

Title (en)  
TEST CIRCUIT FOR A RESIDUAL CURRENT CIRCUIT BREAKER

Title (de)  
PRÜFSCHALTUNG FÜR FEHLERSTROMSCHUTZSCHALTER

Title (fr)  
CIRCUIT DE TEST POUR DISJONCTEUR DE COURANT RÉSIDUEL

Publication  
**EP 3224922 A1 20171004 (EN)**

Application  
**EP 15818042 A 20151117**

Priority  
• IT RM20140693 A 20141127  
• IB 2015058879 W 20151117

Abstract (en)  
[origin: WO2016083940A1] A test circuit (20) for a residual current circuit breaker (10) is described, the residual current circuit breaker (10) being adapted to pass from a closed state to an open state to interrupt a neutral branch circuit (1, 11) and a phase branch circuit (2, 12) upon detection of a leakage current, wherein the test circuit (20) is adapted to be fed by a mains voltage supplied by the phase and neutral circuit branches. The test circuit (20) comprising: - a first input circuit node (N1) electrically connected, or adapted to be electrically connected, to the neutral branch circuit (1, 11); - a second input circuit node (N2) electrically connected, or adapted to be electrically connected, to the phase branch circuit (2, 12); - a test resistance (Rtest); a test switch (C3) operable by means of a test button (21) to connect the test resistance (Rtest) between the first (N1) and the second (N2) circuit node so as to simulate a leakage current; - an electronic control circuit (22) configured to be fed by the neutral circuit branch and by the phase circuit branch and comprising an electronic time counter adapted to vary and store a time count value and reset it upon pressing of the test button (21); - an optical or acoustic signalling device (D5) controlled by the electronic control circuit (22) for providing an acoustic and/or optic signal upon reaching a given time count value by the electronic time counter. The electronic time counter comprises a volatile memory adapted to store said count value and the electronic control circuit (22) comprises a non-volatile memory and is programmed to periodically copy into the non-volatile memory the time count value stored in the volatile memory.

IPC 8 full level  
**H02H 3/33** (2006.01)

CPC (source: CN EP RU)  
**G05B 23/02** (2013.01 - RU); **H01H 83/04** (2013.01 - RU); **H02H 3/335** (2013.01 - CN EP); **H02H 7/22** (2013.01 - RU)

Citation (search report)  
See references of WO 2016083940A1

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Designated extension state (EPC)  
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