National Differences For

UL 60730-2-7

Standard for Automatic Electrical Controls for Household and Similar Use, Part 2: Particular Requirements for Timers and Time Switches

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Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Timers and Time Switches

Edition: 2

Edition Date: March 21, 2014

These revisions are being issued to reflect the established effective date for UL 60730-2-7. For further information regarding Summary of Requirements, please visit https://ifs.ul.com/ifr/ifr.nsf.

AS OF OCTOBER 19, 2018, THE FIRST EDITION OF UL 60730-2-7, THE THIRD EDITION OF UL 244A, AND THE FIFTH EDITION OF UL 917 WILL BE WITHDRAWN AND WILL BE REPLACED BY THIS STANDARD.

This document provides a single listing of the National Differences included in the UL adoption of the corresponding IEC standard.

Preface

This document provides a single listing of the technical National Differences included in the UL adoption of the corresponding IEC standard.

In its IEC-based standards, UL uses the notations indicated below to identify national difference type, and these types are additionally noted in this document. The standard may not use all types of these deviations.

D1 - These are deviations which are based on basic safety principles and requirements, elimination of which would compromise safety for U.S. consumers and users of products.

D2 - These are deviations based on safety practices. These are deviations for IEC requirements that may be acceptable, but adopting the IEC requirements would require considerable retesting or redesign on the manufacturer's part.

DC - These are deviations based on the component standards and will not be deleted until a particular component standard is harmonized with the IEC component standard.

DE - These are deviations based on editorial comments or corrections.

DR - These are deviations based on the national regulatory requirements.

Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

Deletion / Delete - A deletion entails complete deletion of an entire numbered clause, subclause, table, figure, or annex without any replacement text.

Modification / Modify - A modification is an altering of the existing base IEC text such as the addition, replacement or deletion of certain words or the replacement of an entire clause, subclause, table, figure, or annex of the base IEC text.

National Differences

1.101DV DE *Addition of the following to the part 2:*

In IEC terminology, ″safety″ is defined as an acceptable level of risk. This is consistent with the intention of UL requirements to reduce the risk of fire, shock or injury to persons.

2.1.101DV D2 *Addition to the Part 2:*

CURRENT INRUSH FACTOR: CURRENT INRUSH FACTOR denotes the number by which the normal (steady-state) peak current through a load is multiplied to obtain the peak value of the inrush current through the load.

Such as for TV, tungsten and PILOT DUTY loads.

4.3.2.101DV D2 *Addition to the part 2:*

A permanently connected TIMER that has been tested for an ampere or horsepower rating, or both, may have a tungsten-filament load rating, even though it has not been tested for a tungsten-filament lamp load rating, provided the tungsten-filament lamp load rating does not exceed one-tenth the value of the ampere rating or the full-load motor-running current, whichever is greater.

4.3.2.102DV D2 *Addition to the part 2:*

An in-line cord or plug-in TIME SWITCH that operates on and off a minimum of once in 24 h shall have a tungsten-filament lamp load rating.

Table 7.2DV D2 *Replacement of Table 7.2 of the part 2:*

Table 7.2DV

Information	Clause or subclause	Method
Modification:		
Replace the lines corresponding to items 7, 26, 27 and 28 by the following:		
7 The type of load controlled by each circuit[7]), 101), 101A)	14, 17, 6.2	C
26 Number of cycles of ACTUATION (M) for each MANUAL ACTION[102])	6.10	X
27 Number of automatic cycles (A) for each AUTOMATIC ACTION[102])	6.11	X
28 Ageing period (Y) for Type 1.M or 2.M action[102])	6.16	X
Addition to note 7:		
[7] "High inductive" or "H" if intended for the control of high inductive loads such as gas-tube-sign transformers, fluorescent lamp loads, and the like.		
Additional notes:		
101A Unless an in-line or plug-in TIME SWITCH is acceptable for use with a full-load of tungsten-filament lamps, it shall be marked to indicate the maximum connected incandescent lamp load in watts. The value of lamp wattage is to be not less than that equivalent to one-tenth of the full-load rating.		
102A A switch is to be operated by means of its ACTUATING MEMBER either manually or by an acceptable machine for a minimum of 6 000 cycles unless a particular application requires a higher number of cycles to be declared.		
Switch cycles for in-line cord, free-standing and INDEPENDENTLY MOUNTED CONTROLS, see Annex AA.		
103A Change "TV" to "TV-". Change "ampere" to "ampere rating expressed in an integer value". Example: TV-8/240.		

9.5.101DV D2 *Addition of 9.5.101DV.1 to 9.5.101DV.4 to the part 2:*

9.5.101DV.1 A permanently connected clock-operated switch or one with a polarized or grounded attachment plug shall not disconnect the grounded conductor of a circuit unless one of the following conditions occur:

a) The switch simultaneously disconnects all the conductors of the circuit, or

b) The switch is so arranged that the grounded conductor cannot be disconnected until all the ungrounded conductors of the circuit have been disconnected.

9.5.101DV.2 OPERATION of a permanently connected clock-operated switch, with a marked OFF POSITION that disconnects any conductor of an output circuit, shall disconnect all ungrounded conductors of the same circuit simultaneously.

9.5.101DV.3 A cord-connected switch that has a polarized or grounded attachment plug shall comply with 9.5.101DV.2.

