DATASHEET - FAZ-D16/3N



Miniature circuit breaker (MCB), 16A, 3Np, D-Char, AC



Part no.FAZ-D16/3NCatalog No.278998Eaton Catalog No.FAZ-D16/3NEL-Nummer0001691221(Norway)

Similar to illustration

Technical data

Electrical			
Standards			IEC/EN 60947-2 IEC/EN 60898
Rated operational voltage	U _e	V	
	U _e	V AC	240/415
		V DC	60 (per pole)
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
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 ²	
		mm ²	1 x 25
		mm ²	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	А	16
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	7.2
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	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
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

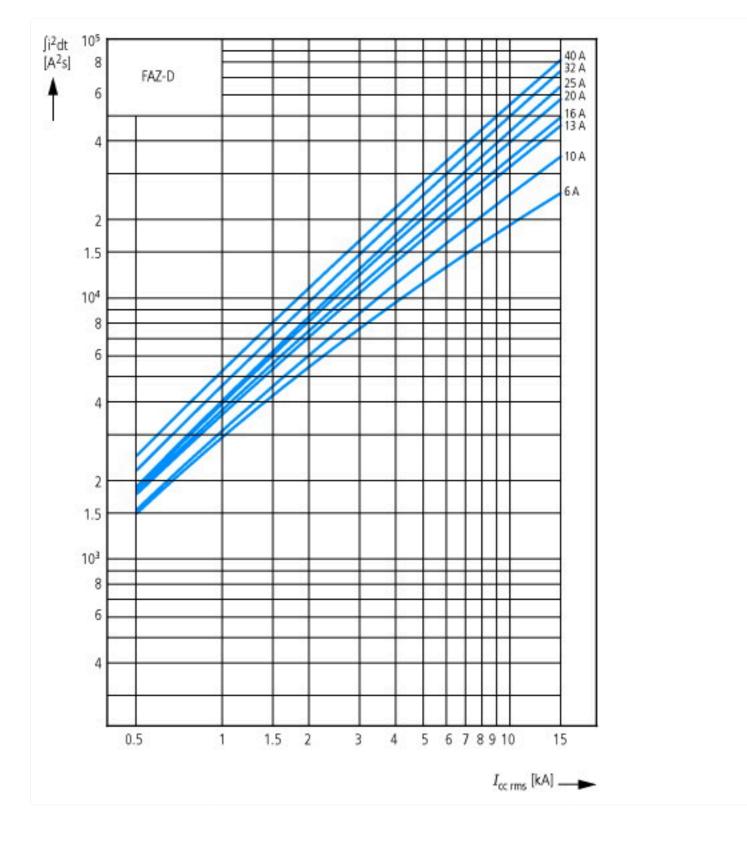
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

