DATASHEET - FAZ-C40/2-NA

No.

Miniature circuit breaker (MCB), 40A, 2p, C-Char, AC



FAZ-C40/2-NA Part no. Catalog No. 102176 Alternate Catalog FAZ-C40/2-NA **EL-Nummer** 0001691605 (Norway)

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	40
Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Product range			FAZ-NA

Technical data Electric el

Read operational voltage Up IEC 6094-2 Rated operational voltage Up V L Up VA Parameters Rated voltage according to IEC/EN 60947-2 Un VA Parameters Rated voltage according to UL Parameters Parameters Parameters Rated voltage according to UL Parameters Parameters Parameters Rated voltage according to UL Parameters Parameters Parameters Statistic Case of the parameters Parameters Parameters Parameters Statistic Case of the parameters Parameters Parameters Parameters Recedoring to UL Parameters Parameters Parameters Parameters Recedoring to UL Parameters Parameters Parameters <th>Electrical</th> <th></th> <th></th> <th></th>	Electrical			
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Braking capacity according to UL In U(U489) Characteristic B, C, D Selectivity Class B, C, D Selectivity Class Selectivity Class Lifespan Operations Direction of incoming supply Operations Bechanical sequerical Selectivity Class mm Enclosure height mm Mounting Mm Direction of Incoming supply Selectivity Class Selectivity Class mm Enclosure height mm Mounting FC/FN 60715 top-hat raiil Degree of Protection FC/FN 60715 top-hat raiil Terminal protection FC/FN 60715 top-hat raiil Terminal protection mm Tightening torque of fixing screws mm Num Right Screws mm Num Right Screws Figure and back-of-hand proof to BGV A2 Screws mm	Rated voltage according to UL	Un	V AC	240
Characteristic Selectivity Class Selectivity Class Lifespan Lifespan Direction of incoming supply Direction of incoming supply Mechanical Standard front dimension Enclosure height Mounting width per pole Mounting Mounting Degree of Protection Terminals top and bottom Terminals top and bottom Terminal protection Tightening torque of fixing screws Mechanical Mounting Degree of Protection Terminals top and bottom Terminals top and top and top and top and top and	Rated switching capacity acc. to IEC/EN 60947-2	l _{cu}	kA	15
Selectivity Class Image: Selectivity Class Selecti	Breaking capacity according to UL		kA	10 (UL489)
International lifespan Mark Parameter Image: Parameter Parameter Power Par	Characteristic			B, C, D
LifespanOperations> > > > > > > > > > > > > > > > > > >	Selectivity Class			3
Direction of incoming supply as required Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole mm 16C/EN 60715 top-hat rail Degree of Protection FCEN 60715 top-hat rail 105 Terminals top and bottom FCEN 60715 top-hat rail 105 Terminal protection FCEN 60715 top-hat rail 105 Tightening torque of fixing screws FCEN 60715 top-hat rail 105 Vim purpose terminals Finger and back-of-hand proof to BGV A2 105 Tightening torque of fixing screws N/m Singer and back-of-hand (21 b-in) #18-12 AWG: 2.4 Nm (21 b-in) #10-8 AWG: 2.8 Nm (25 b-in) #10-8 AWG: 2.8 Nm (25 b-in)	lifespan			
Mechanical mm 45 Standard front dimension mm 105 Enclosure height mm 17.7 Mounting width per pole Mm 16C/EN 60715 top-hat rail Degree of Protection Feed of the second secon	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingIC/EN 60715 top-hat railDegree of ProtectionICO INICO INOPURS ErrimalsTerminals top and bottomICO INOPURS ErrimalsInopurpose terminalsTerminal protectionICO INOPURS INO	Direction of incoming supply			as required
Enclosure heightmm105Mounting width per polemm1.7MountingIC/EN 60715 top-hat railDegree of ProtectionICOP20, IP40 (when fitted)Terminals top and bottomICOICOICOTerminal protectionICOICOICOTightening torque of fixing screwsICOICOICON/mISAL 24Instantanta Instantanta I	Mechanical			
Mounting width per polemm1.7MountingEC/EN 60715 top-hat railDegree of ProtectionImmIEC/EN 60715 top-hat railTerminals top and bottomImmImmImmTerminal protectionImmImmImmTerminal protectionImmImmImmTightening torque of fixing screwsImmImmImmTightening torque of fixing screwsImm <td>Standard front dimension</td> <td></td> <td>mm</td> <td>45</td>	Standard front dimension		mm	45
MountingIC/EN 60715 top-hat railDegree of ProtectionIC/EN 60715 top-hat railTerminals top and bottomIC/EN 60715 top-hat railTerminal protectionIC/EN 60715 top-hat railTightening torque of fixing screwsIC/EN 60715 top-hat railTightening torque of fixing screwsIC/EN 60715 top-hat railIC/EN 6071	Enclosure height		mm	105
Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Twin-purpose terminals Terminal protection Image: Transmark of the terminals Tightening torque of fixing screws Image: Transmark of terminals Image: Transmark of terminals Image: Transmark of terminals Tightening torque of fixing screws Image: Transmark of terminals Image: Transmark of terminal protection Image: Transmark of terminals Tightening torque of fixing screws Image: Transmark of terminals Image: Transmark of terminals Transmark of terminals Image: Transmark of terminal	Mounting width per pole		mm	17.7
Terminals top and bottom Image: Comparison of the second of the seco	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) #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	A	40
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	8.1

