



Product designation         Final Minitature circuit breaker (MCR)           Product type designation         + 7 MR           Number of DIN modules         4 4           Compliance         + 8 MR           Electrical features         V 440           Rated insulation voltage Uil EC/EN         V 440           Rated insulation voltage AC (IEC)         NAC 230/400           Rated frequency         Hz 50/60           Rated frequency         B           Rated current (In)         A 1           Tripping curve         B           Short circuit rating (IEC)         KA 10           Electrical life         cycles 10000           Power dissipation per pole max         W 1.07           Ambient conditions         W 1.07           Operating temperature         min °C 40           Storage temperature         min °C 440           Max altitude         m 2000           Mechanical features         momal N 20           Operating position         momal N 20           Fixing         35mm DIN rail           Fixing         35mm DIN rail           Fixing         10 mm N 10           Fixing         10 mm N 10           Fixing         10 mm N 10				
Product type designation	Draduat designation			Miniature circuit
Number of poles         4P           Number of DIN modules         1EC / UL 1077           Compliance         1EC / UL 1077           Electrical features         3V         440           Rated insulation voltage Uil IEC/EN         V         4           Rated insulation voltage Uil EQ (IEC)         VXC         230/400           Rated forequency         1Hz         50/60           Rated frequency         KA         1           Rated frequency         KA         1           Rated frequency         KA         1           Short circuit rating (IEC)         KA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions         W         1.07           Operating temperature         min         *C         40           Max altitude         m         20         40           Mechanical features         min         *C         40           Operating position         nomal         *C         40           Fixing         nomal         *D         22           Texture         min         min         1.0           Tippi	Product designation			breaker (MCB)
Number of DIN modules         4           Compliance         IEC / UL 1077           Electrical features         V         440           Rated insulation voltage UI IEC/EN         V         4           Rated insulation voltage UII PC/EN         VX         20/400           Rated insulation voltage AC (IEC)         VXA         2000           Rated frequency         Hz         50/60           Rated current (In)         A         1           Tripping curve         B         B           Short circuit rating (IEC)         KA         10           Electrical life         cycles         1000           Power dissipation per pole max         W         1,07           Ambient conditions         T         1,00           Storage temperature           Temperature         min         °C         40           Max altitude         min         20         40           Max altitude         min         20         40           Mechanical features           Tightening position         min         1min         1min         1min         1min         1min         1min         1min         1min         1min<	Product type designation			P1 MB
Compliance         Electrical features           Electrical features         V         440           Rated inspulse withstand voltage Ulinp         kV         4           Rated operational voltage AC (IEC)         VAC         230/400           Rated frequency         Hz         50/60           Rated current (In)         A         1           Tripping curve         kA         10           Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         w         1.07           Ambient conditions         min         °C         40           Operating temperature         min         °C         40           Max altitude         m         200         200           Mechanical features         min         °C         40           Operating position         mormal         v         10           Fixing         mormal         v         vertical plan           Tightening torque for terminals         min         min         min           Tightening torque for terminals         min         min         10           Terminals tool         min         min	Number of poles			4P
Electrical features         V         440           Rated insulation voltage Uiripp         kV         4           Rated operational voltage AC (IEC)         VAC         230/400           Rated operational voltage AC (IEC)         VAC         230/400           Rated operational voltage AC (IEC)         Hz         50/60           Rated current (In)         A         1           Tripping curve         B         8           Short circuit rating (IEC)         KA         10           Power dissipation per pole max         W         1.07           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           min         Nm         1.8           m	Number of DIN modules			4
