



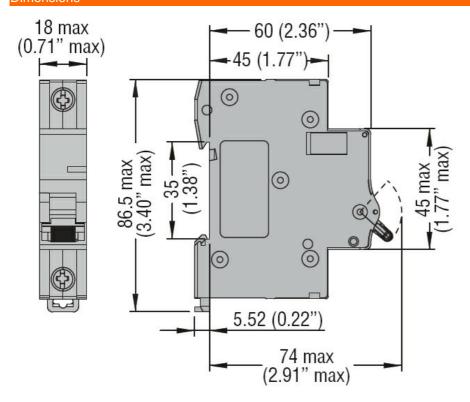
Product designation         Miniature circuit by seaker (MCR)           Product type designation         1 P1 M8           Number of poles         1 P           Number of DIN modules         1 Ec / UL1077           Compliance         IEC / UL1077           Electrical features         IEC / UL1077           Rated insulation voltage UI EC/EN         V 440           Rated insulation voltage VI EC/EN         VC 230           Rated operational voltage AC (IEC)         VC 230           Rated operational voltage AC (IEC)         A 8           Rated derequency         A 8           Rated derequency         A 8           Short circuit rating (IEC)         KA 10           Electrical life         cycles         10000           Power dissipation per pole max         W 0.96           Ambient conditions         min °C 40         40           Operating temperature         min °C 40         40           Max altitude         min °C 40         40           Mechanical features         min °C 40         40           Operating position         min °C 40         40           Fixing         min °C 40         40           Fixing         min °C 40         40           Recample for termi				4800
Product type designation	Product designation			Miniature circuit
Number of poles         1P           Number of DIN modules         1 EC / UL 1077           Compliance         1EC / UL 1077           Electrical features         1EC / UL 1077           Rated insulation voltage Uil EC/EN         V         440           Rated insulation voltage Uimp         kV         4           Rated operational voltage DC         VDC         80           Rated operational voltage DC         VDC         80           Rated frequency         Hz         50/60           Rated operational voltage DC         Kz         10000           Rated frequency         Hz         50/60           Rate d frequency <td>Draduat tune decignation</td> <td></td> <td></td> <td>• •</td>	Draduat tune decignation			• •
Number of DIN modules         1 EC / U1.077           Compliance         UE / U1.077           Electrical features         V         440           Rated insulation voltage UI IEC/EN         V         4           Rated inpulse withstand voltage UImp         kV         4           Rated operational voltage DC         VDC         20           Rated current (In)         A         8           Rated current (In)         A         8           Floring curve         D         50           Short circuit straing (IEC)         RAA         10           Electrical life         vcles         10000           Power dissipation per pole max         wcles         0.96           Ambient conditions         wcles         0.96           Operating temperature         min         °C         -40	• • • • • • • • • • • • • • • • • • • •			
Compliance         IEC / UL1077           Electroal Teatures         V         440           Rated insulation voltage Ulir IEC/EN         kV         4           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 frequency         A         8           Rated Gurrent (In)         A         8           Short circuit rating (IEC)         kA         10           Short circuit rating (IEC)         kA         10           Power dissipation per pole max         W         0           Ambient conditions         W         0           Very Electrical Iffe         min         °C         -40           Max altitude         m         0         -40           Max altitude         m         0         -40           Mechanical features         m         0         0           Operating position         min         N         1         1           Fixing         min         Nm         2         -40         1         1	•			
Electrical features         V         440           Rated insulation voltage Uimp         kV         4           Rated operational voltage AC (IEC)         VAC         230           Rated operational voltage DC         VDC         80           Rated doperational voltage BC         Hz         50/60           Rated current (In)         A         8           Tripping curve         D         D           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         m         2000           Operating position         normal         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals         min         Nm         1.8           max         Nm         2         min         max         Nm         2           Conductor section         min         mm         nm         2         2				•
Rated insulation voltage Uir IEC/EN         V         4440           Rated impulse withstand voltage Uirip         RV         4           Rated operational voltage AC (IEC)         VAC         230           Rated operational voltage DC         VDC         80           Rated current (In)         A         8           Tripping curve         D         D           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         0         -40           Operating position         normal         Vertical plan           Fixing         softmothyradia         -40           Ighthering torque for terminals         min         Nm         1.8           min         Nm         1.8         -4           min         lbin         16 <td><u> </u></td> <td></td> <td></td> <td>ILO / OL 1077</td>	<u> </u>			ILO / OL 1077
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         8           Tripping curve         D         D           Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         0.96           Ambient conditions         min         °C         -40           Operating temperature         min         °C         -40           Max altitude         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           Terminals tool         min         nm         1.7           Terminals tool         min         min         nm         2           Conductor section			V	440
Rated operational voltage AC (IEC)         VAC         230           Rated operational voltage DC         VDC         80           Rated frequency         Hz         50/60           Rated current (In)         A         8           Tripping curve         D         D           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         °C         -40           Operating position         normal         Vertical plan         Vertical plan           Fixing         35mm DIN rail         1           Tightening torque for terminals         min         Nm         1.8           max         nm         2         2           Conductor section         min         nm         16           min         nm         1         2           AWG/Kcmil         min         nm         14           max				
