



AF970J

RCBO 1P+N 6kA C-20A 300mA A Class

Technical Features

Architecture

Type of pole	1P+N
Curve	C

Electric current

Rated current	20 A
Rated residual operating current I_{dn}	300 mA
Rated current -25°C	22.70 A
Rated current at -20°C	22.50 A
Rated current -15°C	22.20 A
Rated current -10°C	22 A
Rated current -5°C	21.80 A
Rated current at 0°C	21.50 A
Rated current 5°C	21.30 A
Rated current 10°C	21 A
Rated current 15°C	20.80 A
Rated current at 20°C	20.50 A
Rated current 25°C	20.30 A
Rated current 30°C	20 A
Rated current 35°C	19.80 A
Rated current at 40°C	19.60 A
Rated current at 50°C	19.20 A
Rated current 55°C	19 A
Rated current 60°C	18.80 A
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	0.90
Correction factor of rating current for 6 devices placed side by side	0.85
Min./max. threshold value of the AC thermal operation	1.13 - 1.45 A
Rated short-circuit breaking capacity I_{cn} under 230 V AC according to IEC 60898-1	6 kA

Safety

Residual current type	A
Ingress Protection (IP) class	IP20

Main electrical attributes

Rated short-circuit breaking capacity I_{cn} AC according to IEC 60898-1	6 kA
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Connectivity

Type of connection	Screw terminal
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Voltage

Rated insulation voltage U_i	500 V
Rated impulse withstand voltage U_{imp}	4000 V
Max. operating voltage	240 V
Rated operational voltage U_e	240 - 240 V
Overvoltage category according to IEC 60947-1	3

Power

Total power loss under I_N	5.20 W
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Frequency

Frequency	50 - 50 Hz
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Use conditions

Max. Altitude	2000 m
Class of energy limitation I^2t	3

Endurance

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

Connection

Cross-section flexible conductor	1 - 16 mm ²
Cross-section rigid conductor	1 - 25 mm ²
Cross-section of input with screws, for flexible conductors	1 - 16 mm ²
Cross-section of input with screws, for massive conductors	1 - 25 mm ²
Cross-section of output with screws, for flexible conductors	1 - 16 mm ²
Cross-section of output with screws, for massive conductors	1 - 25 mm ²

Installation, mounting

Nominal tightening torque	2.10 - 2.10 Nm
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Capacity

Number of modules	2
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Installation, mounting

Type of top connection for modular devices	Screw terminal
Type of bottom connection for modular devices	biconnect

Dimensions

Height	83 mm
Width	35 mm
Depth	68 mm

Use conditions

Operating temperature	-25 - 40 °C
Storage/transport temperature	-25 - 70 °C

Connection

Cross-section of input and output with screws, for flexible conductors	1 - 16 mm ²
Cross-section of input and output with screws, for massive conductors	1 - 25 mm ²

Sustainability

RoHS conform	Yes
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