



 PRODUCT-DETAILS

DS-ARC1 C20 A30

DS-ARC1 C20 A30 Arc fault detection device integrated with RCBO



General Information

Extended Product Type:	DS-ARC1 C20 A30
Product ID:	2CSA255103R1204
EAN:	8012542735113
Catalog Description:	DS-ARC1 C20 A30 Arc fault detection device integrated with RCBO
Long Description:	DS-ARC1 is a 1P+N arc fault detection device (AFDD) with an integrated RCBO in three modules, for the protection against earth arc faults, parallel arc faults, series arc faults, overvoltage, short-circuit currents, overload, earth fault currents
Display Name:	DS-ARC1 C20 A30

ABB EcoSolutions

Environmental Product Declaration - EPD: 9AKK108470A1707

Technical

Type of Residual Current: Type A

Test Voltage (Ut):	170 ... 264 V
Dielectric Test Voltage:	2.5 kV
Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}):	7.5 kA
Rated Residual Breaking Capacity (I_{Δm}):	6 kA
Rated Service Short-Circuit Breaking Capacity (I_{cs}):	6 kA
Power Supply Connection:	Arbitrary
Contact Position Indication:	Red ON / Green OFF
Energy Limiting Class:	3
Electrical Endurance:	10000 cycle
Mechanical Endurance:	20000 cycle
Number of Protected Poles:	1
Number of Poles:	1P+N
Number of Modular Spacings per DIN Rail:	3
Fault Indication:	Blue Flag on Toggle
Operating Characteristic:	Instantaneous
Position of Neutral Terminals:	Right
Tightening Torque:	2.8 N·m
Accessory Type:	Auxiliary contact Auxiliary/Signal contact Shunt trip Undervoltage release Overvoltage release Bottom fitting auxiliary contact
Actuator Type:	Toggle
Housing Type:	Insulation group I, RAL 7035
Screw Terminal Type:	Failsafe Bi-directional Cylinder-lift Terminal
Accessories Available:	Yes
Mounting Position of Accessories:	Right
Number of Batteries:	0
Connecting Capacity:	Busbar 10 mm ² Rigid 1...25 mm ² Flexible 1...16 mm ²
Wire Stripping Length:	12 mm
Terminal Type:	Screw Terminals

Electrical

Tripping Characteristic:	C
Rated Operational Voltage:	230...240 V AC
Rated Insulation Voltage (U_i):	500 V
Rated Impulse Withstand Voltage (U_{imp}):	4 kV
Input Voltage Type:	AC
Rated Current (I_n):	20 A

Rated Residual Current:	30 mA
Rated Short-Circuit Capacity:	6 kA
Rated Frequency (f):	50 ... 60 Hz
Power Loss:	Total 4.2 W
Overvoltage Category:	III

Design

Number of Modules:	3
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Material Compliance

RoHS Declaration:	9AKK107046A6530
RoHS Information:	Following EU Directive 2011/65/EU
RoHS Date:	20180903
REACH Declaration:	9AKK108467A9482
REACH Information:	True - contains substances > 0.1 mass percentage
REACH Date:	20240429
Conflict Minerals Reporting Template (CMRT):	9AKK108468A3363
WEEE Category:	5. Small Equipment (No External Dimension More Than 50 cm)
WEEE B2C / B2B:	Business To Consumer

Environmental

Ambient Air Temperature:	Operation -25 ... 55 °C Storage -40 ... 70 °C
Reference Ambient Air Temperature:	30 °C
Degree of Protection:	Terminals IP20 Housing IP40
Pollution Degree:	2
Environmental Conditions:	28 cycles with 55 °C / 90-96 % and 25 °C / 95-100 %
Resistance to Vibrations:	20 Cycles with Load 0.8 In: 5g or 0.2mm 5 ... 150 Hz
Resistance to Shock acc. to IEC 60068-2-27:	30g 2 shocks 13 ms

Dimensions

Width in Number of Modular Spacings:	3
Product Net Width:	52.5 mm
Product Net Height:	85 mm
Product Net Depth / Length:	69 mm

Product Net Weight:	240 g
Built-In Depth (t ₂):	69 mm
Dimension Diagram:	9AKK107046A6174

Engineering

EPLAN Data:	9AAC190691_EPLAN
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Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	56 mm
Package Level 1 Height:	95 mm
Package Level 1 Depth / Length:	79 mm
Package Level 1 Gross Weight:	0.270 kg
Package Level 1 EAN:	8012542735113

Ordering

Minimum Order Quantity:	1 piece
E-Number (Finland):	3211096
E-Number (Norway):	1683248

Certificates and Declarations

Declaration of Conformity - CE:	9AKK107046A6529
IMQ Certificate:	9AKK107046A6176
KC Certificate:	9AKK108466A5927
VDE Certificate:	9AKK107046A6538

Installation

Instructions and Manuals:	9AKK107046A6173 9AKK106930A8986
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Popular Downloads

Data Sheet, Technical Information:	9AKK107046A7200
Mechanical Drawings:	9AKK107046A6174 9AKK107046A6175

External Classifications and Standards

ETIM 8:	EC002695 - Earth leakage circuit breaker with auxiliary device
ETIM 9:	EC002695 - Earth leakage circuit breaker with auxiliary device
eClass:	V11.0 : 27142213
Object Classification Code:	F
Standards:	IEC/EN 62606 IEC/EN 61009-1 IEC/EN 61009-2-1

Categories

Products > Low Voltage Products and Systems > Modular DIN Rail Products > Protection Against Arc Faults AFDDs > Arc Fault Detection Devices with Integrated Overcurrent and Residual Current Protection - AFDD+RCBO

