#### DATASHEET - FAZ-D6/2-NA

Part no. Catalog No.

**EL-Nummer** 

(Norway)

No.

Alternate Catalog

Miniature circuit breaker (MCB), 6 A, 2p, characteristic: D

FAZ-D6/2-NA

FAZ-D6/2-NA

102184

1691649



Similar to illustration

#### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			2 pole
Tripping characteristic			D
Application			Switchgear for export to North America (UL-listed)
Rated current	In	А	6
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	15
Product range			FAZ-NA

# Technical data

Rated operational worksage     LGE 0084-2       Rated operational worksage     U     CERCOMPACE       Land     Va     V/ROV       Rated operational worksage according to EC/EN 60947-2     Un     VA     S00       Rated worksage according to EC/EN 60947-2     Un     VA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947-2     Laud     KA     S00       Rated worksage according to EC/EN 60947     Ma     S00     S00       Rated worksage according to EC/EN 60947     Ma     S00     S00       Rated worksage according to EC/EN 60947     Ma     S00     S00       Roted worksage according to EC/EN 60947     Ma     S00     S00       Roted worksage according to EC/EN 60947     Ma     S00     S00   <	Electrical			
Image: space of the space of	Standards			
IndexVDC0Rade valage according to IC/EN 60947-2VaVAC40/277Rade switching capacity acc. to IC/EN 60947-2VaKa50Salectivity ClassVaKa6.07.0Salectivity ClassVaNa7.07.0IterspanVaVa7.07.0Standard front dimensionVaVa7.07.0Standard front dimensionVaMa7.07.0Standard front dimensionMaMa7.07.0Mounting width per poleMa7.07.07.0Standard front dimensionMa7.07.07.0Standard front dimensionMa7.0	Rated operational voltage	Ue	V	
Rated voltage according to IEC/EN 60947-2VnVAC47CRated voltage according to UVnVAC80/77Rated voltage according to UEC/EN 60947-2VaKa50CharacteristicVaKa50Selectivity ClassVaNa50Selectivity ClassVaVa100LifespanVaVa2000DeretoriaVaVa100Selectivity ClassVaVa100Selectivity ClassVaVa100Deretoria functioning supplyVaVa100Nated affort dimensionMaSa100Mouting width per poleMaSa100Mouting width per poleMaSa100Remain affort dimensionMaSa100Remain affort dimensionMaSa100Remain affort dimensionMaSa100Mouting width per poleMaSa100Remain affort dimensionMaSa100Remain affort dimensionMaMa100Remain affort dimension		Ue	V AC	277/480 Y
Aread voltage according to UL       VL       VAC       800/277         Rated working capacity acc. to IEC/EN 60947-2       Leu       KA       5         Characteristic       B. C. D       B. C. D         Selectivity Class       B. C. D       Selectivity Class         Lifespan       Operations       Selectivity Class       seregired         Direction of incoming supply       Operations       Selectivity Class       seregired         Vechanical       Monting work per pole       mm       45         Mounting width per pole       Monting work per pole       Mm       15         Mounting to reduction       FC/EN 60715 top-hat rail       FC/EN 60715 top-hat rail         Degree of Protection       Finger and back-of-hand proof to BGV A2       Finger and back-of-hand proof to BGV A2         Terminal protection       Mine       Finger and back-of-hand proof to BGV A2         Tight-night torque of fixing screws       N/M       N/M       N/M 80 bi-in)			V DC	60
Reta switching capacity acc. to IEC/EN 60947-2         Image: Participa for the space of t	Rated voltage according to IEC/EN 60947-2	Un	V AC	415
Characteristic B, C, D Selectivity Class B, Selectivity Select	Rated voltage according to UL	Un	V AC	480Y/277
Selectivity Class Infespan Inf	Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA	15
Integran       Operations       Image: Section of incoming supply       > 20000         Direction of incoming supply       Image: Section of incoming supply       Image: Section of incoming supply         Mechanical       Image: Section of incoming supply       Image: Section of incoming supply         Mechanical       Image: Section of incoming supply       Image: Section of incoming supply         Section of incoming supply       Image: Section of incoming supply       Image: Section of incoming supply         Mounting width per pole       Image: Section of incoming sectin of incoming section of incoming sectin of incoming sect	Characteristic			B, C, D
