

circuit breaker VL1200 UL; type NG (cat no. HNX3B100) non-interchangeable frame, with circuit breaker approval acc. to UL 489 very high breaking capacity 3-pole, NEMA rating 100kA/480V, (molded case circuit breaker) trip unit TM, LI TA=40°C In=< 1000A, rated current I_n=6000...10000A short-circuit protection IR=1000A ETU for line protection without connection accessories without auxiliary release without auxiliary/alarm switch

Model	
type of the driving mechanism / motor drive	No
design of the overcurrent release	TM
General technical data	
number of poles	3
size of the circuit-breaker	3VL7 UL
mechanical service life (switching cycles) / typical	3 000
electrical endurance (switching cycles) / typical	1 500
utilization category	A
performance class for circuit breaker	N
reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q
operating frequency / maximum	30 1/s
Voltage	
Rated operational voltage U _e / max.	690 V
<ul style="list-style-type: none"> insulation voltage / rated value 	800 V
<ul style="list-style-type: none"> insulation voltage (U_i) / at AC / rated value 	800 V
surge voltage resistance / rated value	8 kV
operating voltage	
<ul style="list-style-type: none"> rated value / maximum 	690 V
<ul style="list-style-type: none"> for main current circuit / at AC / at 50 Hz / acc. to UL 489 / maximum 	600 V
<ul style="list-style-type: none"> for main current circuit / at AC / at 50 Hz / maximum 	690 V
<ul style="list-style-type: none"> for main current circuit / at AC / at 60 Hz / acc. to UL 489 / maximum 	600 V
<ul style="list-style-type: none"> for main current circuit / at AC / at 60 Hz / maximum 	690 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	LI
Current	
operational current	
<ul style="list-style-type: none"> at 40 °C / rated value 	1 000 A
<ul style="list-style-type: none"> at 45 °C / rated value 	930 A
<ul style="list-style-type: none"> at 50 °C / rated value 	930 A
<ul style="list-style-type: none"> at 55 °C / rated value 	860 A
<ul style="list-style-type: none"> at 60 °C / rated value 	860 A
continuous current / rated value	1 000 A
derating temperature / for the rated value of the continuous current	50 °C
<ul style="list-style-type: none"> acc. to UL 489 	40 °C
adjustable current response value current	
<ul style="list-style-type: none"> of the current-dependent overload release / full-scale value 	1 000 A
<ul style="list-style-type: none"> of instantaneous short-circuit trip unit / minimum 	5 000 A
<ul style="list-style-type: none"> of instantaneous short-circuit trip unit / maximum 	10 000 A
Main circuit	
operating frequency	

<ul style="list-style-type: none"> • 1 / rated value 	50 Hz		
<ul style="list-style-type: none"> • 2 / rated value 	60 Hz		
Auxiliary circuit			
number of CO contacts / for auxiliary contacts	0		
number of NC contacts / for auxiliary contacts	0		
number of NO contacts / for auxiliary contacts	0		
Suitability			
suitability for use	system protection		
Adjustable parameters			
adjustable current response value current / of the current-dependent overload release / initial value	80 A		
Product details			
product component			
<ul style="list-style-type: none"> • trip indicator 	No		
<ul style="list-style-type: none"> • auxiliary switch 	No		
<ul style="list-style-type: none"> • voltage trigger 	No		
<ul style="list-style-type: none"> • undervoltage release 	No		
<ul style="list-style-type: none"> • undervoltage release with leading contact 	No		
product extension / optional / motor drive	Yes		
Product function			
product function			
<ul style="list-style-type: none"> • of thermal overload trip unit 	fixed		
<ul style="list-style-type: none"> • grounding protection 	No		
<ul style="list-style-type: none"> • for neutral conductors / short-circuit and overload proof 	No		
<ul style="list-style-type: none"> • overload protection 	Yes		
Short circuit			
breaking capacity operating short-circuit current (Ics)			
<ul style="list-style-type: none"> • at 240 V / rated value 	100 kA		
<ul style="list-style-type: none"> • at 415 V / rated value 	50 kA		
<ul style="list-style-type: none"> • at 690 V / rated value 	17 kA		
breaking capacity maximum short-circuit current (Icu)			
<ul style="list-style-type: none"> • at 240 V / rated value 	200 kA		
<ul style="list-style-type: none"> • at 415 V / rated value 	100 kA		
<ul style="list-style-type: none"> • at 480 V / acc. to NEMA / rated value 	100 kA		
<ul style="list-style-type: none"> • at 600 V / acc. to NEMA / rated value 	65 kA		
<ul style="list-style-type: none"> • at 690 V / rated value 	35 kA		
Connections			
arrangement of electrical connectors / for main current circuit	front side		
type of electrical connection / for main current circuit	without connection accessoires		
Mechanical Design			
height	406.5 mm		
width	228.5 mm		
depth	333.5 mm		
fastening method	fixed mounting		
Environmental conditions			
ambient temperature / during operation			
<ul style="list-style-type: none"> • minimum 	0 °C		
<ul style="list-style-type: none"> • maximum 	70 °C		
ambient temperature / during storage			
<ul style="list-style-type: none"> • minimum 	-40 °C		
<ul style="list-style-type: none"> • maximum 	80 °C		
General Product Approval	EMC	Declaration of Conformity	Test Certificates

[Miscellaneous](#)



[Special Test Certificate](#)

Marine / Shipping

other



[Miscellaneous](#)

[Environmental Confirmations](#)

[Confirmation](#)

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VL7110-3KN30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL7110-3KN30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL7110-3KN30-0AA0

CAX-Online-Generator

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

Tender specifications

<http://www.siemens.com/specifications>



