



HDA050Z

## Moulded Case Circuit Breaker X160 3P 18kA 50A

### 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 F/F
With integrated earth leakage fault protection	No

#### Configuration

Number of modules	4.5
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#### Main electrical features

Rated operational voltage U <sub>e</sub>	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	50 A
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> 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	15 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	9 kA
Rated service breaking capacity I <sub>cs</sub> AC according IEC 60947-2	100 %
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 230V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 240V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 400V AC IEC 60947-2	18 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 415V AC IEC 60947-2	18 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 440V AC IEC 60947-2	15 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 <sub>N</sub>	17.3 W
Power loss per pole at I <sub>N</sub>	5.8 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
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**Endurance**

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

**Installation, mounting**

DIN rail mounting with optional adaptor	Yes
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**Connection**

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

**Settings**

Range of the magnetic adjustment	600 A
Setting type I <sub>N</sub> or I <sub>th</sub>	I <sub>N</sub>

**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
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**Standards**

Standard text	IEC 60947-2
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**Use conditions**

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