SIEMENS

Data sheet

withdrawable circuit breaker with guide frame 4-pole, size I, IEC In=1250A to 690V, AC50/60Hz Icu=66kA at 500V rear connection horizontal

product brain ame product designation ACB design of the actuating element Pushbutton ACB design of the actuating element Pushbutton ACB design of the actuating element Pushbutton No Design of the driving mechanism / motor drive No design of the overcurrent release ETU27B Central technical data number of poles 4 Size of the circuit-breaker 1 Utilization category B circuit-breaker / Design Woltage Voltage Nated insulation voltage Ui Insulation voltage Ui Insulation voltage Ui Insulation voltage I act value Operating voltage • at AC / at 50'60 Hz / rated value Operating voltage • at AC / at 50'60 Hz / rated value Protection class Protection class IP IP20 Protection class IP IP20 Protection function of the overcurrent release LSING Dissipation Dower loss [M] • for rated value of the current / at AC / in hot operating state / per pole • maximum Confinuous current / rated value / maximum confinuous current / rated value / maximum of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-ci		to 690V, AC50/60Hz Icu=66kA at 500V rear connection horizontal
product designation design of the product design of the product lecked potential product lecked	Model	
design of the product design of the actuating element Pushbutton Pyee of the driving mechanism Amaual operating mechanism with mechanical closing Pyee of the driving mechanism / motor drive design of the overcurrent release ETU27B General technical data number of poles 4 Size of the circuit-breaker 1 utilization category Becircuit-breaker/Design Woltage Rated insulation voltage UI Insulation voltage II Insulation voltage / rated value operating voltage • at AC / at 50/60 Hz / rated value Protection class IP protection class IP / on the front protection function of the overcurrent release Dissipation power loss [W] • for rated value of the current / at AC / in hot operating state / per pole maximum 205 W Current continuous current / rated value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of or / rated value • of or / rated value • at 50 ° C / rated	·	
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 ETU27B		
type of the driving mechanism / motor drive		
Type of the driving mechanism / motor drive No design of the overcurrent release ETU27B	design of the actuating element	Pushbutton
design of the overcurrent release General technical data number of poles size of the circuit-breaker 1 size of the circuit-br	type of the driving mechanism	Manual operating mechanism with mechanical closing
Ceneral technical data	type of the driving mechanism / motor drive	No
number of poles size of the circuit-breaker 1 size of the circuit-breaker 1 size of the circuit-breaker 1 size of the circuit-breaker 2 circuit-breaker 3 swt.1 Voltage Rated insulation voltage Ui insulation voltage Ui 1 000 V operating voltage • at AC / at 50/60 Hz / rated value 690 V Protection class protection class IP / on the front IP20 protection class IP / on the front IP20 protection class IP / on the front IP20 protection class IP / on the front IP20 Continuous current / rated value of the current / at AC / in hot operating state / per pole • maximum 205 W Current continuous current / rated value / maximum 1 250 A continuous current / rated value w 1 250 A adjustable current response value current • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / initial value • 2 / rated value 1 / rated value 50 Hz • 2 / rated value 1 / rated value	design of the overcurrent release	ETU27B
Size of the circuit-breaker 1	General technical data	
utilization category circuit-breaker / Design 70tlage Rated insulation voltage Ui insulation voltage / rated value	number of poles	4
circuit-breaker / Design 3WL1 Voltage Rated insulation voltage Ui 1000 V insulation voltage / rated value 690 V Protection class Protection c	size of the circuit-breaker	1
Rated insulation voltage Ui 1 000 V insulation voltage V arted value 1 000 V operating voltage at AC / at 50/60 Hz / rated value 690 V Protection class IP oprotection class IP / protection class IP / on the front IP20 protection class IP / on the front IP20 protection class IP / on the front IP20 protection function of the overcurrent release LSING Dissipation Dissipation ### Overland State / per pole operating state / per pole operating state / per pole operating state / per pole of the current / rated value / maximum 205 W Current continuous current / rated value / maximum 1250 A 250	utilization category	В
Rated insulation voltage Ui	circuit-breaker / Design	3WL1
insulation voltage / rated value	Voltage	
