



HDA021L

## Moulded Case Circuit Breaker X160 4P 18kA 20A

### Technical properties

#### Architecture

Number of poles	4 P
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#### Functions

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

#### Configuration

Number of modules	6
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#### 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 $xIN$	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
Rated ultimate short-circuit breaking capacity $I_{cu}$ 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
<b>Power</b>	
Total power loss under IN	8.7 W
Power loss per pole at In	2.9 W
<b>Tripping</b>	
Tripmode	TM
Thermal protection trip time	0 ms
Time of response when opening	10 ms
<b>Electrical specifications</b>	
Magnetic trip delay time	0 ms
<b>Endurance</b>	
Electric endurance in number of cycles	1000
Number of mechanical operations	4000
<b>Installation, mounting</b>	
DIN rail mounting with optional adaptor	No
<b>Connection</b>	
Connection cross-sect. rigid cable	4 / 95mm <sup>2</sup>
<b>Settings</b>	
Range of the magnetic adjustment	600 A
Setting type In or Ith	IN
<b>Equipment</b>	
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
<b>Use cases</b>	
Category of use	A
<b>Standards</b>	
Standard text	IEC 60947-2
European directive WEEE	concerned
<b>Use conditions</b>	
Operating temperature	-25...70 °C
Altitude	2000 m

Subject to technical modifications

