

MERLIN GERIN

the modular system from 1 to 100A

The modular system (9mm for each module) provides the broadest range of DIN mounted protective devices available on the market, with more than 10,000 combinations; including circuit breakers, accessories, timers, and ground fault relays. Type C60 and NC100 circuit breakers can solve most problems in industrial or marine applications with continuous current ratings from 1 to 100A, and interrupting ratings up to 100kA.

current limiting capability

The advanced design of the multi 9 range provides current limitation with far better protection than conventional circuit breakers. For example, on a 6A rating with a prospective short circuit of 5000A, the current will be limited at 350A or 7%.

compliance with domestic and international standards

In addition to IEC 947-2 and its associated standards (including VDE, BS, AS, etc...), type C60N and NC100 have been recognized under UL 1077 (file E90509) and are certified under CSA 22-2 (file LR 80849).

The multi 9 line circuit breakers have also been approved for use in offshore oil rigs and merchant or cruise ships by Bureau Veritas, Lloyd's Register of Shipping, etc.

description

Type C60 N-L; NC 100 H

number of poles: 1, 2, 3, or 4

installation: mounting on a DIN rail or direct mount on a back plate.

connections: by pressure terminals

	C60	NC100
1 to 6A	#3 AWG	
10 to 25A	#3 AWG	#2 AWG
32 to 63A	#2 AWG	#2 AWG
80 to 100A		#1 AWG

(screw type terminals available on request)

positive contact indication: a green indicator shows positively the open position by a reliable mechanical linkage to the main contacts. (NC 100: green flag - C60: green indicator on handle).

endurance: 20,000 operations.

standard fungus & moisture protection:

humidity 95% - temperatures 55°C.

max. temperature: 65°C.

impulse withstand: 6kV

vibrations - shocks: in accordance with Veritas for marine application.

field installable snap-on accessories (UL and CSA)

- shunt trip
- undervoltage release
- auxiliary switch
- alarm switch

other field installable accessories

- padlocking attachment
- terminal shield
- interpole barrier
- sealable terminal shield
- rotary handle
- plug-in version

add-on ground fault device

field installable; they are available from 10 mA to 500 mA (not UL or CSA).

multi 9 480V

thermal and magnetic protection

Bimetals are used to provide the adequate overload protection. They can withstand high inrush currents due to motor starting or other transients without nuisance tripping. They prevent the breaker from reclosing before a cool-down time for the load. High speed magnetic trip device is used to provide short circuit protection. Several tripping curves are available to match the level of protection needed and avoid nuisance tripping in various applications.

■ curve B magnetic trip between 3.2 and 4.8 x Ir for computers, electronic circuits and generator applications

■ curve C trip between 7 and 10 x Ir for general purpose

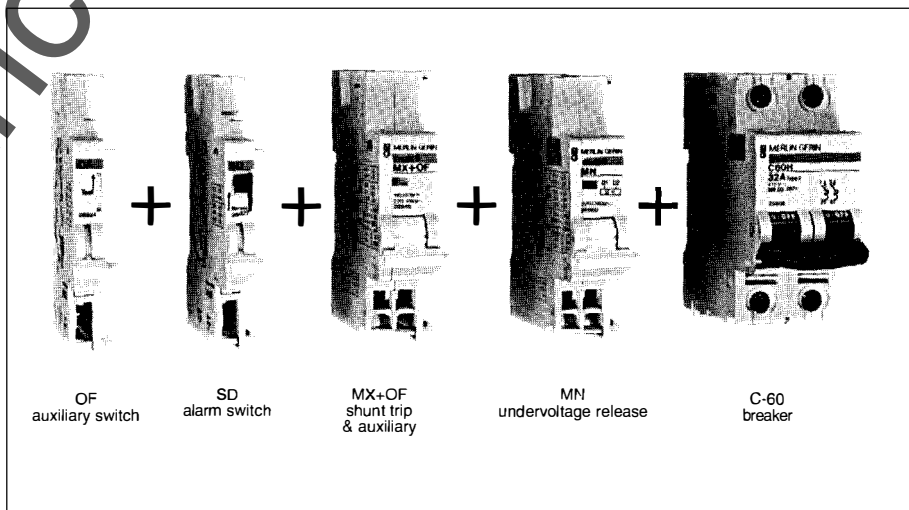
■ curve D trip between 10 and 14 x Ir for motor, transformer, etc.

