



HHA078Z

## Moulded Case Circuit Breaker X160 1P 25kA 80A

## **Technical properties**

Type of order	Toggle
Number of poles	1 P
Type of pole	1P1D
Functions	
Complete device with protection unit	Yes
Trip Unit	TM F/F
Integrated earth fault protection	No
Configuration	
Number of modules	1.5
Main electrical features	
Rated operational voltage Ue	220 / 240 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	A 08
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	4 kA
Thermal protection nob setting xIN	1
Breaking capacity on 1 pole for IT 230V NF 60947-2	21 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	9 kA
Rated service breaking capacity Ics AC according IEC 60947-2	80 %
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	35 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking	
capacity Icu under 415V 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 IN	4.8 W
Power loss per pole at In	4.8 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	4 / 70mm²
Connection cross-sect. flexible conductor Connection cross-sect_rigid cable	
Connection cross-sect. rigid cable	4 / 95mm²
Connection cross-sect. rigid cable Connection	4 / 95mm² Front connection
Connection cross-sect. rigid cable Connection	4 / 95mm² Front connection
Connection cross-sect. rigid cable Connection Type of connection Settings	4 / 95mm <sup>2</sup> Front connection with screw
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment	4 / 95mm <sup>2</sup> Front connection with screw 1000 A
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Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally	4 / 95mm <sup>2</sup> Front connection with screw 1000 A IN
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally	4 / 95mm Front connection with screw 1000 A IN
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Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change- over contact Motor drive optional	4 / 95mm <sup>2</sup> Front connection with screw 1000 A IN C C C C No
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change- over contact Motor drive optional Use cases	4 / 95mm <sup>2</sup> Front connection with screw 1000 A IN C C C C No
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change- over contact Motor drive optional Use cases Category of use	4 / 70mm <sup>2</sup> 4 / 95mm <sup>2</sup> Front connection with screw 1000 A 1000 A IN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

## **Use conditions**

Operating temperature	-2570 °C
Altitude	2000 m
Air humidity protection	for all climates
Storage/transport temperature	-3570 °C