DATASHEET - FAZ-D16/2-NA

Part no. Catalog No.

EL-Nummer

(Norway)

No.

Alternate Catalog

Miniature circuit breaker (MCB), 16 A, 2p, characteristic: D

FAZ-D16/2-NA

FAZ-D16/2-NA

102190

1691655



Similar to illustration

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			2 pole
Tripping characteristic			D
Application			Switchgear for export to North America (UL-listed)
Rated current	I _n	А	16
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Product range			FAZ-NA

Technical data

StandardsNoUseUse Generational ValueNoRed operational ValuesNoVoVoVoRed voltage according to EC/EN 60047-2NoVoVoVoRed voltage according to EC/EN 60047-2NoSoVoVoRed voltage according to EC/EN 60047-2NoNoVoVoRed voltage according to EC/EN 60047-2NoNoNoNoRed voltage according to EC/EN 60047-2No	Electrical			
And Vac 7/480 Y Vac 7/480 Y 6 Red voltage according to IEC/EN 60947-2 Un VAC 45 Red voltage according to IEC/EN 60947-2 Un VAC 400/27/7 Red voltage according to IEC/EN 60947-2 Lu Solution 5 Characteristic Lu KAC 5 Solectivity Class Poeration Solution 5 Ifespan Poeration Solution Solution Datection funcoming supply Poeration Solution Solution Reclosure height Monting Monting Solution Solution Routing with per pole Foerational Foerational Solution Solution Regree of Protection Foerational Foerational Foerational Foerational Terminal protection Foerational Foerational Foerational Foerational Terminal protection Foerational Foerational Foerational Foerational Terminal protection Foerational Foerational	Standards			
Index of the second s	Rated operational voltage	Ue	V	
Rade voltage according to IE/E/N 60947-2 Nn VAC Adv/277 Rade voltage according to UL Image: Marcine Mar		Ue	V AC	277/480 Y
Rade voltage according to UL Un VAC 800/277 Rade voltage according to UL Icu KA 5 Characteristic Icu KA 5 Selectivity Class B, C, D 3 Ifrespan Operations Selectivity Class ser reguired Direction of incoming supply Operations ser reguired ser reguired Machanization Mark Mark Selectivity Class Selectivity Class Standard front dimension Mark Selectivity Class ser reguired Selectivity Class Mounting width per pole Mark Selectivity Class Selectivity Class Selectivity Class Selectivity Class Terminals top and bottom Mark Selectivity Class Selectivity Class Selectivity Class Selectivity Class Tiget and protection Mark Mark Selectivity Class Selectiv			V DC	60
Rated switching capacity acc. to IEC/EN 60947-2 Icure of the second se	Rated voltage according to IEC/EN 60947-2	Un	V AC	415
Characteristic B C Characteristic B C, D Selectivity Class B C, D Iftespan Operations B C Direction of incoming supply Operations P Selectivity Class Brechanical Image: Selectivity Class Selectivity Class Selectivity Class Brection of incoming supply Operations Selectivity Class Selectivity Class Brection of incoming supply Image: Selectivity Class Selectivity Class Selectivity Class Brection of incoming supply Image: Selectivity Class Selectivity Class Selectivity Class Brection of incoming supply Image: Selectivity Class Selectivity Class Selectivity Class Brechanical Image: Selectivity Class Selectivity Class Selectivity Class Brechanical Image: Selectivity Class Selectivity Class Selectivity Class Mounting width per pole Image: Selectivity Class Image: Selectivity Class Selectivity Class Noning Selection Image: Selectivity Class Image: Selectivity Class Selectivity Class Terminals top and bottom Image: Selectivity Class Selectivity Class Selectivity Class Terminals top and bottom Image: Selectivity Class Selectivity C	Rated voltage according to UL	Un	V AC	480Y/277
Selectivity Class And Selectivity Class <th< td=""><td>Rated switching capacity acc. to IEC/EN 60947-2</td><td>l_{cu}</td><td>kA</td><td>15</td></th<>	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Idespan Operations Joint of the second seco	Characteristic			B, C, D
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Direction of incoming supply Image: Biology of the second se	lifespan			
Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 17.7 Degree of Protection MMC 120.11 Terminals top and bottom MMC 120.11 Terminal protection MMC 120.11 Terminal protection MMC 120.11 Tightening screws MMC MMC Mining Screws MMC MMC	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingIEC/EN 60715 top-hat railDegree of ProtectionIEC/EN 60715 top-hat railTerminals top and bottomIEC/EN 60715 top-hat railTerminal protectionIEC/EN 60715 top-hat railTerminal protectionIEC/EN 60715 top-hat railTiminal protectionIEC/EN 60715 top-hat railTerminal protectionIEC/EN 60715 top-hat railTiminal protectionIEC/EN 60715 top-hat railTightening torque of fixing screwsIEC/EN 60715 top-hat railStandard Marker SchwarzImage and back-of-hand proof to BGV A2Tightening torque of fixing screwsImage and SchwarzStandard Marker SchwarzImage and SchwarzStandard Marker Schwarz <td></td> <td></td> <td></td> <td>as required</td>				as required
Enclosure height mm 15 Mounting width per pole mm 17. Mounting EC/EN 60715 top-hat rail 100 Degree of Protection Ferminals top and bottom P20, IP40 (when fitted) 100 Terminal protection Ferminals top and bottoms Ferminal protection Ferminal protection Ferminal protection Tightening torque of fixing screws State of the st	Mechanical			
Mounting width per polemm1.7MountingEC/EN 60715 top-hat railDegree of ProtectionFOTerminals top and bottomFOTerminal protectionFOTightening torque of fixing screwsSinger and back-of-hand proof to BGV A2Tightening torque of fixing screwsSinger and back-of-hand proof to BGV A2	Standard front dimension		mm	45
Mounting IC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Image: State of the st	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 Market All Market 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 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)	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	16
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	3.5
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)

