

Title (en)

Line coupler for connecting two electrical leads.

Title (de)

Leitungskupplung zum Durchverbinden von zwei elektrischen Leitungen.

Title (fr)

Couplage de ligne pour connecter deux lignes électriques.

Publication

EP 0008603 A1 19800319 (DE)

Application

EP 79100790 A 19790315

Priority

DE 2835400 A 19780812

Abstract (en)

1. Cable-coupling for the through-connection of two electric cables having the same number of conductors, this coupling consisting of a casing, containing contact sockets (4, 5) and of a plug, possessing plug-pins (15, 16), this plug having an accurate fitting shape, and the joints, in the casing and plug, between the cores of the conductors and the contacts, being surrounded in each case, in a leak-proof manner, by a solid protecting body (9, 11), made of an insulating material which can be securely welded to the cables and is injection-moulded around the joints, in which coupling the plug possesses an annular component for effecting sealing in the region of the fitting shape, and in which means for avoiding unintentional separation of the plug and casing are provided, characterized by the combination of the following features : a) the casing possesses a top-shaped widened portion (10) for receiving the plug, which is extended into the shape of a connecting piece (19) ; b) the annular component for effecting sealing is designed as an O-ring (20) is fitted in the region of the connecting piece (19) ; c) the plug is equipped, in the region of the connecting piece (19), with at least two catches (21, 22), which are mutually displaced, on the periphery, by 180 degrees ; d) the casing possesses, in the region of the widened portion (10), recesses (23, 24) for receiving the catches (21, 22) of the plug ; e) in at least one of the parts of the coupling, casing or plug, shrinkdown plastic tubes (26, 27) are fitted on to the cores (7, 8, 17, 18), and are bonded to their surfaces after their having been stripped of insulation over a greater length than is necessary for the connection to the contacts ; f) before the protecting body (9, 11) is injection-moulded, secure bonding to the latter is assured by applying an adhesion-promoter to the surfaces of the shrinkdown plastic tubes (26, 27) and of the conductors (2, 3, 13, 14).

Abstract (de)

Aus Stecker und Dose bestehende Kupplung zum feuchtigkeitsdichten Verbinden von elektrischen Leitungen (12). Der genau in die Dose passende Stecker weist einen O-Ring (20) auf und kann mit der Dose einrastend verriegelt werden. Innerhalb des Schutzkörpers (11) des Steckers sind die Leiter (17, 18) gegenüber ihren Isolierungen durch Schrumpfschläuche (27) abgedichtet. Schrumpfschläuche (27) und Adern (13, 14) sind mit dem Schutzkörper (11) verklebt.

IPC 1-7

H01R 13/523

IPC 8 full level

H01R 13/52 (2006.01)

CPC (source: EP)

H01R 13/5219 (2013.01)

Citation (search report)

- DE 7612452 U1 19760819
- DE 2802798 A1 19780727 - RAYCHEM CORP
- DE 1765044 U 19580417 - SIEMENS AG [DE]
- DE 2317700 A1 19741024 - NORDDEUTSCHE SEEKABELWERKE AG
- DD 131692 A1 19780712 - STRAUBEL HORST, et al
- US 3124405 A 19640310
- DE 1440918 A1 19681212 - INT STANDARD ELECTRIC CORP
- IEEE JOURNAL OF OCEANIC ENGINEERING, Band OE-3, Nr. 3, Juli 1978, New York E. LAMBORN "Underwater Electrical Terminations" Seiten 67 bis 70 * Seite 69, Zeile 6 bis Seite 70, Zeile 16; Fig. 4 und 5 *

Cited by

DE3440400A1; DE202016106778U1; EP1172193A1; DE2835400A1; EP2978077A1; WO03017434A1; US6565790B2

Designated contracting state (EPC)

FR GB IT SE

DOCDB simple family (publication)

EP 0008603 A1 19800319; EP 0008603 B1 19820526; EP 0008603 B2 19890125; DE 2835400 A1 19800221; DE 2835400 C2 19830324

DOCDB simple family (application)

EP 79100790 A 19790315; DE 2835400 A 19780812