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

Powering Business Worldwide*

Part no. FAZ-C2/2-NA-DC

137239

EL Number 1691699

(Norway)

Product name	(NOI Way)	
Part no.	General specifications	
Product langible Depth 106 millimentra 106		
Product Length Clepth 108 millimetre 175 millimetre		
Product Insight 75.5 millimetre Product width 35.4 millimetre Product width 0.27 Millogram Compliances RelHS canfum Compliances ILL 480, ISA C222 No. 5 (ESD MILL) Elebany 2- management EBBON 2- 2 (EBBON 2- 2 (EBBON 2- 2 EBBON 2- 2 EBBON 2- 2 (EBBON 2- 2 EBBON 2- 2		
Product weight 2.47 kingsram 2.47 kingsr		
Product weight Complemens Certifications Certificat		75.5 millimetre
Compliances		
Lerifications Product Tradename selective type sele	·	
Froduct Tradename Product Type Product Type Product Type Product Sub Type Produ		
Product Type MCB Delivery program None Application Switchgear for export to North America (UI-listed) Number of poles Two-pole Number of poles (total) 2 Number of poles (protected) 2 Tripping characteristic C Amperage Reting 2A Type FAZ-DC Ministure circuit breaker Technical Data - Electrical DC Voltage type DC Voltage rating at DC 440 V DC Rated operational voltage (U) - max 440 V DC Rated impulse withstand voltage (Ui) 440 V DC Rated impulse withstand voltage (Ui) 440 V DC Rated simple-retire threaking capacity (EC/ER 00947-2) 50 Hz Requency rating - min 50 Hz Frequency rating max 60 Hz Rated short-circuit breaking capacity (EC/ER 00947-2) 10 kA Rated short-circuit breaking capacity (EC/ER 00947-2) at 200 V 10 kA Rated short-circuit breaking capacity (EC/ER 00947-2) at 200 V 10 kA Rated short-circuit breaking capacity (EC/ER 00947-2) at 200 V 10 kA	Certifications	IEC 60947-2 IEC 61373
Product Su Type	Product Tradename	xEffect - FAZ-NA-DC
Delivery program Switchgear for export to North America (UL-listed) Application Switchgear for export to North America (UL-listed) Number of poles (total) 2 Number of poles (protected) 2 Release characteristic C Release characteristic C Amperage Rating FA2-DC Type Ministure circuit breaker Total Data - Electrical DC Voltage type DC Voltage type DC Voltage fully of the max 250 V Rated insulation voltage (Ue) - max 250 V Rated insulation voltage (Uin) 440 V Rated insulation voltage (Uinp) 440 V Frequency rating - min 50 Hz Frequency rating - min 50 Hz Rated short-circuit breaking capacity (EC (EM 80947-2) 10 NA Rated short-circuit breaking capacity (EN 80988) at 200 V 0 LA Rated short-circuit breaking capacity (EN 80988) at 400 V 0 LA Rated short-circuit breaking capacity (EN 80987-2) at 200 V 0 LA Rated short-circuit breaking capacity (EN 80988) at 200 V 0 LA <tr< td=""><td>Product Type</td><td>мсв</td></tr<>	Product Type	мсв
Application Switchgear for export to North America (U listed) Number of poles Two-pole Number of poles (total) 2 Number of poles (protected) 2 Tripping characteristic C Release characteristic C Amparage flating 2A Type AP2-DC Ministure circuit breaker Technical Data - Electrical DC Voltage rating at DC 440 V DC Rated operational voltage (Ue) - max 250 V Rated insulation voltage (Ui) 440 V DC Rated insulation voltage (Ui) 440 V Rated insulation voltage (Ui) 440 V Rated short-circuit breaking capacity (EC/EN 60947-2) 50 Hz Frequency rating - min 50 Hz Frequency rating capacity (EC/EN 60947-2) 10 kA Rated short-circuit breaking capacity (EC/EN 60947-2) 10 kA Rated short-circuit breaking capacity (EC/EN 60989) at 400 V 0 kA Rated short-circuit breaking capacity (EC/EN 60947-2) at 400 V 10 kA Overvoltage category 10 kA Pollution degree 2 Built-in d	Product Sub Type	None
Number of poles Number of poles (total) Number of poles (total) Number of poles (total) Pripping characteristic Reliesse characteristic Amperage Reting Type Topining Characteristic Notlage Type DC Reterioral Data - Electrical Voltage rating at DC Reterioral Outlage (Ue) - max Reterioral operational voltage (Ue) - max Reterioral poulse withstand voltage (Uimp) Reterioral poulse withstand voltage (Uimp) Frequency rating - min Frequency rating - min Frequency rating - min Frequency rating - min Frequency rating - max Reterioral sohrt-circuit breaking capacity (ER 609847-2) Reterioral Sohrt-circuit breaking capacity (ER 60988) at 230 V Reterioral breaking capacity (ER 60988) at 400 V Reterioral breaking capacity (ER 60989) at 400 V Reterioral breaking capacity (ER 60987-2) at 400 V Reterioral breaking capacity (ER 60987-2) at 400 V Reterioral Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min Two-polluction I mm² Two-polluction Connectable conductor cross section (solid-core) - min	Delivery program	
