



**Miniature circuit breaker (MCB), 50A, 1p, K-Char, AC**

**Part no.** FAZ-K50/1  
**Catalog No.** 278604  
**Alternate Catalog No.** FAZ-K50/1  
**EL-Nummer (Norway)** 0001695321

Similar to illustration

### Delivery program

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			K
Application			Switchgear for industrial and advanced commercial applications
Rated current	$I_n$	A	50
Rated switching capacity acc. to IEC/EN 60947-2	$I_{cu}$	kA	10
Product range			FAZ

### Technical data

#### Electrical

Standards			IEC/EN 60947-2 IEC/EN 60898
Rated operational voltage	$U_e$	V	
	$U_e$	V AC	240
		V DC	60 (per pole)
Rated switching capacity acc. to IEC/EN 60947-2	$I_{cu}$	kA	10
Operational switching capacity		kA	7.5
Characteristic			B, C, D, K, S, Z
Max. back-up fuse		A gL/gG	125
Selectivity Class			3
lifespan			
Lifespan	Operations		> 10000
Direction of incoming supply			as required

#### Mechanical

Standard front dimension		mm	45
Enclosure height		mm	80
Mounting width per pole		mm	17.5
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
Terminal capacities		mm <sup>2</sup>	
		mm <sup>2</sup>	1 x 25
		mm <sup>2</sup>	2 x 10
Thickness of busbar material		mm	0.8 ... 2
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	50
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0

Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	4.9
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-40
Operating ambient temperature max.		°C	75
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity

## 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			K
Number of poles (total)			1
Number of protected poles			1
Rated current		A	50
Rated voltage		V	230
Rated insulation voltage U <sub>i</sub>		V	440
Rated impulse withstand voltage U <sub>imp</sub>		kV	4
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	10
Rated short-circuit breaking capacity I <sub>cu</sub> IEC 60947-2 at 400 V		kA	10
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			1
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 <sup>2</sup>	1 - 25
Connectable conductor cross section solid-core		mm <sup>2</sup>	1 - 25

## Approvals

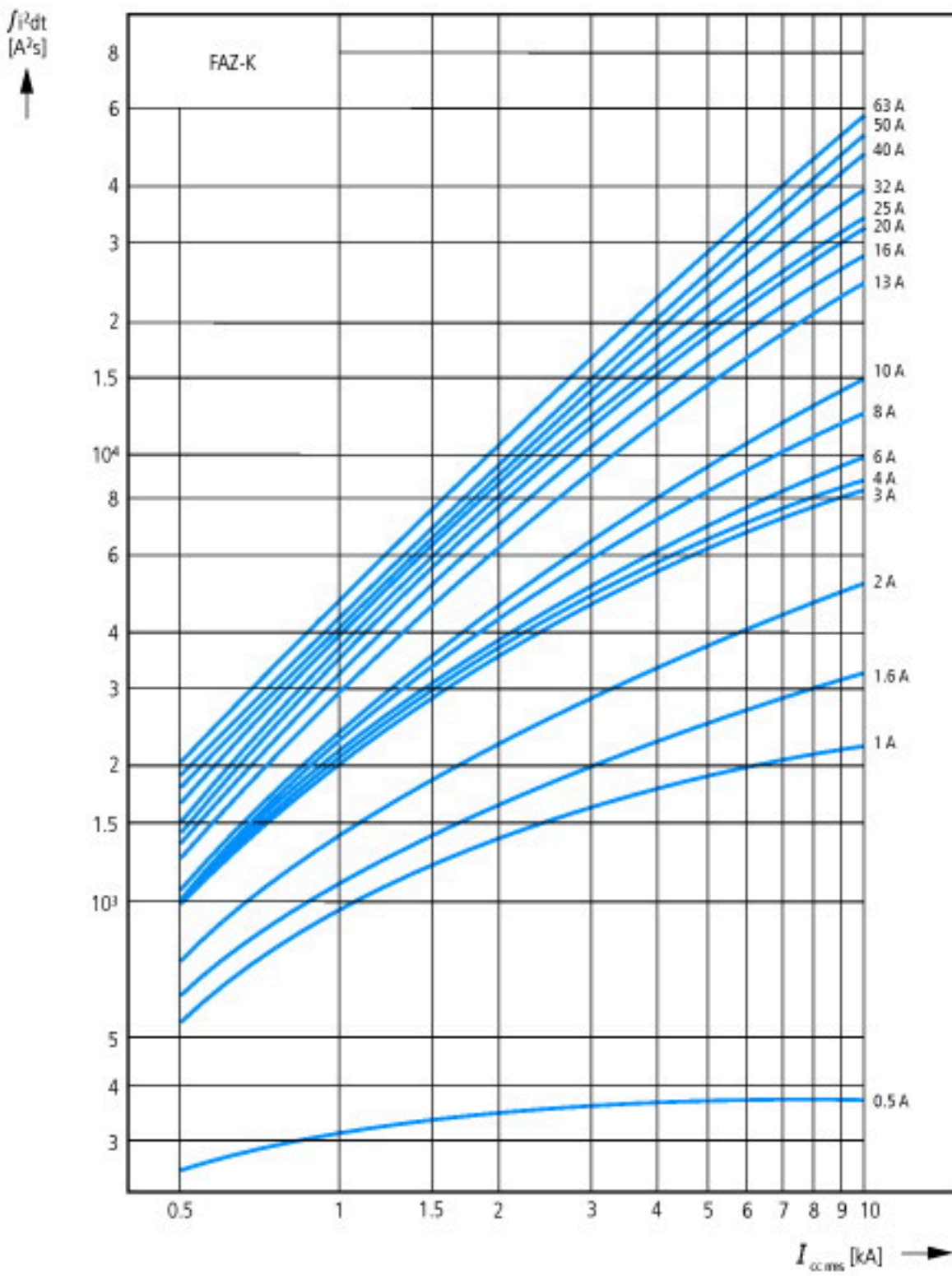
Product Standards			IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.			E177451
UL Category Control No.			QVNU2, QVNU8
CSA File No.			204453
CSA Class No.			3215-30
North America Certification			UL recognized, CSA certified
Conditions of Acceptability			Supplementary Protector only
Suitable for			Branch Circuits; not as BCPD
Current Limiting Circuit-Breaker			No
Max. Voltage Rating			277 VAC; 48 VDC
Degree of Protection			IEC: IP20; UL/CSA Type: -

# Characteristics



Let-through energy  $I^2t$   
According to IEC/EN 60898





Let-through current  $i_p$   
According to IEC/EN 60898





Tripping characteristic at 30 °C:  
 K according to IEC/EN 60947

## Dimensions



## Additional product information (links)

### AWA1220-1755 Circuit-breaker

AWA1220-1755 Circuit-breaker

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/17550701.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/17550701.pdf)

Temperature dependency, derating

[https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ.pdf](https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating%20table%20FAZ.pdf)