insulation voltage / rated value operating voltage • at AC / at 50/60 Hz / rated value Protection class protection class IP protection class IP IP20 protection function of the overcurrent release Dissipation power loss [W] • for rated value of the current / at AC / in hot operating state / per pole • maximum Dissipation Current Current continuous current / rated value / maximum	Rated insulation voltage Ui	1 000 V
operating voltage • at AC / at 50/60 Hz / rated value Protection class IP 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 • maximum 205 W Current continuous current / rated value / maximum 1 250 A continuous current / rated value 1 250 A adjustable current response value current • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value 25 000 A value value 50 Hz • 2 / rated value 50 Hz • 2 / rated value 50 Hz • 2 / rated value 1 250 A • at 50 °C / rated value 1 250 A • at 55 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 65 °C / rated value 1 250 A • at 60 °C / rated value 1 250 A		1 000 V
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protection class IP / on the front 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 • maximum Current continuous current / rated value / maximum continuous current / rated value • adjustable current response value current • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of rated value • 1 / rated value • 2 / rated value • 2 / rated value • at 40 °C / rated value • at 50 °C / rated value • at 60 °C / rated value • at 65 °C / rated value • at 65 °C / rated value • at 60 °C / rated value • at 70 °C / rated value	Protection class	
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protection function of the overcurrent release Dissipation power loss [W] • for rated value of the current / at AC / in hot operating state / per pole • maximum Current continuous current / rated value / maximum 1 250 A continuous current / rated value / maximum 1 250 A adjustable current response value current • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / full-scale value Main circuit operating frequency • 1 / rated value • 2 / rated value • 2 / rated value • 2 / rated value • 30 Hz • 2 / rated value operational current • at 40 °C / rated value • at 55 °C / rated value • at 60 °C / rated value • at 65 °C / rated value • at 65 °C / rated value • at 65 °C / rated value • at 60 °C / rated value • at 65 °C / rated value • at 60 °C / rated value	-	
Dissipation power loss [W] • for rated value of the current / at AC / in hot operating state / per pole • maximum 205 W Current continuous current / rated value / maximum 1 250 A continuous current / rated value • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / full-scale • of instantaneous short-circuit trip unit / full-scale • of instantaneous short-circuit trip unit / full-s	protection function of the overcurrent release	
power loss [W] • for rated value of the current / at AC / in hot operating state / per pole • maximum 205 W Current continuous current / rated value / maximum continuous current / rated value • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of instantaneous short-circuit trip unit / full-scale value • of of instantaneous short-circuit trip unit / full-scale value • of of instantaneous short-circuit trip unit / full-scale value • of of instantaneous short-circuit trip unit / full-scale value • 1 / rated value • 2 / rated value • 2 / rated value • 2 / rated value • 1 250 A • at 40 °C / rated value • at 50 °C / rated value • at 60 °C / rated value		
for rated value of the current / at AC / in hot operating state / per pole maximum 205 W Current Continuous current / rated value / maximum 1 250 A continuous current / rated value adjustable current response value current • of the current-dependent overload release / full-scale value • of instantaneous short-circuit trip unit / initial value • of instantaneous short-circuit trip unit / full-scale value Main circuit operating frequency • 1 / rated value • 2 / rated value • 2 / rated value • at 40 °C / rated value • at 55 °C / rated value • at 60 °C / rated value • at 60 °C / rated value • at 65 °C / rated value • at 65 °C / rated value • at 70 °C / rated value		
maximum 205 W Current continuous current / rated value / maximum 1 250 A continuous current / rated value 1 250 A adjustable current response value current	 for rated value of the current / at AC / in hot 	68.3 W
continuous current / rated value / maximum continuous current / rated value adjustable current response value current of the current-dependent overload release / full-scale value of instantaneous short-circuit trip unit / initial value of instantaneous short-circuit trip unit / full-scale value Main circuit operating frequency 1 / rated value 2 / rated value operational current otal 40 °C / rated value at 40 °C / rated value at 55 °C / rated value at 65 °C / rated value		205 W
