



HNA160U

Moulded Case Circuit Breaker X160 3P 40kA 160A

Technical properties

Architecture

Number of poles	3 P
-----------------	-----

Functions

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

Configuration

Number of modules	4.5
-------------------	-----

Main electrical features

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

Voltage

Rated insulation voltage	690 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	6 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	25 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 I _N	43.8 W
Power loss per pole at I _N	14.6 W

Tripping

Trip mode	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 adaptor	Yes
---	-----

Connection

Connection cross-sect. rigid cable	4 / 95mm ²
------------------------------------	-----------------------

Settings

Range of the magnetic adjustment	1600 A
Setting type I _N or I _{th}	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	No

Use cases

Category of use	A
-----------------	---

Standards

Standard text	IEC 60947-2
European directive WEEE	concerned

Use conditions

Operating temperature	-25...70 °C
Altitude	2000 m

Subject to technical modifications

