## Product data sheet MBN440





 $\begin{array}{c|c} \mathsf{MBN440} \\ 1 & 3 & 5 & 7 \\ \mathsf{MBN440} \\ \mathsf{MBN40} \\ \mathsf$ 

## MCB 4P 6kA B-40A 4M

**Technical properties** 

Number of protected poles	
Number of poles	4
Curve	
Functions	
Concurrently switching N-neutral	Ν
Configuration	
Number of modules	
Connectivity	
Top connection alignement for modular devices	Aligned termin
Bottom connection alignement for modular devices	Aligned termin
Main electrical features	
Rated short circuit breaking capacity Icn AC according IEC60898-1	6 k
Rated operational voltage Ue	230 / 400
Type of supply voltage	A
Frequency	50/60 H
Voltage	
Rated insulation voltage	500
Rated impulse withstand voltage	4000
Electric current	
Rated current	40
Rated service breaking capacity Ics AC according IEC 60898-1	6 k
	1.13 / 1.45
min/maxi threshold value of the AC thermal operation	
	3 / 5
operation	
operation Magnetic regulating currrent min/maxi threshold value of the DC	4 / 7
operation Magnetic regulating currrent min/maxi threshold value of the DC magnetic operation min/maxi threshold value of the DC thermal	3 / 5 4 / 7 1.13 / 1.45 3 k

Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	10 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	10 kA

## Electric current / temperature

Rating current -25°C	50 A
Rating current -20°C	49.2 A
Rating current -15°C	48.4 A
Rating current -10°C	47.5 A
Rating current -5°C	46.6 A
Rating current 0°C	45.8 A
Rating current 5°C	44.8 A
Rating current 10°C	43.9 A
Rating current 15°C	43 A
Rating current 20°C	42 A
Rating current 25°C	41 A
Rating current 30°C	40 A
Rating current 35°C	38.8 A
Rating current 40°C	37.5 A
Rating current 45°C	36.2 A
Rating current 50°C	34.8 A
Rating current 55°C	33.4 A
Rating current 60°C	31.9 A
Rating current 65°C	30.3 A
Rating current 70°C	28.6 A

## **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	0.95
Correction factor of rating current for 4 and 5 devices placed side-by-side	0.9
Correction factor of rating current for 6 devices placed side-by-side	0.85
Correction factor of magnetic tripping with 100 Hz	1.1
Correction factor of magnetic tripping with 200 Hz	1.2
Correction factor of magnetic tripping with 400 Hz	1.5
Correction factor of magnetic tripping with 60 Hz	1
Dimensions	
Depth of installed product	70 mm
Height of installed product	83 mm
Width of installed product	70 mm
Frequency	
Frequency	50 to 60 Hz

Total power loss under IN	22.4 W
Power loss per pole at In	6.2 W
Endurance	
Electric endurance in number of cycles	4000
Number of mechanical operations	20000
Installation, mounting	
Type of top connection for modular devices	with screw
Tightening torque	2,8Nm
Type of Bottom Connection for modular devices	Biconnect
Connection	
Connection cross-section of input and output with screws, for massive conductors	1 / 35 mm <sup>2</sup>
Connection cross section of access and exit with screws, for flexible conductor	1 / 25 mm
Type of connection	with screw
Standards	
Standard text	EN 60898-1
Safety	
Protection index IP	IP20
REACH conform	No
RoHS conform	Yes
Halogen free	Nc
Use conditions	
Operating temperature	-2570 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I <sup>2</sup> t	3
Altitude	2000 m
Air humidity protection	for all climates
Storage/transport temperature	-2580 °C