

West Coast Division Camas Office 2600 N. W. Lake Road Camas, WA 98607-8542 USA www.ul.com tel: 1 360 817 5500 Customer service: 1 877 854 3577

## NOTICE OF AUTHORIZATION TO APPLY THE UL MARK

2006-09-20

Attn: Mr. Johnson Cheng Qifurui Electronics Co 1150 Three Ranch Rd Duarte, CA 91010 United States

Reference:	File E211048	Project 06CA27426
	UL Recognition i	nvestigation of AWM Wires (AVLV2), Styles 1164, 1180, 1198, 1199,
Product(s):	1371, 1538, 1570	), 1589, 1617, 1659, 1672, 1716, 1815, 1914, 1927, 1942, 10007, 10064,
	10072, 10102, 10	156, 10212, 10298, 10311, 10393, 10491 and 10507

Dear Mr. Cheng,

UL's investigation of your product has been completed under the above project number and the subject product was determined to comply with the applicable requirements.

This letter temporarily supplements the UL Follow-Up Services Procedure and serves as authorization to apply the UL Recognized Marking and/or Recognized Component Mark only at the factory under UL's Follow-Up Service Program to the subject product(s), which is (are) constructed as described below:

Similar to products covered in the UL Follow-Up Services Procedure, File E211048, Volume 1.

Modified per the Style Pages 1164, 1180, 1198, 1199, 1371, 1538, 1570, 1589, 1617, 1659, 1672, 1716, 1815, 1914, 1927, 1942, 10007, 10064, 10072, 10102, 10156, 10212, 10298, 10311, 10393, 10491 and 10507 and the attached facing pages.

Modified per the attached E211048, Vol. 1, Sec. 6, Canadian Appliance Wiring Material Description No. 9.

To provide the manufacturer with the intended authorization to use the UL Mark, the addressee must send a copy of this Notice and all attached material to each manufacturing location as currently authorized in File E211048, Volume 1.

This authorization is effective from the date of this Notice and only for products at the indicated manufacturing locations. Records in the Follow-Up Services Procedure covering the product are now being prepared and will be sent to the indicated manufacturing locations in the near future. Please note that Follow-Up Services Procedures are sent to the manufacturers only unless the Applicant specifically requests this document.

Products that bear the UL Mark shall be identical to those that were evaluated by UL and found to comply with UL's requirements. If changes in construction are discovered, appropriate action will be taken for products not in conformance with UL's requirements and continued use of the UL Mark may be withdrawn.

Sincerely, Dawn M. Bott Project Handler I Department: 3011BCAM Tel: 360-817-5622 Fax: 360-817-6252 E-mail: dm.bott@comcast.net Reviewed by: Roger Herb Staff Engineer Department: 3011BCAM E-mail: roger.j.herb@us.ul.com

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		and Report		New:	2006-00-00

DESCRIPTION NO. 8

PRODUCT COVERED:

CNR - Appliance Wire, Multiconductor with non-integral PVC jacket, Class I, Class II, or Class I/II, Group A, B, or A/B.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

CNR indicates investigation to Canadian Standard C22.2 No. 210.2. This product shall be constructed in accordance with the Canadian Standard for Appliance Wiring Material, C22.2 No. 210.2, and as described below.

## CONSTRUCTION DETAILS:

Marking - In accordance with the Section General and the Standard.

Construction - This is a multiconductor cable with extruded PVC non-integral jacket.

- Use Class I (internal use) II (external use)
- Group A (Not subject to mechanical abuse) B (May be subject to mechanical abuse)

Voltage Rating - 30, 150, 300 or 600 Volts.

Temperature Rating - 60, 80, 90 or 105°C.

Flame Rating - FT1, FT2.

Jacket - Material Class No. 5, PVC with thickness in accordance with the table(s) below:

## Table 1 Thickness of Jacket

	1111 01111
Material:	PVC
Temperature Rating:	80°C
Use Class:	I (Internal)
Group:	A, B, or A/B

Thickness					
Minimu	m average	Minimum	at any point		
in. (mm)		in.	( mm )		
0.015	1.02	0.013	0.86		

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		and Report		New:	2006-00-00

Table 2 Thickness of Jacket						
Material: PVC Class 5						
Temperature Rating:	105°C					
Use Class:	se Class: I (Internal)					
II (External)						
I/II (Internal/External)						
Group: A, B, or A/B						

Measured diameter# Under jacket				Thickness			
						Minimum at any	
Over		Up to		Minimum average		point	
in.	( mm )	in.	( mm )	in.	( mm )	in.	( mm )
0	(0)	0.250	(6.35)	0.015	(0.38)	0.012	(0.30)
0.251	(6.36)	0.500	(12.7)	0.030	(0.76)	0.024	(0.60)
0.501	(12.71)	0.700	(17.8)	0.050	(1.27)	0.040	(1.01)
0.701	(17.81)	1.500	(38.1)	0.080	(2.03)	0.064	(1.62)
1.501	(38.11)	2.500	(63.5)	0.110	(2.79)	0.088	(2.23)
2.501	(63.51)	3.500	(88.9)	0.140	(3.55)	0.112	(2.84)
3.501	(88.91)	and larger		0.160	(4.06)	0.128	(3.25)

# - For parallel constructions, use the measured minor core dimension under the jacket to determine the jacket thickness required UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1371 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1538 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

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 Section 1
 Facing Page 1589
 Issued: 2002-06-11

 Vol. 1
 Revised: 2006-09-21

INSULATION COMPOUND: XLPE, Class 38, 30 mils minimum average thickness, 27 mils minimum at any point. No optional extruded polymeric covering authorized.

Or

PTFE Insulation Material, 10 mils minimum thickness, 8 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1617 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

<u>COVERING</u>: PVC compound, 15 mils minimum average thickness, 13 mils minimum thickness at any point.

FLAME RATING: May not be marked VW-1.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1618 Issued: 6-11-02 Revised: 2006-09-21

INSULATION: May not be marked VW-1.

<u>COVERING</u>: PVC compound, 15 mils minimum average thickness, 13 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1659 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

Optional covering not authorized.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1672 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

<u>COVERING</u>: PVC compound, 15 mils minimum average thickness, 13 mils minimum thickness at any point.

FLAME RATING: May not be marked VW-1.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1716 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound, 10 mils minimum average thickness, 8 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1815 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

COVERING: Not authorized.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1914 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound, 10 mils minimum average thickness, 8 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1927 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 1942 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound, 10 mils minimum average thickness, 8 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10007 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10064 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10072 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound only.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10102 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10156 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10212 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound, 10 mils minimum average thickness, 8 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10298 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound, 10 mils minimum average thickness, 8 mils minimum thickness at any point.

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10311 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

UNDERWRITERS LABORATORIES INC. FACTORY INSPECTION PROCEDURE File E211048 Section 1 Facing Page 10491 Issued: 2002-06-11 Vol. 1 New: 2006-09-21

INSULATION: PTFE Insulation compound, 10 mils minimum average thickness, 8 mils minimum thickness at any point.

 File E211048
 Section 1
 Facing Page 10507
 Issued: 2002-06-11

 Vol. 1
 Revised: 2006-09-21

INSULATION COMPOUND: XLPE, Class 38, 30 mils minimum average thickness, 27 mils minimum at any point. No optional extruded polymeric covering authorized.

OR