

Current clamp for AC current

Model D37N

DN series

Current	30 AAC	300 AAC	3000 AAC
Output	100 mV/A	10 mV/A	1 mV/A

Electrical specifications

Current calibres:

10 mA...30 AAC
 1 AAC...300 AAC
 1 AAC...2000 AAC
 (2800 A for temperature < 35 °C)

Output signal:

100 mV/A AC (3 V for 30 A) 90 A peak
 10 mV/A AC (3 V for 300 A) 900 A peak
 1.666 mV/A AC (3 V for 3000 A) 9000 A peak

Accuracy and phase shift ⁽¹⁾:

■ 30 A calibre

Primary current	1.5 A	6 A	30 A
% Accuracy of output signal	2 % ± 10 mV		
Phase shift	15°	7°	5°

■ 300 A calibre

Primary current	15 A	60 A	300 A
% Accuracy of output signal	2 % ± 2 mV		
Phase shift	3°	1.5°	1°

■ 3000 A calibre

Primary current	150 A	600 A	3000 A
% Accuracy of output signal	2 % ± 0.5 mV		
Phase shift	1.5°	1°	0.5°

Overload:

3200 A for 5 mn

Ampere second product:

100 A.s

dV/dt:

100 mVAC/A AC: dV/dt = 400 mV/μs
 10 mVAC/A AC: dV/dt = 50 mV/μs
 1 mVAC/A AC: dV/dt = 5 mV/μs

Bandwidth:

30 Hz to 5 kHz (on the 3000 A range the max. measurement current is limited above 200 Hz)

Load impedance:

≥ 1 MΩ

Operating voltage:

600 V AC

Common mode voltage:

600 V AC

Influence of adjacent conductor:

0.005 A/A AC

Influence of conductor position in jaws:

1.5 % of the reading

Influence of frequency:

30 Hz to 5 kHz:
 ± 6 % on all calibres

Influence of DC current:

0.04 % per A DC

Mechanical specifications

Operating temperature:

-10 °C to +50 °C

Storage temperature:

-25 °C to +80 °C

Influence of temperature:

< 0.1 % per 10 °K

Max. jaw opening:

90 mm

Max. jaw insertion capacity:

Cable: 64 mm
 Group of wires: 50 x 135 mm - 64 x 100 mm

Casing protection rating:

IP20 in accordance with IEC 529

Drop test:

500 mm (IEC 68-2-32)

Shock resistance:

100 g, in accordance with IEC 68-2-27

Vibration resistance:

10/55/10 Hz, 0.15 mm
 test in accordance with IEC 68-2-6

Self-extinguishing capability:

Casing: UL94 V0
 Jaws: UL94 V2

Dimensions:

120 x 315 x 48 mm

Weight:

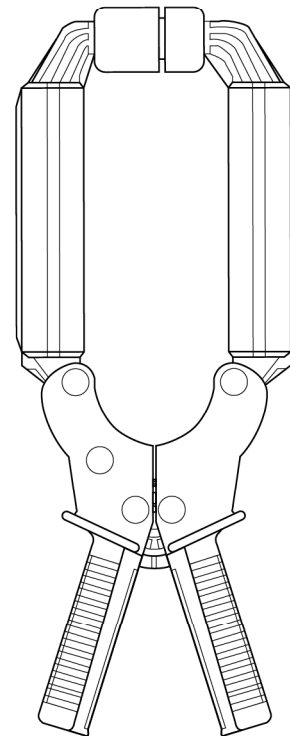
1200 g

Colour:

Dark grey casing with red jaws

Output:

Safety sockets (4 mm)



Safety specifications

Electrical safety:

Double insulation or reinforced insulation between the primary and the secondary circuits and the outside casing in accordance with IEC 1010-2-032.
 - 600 V category III, pollution degree 2
 - 300 V category IV, pollution degree 2

Electromagnetic compatibility (EMC):

EN 50081-1: class B
 EN 50082-2:
 - Electrical discharge IEC 1000-4-2
 - Radial field IEC 1000-4-3
 - Fast transients IEC 1000-4-4
 - Magnetic field at 50/60 Hz IEC 1000-4-8

(1) Conditions of reference: 23 °C ± 5 °K, 20 % to 75 % RH, 48 Hz to 65 Hz, external magnetic field < 40 A/m, no DC component, no current-carrying conductor nearby, centred test sample.

To order	Reference
AC current clamp model D37N with operating manual	P01120056A