Number of poles (protected) 2 Number of poles (protected) 2 Tripping characteristic Release characteristic C Amperage Rating Type RAZ-DC Minitature circuit breaker Release characteristic Voltage rating at DC Rated operational voltage (Ue) - max Rated operational voltage (Ui) Rated impulse withstand voltage (Uimpl) Rated impulse withstand voltage (Uimpl) Rated withing capacity (IEC 60947-2) at 200 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Routing degree Width in number of modular spacings 2 Rull-in degrh Degree of protection Limitation Lim	Application	Switchgear for export to North America (UL-listed)
Number of poles (protected) 2 Tripping characteristic C Amperage Rating 2 A Type FA2-DC Miniature circuit breaker FA2-DC Miniature circuit breaker Miniature circuit breaker Technical Data - Electrical Voltage rating at DC Rated operational voltage (Ue) - max 250 V Rated insulation voltage (Ui) 440 V Rated insulse withstand voltage (Uinp) 4kV Frequency rating - min 50 Hz Frequency rating - max 80 Hz Rated short-circuit breaking capacity (EN 60984-2) 10 kA Rated short-circuit breaking capacity (EN 60988) at 230 V 0 kA Rated short-circuit breaking capacity (EN 60989-2) at 200 V 0 kA Rated short-circuit breaking capacity (EC 60947-2) at 200 V 10 kA Rated short-circuit breaking capacity (EC 60947-2) at 200 V 10 kA Rated short-circuit breaking capacity (EC 60947-2) at 400 V 0 kA Rated short-circuit breaking capacity (EC 60947-2) at 200 V 10 kA Rated short-circuit breaking capacity (EC 60947-2) at 200 V 10 kA Rate	Number of poles	Two-pole
Tripping characteristic Release characteristic Amperage Rating Type RAZ-DC Minitature circuit breaker Technical Data - Electrical Voltage type Voltage rating at DC Rated operational voltage (Up) - max Rated operational voltage (Uiip) Rated impulse withstand voltage (Uiip) Rated impulse withstand voltage (Uiip) Rated impulse withstand voltage (Uiip) Rated switching capacity (IEC/EN 60947-2) Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60989) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 200 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category IIII Pollution degree Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min I mm² Connectable conductor cross section (solid-core) - min Connectable conductor cross section (solid-core) - min	Number of poles (total)	2
Release characteristic Amperage Rating Type PAZ-DC FAZ-DC Ministure circuit breaker Tochnical Data - Electrical Voltage type Voltage rating at DC Rated operational voltage (Ue) - max Rated operational voltage (Ui) Rated impulse withstand voltage (Uimp) Rated impulse withstand voltage (Uimp) Reted impulse withstand voltage (Uimp) Frequency rating - mia Rated switching capacity (IEC/EN 80947-2) Rated short-circuit breaking capacity (EN 80989) at 230 V Rated short-circuit breaking capacity (EN 80989) at 230 V Rated short-circuit breaking capacity (IEC 80947-2) at 230 V Rated short-circuit breaking capacity (IEC 80947-2) at 400 V Overvoltage category III Pollution degree Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min I mm² Connectable conductor cross section (solid-core) - min Connectable conductor cross section (solid-core) - min Connectable conductor cross section (solid-core) - min Control Total Control Contro	Number of poles (protected)	2
Amperage Rating Type Technical Data - Electrical Voltage type Voltage rating at DC Rated operational voltage (Ue) - max Rated insulation voltage (Uinp) Rated impulse withstand voltage (Uimp) Rated switching capacity (IEC/EN 60947-2) Rated switching capacity (IEC 80989) at 230 V Rated short-circuit breaking capacity (IEC 80947-2) at 23	Tripping characteristic	С
