

HDA048Z

Moulded Case Circuit Breaker X160 1P 18kA 50A

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	Nc
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	50 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	4 kA
	1
Thermal protection nob setting xIN	1
Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF 60947-2	
Breaking capacity on 1 pole for IT 230V NF	15 kA
Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF	15 kA 9 kA
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	15 kA 9 kA 100 %
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	15 kA 9 kA 100 % 18 kA
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	15 kA 9 kA 100 % 18 kA 25 kA
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	15 kA 9 kA 100 % 18 kA 25 kA 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	5 W
Power loss per pole at In	5 W
Tripping	
Tripmode	ТМ
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. rigid cable	4 / 95mm²
Connection	Front connection
Type of connection	
	with screw
Settings Range of the magnetic adjustment	600 A
Range of the magnetic adjustment Setting type In or Ith	600 A
Range of the magnetic adjustment Setting type In or Ith Equipment	600 A
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	600 A 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-	600 A IN 0
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	600 A IN 0
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	600 A IN 0 0
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	600 A IN 0 0
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	600 A IN 0 0 0 No
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	600 A IN 0 0 0 No

Use conditions

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