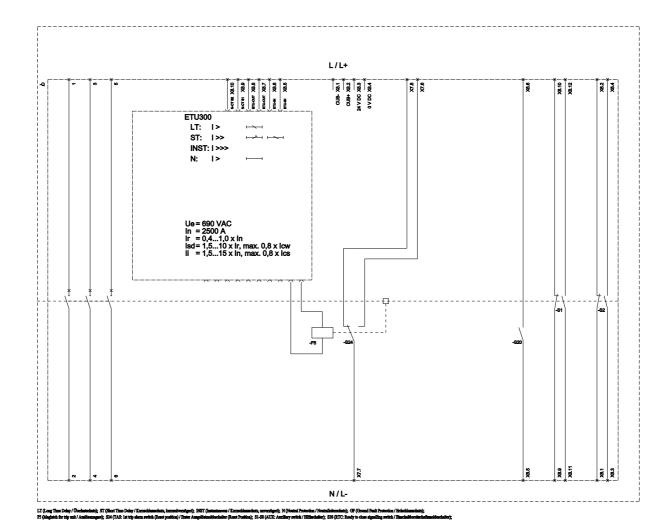
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