DATASHEET - FAZ-C5/3-RT

Miniature circuit breaker (MCB), 5 A, 3p, characteristic: C





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	I _n	А	5
Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Product range			FAZ-RT

Technical data

StandardsUL 48 (SA S222 No. 5 (EG 094/7 222 No. 5 (EG 094/7 22 No. 5 (EG 094/7 204 222 No. 5 (EG 094/7 204 222 No. 5 (EG 094/7 204 204 204 204 204 204 204 204 204 204	Electrical			
Initial ControlNoYakaNo7/480 YRed voltage according to IEC/EN 60947-2No40Red voltage according to IEC/EN 60947-2No400/277Red voltage according to ULLuKata5000000000000000000000000000000000000	Standards			
Image: second ing to IEC/EN 60947-2 Image: se	Rated operational voltage	U _e	V	
Rete voltage according to LEC/EN 60947-2 Vac Vac 40 Rete voltage according to UL Lou Vac 50 Breaking capacity according to UL Lou Kat 0(U489) Characteristic Kat 0(U489) 8, C, D Solectivity Class Kat 8, C, D 8, C, D Ifespan Parator Kat 8, C, D Infespan Parator 8, C, D 8, C, D Infespan Parator 9, C 9, C Infespan Infespan 1, C 1, C Infespan Parator 1, C 1, C		U _e	V AC	277/480 Y
Aread wording to UL Vn VAC 800/727 Rated wording capacity acc. to IEC/EN 60947-2 Fea RA 90/727 Breaking capacity acc. to IEC/EN 60947-2 Fea 10(UL489) Characteristic G 10(UL489) Characteristic Rate 8, D 3, D Selectivity Class Image: Selectivity Class Selectivity Class Selectivity Class Selectivity Class Ifespan Operators Selectivity Class Selecti			V DC	60
Rate witching capacity acc. to IEC/EN 60947-2 Icu KA 5 Breaking capacity acc. to IEC/EN 60947-2 Icu KA 10(UL499) Breaking capacity acc.rding to UL B C, D C Characteristic B C, D C S Selectivity Class B C, D C S Ifespan Operations S 20000 S S Direction of incoming supply So are quired So are quired S <t< td=""><td>Rated voltage according to IEC/EN 60947-2</td><td>U_n</td><td>V AC</td><td>440</td></t<>	Rated voltage according to IEC/EN 60947-2	U _n	V AC	440
Breaking capacity according to UL Ka IU (UL489) Characteristic B, C, D Selectivity Class B, C, D Lifespan Operation B Lifespan Operation Solo Direction of incoming supply Operation sa required Mechanical Image: Solo operation Solo operation Standard fort dimension Image: Solo operation Solo operation Rounting Image: Solo operation Image: Solo operation Operation operation Image: Solo operation Solo operation Mounting Image: Solo operation Image: Solo operation Degree of Protection Image: Solo operation Image: Solo operation Terminal protection Image: Solo operation Image: Solo operation Tightening torque of fixing screws Image: Solo operation Image: Solo operation Tightening torque of fixing screws Image: Solo operation Image: Solo operation Tightening torque of fixing screws Image: Solo operation Image: Solo operation	Rated voltage according to UL	Un	V AC	480Y/277
Characteristic B, C, D Selectivity Class B, C, D Ifespan Selectivity Class Lifespan Operations > 20000 Direction of incoming supply > 20000 Mechanical se required Standard front dimension mm 5 Forloant of incoming supply mm 105 Mounting width per pole mm 17 Mounting mm 17 Regree of Protection mm 16(2N 60715 top-hat rail Terminal stop and bottom min-upropes terminals Incirumals concertionals screws Tightening torque of fixing screws Nm Size A, Mm (21 Ib-ini) Sightening torque of fixing screws Nm Size A, Mm (21 Ib-ini) Sightening torque of fixing screws Nm Size A, Mm (21 Ib-ini) Size A, Mm (21 Ib-ini) Size A, Mm (21 Ib-ini) Size A, Mm (21 Ib-ini)	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Selectivity Class And Antion Selectivity Class Antion Sel	Breaking capacity according to UL		kA	10 (UL489)
lifespan Perations Jone Jone Direction of incoming supply > 2000 Direction of incoming supply as required Mechanical	Characteristic			B, C, D
Lifespan Operations >2000 Direction of incoming supply as required Mechanical Image: Second Sec	Selectivity Class			3
Direction of incoming supply Image: Provide a sequired Direction of incoming supply as required Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 16C/EN 60715 top-hat rail Degree of Protection Ferminals top and bottom 120, 1240 (when fitted) Terminal protection min purpose terminals inin purpose terminals Tightening torque of fixing screws N/m Right and Sa AWG: 2.4 Nm (21 lb-in)	lifespan			
Mechanical Standard front dimension mm 45 Enclosure height mm 105 Mounting width per pole mm 17.7 Mounting IEC/EN 60715 top-hat rail IEC/EN 60715 top-hat rail Degree of Protection IEC/EN 60715 top-hat rail IEC/EN 60715 top-hat rail Terminals top and bottom Immediate Immediate Immediate Terminal protection Immediate Immediate Immediate Immediate Tightening torque of fixing screws Immediate	Lifespan	Operations		> 20000
Standard front dimensionImm45Enclosure heightmm105Mounting width per polemm17.7MountingIC/EN 60715 top-hat railDegree of ProtectionIC/EN 60715 top-hat railTerminals top and bottomICON 6000000000000000000000000000000000000	Direction of incoming supply			as required
Enclosure height mm 105 Mounting width per pole mm 17.7 Mounting ECEN 60715 top-hat rail Degree of Protection PO0, IP40 (when fitted) Terminals top and bottom PO0 Fore of insing screws Tightening torque of fixing screws State of the screws Fore of screws	Mechanical			
Mounting width per polemm17.7MountingIEC/EN 60715 top-hat railDegree of ProtectionIEO, IPA0 (when fitted)Terminals top and bottomIEOTerminal protectionIEOTerminal protectionIEOTightening torque of fixing screwsImage: ScrewsNumerical screwsImage: Screws <td>Standard front dimension</td> <td></td> <td>mm</td> <td>45</td>	Standard front dimension		mm	45
Mounting IEC/EN 60715 top-hat rail Degree of Protection IEQ, IP40 (when fitted) Terminals top and bottom IEC Terminal protection IEC Tightening torque of fixing screws IEC N/m max. 2.4 #18-12 AWG: 2.8 Nm (25 Ib-in) #10-8 AWG: 2.8 Nm (25 Ib-in)	Enclosure height		mm	105
Degree of Protection IP20, 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 Win-suppose terminals max. 2.4 Vin-suppose terminals vin-suppose terminals Finger and back-of-hand proof to BGV A2 max. 2.4 Vin-suppose terminals vin-suppose terminals Vin-supose terminals vin-supose termin	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 M/m V/m max. 2.4 UL: #18-12 AWG: 2.4 Nm (21 lb-in) #0-8 AWG: 2.8 Nm (25 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	In	А	5
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	5.6
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 observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must 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)

