



CIRCUIT-BREAKER VL 250 UL TYPE FG (CAT NO. HFK3B125) NON-INTERCHANGEABLE FRAME W. APPROBATION CIRCUIT-BREAKER ACC. UL489 HIGH BREAKING CAPACITY 3-POLE, NEMA RATING 65KA@480V AND 18KA@600/347V (MOLDED CASE CIRCUIT BREAKER) OVERCURRENT RELEASE TM, LI TU= 40 DEGR. CELSIUS IN=125A, RATED CURRENT II= 800...1600A SHORT-CIRCUIT PROTECTION IR= 125A OVERCURRENT RELEASE F. PLANT PROTECTION W/O CONNECTION ACCESSORIES

Model		
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		TM
General technical data		
Number of poles		3
Size of the circuit-breaker		3VL3 UL
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 U_e / max.	V	690
Insulation voltage		
• rated value	V	800
• at AC / rated value	V	800

Surge voltage resistance / rated value	kV	8
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Protection class

Protection class IP		IP20
Protective function of the overcurrent release		LI

Dissipation

Power loss [W]		
• maximum	W	80

Electricity

Continuous current / rated value	A	125
Derating temperature / for the rated value of the continuous current		
• acc. to UL 489	°C	40
Adjustable pick-up value current		
• of the current-dependent overload release / Full-scale value	A	125
• of instantaneous short-circuit trip unit / initial value	A	800
• of instantaneous short-circuit trip unit / Full-scale value	A	1 600

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 / acc. to UL 489 / maximum	V	600
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / acc. to UL 489 / maximum	V	600
• for main current circuit / at AC / at 60 Hz / maximum	V	690
• for main current circuit / at DC / acc. to UL 489 / maximum	V	500
Operating current		
• at 40 °C / rated value	A	125
• at 50 °C / rated value	A	116.3
• at 55 °C / rated value	A	107.5
• at 60 °C / rated value	A	107.5

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		1
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Suitability

Suitability for use		system protection
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Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value	A	125
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Product details

Product component		
• Trip indicator		No
• Auxiliary switch		Yes
• 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		fixed
• Ground fault protection		No
• for neutral conductors / Short-circuit and overload proof		No
• Overload protection		Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)		
• at 240 V / rated value	kA	75
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / rated value	kA	100
• at 480 V / acc. to NEMA / rated value	kA	65

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	185.5
Width	mm	104.5
Depth	mm	106.5
Mounting type		fixed mounting

Environmental conditions

Ambient temperature		
• during operation / minimum	°C	0

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

°C	70
°C	-40
°C	80

Certificates

Certificate of suitability	UL high switching capacity (H), non-interchangeable
Equipment marking	Q
• acc. to DIN EN 61346-2	

General Product Approval EMC



Declaration of Conformity	Test Certificates	Shipping Approval	other
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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/3VL3512-2KN30-0AB1>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
<http://support.automation.siemens.com/WW/view/en/3VL3512-2KN30-0AB1/all>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VL3512-2KN30-0AB1
- CAX-Online-Generator**
<http://www.siemens.com/cax>
- Tender specifications**
<http://ausschreibungstexte.siemens.com/tiplv>

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