Rated operational voltage DC         VDC         80           Rated frequency         Hz         50/60           Rated current (In)         A         8           Tripping curve         D         D           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           Max altitude         min         2000           Mechanical features         Operating position         Vertical plan           Fixing         35mm DIN rail           Tightening torque for terminals         min         Nm         1.8           max         Nm         2           min         Nm         1.8           max         libin         11.7           Terminals tool         min         min         min         min         min         min				
Rated frequency         Hz         50/60           Rated current (In)         A         8           Tripping curve         D         D           Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         0.96           Ambient conditions         To 40         To 40           Ambient conditions         min         °C         -40           Operating temperature         min         °C         -40           Storage temperature         min         °C         -40           Max altitude         m         2000           Mechanical features         min         2000           Operating position         normal         Vertical plan           Fixing         s5mm DIN rail           Tightening torque for terminals         min         Nm         1.8           max         Nm         2         2           min         Ibin         17.7         15           Terminals tool         min         min         16         min         17.7         15         15         16         16         17.7         17         17				
Rated current (in)         A         8           Tripping curve         D           Short circuit rating (IEC)         KA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         0.96           Ambient conditions         Temperature           Operating temperature         min         °C         -40           max         Nm         <	· · · · · · · · · · · · · · · · · · ·			
Tripping curve				
Short circuit rating (IEC)         kA         10           Electrical life         cycles         10000           Power dissipation per pole max         W         0.96           Ambient conditions         Toperating temperature           Max altitude         min ormal				
Electrical life			kΑ	
Power dissipation per pole max				
Ambient conditions				
Operating temperature         min max         °C valo colspan="3">-40 col			VV	0.30
Min				
Storage temperature           Storage temperature           min         °C         -40           min         °C         -480           Max altitude         m         2000           Mechanical features           Operating position           normal         Vertical plan           Fixing         min         Nm         1.8           min         Nm         2           min         Nm         2           min         1bin         16           max         bin         17.7           Terminals tool         P2 2           Conductor section           IEC           min         mm²         1           AWG/Kcmil         min         mm²         3           AWG/Kcmil         min         14         min         14           max         6         0000         0000           Weight         g         115	Operating temperature	min	°C	-40
Storage temperature         min max         °C max         -40 max				
Max altitude         min max         °C +80           Max altitude         m 2000           Mechanical features           Operating position           Fixing         Tommal         Vertical plan           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 mm² 1 max mm² 35           AWG/Kcmil         min mm² 14 max 6           Mechanical life         cycles         20000           Weight         g 115	Storage temperature	max		- 170
Max altitude         max         °C         +80           Mechanical features         Mechanical features         Coperating position         normal         Vertical plan           Fixing         35mm DIN rail         Tightening torque for terminals         min         Nm         1.8           In max         Nm         2         min         lbin         17.7           Terminals tool         pz 2         2           Conductor section         min         mm²         1           IEC         min         mm²         35           AWG/Kcmil         min         min         14           max         6         6           Mechanical life         cycles         20000           Weight         g         115	Clorage temperature	min	°C	-40
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         min         min         min         1         nm         35           AWG/Kcmil         min         14         nm         14				
Mechanical features           Operating position           Fixing         35mm DIN rail           Tightening torque for terminals           min Nm Nm 1.8 max Nm 2 mmx Nm 2 mmx lbin 16 max lbin 16 max lbin 17.7           Terminals tool         Pz 2           Conductor section           IEC         min mm² 1 nm² 1 nm² 35           AWG/Kcmil           min mm² 14 max nm² 35           AWG/Kcmil           Mechanical life         cycles         20000           Weight         g         115	Max altitude			
Operating position           Fixing         35mm DIN rail           Tightening torque for terminals           min Nm Nm 1.8           max max Nm 2         2           min lbin 16         16           max lbin 17.7         17.7           Terminals tool         Pz 2           Conductor section         IEC         min mm² mm² 35           AWG/Kcmil         min max mm² 35         14           Mechanical life         cycles         20000           Weight         g         115				
Fixing         Journals           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         35           AWG/Kcmil         min         14         max         6           Mechanical life         cycles         20000           Weight         g         115				
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	31	normal		Vertical plan
Tightening torque for terminals	Fixing			
Mechanical life   Min   Nm   1.8   Max   Nm   2   Min   1bin   16   Max   1bin   17.7   Min   Min				
Max   Nm   2   min   lbin   16   max   lbin   17.7	9 4 9 4 1 4 4 4	min	Nm	1.8
Terminals tool				
Terminals tool   Pz 2		min	lbin	16
Conductor section   IEC		max	lbin	17.7
IEC	Terminals tool			Pz 2
min mx         mm² mx         1 mx         35           AWG/Kcmil         min mx         14 max         6           Mechanical life         cycles         20000           Weight         g         115	Conductor section			
Mechanical life         max         mm²         35           Meight         14         6           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         cycles         20000           Weight         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)