

HLF399S

MCB 3P 10kA C-125A 4.5M

Technical characteristics

Architecture

Number of protected poles	3
Number of poles	3 P
Type of pole	3 P
Curve	C

Functions

Concurrently switching N-neutral	No

Configuration

Number of modules	4.5

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 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 AC thermal operation	1.13 / 1.45 In
Magnetic regulating currrent	5 / 10 In
Rating current 40°C according to IEC 60947	125 A
Rating current 45°C according to IEC 60947	122 A
Rating current 50°C according to IEC 60947	119 A
Rating current 55°C according to IEC 60947	115.7 A
Rating current 60°C according to IEC 60947	112 A
Rating current 65°C according to IEC 60947	109.1 A

Rating current 70°C according to IEC 60947	105.6 A
Breaking capacity on 1 pole for IT 400V NF 60947-2	4.5 kA
Breaking capacity on 1 pole for IT 415V NF 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 breaking capacity Icu under 240V AC IEC 60947-2	10 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	10 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	10 kA

Electric current / temperature

Rating current 30°C	125 A
Rating current 35°C	122 A
Rating current 40°C	119 A
Rating current 45°C	115.7 A
Rating current 50°C	112 A
Rating current 55°C	109.1 A
Rating current 60°C	105.6 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

Dimensions

Depth of installed product	70 mm
Height of installed product	90 mm
Width of installed product	80 mm

Frequency

Frequency	50 to 60 Hz

Power

Total power loss under IN	34.93 W
Power loss per pole at In	12 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	with screw
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 mm²
Connection cross-section at output with screw, for massive conductor	1 / 70 mm²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 70 mm²
Connection cross-section of the access with screws, with flexible conductor	1 / 50 mm²
Connection cross-section of input and output with screws, for massive conductors	1 / 70 mm²
Connection cross section of access and exit with screws, for flexible conductor	1 / 50 mm²

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 / IEC 60947-2	3
Class of energy limitation I²t	3
Altitude	2000 m

temperatur

Temperature of calibration	30 °C