



AFH816F

RCBO.1P+N 4.5kA C-16A 300mA HI

Product Datasheet

Architecture

Neutral position	left
Number of protected poles	1
Number of poles	2 P
Type of pole	1P+N
Curve	C

Connectivity

Top connection alignment for modular devices	Shifted 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	300 mA
Rated current	16 A
Withstand not tripping on 8-20 μ s wave	3000 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	5 / 10 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	18,5 A
Rating current -20°C	18,3 A
Rating current -15°C	18,1 A
Rating current -10°C	17,9 A
Rating current -5°C	17,7 A
Rating current 0°C	17,4 A
Rating current 5°C	17,2 A
Rating current 10°C	17 A
Rating current 15°C	16,7 A
Rating current 20°C	16,5 A
Rating current 25°C	16,2 A
Rating current 30°C	16 A
Rating current 35°C	15,8 A
Rating current 40°C	15,6 A
Rating current 45°C	15,4 A
Rating current 50°C	15,2 A
Rating current 55°C	15 A
Rating current 60°C	14,8 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

Frequency

Frequency	50 Hz
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Selectivity

Maximal rating current of downstream aM fuse for selectivity on short-circuit	4 A
Maximal rating current of downstream gL fuse for selectivity on short-circuit	10 A
Minimal rating current of upstream aM fuse for selectivity on short-circuit	20 A
Minimal rating current of upstream gL fuse for selectivity on short-circuit	25 A

Power

Total power loss under I _N	5,2 W
Power loss per pole at I _N	3,8 W

Tripping

Protected against nuisance tripping	no
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Endurance

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

Dimensions

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

Installation, mounting

Tightening torque	2,1Nm
360° product mounting position	yes

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	not concerned

Safety

Protection index IP	IP20
Residual current type	A HI

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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