



**Miniature circuit breaker (MCB), 1A, 3p, D-Char, AC**



**Part no.** FAZ-D1/3-RT  
**Catalog No.** 102298  
**Eaton Catalog No.** FAZ-D1/3-RT  
**EL-Nummer (Norway)** 1691874

Similar to illustration

**Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	$I_n$	A	1
Rated switching capacity acc. to IEC/EN 60947-2	$I_{cu}$	kA	15
Product range			FAZ-RT

**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 voltage according to IEC/EN 60947-2	$U_n$	V AC	415
Rated voltage according to UL	$U_n$	V AC	480Y/277
Rated switching capacity acc. to IEC/EN 60947-2	$I_{cu}$	kA	15
Characteristic			B, C, D
Selectivity Class			3
lifespan			
Lifespan	Operations		> 20000
Direction of incoming supply			as required

**Mechanical**

Standard front dimension		mm	45
Enclosure height		mm	105
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
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)
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	1
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	$P_{vid}$	W	2.3
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.

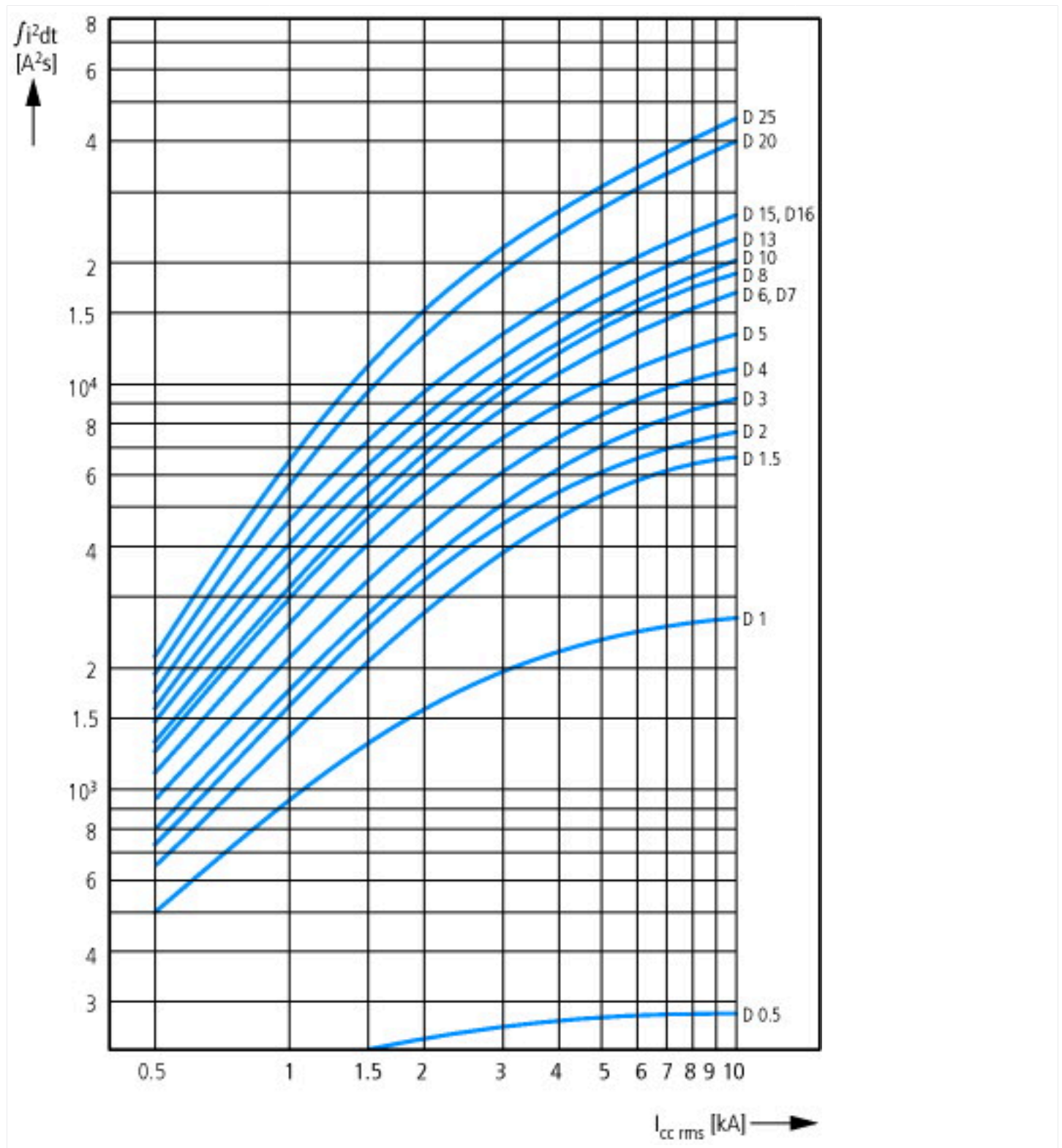
## Technical data ETIM 6.0

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) (ecl@ss8.1-27-14-19-01 [AAB905011])		
Release characteristic		D
Number of poles (total)		3
Number of protected poles		3
Nominal rated current	A	1
Nominal rated voltage	V	415
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		3
Built-in depth	mm	70.5
Additional equipment possible		Yes
Degree of protection (IP)		IP20

