

HNB200U

## Moulded Case Circuit Breaker X250 3P 40kA 200A TM

## **Technical properties**

Type of order	Toggle
Number of poles	3 P
Type of pole	3P3D
Functions	
Complete device with protection unit	Yes
Trip Unit	TM A/A
With integrated earth leakage fault protec- tion	No
Configuration	
Number of modules	6
Main electrical features	
Rated operational voltage Ue	220 / 415 V
Frequency	50/60 Hz
Voltage	
Rated insulation voltage	800 V
Rated impulse withstand voltage	8 kV
With under voltage release	No
Electric current	
Rated current	200 A
Rated ultimate short-circuit breaking capa- city Icu under 690V AC IEC 60947-2	4 kA
Thermal protection nob setting xIN	0.63 / 0.8 / 1
Breaking capacity on 1 pole for IT 230V NF 60947-2	51 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	9 kA
Rated service breaking capacity Ics AC according IEC 60947-2	50 %
Rated ultimate short-circuit breaking capa- city Icu under 230V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capa- city Icu under 240V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capa- city Icu under 400V AC IEC 60947-2	40 kA
Rated ultimate short-circuit breaking capa- city Icu under 415V AC IEC 60947-2	40 kA
Rated ultimate short-circuit breaking capa- city Icu under 440V AC IEC 60947-2	30 kA

