

**Miniature circuit breaker (MCB), 30A, 1p, D-Char, AC**

**Part no.** FAZ-D30/1-NA  
**Catalog No.** 102113  
**Eaton Catalog No.** FAZ-D30/1-NA



Similar to illustration

## Delivery program

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			D
Application			Switchgear for export to North America (UL-listed)
Rated current	$I_n$	A	30
Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Product range			FAZ-NA

## Technical data

### Electrical

Standards			UL 489, CSA C22.2 No. 5 IEC 60947-2
Rated operational voltage	$U_e$	V	
	$U_e$	V AC	277/480 Y
		V DC	60
Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Characteristic			B, C, D
Selectivity Class			3
Lifespan	Operations		> 20000
Direction of incoming supply			as required

### Mechanical

Standard front dimension		mm	45
Enclosure height		mm	105
Terminal protection			Finger and back-of-hand proof to BGV A2
Mounting width per pole		mm	17.7
Mounting			IEC/EN 60715 top-hat rail
Degree of Protection			IP20, IP40 (when fitted)
Terminals top and bottom			Twin-purpose terminals
Mounting position			As required

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	30
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	$P_{vid}$	W	2.7
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 6.0

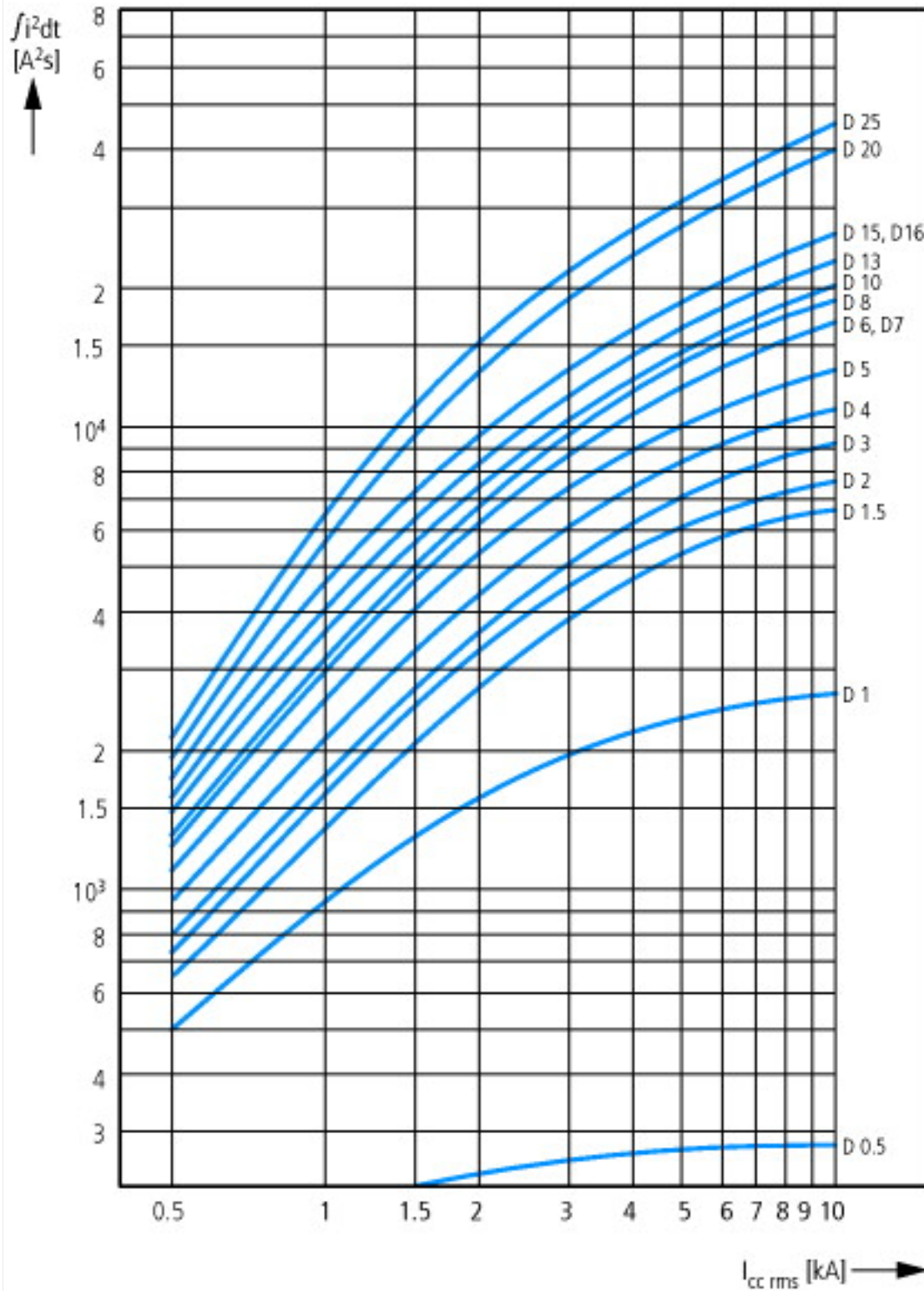
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)			
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ec!@ss8.1-27-14-19-01 [AAB905011])			
Release characteristic			D
Number of poles (total)			1
Number of protected poles			1
Nominal rated current	A		30
Nominal rated voltage	V		240
Rated short-circuit breaking capacity I <sub>cn</sub> EN 60898 at 230 V	kA		0
Rated short-circuit breaking capacity I <sub>cn</sub> EN 60898 at 400 V	kA		0
Rated short-circuit breaking capacity I <sub>cu</sub> IEC 60947-2 at 230 V	kA		15
Rated short-circuit breaking capacity I <sub>cu</sub> IEC 60947-2 at 400 V	kA		15
Voltage type			AC
Current limiting class			3
Frequency	Hz		50 - 60
Concurrently switching N-neutral			No
Suitable for flush-mounted installation			No
Over voltage category			3
Pollution degree			2
Width in number of modular spacings			1
Built-in depth	mm		70.5
Additional equipment possible			Yes
Degree of protection (IP)			IP20

## Approvals

Product Standards			IEC/EN 60947-2; 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: -

## Characteristics



Let-through energy  $I^2t$   
 Characteristic D (0.5 - 20 A), 277 V



Characteristic D (25 - 40 A), 240 V