continuous current / rated value / maximum continuous current / rated value adjustable current response value current of the current-dependent overload release / full-scale value of instantaneous short-circuit trip unit / initial value of instantaneous short-circuit trip unit / full-scale value Main circuit operating frequency 1 / rated value 2 / rated value operational current otal 40 °C / rated value at 40 °C / rated value at 55 °C / rated value at 65 °C / rated value	Current	
continuous current / rated value adjustable current response value current of the current-dependent overload release / full-scale value of instantaneous short-circuit trip unit / initial value of instantaneous short-circuit trip unit / full-scale value Main circuit operating frequency operating grequency operational current operational current otal 40 °C / rated value otal 50 °C / rated value otal 60 °C / rated value		1 250 A
adjustable current response value current of the current-dependent overload release / full-scale value of instantaneous short-circuit trip unit / initial value of instantaneous short-circuit trip unit / full-scale value 25 000 A 25 000 A 25 000 A 25 000 A 26 000 A Main circuit Operating frequency of 1 / rated value of 1 / rated value operational current of at 40 °C / rated value of at 50 °C / rated value of at 50 °C / rated value of at 60 °C / rated value of at 70 °C / rated value		
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of instantaneous short-circuit trip unit / full-scale value Main circuit	of the current-dependent overload release / full-	1 250 A
of instantaneous short-circuit trip unit / full-scale value Main circuit	 of instantaneous short-circuit trip unit / initial value 	25 000 A
Wain circuit operating frequency 1 / rated value 2 / rated value 60 Hz operational current at 40 °C / rated value 1 250 A at 50 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 60 °C / rated value 1 250 A at 65 °C / rated value 1 250 A		25 000 A
operating frequency • 1 / rated value • 2 / rated value 60 Hz operational current • at 40 °C / rated value • at 50 °C / rated value • at 55 °C / rated value • at 65 °C / rated value • at 65 °C / rated value • at 65 °C / rated value 1 250 A • at 67 °C / rated value 1 250 A • at 70 °C / rated value 1 250 A		
 1 / rated value 2 / rated value 60 Hz operational current at 40 °C / rated value at 50 °C / rated value at 55 °C / rated value at 60 °C / rated value at 65 °C / rated value at 65 °C / rated value at 70 °C / rated value 1 250 A 	Main circuit	
	operating frequency	
operational current • at 40 °C / rated value	• 1 / rated value	50 Hz
 at 40 °C / rated value at 50 °C / rated value at 55 °C / rated value at 60 °C / rated value at 65 °C / rated value at 65 °C / rated value at 70 °C / rated value 1 250 A 	• 2 / rated value	60 Hz
 at 50 °C / rated value at 55 °C / rated value at 60 °C / rated value at 65 °C / rated value at 65 °C / rated value at 70 °C / rated value 1 250 A 1 250 A 250 A	operational current	
 at 55 °C / rated value at 60 °C / rated value at 65 °C / rated value at 70 °C / rated value 1 250 A 250 A 250 A 250 A 250 A 	 at 40 °C / rated value 	1 250 A
 at 60 °C / rated value at 65 °C / rated value at 70 °C / rated value 1 250 A 1 250 A 2 10 A 	 at 50 °C / rated value 	1 250 A
 at 65 °C / rated value at 70 °C / rated value 1 250 A 1 210 A 	• at 55 °C / rated value	1 250 A
• at 70 °C / rated value 1 210 A	• at 60 °C / rated value	1 250 A
	• at 65 °C / rated value	1 250 A
Auxiliary circuit	• at 70 °C / rated value	1 210 A
	Auxiliary circuit	

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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	500 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
	165
Display and operation	with a stational as
display version	without display
Short circuit	
breaking capacity operating short-circuit current (Ics)	
at 415 V / rated value	66 kA
at 500 V / rated value	66 kA
at 690 V / rated value	50 kA
breaking capacity maximum short-circuit current (Icu)	
at 415 V / rated value	66 kA
at 500 V / rated value	66 kA
at 690 V / rated value	50 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	460 mm
width	410 mm
depth	456 mm
fastening method	drawer unit
Environmental conditions	
ambient temperature / during operation	
• minimum	-20 °C
• maximum	70 °C
ambient temperature / during storage	
• minimum	-40 °C
• maximum	70 °C
Certificates	
reference code	
• acc. to DIN EN 61346-2	Q
• acc. to IEC 81346-2	Q
Further information	
Industry Mall (Online ardering system)	

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1112-3DG46-1AA2

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

https://support.industry.siemens.com/cs/ww/en/ps/3WL1112-3DG46-1AA2

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1112-3DG46-1AA2

Tender specifications

http://www.siemens.com/specifications



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