



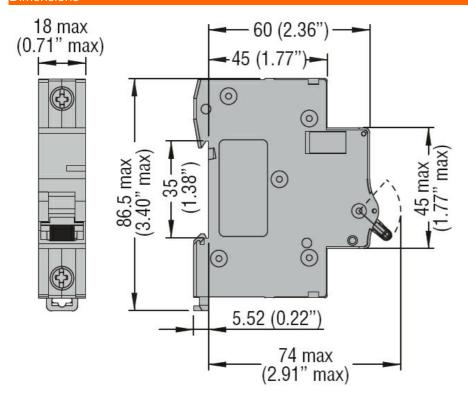
Product type designation Figure 1 Miniature circuits breaker (MS) Product type designation 1 P1 MB Number of poles 1 P2 Number of poles 1 P3 Number of DIM modules 1 EC/ UL1077 Compliance IEC / UL1077 Electrical features V 440 Rated inputise withstand voltage Ulmp KV 230 Rated operational voltage AC (IEC) VDC 80 Rated operational voltage DC VDC 80 Rated drequency L 5 60 Rated current (In) A 3 1 7 7 1 1 2 2 1 2 2 1 2				
Product type designation	Draduat designation			Miniature circuit
Number of DiN modules 1 P Compliance 1 EC / UL 1077 Electrical features IEC / UL 1077 Rated insulation voltage Uil EC/EN V 440 Rated insulation voltage Uimp kV 230 Rated operational voltage DC VDC 80 Rated operational voltage DC VDC 80 Rated operational voltage DC L 250/60 Rated frequency L 3 3 Tripping curve L 2 50/60 Short circuit rating (IEC) KA 10 Electrical life cycles 10000 Power dissipation per pole max W 96 Ambient conditions min °C 40 Operating temperature min °C 440 Max altitude m 2000 Mechanical features m 2000 Operating position mm 2000 Mechanical features mm 2000 Operating position mm 2000 Elixing 35mm DIN rail Tightening torque for terminals min 8mx N 2 2 min 10 min	Froduct designation			breaker (MCB)
Number of DIN modules	Product type designation			P1 MB
Compliance Section S	Number of poles			1P
Electrical features V 440 Rated insulation voltage Uimp kV 4 Rated operational voltage C(IEC) VAC 230 Rated operational voltage DC VDC 80 Rated operational voltage DC Hz 50/60 Rated current (In) A 3 Tripping curve C C Short circuit rating (IEC) kA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions W 0.96 Operating temperature min °C -40 Max attitude m 2000 Mechanical features m 2000 Operating position normal Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 2 Conductor section min nm 1.8 AWG/Kcmil min min 1.4 </td <td>Number of DIN modules</td> <td></td> <td></td> <td>1</td>	Number of DIN modules			1
Rated insulation voltage Ui IEC/EN	Compliance			IEC / UL1077
Rated impulse withstand voltage Ulimp kV 4 Rated operational voltage AC (IEC) VAC 230 Rated operational voltage DC VDC 80 Rated frequency Hz 50/60 Rated current (In) A 3 Tripping curve C C Short circuit rating (IEC) kA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions W 0.96 Operating temperature min °C -40 max °C +70 Storage temperature min °C -40 Max altitude m 2000 Mechanical features w Vertical plan Operating position normal Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 2 Conductor section min mm 1 <td>Electrical features</td> <td></td> <td></td> <td></td>	Electrical features			
Rated operational voltage DC VAC 230 Rated frequency Hz 50/60 Rated frequency Hz 50/60 Rated current (In) A 3 Tripping curve C C Short circuit rating (IEC) kA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions W 0.96 Operating temperature min °C -40 Max altitude m 2000 Mechanical features min 200 -40 Operating position normal Vertical plan	Rated insulation voltage Ui IEC/EN		V	440
Rated operational voltage DC VDC 80 Rated frequency Hz 50/60 Rated current (In) A 3 Tripping curve C C Short circuit rating (IEC) kA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions W 0.96 Operating temperature min °C -40 Max °C +70 Storage temperature min °C -40 Max altitude max °C +80 Mechanical features Operating position Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 Fixing min Nm 1.8 max Nm 2 Tightening torque for terminals min lin 11.7 1.6 min 16 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	Rated impulse withstand voltage Uimp		kV	4
Rated frequency Hz 50/60 Rated current (In) A 3 Tripping curve C C Short circuit rating (IEC) kA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions W 0.96 Ambient conditions To 40 Max (2) 40 Operating temperature min °C -40 *** Storage temperature min °C -40 ***	Rated operational voltage AC (IEC)		VAC	230
Rated current (in) A 3 Tripping curve C Short circuit rating (IEC) KA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions W 0.96 Operating temperature min °C -40 max °C +70 Storage temperature min °C -40 Max altitude m 2000 Mechanical features m 2000 Operating position normal Vertical plan Fixing 35mm DIN rail Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 2 Conductor section min nm 2 Lect min mm 2 Lect min mm 2 Conductor section min mm 1 4 AWG/Kcmil <td>Rated operational voltage DC</td> <td></td> <td>VDC</td> <td>80</td>	Rated operational voltage DC		VDC	80
