DATASHEET - FAZ-C15/3-NA

Part no. Catalog No.

EL-Nummer

(Norway)

No.

Alternate Catalog

Miniature circuit breaker (MCB), 15 A, 3p, characteristic: C

FAZ-C15/3-NA

102249 FAZ-C15/3-NA

1691616



Similar to illustration

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			C
Application			Switchgear for export to North America (UL-listed)
Rated current	In	А	15
Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Product range			FAZ-NA

Technical data

Initial and persional voltage Initial voltage according to IEC/EN 60947-2 Initial and persional voltage according to IEC/EN 60947-2 Initial and persional voltage according to UL Initial and persional voltage according to UL Initial and persional voltage according to UL Initial voltage according to UL <th< th=""><th>Electrical</th><th></th><th></th><th></th></th<>	Electrical			
NoNoNACNACNACRed valtage according to EC/EN 60947-2UnVAC40Rated valtage according to ULUnVAC40/277Rated switching capacity acc. to EC/EN 60947-2LuKAC10Breaking capacity acc. to EC/EN 60947-2LuKAC10Selectivity ClassLuS.C.3.0CharacteristicPeretionsS.C.3.0Selectivity ClassPeretionsS.C.2000IfespanPeretionsS.C.2000Direction of incoming supplyPeretionsS.C.2000BeckarctardNom1510Selectivity ClassNom1510InternationNom1510BreationalNom1510BreationalNom1510Selectivity ClassNom1510InternationalNom1510BreationalNom1510BreationalNom1510Selectivity ClassNom1510InternationalNom1510BreationalNom1510Selectivity ClassNom1510Selectivity ClassNom1510Selectivity ClassNom1510BreationalNom151010Selectivity ClassNom151010Selectivity ClassNom151010Se	Standards			
Image: second ing to LEC/EN 60947-2 Image: second ing to LEC/EN 60747-2 Image: second ing to LEC/EN 60747-2 Image: second ing to LEC/EN 60715 top-hat rai Internate of Protection Image: second ing to LEC/EN 60715 top-hat rai Image: second ing top-ing	Rated operational voltage	Ue	V	
Rated voltage according to LEC/EN 60947-2VACVAC40Rated voltage according to ULLeuKa50Breaking capacity according to ULLeuKA40(L489)CharacteristicKaKa80, C, DSelectivity ClassKa8, C, D50Idetastore differenceKa8, C, D50Idetastore differenceKa6, C50Idetastore differenceKa5050Idetastore differenceKa5050Idetastor		U _e	V AC	277/480 Y
Rated voltage according to UL Un VAC 809/277 Rated voltage according to UL Lea A 50 </td <td></td> <td></td> <td>V DC</td> <td>60</td>			V DC	60
Rate witching capacity acc. to IEC/EN 60947-2 Icu A 5 Breaking capacity acc. to IEC/EN 60947-2 Icu KA 4 (UL489) Breaking capacity acc. to IEC/EN 60947-2 B, C, D B, C, D Characteristic B, C, D B, C, D Selectivity Class B, C, D B, C, D Lifespan Operations B, C, D Direction of incoming suply Selectivity Class Selectivity Class Mechanical Selectivity Class Selectivity Class Enclosure height Mm Selectivity Class Mounting with per pole Mm Selectivity Class Degree of Protection Finger and bactory Environe Finger and bactory Environe Terminal protection Finger and bactory Environe Finger and bactory Environe Tightening torque of fixing screws River and Selective Ann (21 lb-in) Selective Ann (25 lb-in) Selective Annote Selecive Annote Selective Annote Selective Annote Selective	Rated voltage according to IEC/EN 60947-2	Un	V AC	440
Breaking capacity according to UL Id (UL489) Characteristic B, C, D Selectivity Class B, C, D Lifespan Person Lifespan as required Direction of incoming supply Person Becharical se required Standard front dimension Image: Second	Rated voltage according to UL	Un	V AC	480Y/277
