DATASHEET - FAZ-C3/2-NA

Part no. Catalog No.

EL-Nummer

(Norway)

No.

Alternate Catalog

Miniature circuit breaker (MCB), 3 A, 2p, characteristic: C

FAZ-C3/2-NA

FAZ-C3/2-NA

102161

1691590



Similar to illustration

Delivery program

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

Technical data

Participant of the second se	Electrical			
NoVac7/40 YRede voltage according to IC/CN 60947-2UnVac40Rated voltage according to ULUnVac40/277Rated switching capacity acc. to IC/CN 60947-2LaVac40/277Rated switching capacity acc. to IC/CN 60947-2LaVac50Breaking capacity acc. to IC/CN 60947-2LaVac50Selectivity ClassLa10/L48910/L489CharacteristicLaVac6030Selectivity ClassFor a Grading To IC/CN CONSTRANCIONSelectivity ClassSelectivity ClassIfespanFor a Grading To IC/CN CONSTRANCIONSelectivity ClassSelectivity ClassStochard InformitignsphyFor a Grading To IC/CN CONSTRANCIONSelectivity ClassNotard InformitignsphyFor a Grading To IC/CN CONSTRANCIONSelectivity ClassStochard InformitignsphyFor a Grading To IC/CN CONSTRANCIONSelectivity ClassNotard InformitignsphyFor a Grading To IC/CN ConstrancionSelectivity Class <td< td=""><td>Standards</td><td></td><td></td><td></td></td<>	Standards			
Image: series of the series	Rated operational voltage	Ue	V	
Rated voltage according to IEC/EN 60947-2 Vanue VAC 40 Rated voltage according to UL Vn VAC 800/277 Breaking capacity acc. to IEC/EN 60947-2 Icu KA 10 Breaking capacity acc. to IEC/EN 60947-2 Icu KA 10 Breaking capacity according to UL Icu KA 10 Characteristic KA 10 10 Solectivity Class KA 8, C, D 10 Ifespan Operations 8, C, D 10 Direction of incoming supply Monuting sequire/a 2000 Mounting width per pole Monuting 105 10 Mounting width per pole Mon 12 12 Terminal protection Mon 12 12 Terminal protection Monuting 12 12 12 Terminal protection Monuting 12 12 12 Terminal protection Monuting Fore and back-of-hand proof to BGV A2 12 Terminal protection Monuting <td></td> <td>Ue</td> <td>V AC</td> <td>277/480 Y</td>		Ue	V AC	277/480 Y
Rated voltage according to UL Vn VAC 800//277 Rated voltage according to UL Lea KA 5 Breaking capacity acc. to IEC/EN 60947-2 Lea KA 10(UL489) Breaking capacity acc. to IEC/EN 60947-2 Lea Rated voltage to IUL B(D)//200 Characteristic S 10(UL489) B(D)//200 B(D)//200 Selectivity Class G S 20000 S S Lifespan Operations S 20000 S S S Natedrift fort dimension G Man S <td></td> <td></td> <td>V DC</td> <td>60</td>			V DC	60
Area of a constraint of	Rated voltage according to IEC/EN 60947-2	Un	V AC	440
Braking capacity according to UL Image: Status according to UL <td< td=""><td>Rated voltage according to UL</td><td>Un</td><td>V AC</td><td>480Y/277</td></td<>	Rated voltage according to UL	Un	V AC	480Y/277
Characteristic Image: Characteristic B, C, D Selectivity Class B, C, D Selectivity Class F B Iffespan Operations - Direction of incoming supply Operations - Direction of incoming supply Sonool - Memeritation Image: Characteristic - Standard front dimension Image: Characteristic - Rounting width per pole Image: Characteristic - Mounting Image: Characteristic - Terminal stop and bottom Image: Characteristic - Terminal protection Image: Characteristic - Tightening torque of fixing screws Image: Characteristic - Standard fixing screws Image: Characteristic -	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Selectivity Class Selectivity Class Selectivity Class Iffespan Intervention Iffespan Intervention Interventio	Breaking capacity according to UL		kA	10 (UL489)
Ifespan Perations Image:	Characteristic			B, C, D
Lifespan Operations >20000 Direction of incoming supply as required Mechanical Image: Second Se	Selectivity Class			3
Direction of incoming supply as required Mechanical mm Standard front dimension mm Enclosure height mm Mounting width per pole mm Mounting mm Degree of Protection mm Terminal stop and bottom Mm Terminal protection Mm Terminal protection Mm Tightening screws Mm Standard front dimension Mm Mounting Mm Mounting Mm Degree of Protection Mm Terminal protection Mm Terminal protection Mm Tightening screws Mm Standard Screws Standard Screws	lifespan			
Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole MM 17.7 Mounting MM 16C/EN 60715 top-hat rail Degree of Protection MM 120.1 Terminals top and bottom MM 120.1 Terminal protection MM Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws MM max.2.4 VL: #18-12 AWG: 2.4 Nm (21 Ib-in) #10-8 AWG: 2.4 Nm (36 Ib-in)	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingMm120. [KPK 60715 top-hat railDegree of ProtectionMm120. [P40 (when fitted)Terminals top and bottomMmMmTerminal protectionMmFinger and back-of-hand proof to BGV A2Tightening torque of fixing screwsMmMmStandard fixing screwsMmMmMarker Standard fixing screwsMmMmMmMm	Direction of incoming supply			as required
Enclosure height mm 105 Mounting width per pole mm 17.7 Mounting ECEN 60715 top-hat rail 120 Degree of Protection P20, IP40 (when fitted) 120, IP40 (when fitted) Terminals top and bottom Form Finger and back-of-hand proof to BGV A2 Terminal protection Mm Finger and back-of-hand proof to BGV A2 Tightening torque of fixing screws Nm Max 2.4 With screws Start Screws Start Screws	Mechanical			
Mounting width per polemm1.7MountingEC/EN 60715 top-hat railDegree of ProtectionFCO Pole (when fitted)Terminals top and bottomTom - up ropes terminalsTerminal protectionFCO Pole (when fitted)Tightening torque of fixing screwsFCO Pole (when fitted)FCO Pole (when fitted) </td <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	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 max. 2.4 Vin-surges and wing screws N/m Win #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 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 W/m max. 2.4 UL: #18-12 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 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	2.4

