

CIRCUIT-BREAKER VL 400N STANDARD BREAKING
CAPACITY ICU=55KA / 415 V AC 4 POLE, LINE
PROTECTION ELECTRONIC TRIP UNIT LCD ETU42,
LSIG IN=400A, RATED CURRENT IR=160-400A,
OVERLOAD ISD=1,5TO10XIR, II=11XIN SHORT-
CIRCUIT N PROTECTED WITH EARTH FAULT

Model		
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		LCD ETU42
General technical data		
Number of poles		4
Size of the circuit-breaker		3VL4
Electrical endurance (switching cycles) / typical		10 000
Usage category		A
Performance class for circuit breaker		N
Mechanical service life (switching cycles) / typical		20 000
Equipment marking / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750		Q
Operating frequency / maximum	1/s	120
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		LSING
Electricity		
Continuous current / rated value	A	400
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	400
• of instantaneous short-circuit trip unit / initial value	A	500
• of instantaneous short-circuit trip unit / Full-scale value	A	4 400
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
• for main current circuit / at DC / maximum	V	500
Operating current		
• at 40 °C / rated value	A	400
• at 50 °C / rated value	A	400
• at 55 °C / rated value	A	380
• at 60 °C / rated value	A	380
• at 65 °C / rated value	A	320
• at 70 °C / rated value	A	320
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/generator protection
Adjustable parameters		
Adjustable pick-up value current / of the current-dependent overload release / initial value	A	160

Product details

Product component		
• Trip indicator		No
• Auxiliary switch		No
• Voltage trigger		No
• undervoltage release		No
• undervoltage release with leading contact		No
Product extension / optional / motor drive		Yes

Product function

Product function		
• of thermal overload trip unit		adjustable
• Ground fault protection		Yes
• for neutral conductors / Short-circuit and overload proof		Yes
• Overload protection		Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)		
• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 500 V / rated value	kA	20
• at 690 V / rated value	kA	8
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 440 V / rated value	kA	35
• at 480 V / acc. to NEMA / rated value	kA	35
• at 500 V / rated value	kA	25
• at 600 V / acc. to NEMA / rated value	kA	20
• at 690 V / rated value	kA	15

Connections

Arrangement of electrical connectors / for main current circuit		front side
Type of electrical connection / for main current circuit		screw-type terminals

Mechanical Design

Height	mm	279.5
Width	mm	183.5
Depth	mm	163.5
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	Declaration of Conformity



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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/3VL47401CN460AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL47401CN460AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL47401CN460AA0

CAX-Online-Generator

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

Tender specifications

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

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