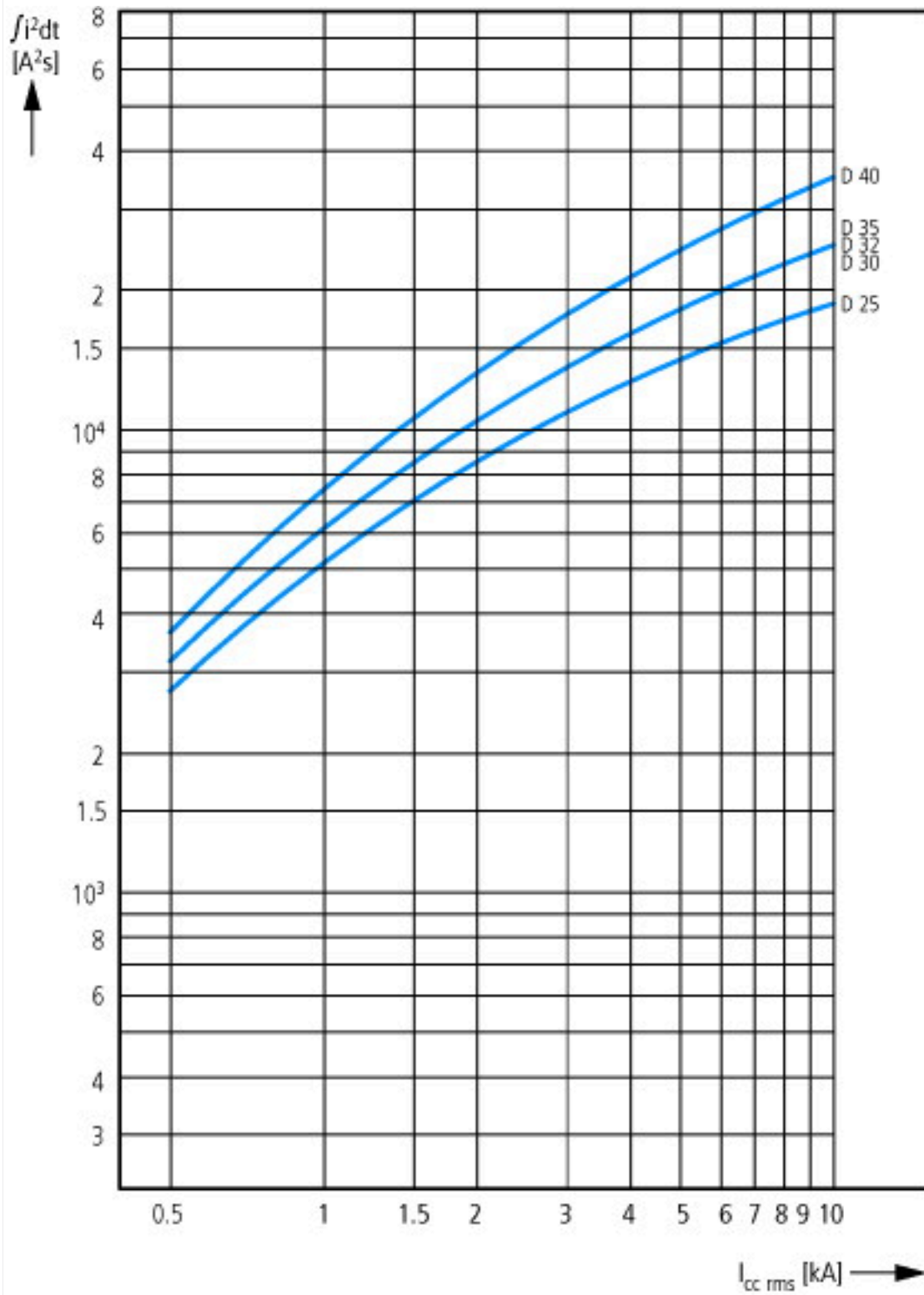
## Approvals

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