



HDA021Z

Moulded Case Circuit Breaker X160 4P 18kA 20A

Technical properties

Architecture

Type of order	Toggle
Number of poles	4 P
Type of pole	4P4D

Functions

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

Configuration

Number of modules	6
-------------------	---

Main electrical features

Rated operational voltage U _e	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	20 A
Rated ultimate short-circuit breaking capacity I _{cu} under 690V AC IEC 60947-2	4 kA
Thermal protection nob setting xI _n	1
Thermal setting current on neutral pole	1 I _n
Breaking capacity on 1 pole for IT 230V NF 60947-2	15 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	9 kA
Rated service breaking capacity I _{cs} AC according IEC 60947-2	100 %
Rated ultimate short-circuit breaking capacity I _{cu} under 230V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 240V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 400V AC IEC 60947-2	18 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 415V AC IEC 60947-2	18 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	8.7 W
Power loss per pole at In	2.9 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 adaptor	Yes
-----------------------------------------	-----

Connection

Connection cross-sect. flexible conductor	4 / 70mm ²
Connection cross-sect. rigid cable	4 / 95mm ²
Connection	Front connection
Type of connection	with screw

Settings

Range of the magnetic adjustment	600 A
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	No

Use cases

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

Standards

Standard text

IEC 60947-2

Use conditions

Operating temperature

-25...70 °C

Altitude

2000 m

Air humidity protection

for all climates

Storage/transport temperature

-35...70 °C