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 D Number of poles (total) 4 Number of poles (total) 3 Number of protected poles 3 Rated current CM 3 Rated current CM 40 Rated voltage CM 40 Rated solution voltage Uin KV 40 Rated solution voltage Uin KV 40 Rated solution voltage Uin Cookers at 200 V KA 10 Rated solution capacity Ice E06989 at 200 V KA 10 Rated solutic circuit breaking capacity Ice E06987 at 200 V KA 10 Rated solutic circuit breaking capacity Ice E06987 at 200 V KA 10 Rated solutic circuit breaking capacity Ice E06987 at 200 V KA 10 Notage type CM 10 Voltage type CM 10 Voltage type CM 10 Suitable for flush-mounted installation Solution Courrent switching N-neutral MA 10 Polution degree Solution 10 <tr< th=""><th>(eci@5510.0.1-27-14-13-01 [AAD303014])</th><th></th><th></th></tr<>	(eci@5510.0.1-27-14-13-01 [AAD303014])		
Number oprotected polesImage of the set o	Release characteristic		D
Rate durint A A Rate doubage V 40 Rate doubage UI V 40 Rate disulation voltage UIm V 40 Rate disubitive withstand voltage UIm V 40 Rate disort-circuit breaking capacity loc IN 60088 at 200 V V 40 Rate disort-circuit breaking capacity loc IN 60088 at 200 V KA 10 Rate disort-circuit breaking capacity loc IN 60089 at 200 V KA 10 Rate disort-circuit breaking capacity loc IN 60089 at 200 V KA 10 Rate disort-circuit breaking capacity loc IN 60089 at 200 V KA 10 Nate disort-circuit breaking capacity loc IN 60089 at 200 V KA 10 Notage type KA 10 10 Voltage type KA 10 10 Stable for flush-mounted installation KA 10 10 Courcently switching N-mounted MA 10 10 Notage type KA 10 10 10 Polytope KA 10 10 10	Number of poles (total)		4
Rated voltage V 40 Rated isulation voltage Ui V 40 Rated isulation voltage Uinp V 40 Rated short-circuit breaking capacity Icn EN 60898 at 230 V K 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V K 10 Rated short-circuit breaking capacity Icn EN 60898 at 230 V K 10 Rated short-circuit breaking capacity Icn EN 60898 at 230 V K 10 Rated short-circuit breaking capacity Icn EN 60898 at 230 V K 10 Rated short-circuit breaking capacity Icn EN 60898 at 230 V K 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 V K 10 Rated short-circuit breaking capacity Icn EN 60994-2 at 230 V K 10 Notage type K K 10 Voltage type K K 10 Current limiting class K K 10 Subble for flush-mounted installation K K 10 Coursently switching N-neutral K K 10 Pultion degree K K 10 10 Additional equipment posxible	Number of protected poles		3
Rated insulation voltage Uim V 40 Rated inpulse withstand voltage Uimp KV 40 Rated short-circuit breaking capacity Icn EN 60989 at 230 V KA 10 Rated short-circuit breaking capacity Icn EN 60989 at 400 V KA 10 Rated short-circuit breaking capacity Icn EC 60947-2 at 230 V KA 10 Votage type KA 10 Votage type KA 10 Frequency KA 10 Current limiting class 50 60 Sutable for flush-mounted installation KA 10 Concurrently switching N-neutral KA 10 Pollution degree No 10 Additional equipment possible KA 10 With in number of modular spacings KA 10 Buil-in depth mm 10	Rated current	А	16
Rated inpulse within a noticing elimination of the second secon	Rated voltage	V	400
Rated short-circuit breaking capacity lot EN 60898 at 230 V KA 0 Rated short-circuit breaking capacity lot EN 60898 at 400 V KA 0 Rated short-circuit breaking capacity lot EN 60997-2 at 230 V KA 15 Rated short-circuit breaking capacity lot IEC 60947-2 at 400 V KA 15 Voltage type KA 50 60 Voltage type KA 50 60 Current limiting class S0 60 60 Suitable for flush-mounted installation KA 50 60 Over voltage category KA 50 60 Pollution degree KA 50 60 Additional equipment possible KA 50 60 With in number of modular spacings KA 50 60 Built-in depth KA 50 60 60 KA KA 50 60 <td>Rated insulation voltage Ui</td> <td>V</td> <td>440</td>	Rated insulation voltage Ui	V	440
Rated short-circuit breaking capacity lon EN 60898 at 400 V KA I Rated short-circuit breaking capacity lou IEC 60947-2 at 230 V KA I Rated short-circuit breaking capacity lou IEC 60947-2 at 400 V KA I Voltage type KA I Voltage type KA I Frequency KA I I Suitable for flush-mounted installation I I I Concurrently switching N-neutral I I I Pollution degree I I I I Additional equipment possible I I I I Buil-in degth Im Im IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V KA 5 Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V KA 5 Votage type C C Frequency KA 50-60 Current limiting class S S Suitable for flush-mounted installation S S Concurrently switching N-neutral S S Pollution degree S S Additonal equipment possible S S With in number of modular spacings S S Buit-in depth S Ma	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	10
Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V KA 15 Votage type AC KA Frequency KA 50-60 Current limiting class KA 50-60 Sutable for flush-mounted installation KA 50-60 Concurrently switching N-neutral KA 50-60 Over votage category KA 50-60 Pollution degree KA 50-60 Additional equipment possible KA 50-60 With in number of modular spacings KA 50-60 Buit-in depth KA 50-60	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10
Votage type AC Frequency Hz 50-60 Current limiting class S S Suitable for flush-mounted installation S S Concurrently switching N-neutral S S Over votage category S S Pollution degree S S Additional equipment possible S S Woth in number of modular spacings S S Built-in depth Sm S	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
FrequencyHz50-60Current limiting class50-60Suitable for flush-mounted installation50-60Concurrently switching N-neutralNoOver voltage categoryYesPollution degree2Additional equipment possibleYesWitch in number of modular spacings60Built-in depthmm	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
Current limiting class3Suitable for flush-mounted installationNoConcurrently switching N-neutralYesOver voltage category3Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsMmmBuilt-in depthmmm	Voltage type		AC
Suitable for flush-mounted installationNoConcurrently switching N-neutralYesOver voltage category3Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsMoBuilt-in depthmm	Frequency	Hz	50 - 60
Concurrently switching N-neutralMark PolOver voltage category3Pollution degree2Additional equipment possibleYesWitch in number of modular spacingsConcurrent MarkBuilt-in depthmm	Current limiting class		3
Over voltage category3Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsMBuilt-in depthmm	Suitable for flush-mounted installation		No
Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsMmBuilt-in depthMm	Concurrently switching N-neutral		Yes
Additional equipment possibleYesWidth in number of modular spacingsMBuilt-in depthMMM	Over voltage category		3
Width in number of modular spacings Image: Constraint of modular spacings Built-in depth Image: Constraint of modular spacings	Pollution degree		2
Built-in depth mm 70.5	Additional equipment possible		Yes
	Width in number of modular spacings		4
Degree of protection (IP) IP20	Built-in depth	mm	70.5
	Degree of protection (IP)		IP20
Ambient temperature during operating °C -25 - 75	Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired mm ² 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section solid-core	mm²	1 - 25

Characteristics











Dimensions

