CR

Current injection relay tester

Description

The **CR-50, CR-100** and **CR-250** units include specially designed current generation systems that can check the current / time trigger curve of automatic switches and indirect protection relays.

Its operation principle is based on the injection of an alternating current that can be adjusted throughout the circuit being tested with a short-circuit cable loop. The connection of an auxiliary contact of the switch being tested can be used to measure the trip time for each current selected.

The test is easily carried out with a start-stop control. An automatic meter is responsible for taking the measurements and showing them on the display.

We can highlight that the unit can be used to check the full protection system, including the current transformer in the case of indirect relays, since the current can be injected on the primary side of these transformers.

After the test, a digital display automatically shows the value of the current injected and the trip time until the RESET button is pressed.

Features

Features	
Power supply	230 Vac (-15 ... +10 %)
Frequency	50 ... 60 Hz
Current generation system	Insulated, short-circuit potential, adjustable with the controls on the front of the unit
Overload capacity	**CR-50**: 1,5 I_n, 1 min (12 V max.) **CR-100**: 2,5 I_n, 10 s (6 V max.) / 1,5 I_n, 1 min (12 V max.) **CR-250**: 2,5 I_n, 10 s (6 V max.) / 1,5 I_n, 1 min (12 V max.)
Nominal power	**CR-50**: 300 V·A **CR-100**: 600 V·A **CR-250**: 2 500 V·A
Current	**CR-50**: 1.6 A max. **CR-100**: 6 A max. **CR-250**: 20 A max.
Current generation system	**CR-50**: 0 to 6 V: I_n = 50 A max. 0 to 30 V: I_n = 10 A max. **CR-100**: 0 to 6 V: I_n = 100 A max. 0 to 30 V: I_n = 20 A max. **CR-250**: 10 to 50 V: I_n = 50 A max. 0 to 10 V: I_n = 250 A max.
Measurement	
Current measurement	digital instrument
Accuracy	**CR-50**: 1 % of the reading / ± 2 digits **CR-100**: 0.5 % of the reading / ± 1 digits **CR-250**: 0.5 % of the reading / ± 1 digits
Time measurement	Digital clock
Measurement range	**CR-50:** up to 99 999.9 s **CR-100:** up to 99,999.99 s **CR-250:** up to 99,999.99 s
Test method	Start: with start button Automatic stop: aux. contact open or closedManual stop: with stop button
Construction features	
Dimensions	**CR-50**: 320 x 200 x 215 mm **CR-100**: 430 x 312 x 265 mm **CR-250**: 280 x 470 x 500 mm
Weight	**CR-50**: 11 kg **CR-100**: 22 kg **CR-250**: 43 kg
Standards	
IEC 348, IEC 664, UNE 20 553, VDE 0110 (*also see the regulations to check the test methods)	

References

Description	Type	Code
50 A relay check system (case version)	**CR-50**	**P60211**
100 A relay check system (case version)	**CR-100**	**P60212**
250 A relay check system	**CR-250**	**P60213**