



HDA160L

Moulded Case Circuit Breaker X160 3P 18kA 160A

Technical properties

	Toggle
Number of poles	3 P
Type of pole	3P3D
Functions	
Complete device with protection unit	Yes
Trip Unit	TM F/F
Integrated earth fault protection	No
Configuration	
Number of modules	4.5
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
Rated current Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	160 A 4 kA
Rated ultimate short-circuit breaking	
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	4 kA 1
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF	4 kA 1 15 kA
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF	4 kA 1 15 kA 9 kA
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC	4 kA 1 15 kA 9 kA 100 %
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC according IEC 60947-2 Rated ultimate short-circuit breaking	4 kA 1 15 kA 9 kA 100 % 25 kA
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC according IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 Rated ultimate short-circuit breaking	4 kA 1 15 kA 9 kA 100 % 25 kA 25 kA
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF 60947-2 Rated service breaking capacity Ics AC according IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	4 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	43.8 V
Power loss per pole at In	14.6 V
Tripping	
Tripmode	TN
Thermal protection trip time	0 m:
Time of response when opening	10 m:
Electrical specifications	
Magnetic trip delay time	0 m
Endurance	
Electric endurance in number of cycles	100
Number of mechanical operations	4000
Installation, mounting	
DIN rail mounting with optional adaptator	Nc
Connection	
Connection cross-sect. flexible conductor	4 / 70mm
Connection cross-sect. rigid cable	4 / 95mm
Connection	
Type of connection	Front connection
Settings	
-	with screv
Range of the magnetic adjustment	with screv 1600 /
Range of the magnetic adjustment Setting type In or Ith	with screv 1600 /
Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally	with screw 1600 / If
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	with screw 1600 / If
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-	with screw 1600 / II
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	with screw 1600 / IN
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	with screw 1600 / IN
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	with screv 1600 A IN () () () () () () () () () ()
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 Standards	with screw 1600 / If If If If If If If If If If
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	Front connection with screv 1600 / 1600 / (((((((((((((((((((

Use conditions

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