

circuit breaker VL1600N standard breaking capacity I_{cu}=55kA, 415V AC 3-pole, line protection trip unit ETU20, LSI I_n=1600A, rated current I_R=640...1600A, overload protection, ISD=1.5 to 8 xI_R, II=9 xI_N short-circuit protection without auxiliary release without auxiliary/alarm switch

Model	
type of the driving mechanism / motor drive	No
design of the overcurrent release	ETU20
General technical data	
number of poles	3
size of the circuit-breaker	3VL8
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 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 for main current circuit / at AC / at 50 Hz / maximum for main current circuit / at AC / at 60 Hz / maximum 	690 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	LSI
Current	
operational current <ul style="list-style-type: none"> at 40 °C / rated value at 45 °C / rated value at 50 °C / rated value at 55 °C / rated value at 60 °C / rated value at 65 °C / rated value at 70 °C / rated value 	1 600 A
continuous current / rated value	1 600 A
derating temperature / for the rated value of the continuous current	50 °C
adjustable current response value current <ul style="list-style-type: none"> of the current-dependent overload release / full-scale value of instantaneous short-circuit trip unit / minimum of instantaneous short-circuit trip unit / maximum 	1 600 A
Main circuit	
operating frequency <ul style="list-style-type: none"> 1 / rated value 2 / rated value 	50 Hz
	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/generator protection	
Adjustable parameters		
adjustable current response value current / of the short-time delayed short-circuit release / full-scale value	12 800 A	
adjustable current response value current / of the current-dependent overload release / initial value	640 A	
Product details		
product component		
• trip indicator	No	
• auxiliary switch	No	
• voltage trigger	No	
• undervoltage release	No	
• undervoltage release with leading contact	No	
product extension / optional / motor drive	Yes	
Product function		
product function		
• of thermal overload trip unit	adjustable	
• grounding protection	No	
• for neutral conductors / short-circuit and overload proof	No	
• overload protection	Yes	
Short circuit		
breaking capacity operating short-circuit current (Ics)		
• at 240 V / rated value	35 kA	
• at 415 V / rated value	28 kA	
• at 500 V / rated value	20 kA	
• at 690 V / rated value	10 kA	
breaking capacity maximum short-circuit current (Icu)		
• at 240 V / rated value	65 kA	
• at 415 V / rated value	55 kA	
• at 440 V / rated value	35 kA	
• at 480 V / acc. to NEMA / rated value	25 kA	
• at 500 V / rated value	25 kA	
• at 600 V / acc. to NEMA / rated value	20 kA	
• at 690 V / rated value	20 kA	
Connections		
arrangement of electrical connectors / for main current circuit	front side	
type of connectable conductor cross-sections / for auxiliary contacts		
• solid	0.75 ... 1.5 mm ²	
• finely stranded / with core end processing	0,75 ... 1.0 mm ²	
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		
• minimum	-25 °C	
• maximum	70 °C	
ambient temperature / during storage		
• minimum	-40 °C	
• maximum	80 °C	
General Product Approval	EMC	Test Certificates

[Miscellaneous](#)



[TSE](#)



[Special Test Certificate](#)

Marine / Shipping

other



[Environmental Confirmations](#)

[Confirmation](#)

[Miscellaneous](#)

other

[Miscellaneous](#)

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?mfb=3VL8716-1SE30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL8716-1SE30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VL8716-1SE30-0AA0

CAX-Online-Generator

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

Tender specifications

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



