




Date : 2024-01-11

CERTIFICATE OF COMPLIANCE

This Certificate of Compliance Validates the Following			
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	E230764-20160119	CERTIFICATE NUMBER	UUMW.E230764
DATE OF ISSUE	20160119	DATE OF ISSUE	2023-08-25
DATE OF EXPIRY	Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service.	DATE OF EXPIRY	Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service.
Manufacturer Details			
NAME OF FACTORY / MANUFACTURER	EUROPEAN SAFETY SYSTEMS LTD	NAME OF THE BRAND	E2S
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	IMPRESS HOUSE MANSELL RD. LONDON W3 7QH UNITED KINGDOM	MODEL / NO	ML15FV070, ML25FV070, ML15FV725, ML25FV725, ML25HV725 See details on Page 8
WEBSITE	www.e2s.com	LOGO ON THE PRODUCT	
TEL	+44 (0) 208 743 8880	EMAIL	sales@e2s.com



Product Details From Test Report		Reference Test Report page NO
DESCRIPTION OF THE PRODUCT (TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)	Speakers and Amplifiers for Fire-protective Signaling Systems This category covers speakers, amplifiers and their accessories investigated for use in fire alarm and/or emergency communication systems.	E230764-20160119
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	ANSI/UL 1480, "Speakers for Fire Alarm and Signaling Systems, Including Accessories - Edition 7, Issue Date 05/26/2023" 1 Scope 1.1 These requirements apply to speakers, rated at 300 V or less, for fire alarm and signaling systems intended for indoor and/or outdoor installation: a) In Canada only: in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, and with ULC-S524, Standard for Installation of Fire Alarm Systems. b) In the United States only: in accordance with the National Electrical Code, NFPA 70, and the National Fire Alarm and Signaling Code, NFPA 72. 1.2 These requirements apply to speakers for use in ordinary (non-hazardous or non-corrosive) locations. 1.3 This Standard also covers protective covers and other accessories used with speakers. 1.4 Speakers for use in hazardous or corrosive locations shall comply with the requirements of this Standard and the applicable requirements: a) In Canada only: CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, with respect to the hazard or category classification.	E230764-20160119



