

> Make the most of your energySM

Multi 9 Low Voltage Final Distribution Products 0.5A to 125A

Low voltage

Multi 9

Low Voltage Final Distribution Products
0.5A to 125A

Catalogue
2011



IEC 규격에 의한
전기설비 설계
가이드

무료백서 다운로드 이벤트

www.sereply.com을 방문하셔서 키코드 **42874y**를 등록하시면, 전기설비 설계 가이드를 무료로 다운로드 받으실 수 있습니다. IEC 규격에 의한 전기설비 설계 가이드를 무료로 다운로드하시고 건축 설비 설계 및 시공의 국내현장 적용 방법에 대해서 알아보십시오.

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C60 UL Features



C60 UL 489



C60 UL 489 480Y/277 V ~



C60 UL 1077



C60 UL 489A

Multi 9 products for equipments having to satisfy with standards UL / CSA and IEC

The Multi 9 modular offer is a system protection including:

- miniature circuit breakers (MCB)
- supplementary protectors
- electrical auxiliaries
- accessories.

The Multi 9 system is ideal for use by OEMs to provide protection of their complete products or specific circuits within the equipment.

Thanks to this offer, OEMs in the entire world can offer equipment that is conform to the primary world standards:

- UL 489, UL 1077, UL 489A
- CSA C22.2 No. 5-02, CSA C22.2 No. 235-04
- IEC 60947-2
- GB 14048-2.

Main applications fields

- Semi-conductor machines.
- Communication equipment.
- Computers.
- Medical equipment.
- Transformers.
- Industrial controls and automation.
- Packaging equipment.
- Food processing.

Multi 9 products C60 and provide OEMs with:

- Ease of installation with DIN rail mounting (35 mm).
- Panel space savings thanks to their small and compact size: width per pole is only 0.71 in (18 mm) up to 63 A.
- Multiple possibilities of connecting for UL 489 circuit breakers (up/down):
 - ☐ box lug/box lug
 - ☐ ring tongue terminal/ring tongue terminal (RTT/RTT)
 - ☐ box lug/ring tongue terminal.
- Ring tongue terminal connections kit for UL 1077 supplementary protectors.
- Multi 9 products (circuit breakers and supplementary protectors) are current limiting, providing faster separation of the component from the fault, reducing system damage.
- Suitable products with overcurrent protection meeting specific uses:
 - B, C, D time-current curves for:
 - ☐ sensitive equipment (computers, electronic devices...): B curve
 - ☐ all application types: C curve
 - ☐ high inrush currents (motors, transformers...): D curve.
- A range of electrical auxiliaries such as:
 - ☐ alarm switch (**SD**)
 - ☐ auxiliary switch (**OF**)
 - ☐ shunt trip (**MX + OF**)
 - ☐ under-voltage release (**MN**).
- Wide choice of ampere ratings, suitable for low-power circuits:

Type	Standards			
	UL 489 CSA C22.2 No. 5-02	UL 489A	UL 1077 CSA C22.2 No. 235-04	IEC 60947-2 GB 14048-2
C60	■	■	■	■

C60 UL

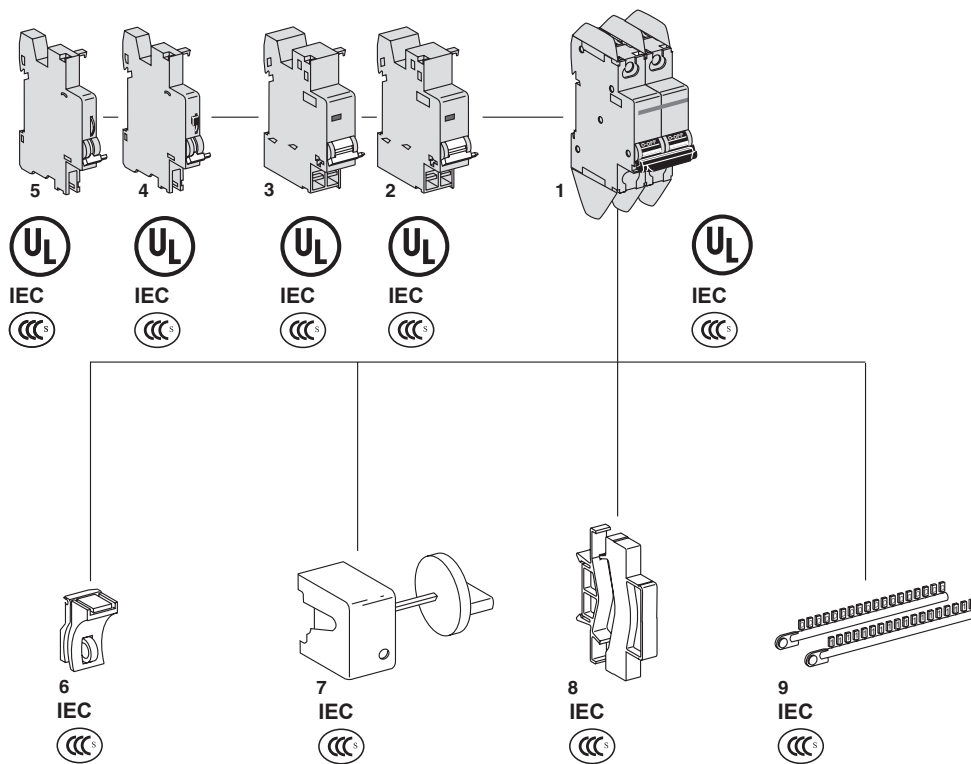
Architecture

UL 489 / CSA C22.2 No. 5-02



Overview

1. Circuit breaker C60 UL 489
2. Undervoltage release (MN)
3. Shunt trip (MX + OF)
4. Auxiliary switch (OF)
5. Alarm switch (SD)
6. Padlock attachment (for OFF position only)
7. Rotary handle
8. Spacer
9. Identification system



