SIEMENS

Data sheet

3VA5220-6ED36-1AA0

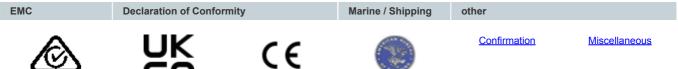


circuit breaker 3VA5 UL frame 250 breaking capacity class H 65kA @ 480 V 3-pole, line protection TM210, FTFM, In=200A overload protection Ir=200A fixed short-circuit protection Ii=10 x In UL489 SB (naval), 50 deg. cel. cable connection on both sides

product brand name SENTRON product designation / according to UL file HFAM design of the product System protection design of the doad witch / according to UL 489 / Heating Arr Conditioning, and Refrigeration circuit breaker (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HACR Type) No design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HACR Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (WID Type) No design of the overcurrent release TM210 protection function of the overcurrent release U number of poles 3 contral technical data 690 V operating voltage / at AC / rated value 690 V operating voltage / at AC / rated value 690 V operating voltage / at AC / rated value 690 V operating voltage / at AC / rated value 690 V operating voltage / at AC / rated value 690 V operating voltage / at AC / rated value 600 V operating voltage / at AC / rated value 74 000 electricial endurance (operating voltagi / tayoch / at 80415	Model	
product designation / according to UL file HFAM design of the product System protection design of the load switch / according to UL 489 / Heating, Atr Yes Conditioning, and Refrigeration circuit breaker (HACR Type) No Discharge circuit breaker (INT Type) No design of the load switch / according to UL 489 / High-Intensity: No Discharge circuit breaker (INT Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (INT Type) No design of the overcurrent release Ll number of poles 3 Ceneral technical data 690 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 43 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / typical 8 000 ground-fault monitoring version without product feature / for neutral conductors / upgradable/retrofitable No	product brand name	SENTRON
design of the product System protection design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigerative (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity- Discharge drive threaker (HIOT Type) No design of the load switch / according to UL 489 / Switching Duty drive threaker (HIOT Type) No design of the load switch / according to UL 489 / Switching Duty drive threaker (HIOT Type) No design of the overcurrent release TM210 protection function of the overcurrent release Ll number of poles 3 Concret to Exhibit of the overcurrent release HI operating voltage / at AC / rated value 690 V power toss [W] / reaximum 43 W operating state / per pole 14.17 W electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 ground-fault monitoring cycles / at AC-1 / at 380/415 V <	product designation	Molded-case circuit breaker
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) Yes design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type) No design of the overcurrent release TM210 protection function of the overcurrent release L1 number of poles 3 Concal tochnical data 690 V operating voltage / at AC / rated value 690 V power loss [W] / raximum 43 W power loss [W] / raximum 43 W power loss [W] / raximum 43 W perating state / per pole 14.17 W electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at A0 V 8 000 electrical endurance (operating cycles) / at A0 V 8 000 electrical endurance (operating cycles) / at A0 V 8 000 ground-fault monitoring version without product feature / for neutral conductors / upgradable/retrofittable No / shot-fittid 2.2 kg Current 200 A eat 40 °C 200 A eat 60 °C 1	product designation / according to UL file	HFAM
Conditioning, and Refrigeration circuit breaker (HACR Type) No design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HND Type) No design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type) No design of the overcurrent release Ll number of poles 3 General technical data 600 V operating voltage / at AC / rated value 600 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / ta AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / ta AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / ta 480 V 8 000 electrical endurance (operating cycles) / ta 480 V 8 000 electrical endurance (operating cycles) / ta 480 V 8 000 ground-fault monitoring version without product feature / for neutral conductors / upgradable/retrofittable No / statu / according to UL 489 / 100%-rated breaker No operating / according to UL 489 / 100%-rated breaker No other measurement function No	design of the product	System protection
Discharge circuit breaker (HID Type) No design of the load switch / according to UL 489 / Switching Duty No design of the overcurrent release TM210 protection function of the overcurrent release Ll number of poles 3 General technical data 690 V power loss [W] / for rated value of the current / at AC / in hot operating soltae / at AC / rated value of the current / at AC / in hot operating soltae / at AC / rated value of the current / at AC / in hot operating state / per pole mechanical service life (operating cycles) / ttpical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC0 / at 690 V 8 000 electrical endurance (operating cycles) / at AC0 / at 690 V 4 000 electrical endurance (operating cycles) / at AC0 / at 690 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without order the durance (operating cycles) / at AC1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at 480 V 8 000		Yes
circuit breaker (SWD Type) TM210 design of the overcurrent release Ll number of poles 3 coperating voltage / at AC / rated value 690 V power loss [W] / maximum 43 W pertection function of the current / at AC / in hot 14.17 W operating state / per pole mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / ta C-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at 800 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No ////////////////////////////////////		No
protection function of the overcurrent release L1 number of poles 3 General technical data 690 V operating voltage / at AC / rated value 690 V power loss [W] / maximum 43 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 14.17 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 ground-fault monitoring version without product function No • other measurement function No • other measurement function No • other measurement function 200 A • at 40 °C 200 A		No
number of poles 3 General technical data 690 V power loss [W] / maximum 43 W power loss [W] / maximum 43 W power loss [W] / trated value of the current / at AC / in hot operating state / per pole 14.17 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 ground-fault monitoring version without product fination function No • other measurement function No • other measurement function No operating to UL 489 / 100%-rated breaker No operational current 200 A • at 40 °C 200 A • at 45 °C 183 A • at 50 °C 178 A <	design of the overcurrent release	TM210
