

Title (en)

Method and apparatus for determining the residual life of contacts in switching devices

Title (de)

Verfahren zur Bestimmung der Restlebensdauer von Kontakten in Schaltgeräten und zugehörige Anordnung

Title (fr)

Procédé et dispositif pour déterminer la vie résiduelle de contacts dans les appareils de commutation

Publication

EP 0694937 B1 20000329 (DE)

Application

EP 95111202 A 19950717

Priority

DE 4427006 A 19940729

Abstract (en)

[origin: EP0694937A2] The opening time of the main contacts is measured by rectification and limiting of the circuit-breaking arc voltage in a circuit contg. an opto-coupler with a DC source and measuring resistance. The time signals (t0,t1) are applied to a controller (40) which also records the elapsed operating time (T), the number of switching operations (N) and an averaged time difference (t1 minus t0) over a given number of cycles. The measurements and evaluated quantities are stored in non-volatile memory (41) and displayed (45). <IMAGE>

IPC 1-7

H01H 1/00

IPC 8 full level

H01H 1/00 (2006.01); **H01H 3/00** (2006.01)

CPC (source: EP)

H01H 1/0015 (2013.01); **H01H 47/002** (2013.01); **H01H 3/001** (2013.01); **H01H 2071/044** (2013.01)

Cited by

EP2383758A1; EP2200055A1; US7978036B2; EP2182537A1; CN1065352C; FR2959589A1; CN105632840A; DE102005045095A1; DE19947105A1; DE19947105C2; CN114600212A; DE10260248A1; DE10260248B4; FR2940509A1; DE10260249A1; DE10260249B4; CN100413004C; DE10260258A1; DE10260258B4; DE19603310A1; CN1068956C; US6359440B2; EP2975622A1; US6225807B1; US7812696B2; US8688391B2; DE202007018709U1; CN106663553A; EP3971927A1; CN116325055A; WO2004057633A1; WO9728549A1; WO2008000105A1; US7692522B2; US7872552B2; US10340640B2; US6313636B1; US10573476B2; US11887795B2; WO2004057634A1; WO2004057635A1; WO9728548A1; WO2006069957A1; WO0233716A1; WO2006069955A3; WO9908301A1; WO2022058089A1

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