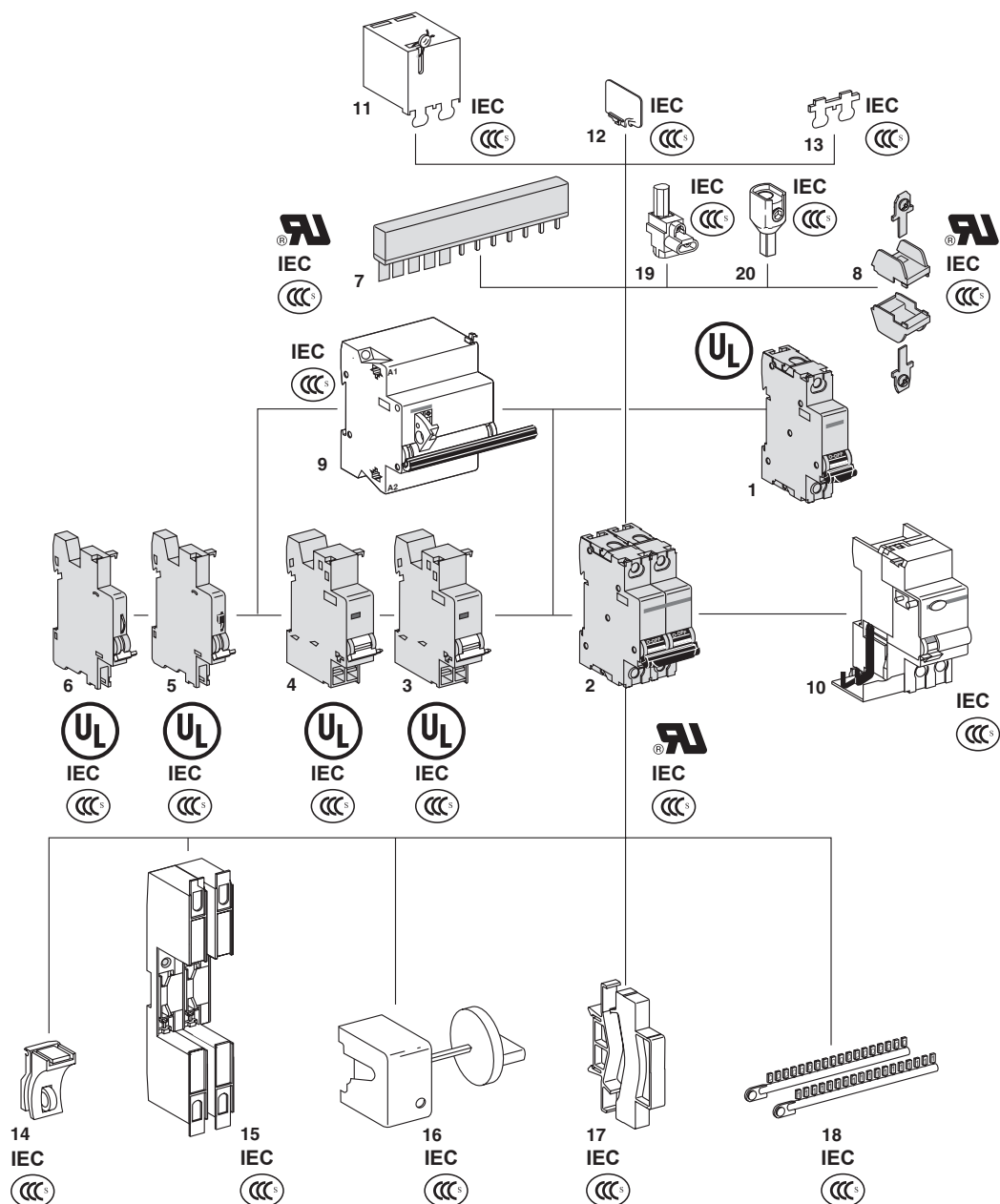
C60 UL

Architecture

UL 489A-UL 1077/CSA C22.2 No.235-04⁽¹⁾

Overview

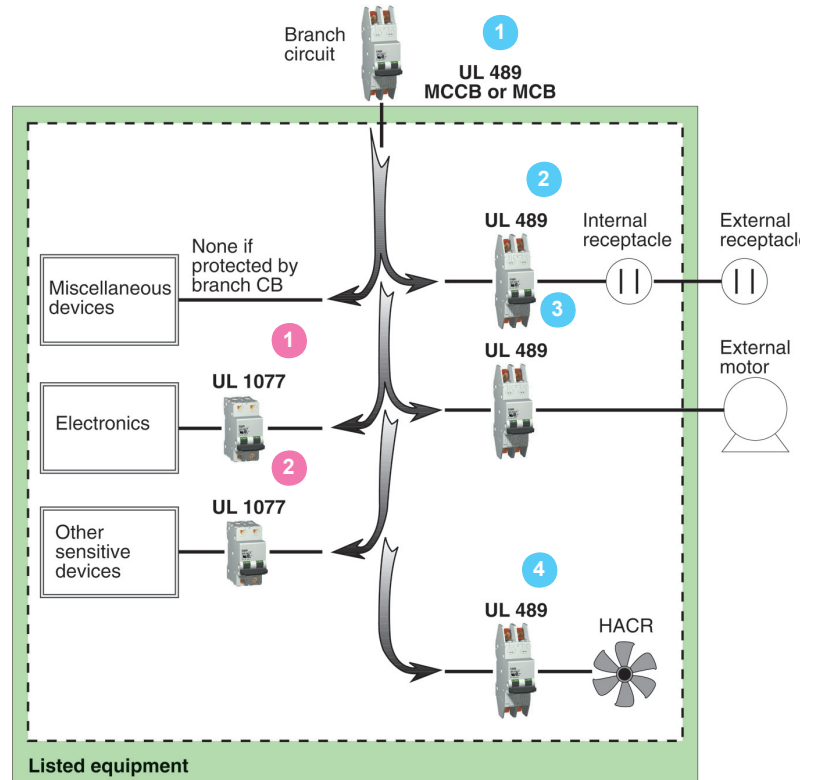
1. Circuit breaker C60 UL 489A
2. C60 UL 1077 supplementary protectors
3. Undervoltage release (MN)
4. Shunt trip (MX + OF)
5. Auxiliary switch (OF)
6. Alarm switch (SD)
7. Comb busbar
8. Ring tongue terminal connections kit (UL 1077)
9. Motor operator C60
10. C60 Vigi module⁽¹⁾
11. Terminal cover
12. Interphase barrier
13. Terminal screw shield
14. Padlock attachment (for C60 OFF position)
15. Plug-in base
16. Rotary handle
17. Spacer
18. Identification system
19. Insulated distribution terminal
20. Terminal 50 mm² Cu/Al



Caution

It is not possible to associate the motor operator (9) and/or the Vigi module (10) on the circuit breaker, if the connection kit (8) is used with the circuit breaker

Example of applicable UL 489 Circuit Breakers and UL 1077 Supplementary Protectors



UL 1077

Applications permitting supplementary protectors

UL 1077 1

Supplements or provides additional protection for sensitive components inside the equipment.

UL 1077 2

Used to protect critical or sensitive internal circuitry such as:

- computers and microprocessors
- telecommunication equipment
- electronic controllers
- power supplies
- transformers
- small motors
- many other types of equipment.

UL 489

Applications requiring branch circuit protection

UL 489 1

