

HLF499S

| Technical characteristics |  |
| :---: | :---: |
| Architecture |  |
| Number of protected poles | 4 |
| Number of poles | 4 P |
| Type of pole | 4 P |
| Curve | C |
| Functions |  |
| Concurrently switching N -neutral | No |
| Configuration |  |
| Number of modules | 6 |
| 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 | 415 V |
| Type of supply voltage | AC |
| Frequency | $50 / 60 \mathrm{~Hz}$ |
| Voltage |  |
| Rated insulation voltage | 500 V |
| Rated impulse withstand voltage | 6000 V |
| Electric current |  |
| Rated current | 125 A |
| Rated service breaking capacity Ics AC according IEC 60898-1 | 7.5 kA |
| min/maxi threshold value of the $A C$ thermal operation | 1.13 / 1.45 ln |
| Magnetic regulating currrent | $5 / 10 \mathrm{ln}$ |
| Rating current $40^{\circ} \mathrm{C}$ according to IEC 60947 | 125 A |
| Rating current $45^{\circ} \mathrm{C}$ according to IEC 60947 | 122 A |
| Rating current $50^{\circ} \mathrm{C}$ according to IEC 60947 | 119 A |
| Rating current $55^{\circ} \mathrm{C}$ according to IEC 60947 | 115.7 A |
| Rating current $60^{\circ} \mathrm{C}$ according to IEC 60947 | 112 A |
| Rating current $65^{\circ} \mathrm{C}$ according to IEC 60947 | 109.1 A |Breaking capacity on 1 pole for IT 400 V NF

60947-2 ..... 4.5 kA
60947-2 ..... 4.5 kA
Rated short circuit breaking capacity Icn under 230V AC according IEC60898-1 ..... 10 kA
Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1 ..... 10 kA
Rated service breaking capacity Ics AC according IEC 60947-2 ..... 75 \%
Rated ultimate short-circuit breaking

capacity Icu under 230V AC IEC 60947-2 10 kA
Rated ultimate short-circuit breakingRated ultimate short-circuit breakingcapacity Icu under 400V AC IEC 60947-210 kA
Rated ultimate short-circuit breakingcapacity Icu under 415V AC IEC 60947-210 kA
Electric current / temperature

| Rating current $30^{\circ} \mathrm{C}$ | 125 A |
| :--- | ---: |
| Rating current $35^{\circ} \mathrm{C}$ | 122 A |
| Rating current $40^{\circ} \mathrm{C}$ | 119 A |
| Rating current $45^{\circ} \mathrm{C}$ | 115.7 A |
| Rating current $50^{\circ} \mathrm{C}$ | 112 A |
| Rating current $55^{\circ} \mathrm{C}$ | 109.1 A |
| Rating current $60^{\circ} \mathrm{C}$ | 105.6 A |

## Current correction factors

Correction factor of rating current for 2 devices placed side-by-side

Correction factor of rating current for 3 devices placed side-by-side0.95
Correction factor of rating current for 4 and 5 devices placed side-by-side ..... 0.9Correction factor of rating current for 6devices placed side-by-side0.85

## Dimensions

| Depth of installed product | 70 mm |
| :--- | ---: |
| Height of installed product | 90 mm |
| Width of installed product | 106 mm |

## Frequency

Frequency 50 to 60 Hz

## Power

| Total power loss under IN | 42.25 W |
| :--- | :---: |
| Power loss per pole at In | 11.56 W |

## Endurance

Electric endurance in number of cycles 4000
Number of mechanical operations 20000

Installation, mounting
Type of top connection for modular devices with screw

| Type of top rail clip for modular devices | Plastic |
| :--- | :--- |
| Type of bottom rail clip for modular devices | plastic |

Type of Bottom Connection for modular devices
Top removability for modular devices ..... Yes
Bottom removability for modular devices ..... Yes

## Connection

Connection cross-section at output with
screw, for flexible conductor $1 / 50 \mathrm{~mm}^{2}$

| Connection cross-section at output with |
| :--- |
| screw, for massive conductor |


| Connection cross-section for rigid |  |
| :--- | :---: |
| conductor, upstream terminals with screws | $1 / 70 \mathrm{~mm}^{2}$ |


| Connection cross-section of the access with |  |
| :--- | :--- |
| screws, with flexible conductor | $1 / 50 \mathrm{~mm}^{2}$ |


| Connection cross-section of input and <br> output with screws, for massive conductors | $1 / 70 \mathrm{~mm}^{2}$ |
| :--- | :--- |


| Connection cross section of access and exit |  |
| :--- | :--- |
| with screws, for flexible conductor | $1 / 50 \mathrm{~mm}^{2}$ |


| Standards |  |
| :--- | ---: |
| Standard text | EN 60898-1; IEC 60947-2 |
| European directive WEEE | concerned |
| Safety |  |
| Protection index IP | IP20 |
| Use conditions |  |
| Degree of pollution according to IEC 60664 / | 3 |
| IEC 60947-2 | 3000 m |
| Class of energy limitation I²t | 3 |
| Altitude | $30{ }^{\circ} \mathrm{C}$ |

