

Over current switch, 40A, 1p, D-Char, AC

Part no. FAZ-D40/1-RT Article no. 102156 Catalog No. FAZ-D40/1-RT



Similar to illustration

Delivery program

Basic function			Miniature circuit breakers
Number of poles			1 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	40
Rated switching capacity acc. to IEC/EN 60947-2		kA	15
Productrange			FAZ-RT

Technical data

Electrical

Rated operational voltage Ue VAC 240 VDC 48 Rated switching capacity acc. to IEC/EN 60947-2 Characteristic Selectivity Class Lifespan Operations Operations Direction of incoming supply Mechanical Standard front dimension Enclosure height My DC 48 B, C, D 3 20000 as required Machanical Standard front dimension mm 45 Enclosure height	
Rated switching capacity acc. to IEC/EN 60947-2 kA 15 Characteristic Selectivity Class Lifespan Operations Operations Direction of incoming supply Mechanical Standard front dimension N D C 48 KA 15 B, C, D 3 Characteristic Standard front dimension N D C 48 D C C C C C C C C C C C C C C C C C C	
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	
Characteristic Selectivity Class Lifespan Operations > 20000 Direction of incoming supply Mechanical Standard front dimension B, C, D 3 Applications Standard front dimension B, C, D Applications Standard front dimension B, C, D Applications Applications Standard front dimension Applications B, C, D Applications Applications Standard front dimension Applications B, C, D Applications Applications Applications Applications B, C, D Applications A	
Selectivity Class Lifespan Operations > 20000 Direction of incoming supply as required Mechanical Standard front dimension mm 45	
Lifespan Operations > 20000 Direction of incoming supply as required Mechanical Standard front dimension mm 45	
Direction of incoming supply Mechanical Standard front dimension as required mm 45	
Mechanical Standard front dimension mm 45	
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	In	Α	40
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	3.9
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])

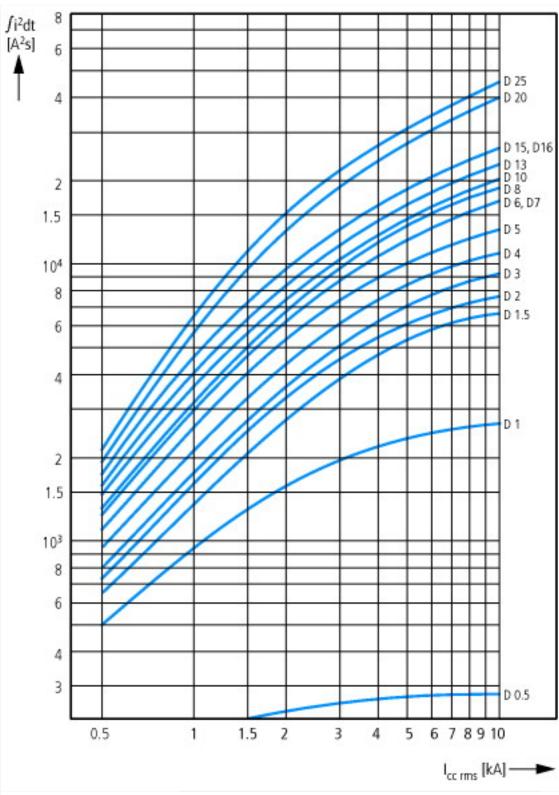
Number of poles (total) 1 Number of protected poles 1 Nominal rated current A 40 Nominal rated voltage V 240 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 0 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 5 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC AC Current limiting class 3 3 Frequency Hz 50 - 60 Concurrently switching N-neutral No No Suitable for flush-mounted installation No 3 Over voltage category No 3 Pollution degree 2 2 Width in number of modular spacings 1 1	Release characteristic		D
Nominal rated current Nominal rated voltage Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 2400 V Voltage type Current limiting class Frequency Hz 50 - 60 Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree A 40 40 40 40 40 A 40 A 0 A A 0 A 4 4 4 4 4 4 4 4 4 4 4 4	Number of poles (total)		1
Nominal rated voltage Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Current limiting class Frequency Hz 50 - 60 Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree V 240 240 240 240 240 240 240 24	Number of protected poles		1
Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rate Short-circuit breaking capacity Icu I	Nominal rated current	Α	40
Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V RATED STATES	Nominal rated voltage	V	240
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC Current limiting class Frequency Hz 50 - 60 Concurrently switching N-neutral No Suitable for flush-mounted installation Over voltage category Pollution degree AB 15 AC AC AC AC No 2 2	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC Current limiting class Frequency Hz 50 - 60 Concurrently switching N-neutral No Suitable for flush-mounted installation Over voltage category Pollution degree 15 No 15 No 2	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
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 AC AC AC AC 3 4 50 - 60 No 2	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
Current limiting class Frequency Hz 50 - 60 Concurrently switching N-neutral No Suitable for flush-mounted installation Over voltage category Pollution degree 3 3 2 3 3 3 4 50 - 60 No No 2 2	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Frequency Hz 50 - 60 Concurrently switching N-neutral No Suitable for flush-mounted installation No Over voltage category 3 Pollution degree 2	Voltage type		AC
Concurrently switching N-neutral No Suitable for flush-mounted installation No Over voltage category 3 Pollution degree 2	Current limiting class		3
Suitable for flush-mounted installation No Over voltage category 3 Pollution degree 2	Frequency	Hz	2 50 - 60
Over voltage category 3 Pollution degree 2	Concurrently switching N-neutral		No
Pollution degree 2	Suitable for flush-mounted installation		No
	Over voltage category		3
Width in number of modular spacings	Pollution degree		2
	Width in number of modular spacings		1
Built-in depth mm 70.5	Built-in depth	mm	m 70.5
Additional equipment possible Yes	Additional equipment possible		Yes
Degree of protection (IP)	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 I²t Characteristic D (0.5 - 20 A), 277 V

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