HNB160U

Moulded Case Circuit Breaker X250 3P 40kA 160A TM

Technical properties

Architecture

Type of order	Toggle
Number of poles	3 P
Type of pole	3P3D

Functions

Complete device with protection unit	Yes
Trip Unit	TM A/A
Integrated earth fault protection	No

Configuration

Number of modules	6

Main electrical features

Rated operational voltage Ue	220 / 415 V
Frequency	50/60 Hz

Voltage

Rated insulation voltage	800 V
Rated impulse withstand voltage	8 kV
With under voltage release	No

Electric current

Rated current	160 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	4 kA
Thermal protection nob setting xIN	0.63 / 0.8 / 1
Breaking capacity on 1 pole for IT 230V NF 60947-2	51 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	9 kA
Rated service breaking capacity Ics AC according IEC 60947-2	50 %
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	40 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	40 kA
Rated ultimate short-circuit breaking capacity Icu under 440V AC IEC 60947-2	30 kA

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	1
Correction factor of rating current for 4 and 5 devices placed side-by-side	1
Correction factor of rating current for 6 devices placed side-by-side	1

Power	
Total power loss under IN	32.6 W
Power loss per pole at In	10.9 W

Tripping	
Tripmode	TM
Thermal protection trip time	0 ms
Time of response when opening	10 ms

Electrical specifications	
Magnetic trip delay time	0 ms

Endurance	
Electric endurance in number of cycles	1000
Number of mechanical operations	4000

Installation, mounting	
DIN rail mounting with optional adaptator	Yes

Connection	
Connection cross-sect. flexible conductor	35 / 150mm²
Connection cross-sect. rigid cable	35 / 185mm²
Connection	Front connection

Settings	
Range of the magnetic adjustment	960 / 1280 / 1600 / 2080 A
Magnetic protection nob setting xIN	6 / 8 / 10 / 13
Setting type In or Ith	IN

Equipment	
Number of auxiliary contacts as normally closed contact	0
Number of auxiliary contacts as normally open contact	0
Number of auxiliary contacts as change-over contact	0
Motor drive optional	Yes

Use cases	
Category of use	A

Standards	
Standard text	IEC 60947-2

European directive WEEE	not concerned

Safety

REACH conform	Yes
RoHS conform	Yes

Use conditions

Operating temperature	-25...70 °C
Altitude	2000 m
Air humidity protection	for all climates
Storage/transport temperature	-35...70 °C