



AD810J

RCBO 1P+N 4.5kA B-10A 30mA AC Class

Technical properties

Architecture

Neutral position	right
Number of protected poles	1
Number of poles	2 P
Type of pole	1P+N
Curve	B

Configuration

Number of modules	2
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Connectivity

Top connection alignment for modular devices	Aligned terminal
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Main electrical features

Rated short circuit breaking capacity I_{cn} AC according IEC60898-1	4.5 kA
Rated operational voltage U_e	240 V
Frequency	50 Hz

Voltage

Rated insulation voltage	500 V
Max operating voltage	240 V
Rated impulse withstand voltage	4000 V

Electric current

Rated residual operating current	30 mA
Rated current	10 A
Withstand not tripping on 8-20 μ s wave	250 A
Breaking and opening capacity	4.5 kA
min/maxi threshold value of the AC thermal operation	1.13 / 1.45 I_n
Magnetic regulating current	3 / 5 I_n
Rated short circuit breaking capacity I_{cn} under 230V AC according IEC60898-1	4.5 kA
Rated ultimate short-circuit breaking capacity I_{cu} under 230V AC IEC 60947-2	6 kA
Rated ultimate short-circuit breaking capacity I_{cu} under 240V AC IEC 60947-2	6 kA

Electric current / temperature

Rating current -25°C	12 A
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Rating current -20°C	11.8 A
Rating current -15°C	11.7 A
Rating current -10°C	11.5 A
Rating current -5°C	11.3 A
Rating current 0°C	11.1 A
Rating current 5°C	11 A
Rating current 10°C	10.8 A
Rating current 15°C	10.6 A
Rating current 20°C	10.4 A
Rating current 25°C	10.2 A
Rating current 30°C	10 A
Rating current 35°C	9.9 A
Rating current 40°C	9.7 A
Rating current 45°C	9.6 A
Rating current 50°C	9.4 A
Rating current 55°C	9.3 A
Rating current 60°C	9.1 A

Current correction factors

Correction factor of rating current for 2 devices placed side-by-side	1
Correction factor of rating current for 3 devices placed side-by-side	0.95
Correction factor of rating current for 4 and 5 devices placed side-by-side	0.9
Correction factor of rating current for 6 devices placed side-by-side	0.85

Dimensions

Depth of installed product	68 mm
Height of installed product	83 mm
Width of installed product	35 mm

Frequency

Frequency	50 Hz
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Selectivity

Maximal rating current of downstream aM fuse for selectivity on short-circuit	1 A
Maximal rating current of downstream gL fuse for selectivity on short-circuit	2 A
Minimal rating current of upstream aM fuse for selectivity on short-circuit	12 A
Minimal rating current of upstream gL fuse for selectivity on short-circuit	12 A

Power

Total power loss under IN	3.4 W
Power loss per pole at In	2.8 W

Tripping

Protected against nuisance tripping	No
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Short-time delayed tripping	No
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Endurance

Electric endurance in number of cycles	2000
Number of mechanical operations	2000

Installation, mounting

Tightening torque	2,1Nm
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Connection

Connection cross-section at output with screw, for flexible conductor	1 / 16 mm ²
Connection cross-section at output with screw, for massive conductor	1 / 25 mm ²
Connection cross-sect. flexible conductor	1 / 16mm ²
Connection cross-sect. rigid cable	1 / 25mm ²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 25 mm ²
Connection cross-section of the access with screws, with flexible conductor	1 / 16 mm ²
Type of connection	with screw

Standards

Standard text	EN 61009-1
European directive WEEE	concerned

Safety

Protection index IP	IP20
Residual current type	AC
REACH conform	No
Halogen free	No

Use conditions

Operating temperature	-25...40 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I ² t	3
Altitude	2000 m
Air humidity protection	for all climates
Storage/transport temperature	-25...70 °C

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Temperature of calibration	30 °C
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