Protects entire OEM equipment. This necessary required UL 489 device may be provided integral to the assembly or by a remote overcurrent protective device.

UL 489 2

Required to protect convenience receptacle circuits (internal or external).

UL 489 3

Required to protect an external load circuit leaving the equipment.

UL 489 4

HACR/HVAC (Heating, Air Conditioning, and Refrigeration) equipment.

Main functions of C60 UL 489 circuit breaker:

■ protection of circuits against:

- short circuit currents
- overload currents

■ control

■ isolation

Various applications:

- semi-conductors
- electronic machinery
- control panel
- metal working
- telecommunication
- food, beverage
- packaging
- crane
- conveyors
- pumps and compressors
- HACR (Heating, Air conditioning, Refrigeration), HVAC
- engine generators.

Compliance with standards products

- UL 489 circuit breakers File #E215117.
- CSA C22.2 No. 5-02 circuit breakers File #179014.
- IEC 60947-2, VDE 0660.

Standard features

- CE Marked.
- Power circuit:
voltage rating: 120 up to 240 V ~, 480Y / 277 V ~, 60 V --- and 125 V ---
- ampere interrupting ratings:

Rating (A) 77°F / 25°C	Number of poles 0.71 in. (0,71 in.)	Voltage	Interrupting rating (kA rms)	
			AIR UL 489/CSA	Icu IEC 60947-2
0.5 to 20	1P	277 V ~	10	10
	2P/3P	480Y/277 V ~	10	10
0.5 to 35	1P	120 V ~	10	-
		240 V ~	5	10
	2P/3P	240 V ~	10	20
		415 V ~	-	10
		440 V ~	-	6
		60 V ---	10 ⁽¹⁾	10 ⁽¹⁾
40 to 63	2P	125 V ---	10 ⁽¹⁾	10 ⁽¹⁾
	1P	60 V ---	10 ⁽¹⁾	10 ⁽¹⁾