Technical Data - Electrical Voltage type DC Add V DC Rated operational voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated impulse withstand voltage (Uimp) Frequency rating - min Frequency rating - max Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Quervoltage category Pollution degree Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Limit of the conductor cross section (solid-core) - min Polgree of protection Limit of the minimatire circuit breaker and section is a consistency of the conductor cross section (solid-core) - min FAZ-DC Miniature circuit breaker 440 V DC 440 V 440	Release characteristic	С
Miniature circuit breaker Miniature circuit breaker	Amperage Rating	2 A
Voltage type DC Voltage rating at DC 440 V DC Rated operational voltage (Ue) - max 250 V Rated insulation voltage (Uii) 440 V Rated impulse withstand voltage (Uimp) 4 kV Frequency rating - min 50 Hz Frequency rating - max 60 Hz Rated switching capacity (IEC/EN 60947-2) 10 kA Rated short-circuit breaking capacity (IEC 60989) at 230 V 0 kA Rated short-circuit breaking capacity (IEC 60947-2) at 230 V 0 kA Rated short-circuit breaking capacity (IEC 60947-2) at 400 V 10 kA Overvoltage category III Pollution degree 2 Technical Data - Mechanical 2 Width in number of modular spacings 2 Built-in depth 70.5 mm Degree of protection IP20 Connectable conductor cross section (solid-core) - min 1 mm²	Туре	
Voltage rating at DC Rated operational voltage (Ue) - max Rated insulation voltage (Ui) Rated insulation voltage (Uimp) At V Frequency rating - min Frequency rating - max Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60989) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rovervoltage category III Pollution degree Technical Data - Mechanical Width in number of modular spacings 2 Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min 1 mm²	Technical Data - Electrical	
Rated operational voltage (Ue) - max Rated insulation voltage (Uii) Rated impulse withstand voltage (Uimp) Frequency rating - min Frequency rating - max Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60989) at 230 V Rated short-circuit breaking capacity (EN 60989) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) a	Voltage type	DC
Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Frequency rating - min Frequency rating - max Frequency rating capacity (IEC/EN 60947-2) Rated switching capacity (EE/EN 60947-2) Rated short-circuit breaking capacity (EN 60898) at 230 V Rated short-circuit breaking capacity (EE 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Quervoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Degree of protection Connectable conductor cross section (solid-core) - min 1 mm²	Voltage rating at DC	440 V DC
Rated impulse withstand voltage (Uimp) Frequency rating - min Frequency rating - max 60 Hz Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60898) at 230 V Rated short-circuit breaking capacity (EN 60898) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings 2 Built-in depth Degree of protection Possessection (solid-core) - min Imm²	Rated operational voltage (Ue) - max	250 V
Frequency rating - min Frequency rating - max Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60988) at 230 V Rated short-circuit breaking capacity (IEC 60988) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min 50 Hz 60 Hz 10 kA 10 kA 2 10 kA 10 k	Rated insulation voltage (Ui)	440 V
Frequency rating - max Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60898) at 230 V Rated short-circuit breaking capacity (EN 60898) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category Pollution degree Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min 60 Hz 10 kA 10 kA 11 kA 12 C 12 C 12 C 13 kA 14 kA 15 kA 16 kA 17 kA 18	Rated impulse withstand voltage (Uimp)	4 kV
Rated switching capacity (IEC/EN 60947-2) Rated short-circuit breaking capacity (EN 60898) at 230 V Rated short-circuit breaking capacity (EN 60898) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings 2 Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min 10 kA 10 kA 10 kA 2 11 kA 10 kA 1	Frequency rating - min	50 Hz
