

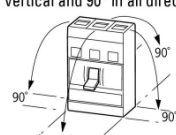


ACB 250-3P

Delivery programme

Product range			Circuit-breaker
Protective function			System and cable protection
Standard/Approval			IEC
Installation type			Fixed
Release system			Thermomagnetic release
Construction size			NZM2
Number of poles			3 pole
Standard equipment			Screw connection
Switching capacity			
400/415 V 50/60 Hz	I_{cu}	kA	36
Rated current = rated uninterrupted current			
Rated current = rated uninterrupted current	$I_n = I_u$	A	250
Setting range			
Overload trip			
	I_r	A	200 - 250
Short-circuit releases			
Non-delayed	$I_i = I_n \times$...		6 - 10

General

Standards			IEC/EN 60947
Protection against direct contact			Finger and back of hand proof to VDE 0106 Part 100
Climatic proofing			Damp heat, constant to IEC 60068-2-78 Damp heat, cyclic to IEC 60068-2-30
Ambient temperature		°C	
Ambient temperature, storage		°C	- 40 - + 80
Operation		°C	- 25 ... + 70
Mechanical shock resistance (10 ms half-sinusoidal shock) according to IEC 60068-2-27		g	20 (half-sinusoidal shock 20 ms)
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
Between auxiliary contacts and main contacts		V AC	500
between the auxiliary contacts		V AC	300
Weight		kg	2.345
Mounting position			
Mounting position			Vertical and 90° in all directions  With residual-current release XFI: - NZM1, N1, NZM2, N2: vertical and 90° in all directions with plug-in adapter elements - NZM1, N1, NZM2, N2: vertical, 90° right/left with withdrawable unit: - NZM3, N3: vertical, 90° left - NZM4, N4: vertical with remote operator: - NZM2, N(S)2, NZM3, N(S)3, NZM4, N(S)4: vertical and 90° in all directions
Direction of incoming supply			as required
Degree of protection			

Device			In the operating controls area: IP20 (basic degree of protection)
Enclosures			With insulating surround: IP40, with door coupling rotary handle: IP66
Terminations			Tunnel terminal: IP10 Phase isolator and strip terminal: IP00
Other technical data (sheet catalogue)			Weight Temperature dependency, Derating Effective power loss

Circuit-breakers

Rated current = rated uninterrupted current	$I_n = I_u$	A	250
Rated surge voltage invariability	U_{imp}		
Main contacts		V	8000
Auxiliary contacts		V	6000
Rated operational voltage	U_e	V AC	690
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V	690
Use in unearthed supply systems		V	≤ 690

Switching capacity

Rated short-circuit making capacity	I_{cm}		
240 V	I_{cm}	kA	121
400/415 V	I_{cm}	kA	76
440 V 50/60 Hz	I_{cm}	kA	63
525 V 50/60 Hz	I_{cm}	kA	24
690 V 50/60 H	I_c	kA	14
Rated short-circuit breaking capacity I_{cn}	I_{cn}		
I_{cu} to IEC/EN 60947 test cycle O-t-CO	I_{cu}	kA	
240 V 50/60 Hz	I_{cu}	kA	55
400/415 V 50/60 Hz	I_{cu}	kA	36
440 V 50/60 Hz	I_{cu}	kA	30
525 V 50/60 Hz	I_{cu}	kA	12
690 V 50/60 Hz	I_{cu}	kA	8
I_{cs} to IEC/EN 60947 test cycle O-t-CO-t-CO	I_{cs}	kA	
240 V 50/60 Hz	I_{cs}	kA	55
400/415 V 50/60 Hz	I_{cs}	kA	36
440 V 50/60 Hz	I_{cs}	kA	22.5
525 V 50/60 Hz	I_{cs}	kA	6
690 V 50/60 Hz	I_{cs}	kA	4
			Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker.
Utilization category to IEC/EN 60947-2			A
Rated making and breaking capacity			
Rated operational current	I_e	A	
AC-1			
380 V 400 V	I_e	A	300
415 V	I_e	A	300
690 V	I_e	A	300
AC--3			
380 V 400 V	I_e	A	250
415 V	I_e	A	250
660 V 690 V	I_e	A	250
Lifespan, mechanical (of which max. 50 % trip by shunt/undervoltage release)	Operations		20000
Lifespan, electrical			
AC-1			
400 V V 50/60 Hz	Operations		10000

415 V V 50/60 Hz	Operations		7500
690 V V 50/60 Hz	Operations		7500
AC--3			
415 V V 50/60 Hz	Operations		6500
690 V V 50/60 Hz	Operations		5000
Max. operating frequency		Ops/h	120
Current heat losses per pole at I_u are based on the maximum rated operational current of the frame size.		W	19
			For current heat loss per pole the specification refers to the maximum rated operational current of the frame size.
Total downtime in a short-circuit		ms	< 10

Terminal capacity

Standard equipment			Screw connection
Round copper conductor			
Tunnel terminal			
Solid		mm ²	1 x 16
Copper busbar (width x thickness)	mm		
Bolt terminal and rear-side connection			
Screw connection			M8

Technical data ETIM 4.0

Number of poles			3
Rated uninterrupted current I_u		A	250
Number of auxiliary contacts as N/Cs			0
Number of auxiliary contacts as N/Os			0
Device construction			Built-in device fixed built-in technique
With under voltage release			No
Motor operator optional			YES
Integrated earth fault protection			No
Suitable for DIN rail (top hat rail) mounting			No
Setting range non-delayed short-circuit release		A	2500
Setting range short-term delayed short-circuit release		A	0
Rated short-circuit breaking capacity I_{cu} at 400 V, 50 Hz		kA	36
Switched-off indicator available			No
Type of control element			Toggle lever
Connection type main current circuit			Screw connection
Motor operator integrated			No
Position of connection for main circuit			Front connection
Protection type (IP)			IP20
Number of auxiliary contacts as changeover contact			0
Setting range of overload releases		A	250

Characteristics