Tripping curve C Short circuit rating (IEC) kA 10 Electrical life cycles 100000 Power dissipation per pole max w 0.96 Ambient conditions min °C -40 Operating temperature min °C -40 Max a cc +80 max °C -40 Max altitude m 2000 2000 Mechanical features normal Vertical plan Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1 Tightening torque for terminals min lbin 17.7 17.7 Terminals tool pz 2 2 2 2 Conductor section min mm² 1 mm² 1 AWG/Kcmil min min min min 14 min min 6 Mechanical life cycle 20000 20000 2 200000 2 200000	Rated frequency		Hz	50/60
Short circuit rating (IEC) kA 10 Electrical life cycles 10000 Power dissipation per pole max W 0.96 Ambient conditions Operating temperature min °C -40 max °C +70 Storage temperature min °C -40 Max altitude m 2000 Mechanical features Operating position normal Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 nin 10n 1.8 max Nm 2 nin 1.7 1.7 Terminals tool EC Conductor section IEC min mm 1 1 AWG/Kcmil min mm 14 1 Mechanical life cycles 20000 Weight g 1115	Rated current (In)		Α	3
Electrical life	Tripping curve			С
Power dissipation per pole max	Short circuit rating (IEC)		kA	10
Ambient conditions	Electrical life		cycles	10000
Operating temperature min max °C valous valou	Power dissipation per pole max		W	0.96
Min	Ambient conditions			
Max C +70	Operating temperature			
Storage temperature min max °C max -40 max °C max +80 max Max 100 max Max 100 max Max 2000 Max 2 min Max M		min	°C	-40
Max altitude min max °C +80 Max altitude m 2000 Mechanical features Operating position Fixing Journal of Normal Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 min 10 lbin 16 max Nm 2 min 17.7 Terminals tool Pz 2 Conductor section IEC min mm² 1 mm² 35 AWG/Kcmil min min 14 max 6 Mechanical life cycles 20000 Weight g 115		max	°C	+70
Max altitude max °C +80 Mechanical features Operating position normal Vertical plan Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 min lbin 17.7 Terminals tool Pz 2 Conductor section IEC min mm² 1 AWG/Kcmil min mm² 35 AWG/Kcmil min 14 max 6 Mechanical life cycles 20000 Weight g 115	Storage temperature			
Max altitude m 2000 Mechanical features Operating position Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 min Nm 2 Terminals tool Pz 2 Conductor section IEC min mm² 1 AWG/Kcmil min 14 max min		min	°C	-40
Mechanical features Operating position Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 mm 2 lbin 16 max lbin 16 max lbin 17.7 Terminals tool Pz 2 Conductor section IEC min mm² 1 mm² 1 mm² 35 AWG/Kcmil min max mm² 35 AWG/Kcmil min min mm² 14 max 6 Mechanical life cycles 20000 Weight g 115		max	°C	+80
Operating position Fixing 35mm DIN rail Tightening torque for terminals min Nm Nm 1.8 max Nm 2 min Ibin 16 max Ibin 17.7 Terminals tool Pz 2 Conductor section IEC min mm² 1 and max mm² 35 AWG/Kcmil min min min mm² 14 max 6 Mechanical life cycles 20000 Weight g 115	Max altitude		m	2000
Fixing Journals Tightening torque for terminals min kmax Nm 1.8 max Nm 2 min kmin lbin 16 max lbin 17.7 Terminals tool Pz 2 Conductor section IEC min kmax 14 AWG/Kcmil min kmax 14 Mechanical life cycles 20000 Weight g 115	Mechanical features			
Fixing 35mm DIN rail Tightening torque for terminals min Nm 1.8 max Nm 2 min lbin 16 max lbin 17.7 Terminals tool Pz 2 Conductor section Pz 2 IEC min mm² nm² 1 max mm² 35 AWG/Kcmil min max mm² 6 Mechanical life cycles 20000 Weight g 115	Operating position			
Tightening torque for terminals		normal		Vertical plan
Mechanical life Min Nm 1.8 max Nm 2 min lbin 16 max lbin 17.7 Terminals tool Pz 2 Terminals tool Pz 2 Terminals tool Pz 2 Terminals tool Terminals tool Terminals tool Terminals tool Pz 2 Terminals tool Termi	Fixing			35mm DIN rail
Mechanical life Max Nm 2 min lbin 16 max lbin 17.7	Tightening torque for terminals			
Mechanical life min max lbin 16 max lbin 17.7		min	Nm	1.8
Terminals tool		max	Nm	2
Terminals tool Pz 2		min	lbin	16
Conductor section IEC		max	lbin	17.7
Fig. 1 Fig. 2 F	Terminals tool			Pz 2
Mechanical life min mx mm² mm² mm² mm² 35 Mechanical life cycles 20000 Weight g 115	Conductor section			_
AWG/Kcmil max mm² 35 min max 14 max 6 Mechanical life cycles 20000 Weight g 115	IEC			
AWG/Kcmil min max 14 max 6 Mechanical life cycles 20000 Weight g 115		min	mm²	1
min max 14 max Mechanical life cycles 20000 Weight g 115		max	mm²	35
Mechanical life max 6 Weight cycles 20000 g 115	AWG/Kcmil			
Mechanical lifecycles20000Weightg115		min		14
Weight g 115		max		6
	Mechanical life		cycles	20000
	Weight		g	115
	Frontal IP degree			IP20



ENERGY AND AUTOMATION

Pollution degree		2
Grid distance as per Annex H.1 of IEC/EN60898-1 standard	mm	60

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n°235. UR "UL Recognized" per Canada e USA.

IEC/EN 60898-1

IEC/EN 60947-2

UL 1077

Certifications

cURus

EAC

TÜV-Rheinland

ETIM classification

ETIM 8.0

EC000042 -Miniature circuit breaker (MCB)