DATASHEET - FAZ-C30/3-NA



Miniature circuit breaker (MCB), 30 A, 3p, characteristic: C

Part no.FAZ-C30/3-NACatalog No.102253Alternate CatalogFAZ-C30/3-NANo.EL-NummerI691618(Norway)



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	I _n	А	30
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Product range			FAZ-NA

Technical data

StandardsUUUUReled operational voltageUVVVReled operational voltageUVVVReled voltage according to IEC/EN 60047-2UV40Reled voltage according to UUV40Reled voltage according to UVV40Reled voltage according to UVV400Reled voltage according to UVV400Reled voltage according to UVV400Reled voltage according to UVV400Reled vol	Electrical			
NoNoNoNoNoRed voltage according to EC/EN 60947-2UnVn40Red voltage according to ULUnVn400Red switching capacity acc. to EC/EN 60947-2LuKA500Breaking capacity acc. to EC/EN 60947-2LuKA500Breaking capacity acc. to EC/EN 60947-2LuSo300Breaking capacity acc. to EC/EN 60947-2MaSo300Breaking capacity acc. to EC/EN 60947-2MaSo300Breaking capacity acc. to EC/EN 60047MaSo300Breaking Capacity acc. to EC/EN 60015 to p-hat railSo300Breaking Capacity acc. to EC/EN 6015 to g-hat railSo300Breaking Capacity acc. to EC/EN 6015 to SoSo300Breaking Capacity acc. to EC/EN 6015 tor	Standards			
Image: second	Rated operational voltage	Ue	V	
Rete voltage according to IEC/EN 60947-2 VAC 40 Rete voltage according to UL Leu IC 5000000000000000000000000000000000000		U _e	V AC	277/480 Y
Aread voltage according to UL Vn VAC 800//277 Rated voltage according to UL Lea A 50 Breaking capacity acc. to IEC/EN 60947-2 Lea A 50 Breaking capacity acc. to IEC/EN 60947-2 Lea A 50 Breaking capacity acc. to IEC/EN 60947-2 Lea A 50 Breaking capacity acc. to IEC/EN 60947-2 Lea A 50 Characteristic S A 60 A 60 A 60 A 60 A A Condrig Supply Fore A and ford finamension Fore A and fore A			V DC	60
Rated witching capacity acc. to EC/EN 60947-2 Peue A S 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 Operations B, C, D Direction of incoming supply Operations Source of versions Machanization of from fingensing According to the pole Source of versions Source of versions Rothoning Man Source of versions Source of versions Mounting width per pole Man Source of versions Source of versions Regree of Protection Man Source of versions Source of versions Terminal protection Source of versions Source of versions Source of versions Terminal protection Source of versions Source of versions Source of versions Terminal protection Source of versions Source of versions Source of versions Terminal protection Source of versions Source of versions Source of versions Terminal protection Source of ve	Rated voltage according to IEC/EN 60947-2	Un	V AC	440
Breaking capacity according to UL Breaking capacity according to UL Characteristic Characteristic Selectivity Class Infespan Infe	Rated voltage according to UL	Un	V AC	480Y/277
Characteristic Figs an and a stream of the stream of t	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)
lifespan Mark Ferdion Ferdion Ferdion Second Seco	Characteristic			B, C, D
Lifespan Operations > 2000 Direction of incoming supply as required Mechanical sequired Standard front dimension Image: Second Se	Selectivity Class			3
Direction iconing supply Image: Biology iconic biconiconic biconiconic biology iconic biconic biconiconiconiconic bi	lifespan			
Mechanical Standard front dimension mm 45 Enclosure height mm 105 Mounting width per pole mm 17.7 Mounting Ferce of Protection Ferce of Protection Ferce of Protection Terminals top and bottom Ferce of fixing screws Ferce of fixing screws Ferce of fixing screws	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingIEC/EN 60715 top-hat railDegree of ProtectionImage: Comparison of the poleTerminals top and bottomImage: Comparison of the poleTerminal protectionImage: Comparison of the poleTightening torque of fixing screwsImage: Comparison of the poleImage: Comparison of				as required
Enclosure heightmm15Mounting width per polemm17.7MountingEC/EN 60715 top-hat railDegree of ProtectionImmIP20, IP40 (when fitted)Terminals top and bottomImmImmTerminal protectionImmImmTightening screwsImmImmSighten and screwsImm <td>Mechanical</td> <td></td> <td></td> <td></td>	Mechanical			
Mounting width per polemm1.7MountingEC/EN 60715 top-hat railDegree of ProtectionF20, 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 fixing	Standard front dimension		mm	45
Mounting IEC/EN 60715 top-hat rail Degree of Protection IEC/EN 60715 top-hat rail Terminals top and bottom IEC/EN 60715 top-hat rail Terminal protection Image: state	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 Winner Stremmer	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 (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	30
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	9
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)