Characteristic Presention B, C, D Selectivity Class G G Lifespan Operations > 20000 Direction of incoming supply Presentions se required Meteristan M S Standard front dimension M S Rounting width per pole M S Mounting M S Derection Front Presention Interpresention Terminal stop and bottom M S Terminal protection M S Tightening torque of fixing screws M/m Server SAN (25 lb-in)	Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Selectivity Class Image: Selecti	Breaking capacity according to UL		kA	14 (UL489)
Ifespan Operations Image: Specific specif	Characteristic			B, C, D
Liespan Operations >2000 Direction of incoming supply as required Mechanical Image: Standard front dimension Image: Standard front dimension Enclosure height Image: Standard front dimension Image: Standard front dimension Mounting width per pole 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 Image: Standard front dimension Image: Standard front dimension Image: Standard front dimension Mounting Image: Standard front dimension Image: Standard front dimension Image: Standard front dimension 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 Tightening torque of fixing screws Image: Standard front dimension Image: Standard front dimension	Selectivity Class			3
Direction of incoming supply is required Mechanical mm 5 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 12/K N0715 top-hat rail Degree of Protection MM 12/K N0715 top-hat rail Terminals top and bottom MM 12/K N0715 top-hat rail Terminal protection MM 12/K N0715 top-hat rail Tightening torque of fixing screws MM 12/K N0715 top-hat rail Tightening torque of fixing screws MM 12/K N0715 top-hat rail	lifespan			
Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 17.7 Mounting FC/EN 60715 top-hat rail FC/EN 60715 top-hat rail Degree of Protection FC/EN 60715 top-hat rail FC/EN 60715 top-hat rail Terminals top and bottom FC/EN 60715 top-hat rail FC/EN 60715 top-hat rail Terminal protection FC/EN 60715 top-hat rail FC/EN 60715 top-hat rail Terminal protection FC/EN 60715 top-hat rail FC/EN 60715 top-hat rail Tightening torque of fixing screws Mm Mm FC/EN 60715 top-hat rail Tightening torque of fixing screws Mm Mm FC/EN 60715 top-hat rail Tightening torque of fixing screws Mm Mm Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws Mm Mm Screws rail rail rail rail rail rail rail rail	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingIEC/EN 60715 top-hat railDegree of ProtectionIECIEC/EN 60715 top-hat railTerminals top and bottomIECIEC/EN 60715 top-hat railTerminal protectionIECImage and back-of-hand proof to BGV A2Tightening torque of fixing screwsImage and scheme and	Direction of incoming supply			as required
Enclosure heightmm15Mounting width per polemm17.7MountingIC/EN 60715 top-hat railDegree of ProtectionICP20, IP40 (when fitted)Terminals top and bottomICImmTerminal protectionImmFinger and back-of-hand proof to BGV A2Tightening torque of fixing screwsN/mN/mNumeric ScrewsN/mN/mNorman ScrewsN/mN/m <td>Mechanical</td> <td></td> <td></td> <td></td>	Mechanical			
Mounting width per polemm1.7MountingIC/EN 60715 top-hat railDegree of ProtectionP20, IP40 (when fitted)Terminals top and bottomTom-purpose terminalsTerminal protectionTom - purpose terminalsTerminal protectionFinger and back-of-hand proof to BGV A2Tightening torque of fixing screwsN/mMunting torque of fixi	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 top of t	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 Market All Market All Market All State All Market All State All Tightening torque of fixing screws M/m Market All State All <	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 max. 2.4 UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.4 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)	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