LifespanOperations> 2000Direction of incoming supply> a requiredMechanicalmm4Standard front dimensionmm15Enclosure heightmm15Mounting width per pole16Mounting16Degree of ProtectionE/CEN 60715 top-hat railTerminal stop and bottom10Terminal protectionFiner and back-of-hand proof to BGV A2Tightening torque of fixing screwsN/mSix 24 Nir Six 24 Nin (21 Ib-in) stow 23 Nin (25 Ib-in) stow 23 Nin (25 Ib-in)	Selectivity Class			3
Direction of incoming supply         is required           Mechanical         srequired           Standard front dimension         mm         45           Enclosure height         mm         105           Mounting width per pole         mm         17.7           Mounting         EC/FN 60715 top-hat rail         EC/FN 60715 top-hat rail           Degree of Protection         Freminals top and bottom         Freminals top and bottom         Finger and back-of-hand proof to BGV A2           Tightening torque of fixing screws         N/m         N/m         Standards Wills-inity #18-12 AWG: 24 Nm (25 Ib-in) #18-12 AWG: 24 Nm (25 Ib-in) #10-8 AWG: 24 Nm (25 Ib-in)	lifespan			
Mechanical         mm         45           Standard front dimension         mm         105           Enclosure height         mm         17.7           Mounting width per pole         mm         17.7           Degree of Protection         Mounting         120.1140 (when fitted)           Terminals top and bottom         Mounting         120.1140 (when fitted)           Terminal protection         Mm         120.1140 (when fitted)           Tightening torque of fixing screws         Mm         mm           Wim         mm         mm         mm           Mounting         Mm         Mm         Mm           Mounting         Mm         17.7         Mm           Degree of Protection         Mm         162(FM 60715 top-hat rail         Mm           Terminal protection         Mm         Mm         Mm         Mm           Tightening torque of fixing screws         Mm         mm         mm         Mm           Mm         Mm         Mm         mm         mm         mm           Mm         Mm         Mm         mm         mm         mm           Mm         Mm         Mm         mm         mm         mm           Mm </td <td>Lifespan</td> <td>Operations</td> <td></td> <td>&gt; 20000</td>	Lifespan	Operations		> 20000
Standard front dimensionmm45Enclosure heightmm105Mounting width per polemm17.7MountingIEC/EN 60715 top-hat railDegree of ProtectionImmIEC/EN 60715 top-hat railTerminals top and bottomImmImmTerminal protectionImmImmTerminal protectionImmImmTightening torque of fixing screwsImm	Direction of incoming supply			as required
Enclosure height Enclosure height Enclosure height Enclosure height Mounting width per pole Mounting Degree of Protection Terminals top and bottom Terminal protection Tightening torque of fixing screws Mounting	Mechanical			
Mounting width per pole       mm       7.7         Mounting       EC/EN 60715 top-hat rail         Degree of Protection       Fee       Fee         Terminals top and bottom       Fee       Finger and back-of-hand proof to BGV A2         Tightening torque of fixing screws       N/m       max. 2.4         Wile       #18-12 AWG: 2.4 Nm (21 lb-in)       #18-12 AWG: 2.4 Nm (36 lb-in)	Standard front dimension		mm	45
Mounting       Image: Comparison of the sector	Enclosure height		mm	105
Degree of Protection       P20, 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         Winner Strews       N/m         Market Strews	Mounting width per pole		mm	17.7
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: 2.4 Nm (25 lb-in) #6 AWG: 4 Nm (36 lb-in)	Mounting			IEC/EN 60715 top-hat rail
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)	Degree of Protection			IP20, IP40 (when fitted)
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)	Terminals top and bottom			Twin-purpose terminals
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)	Terminal protection			Finger and back-of-hand proof to BGV A2
Mounting position As required	Tightening torque of fixing screws		N/m	UL: #18-12 AWG: 2.4 Nm (21 lb-in) #10-8 AWG: 2.8 Nm (25 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	In	А	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2.3
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	-25
Operating ambient temperature max.		°C	75
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
EC/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 b observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must b 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)

