

CIRCUIT-BREAKER VL 1600N STANDARD
 BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE,
 LINE PROTECTION ELECTRONIC TRIP UNIT ETU22,
 LSIG 3PHASES/4WIRES WITH PIGTAIL IN=1600A,
 RATED CURRENT IR=640-1600A, OVERLOAD
 ISD=1,5TO8XIR, II=9XIN SHORT-CIRCUIT

Model		
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		ETU22
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		LSIG
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
- of instantaneous short-circuit trip unit / initial value
- of instantaneous short-circuit trip unit / Full-scale value

A	1 600
A	14 400
A	14 400

Main circuit

Operating frequency

- 1 / rated value
- 2 / rated value

Hz	50
Hz	60

Operating voltage

- for main current circuit / at AC / at 50 Hz / maximum
- for main current circuit / at AC / at 60 Hz / maximum

V	690
V	690

Operating current

- at 40 °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

A	1 600
A	1 600
A	1 520
A	1 520
A	1 280
A	1 280

Suitability

Suitability for use

system/generator protection

Adjustable parameters

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

A	640
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Product details

Product component

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

No
Yes
No
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

adjustable
Yes
No

- Overload protection

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 electrical connection / for main current circuit

without connection accessoires

Mechanical Design

Height

mm	406.5
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Width

mm	228.5
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Depth

mm	333.5
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Mounting type

fixed mounting

Environmental conditions

Ambient temperature

- during operation / minimum
- during operation / maximum
- during storage / minimum
- during storage / maximum

°C	-25
°C	70
°C	-40
°C	80

Certificates

Certificate of suitability

IEC, standard switching capacity (N)

Equipment marking

- acc. to DIN EN 61346-2

Q

General Product Approval				EMC
 CCC	 CSA	sonstig		TSE  C-Tick

Declaration of Conformity	Test Certificates	Shipping Approval		other	
 EG-Konf.	spezielle Prüfbescheinigungen n	 RINA	 RMRS	sonstig	Umweltbestätigung

other Bestätigungen

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/3VL8716-1SH30-0AC1>

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

<http://support.automation.siemens.com/WW/view/en/3VL8716-1SH30-0AC1/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8716-1SH30-0AC1

CAX-Online-Generator

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

Tender specifications

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