	<p>b) In the United States only: the National Electrical Code, NFPA 70.</p> <p>1.5 Each product or device referred to as a speaker in this Standard is a speaker assembly suitable for separate installation as a component of a fire alarm system.</p> <p>1.6 A supplementary visual signal, incorporated as part of a speaker which is intended for fire alarm application shall comply with the requirements of this Standard and the applicable requirements of the Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories, ULC 526 and UL 1638.</p> <p>1.7 Speakers intended for use with fire alarm systems and having integral amplifiers shall comply with the requirements in this standard in addition to the applicable requirements in:</p> <p>a) In Canada only: ULC 527, Standard for Control Units for Fire Alarm Systems.</p> <p>b) In the United States only: UL 864, Control Units and Accessories for Fire Alarm Systems.</p> <p>1.8 Speakers intended for installations requiring a low frequency (520 Hz) notification to awaken sleeping persons shall also be evaluated to:</p> <p>a) In Canada only: ULC 527, Control Units for Fire Alarm Systems.</p> <p>b) In the United States only: UL 864, Standard for Control Units and Accessories for Fire Alarm Systems.</p> <p>1.9 Speakers intended for use in air-handling spaces (plenums) shall comply with the requirements in this standard and the requirements in:</p> <p>a) In Canada only: ULC-S142, Standard Method of Fire Test for Heat and Visible Smoke Release for Discrete Products.</p> <p>b) In the United States only: UL 2043, Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces.</p> <p>1.10 These requirements do not cover the following:</p>	
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	<p>a) Speakers intended for personal or private consumer use;</p> <p>b) Speakers which are intended for commercial or professional audio applications; and</p> <p>c) Speakers intended for security applications.</p>																																																																						
<p>TEST DESCRIPTION</p>	<p>The following tests from the referenced standard(s), as applicable to the products submitted, were conducted:</p> <table border="1" data-bbox="512 712 1252 1953"> <thead> <tr> <th>Standard</th> <th>Test</th> <th>Standard Section</th> </tr> </thead> <tbody> <tr><td>UL 1480</td><td>General</td><td>17</td></tr> <tr><td>UL 1480</td><td>Samples</td><td>18</td></tr> <tr><td>UL 1480</td><td>Input Test</td><td>19</td></tr> <tr><td>UL 1480</td><td>Frequency Response and Output Sound Pressure Level</td><td>20</td></tr> <tr><td>UL 1480</td><td>Directional Characteristic</td><td>21</td></tr> <tr><td>UL 1480</td><td>Temperature Rise</td><td>22</td></tr> <tr><td>UL 1480</td><td>Dielectric Voltage-Withstand</td><td>23</td></tr> <tr><td>UL 1480</td><td>Evaluation of Reduced Spacings on Printed-Wiring Boards</td><td>24</td></tr> <tr><td>UL 1480</td><td>Endurance</td><td>25</td></tr> <tr><td>UL 1480</td><td>Variable Ambient Temperature</td><td>26</td></tr> <tr><td>UL 1480</td><td>Humidity Test</td><td>27</td></tr> <tr><td>UL 1480</td><td>Abnormal Operation and Burnout</td><td>28</td></tr> <tr><td>UL 1480</td><td>Component Stress</td><td>29</td></tr> <tr><td>UL 1480</td><td>Jarring</td><td>30</td></tr> <tr><td>UL 1480</td><td>Vibration</td><td>31</td></tr> <tr><td>UL 1480</td><td>Strain Relief</td><td>32</td></tr> <tr><td>UL 1480</td><td>Corrosion Test</td><td>33</td></tr> <tr><td>UL 1480</td><td>Water Spray</td><td>34</td></tr> <tr><td>UL 1480</td><td>Polarity Reversal</td><td>35</td></tr> <tr><td>UL 1480</td><td>Electric Shock Current</td><td>36</td></tr> <tr><td>UL 1480</td><td>Tests on Polymeric (Plastic) Materials</td><td>37</td></tr> <tr><td>UL 1480</td><td>Mechanical Strength Tests for Enclosures</td><td>38</td></tr> </tbody> </table>	Standard	Test	Standard Section	UL 1480	General	17	UL 1480	Samples	18	UL 1480	Input Test	19	UL 1480	Frequency Response and Output Sound Pressure Level	20	UL 1480	Directional Characteristic	21	UL 1480	Temperature Rise	22	UL 1480	Dielectric Voltage-Withstand	23	UL 1480	Evaluation of Reduced Spacings on Printed-Wiring Boards	24	UL 1480	Endurance	25	UL 1480	Variable Ambient Temperature	26	UL 1480	Humidity Test	27	UL 1480	Abnormal Operation and Burnout	28	UL 1480	Component Stress	29	UL 1480	Jarring	30	UL 1480	Vibration	31	UL 1480	Strain Relief	32	UL 1480	Corrosion Test	33	UL 1480	Water Spray	34	UL 1480	Polarity Reversal	35	UL 1480	Electric Shock Current	36	UL 1480	Tests on Polymeric (Plastic) Materials	37	UL 1480	Mechanical Strength Tests for Enclosures	38	<p>E230764-20160119</p>
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<p>SPECIFICATION OF TEST SPECIMEN</p>	<p>The samples used for testing and evaluation were considered representative of the submitted products.</p>	<p>E230764-20160119</p>												
<p>TEST RESULT (SUCH AS PASSED CRITERIA / COMPLIED TO / DURATION / OBSERVATION / ETC)</p>	<p>Pass – Only those products bearing the UL Mark should be considered to be Certified and covered under UL’s Follow-Up Service.</p>	<p>E230764-20160119</p>												
<p>PRODUCT APPLICATION GUIDELINE (END USE) (CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN ___/TO BE INSTALLED AT ___/TO BE CONNECTED WITH ___/TO BE INSTALLED WITH ___ ETC ALONG WITH ANY WARNINGS SUCH AS NOT TO BE USED IN ___/NOT TO BE INSTALLED AT ___/ NOT TO BE INSTALLED WITH ___ ETC.</p>	<p>This category covers speakers, amplifiers and their accessories investigated for use in fire alarm and/or emergency communication systems.</p> <p>Speakers have been investigated for audible output of 75dBA or greater measured at 10 ft, when powered from a source of pink noise over a range of 400 - 4000 Hz. The units are marked with a minimum audibility rating.</p> <p>Accessories, such as enclosures, have been investigated with respect to both mechanical and acoustical consideration when used with speakers specified in the individual certifications.</p> <p>Where a certified product is formed by the assembly of two or more parts and all parts are not provided as a single package, the specific parts are identified in the individual certifications and each part bears a separate Certification Mark. The marking on each part references installation instructions that show assembly and installation of the parts to form a certified product.</p> <p>Amplifiers have been investigated with respect to specified input/output parameters in a variety of tests, including harmonic</p>	<p>E230764-20160119</p>												