Rated insulation voltage Uir IEC/EN         V         440           Rated impulse withstand voltage Uimp         kV         4           Rated operational voltage AC (IEC)         VAC         230/400           Rated operational voltage AC (IEC)         VAC         230/400           Rated frequency         HZ         50/60           Rated current (In)         A         1           Tripping curve         B         100           Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions         W         1.07           Operating temperature         min         °C         -40           Ambient conditions         min         °C         -40           Storage temperature         min         °C         -40           Max altitude         m         2000           Mechanical features         min         Vertical plan           Operating position         mormal         Vertical plan           Fixing         normal         Vertical plan           Fixing         normal         Nm         2           Interpretable	Compliance			IEC / UL1077
Rated impulse withstand voltage Uimp Rated operational voltage AC (IEC)	Electrical features			
Rated operational voltage AC (IEC)         VAC         230/400           Rated frequency         HZ         50/60           Rated current (In)         A         1           Tripping curve         B         B           Short circuit rating (IEC)         KA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions           Operating temperature           min         °C         -40           max         °C         -	Rated insulation voltage Ui IEC/EN		V	440
Rated frequency   Rated current (In)	Rated impulse withstand voltage Uimp		kV	4
Rated current (In)         A         1           Tripping curve         B           Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions           Operating temperature           min °C 40 max °C 40 max °C 40 max °C 480           min °C 40 max °C 480           Max altitude         m         2000           Mechanical features           Operating position         normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals         min max nm 2         Nm 2           Tightening torque for terminals         min loin loin loin loin loin loin loin lo	Rated operational voltage AC (IEC)		VAC	230/400
Tripping curve         B           Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions         W         1.07           Ambient conditions           Operating temperature           min         °C         -40	Rated frequency		Hz	50/60
Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions         W         1.07           Operating temperature         min of conditions of co	Rated current (In)		Α	1
Short circuit rating (IEC)         KA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions           Operating temperature         min °C -40 max °C +70           Storage temperature           Min °C -40 max °C +80           Max altitude         m         2000           Mechanical features           Operating position           Fixing         35mm DIN rail           Tightening torque for terminals         min normal         Vertical plan           Tightening torque for terminals         min normal         Nm         1.8           max         Nm         2         2           min lbin 16         16         17.7           Terminals tool         pz 2         2           Conductor section           IEC         min max mm² 1 mm² 1 mm² 3 mm²	Tripping curve			В
Electrical life         cycles         10000           Power dissipation per pole max         W         1.07           Ambient conditions			kA	10
Power dissipation per pole max			cycles	10000
Ambient conditions	Power dissipation per pole max			1.07
Min				
max         °C         +70           Storage temperature         min         °C         -40           max         °C         +80           Max altitude         max         °C         +80           Mechanical features           Operating position           Fixing         normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals         min         Nm         1.8           max         Nm         2           min         lbin         16           max         lbin         17.7           Terminals tool         reg         2           Conductor section         min         mm²         1           IEC         min         mm²         35           AWG/Kcmil         min         min         14           max         min         14         min           min	Operating temperature			
Storage temperature		min	°C	-40
Max altitude         min max         °C vocal max         480 mode           Mechanical features           Operating position         normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals         min normal Nm 1.8 max Nm 2 amax Nm 2 amax lbin 15.7 normal lbin 16 max lbin 17.7 normal lbin 16 max lbin 17.7 normal lbin 16 max lbin 17.7 normal lbin max mm 2 amax mm 2		max	°C	+70