Fechnical data for design verification			
Rated operational current for specified heat dissipation	In	А	15
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
EC/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 b observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must b 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)

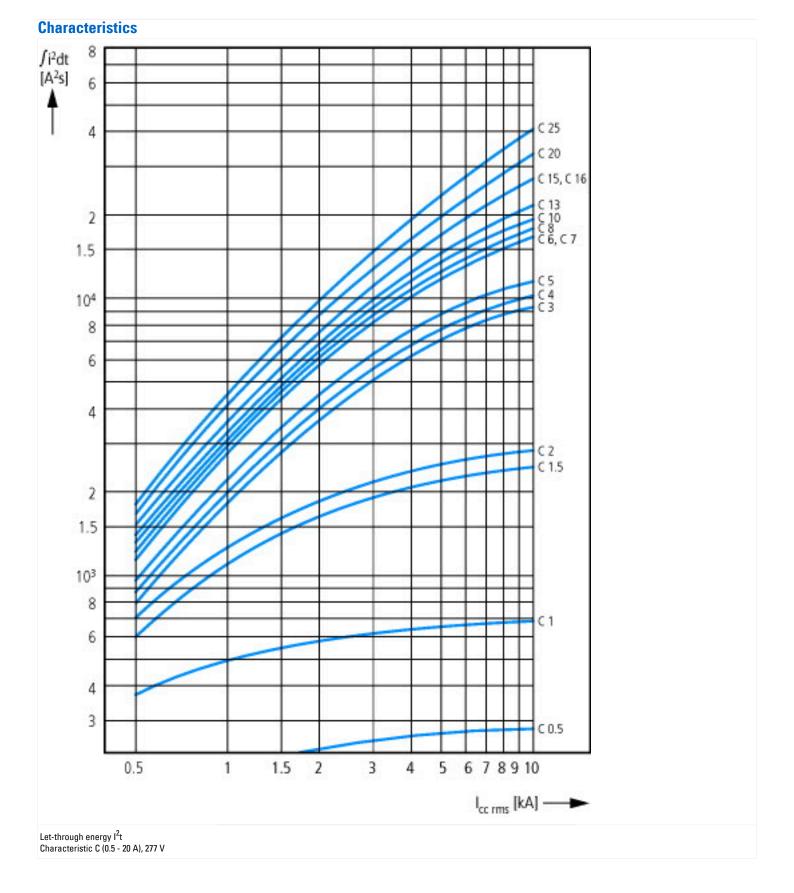
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

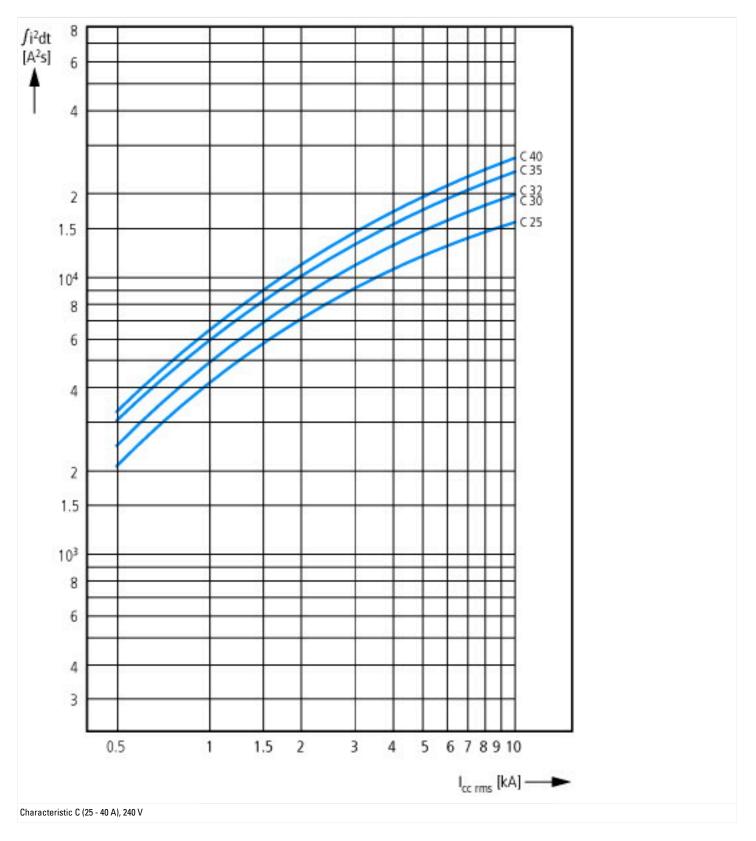
Release characteristic		C
Number of poles (total)		3
Number of protected poles		3
Rated current	А	15
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn 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