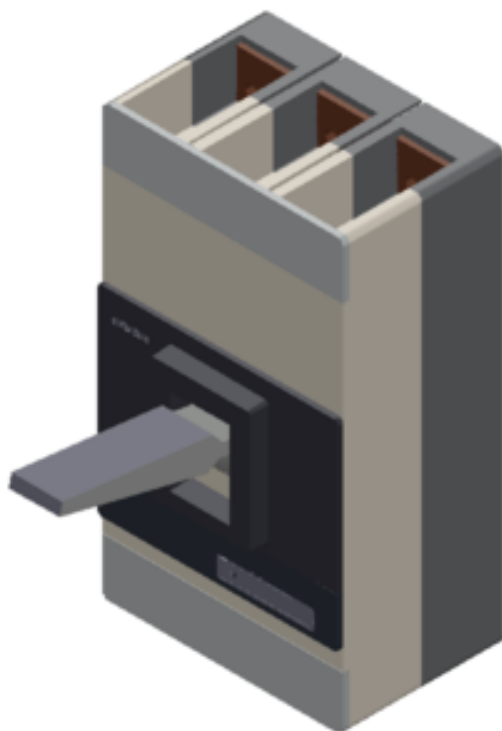




CIRCUIT-BREAKER VL 1600N STANDARD
 BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE,
 LINE PROTECTION ELECTRONIC TRIP UNIT ETU12,
 LIG 3PHASES/3WIRES IN=1600A, RATED CURRENT
 IR=640-1600A, OVERLOAD II=1,25TO9XIN, SHORT
 CIRCUIT

Model		
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		ETU12
General technical data		
Number of poles		3
Size of the circuit-breaker		3VL8
Electrical endurance (switching cycles) / typical		1 500
Usage category		A
Performance class for circuit breaker		N
Mechanical service life (switching cycles) / typical		3 000
Equipment marking / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750		Q
Operating frequency / maximum	1/s	30
Voltage		
Rated operational voltage Ue / max.	V	690
Insulation voltage		
• rated value	V	800
• at AC / rated value	V	800

Surge voltage resistance / rated value	kV	8
Protection class		
Protection class IP		IP20
Protective function of the overcurrent release		LIG
Dissipation		
Power loss [W]		
• maximum	W	260
Electricity		
Continuous current / rated value	A	1 600
Derating temperature / for the rated value of the continuous current	°C	50
Adjustable pick-up value current		
• of the current-dependent overload release / Full-scale value	A	1 600
• of instantaneous short-circuit trip unit / initial value	A	2 000
• of instantaneous short-circuit trip unit / Full-scale value	A	14 400
Main circuit		
Operating frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Operating voltage		
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / maximum	V	690
Operating current		
• at 40 °C / rated value	A	1 600
• at 50 °C / rated value	A	1 600
• at 55 °C / rated value	A	1 520
• at 60 °C / rated value	A	1 520
• at 65 °C / rated value	A	1 280
• at 70 °C / rated value	A	1 280
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		2
Suitability		
Suitability for use		system protection

Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value

A 640

Product details

Product component

- Trip indicator
- Auxiliary switch
- Voltage trigger
- undervoltage release
- undervoltage release with leading contact

Yes

Yes

Yes

No

No

Product extension / optional / motor drive

Yes

Product function

Product function

- of thermal overload trip unit
- Ground fault protection
- for neutral conductors / Short-circuit and overload proof
- Overload protection

adjustable

Yes

No

Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

kA 35
kA 28
kA 20
kA 10

Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value
- at 415 V / rated value
- at 440 V / rated value
- at 480 V / acc. to NEMA / rated value
- at 500 V / rated value
- at 600 V / acc. to NEMA / rated value
- at 690 V / rated value

kA 65
kA 55
kA 35
kA 25
kA 25
kA 20
kA 20

Connections

Arrangement of electrical connectors / for main current circuit

front side

Type of connectable conductor cross-sections

- for auxiliary contacts
 - solid
 - finely stranded / with core end processing

0.75 ... 1.5 mm²

0,75 ... 1.0 mm²

Type of electrical connection / for main current circuit

without connection accessoires

Mechanical Design		
Height	mm	406.5
Width	mm	228.5
Depth	mm	333.5
Mounting type		fixed mounting

Environmental conditions		
Ambient temperature		
• during operation / minimum	°C	-25
• during operation / maximum	°C	70
• during storage / minimum	°C	-40
• during storage / maximum	°C	80

Certificates		
Certificate of suitability		IEC, standard switching capacity (N)
Equipment marking		Q
• acc. to DIN EN 61346-2		

General Product Approval				EMC
 CCC	 CSA	sonstig	 EAC	TSE  C-TICK

Declaration of Conformity	Test Certificates	Shipping Approval			
 EG-Konf.	spezielle Prüfbescheinigungen n	 DNV	 GL	 RINA	 RMRS

other		
Bestätigungen	Umweltbestätigung	sonstig

Further information	
Information- and Downloadcenter (Catalogs, Brochures,...)	http://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)	https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VL87161SL308CE1
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	http://support.automation.siemens.com/WW/view/en/3VL87161SL308CE1/all
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)	http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL87161SL308CE1

CAX-Online-Generator
<http://www.siemens.com/cax>

Tender specifications
<http://ausschreibungstexte.siemens.com/tiplv>

last modified:

22.03.2016