General technical data operating voltage / at AC / rated value 690 V power loss [W] / for rated value of the current / at AC / in hot 43 W operating state / per pole 14.17 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 ground-fault monitoring cycles) / at AC-1 / at 690 V 4 000 ground-fault monitoring cycles) / at AC-1 / at 690 V 4 000 ground-fault monitoring version without product function No • communication function No • communication function No • other measurement function No Net Weight 2.2 kg Current No • at 40 °C 194 A • at 50 °C 183 A	protection function of the overcurrent release	LI
operating voltage / at AC / rated value 690 V power loss [W] / maximum 43 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 14.17 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at ABO V 8 000 electrical endurance (operating cycles) / at ABO V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof No ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current eat 40 °C • at 40 °C 194 A • at 50 °C 194 A • at 50 °C 183 A • at 60 °C 178 A • at 65 °C 172	number of poles	3
power loss [W] / maximum 43 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 14.17 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC0 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable /short-circuit and overload proof No ground-fault monitoring version without product function No • other measurement function No Net Weight 2.2 kg Current at 40 °C • at 40 °C 194 A • at 40 °C 194 A • at 45 °C 194 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	General technical data	
power loss [W] / for rated value of the current / at AC / in hot 14.17 W operating state / per pole 14.17 W mechanical service life (operating cycles) / typical 20 000 electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC 1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • other measurement function No • other measurement function No operational current 200 A • at 40 °C 200 A • at 45 °C 194 A • at 45 °C 183 A • at 50 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	operating voltage / at AC / rated value	690 V
operating state / per polemechanical service life (operating cycles) / typical20 000electrical endurance (operating cycles) / at AC-1 / at 380/15 V8 000electrical endurance (operating cycles) / at 480 V8 000electrical endurance (operating cycles) / at 600 V4 000electrical endurance (operating cycles) / at 600 V4 000product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proofNoground-fault monitoring versionwithoutproduct functionNo• communication functionNo• other measurement functionNo• other measurement functionNooperating / according to UL 489 / 100%-rated breakerNooperational current200 A• at 40 °C200 A• at 55 °C189 A• at 60 °C178 A• at 65 °C172 A	power loss [W] / maximum	43 W
electrical endurance (operating cycles) / at AC-1 / at 380/415 V 8 000 electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at AC V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at AO V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current at 40 °C • at 40 °C 200 A • at 40 °C 194 A • at 50 °C 189 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A		14.17 W
electrical endurance (operating cycles) / at AC-1 / at 690 V 4 000 electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof No ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current V marking / according to UL 489 / 100%-rated breaker No operational current 194 A • at 40 °C 200 A • at 45 °C 194 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at 480 V 8 000 electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current Maximum marking / according to UL 489 / 100%-rated breaker No operational current 194 A • at 40 °C 194 A • at 50 °C 189 A • at 55 °C 183 A • at 65 °C 172 A	electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at 600 V 4 000 product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current No marking / according to UL 489 / 100%-rated breaker No operational current 200 A • at 40 °C 200 A • at 45 °C 194 A • at 55 °C 183 A • at 65 °C 172 A	electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
product feature / for neutral conductors / upgradable/retrofittable No / short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current Mo marking / according to UL 489 / 100%-rated breaker No operational current 200 A • at 40 °C 200 A • at 45 °C 194 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	electrical endurance (operating cycles) / at 480 V	8 000
/ short-circuit and overload proof without ground-fault monitoring version without product function No • communication function No • other measurement function No Net Weight 2.2 kg Current No marking / according to UL 489 / 100%-rated breaker No operational current 200 A • at 40 °C 200 A • at 45 °C 194 A • at 50 °C 189 A • at 65 °C 178 A • at 65 °C 172 A	electrical endurance (operating cycles) / at 600 V	4 000
product functionNo• communication functionNo• other measurement functionNoNet Weight2.2 kgCurrentmarking / according to UL 489 / 100%-rated breakerNoNooperational currentNo• at 40 °C200 A• at 45 °C194 A• at 50 °C189 A• at 55 °C183 A• at 60 °C178 A• at 65 °C172 A		No
• communication functionNo• other measurement functionNoNet Weight2.2 kgCurrentCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current200 A• at 40 °C200 A• at 55 °C194 A• at 55 °C183 A• at 60 °C178 A• at 65 °C172 A	ground-fault monitoring version	without
• other measurement functionNoNet Weight2.2 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational currentNo• at 40 °C200 A• at 45 °C194 A• at 55 °C189 A• at 55 °C183 A• at 60 °C178 A• at 65 °C172 A	product function	
Net Weight2.2 kgCurrentmarking / according to UL 489 / 100%-rated breakerNooperational current• at 40 °C200 A• at 45 °C194 A• at 55 °C189 A• at 65 °C178 A• at 65 °C172 A	 communication function 	No
Currentmarking / according to UL 489 / 100%-rated breakerNooperational current200 A• at 40 °C200 A• at 45 °C194 A• at 50 °C189 A• at 55 °C183 A• at 60 °C178 A• at 65 °C172 A	 other measurement function 	No
marking / according to UL 489 / 100%-rated breakerNooperational current200 A• at 40 °C200 A• at 45 °C194 A• at 50 °C189 A• at 55 °C183 A• at 60 °C178 A• at 65 °C172 A	Net Weight	2.2 kg
operational current 200 A • at 40 °C 200 A • at 45 °C 194 A • at 50 °C 189 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	Current	
• at 40 °C 200 A • at 45 °C 194 A • at 50 °C 189 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	marking / according to UL 489 / 100%-rated breaker	No
• at 45 °C 194 A • at 50 °C 189 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	operational current	
• at 50 °C 189 A • at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	• at 40 °C	200 A
• at 55 °C 183 A • at 60 °C 178 A • at 65 °C 172 A	• at 45 °C	194 A
• at 60 °C 178 A • at 65 °C 172 A	• at 50 °C	189 A
• at 65 °C 172 A	● at 55 °C	183 A
	● at 60 °C	178 A
• at 70 °C 167 A	● at 65 °C	172 A
	● at 70 °C	167 A

Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	Н
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	100 kA
• at 480 V	65 kA
• at 600 V	25 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with	
I2t characteristic	200 A
• minimum	200 A
maximum divetable reasonable value delay time (tr) (for L tripping (with 12t	200 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
• maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	2 000 A
● maximum	2 000 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
adjustable current response value current / of the current- dependent overload release	200 200 A
product function / grounding protection	No
Mechanical Design	
product component	
 undervoltage release 	No
 voltage trigger 	No
trip indicator	No
height [in]	7.28 in
height	185 mm
width [in]	4.13 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (6 AWG - 350 kcmil)
width	105 mm
depth [in]	3.27 in
depth	83 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
during operation / minimum	-25 °C
during operation / maximum	70 °C
during storage / minimum	-40 °C
during storage / maximum	80 °C
Certificates certificate of suitability / as approval for NAVAL (no combat	Yes
vessels) / supplement SB	
General Product Approval	





Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5220-6ED36-1AA0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5220-6ED36-1AA0

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

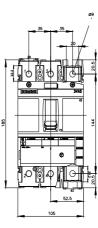
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5220-6ED36-1AA0

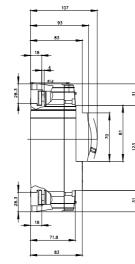
CAx-Online-Generator

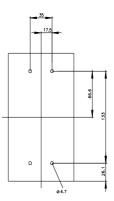
http://www.siemens.com/cax

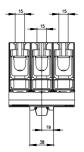
Tender specifications

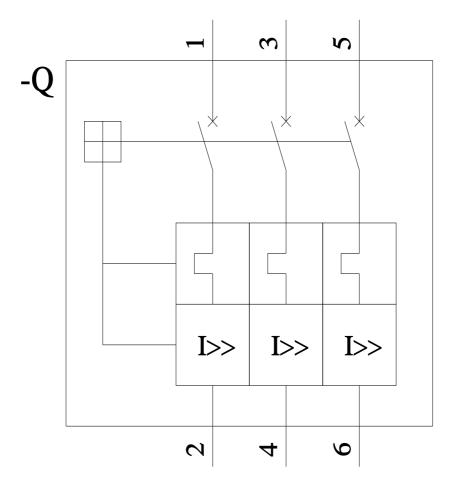
http://www.siemens.com/specifications

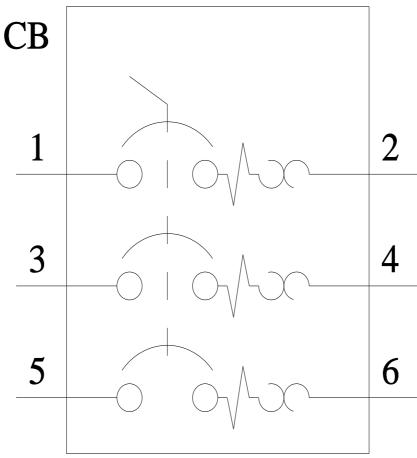












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Mouser Electronics

Authorized Distributor

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Siemens: 3VA52206ED361AA0