⁽¹⁾ C curve only available

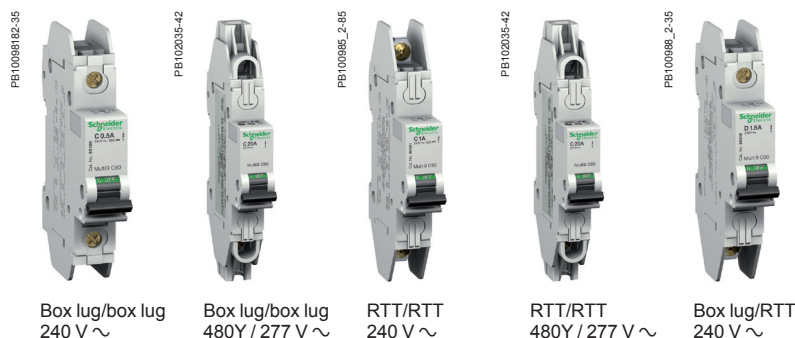
- fast closing: allows increased withstand to the high inrush currents of some loads
- fault current limiting
- trip-free mechanism: contacts cannot be held in the ON position when the circuit breaker is tripped automatically
- isolation with positive break indication-Green strip on the circuit breaker operating handle indicates that all poles open
- number of operating cycles (O-C):
 - electrical: 10000
 - mechanical: 20000.
- Environment:
 - tropicalization: treatment 2 (relative humidity: 95 % at 131 °F/55 °C)
- degree of protection as per IEC 60529:
 - on front panel: IP40 / IPXXB
 - box lug connection: IP20 / IPXXB
 - ring tongue terminal connection: IP10 / IPXXA
- temperature:
 - operation: -22 to 158 °F (-30 to 70 °C)
 - storage: -40 to 176 °F (-40 to 80 °C).
- Weight (oz./g):

Type	1P	2P	3P
C60	3.88/110	7.75/220	11.64/330

Connection

The C60 UL 489 is available in 3 different types of connection:

- box lug/box lug
- ring tongue terminal/ring tongue terminal (RTT/RTT)
- box lug/ring tongue terminal.



Connection characteristics

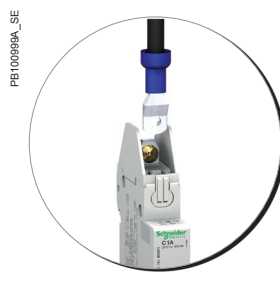
- Box lug for copper cables UL 486A File #E216919:
 - 0.5 to 25 A: (#14–#4 AWG) 2.5 to 25 mm² cables, torque 22 lb.in.
 - 30 to 63 A: (#14–#2 AWG) 2.5 to 35 mm² cables, torque 31 lb.in.
- Box lug C60 UL 480Y / 277 V ~ for copper cables UL 486A, File #E216919 :
 - 0.5 to 10 A: 1 to 1.5 mm² (#18–#16 AWG), 1 or 2 cables, torque (7 lb.in.)
 - 15 to 25 A: 2.5 to 6 mm² (#14–#10 AWG), 1 or 2 cables, torque (14 lb.in.).
- Ring terminal:
 - use single UL listed or CSA certified and insulated ring only
 - screw diameter 0.2 in (5 mm) torque 18 lb.in.



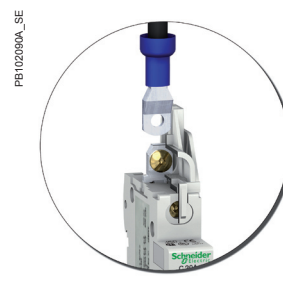
Box lug 240 V ~



Box lug 480Y / 277 V ~



Ring terminal 240 V ~



Ring terminal 480Y / 277 V ~

Time-current curves

C curve—Overcurrent protection for all application types:

- ratings: 0.5 to 63 A set at 77°F (25°C)
- tripping threshold:
 - alternative current: between 7 and 10 I_n (ratings 0.5 to 35 A)
 - direct current: between 7 and 14 I_n (ratings 0.5 to 63 A).

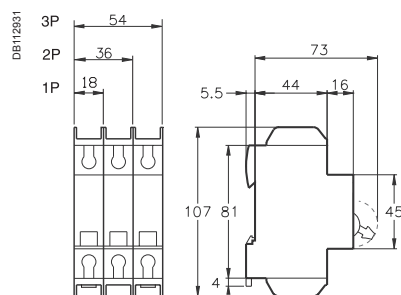
D curve—Overcurrent protection for loads with high inrush currents (motors, transformers etc.):

- ratings: 0.5 to 35 A set at 77°F (25°C)
- tripping threshold: The magnetic releases operates between 10 and 14 times ampere rating.

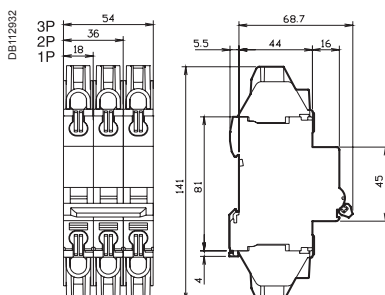
Adaptable electrical auxiliaries

- Remote tripping:
 - shunt trip (MX + OF)
 - undervoltage release (MN).
- Remote indication:
 - auxiliary switch (OF)
 - alarm switch (SD).

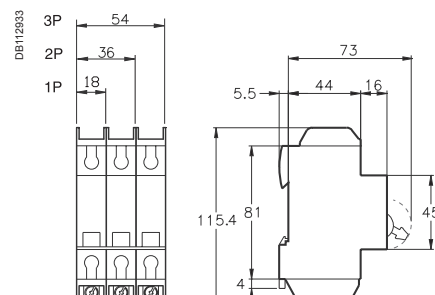
Dimensions



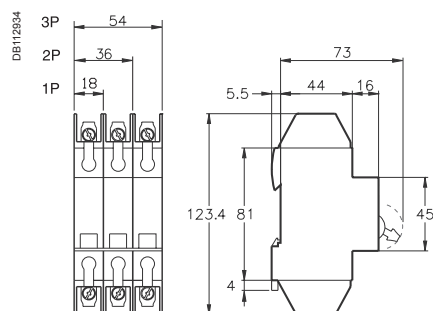
Box lug / box lug 240 V ~



Box lug / box lug 480Y / 277 V ~
RTT/RTT 480Y / 277 V ~



Box lug / RTT 240 V ~



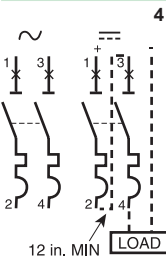
RTT / RTT 240 V ~

C60 UL

UL 489 / CSA C22.2 No. 5-02

120 to 240 V ~, 60 V --- and 125 V ---

Box lug/box lug connection (upstream/downstream)

Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. no. curve	curve
			C	D
1P				
	2	0.5	60100	60117
		1	60101	60118
		1.5	60102	60119
		2	60103	60120
		3	60104	60121
		4	60105	60122
		5	60106	60123
		6	60107	60124
		7	60108	60125
		8	60109	60126
		10	60110	60127
		13	60111	60128
		15	60112	60129
		20	60113	60130
		25	60114	60131
		30	60115	60132
		35	60116	60133
2P				
	4	0.5	60134	60151
		1	60135	60152
		1.5	60136	60153
		2	60137	60154
		3	60138	60155
		4	60139	60156
		5	60140	60157
		6	60141	60158
		7	60142	60159
		8	60143	60160
		10	60144	60161
		13	60145	60162
		15	60146	60163
		20	60147	60164
		25	60148	60165
		30	60149	60166
		35	60150	60167
C curve				
	4	1	60168	60184
		1.5	60169	60185
		2	60170	60186
		3	60171	60187
		4	60172	60188
		5	60173	60189
		6	60174	60190
		7	60175	60191
		8	60176	60192
		10	60177	60193
		13	60178	60194
		15	60179	60195
		20	60180	60196
		25	60181	60197
		30	60182	60198
		35	60183	60199
		D curve		
3P				
	6	1	60168	60184
		1.5	60169	60185
		2	60170	60186
		3	60171	60187
		4	60172	60188
		5	60173	60189
		6	60174	60190
		7	60175	60191
		8	60176	60192
		10	60177	60193
		13	60178	60194
		15	60179	60195
		20	60180	60196
		25	60181	60197
		30	60182	60198
		35	60183	60199

	Utilization in alternative current and direct current.
	Utilization in alternative current only.

PB100981_2-35

PB100983_2-35

PB100982_2-35

PB100984_2-35

C60 UL

UL 489 / CSA C22.2 No. 5-02

480Y / 277 V ~

Box lug/box lug connection (upstream/downstream)

Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. no. curve	curve
			C	D
1P				
	2	0.5	MGN61300	MGN61333
		1	MGN61301	MGN61334
		2	MGN61302	MGN61335
		3	MGN61303	MGN61336
		4	MGN61304	MGN61337
		5	MGN61305	MGN61338
		6	MGN61306	MGN61339
		8	MGN61307	MGN61340
		10	MGN61308	MGN61341
		15	MGN61309	MGN61342
		20	MGN61310	MGN61343
2P				
	4	0.5	MGN61311	MGN61344
		1	MGN61312	MGN61345
		2	MGN61313	MGN61346
		3	MGN61314	MGN61347
		4	MGN61315	MGN61348
		5	MGN61316	MGN61349
		6	MGN61317	MGN61350
		8	MGN61318	MGN61351
		10	MGN61319	MGN61352
		15	MGN61320	MGN61353
		20	MGN61321	MGN61354
3P				
	6	0.5	MGN61322	MGN61355
		1	MGN61323	MGN61356
		2	MGN61324	MGN61357
		3	MGN61325	MGN61358
		4	MGN61326	MGN61359
		5	MGN61327	MGN61360
		6	MGN61328	MGN61361
		8	MGN61329	MGN61362
		10	MGN61330	MGN61363
		15	MGN61331	MGN61364
		20	MGN61332	MGN61365



Utilization in alternative current only.

PB102035-35



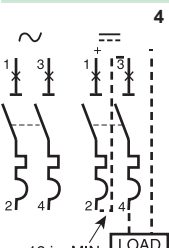
PB102036-35



PB102037-35



Ring tongue/ring tongue terminal connection (upstream/downstream)

Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. no. curve	curve
1P				
	2	0.5	60200	60217
		1	60201	60218
		1.5	60202	60219
		2	60203	60220
		3	60204	60221
		4	60205	60222
		5	60206	60223
		6	60207	60224
		7	60208	60225
		8	60209	60226
		10	60210	60227
		13	60211	60228
		15	60212	60229
		20	60213	60230
		25	60214	60231
		30	60215	60232
		35	60216	60233
2P				
	4	0.5	60234	60251
		1	60235	60252
		1.5	60236	60253
		2	60237	60254
		3	60238	60255
		4	60239	60256
		5	60240	60257
		6	60241	60258
		7	60242	60259
		8	60243	60260
		10	60244	60261
		13	60245	60262
		15	60246	60263
		20	60247	60264
		25	60248	60265
		30	60249	60266
		35	60250	60267
C curve				
	4	1	60268	60284
		1.5	60269	60285
		2	60270	60286
		3	60271	60287
		4	60272	60288
		5	60273	60289
		6	60274	60290
		7	60275	60291
		8	60276	60292
		10	60277	60293
		13	60278	60294
		15	60279	60295
		20	60280	60296
		25	60281	60297
		30	60282	60298
		35	60283	60299
		D curve		
3P				
	6	1	60268	60284
		1.5	60269	60285
		2	60270	60286
		3	60271	60287
		4	60272	60288
		5	60273	60289
		6	60274	60290
		7	60275	60291
		8	60276	60292
		10	60277	60293
		13	60278	60294
		15	60279	60295
		20	60280	60296
		25	60281	60297
		30	60282	60298
		35	60283	60299

Utilization in alternative current and direct current.
Utilization in alternative current only.