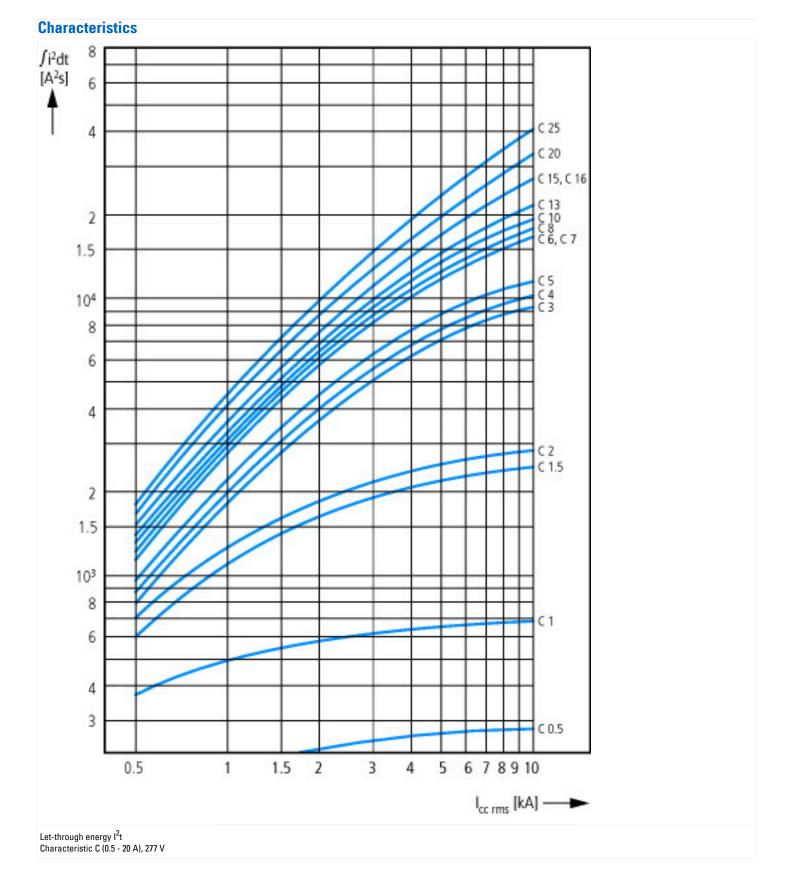
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