Rated short-circuit breaking capacity (EN 60898) at 230 V Rated short-circuit breaking capacity (EN 60898) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 200 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings 2 Built-in depth Degree of protection IP20 Connectable conductor cross section (solid-core) - min O kA 10 kA	Frequency rating - max	60 Hz
Rated short-circuit breaking capacity (EN 60898) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V 10 kA Overvoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings 2 Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min New York of the Action of the Actio	Rated switching capacity (IEC/EN 60947-2)	10 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 230 V Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category III Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min 10 kA	Rated short-circuit breaking capacity (EN 60898) at 230 V	0 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 400 V Overvoltage category Pollution degree Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min 10 kA 10 kA 10 kA 10 kA 10 kA 11 min 11 min 11 min 2	Rated short-circuit breaking capacity (EN 60898) at 400 V	0 kA
Overvoltage category Pollution degree 2 Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection P20 Connectable conductor cross section (solid-core) - min III 2 Technical Data - Mechanical 2 III 2 III 1 1 1 1 1 1 1 1 1 1 1	Rated short-circuit breaking capacity (IEC 60947-2) at 230 V	10 kA
Pollution degree 2 Technical Data - Mechanical	Rated short-circuit breaking capacity (IEC 60947-2) at 400 V	10 kA
Technical Data - Mechanical Width in number of modular spacings Built-in depth Degree of protection Connectable conductor cross section (solid-core) - min Degree of protection 1 mm²	Overvoltage category	III
Width in number of modular spacings 2 Built-in depth 70.5 mm Degree of protection IP20 Connectable conductor cross section (solid-core) - min 1 mm²	Pollution degree	2
Built-in depth 70.5 mm Degree of protection IP20 Connectable conductor cross section (solid-core) - min 1 mm²	Technical Data - Mechanical	
Degree of protection IP20 Connectable conductor cross section (solid-core) - min 1 mm ²	Width in number of modular spacings	2
Connectable conductor cross section (solid-core) - min 1 mm ²	Built-in depth	70.5 mm
	Degree of protection	IP20
	Connectable conductor cross section (solid-core) - min	1 mm ²
Connectable conductor cross section (solid-core) - max 25 mm ²		I IIIIII
Connectable conductor cross section (multi-wired) - min 1 mm ²	Connectable conductor cross section (solid-core) - max	
Connectable conductor cross section (multi-wired) - max 25 mm ²		25 mm ²

Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	2 A
Heat dissipation per pole, current-dependent	0 W
Equipment heat dissipation, current-dependent	2.8 W
Static heat dissipation, non-current-dependent	0 W
Heat dissipation capacity	0 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	75 °C
Design verification as per IEC/EN 61439	
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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.
Additional information	
Current limiting class	3
Features	Additional equipment possible
Special features	Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
Used with	FAZ-DC Miniature circuit breaker

Technical data ETIM 9.0

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@ss13-27-14-19-01 [AAB905019])

Built-in depth	mm	70.5
Release characteristic		C
Number of poles (total)		2
Number of protected poles		2
Rated current	Α	2
Rated voltage	V	250
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V	kA	0
Voltage type		DC
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA	10

Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	k	kA	10
Frequency	H	Hz	50 - 60
Power loss	١	W	2.8
Current limiting class			3
Flush-mounted installation			No
Concurrently switching neutral conductor			No
Over voltage category			3
Pollution degree			2
Additional equipment possible			Yes
Width in number of modular spacings			2
Degree of protection (IP)			IP20
Ambient temperature during operating	c	°C	-25 - 75
Connectable conductor cross section multi-wired	r	mm²	1 - 25
Connectable conductor cross section solid-core	r	mm²	1 - 25
Explosion-proof			No