## **Current correction factors**

devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   24.8 W     Power loss per pole at In   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Time of response when opening   10 ms     Electrical specifications   1     Magnetic trip delay time   0 ms     Endurance   1000     Number of mechanical operations   4000     Installation, mounting   1000     Number of mechanical operations   4000     Installation, mounting   1000     Connection   35 / 150mm²     Connection cross-sect. fiexible conductor   35 / 150mm²     Connection   7   Yes     Connection cross-sect. fiexible conductor   35 / 150mm²     Connection cross-sect. fiexible conductor   35 / 150mm²     Connection cross-sect. fiexible conductor<		
devices placed side-by-side 1   Correction factor of rating current for 3 1   correction factor of rating current for 4 and 1   Correction factor of rating current for 6 1   file 0 ms   file 0 ms <th></th> <th>Yes</th>		Yes
devices placed side-by-side   1     Correction factor of rating current for 3   1     Correction factor of rating current for 4 and   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Power   24.8 W     Power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   0 ms     Tripping   0 ms     Time of response when opening   10 ms     Electrical specifications   0 ms     Electric endurance in number of cycles   10000     Number of mechanical operations   4000     Installation, mounting   Yes     Connection   35 / 150mm²     Connection   75 / 150mm²     Connection   35 / 150mm²     Connection   75 / 150mm²     Connection   75 / 150mm²     Connection   75 / 150mm²	Number of auxiliary contacts as change- over contact	-
devices placed side-by-side   1     Correction factor of rating current for 3   1     Correction factor of rating current for 4 and   1     S devices placed side-by-side   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Power   1     Power   8     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Triponde   TM     Thermal protection trip time   0 ms     Electrical specifications   1000     Magnetic trip delay time   0 ms     Electric endurance in number of cycles   10000     Number of mechanical operations   40000     Installation, mounting   1     DIN rail mounting with optional adaptator   Yes     Connection   35 / 150mm²     Connection cross-sect. figid cable   35 / 150mm²     Connection   Front connection     Type of connection roth   1200 / 1600 / 20	Number of auxiliary contacts as normally open contact	0
devices placed side-by-side   1     Correction factor of rating current for 3   1     Correction factor of rating current for 4 and 5   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Power   24.8 W     Power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 ms     Time of response when opening   10 ms     Electrical specifications   0000     Number of mechanical operations   4000     Installation, mounting   10000     Number of mechanical operations   4000     Installation, mounting   10000     Connection   35 / 150mm <sup>2</sup> Connection cross-sect. flexible conductor   35 / 150mm <sup>2</sup> Connection   Front connectior     Type of connection   Termina     Settings   1200 / 1600 / 2000 / 2600	Number of auxiliary contacts as normally closed contact	C
devices placed side-by-side   1     Correction factor of rating current for 3   1     Correction factor of rating current for 4 and 5   1     Correction factor of rating current for 6   1     Power   24.8 W     Power loss per pole at In   8.3 W     Tripping   10     Tripping   10     Trime of response when opening   10     Electrical specifications   0     Magnetic trip delay time   0     Electrical specifications   4000     Installation, mounting   10000     Installation, mounting   10000     DIN rail mounting with optional adaptator   Yes     Connection   5 / 185mmi     Conn	Equipment	
devices placed side-by-side 1   Correction factor of rating current for 3 1   Correction factor of rating current for 4 and 5 1   Correction factor of rating current for 6 1   Power 24.8 W   Power loss under IN 24.8 W   Power loss per pole at In 8.3 W   Tripping 1   Tripping 1   Tripping 1   Trime of response when opening 10 ms   Electrical specifications 0 ms   Magnetic trip delay time 0 ms   Electrical specifications 4000   Number of mechanical operations 4000   Installation, mounting 100   DIN rail mounting with optional adaptator Yes   Connection 35 / 150mm   Connection cross-sect. flexible conductor 35 / 150mm   Connection cross-sect. rigid cable 35 / 185mm   Connection Front connectior   Type of connection Termina   Settings	Setting type In or Ith	Л
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 6 devices placed side-by-side   1     Correction factor of rating current for 6 devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss under IN   24.8 W     Power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   T     Tripmode   TM     Thermal protection trip time   0 ms     Time of response when opening   10 ms     Electrical specifications   0 ms     Electrical specifications   0 ms     Electric endurance in number of cycles   10000     Number of mechanical operations   4000     Installation, mounting   10     DIN rail mounting with optional adaptator   Yes     Connection   35 / 150mm     Connection cross-sect. flexible conductor   35 / 150mm     Connection cross-sect. rigid cable   35 / 185mm     Connection   Termina	Magnetic protection nob setting xIN	6/8/10/13
devices placed side-by-side 1   Correction factor of rating current for 3 1   Correction factor of rating current for 6 1   Power 1   Total power loss under IN 24.8 W   Power loss per pole at In 8.3 W   Tripping 1   Tripmode TM   Thermal protection trip time 0 ms   Time of response when opening 10 ms   Electrical specifications 0 ms   Electrical specifications 4000   Number of mechanical operations 4000   Installation, mounting 10   DIN rail mounting with optional adaptator Yes   Connection 35 / 150mm   Connection cross-sect. flexible conductor 35 / 150mm   Connection Front connection   Tore cross-sect. rigid cable 35 / 185mm		1200 / 1600 / 2000 / 2600 A