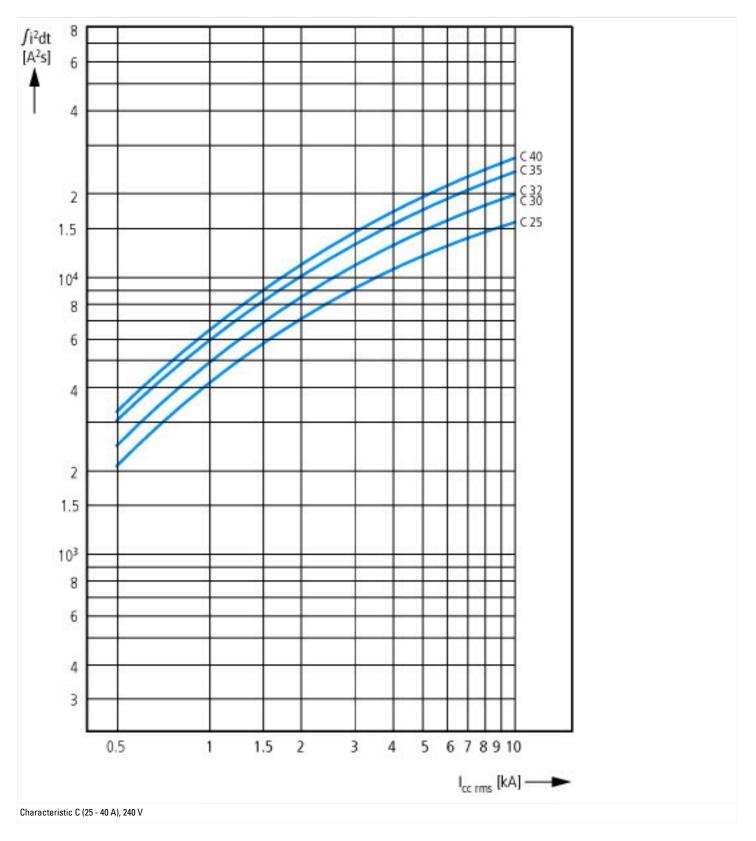
Release characteristic		C
Number of poles (total)		3
Number of protected poles		3
Rated current	А	5
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn 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