248813
PBHT-125/4/05-A

DELIVERY PROGRAM

Basic function
Add-on residual current protection unit

Number of poles
4 pole

Application
For commercial and industry applications

Rated current [I_n]
125 A

Rated short-circuit strength [I_{cn}]
same as connected PLHT kA

Rated fault current [$I_{\Delta N}$]
0.5 A

Type
Type A

Tripping
non-delayed s…

Product range
PBHT

Sensitivity
Pulse-current sensitive

Impulse withstand current
Partly surge-proof 250 A

TECHNICAL DATA

Electrical

Types conform to
IEC/EN 60947-2

Rated frequency [f]
50 Hz

Sensitivity
Pulse-current sensitive

Rated current [I_n]
125 A

Rated impulse withstand voltage [U_{imp}]
4 kV

lifespan
Electrical [Operations]
□ 1000

lifespan
Mechanical [Operations]
□ 8000

Mechanical

Standard front dimension
45 mm

Device height
90 mm

Built-in width
95 (5.5TE) mm

Mounting
screwed onto PLHT

Degree of Protection
IP20, IP40 with suitable enclosure

Terminals top and bottom
Lift terminals

Terminal protection
DGUV VS3, EN 50274

Permissible storage and transport temperatures
-35 - +60 °C

Climatic proofing
25-55°C/90-95% relative humidity according to IEC 60068-2

DESIGN VERIFICATION AS PER IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_n]
125 A

Heat dissipation per pole, current-dependent [P_{vid}]
0 W

Equipment heat dissipation, current-dependent [P_{vid}]

39.7 W

Static heat dissipation, non-current-dependent [P_{vs}]
0 W

Heat dissipation capacity [P_{diss}]
0 W

Operating ambient temperature min.
-25 °C

Operating ambient temperature max.
+40 °C

Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C

IEC/EN 61439 design verification

10.2 Strength of materials and parts
10.2.2 Corrosion resistance
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.1 Verification of thermal stability of enclosures
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts
10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts
10.2.7 Inscriptions
Meets the product standard's requirements.

10.3 Degree of protection of ASSEMBLIES
Does not apply, since the entire switchgear needs to be evaluated.

10.4 Clearances and creepage distances
Meets the product standard's requirements.

10.5 Protection against electric shock
Does not apply, since the entire switchgear needs to be evaluated.

10.6 Incorporation of switching devices and components
Does not apply, since the entire switchgear needs to be evaluated.

10.7 Internal electrical circuits and connections
Is the panel builder's responsibility.

10.8 Connections for external conductors
Is the panel builder's responsibility.

10.9 Insulation properties
10.9.2 Power-frequency electric strength
Is the panel builder's responsibility.

10.9 Insulation properties
10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties
10.9.4 Testing of enclosures made of insulating material
Is the panel builder's responsibility.

10.10 Temperature rise
The panel builder is responsible for the

temperature rise calculation. Eaton will provide heat dissipation data for the devices.

10.11 Short-circuit rating
Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.12 Electromagnetic compatibility
Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.13 Mechanical function
The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

TECHNICAL DATA ETIM 7.0

Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003)

Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ecl@ss10.0.1-27-14-22-01 [AAB906014])

Number of poles
4

Rated voltage
400 V

Rated current
125 A

Rated fault current
500 mA

Rated insulation voltage Ui
440 V

Rated impulse withstand voltage Uimp
4 kV

Mounting method
DIN rail

Leakage current type
A

Selective protection
No

Short-time delayed tripping
No

Short-circuit breaking capacity (Icw)
0 kA

Surge current capacity
0.25 kA

Frequency
50 Hz

Additional equipment possible
Yes

With interlocking device
Yes

Degree of protection (IP)
IP20

Width in number of modular spacings
5.5

Built-in depth
70 mm

Ambient temperature during operating
-25 - 40 °C

Pollution degree
2

Connectable conductor cross section multi-wired

2.5 - 50 mm²

Connectable conductor cross section solid-core
2.5 - 50 mm²