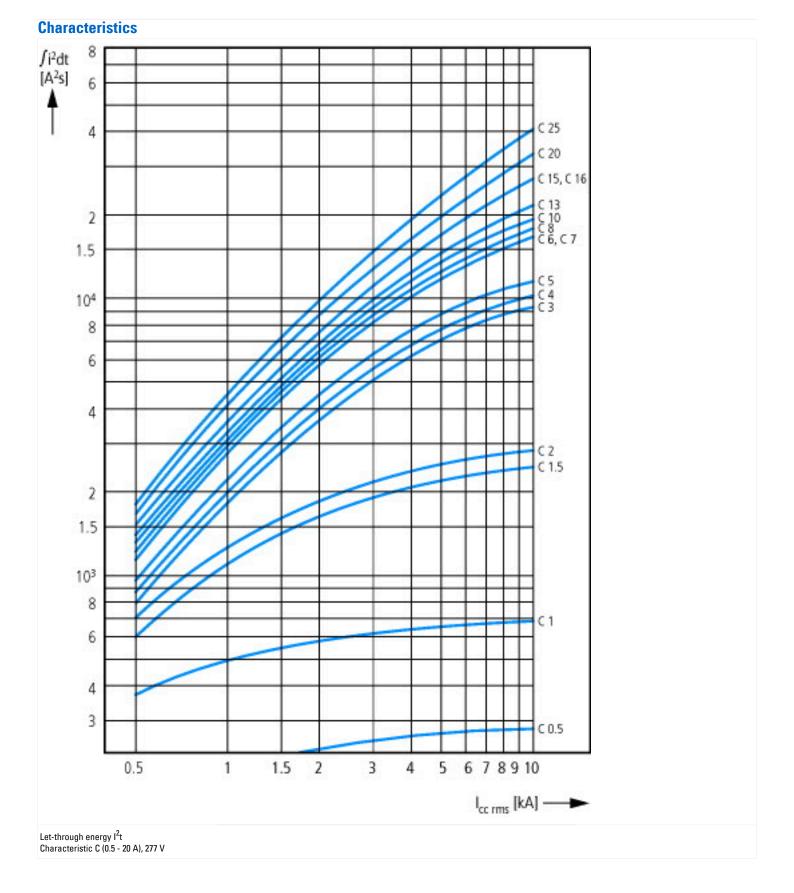
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

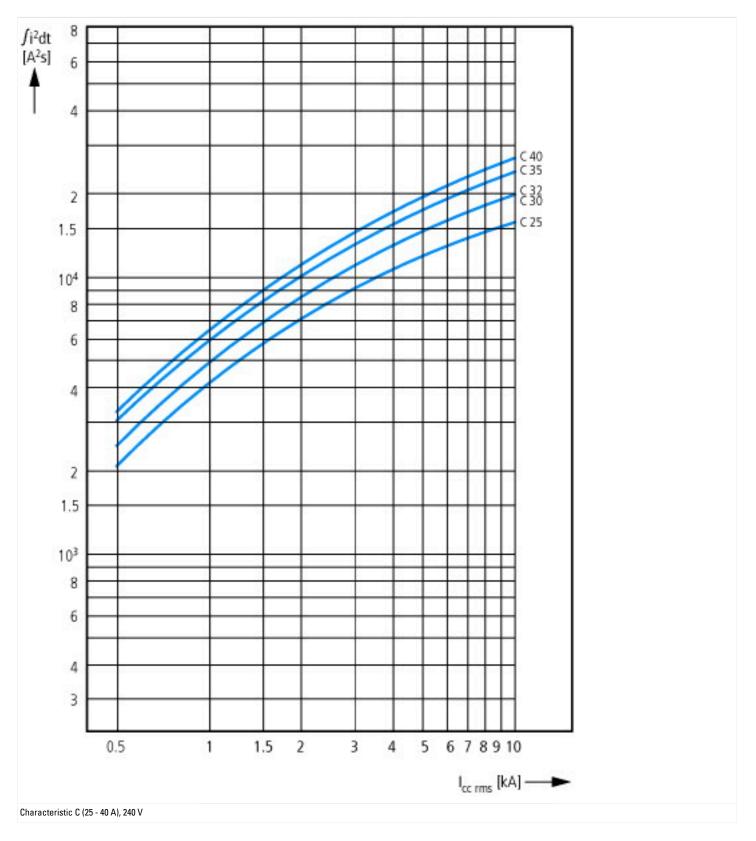
Release characteristic		С
Number of poles (total)		3
Number of protected poles		3
Rated current	А	30
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn 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