

circuit breaker VL800N standard breaking capacity $I_{cu}=55\text{kA}$, 415V AC 4-pole, line protection trip unit ETU10, LIN $I_n=800\text{A}$, rated current $I_R=320\ldots800\text{A}$, overload protection, $I_L=1.25$ to $8 \times I_N$, short-circuit protection N protected without auxiliary release without auxiliary/alarm switch

Model	
type of the driving mechanism motor drive	No
design of the overcurrent release	ETU10
General technical data	
number of poles	4
size of the circuit-breaker	3VL6
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 according to IEC 204-2 according to IEC 750	Q
operating frequency maximum	60 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	LIN
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 protection
Adjustable parameters	
adjustable current response value current of the current-dependent overload release initial value	320 A
Product details	
product component <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> of thermal overload trip unit 	adjustable

- grounding protection
- for neutral conductors short-circuit and overload proof
- overload protection

No
Yes
Yes

Short circuit

operating short-circuit current breaking capacity (Ics)	
• at 240 V rated value	65 kA
• at 415 V rated value	55 kA
• at 500 V rated value	20 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	55 kA
• at 440 V rated value	35 kA
• at 480 V according to NEMA rated value	25 kA
• at 500 V rated value	25 kA
• at 600 V according 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	screw-type terminals

Mechanical Design

height	406.5 mm
width	253.5 mm
depth	176.5 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

Approvals Certificates

General Product Approval

[Confirmation](#)



General Product Approval	Test Certificates	other	Environment
--------------------------	-------------------	-------	-------------



[Special Test Certificate](#)

[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

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=3VL6780-1TA46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6780-1TA46-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6780-1TA46-0AA0

last modified:

6/17/2023 

