Modular Devices

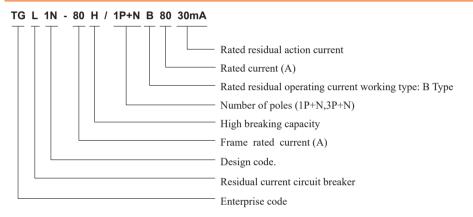
TGL1N-80H Series RCCB, Electromagnetic B Type



1 Overview

TGL1N-80(H) series electromagnetic type residual current operated circuit breaker is used in the B type residual current protection AC 50/60Hz circuit with the rated voltage AC230V/240V (2P) and AC400V/415V(4P) and with the rated current up to 80A. In the event of personal electric shock or the grid leakage current out of the specified range, the electromagnetic type residual current operated circuit breaker can quickly work to cut off the power supply in a very short time when there is no power voltage to ensure the safety of personnel and power equipment, and it is also used for infrequent conversion of the line and for infrequent startup of the electric motor. The product is especially suitable for many applications such as industry, business, charging pile field, and high-rise residential buildings.

2 Type Designation



3 Technical Parameters

3.1 Basic parameters

Table 1

Product name	TGL1N-80H		
Standard	IEC/EN 61008-1, IEC/EN 62423 ROHS2.0		
Certificate	TUV, CE, CB		
Electrical characteristics			
Rated voltage (Ue)	AC230V/240V (1P+N), AC400V/415V (3P+N), N pole can be open and closed		
Rated frequency (Hz)	50/60Hz		
Rated current (In)	16, 20, 25, 32, 40, 50, 63, 80A		
Rated residual operating current I∆n	30mA, 100mA, 300mA		
Rated operating current type	B type		
Rated operating current time (t)	t ≤0.1S		
Rated residual making and breaking capacity (I Δ m)	IΔm=Im=1000A		
Rated limit short circuit current (Inc)	Inc=IΔc=10000A		
Number of poles	1P+N, 3P+N		
Rated insulation voltage (Ui)	690V		
Rated impulse withstand voltage (Uimp)	4KV		
Leakage release type	Electromagnetic type		
Pollution degree	2		

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Table 1, continued

	TGL1N-80H
Mechanical properties	
Electrical life	2,000 times
Mechanical life	4,000 times
Protection grade	IP20
Normal operation conditions and in	nstallation characteristics
Ambient temperature	-25°C∼ +70°C
Installation site altitude	≤ 2,000 meters
Terminals	Fixed with screws
Maximum wiring capacity	35mm ²
Maximum limit torque	3N•m
Installation category	III
Installation method	TH35-7.5 standard rail
Incoming method	Top inlet and bottom inlet
Rated ambient air temperature	50°C

3.2 Wiring: Suitable for wire connection of 35mm^2 and below (see Table 3). The wiring method is that the wire is fixed with screws according to the tightening torque $3N \cdot \text{m}$.

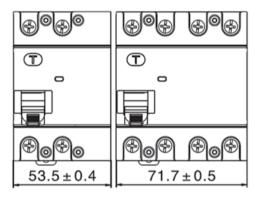
Table 2

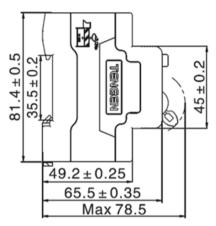
Rated current (A)	Sectional area of wire (mm²)
16~20	2.5
25	4
32	6
40	10
50~63	16
80	25



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4 Outline and Installation Dimensions





5 Ordering Notice

Please specify the following items when ordering:

- 5.1 Product name, such as TGL1N-80 series residual current operated circuit breakers
- 5.2 The number of poles of the product, such as 1P+N;
- 5.3 The rated current of the product, such as 32A;
- 5.4 The rated residual operating current of the product, such as 30 mA;
- 5.5 Working status of DC component, B type;
- $5.6\ \mathrm{The}\ \mathrm{number}\ \mathrm{of}\ \mathrm{products},\ \mathrm{such}\ \mathrm{as}\ 100\ \mathrm{pcs};$
- 5.7 Order example: TGL1N-80 1P+N 32A 30mA B, 100 pcs.