DATASHEET - FAZ-C3/3-RT

Miniature circuit breaker (MCB), 3 A, 3p, characteristic: C



Part no.FAZ-C3/3-RTCatalog No.102281Alternate CatalogFAZ-C3/3-RTNo.EL-NummerI691817(Norway)



Similar to illustration

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			C
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	А	3
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Product range			FAZ-RT

Technical data

StandardInterfere<	Electrical			
Image: space s	Standards			
Image: second	Rated operational voltage	U _e	V	
Reta voltage according to EIC/EN 08947-2VACVACVACRated voltage according to ULLeuICVACBraking capacity according to ULLeuICVACBraking capacity according to ULMarkICUR499ICUR499CharacteristicMarkICUR499ICUR499Solectivity ClassMarkICUR499ICUR499IdeganMarkICUR499ICUR499IdeganMarkICUR499ICUR499IdeganMarkICUR499ICUR499IdeganMarkICUR499ICUR499MarkMarkICUR499ICUR499IdeganMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499ICUR499MarkMarkICUR499		U _e	V AC	277/480 Y
Area of a constraint of			V DC	60
Red switching capacity acc. to EC/EN 60947-2 Paue RA 5 Breaking capacity according to UL N 0 (UL489) Characteristic B C, D B C, D Selectivity Class B C, D B C, D Iffespan M M B C Infespan M M M Norting M M M Bredstrift ford fimension M M M Robusting capacity according to UL M M M Mounting width per pole M M M Robusting Capacity according to UL M M M Robusting Capacity According to UL M M M Robusting Serversity M M M M Robusting Serversity M M M M M Robusting Serversity M M M M M M M M M M M M M M M M M	Rated voltage according to IEC/EN 60947-2	Un	V AC	440
Breaking capcity according to UL Ka Ka 10 (UL489) Characteristic B, C, D B, C, D Selectivity Class B, C, D B Lifespan Operations B 20000 Direction of incoming supply Selectivity Class Selectivity Class Selectivity Class Breaking Capcity Class Operations Selectivity Class Selectivity Class Selectivity Class Lifespan Operations Selectivity Class Selecitity Class Selectivity Class Se	Rated voltage according to UL	Un	V AC	480Y/277
Characteristic Presented B, C, D Selectivity Class F B, C, D Lifespan Presented F B Direction of incoming supply Presented Senguired Senguired Mechanical F Main Senguired Standard front dimension F Main Senguired Rounding width per pole Main Ifc/K 100715 top-hat rail Senguired Nounding F F Senguired back-of-hand proof to BGV A2 Terminal protection F	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Selectivity Class Image: Selecti	Breaking capacity according to UL		kA	10 (UL489)
Integran Mark Integran Mark Integran Mark Mark Direction of incoming supply Direction of incoming supply Direction of incoming supply Direction Di	Characteristic			B, C, D
Lifespan Operations >2000 Direction of incoming supply as required Mechanical Image: Standard front dimension Image: Standard front dimension Standard front dimension Image: Standard front dimension Image: Standard front dimension Rotosure height Image: Standard front dimension Image: Standard front dimension Mounting width per pole Image: Standard front dimension Image: Standard front dimension Mounting Image: Standard front dimension Image: Standard front dimension Mounting width per pole Image: Standard front dimension Image: Standard front dimension Mounting Image: Standard front dimension Image: Standard front dimension Mounting Image: Standard front dimension Image: Standard front dimension Mounting Image: Standard front dimension Image: Standard front dimension Mounting better on front distord Image: Standard front dimension Image: Standard front dimension Terminal protection Image: Standard front dimension Image: Standard front dimension Tightening torque of fixing screws Image: Standard front dimension Image: Standard front dimension Standard front dimension Image: Standard front dimension Image: Standard front dimension Standard front dimension Image: Standard front dimension I	Selectivity Class			3
Direction of incoming supply Image: Biology incoming supply Image: Bi	lifespan			
Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 17.7 Degree of Protection Ferminals top and bottom Ferminal protection Terminal protection Ferminal protection Ferminal protection Ferminal protection Ferminal protection Ferminal protection Ferminal protectin Ferminal protection <t< td=""><td>Lifespan</td><td>Operations</td><td></td><td>> 20000</td></t<>	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingIEC/EN 60715 top-hat railDegree of ProtectionImage: Comparison of the protectionImage: Comparison of the protectionTerminals top and bottomImage: Comparison of the protectionImage: Comparison of the protectionTerminal protectionImage: Comparison of the protectionImage: Comparison of the protectionTerminal protectionImage: Comparison of the protectionImage: Comparison of the protectionTightening torque of fixing screwsImage: Comparison of the protectionImage: Comparison of the protection of the protectionTightening torque of fixing screwsImage: Comparison of the protection of the protection of the protectionImage: Comparison of the protection of the	Direction of incoming supply			as required
Enclosure height mm 15 Mounting width per pole mm 17.7 Mounting EC/EN 60715 top-hat rail 120 Degree of Protection Ferminals top and bottom P20, IP40 (when fitted) 120 Terminal protection Ferminal protection Ferminal protection Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws N/m N/m N/m N/m	Mechanical			
Mounting width per polemm1.7MountingEC/EN 60715 top-hat railDegree of ProtectionFOTerminals top and bottomFOTerminal protectionFOTightening torque of fixing screwsSill and schoft and proof to BGV A2Tightening torque of fixing screwsN/mSill and schoft and proof to BGV A2Sill an	Standard front dimension		mm	45
Mounting IC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Image: State of the st	Enclosure height		mm	105
Degree of Protection P20, IP40 (when fitted) Terminals top and bottom Tim - purpose terminals Terminal protection Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws N/m Winner State State	Mounting width per pole		mm	17.7
Terminals top and bottom Monoperation Twin-purpose terminals Terminal protection Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws N/m max. 2.4 UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.4 Nm (36 lb-in)	Mounting			IEC/EN 60715 top-hat rail
Terminal protection Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws N/m max. 2.4 UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.8 Nm (25 lb-in) #6 AWG: 4 Nm (36 lb-in)	Degree of Protection			IP20, IP40 (when fitted)
Tightening torque of fixing screws N/m max. 2.4 UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.8 Nm (25 lb-in) #6 AWG: 4 Nm (36 lb-in)	Terminals top and bottom			Twin-purpose terminals
UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.8 Nm (25 lb-in) #6 AWG: 4 Nm (36 lb-in)	Terminal protection			Finger and back-of-hand proof to BGV A2
Mounting position As required	Tightening torque of fixing screws		N/m	UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.8 Nm (25 lb-in)
	Mounting position			As required

