



HHA020Z

Moulded Case Circuit Breaker X160 3P 25kA 20A

Technical properties

Type of order	Toggle
Number of poles	3 F
Type of pole	3P3D
Functions	
Complete device with protection unit	Yes
Trip Unit	TM F/F
Integrated earth fault protection	Nc
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	No
Electric current	20 A
Electric current Rated current Rated ultimate short-circuit breaking capa-	No 20 A 4 kA 1
Electric current Rated current Rated ultimate short-circuit breaking capa- city Icu under 690V AC IEC 60947-2	20 A 4 kA 1
Electric current Rated current Rated ultimate short-circuit breaking capa- city Icu under 690V AC IEC 60947-2 Thermal protection nob setting xIN Breaking capacity on 1 pole for IT 230V NF	20 A 4 kA 1 21 kA
Electric current Rated current Rated ultimate short-circuit breaking capa- city 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	20 A 4 kA 1 21 kA 9 kA
Electric current Rated current Rated ultimate short-circuit breaking capa- city 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	20 A 4 kA 1 21 kA 9 kA 80 %
Electric current Rated current Rated ultimate short-circuit breaking capa- city 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 capa-	20 A 4 kA 1 21 kA 9 kA 80 % 35 kA
Electric current Rated current Rated ultimate short-circuit breaking capa- city 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 capa- city Icu under 230V AC IEC 60947-2 Rated ultimate short-circuit breaking capa-	20 A 4 kA 1 21 kA 9 kA 80 % 35 kA 35 kA
Electric current Rated current Rated ultimate short-circuit breaking capa- city 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 capa- city Icu under 230V AC IEC 60947-2 Rated ultimate short-circuit breaking capa- city Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking capa- city Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking capa- city Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking capa- city Icu under 240V AC IEC 60947-2 Rated ultimate short-circuit breaking capa-	20 A 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	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 adaptator	Yes
Connection	
Connection cross-sect. flexible conductor	4 / 70mm²
	4 / 70mm² 4 / 95mm² Front connection
Connection cross-sect. rigid cable Connection	4 / 95mm² Front connection
Connection cross-sect. rigid cable Connection Type of connection	4 / 95mm² Front connection
Connection cross-sect. rigid cable Connection Type of connection Settings	4 / 95mm² Front connection with screw
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment	4 / 95mm ² Front connection with screw 600 A
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith	4 / 95mm ² Front connection with screw 600 A
Connection cross-sect. rigid cable Connection Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally	4 / 95mm ² Front connection with screw 600 A IN
Connection cross-sect. rigid cable Connection Type of connection 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	4 / 95mm ² Front connection with screw 600 A IN
Connection cross-sect. rigid cable Connection Type of connection 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-	4 / 95mm ² Front connection with screw 600 A IN 0
Connection cross-sect. rigid cable Connection Type of connection 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	4 / 95mm ² Front connection with screw 600 A IN 0 0
Connection cross-sect. rigid cable Connection Type of connection 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	4 / 95mm ² Front connection with screw 600 A IN 0 0
Connection cross-sect. rigid cable Connection Type of connection 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	4 / 95mm² Front connection with screw 600 A IN 0 0 0 0 0 0
Type of connection 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	4 / 95mm²
Connection cross-sect. rigid cable Connection Type of connection 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	4 / 95mm² Front connection with screw 600 A IN 0 0 0 0 0 0

Use conditions

Altitude

Air humidity protection

2000 m

for all climates