Max altitude         m         2000           Mechanical features           Operating position           Fixing         Normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals           min         Nm         1.8         nax         Nm         2         nax         Ibin         16         nax         lbin         17.7         17         Terminals tool         Pz 2         Pz 2         2         Conductor section         IEC         min         mm²         1         4         max         mm²         35         A         4         4         max         6         4         <	Storage temperature			
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           min         lbin         16           max         lbin         17.7           Terminals tool         Pz 2           Conductor section           IEC         min         mm²         1           AWG/Kcmil         min         mm²         1           AWG/Kcmil         min         mn         14           Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20		min	°C	-40
Mechanical features           Operating position           Fixing         35mm DIN rail           Tightening torque for terminals           min Nm Nm 1.8 max Nm 2 min lbin 16 max Nm 2 min lbin 16 max lbin 17.7           Terminals tool         Pz 2           Conductor section           IEC         min mm² 1 mm² 1 mm² 35           AWG/Kcmil         min mm² 14 max 6           Mechanical life         cycles 20000           Mechanical life         cycles 20000           Weight         g 460           Frontal IP degree         IP20		max	°C	+80
Operating position         Normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals           min plan         Nm         1.8           max         Nm         2           min max         lbin         16           max         lbin         17.7           Terminals tool         Pz 2           Conductor section         IEC         min mm² mm² 1         nm² 35           AWG/Kcmil         min max mm² 14         nm² 14         nm² 6           Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20	Max altitude		m	2000
Normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals         min         Nm         1.8           max         Nm         2         2           min         lbin         16         17.7           Terminals tool         pz 2         2           Conductor section         IEC         min         mm²         1           AWG/Kcmil         min         max         mm²         35           AWG/Kcmil         min         min         14         max         6           Mechanical life         cycles         20000         20000         Weight         g         460           Frontal IP degree         IP20         IP20         IP20         IP20	Mechanical features			
Fixing         35mm DIN rail           Tightening torque for terminals         min Nm 1.8 max Nm 2 min 1bin 16 max 1bin 17.7           Terminals tool         Pz 2           Conductor section         min mm² 1 max mm² 35           AWG/Kcmil         min mm² 14 max 6           Mechanical life         cycles 20000           Weight         g 460           Frontal IP degree         IP20	Operating position			
Tightening torque for terminals    min   Nm   1.8   max   Nm   2   min   Ibin   16   max   Ibin   17.7		normal		Vertical plan
Mechanical life   Min   Nm   1.8   max   Nm   2   min   lbin   16   max   lbin   17.7	Fixing			35mm DIN rail
Max   Nm   2   min   Ibin   16   max   Ibin   17.7	Tightening torque for terminals			
Mechanical life   Max   Ibin   16 max   Ibin   17.7		min	Nm	1.8
Terminals tool		max	Nm	2
Terminals tool		min	Ibin	16
Conductor section   IEC		max	Ibin	17.7
Frontal IP degree   IEC	Terminals tool			Pz 2
Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20	Conductor section			
AWG/Kcmil         max         mm²         35           min max         14 max         6           Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20	IEC			
AWG/Kcmil           min max         14 max         6           Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20		min	mm²	
min max         14 max         6           Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20		max	mm²	35
Mechanical life         cycles         20000           Weight         g         460           Frontal IP degree         IP20	AWG/Kcmil			
Mechanical lifecycles20000Weightg460Frontal IP degreeIP20		min		
Weight g 460 Frontal IP degree IP20		max		
Frontal IP degree IP20			cycles	
			g	
Pollution degree 2				
	Pollution degree			2

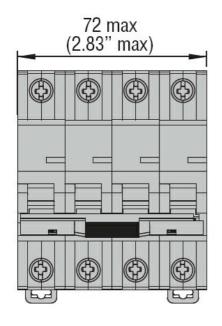
**ENERGY AND AUTOMATION** 

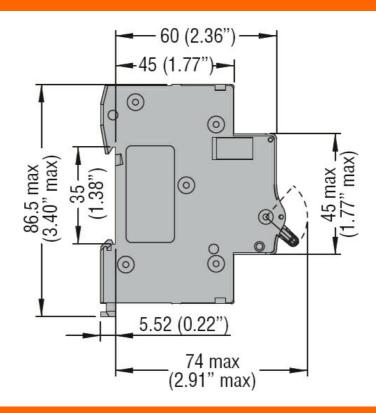
Grid distance as per Annex H.1 of IEC/EN60898-1 standard

mm

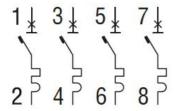
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## **Dimensions**





## 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)