Ring tongue/ring tongue terminal connection (upstream/downstream)

Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. no. curve	curve
			C	D
1P				
	2	0.5	MGN61366	MGN61399
		1	MGN61367	MGN61400
		2	MGN61368	MGN61401
		3	MGN61369	MGN61402
		4	MGN61370	MGN61403
		5	MGN61371	MGN61404
		6	MGN61372	MGN61405
		8	MGN61373	MGN61406
		10	MGN61374	MGN61407
		15	MGN61375	MGN61408
		20	MGN61376	MGN61409
2P				
	4	0.5	MGN61377	MGN61410
		1	MGN61378	MGN61411
		2	MGN61379	MGN61412
		3	MGN61380	MGN61413
		4	MGN61381	MGN61414
		5	MGN61382	MGN61415
		6	MGN61383	MGN61416
		8	MGN61384	MGN61417
		10	MGN61385	MGN61418
		15	MGN61386	MGN61419
		20	MGN61387	MGN61420
3P				
	6	0.5	MGN61388	MGN61421
		1	MGN61389	MGN61422
		2	MGN61390	MGN61423
		3	MGN61391	MGN61424
		4	MGN61392	MGN61425
		5	MGN61393	MGN61426
		6	MGN61394	MGN61427
		8	MGN61395	MGN61428
		10	MGN61396	MGN61429
		15	MGN61397	MGN61430
		20	MGN61398	MGN61431



Utilization in alternative current only.

PE102035-35



PE102036-35



PE102037-35

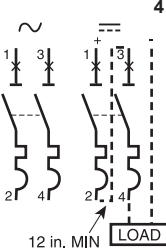


C60 UL

UL 489 / CSA C22.2 No. 5-02

120 to 240 V ~, 60 V --- and 125 V ---

Box lug/ring tongue terminal connection (upstream/downstream)

Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. no. curve	curve
1P				
	2	0.5	60300	60317
		1	60301	60318
		1.5	60302	60319
		2	60303	60320
		3	60304	60321
		4	60305	60322
		5	60306	60323
		6	60307	60324
		7	60308	60325
		8	60309	60326
		10	60310	60327
		13	60311	60328
		15	60312	60329
		20	60313	60330
		25	60314	60331
		30	60315	60332
		35	60316	60333
2P				
	4	0.5	60334	60351
		1	60335	60352
		1.5	60336	60353
		2	60337	60354
		3	60338	60355
		4	60339	60356
		5	60340	60357
		6	60341	60358
		7	60342	60359
		8	60343	60360
		10	60344	60361
		13	60345	60362
		15	60346	60363
		20	60347	60364
		25	60348	60365
		30	60349	60366
		35	60350	60367
C curve				
	4	1	60368	60384
		1.5	60369	60385
		2	60370	60386
		3	60371	60387
		4	60372	60388
		5	60373	60389
		6	60374	60390
		7	60375	60391
		8	60376	60392
		10	60377	60393
		13	60378	60394
		15	60379	60395
		20	60380	60396
		25	60381	60397
		30	60382	60398
		35	60383	60399
		D curve		
3P				
	6	1	60368	60384
		1.5	60369	60385
		2	60370	60386
		3	60371	60387
		4	60372	60388
		5	60373	60389
		6	60374	60390
		7	60375	60391
		8	60376	60392
		10	60377	60393
		13	60378	60394
		15	60379	60395
		20	60380	60396
		25	60381	60397
		30	60382	60398
		35	60383	60399

Utilization in alternative current and direct current.
Utilization in alternative current only.

Applications: telecommunication equipments and  applications.

The circuit breakers combine the following functions:

- protection of circuits against short-circuit currents,
- protection of circuits against overload currents.

Compliance with standards products

UL 489A circuit breakers File #E208650.

Standard features

- CE Marked.
- Power circuit:
 - voltage rating: 60 V 
 - ampere interrupting ratings as UL 489A standards:

Rating (A) 77°F/25°C	Number of poles 0.71 in. (18 mm)	Voltage	Interrupting rating (kA rms) AIR UL 489A
0.5 to 63	1P	60 V 	10

- fast closing: allows increased withstand to the high inrush currents of some loads
- fault current limiting
- trip-free mechanism: contacts cannot be held in the ON position when the circuit breaker is tripped automatically
- isolation with positive break indication-Green strip on the circuit breaker operating handle indicates that all poles open
- number of operating cycles (O-C):
 - electrical: 10,000
 - mechanical: 20,000.
- Environment:
 - tropicalization: treatment 2 (relative humidity: 95% at 131°F/55°C)
 - degree of protection as per IEC 60529: IP40 / IPXXB
 - temperature:
 - operation: -22 to 158°F (-30 to 70°C)
 - storage: -40 to 176°F (-40 to 80°C).
- Weight: 3.88 oz/110 g.