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	3
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	3.6
Static heat dissipation, non-current-dependent	P _{vs}	W	0

Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	75
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
C/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must l observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must l observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 7.0

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

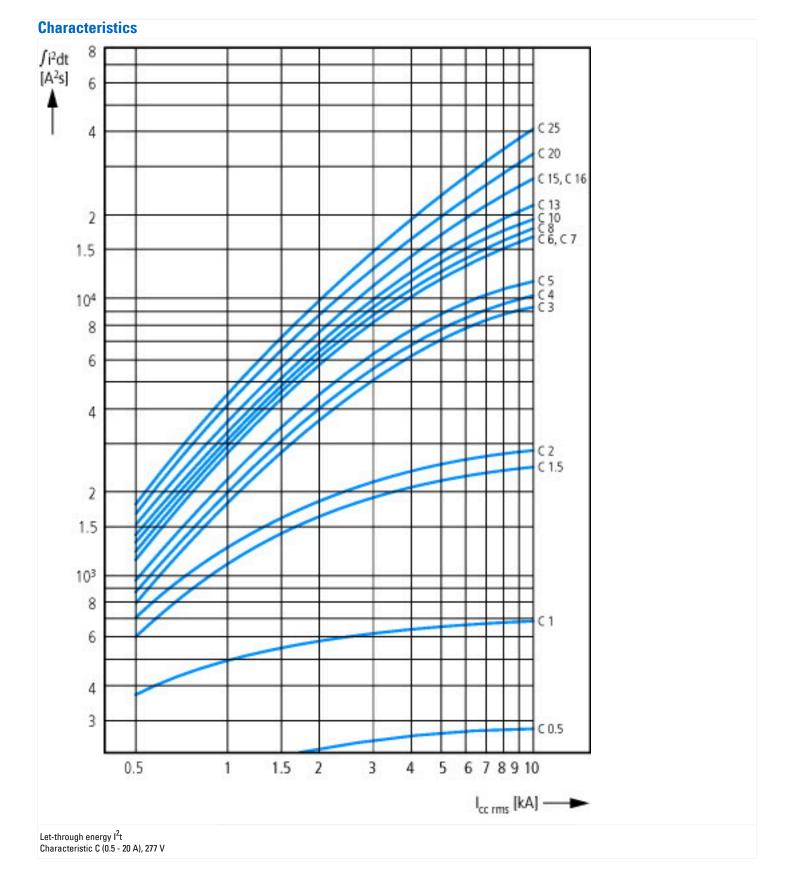
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

