



# UL 60730-2-6

## STANDARD FOR SAFETY

Automatic Electrical Controls – Part 2-6: Particular Requirements for Automatic Electrical Pressure Sensing Controls Including Mechanical Requirements

ULNORM.COM : Click to view the full PDF of UL 60730-2-6 2021

[ULNORM.COM](https://ULNORM.COM) : Click to view the full PDF of UL 60730-2-6 2021

UL Standard for Safety for Automatic Electrical Controls – Part 2-6: Particular Requirements for Automatic Electrical Pressure Sensing Controls Including Mechanical Requirements, UL 60730-2-6

Third Edition, Dated December 22, 2016

### **Summary of Topics**

***This revision of ANSI/UL 60730-2-6 dated November 30, 2021 adopts the first amendment of IEC 60730-2-6 issued September 2019.***

***Please note that the national difference document incorporates all of the U.S. national differences for UL 60730-2-6. This standard is an adoption of IEC 60730-2-6, Edition 3 including amendment 1, published by the IEC, September 2019.***

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated August 27, 2021.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of UL.

UL provides this Standard "as is" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability or fitness for any purpose.

In no event will UL be liable for any special, incidental, consequential, indirect or similar damages, including loss of profits, lost savings, loss of data, or any other damages arising out of the use of or the inability to use this Standard, even if UL or an authorized UL representative has been advised of the possibility of such damage. In no event shall UL's liability for any damage ever exceed the price paid for this Standard, regardless of the form of the claim.

Users of the electronic versions of UL's Standards for Safety agree to defend, indemnify, and hold UL harmless from and against any loss, expense, liability, damage, claim, or judgment (including reasonable attorney's fees) resulting from any error or deviation introduced while purchaser is storing an electronic Standard on the purchaser's computer system.

No Text on This Page

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 60730-2-6 2021

**DECEMBER 22, 2016**  
(Title Page Reprinted: November 30, 2021)



**ANSI/UL 60730-2-6-2021**

1

**UL 60730-2-6**

**Standard for Automatic Electrical Controls – Part 2-6: Particular  
Requirements for Automatic Electrical Pressure Sensing Controls Including  
Mechanical Requirements**

Prior to the first edition of UL 60730-2-6, the requirements for the products covered by this Standard were included in UL 8730-2-6.

First Edition – February, 2002  
Second Edition – October, 2013

**Third Edition**  
**December 22, 2016**

This ANSI/UL Standard for Safety consists of the Third Edition including revisions through November 30, 2021.

The most recent designation of ANSI/UL 60730-2-6 as an American National Standard (ANSI) occurred on November 30, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, or Preface. The National Difference Page and IEC Foreword are also excluded from the ANSI approval of IEC-based standards.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

UL's Standards for Safety are copyrighted by UL. Neither a printed nor electronic copy of a Standard should be altered in any way. All of UL's Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of UL.