Connection for copper cables UL 486A File #E216919

- 0.5 to 20 A: (#14–#4 AWG) 2.5 to 25 mm² cables, torque 22 lb.in.
- 40 to 63 A: (#14–#2 AWG) 2.5 to 35 mm² cables, torque 31 lb.in.





2B100991 2-35

Time-current curves

C curve—Overcurrent protection for all application types:

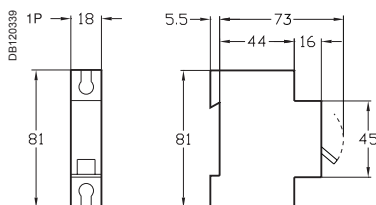
- ratings: 0.5 to 63 A set at 77°F (25°C)
- tripping threshold (as IEC 60947-2):
- direct current: between 7 and 14 times ampere rating (—mm)
- direct current: between 10 and 14 times ampere rating (—mm).

Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. no. curve
1P			C
1	2	0.5	60406
1		1	60407
1		2	60408
1		3	60409
1		4	60410
1		5	60411
1		6	60412
1		8	60413
1		10	60414
1		13	60415
1		15	60416
1		20	60417
1		30	60418
1		40	60419
1		50	60420
1		63	60421

Adaptable electrical auxiliaries

- Remote tripping:
 - shunt trip (MX + OF)
 - undervoltage release (MN).
- Remote indication:
 - auxiliary switch (OF)
 - alarm switch (SD).

Dimensions





The circuit breakers combine the following functions:

- protection of circuits against short-circuit currents,
- protection of circuits against overload currents,
- control,
- isolation,
- protection of persons against indirect contact in the TN and IT earthing systems.

Compliance with standards products

- UL 1077 Supplementary Protectors File #E90509.
- CSA C22.2 No. 235-04 Supplementary Protectors File #179014.
- IEC 60947-2.

Standard features

- CE Marked.
- Power circuit:
 - ☐ voltage rating: 480Y / 277 V ~
 - ☐ ampere interrupting ratings:

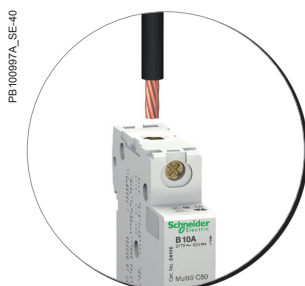
Rating (A) 77 °F/25 °C	Number of poles 0.71 in. (18 mm)	Voltage	Interrupting rating (kA rms)	
			AIR UL 1077/CSA	Icu IEC 60947-2
0.5 to 63	1P	240 V ~	10	10
	2P/3P/4P	240 V ~	10	20
	1P	277 V ~	5	-
		415 V ~	-	3
	2P/3P/4P	415 V ~	-	10
		440 V ~	-	6
		480Y/277 V ~	5	-
0.5 to 63	1P	60 V ---	-	10
B, C curve	1P	65 V ---	10	-
	2P	125 V ---	10	10

- ☐ fast closing: allows increased withstand to the high inrush currents of some loads
- ☐ fault current limiting
- ☐ trip-free mechanism: contacts cannot be held in the ON position when the supplementary protector is tripped automatically
- ☐ isolation with positive break indication-Green strip on the supplementary protector operating handle indicates that all poles open
- ☐ number of operating cycles (O-C): 20,000.
- Environment:
 - ☐ tropicalization: treatment 2 (relative humidity: 95% at 131°F/55°C)
 - ☐ degree of protection as per IEC 60529: IP40 / IPXXB
 - ☐ temperature:
 - operation: -22 to 158 °F (-30 to 70 °C)
 - storage: -40 to 176 °F (-40 to 80 °C).
- Weight (oz./g):

Type	1P	2P	3P	4P
C60	3.88/110	7.75/220	11.64/330	15.52/440

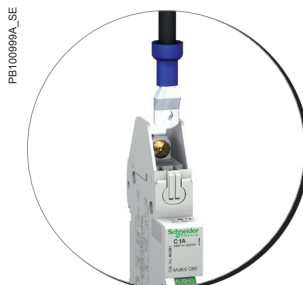
Connection for copper cables UL 486A File #E216919

- 0.5 to 25 A: (#14-#4 AWG) 2.5 to 25 mm² cables, torque 22 lb.in.
- 30 to 63 A: (#14-#2 AWG) 2.5 to 35 mm² cables, torque 31 lb.in.



Ring tongue terminal connections kit (option)

- 2 ring tongue terminals with screws (0.2 in/5 mm dia).
- 2 connector shrouds.



Time-current curves

B curve-Overcurrent protection for sensitive equipment (computers, electronic devices etc.):

- ratings: 1 to 63 A set at 77°F (25°C)
- tripping threshold: The magnetic release operates between 3.2 and 4.8 times ampere rating.

C curve-Overcurrent protection for all application types:

- ratings: 0.5 to 63 A set at 77°F (25°C)
- tripping threshold: The magnetic releases operates between 7 and 10 times ampere rating.

D curve-Overcurrent protection for loads with high inrush currents (motors, transformers etc.):

- ratings: 0.5 to 63 A set at 77°F (25°C)
- tripping threshold: The magnetic releases operates between 10 and 14 times ampere rating.

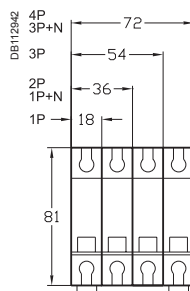
Adaptable electrical auxiliaries

- Remote tripping:
 - ☐ shunt trip (MX + OF)
 - ☐ undervoltage release (MN).
- Remote indication:
 - ☐ auxiliary switch (OF)
 - ☐ alarm switch (SD).

