# NC100HLE Leakage Circuit Breaker With Over-current Protection







# 1. Application

NC100HLE is applicable to a line of AC 50Hz/60Hz, rated voltage 230V for single pole two-wire, 2-pole or 400V for 3-pole, 3-pole 4wire, 4-pole and rated current up to 40A. It can protect the line and motor from overload and short circuit. It can also be used for infrequent line conversion and infrequent motor start. It conforms with the standards of IEC60947-2.

#### 2. Main technical parameter

Type	NC100HLE		
Pole	1P+N, 2P	3P, 3P+N, 4P	
Rated current (A)	63,80,100		
Rated voltage(V)	230	400	
Rated short circuit breaking capacity Icn(KA)	6		
Rated residual making/breaking capacity IΔm(A)	2000		
Rated residual action current I∆no(A)	0.03,0.1,0.3		
Rated residual non-action current I∆no(A)	0.5l <b>∆</b> n		
Over voltage protection grade	$280V \pm 5\%$		

## 3. Applicable conducting wire

Rated current(A)	63	80	100
Nominal cross section of wire mm²	16	25	35

#### 4. Residual current breaking time

In	l∆n	Breaking time(s) when equals to rating follow					
(A)	(A)	lΔn	2l∆n	5l∆n	5,10,20,50,100,200,500 <sup>a</sup> (A)	I∆t <sup>b</sup>	
6-63	0.03, 0.05, 0.1, 0.3	0.1	0.06	0.04	0.04	0.04	

### 5. The over-current protection property

Ambient Temperature	Initial Status	Test Current	Expected Result	Expected Result	Note
	Cold position	1.05ln(ln ≤ 63A)	t ≤ 1h	Non-release	_
40 000	Cold position	1.05In (In>63A)	t ≤ 2h	Non-release	_
40 ± 2℃	Carried out immediately after	1.30ln(ln ≤ 63A)	t<1h	Release	Current smoothly rises to specified
	previous test	1.30ln (ln>63A)	t<2h	Release	value within 5s
-5~+40°C	Cold position	8.00ln	t ≤ 0.2s	Non-release	<del>-</del>
-5~+40 C	Cold position	12.00ln	t<0.2s	Non-release	-