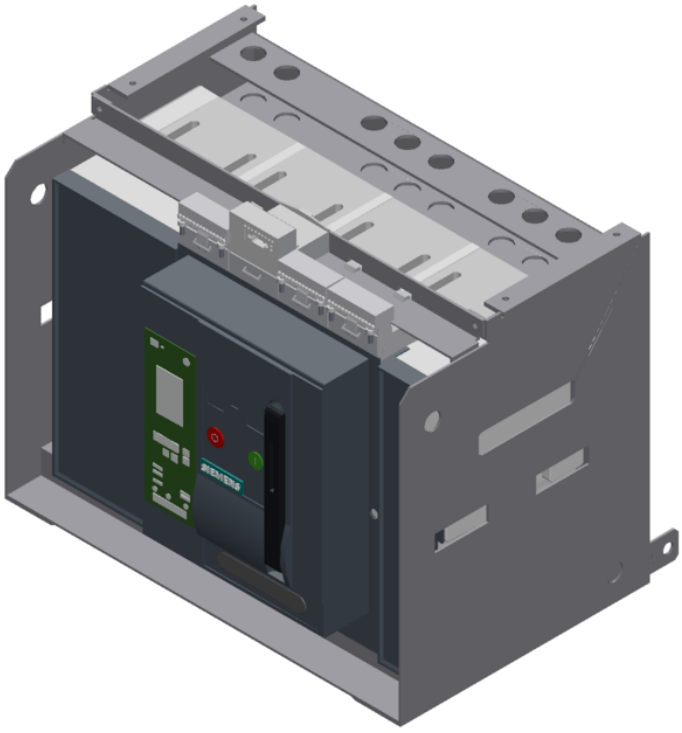
SIEMENS

Data sheet 3WL1220-3NG45-5FA4-Z C22+F02+F05+R21



withdrawable circuit breaker without guide frame 4-pole, size II, IEC In=2000A to 690V, AC50/60Hz Icu=80kA at 500V rear connection horizontal Overcurrent release ETU 76 LSING protection adjustable 0.4-1 in with graphic display U cubicle bus with ground fault protection Opt.: Comm./measuring func./ZSI Motorized/manual operating mechanism with memory Drive motor AC 50/60 Hz 110-127 V AC or 110-125 V DC Activation 50/60 Hz 110 V AC, 110 V DC With 1st auxiliary release Shunt release "F", F1 50/60 Hz 110 V AC/110 V DC, 100% on-load factor without 2nd auxiliary release 4NO+4NC C22= Ready-to-close signaling F02= COM15 PROFIBUS module with breaker status sensor F05= Measuring function plus for U, I, P, W Harmonics and total harmonic distortion R21= Shutter 2-part can be locked with bracket lock

Model		
Product brand name		SENTRON
Product designation		ACB
Design of the product		IEC 60947-2
Design of the auxiliary switch		4 NO + 4 NC
Design of the operating mechanism		Pushbutton

Type of the driving mechanism		Manual/motorized operating mechanism with mechanical and electrical closing
Type of the driving mechanism / motor drive		Yes
Design of the overcurrent release		ETU76B

General technical data		
Number of poles		4
Size of the circuit-breaker		2
Electrical endurance (switching cycles) / typical		15 000
Usage category		B
circuit-breaker / Design		3WL1
Mechanical service life (switching cycles) / typical		15 000

Voltage		
Rated insulation voltage Ui	V	1 000

Protection class		
Protection class IP		IP20
Protective function of the overcurrent release		LSING

Dissipation		
Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	W	106.7

Electricity		
Operating current / at 45 °C / rated value	A	2 000
Continuous current / rated value	A	2 000
Adjustable pick-up value current		
• of the current-dependent overload release / Full-scale value	A	2 000
• of instantaneous short-circuit trip unit / initial value	A	3 000
• of instantaneous short-circuit trip unit / Full-scale value	A	64 000
Short-time current resistance (Icw)		
• limited to 0.5 s / rated value	kA	80
• limited to 1 s / rated value	kA	66
• limited to 2 s / rated value	kA	46
• limited to 3 s / rated value	kA	44

Main circuit		
Operating frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Operating voltage		
• at AC / at 50/60 Hz / rated value	V	690
Operating current		

• at 40 °C / rated value	A	2 000
• at 50 °C / rated value	A	2 000
• at 55 °C / rated value	A	2 000

Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		4
Number of NO contacts / for auxiliary contacts		4

