



AFC825F

RCBO 1P+N 4.5kA C-25A 300mA AC

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 |
|--|------------------|

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 | 25 A |
| Withstand not tripping on 8-20 μ s wave | 250 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 | 28,2 A |
| Rating current -20°C | 27,9 A |
| Rating current -15°C | 27,6 A |
| Rating current -10°C | 27,4 A |
| Rating current -5°C | 27,1 A |
| Rating current 0°C | 26,8 A |
| Rating current 5°C | 26,5 A |
| Rating current 10°C | 26,2 A |
| Rating current 15°C | 25,9 A |
| Rating current 20°C | 25,6 A |
| Rating current 25°C | 25,3 A |
| Rating current 30°C | 25 A |
| Rating current 35°C | 24,8 A |
| Rating current 40°C | 24,5 A |
| Rating current 45°C | 24,3 A |
| Rating current 50°C | 24 A |
| Rating current 55°C | 23,8 A |
| Rating current 60°C | 23,5 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 |
|-----------|-------|

Selectivity

| | |
|---|------|
| Maximal rating current of downstream aM fuse for selectivity on short-circuit | 6 A |
| Maximal rating current of downstream gL fuse for selectivity on short-circuit | 12 A |
| Minimal rating current of upstream aM fuse for selectivity on short-circuit | 32 A |
| Minimal rating current of upstream gL fuse for selectivity on short-circuit | 40 A |

Power

| | |
|---------------------------------------|-------|
| Total power loss under I _N | 6,5 W |
| Power loss per pole at I _n | 4,7 W |

Tripping

| | |
|-------------------------------------|----|
| Protected against nuisance tripping | no |
|-------------------------------------|----|

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 | AC |

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 |

temperatur

| | |
|----------------------------|-------|
| Temperature of calibration | 30 °C |
|----------------------------|-------|