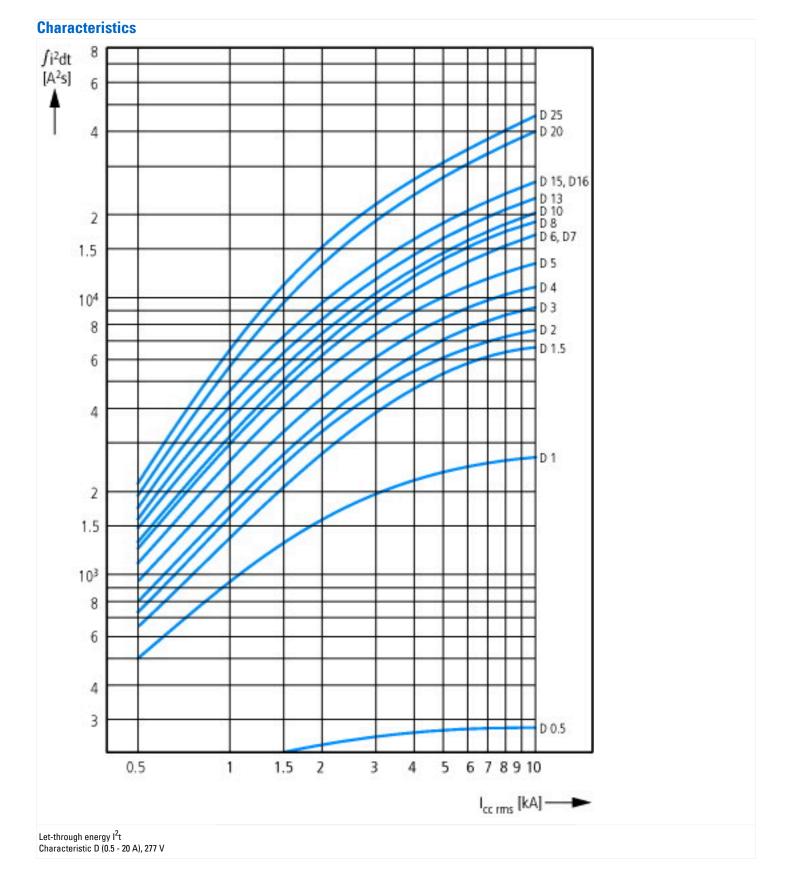
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

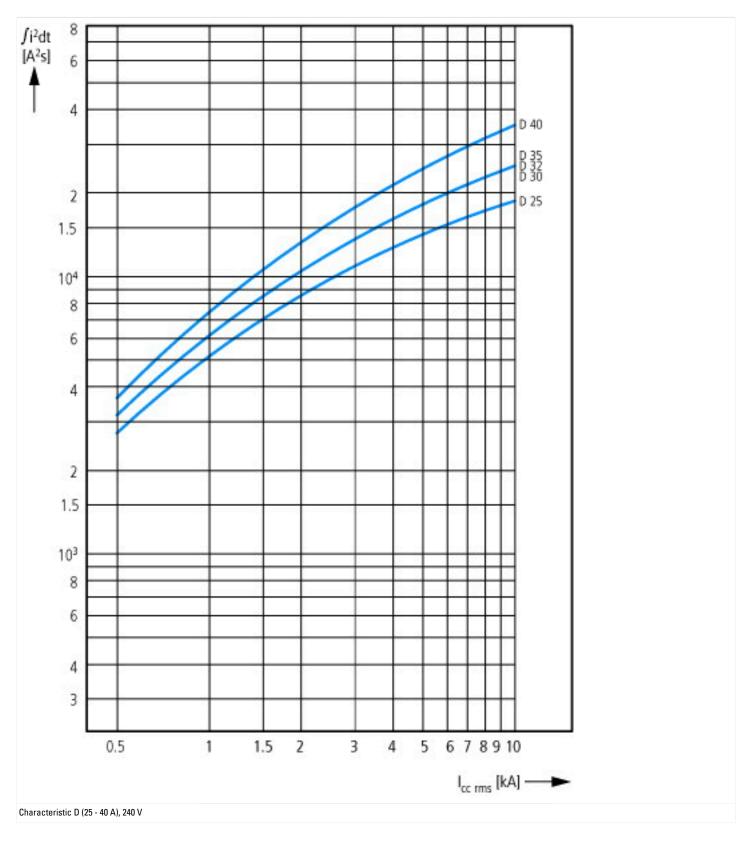
Release characteristic		D
Number of poles (total)		2
Number of protected poles		2
Rated current	А	6
Rated voltage	V	415
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
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
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		2

Built-in depth	mm	70.5
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25

## **Approvals**

Product Standards	IEC/EN 60947-2; EN 45545-2; IEC 61373; 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: -





# Additional product information (links)

Temperature dependency, derating

https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ-NA-RT.pdf