Suitability		
Suitability for use		Plant / motor protection

Adjustable parameters		
Adjustable pick-up value current		
• of the L-trip / with I4t characteristic / initial value	A	800
• of the L-trip / with I4t characteristic / Full-scale value	A	2 000
Adjustable pick-up value current / of the current-dependent overload release / initial value	A	800

Product details		
Product component		
• Trip indicator		Yes
• Voltage trigger		Yes
• undervoltage release		No
Product extension / optional / motor drive		No

Product function		
Product function		
• Ground fault protection		Yes
• Phase failure detection		Yes

Display and operation		
Display version		With fully-graphical display

Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• at 415 V / rated value	kA	80
• at 500 V / rated value	kA	80
• at 690 V / rated value	kA	75
Maximum short-circuit current breaking capacity (Icu)		
• at 415 V / rated value	kA	80
• at 500 V / rated value	kA	80
• at 690 V / rated value	kA	75

Connections		
Arrangement of electrical connectors / for main current circuit		without guide frame

Type of electrical connection / for main current circuit		Blade contacts

Mechanical Design

Height	mm	411.5
Width	mm	555
Depth	mm	337
Mounting type		drawer unit

Environmental conditions

Ambient temperature		
• during operation / minimum	°C	-20
• during operation / maximum	°C	55
• during storage / minimum	°C	-40
• during storage / maximum	°C	70

Certificates

Reference code		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

Waste electronic equipment must not be disposed as unsorted municipal waste, e.g. household waste. For disposing the waste electronic equipment it is necessary to observe the current local national/international regulations.

General Product Approval		Declaration of Conformity	Test Certificates		Shipping Approval
CCC	VDE	EG-Konf.	Special Test Certificate	Miscellaneous	ABS

Shipping Approval					other
BUREAU VERITAS	GL	LRS	PRS	RMRS	Environmental Confirmations

other	
Manufacturer Declaration	Miscellaneous

Further information

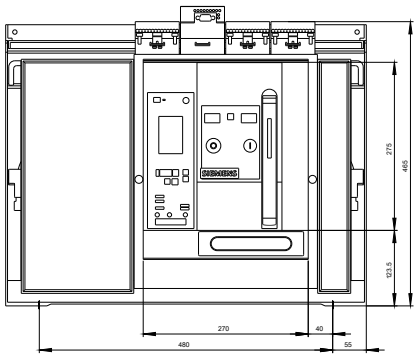
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WL1220-3NG45-5FA4-Z C22+F02+F05+R21

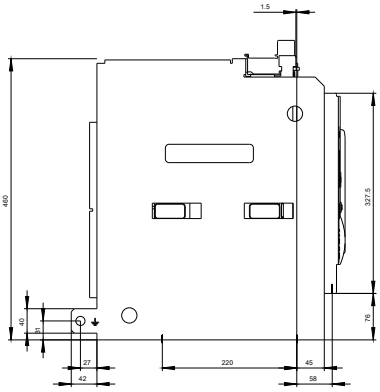
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3WL1220-3NG45-5FA4-Z C22+F02+F05+R21

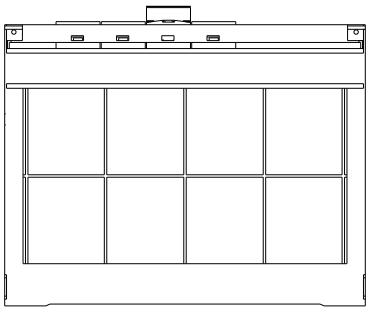
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WL1220-3NG45-5FA4-Z C22+F02+F05+R21

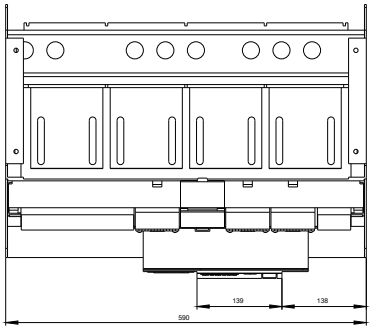
CAx-Online-Generator
http://www.siemens.com/cax

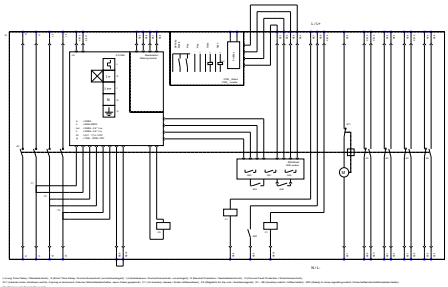
Tender specifications
http://www.siemens.com/specifications











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