### DATASHEET - AFDD-20/2/C/003-LI/A-OL



### Arc Fault Detection Device, 2 poles, C20A-OL, 30mA, KV, type A

Powering Business Worldwide\*

Part no. AFDD-20/2/C/003-LI/A-0L Catalog No. 187217

Similar to illustration

# **Technical data Electrical**

Electrical			
Types conform to			IEC/EN 62606 IEC/EN 61009
Current test marks			As per inscription
Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	10
Limit values of the operating voltage			
Test circuit		V AC	170 - 264
Sensitivity			Pulse-current sensitive
Rated short-circuit strength	I <sub>cn</sub>	kA	10
lifespan			
Electrical	Operations		≧ 4000
Mechanical	Operations		≧ 20000
Rated short-circuit strength	I <sub>cn</sub>	kA	10
Mechanical			
Standard front dimension		mm	45
Device height		mm	80
Built-in width		mm	54 (3TE)
Mounting			Tristable slide catch enables removal from existing combination.
Degree of Protection			IP20 switches IP40 enclosed
Terminals top and bottom			Twin-purpose terminals
Terminal protection			Busbar tag shroud as per VBG4, ÖVE-EN 6
Thickness of busbar material		mm	0.8 - 2
Admissible ambient temperature range		°C	-25 - +40
Permissible storage and transport temperatures		°C	-35 - +60
Climatic proofing			according to IEC/EN 61009
Contact position indicator			red / green

## **Design verification as per IEC/EN 61439**

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Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	20
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	8
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
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) / Earth leakage circuit breaker with auxiliary device (EC002695)

Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Earth leakage circuit breaker with auxiliary device (ecl@ss10.0.1-27-14-22-13 [ADI479007])

Number of poles		2
Rated voltage	V	230
Rated current	Α	20
Rated fault current	Α	0.03
Leakage current type		A
Current limiting class		3
Rated short-circuit breaking capacity acc. EN 61009	kA	10
Rated short-circuit breaking capacity IEC 60947-2	kA	0
Frequency	Hz	50
Release characteristic		C
Concurrently switching N-neutral		No
Over voltage category		3
Pollution degree		2
Width in number of modular spacings		3
Built-in depth	mm	67
Additional equipment attached at delivery		Fire protection switch
Rated switch current auxiliary device	Α	0
Rated voltage auxiliary device	V	230
Control voltage type auxiliary equipment		AC
Degree of protection (IP)		IP20