Static heat dissipation, non-current-dependent	$P_{\nu s}$	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

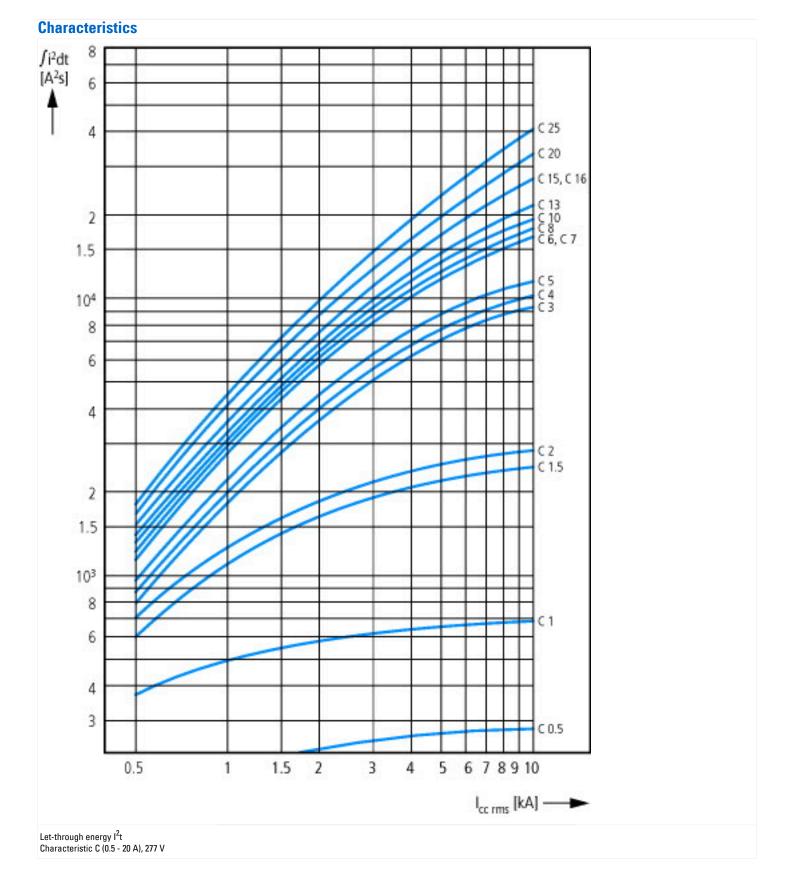
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

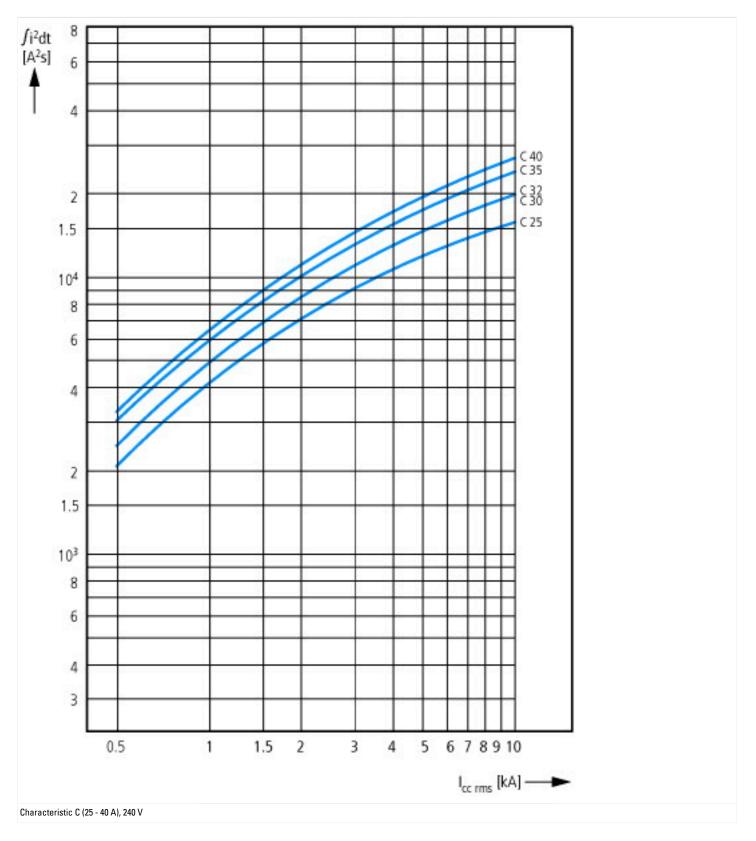
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

Release characteristic			C
Number of poles (total)			2
Number of protected poles			2
Rated current	А		40
Rated voltage	V		415
Rated insulation voltage Ui	V		440
Rated impulse withstand voltage Uimp	k۱	V	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	A	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	A	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	A	15
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	A	15
Voltage type			AC
Frequency	Ha	z	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	mm ²	1 - 25
Connectable conductor cross section solid-core	mm ²	1 - 25

Approvals Product Standards IEC/EN 60947-2; UL 489; CSA-C22.2 No. 5-09; CE marking UL File No. E235139 DIVQ UL Category Control No. 204453 CSA File No. 1432-01 CSA Class No. North America Certification UL listed, CSA certified Specially designed for North America Yes, suitable as BCPD Suitable for Feeder circuits, branch circuits Yes Current Limiting Circuit-Breaker 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