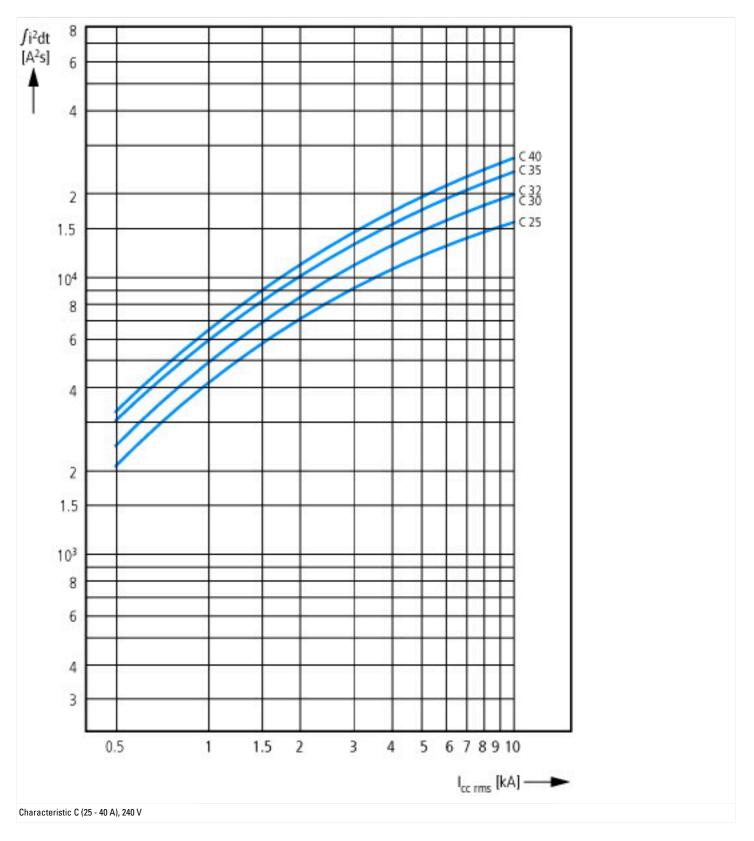
Release characteristic		C
Number of poles (total)		3
Number of protected poles		3
Rated current	А	3
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Voltage type		AC
Frequency	Hz	50 - 60
Current limiting class		3
Suitable for flush-mounted installation		No
Concurrently switching N-neutral		No
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		3

Built-in depth	mm	70.5
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25

Approvals

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Product Standards	IEC/EN 60947-2; EN 45545-2; IEC 61373; UL 489; CSA-C22.2 No. 5-09; CE marking
UL File No.	E235139
UL Category Control No.	DIVQ
CSA File No.	204453
CSA Class No.	1432-01
North America Certification	UL listed, CSA certified
Specially designed for North America	Yes, suitable as BCPD
Suitable for	Feeder circuits, branch circuits
Current Limiting Circuit-Breaker	Yes
Max. Voltage Rating	≤ 32 A
Degree of Protection	IEC: IP20, UL/CSA Type: -





Additional product information (links)

Temperature dependency, derating

https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ-NA-RT.pdf