

## MCCB h3 x160 TM 4x80A 40kA

## HNA081U

Number of protected poles	4
Number of poles	4 P
Type of pole	4P4D
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Functions	
Trip Unit	TM A/F
Compatibility	
Compatible with DIN rail mounting	no
Controls and indicators	
Motor drive integrated	no
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
Thermal protection nob setting xIN	0,63 / 0,8 / 1
Rating current 10°C according to IEC 60947	93,2 A
Rating current 150°C according to IEC 60947	91,6 A
Rating current 20°C according to IEC 60947	90,1 A
Rating current 25°C according to IEC 60947	88,5 A
Rating current 30°C according to IEC 60947	86,8 A
Rating current 35°C according to IEC 60947	85,2 A
Rating current 40°C according to IEC 60947	83,5 A
Rating current 45°C according to IEC 60947	81,7 A
Rating current 50°C according to IEC 60947	80 A
Rating current 55°C according to IEC 60947	78,1 A
Rating current 60°C according to IEC 60947	76,3 A



Technical Properties	
Rating current 65°C according to IEC 60947	74,4 A
Rating current 70°C according to IEC 60947	72,4 A
Rated service breaking capacity Ics under 220V AC	40 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 230V AC	40 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 240V AC	40 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 380V AC	20 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 400V AC	20 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 415V AC	20 kA
according IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	85 kA
under 230V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	85 kA
under 240V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	40 kA
under 400V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	40 kA
under 415V AC IEC 60947-2	
Range of the thermal adjustment	50 / 63 / 80 A
Rated ultimate short-circuit breaking capacity Icu	40 kA
under 380V AC IEC 60947-2	
Frequency	
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Frequency	50 to 60 Hz
Frequency	50 to 60 Hz
Frequency Power	50 to 60 Hz
Power	
Power Power loss per pole at 0.63*In	4,2 W
Power loss per pole at 0.63*In Power loss per pole at 0.8*In	4,2 W 6,6 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In	4,2 W 6,6 W 12,5 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In	4,2 W 6,6 W 12,5 W 19,9 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In	4,2 W 6,6 W 12,5 W 19,9 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles  Number of mechanical operations  Dimensions	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles  Number of mechanical operations  Dimensions  Depth of installed product	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles  Number of mechanical operations  Dimensions  Depth of installed product  Height of installed product	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W 1000 4000
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles  Number of mechanical operations  Dimensions  Depth of installed product  Height of installed product  Width of installed product	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W 1000 4000
Power  Power loss per pole at 0.63*In  Power loss per pole at 0.8*In  Total power loss at 0.63*In  Total power loss at 0.8*In  Total power loss under IN  Power loss per pole at In  Endurance  Electric endurance in number of cycles  Number of mechanical operations  Dimensions  Depth of installed product  Height of installed product	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W 1000 4000
Power loss per pole at 0.63*In Power loss per pole at 0.8*In Total power loss at 0.63*In Total power loss at 0.8*In Total power loss under IN Power loss per pole at In  Endurance  Electric endurance in number of cycles Number of mechanical operations  Dimensions  Depth of installed product Height of installed product Width of installed product Critical distance switching emission/earthed part bottom	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W  1000 4000  68 mm 130 mm 100 mm 40 mm
Power loss per pole at 0.63*In Power loss per pole at 0.8*In Total power loss at 0.63*In Total power loss at 0.8*In Total power loss under IN Power loss per pole at In  Endurance  Electric endurance in number of cycles Number of mechanical operations  Dimensions  Depth of installed product Height of installed product Width of installed product Critical distance switching emission/earthed part left	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W  1000 4000  68 mm 130 mm 100 mm 40 mm
Power loss per pole at 0.63*In Power loss per pole at 0.8*In Total power loss at 0.63*In Total power loss at 0.8*In Total power loss under IN Power loss per pole at In  Endurance  Electric endurance in number of cycles Number of mechanical operations  Dimensions  Depth of installed product Height of installed product Width of installed product Critical distance switching emission/earthed part left Critical distance switching emission/earthed part right	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W  1000 4000  68 mm 130 mm 100 mm 40 mm  50 mm tt50 mm
Power loss per pole at 0.63*In Power loss per pole at 0.8*In Total power loss at 0.63*In Total power loss at 0.8*In Total power loss under IN Power loss per pole at In  Endurance  Electric endurance in number of cycles Number of mechanical operations  Dimensions  Depth of installed product Height of installed product Width of installed product Critical distance switching emission/earthed part left Critical distance switching emission/earthed part right Critical distance switching emission/earthed part top	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W  1000 4000  68 mm 130 mm 100 mm 40 mm  50 mm tt50 mm
Power loss per pole at 0.63*In Power loss per pole at 0.8*In Total power loss at 0.63*In Total power loss at 0.8*In Total power loss at 0.8*In Total power loss under IN Power loss per pole at In  Endurance  Electric endurance in number of cycles Number of mechanical operations  Dimensions  Depth of installed product Height of installed product Width of installed product Critical distance switching emission/earthed part left Critical distance switching emission/earthed part righ Critical distance switching emission/earthed part top Critical distance switching emission/earthed part top Critical distance switching emission/insulated plate	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W  1000 4000  68 mm 130 mm 100 mm 40 mm 50 mm
Power loss per pole at 0.63*In Power loss per pole at 0.8*In Total power loss at 0.63*In Total power loss at 0.8*In Total power loss under IN Power loss per pole at In  Endurance  Electric endurance in number of cycles Number of mechanical operations  Dimensions  Depth of installed product Height of installed product Width of installed product Critical distance switching emission/earthed part left Critical distance switching emission/earthed part right Critical distance switching emission/earthed part top	4,2 W 6,6 W 12,5 W 19,9 W 32,1 W 10,7 W  1000 4000  68 mm 130 mm 100 mm 40 mm  50 mm 150 mm 40 mm

with screw
1000 A
yes
IEC 60947-2
concerned
Category 5
IP4X
3
2000 m

50 °C

Temperature of calibration