

Title (en)

Internal combustion engine starter motor control arrangements.

Title (de)

Steuerungsanordnungen für den Anlasser eines Verbrennungsmotors.

Title (fr)

Dispositions de commande pour démarreur de moteur à combustion interne.

Publication

**EP 0031664 A1 19810708 (EN)**

Application

**EP 80304492 A 19801212**

Priority

GB 7944237 A 19791221

Abstract (en)

An internal combustion engine starter motor control includes a solenoid with pull-in and holding windings (14 and 15) and a main contact (12). The pull-in winding (14) is connected in series with the starting switch (18) and the motor (10, 11) across the battery (13), the holding winding (15) being connected across the series combination of the pull-in winding (14) and the motor (10, 11). The main contact (12) connects the motor (10, 11) directly for the battery and means are provided for ensuring that, whilst sufficient current can flow through the pull-in winding (14) to index the motor (10, 11) during pull-in, the main contacts are not held closed after the starter switch (18) is opened by current flowing through the main contacts and the two windings in series. To this end, a resistor (16) and diode (17) in series are connected across the pull-in winding to pass extra current during pull-in. Alternatively, a diode may be connected in series with the pull-in winding.

IPC 1-7

**F02N 11/08**

IPC 8 full level

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CPC (source: EP)

**F02N 11/0851** (2013.01); **F02N 11/087** (2013.01)

Citation (search report)

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