**COPYRIGHT © 2021 UNDERWRITERS LABORATORIES INC.**

No Text on This Page

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 60730-2-6 2021

## CONTENTS

Preface (UL).....	7
<b>NATIONAL DIFFERENCES .....</b>	<b>9</b>
<b>FOREWORD .....</b>	<b>11</b>
1 Scope and normative references .....	15
1.1 Scope.....	15
1.1DV Modification of the first paragraph of <a href="#">1.1</a> of the part 2 by adding the following:.....	15
2 Terms and definitions.....	17
2.2 Definitions of types of control according to purpose .....	17
2.3 Definitions relating to the function of controls .....	17
2.8 Definitions relating to component parts of controls.....	17
3 General requirements.....	17
4 General notes on tests.....	17
4.1 Conditions of test.....	18
4.3 Instructions for test .....	18
5 Rating .....	18
6 Classification .....	18
7 Information .....	18
7.2 Methods of providing information .....	19
Table 1DV Replacement of Table 1 of the part 2:.....	19
8 Protection against electric shock .....	20
9 Provision for protective earthing .....	20
10 Terminals and terminations .....	20
10.1 Terminals and terminations for external copper conductors .....	20
11 Constructional requirements.....	21
11.4 Actions.....	21
11.6.101DV Addition to the part 2: .....	21
11.6.102DV Addition to the part 2: .....	21
11.11 Requirements during mounting, maintenance and servicing .....	21
11.11.103DV.1 Modification of <a href="#">11.11.103</a> of the part 2 by adding the following note after the first paragraph:.....	22
11.11.103DV.2 Modification of <a href="#">11.11.103</a> of the part 2 by adding the following note after the third paragraph:.....	22
11.11.104DV Addition of 11.11.104DV.1 – 11.11.104DV.10 to the part 2:.....	22
Table 11.11.104DV.2.1 Addition to the part 2:.....	23
11.11.105DV Modification of <a href="#">11.11.105</a> of the part 2 by adding the following:.....	24
11.11.106DV Modification of <a href="#">11.11.106</a> of the part 2:.....	24
11.101 Construction requirements relating to operating mechanism .....	24
12 Moisture and dust resistance.....	25
13 Electric strength and insulation resistance .....	25
14 Heating.....	25
15 Manufacturing deviation and drift.....	25
15.4DV Modification of <a href="#">15.4</a> of the part 2 by adding:.....	25
16 Environmental stress .....	26
17 Endurance .....	26
17.2.3.1DV Modification to 17.2.3.1 of the UL part 1 by adding the following: .....	26
17.16 Test for particular purpose controls.....	26
18 Mechanical strength .....	28
18.101 Medium leakage .....	28
18.101DV.1 Modification of <a href="#">18.101</a> of the part 2:.....	28
18.102 Strength of parts (hydrostatic).....	29

19	Threaded parts and connections.....	29
20	Creepage distances, clearances and distances through solid insulation.....	29
21	Resistance to heat, fire and tracking .....	29
22	Resistance to corrosion .....	29
23	Electromagnetic compatibility (EMC) requirements – Emission .....	29
24	Components .....	30
25	Normal operation.....	30
26	Electromagnetic compatibility (EMC) requirements – Immunity .....	30
27	Abnormal operation .....	30
28	Guidance on the use of electronic disconnection.....	30

## Annexes

### Annex H (normative) Requirements for electronic controls

H.2	Terms and definitions .....	32
H.6	Classification .....	32
	H.6.18 According to classes of control functions .....	32
H.7	Information .....	32
H.11	Constructional requirements .....	33
	H.11.12 Controls using software.....	33
H.23	Electromagnetic compatibility (EMC) requirements – Emission .....	33
	H.23.1.2 Radio frequency emission .....	33
H.26	Electromagnetic compatibility (EMC) requirements – Immunity .....	33
	H.26.2 .....	33
	H.26.5 Voltage dips, voltage interruptions and voltage variations in the power supply network.....	34
	H.26.8 Surge immunity test.....	34
	H.26.9 Electrical fast transient/burst test .....	34
	H.26.10 Ring wave immunity test .....	34
	H.26.12 Radio-frequency electromagnetic field immunity .....	35
	H.26.13 Test of influence of supply frequency variations.....	35
	H.26.14 Power frequency magnetic field immunity test.....	35
	H.26.15 Evaluation of compliance .....	35
H.27	Abnormal operation.....	36

### Annex AA (normative) Number of cycles

AA.1	Number of cycles for independently mounted controls .....	38
	Table AA.1DV Replacement of <a href="#">AA.1</a> of the part 2:.....	38
AA.2	Cycling rate for independently mounted controls .....	38
	Table AA.101DV Addition to the part 2: .....	39

### Annex BB (informative) Stainless steel for bellows, bourdon tubes or similar elements

### Annex CC (informative) Deviation and drift requirements for pressure operating controls

### Annex DVE (normative) Manufacturing and Production Tests

DVE	Add the following item d) to DVE.1 of the Part 1: .....	44
-----	---	----

**Bibliography**

[ULNORM.COM](https://www.ulnorm.com) : Click to view the full PDF of UL 60730-2-6 2021

No Text on This Page

[ULNORM.COM](http://ULNORM.COM) : Click to view the full PDF of UL 60730-2-6 2021