#### **DATASHEET - FAZT-D15/1**



Miniature circuit breaker (MCB), 15A, 1p, D-Char, AC

Part no. FAZT-D15/1 Catalog No. 240818 Eaton Catalog No. FAZT-D15/1



Similar to illustration

#### Technical data Electrical

Standards     IEC/EN 60947-2       Rated voltage according to IEC/EN 60947-2     Un     VAC     20/41/15       Rated switching capacity acc. to IEC/EN 60947-2     Icu     KA     20       Rated insulation voltage     Ui     V     40       Rated frequency     F     Bz     50/60       Characteristic     Bc, D     Bc, D       Direction of incoming supply     sa required       Iffespan     Departions     S     \$4000       Mechanical     Operations     S     \$1000       Standard front dimension     S     Mm     45       Enclosure height     Mm     45       Mounting width per pole     Mm     45       Mounting     17.5     Uick attachment with 3 latch positions for top-hat rail IEC/EN 60715       Degree of Protection     P20     Ivvin-purpose terminals       Terminal top and bottom     P20     Ivvin-purpose terminals       Terminal protection     Image: and back-of-hand proof according to BGV A3 and ÖVE-EN 6       Terminal capacities     Image: and back-of-hand proof according to BGV A3 and ÖVE-EN 6       Tightening torque of fixing screws     Mm     N/m     max. 24       Thickness of busbar material     N/m     acceptive 0.5 SU	Liectrical			
Rated switching capacity acc. to IEC/EN 60947-2  Rated insulation voltage  Rated frequency  f Hz 50/60  Characteristic  Direction of incoming supply  lifespan  Electrical  Mechanical  Mechanical  Mechanical  Mechanical  Standard front dimension  Enclosure height  Mounting width per pole  Mounting width per pole  Mounting width per pole  Mounting  Degree of Protection  Terminals top and bottom  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Ti	Standards			IEC/EN 60947-2
Rated insulation voltage  Rated frequency  Characteristic  Direction of incoming supply  Iifespan  Electrical  Mechanical  Mechanical  Mechanical  Terminal gwidth per pole  Mounting  Degree of Protection  Terminals top and bottom  Terminal protection  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Value   ### 440  ### 50/60  ### 8, C, D  ### 8, C, D  ### 8, O  ### 94000  ###	Rated voltage according to IEC/EN 60947-2	$U_{n}$	V AC	240/415
Rated frequency  Characteristic  Characteristic  Direction of incoming supply  Iffespan  Electrical  Mechanical  Mechanical  Operations  Terminal protection  Terminal protection  Terminal capacities  Tightening torque of fixing screws  The characteristic  Tightening torque of fixing screws  Tightening torque of fixi	Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	20
Characteristic       B, C, D         Direction of incoming supply       as required         lifespan       P         Electrical       Operations       ≥ 4000         Mechanical       Operations       ≥ 10000         Mechanical         Standard front dimension       mm       45         Enclosure height       mm       80         Mounting width per pole       mm       17.5         Mounting       Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715       1P20         Terminals top and bottom       IP20       Twin-purpose terminals         Terminal protection       Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6       Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6         Terminal capacities       mm²       1 - 25         Tightening torque of fixing screws       N/m       max. 2.4         Thickness of busbar material       mm       0.8 (exept N 0.5 SU)	Rated insulation voltage	Ui	V	440
Direction of incoming supply       as required         lifespan       as required         Electrical       Operations       ≥ 4000         Mechanical       Operations       ≥ 10000         Mechanical         Standard front dimension       mm       45         Enclosure height       mm       80         Mounting width per pole       mm       17.5         Mounting       Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715       1P20         Terminals top and bottom       Terminal protection       Twin-purpose terminals         Terminal protection       Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6         Terminal capacities       mm²       1 - 25         Tightening torque of fixing screws       N/m       max. 2.4         Thickness of busbar material       mm       0.8 (exept N 0.5 SU)	Rated frequency	f	Hz	50/60
lifespan Operations ≥ 4000   Mechanical Operations ≥ 10000   Mechanical   Standard front dimension mm 45   Enclosure height mm 80   Mounting width per pole mm 17.5   Mounting Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715 1P20   Terminals top and bottom Twin-purpose terminals   Terminal protection Twin-purpose terminals   Terminal protection Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6   Terminal capacities mm² 1 - 25   Tightening torque of fixing screws N/m max. 2.4   Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Characteristic			B, C, D
Electrical Operations Operations ≥ 4000  Mechanical  Standard front dimension mm 45  Enclosure height mm 80  Mounting width per pole mounting of Protection IP20  Terminals top and bottom Terminal protection  Terminal protection mm² 1- 25  Tightening torque of fixing screws mm wax 2.4  Thickness of busbar material menusions ≥ 4000  Operations ≥ 4000  Image ≥ 4000  Autour operations ≥ 10000  Image ≥ 4000  Autour operations ≥ 10000  Image ≥ 4000  Autour operations	Direction of incoming supply			as required
Mechanical       Operations       ≥ 10000         Mechanical       Mechanical         Standard front dimension       mm       45         Enclosure height       mm       80         Mounting width per pole       mm       17.5         Mounting       Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715         Degree of Protection       IP20         Terminals top and bottom       Twin-purpose terminals         Terminal capacities       Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6         Terminal capacities       mm²       1 - 25         Tightening torque of fixing screws       N/m       max. 2.4         Thickness of busbar material       mm       0.8 (exept N 0.5 SU)	lifespan			
Mechanical         Standard front dimension       mm       45         Enclosure height       mm       80         Mounting width per pole       mm       17.5         Mounting       Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715         Degree of Protection       IP20         Terminals top and bottom       Twin-purpose terminals         Terminal protection       Finger- and back-of-hand proof according to BGV A3 and ÕVE-EN 6         Terminal capacities       mm²       1 - 25         Tightening torque of fixing screws       N/m       max. 2.4         Thickness of busbar material       mm       0.8 (exept N 0.5 SU)	Electrical	Operations		≧ 4000
Standard front dimension mm 45  Enclosure height mm 80  Mounting width per pole mm 17.5  Mounting Degree of Protection IP20  Terminals top and bottom Terminal protection Terminal protection IP20  Terminal protection Terminal capacities mm² 1 - 25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material Mm 0.8 (exept N 0.5 SU)	Mechanical	Operations		≧ 10000
Enclosure height mm 80  Mounting width per pole mm 17.5  Mounting Cuick attachment with 3 latch positions for top-hat rail IEC/EN 60715  Degree of Protection IP20  Terminals top and bottom Terminal protection Terminal protection Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Terminal capacities mm² 1 - 25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Mechanical			
Mounting width per pole mm 17.5  Mounting Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715  Degree of Protection IP20  Terminals top and bottom Twin-purpose terminals  Terminal protection Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Terminal capacities mm² 1 - 25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Standard front dimension		mm	45
Mounting  Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715  IP20  Terminals top and bottom  Terminal protection  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715  IP20  Twin-purpose terminals  Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Top mm²  1 - 25  N/m max. 2.4  Thickness of busbar material  mm 0.8 (exept N 0.5 SU)	Enclosure height		mm	80
Degree of Protection  Terminals top and bottom  Terminal protection  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Tightening torque of fixing screws  Thickness of busbar material  Tightening torque of fixing screws  Tig	Mounting width per pole		mm	17.5
Terminals top and bottom  Terminal protection  Terminal capacities  Terminal capacities  Tightening torque of fixing screws  Thickness of busbar material  Twin-purpose terminals  Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Town mm²  1 - 25  N/m max. 2.4  Thickness of busbar material  mm 0.8 (exept N 0.5 SU)	Mounting			Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715
Terminal protection  Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6  Terminal capacities  mm² 1 - 25  Tightening torque of fixing screws  N/m max. 2.4  Thickness of busbar material  mm 0.8 (exept N 0.5 SU)	Degree of Protection			IP20
Terminal capacities mm² 1 - 25  Tightening torque of fixing screws N/m max. 2.4  Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Terminals top and bottom			Twin-purpose terminals
Tightening torque of fixing screws N/m max. 2.4 Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Terminal protection			Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6
Thickness of busbar material mm 0.8 (exept N 0.5 SU)	Terminal capacities		$mm^2$	1 - 25
	Tightening torque of fixing screws		N/m	max. 2.4
Mounting position As required	Thickness of busbar material		mm	0.8 (exept N 0.5 SU)
	Mounting position			As required