■ curve MA magnetic only 12 x Ir for motor protection

(overload curves are adjusted for an ambient temperature of:

-25°C for C60N and NC100H (UL-CSA)

-40°C for C60L (IEC)



© UL and CSA recognition are pending

interrupting ratings (KA)

AC

type		C60N							C60L		NC100H						
standards		IEC 947-2			UL-CSA				IEC 947-2		IEC 947-2			UL-CSA			
voltage AC		240V		415V	120V	240V	277V	480V	240V	415V	230V		400V	120V	240V	277V	480V
number of poles		1	2,3,4	2,3,4	1	2,3,4	1	2,3,4	2,3,4	2,3,4	1	2,3,4	2,3,4	1	2,3,4	1	2,3,4
current ratings (A)	1-2-3-4-6	10	20	10	10	10	5	5	50	25							
	10-16-20-25	10	20	10	10	10	5	5	50	25	50	100	50	20	20	10	10
	32-40	10	20	10	10	10	5	5	40	20	50	100	50	20	20	10	10
	50-63	10	20	10	10	10	5	5	30	15	50	100	50	20	20	10	10
	80-100											20	10	10	10	5	5

DC

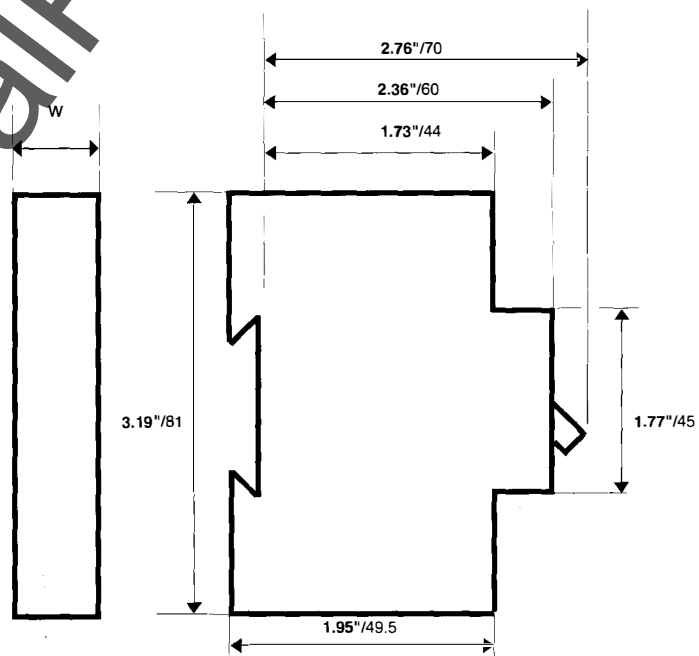
type	C60N		NC100H	
standard	UL-CSA-IEC		UL-CSA-IEC	
voltage DC	65V	125V	250V	
number of poles	1	2	1	
current ratings (A)	1 to 63	10	10	
	10 to 63	10	10	10

dimensions (inch/mm)

type	C60	NC100
width (w)	1-pole : .71"/18 2-pole : 1.42"/36 3-pole : 2.13"/54 4-pole : 2.48"/72 aux. : .35"/9 switch	1.06"/27 2.13"/54 3.19"/81 4.25"/108

weights (oz/g)

type	C60	NC100
1-pole	3.65/110	6.30/180
2-pole	7.70/220	12.60/360
3-pole	11.55/330	18.9/540
4-pole	15.40/440	25.20/720



MERLIN GERIN INC.
5000 Highlands Pkwy, Suite 150
Smyrna, GA 30082
tel: (404) 432-2744
fax: (404) 432-9179

MERLIN GERIN CANADA LTD
855 Matheson Blvd. East,
Unit 14, Mississauga,
Ontario L4W 4L8
tel: (416) 238-9025
fax: (416) 238-9028

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.