



AE990B

RCBO 1P+N 6kA C-40A 100mA AC Class

Technical Features

Architecture

Type of pole	1P+N
Curve	C

Electric current

Rated current	40 A
Rated residual operating current I _{dn}	100 mA
Rated current -25°C	46.90 A
Rated current at -20°C	46.30 A
Rated current -15°C	45.60 A
Rated current -10°C	45 A
Rated current -5°C	44.40 A
Rated current at 0°C	43.80 A
Rated current 5°C	43.10 A
Rated current 10°C	42.50 A
Rated current 15°C	41.90 A
Rated current at 20°C	41.30 A
Rated current 25°C	40.60 A
Rated current 30°C	40 A
Rated current 35°C	39.40 A
Rated current at 40°C	38.80 A
Rated current at 45°C	38.20 A
Rated current at 50°C	37.50 A
Rated current 55°C	36.90 A
Rated current 60°C	36.20 A
Correction factor of rating current for 2 devices placed side by side	1
Min./max. threshold value of the AC thermal operation	1.13 - 1.45 A
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

Safety

Residual current type	AC
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
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Electric current

Rated service breaking capacity I _{cs} AC according to IEC 60898-1	6 kA
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Voltage

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	11.50 W
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Frequency

Frequency	50 - 50 Hz
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Use conditions

Max. Altitude	2000 m
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Installation, mounting

Nominal tightening torque down terminal	2.10 - 2.10 Nm
Nominal tightening torque top terminal	2.10 - 2.10 Nm

Use conditions

Class of energy limitation I ² t	3
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Endurance

Electric endurance in number of cycles	2000
Number of mechanical operations	1000

Connection

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

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

Use conditions

Degree of pollution according to IEC 60664 / IEC 60947-2	2
Air humidity protection	For all climates

Sustainability

RoHS conform	Yes
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