

circuit breaker VL1600 UL; type PG (cat no. NPX3T160) 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, LSI TA=40°C 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
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 / according to DIN 40719 extended	Q
according to IEC 204-2 / according to IEC 750	
operating frequency / maximum	30 1/s
Voltage	
Rated operational voltage Ue / max.	690 V
• insulation voltage / rated value	800 V
• insulation voltage (Ui) / at AC / rated value	800 V
surge voltage resistance / rated value	8 kV
operating voltage	
• rated value / maximum	690 V
• for main current circuit / at AC / at 50 Hz / according to UL 489 / maximum	600 V
• for main current circuit / at AC / at 50 Hz / maximum	690 V
• for main current circuit / at AC / at 60 Hz / according to UL 489 / maximum	600 V
• 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	
• at 40 °C / rated value	1 600 A
• at 45 °C / rated value	1 520 A
• at 50 °C / rated value	1 520 A
• at 55 °C / rated value	1 280 A
• at 60 °C / rated value	1 280 A
continuous current / rated value	1 600 A
derating temperature / for the rated value of the continuous current	
• according to UL 489	40 °C
Main circuit	
operating frequency	
• 1 / rated value	50 Hz
• 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/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
• 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	25 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	50 kA
• at 480 V / according to NEMA / rated value	35 kA
• at 600 V / according 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 connectable conductor cross-sections / for main contacts	
• with flexible busbar	2 x 60 x 10 mm
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	



[Miscellaneous](#)

[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Special Test Certificate](#)



[Confirmation](#)

[Miscellaneous](#)

other

[Environmental Confirmations](#)

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=3VL8116-1PE30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL8116-1PE30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8116-1PE30-0AA0

CAX-Online-Generator

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

Tender specifications

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



