NB420A

MCB 4P 10kA B-20A 4M

Technical properties

Architecture

Number of protected poles	4
Number of poles	4 P
Curve	B

Functions

Concurrently switching N-neutral	No

Configuration

Number of modules	4

Connectivity

Top connection alignement for modular devices	Aligned terminal
Bottom connection alignement for modular devices	Aligned terminal

Main electrical features

Rated short circuit breaking capacity Icn AC according IEC60898-1	10 kA
Rated operational voltage Ue	230 / 400 V
Type of supply voltage	AC
Frequency	50/60 Hz

Voltage

Rated insulation voltage	500 V
Rated impulse withstand voltage	4000 V

Electric current

Rated current	20 A
Rated service breaking capacity Ics AC according IEC 60898-1	10 kA
min/maxi threshold value of the AC thermal operation	1.13 / 1.45 In
Magnetic regulating currrent	3 / 5 In
min/maxi threshold value of the DC magnetic operation	3 / 7.5 In
min/maxi threshold value of the DC thermal operation	1.13 / 1.45 In
Breaking capacity on 1 pole for IT 400V NF 60947-2	3 kA
Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1	10 kA

Electric current / temperature

Rating current 20°C	21.6 A
Rating current 30°C	20 A
Rating current 35°C	19.2 A
Rating current 40°C	18.4 A
Rating current 45°C	17.6 A
Rating current 50°C	16.8 A
Rating current 55°C	16 A
Rating current 60°C	15.2 A
Rating current 70°C	13.6 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
Correction factor of magnetic tripping with 100 Hz	1.1
Correction factor of magnetic tripping with 200 Hz	1.2
Correction factor of magnetic tripping with 400 Hz	1.5
Correction factor of magnetic tripping with 60 Hz	1

Dimensions

Depth of installed product	70 mm
Height of installed product	83 mm
Width of installed product	70 mm

Frequency

Frequency	50 to 60 Hz

Power

Total power loss under IN	11.2 W
Power loss per pole at In	2.8 W

Endurance

Electric endurance in number of cycles	10000
Number of mechanical operations	20000

Installation, mounting

Type of top connection for modular devices	with screw
Tightening torque	2,8Nm
Type of Bottom Connection for modular devices	BIconnect

Connection

Connection cross-section of input and output with screws, for massive conductors	1 / 35 mm²
Connection cross section of access and exit with screws, for flexible conductor	1 / 25 mm²
Type of connection	with screw

Standards

Standard text	EN 60898-1
European directive WEEE	not concerned

Safety

Protection index IP	IP20

Use conditions

Operating temperature	-25...70 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I²t	3
Altitude	2000 m
Air humidity protection	for all climates
Storage/transport temperature	-25...80 °C