# Design verification as per IEC/EN 61439

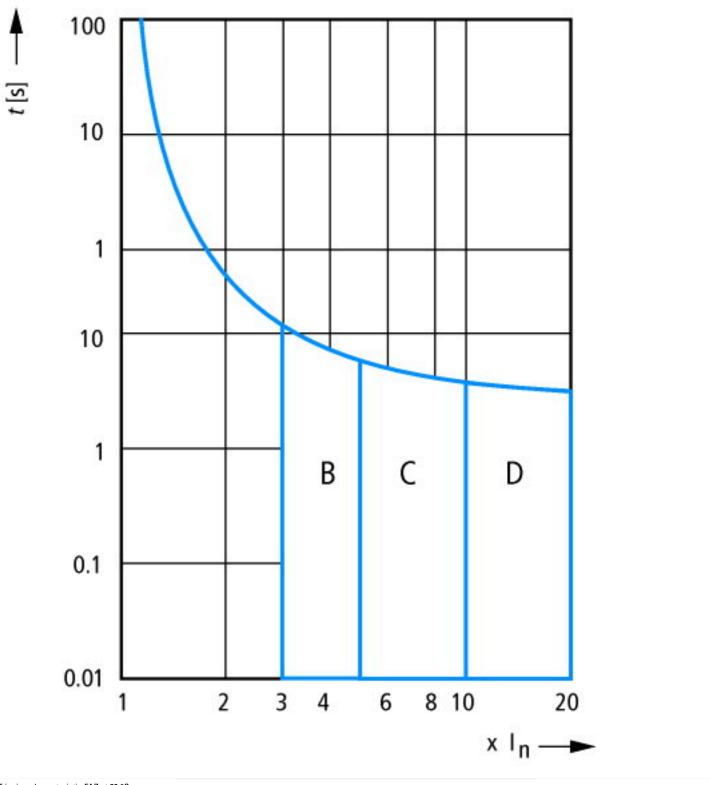
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	15
Heat dissipation per pole, current-dependent	$P_{\text{vid}}$	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2.1
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
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
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 $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( $			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

Technical data Ethiyi 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)		1			
Number of protected poles		1			
Rated current	Α	15			
Rated voltage	V	240			
Rated insulation voltage Ui	V	440			
Rated impulse withstand voltage Uimp	kV	4			
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	15			
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	15			
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	25			
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	25			
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	mm²	1 - 25			

## **Characteristics**



Tripping characteristic FAZ at 30 °C: B, C, D to IEC/EN 60898

## **Dimensions**