9.5.101DV.4 In determining compliance with 9.5.101DV.2 and 9.5.101DV.3, overcurrent and other protective devices are considered to provide OPERATION. In addition, all poles of a multiple switching device are considered to operate simultaneously.

11.9DV D2 *Modification to 11.9 of the UL part 1 by adding the following:*

11.9DV.1 INDEPENDENTLY mounted

11.9DV.1.1 The flexible cord is to be of jacketed construction not lighter than Type SJ; except that a device having a maximum rating of 2 000 VA, 1 hp, or 300 V, may be provided with a cord not lighter than Type SP-2.

11.9DV.1.2 The flexible cord shall have a minimum length of 6 inch (152 mm) and shall not exceed 10 ft (3,05 m).

11.101DV D2 *Addition to the part 2:*

11.101DV.1 Plug-in devices

11.101DV.1.1 A clock-operated switch having attachment-plug blades for plug-in connection to a receptacle outlet rated 15 A, 125 V, and having the ANSI/NEMA WD6-1988 slot configuration shall have a mass of 28 oz (0.79 kg) or less. The moment, center of gravity, and dimensions shall not exceed the limits specified in 11.101DV.1.2.

11.101DV.1.2 The moment, center of gravity, and dimensions of a clock-operated switch, see Figure 11.101DV.1, shall comply with each of the following:

a) The quotient of WY/Z shall not exceed 48 oz (1.36 kg).

b) The quotient of WY/S shall not exceed 48 oz.

c) The product of WX shall not exceed 80 oz-inch (0.56 N·m).

d) The dimension Z_3 shall not exceed 3-1/4 inches (82.6 mm).

e) The dimensions S_1, S_2, Z_1, and Z_2 shall not exceed 5 inches (127 mm).

11.101DV.1.3 Definitions for the symbols used in 11.101DV.1.2 are as follows:

W is the weight of the switch in ounces (kg),

Y is in inches (mm),

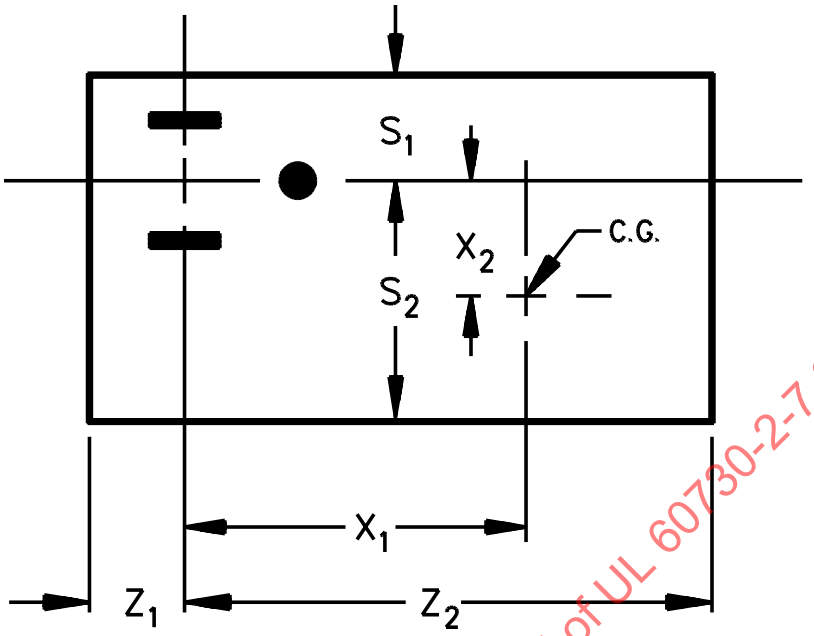
Z is the smaller of Z_1 or Z_2 in inches (mm),

S is the smaller of S_1 or S_2 in inches (mm), and

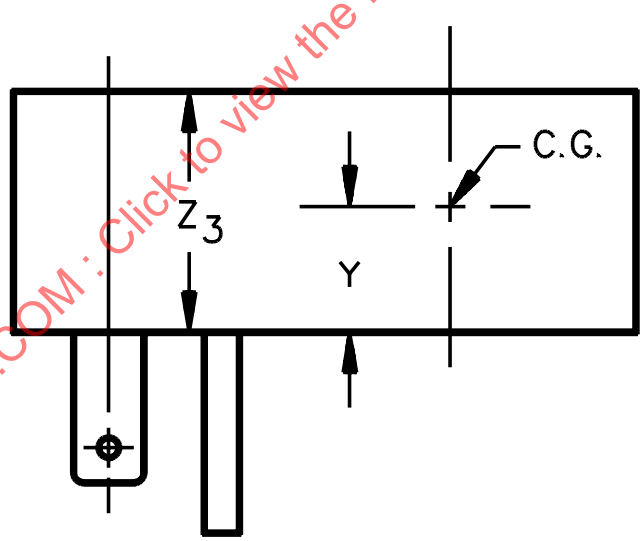
X is the larger of X_1 or X_2 in inches (mm).

Figure 11.101DV.1 D2 *Addition:*

Figure 11.101DV.1
Plug-in device limits of dimensions



FRONT VIEW



SIDE VIEW

C.G. = Center of Gravity

CP100