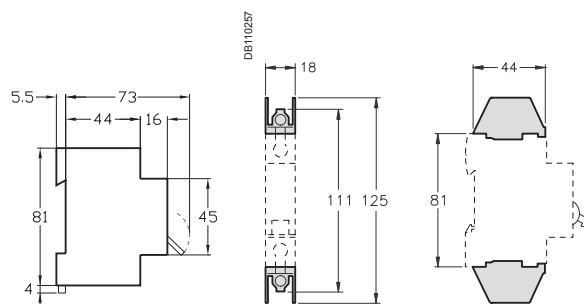
Ground-fault protection

- For UL Listed products, see GFP : [File 90168](#).
- For IEC rated products, see Vigi C60 : [File 90116](#).

Dimensions



C60 UL 1077

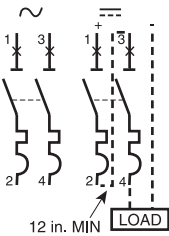


Ring tongue terminal kit



PB100977_2-35



Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. No. Curve	Curve	Curve
B					
C					
D					
1P					
E27969 	2	0.5	-	17411	17421
	1	1	24110	24425	24500
	1.2	1.2	17402	17412	17422
	1.5	1.5	17403	17413	17423
	2	2	24111	24426	24501
	3	3	24112	24427	24502
	4	4	24113	24428	24503
	5	5	17404	17414	17424
	6	6	24114	24430	24504
	7	7	17405	17415	17425
	8	8	24115	24431	24505
	10	10	24116	24432	24506
	13	13	24117	24433	24507
	15	15	17406	17416	17426
	16	16	24118	24434	24508
	20	20	24119	24435	24509
	25	25	24120	24436	24510
	30	30	17407	17417	17427
	32	32	24121	24437	24511
	35	35	17408	17418	17428
	40	40	24122	24438	24512
	50	50	24123	24439	24513
	60	60	17409	17419	17429
	63	63	24124	24440	24514
2P					
DB112935 	4	0.5	-	17441	17451
	1	1	24125	24442	24516
	1.2	1.2	17432	17442	17452
	1.5	1.5	17433	17443	17453
	2	2	24126	24443	24517
	3	3	24127	24444	24518
	4	4	24128	24445	24519
	5	5	17434	17444	17454
	6	6	24129	24447	24520
	7	7	17435	17445	17455
	8	8	24130	24448	24521
	10	10	24131	24449	24522
	13	13	24132	24450	24523
	15	15	17436	17446	17456
	16	16	24133	24451	24524
	20	20	24134	24452	24525
	25	25	24135	24453	24526
	30	30	17437	17447	17457
	32	32	24136	24454	24527
	35	35	17438	17448	17458
	40	40	24137	24455	24528
	50	50	24138	24456	24529
	60	60	17439	17449	17459
	63	63	24139	24457	24530
E27970 	4	0.5	-	17441	17451
	1	1	24125	24442	24516
	1.2	1.2	17432	17442	17452
	1.5	1.5	17433	17443	17453
	2	2	24126	24443	24517
	3	3	24127	24444	24518
	4	4	24128	24445	24519
	5	5	17434	17444	17454
	6	6	24129	24447	24520
	7	7	17435	17445	17455
	8	8	24130	24448	24521
	10	10	24131	24449	24522
	13	13	24132	24450	24523
	15	15	17436	17446	17456
	16	16	24133	24451	24524
	20	20	24134	24452	24525
	25	25	24135	24453	24526
	30	30	17437	17447	17457
	32	32	24136	24454	24527
	35	35	17438	17448	17458
	40	40	24137	24455	24528
	50	50	24138	24456	24529
	60	60	17439	17449	17459
	63	63	24139	24457	24530

Utilization in alternative current and direct current.
Utilization in alternative current only.

PB101029_2-35



PB100577L_2-35





Type	Width in modules 0.354 in. (9 mm)	Rating (A)	Cat. No. Curve	Curve	Curve
			B	C	D
3P					
	6	1	24140	24459	24532
		1.5	-	-	17470
		2	24141	24460	24533
		3	24142	24461	24534
		4	24143	24462	24535
		6	24144	24464	24536
		8	24145	24465	24537
		10	24146	24466	24538
		13	24147	24467	24539
		15	17461	17466	17471
		16	24148	24468	24540
		20	24149	24469	24541
		25	24150	24470	24542
		30	17462	17467	17472
		32	24151	24471	24543
		35	17463	17468	17473
		40	24152	24472	24544
		50	24153	24473	24545
		60	17464	17469	17474
		63	24154	24474	24546
4P					
	8	1	24155	24476	24548
		2	24156	24477	24549
		3	24157	24478	24550
		4	24158	24479	24551
		6	24159	24481	24552
		8	24160	24482	24553
		10	24161	24483	24554
		13	24162	24484	24555
		16	24163	24485	24556
		20	24164	24486	24557
		25	24165	24487	24558
		32	24166	24488	24559
		40	24167	24489	24560
		50	24168	24490	24561
		63	24169	24491	24562

Utilization in alternative current only.

Ring tongue terminal connections kit (option)

Type	Cat. no.
2 RTT + 2 connector shrouds (upstream/downstream)	17400