

circuit breaker VL800 UL; type MG (cat no. NMX3B800) 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 TM, LI TA=40°C In=< 800A, rated current II=3250...6500A short-circuit protection IR=800A 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	3VL6 UL
mechanical service life (operating cycles) typical	10 000
electrical endurance (operating cycles) typical	3 000
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	60 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
for main current circuit at DC according to UL 489 maximum	500 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	LI
Current	
operational current	
at 40 °C rated value	800 A
at 45 °C rated value	744 A
at 50 °C rated value	744 A
at 55 °C rated value	688 A
at 60 °C rated value	688 A
continuous current rated value	800 A
derating temperature for the rated value of the continuous current	
according to UL 489	40 °C
adjustable current response value current	
of the current-dependent overload release full-scale value	800 A
of instantaneous short-circuit trip unit minimum	3 250 A
of instantaneous short-circuit trip unit maximum	6 500 A
Main circuit	
operating frequency	

• 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 protection
Adjustable parameters	
adjustable current response value current of the current-dependent overload release initial value	800 A
Product details	
product component	
• trip indicator • auxiliary switch • voltage trigger • undervoltage release • undervoltage release with leading contact	No No No No No
product extension optional motor drive	Yes
Product function	
product function	
• of thermal overload trip unit • grounding protection • for neutral conductors short-circuit and overload proof • overload protection	fixed No No Yes
Short circuit	
operating short-circuit current breaking capacity (Ics)	
• at 240 V rated value • at 415 V rated value • at 690 V rated value	65 kA 50 kA 10 kA
maximum short-circuit current breaking capacity (Icu)	
• at 240 V rated value • at 415 V rated value • at 480 V according to NEMA rated value • at 600 V according to NEMA rated value • at 690 V rated value	65 kA 50 kA 35 kA 25 kA 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 40 x 10 mm
type of connectable conductor cross-sections for auxiliary contacts	
• solid • finely stranded with core end processing	0.75 ... 1.5 mm ² 0,75 ... 1.0 mm ²
type of electrical connection for main current circuit	without connection accessoires
Mechanical Design	
height	406.5 mm
width	190 mm
depth	176.5 mm
fastening method	fixed mounting
Environmental conditions	
ambient temperature during operation	
• minimum • maximum	0 °C 70 °C
ambient temperature during storage	
• minimum • maximum	-40 °C 80 °C
General Product Approval	
EMC	



[Miscellaneous](#)

[Confirmation](#)



Declaration of Conformity

Test Certificates

Marine / Shipping

other



[Special Test Certificate](#)



[Environmental Confirmations](#)

[Confirmation](#)

other

[Miscellaneous](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VL6180-1KN30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6180-1KN30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6180-1KN30-0AA0

CAX-Online-Generator

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

Tender specifications

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