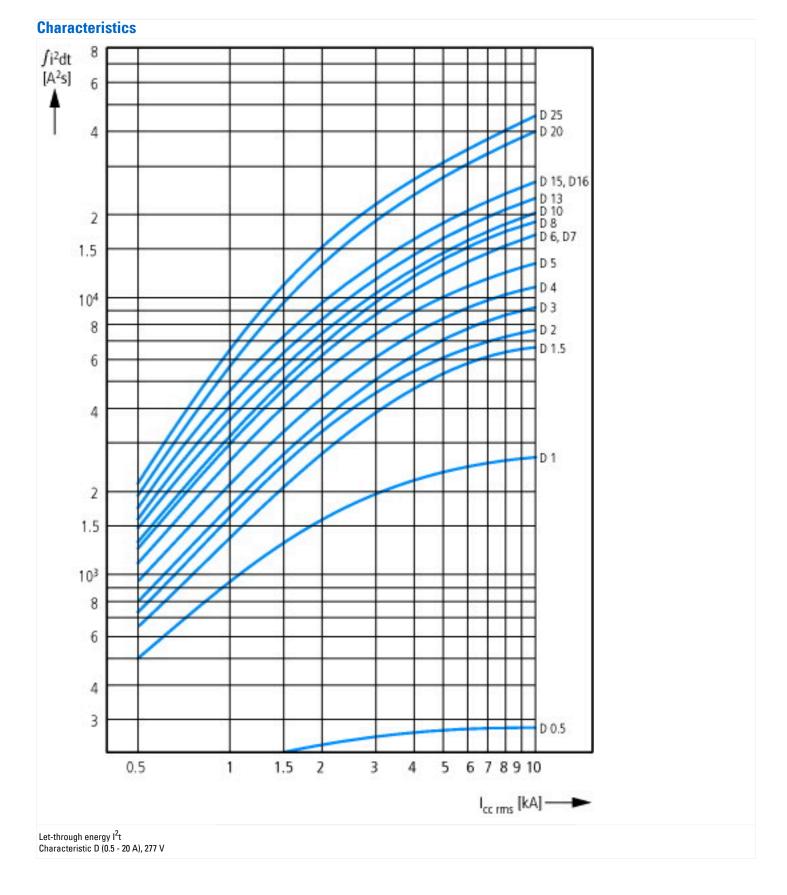
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

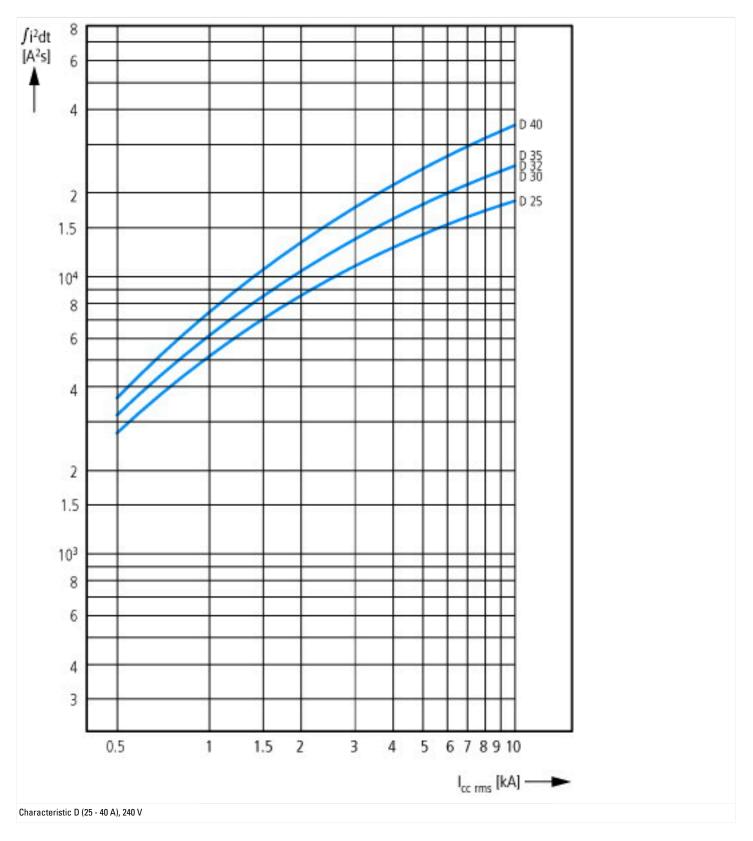
Release characteristic		D
Number of poles (total)		2
Number of protected poles		2
Rated current	А	16
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn 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		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