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 1   Total power loss under IN 24.8 W   Power loss per pole at In 8.3 W   Tripping 1   Tripping 1   Tripote TW   Thermal protection trip time 0 ms   Electrical specifications 100 ms   Bagnetic trip delay time 0 ms   Electric endurance in number of cycles 1000   Number of mechanical operations 4000   Installation, mounting Yes   Connection 35 / 150mm   Connection cross-sect. flexible conductor 35 / 185mm   Connection 75 / 185mm		Termina
devices placed side-by-side   1     Correction factor of rating current for 3   1     correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     power   24.8 W     Power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 ms     Electrical specifications   10 ms     Bagnetic trip delay time   0 ms     Electric endurance in number of cycles   10000     Number of mechanical operations   4000     Installation, mounting   Yes     Connection   35 / 150mm     Connection cross-sect. flexible conductor   35 / 185mm		
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   1     S devices placed side-by-side   1     Correction factor of rating current for 6 devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 ms     Time of response when opening   10 ms     Electrical specifications   0000     Number of mechanical operations   4000     Installation, mounting   10000     Number of mechanical operations   4000     Installation, mounting   Yes     Connection   35 / 150 mm		
devices placed side-by-side   1     Correction factor of rating current for 4 and   1     S devices placed side-by-side   1     Correction factor of rating current for 4 and   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 ms     Time of response when opening   10 ms     Electrical specifications   0 ms     Magnetic trip delay time   0 ms     Electric endurance in number of cycles   10000     Number of mechanical operations   40000     Installation, mounting   10000     Number of mechanical operations   40000     Installation, mounting   Yes     Connection   Yes		
devices placed side-by-side   1     Correction factor of rating current for 3   1     correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 ms     Time of response when opening   10 ms     Electrical specifications   0 ms     Magnetic trip delay time   0 ms     Electric endurance in number of cycles   1000     Number of mechanical operations   4000     Installation, mounting   1000	Connection	
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 ms     Time of response when opening   10 ms     Electrical specifications   0 ms     Magnetic trip delay time   0 ms     Electric endurance in number of cycles   1000     Number of mechanical operations   4000		Yes
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripping   1     Thermal protection trip time   0 ms     Electrical specifications   10 ms     Electric endurance in number of cycles   10000		4000
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripmode   TM     Thermal protection trip time   0 m:     Time of response when opening   10 m:     Electrical specifications   0 m:     Magnetic trip delay time   0 m:		
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 V     Power loss per pole at In   8.3 V     Tripping   1     Tripping   1     Thermal protection trip time   0 m     Time of response when opening   10 m     Electrical specifications   10 m	Endurance	
devices placed side-by-side 1   Correction factor of rating current for 3 1   devices placed side-by-side 1   Correction factor of rating current for 4 and 1   5 devices placed side-by-side 1   Correction factor of rating current for 6 1   devices placed side-by-side 1   Correction factor of rating current for 6 1   devices placed side-by-side 1   Power 1   Total power loss under IN 24.8 W   Power loss per pole at In 8.3 W   Tripping T   Tripping 1   Tripmode T   Thermal protection trip time 0 m   Time of response when opening 10 m	Magnetic trip delay time	0 m:
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   TM     Thermal protection trip time   0 m	Electrical specifications	
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   5     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W     Tripping   1     Tripping   1	Time of response when opening	10 ms
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Power   1     Total power loss under IN   24.8 W     Power loss per pole at In   8.3 W	Thermal protection trip time	0 m:
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   5     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     devices placed side-by-side   1     Power   1     Power loss under IN   24.8 W     Power loss per pole at In   8.3 W	Tripmode	TM
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Power   1     Total power loss under IN   24.8 W	Tripping	
devices placed side-by-side   1     Correction factor of rating current for 3   1     devices placed side-by-side   1     Correction factor of rating current for 4 and   1     5 devices placed side-by-side   1     Correction factor of rating current for 6   1     Correction factor of rating current for 6   1     Power   1	Power loss per pole at In	8.3 W
devices placed side-by-side 1   Correction factor of rating current for 3 1   devices placed side-by-side 1   Correction factor of rating current for 4 and 1   5 devices placed side-by-side 1   Correction factor of rating current for 6 1   devices placed side-by-side 1	Total power loss under IN	24.8 W
devices placed side-by-side   I     Correction factor of rating current for 3   I     devices placed side-by-side   I     Correction factor of rating current for 4 and   I     5 devices placed side-by-side   I     Correction factor of rating current for 4 and   I     5 devices placed side-by-side   I     Correction factor of rating current for 6   I		1
devices placed side-by-side : Correction factor of rating current for 3 devices placed side-by-side : Correction factor of rating current for 4 and	Correction factor of rating current for 6	
devices placed side-by-side T Correction factor of rating current for 3	Correction factor of rating current for 4 and	
5	-	
	Correction factor of rating current for 2 devices placed side-by-side	:

Standards

Standard text	IEC 60947-2
European directive WEEE	not concerned
RoHS conform	Yes
Halogen free	No
Use conditions	
Operating temperature	-2570 °C
Altitude	2000 m
Air humidity protection	for all climates
Storage/transport temperature	-3570 °C