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
IEC/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 be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be 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

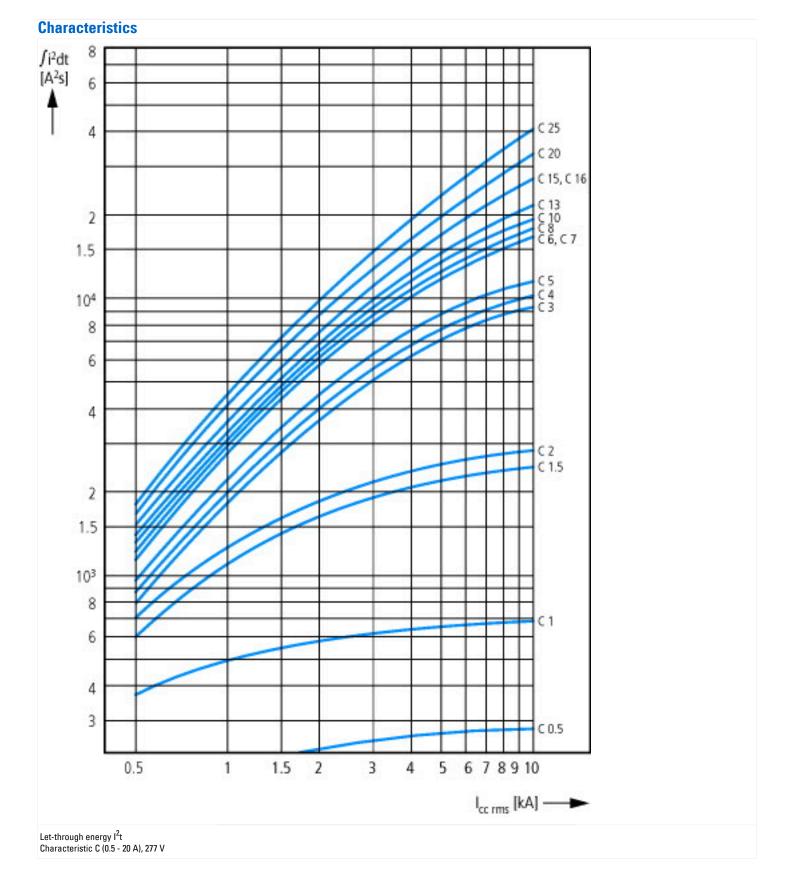
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

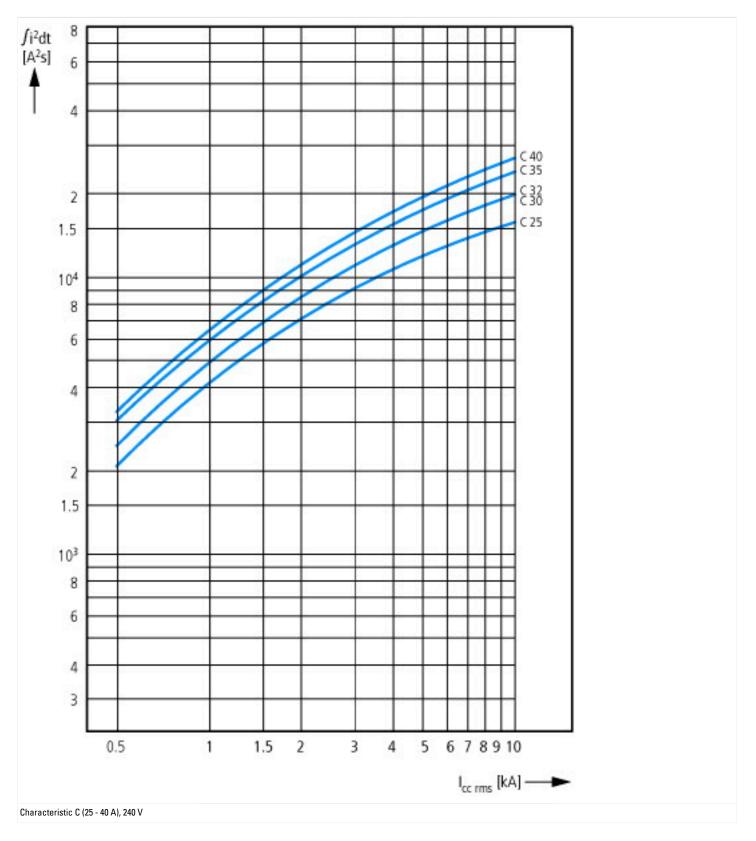
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

Release characteristic			C
Number of poles (total)			2
Number of protected poles			2
Rated current		A	3
Rated voltage	Y	V	415
Rated insulation voltage Ui	Y	V	440
Rated impulse withstand voltage Uimp	I	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	I	kA	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	I	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	I	kA	15
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	I	kA	15
Voltage type			AC
Frequency	1	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		2
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