

circuit breaker VL160N standard breaking capacity $I_{cu}=55kA$, 415V AC 3-pole, motor/generator prot. Electronic Trip Unit ETU10M, LI $I_n=160A$, rated current $I_R=64\dots160A$, overload protection, $II=1.25$ to $11 \times I_N$, short-circuit protection without auxiliary release without auxiliary/alarm switch

Model	
type of the driving mechanism / motor drive	No
design of the overcurrent release	ETU10M
General technical data	
number of poles	3
size of the circuit-breaker	3VL2
mechanical service life (switching cycles) / typical	20 000
electrical endurance (switching cycles) / typical	10 000
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	120 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 for main current circuit / at DC / maximum 	690 V
	690 V
	690 V
	500 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	LI
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 	160 A
	160 A
	160 A
	152 A
	152 A
	128 A
	128 A
continuous current / rated value	160 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 	160 A
	200 A
	1 760 A
Main circuit	
operating frequency	
<ul style="list-style-type: none"> 1 / rated value 2 / rated value 	50 Hz
	60 Hz
operating power / at AC-3	

<ul style="list-style-type: none"> • at 230 V / rated value 	29.4 kW
<ul style="list-style-type: none"> • at 400 V / rated value 	88.7 kW
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	Motor Protection
Adjustable parameters	
adjustable current response value current / of the current-dependent overload release / initial value	64 A
Product details	
product component	
<ul style="list-style-type: none"> • trip indicator 	No
<ul style="list-style-type: none"> • auxiliary switch 	No
<ul style="list-style-type: none"> • voltage trigger 	No
<ul style="list-style-type: none"> • undervoltage release 	No
<ul style="list-style-type: none"> • undervoltage release with leading contact 	No
product extension / optional / motor drive	Yes
Product function	
product function	
<ul style="list-style-type: none"> • of thermal overload trip unit 	adjustable
<ul style="list-style-type: none"> • grounding protection 	No
<ul style="list-style-type: none"> • for neutral conductors / short-circuit and overload proof 	No
<ul style="list-style-type: none"> • overload protection 	Yes
Short circuit	
breaking capacity operating short-circuit current (Ics)	
<ul style="list-style-type: none"> • at 240 V / rated value 	65 kA
<ul style="list-style-type: none"> • at 415 V / rated value 	55 kA
<ul style="list-style-type: none"> • at 500 V / rated value 	20 kA
<ul style="list-style-type: none"> • at 690 V / rated value 	6 kA
breaking capacity maximum short-circuit current (Icu)	
<ul style="list-style-type: none"> • at 240 V / rated value 	65 kA
<ul style="list-style-type: none"> • at 415 V / rated value 	55 kA
<ul style="list-style-type: none"> • at 440 V / rated value 	25 kA
<ul style="list-style-type: none"> • at 480 V / according to NEMA / rated value 	25 kA
<ul style="list-style-type: none"> • at 500 V / rated value 	25 kA
<ul style="list-style-type: none"> • at 600 V / according to NEMA / rated value 	12 kA
<ul style="list-style-type: none"> • at 690 V / rated value 	12 kA
Connections	
arrangement of electrical connectors / for main current circuit	front side
type of connectable conductor cross-sections / for main contacts	
<ul style="list-style-type: none"> • with flexible busbar 	12 x 10 mm
<ul style="list-style-type: none"> • solid 	2.5 ... 95 mm ²
<ul style="list-style-type: none"> • finely stranded / with core end processing 	2.5 ... 50 mm ²
<ul style="list-style-type: none"> • stranded 	2.5 ... 95 mm ²
type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> • solid 	0.75 ... 1.5 mm ²
<ul style="list-style-type: none"> • finely stranded / with core end processing 	0,75 ... 1.0 mm ²
type of electrical connection / for main current circuit	box terminal
Mechanical Design	
height	174.5 mm
width	104.5 mm
depth	106.5 mm
fastening method	fixed mounting
Environmental conditions	

ambient temperature / during operation	-25 °C
<ul style="list-style-type: none"> • minimum • maximum 	70 °C
ambient temperature / during storage	-40 °C
<ul style="list-style-type: none"> • minimum • maximum 	80 °C

General Product Approval EMC

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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=3VL2716-1SP33-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2716-1SP33-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2716-1SP33-0AA0

CAx-Online-Generator

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

Tender specifications

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



