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	l _{cu}	kA	15
Product range			FAZ-RT

Technical data

StandardsNoUseKessessive ConstructionRel dopational voltageNoVoltaVoltaRel dopational voltageNoVoltaVoltaRel domage according to EC/M 00047-2NoVoltaVoltaRel dowage according to UC/M 00047-2NoVoltaVoltaRel dowage accordin	Electrical			
Image: Part of the section of the s	Standards			
Image: second	Rated operational voltage	U _e	V	
Reta voltage according to LEC/EN 06947-2VACVAC40Rated voltage according to ULLouLou10Braking capacity according to ULLouKA10(U489)CharacteristicKAKAKASolectivity ClassAnomeKAKAIfespanMarkKAKAIncode of the Solectivity ClassMarkKAKAIncode of the Solectivity ClassKAKAKAIncode of the Solectivity ClassKAKAKAIncode of the Solectivity ClassKAKA <td< td=""><td></td><td>U_e</td><td>V AC</td><td>277/480 Y</td></td<>		U _e	V AC	277/480 Y
Reta voltage according to LiNnVAC80//77Reta de switching capacity acc. to EC/EN 6094-2Fau1010Breaking capacity acc. to EC/EN 6094-2Fau01/L48910/L489CharacteristicFau101010CharacteristicFau101010Selectivi ClassicFau101010IfospanFauFau20001010Dectorion finoming supplyFau101010Marting find find missionFauFau1010Rotardi ford find missionFauFau1010MontingFauFau101010Monting supplyFauFau101010Marting find find find find find find find find			V DC	60
Rated switching capacity acc. to EEC/EN 60947-2 Peue A 5 Breaking capacity according to UL Peue KA 0 (UL489) Characteristic B, C, D B, C, D Selectivity Class B, C, D B, C, D Iffespan More B B Direction of incoming supply More Selectivity Class Selectivity Class Kechanical More Selectivity Class Selectivi	Rated voltage according to IEC/EN 60947-2	U _n	V AC	440
Breaking capcing to UL KA KA IU (UL489) Characteristic B, C, D B, C, D Selectivity Class B, C, D B, C, D Lifespan Composition B Composition B Direction of incoming supply Composition Selectivity Class Selec	Rated voltage according to UL	Un	V AC	480Y/277
Characteristic Presenteristic B, C, D Selectivity Class F B, C, D lifespan Persenteristic F B Direction of incoming supply Persenteristic seregristic seregristic Mechanical F Main Second seregristic Standard front dimension F Main Second	Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Selectivity Class Image: Selecti	Breaking capacity according to UL		kA	10 (UL489)
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Lifespan Operations >20000 Direction of incoming supply as required Mechanical sequired Standard front dimension sequired Enclosure height sequired Mounting width per pole mm Mounting SCE/EN 60715 top-hat rail Degree of Protection sequired view fitted with per pole Terminal stop and bottom sequired view fitted with per pole Terminal protection sequired view fitted view	Selectivity Class			3
Direction of incoming supply Image: Biology incoming supply <thimage: biology="" incoming="" supply<="" th=""> <thimage: biol<="" td=""><td>lifespan</td><td></td><td></td><td></td></thimage:></thimage:>	lifespan			
Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 17.7 Degree of Protection Feed of 15 top-hat rail 12000000000000000000000000000000000000	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm1.7MountingIEC/EN 60715 top-hat railDegree of ProtectionImmIEC/EN 60715 top-hat railTerminals top and bottomImmImmTerminal protectionImmImmTerminal protectionImmImm<				as required
Enclosure height mm 15 Mounting width per pole mm 17. Mounting EC/EN 60715 top-hat rail 120 Degree of Protection Ferninals top and bottom P20, IP40 (when fitted) 120 Terminal protection Ferninal protection Finer and back-of-hand proof to BGV A2 Finer and back-of-hand proof to BGV A2 Tightening torque of fixing screws N/m N/m N/m N/mex.24 Nome Screws N/m N/mex.24 N/mex.24 N/mex.24	Mechanical			
Mounting width per polemm1.7MountingEC/EN 60715 top-hat railDegree of ProtectionF20, IP40 (when fitted)Terminals top and bottomTom-purpose terminalsTerminal protectionTom purpose terminalsTightening torque of fixing screwsN/mMining torque	Standard front dimension		mm	45
Mounting IC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Image: Comparison of the terminals top and bottom Terminal protection Image: Comparison of the terminals top and bottom of the terminals top and bottom Terminal protection Image: Comparison of the terminals top and bottom of the terminals top and termin	Enclosure height		mm	105
Degree of Protection P20, IP40 (when fitted) Terminals top and bottom Twin-purpose terminals Terminal protection Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws N/m Market AWG: 2.4 Nm (21 lb-in) #18-12 AWG: 2.4 Nm (25 lb-in) #10-8 AWG: 2.8 Nm (25 lb-in)	Mounting width per pole		mm	17.7
Terminals top and bottom Twin-purpose terminals Terminal protection Finger and back-of-hand proof to BGV A2 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) #6 AWG: 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)	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	l _n	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)

