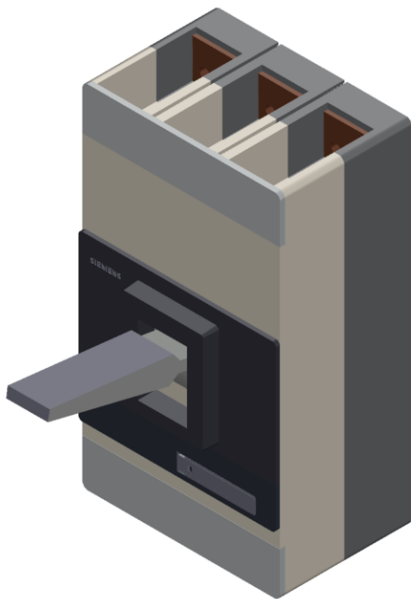


circuit breaker VL1600 UL; type PG (cat no. NPX3V160) non-interchangeable frame, with circuit breaker approval acc. to UL 489 standard breaking capacity 3-pole, NEMA rating 35kA/480V, (molded case circuit breaker) trip unit ETU, LSIG TA=40°C 3 phases/4 lines In=1600A, rated current ISD=1.5 to 8 xIR, II=6 xIN short-circuit protection IR=700-1600A overcurrent rel. 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	ETU545
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL8 UL
Electrical endurance (switching cycles) / typical	1 500

Usage category	A
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	3 000
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
Insulation voltage / 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
Protective function of the overcurrent release	LSIG

Current

Operating current / at 45 °C / rated value	1 520 A
Continuous current / rated value	1 600 A
Derating temperature / for the rated value of the continuous current	
<ul style="list-style-type: none"> acc. to UL 489 	40 °C

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
Operating current	
<ul style="list-style-type: none"> at 40 °C / rated value 	1 600 A
<ul style="list-style-type: none"> at 50 °C / rated value 	1 520 A
<ul style="list-style-type: none"> at 55 °C / rated value 	1 280 A
<ul style="list-style-type: none"> at 60 °C / rated value 	1 280 A

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
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
• Ground fault protection	Yes
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	Yes
Short circuit	
Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	35 kA
• at 415 V / rated value	25 kA
• at 690 V / rated value	10 kA
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V / rated value	65 kA
• at 415 V / rated value	50 kA
• at 480 V / acc. to NEMA / rated value	35 kA
• at 600 V / acc. to NEMA / rated value	25 kA
• at 690 V / rated value	20 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
Mounting type	fixed mounting
Certificates	

Certificate of suitability	UL standard switching capacity (N), non-interchangeable
Reference code	Q

- acc. to DIN EN 61346-2

General Product Approval	EMC	Declaration of Conformity	Test Certificates
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[Miscellaneous](#)



[Special Test Certificate](#)

Shipping Approval	other
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[Environmental Confirmations](#)

[Miscellaneous](#)

[Confirmation](#)

[Manufacturer Declaration](#)

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=3VL8116-1PH30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL8116-1PH30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8116-1PH30-0AA0

CAX-Online-Generator

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

Tender specifications

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