



HNA160U

Moulded Case Circuit Breaker h3 x160 TM ADJ 3P3D 160A 40kA CTC

Technical characteristics

Architecture

Type of order	Toggle
Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3P3D
Type of case	Fixed built-in

Functions

Complete device with protection unit	Yes
Trip Unit	TM A/F
Integrated earth fault protection	No
Concurrently switching N-neutral	No

Controls and indicators

Motor drive integrated	No
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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
Thermal protection nob setting xIN	0.63 / 0.8 / 1
Rating current 10°C according to IEC 60947	188.5 A
Rating current 15°C according to IEC 60947	185.2 A
Rating current 20°C according to IEC 60947	181.8 A
Rating current 25°C according to IEC 60947	178.3 A
Rating current 30°C according to IEC 60947	174.8 A
Rating current 35°C according to IEC 60947	171.2 A
Rating current 40°C according to IEC 60947	167.5 A
Rating current 45°C according to IEC 60947	163.8 A
Rating current 50°C according to IEC 60947	160 A
Rating current 55°C according to IEC 60947	156 A

Rating current 60°C according to IEC 60947	152 A
Rating current 65°C according to IEC 60947	147.8 A
Rating current 70°C according to IEC 60947	143.6 A
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
Range of the thermal adjustment	100 / 125 / 160 A
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	40 kA

Dimensions

Depth of installed product	68 mm
Height of installed product	130 mm
Width of installed product	75 mm

Frequency

Frequency	50 to 60 Hz
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Power

Power loss per pole at 0.63*In	5.7 W
Power loss per pole at 0.8*In	8.9 W
Total power loss at 0.63*In	17.1 W
Total power loss at 0.8*In	26.7 W
Total power loss under IN	43.8 W
Power loss per pole at In	14.6 W

Endurance

Electric endurance in number of cycles	1000
Number of mechanical operations	20000

Installation, mounting

DIN rail mounting with optional adaptator	No
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Connection

Connection	Front connection
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Settings

Range of the magnetic adjustment	1600 A
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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
Can be accessorized	Yes

Subject to technical modifications

Standards

Standard text	IEC 60947-2
European directive WEEE	concerned

Safety

REACH conform	Yes
RoHS conform	Yes
Halogen free	No

Use conditions

Degree of pollution according to IEC 60664 / IEC 60947-2	3
Altitude	2000 m

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Temperature of calibration	50 °C
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