



HNA080U

Moulded Case Circuit Breaker X160 3P 40kA 80A

Technical properties

	Toggle
Number of poles	3 F
Type of pole	3P3D
Functions	
Complete device with protection unit	Yes
Trip Unit	TM A/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	80 A
Rated ultimate short-circuit breaking capa- city Icu under 690V AC IEC 60947-2	6 kA
Thermal protection nob setting xIN	0.63/0.8/1
menne protection now setting Any	
Breaking capacity on 1 pole for IT 230V NF	51 kA
Breaking capacity on 1 pole for IT 230V NF 60947-2 Breaking capacity on 1 pole for IT 400V NF	
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	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 according IEC 60947-2 Rated ultimate short-circuit breaking capa-	9 kA 50 %
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-	9 kA 50 % 85 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 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-	9 kA 50 % 85 kA 85 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 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 400V AC IEC 60947-2 Rated ultimate short-circuit breaking capa- city Icu under 400V AC IEC 60947-2	51 kA 9 kA 50 % 85 kA 85 kA 40 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	32.1 W
Power loss per pole at In	10.7 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 Connection	Yes
Connection cross-sect. flexible conductor	4 / 70mm²
Connection cross-sect. rigid cable	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
-	4 / 95mm ²
(ODDACTION	4 / 95mm ²
	Front connection
Connection Type of connection	
Type of connection Settings	Front connectior with screw
Type of connection Settings Range of the magnetic adjustment	Front connection with screw 1000 A
Type of connection Settings Range of the magnetic adjustment Setting type In or Ith	Front connection with screw 1000 A
Type of connection Settings Range of the magnetic adjustment Setting type In or Ith Equipment Number of auxiliary contacts as normally	Front connection with screw 1000 A
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	Front connection with screw 1000 A IN
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-	Front connection with screw 1000 A IN C
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	Front connection with screw 1000 A IN C
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	Front connection with screw 1000 A IN C
	Front 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	Front connection with screw 1000 A IN C C C C C C C C
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	Front connection with screw 1000 A 1000 A (((((((((((((((((((

Use conditions

Altitude

Air humidity protection

2000 m

for all climates