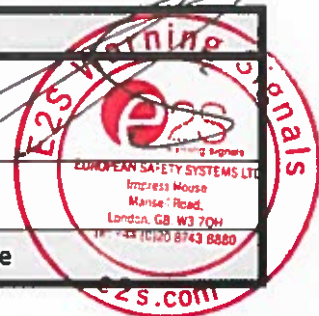


	<p>distortion. These products are not to be confused with amplifiers tested as elements of control unit adjunct systems for personnel emergency relocation and evacuation; see Control Unit Accessories, System (UOXX). Amplifiers used in adjunct systems are suitable for use only in specified configurations.</p> <p>All products covered under this category are intended for indoor use only, unless otherwise specifically identified as suitable for outdoor use by markings on the product and in the individual certifications.</p> <p>Speakers and/or amplifiers and their accessories that have been investigated for mounting in air-handling spaces are specifically identified by markings on the product and in the individual certifications. Installation details are shown on the product or are provided in a separate installation document provided with the product and referenced in the marking on the product.</p> <p style="text-align: center;">PRODUCT MARKINGS</p> <p>Each product is marked to indicate its intended use as indicated in the individual certifications.</p>	
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Laboratory and Certification Body Details			
NAME OF CERTIFICATION BODY	UL LLC	NAME OF TEST FACILITY	UL LLC Facility Underwriters Laboratories of Canada
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	333 Pfingsten Road, Northbrook, IL, USA	TEST FACILITY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	333 Pfingsten Road, Northbrook, IL, USA 7 Underwriters Road, Toronto, ON, M1R 3A9, Canada
WEBSITE	www.ul.com	WEBSITE	www.ul.com
TEL	+1-877-854-3577	TEL	+1-877-854-3577
EMAIL	FireandSecurity@ul.com	EMAIL	FireandSecurity@ul.com
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	American National Standards Institute (ANSI) as a product certification body ansi.org	ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	International Accreditation Services (IAS) iasonline.org
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	ISO/IEC 17065	AS PER (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	ISO/IEC 17025
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	Active as of date of issuance of this certificate	VALIDITY (EXPIRY DATE OF LABORATORY ACCREDITATION)	Active as of date of issuance of this certificate
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	Accreditation ID #0198	REFERENCE NUMBER: (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	Accreditation ID# TL- 157
CERTIFICATION MARK			



(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	Alan King	SIGNATURE	
EMAIL / TEL	Alan.king@e2s.com/ +44 (0) 20 8746 4326	FACTORY OFFICIAL SEAL	
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY			
NAME OF CERTIFICATION BODY SIGNATORY	Shruti Parekh	SIGNATURE	
EMAIL / TEL	shruti.parekh@ul.com/ +14162882278	CERTIFICATION BODY OFFICIAL SEAL	
NOTES: I Undertake that all data and information provided are genuine and accurate			

ATTACHMENTS:

- COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)

COMPANY	E230764
European Safety Systems Ltd Impress House Mansell Rd London, W3 7QH United Kingdom	
Speakers Model(s) ML15FV070, ML15FV725, ML25FV725, ML25HV725, ML25FV070	
Trademark and/or Tradename: 