



AE970B

**RCBO 1P+N 6kA C-20A 100mA AC Class**

**Technical Features**

**Architecture**

Type of pole	1P+N
Curve	C

**Electric current**

Rated current	20 A
Rated residual operating current I <sub>dn</sub>	100 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 45°C	19.40 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
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 <sub>cn</sub> 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 <sub>i</sub>	500 V
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**Electric current**

Rated service breaking capacity I <sub>cs</sub> AC according to IEC 60898-1	6 kA
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**Voltage**

Rated impulse withstand voltage U <sub>imp</sub>	4000 V
Max. operating voltage	240 V
Rated operational voltage U <sub>e</sub>	240 - 240 V
Overtoltage category according to IEC 60947-1	3
Type voltage supply	AC

**Power**

Total power loss under I <sub>N</sub>	5.60 W
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**Frequency**

Frequency	50 - 50 Hz
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<b>Use conditions</b>	
Max. Altitude	2000 m
<b>Installation, mounting</b>	
Nominal tightening torque down terminal	2.10 - 2.10 Nm
Nominal tightening torque top terminal	2.10 - 2.10 Nm
<b>Use conditions</b>	
Class of energy limitation I <sup>2</sup> t	3
<b>Endurance</b>	
Electric endurance in number of cycles	2000
Number of mechanical operations	2000
<b>Connection</b>	
Cross-section rigid conductor	1 - 25 mm <sup>2</sup>
<b>Installation, mounting</b>	
Nominal tightening torque	2.10 - 2.10 Nm
<b>Capacity</b>	
Number of modules	2
<b>Installation, mounting</b>	
Type of top connection for modular devices	Screw terminal
Type of bottom connection for modular devices	biconnect
<b>Dimensions</b>	
Height	83 mm
Width	35 mm
Depth	68 mm
<b>Use conditions</b>	
Operating temperature	-25 - 40 °C
Storage/transport temperature	-25 - 70 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Air humidity protection	For all climates
<b>Sustainability</b>	
RoHS conform	Yes