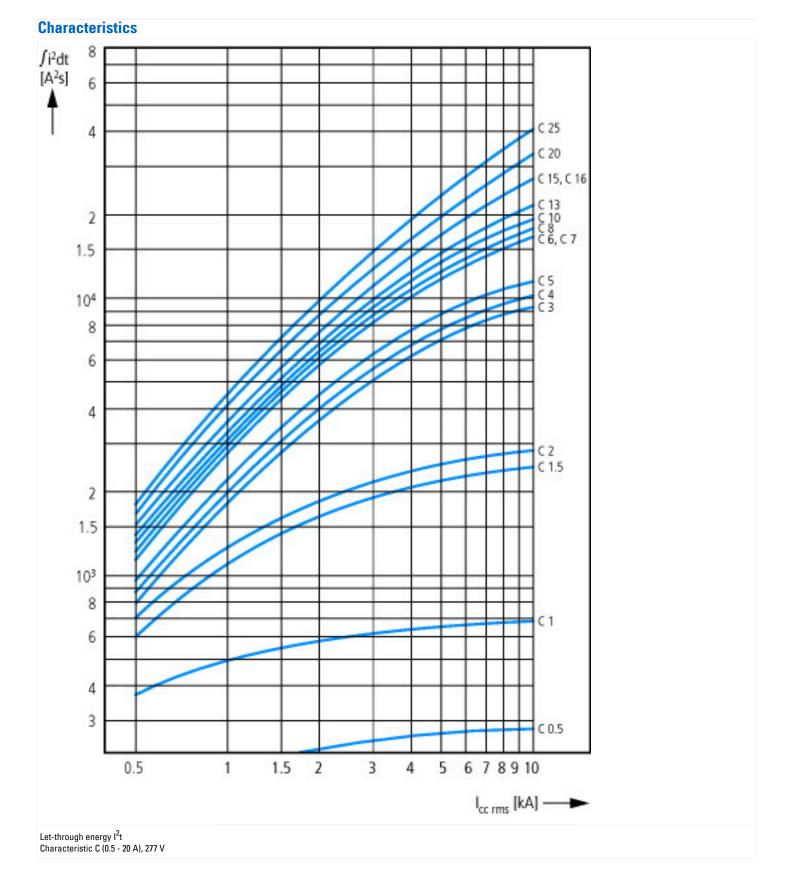
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

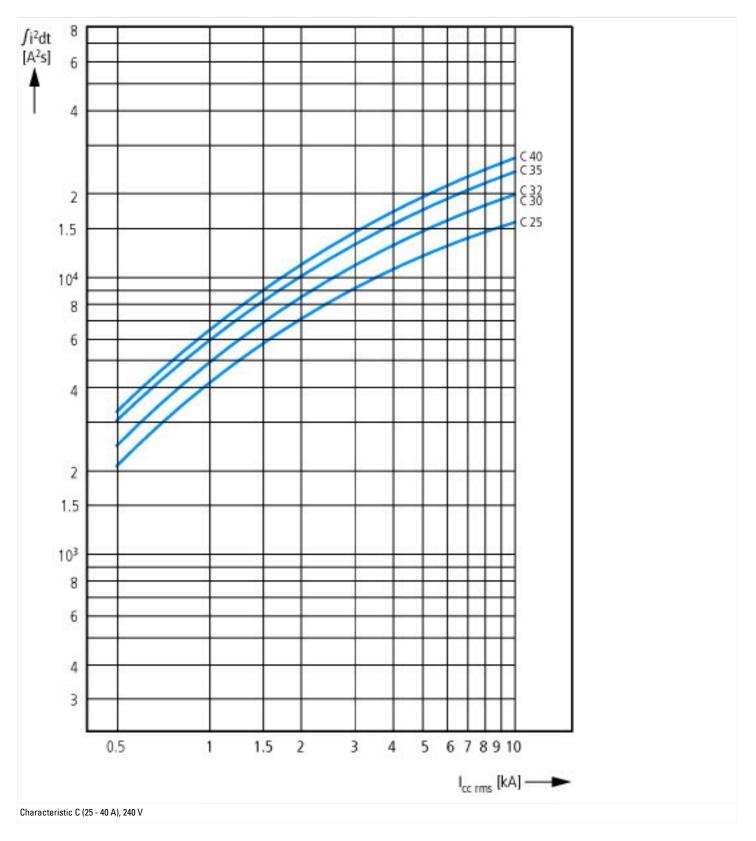
Release characteristic		C
Number of poles (total)		3
Number of protected poles		3
Rated current	А	3
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn 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

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