

**7, 8 POSITIONS FF TAB HOUSINGS FOR MOTOR MOUNTING**

**1. SCOPE**

**1.1 Content**

This specification covers performance, tests and quality requirements for the 7, 8 Pos. FF Tab Housings for Motor Mounting:

- P/N 293014-1 (7 position hsg);
- P/N 293015-1 (7 position hsg);
- P/N 1-293015-1 (7 position hsg);
- P/N 284861-1 (8 position hsg);
- P/N 293014-3 (7 position hsg, UL94-V0 version)
- P/N 284861-3 (8 position hsg, UL94-V0 version)

These housings are designed and developed for multiple lead connections for household appliances and other commercial equipment.

Housing cavities are suitable for 6.3 x 0.8 FF Tab contacts series.

**2. APPLICABLE - REFERENCED DOCUMENTS**

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between requirements of this Specification and Product Inspection Drawings, Product Inspection Drawings shall take precedence. In the event of conflict between requirements of this Specification and referenced documents, this Specification shall take precedence.

- Tyco Product Drawings Refer to TYCO C-Drawings (293014, 293015, 284861)
- IEC 60695-2-10, according to IEC 60335-1
- IEC 60112, according to IEC 60335-1
- IEC 61984 (D6 – 7.3.11)

**3. REQUIREMENTS**

**3.1 Design and Construction**

Product shall be of design, construction and physical dim's specified on applicable product C-dwgs.

**3.2 Materials**

Materials used in the construction of this product shall be as specified on the applicable product drawings.

**3.3 Ratings**

**3.3.1 Voltage/Current :** Voltages 380 Max, current Rating according to wire size and wire application.

**3.3.2 Operating temperature:** -25°C to +105°C (increase due to current load included)

A3	ADDED P/N 1-293015-1	U.AIME		25July2005
A2	ADDED P/Ns 293014-3 AND 284861-3 (UL94-V0)	U.AIME		04May05
A1	ADDED NEW P/Ns (housings) / REVISED	U.AIME	G.TURCO	24Apr04
A	RELEASED FOR PRODUCTION, ET00-0216-03	U.AIME	G.TURCO	10Dec03

#### 4. PERFORMANCES AND TESTS DESCRIPTION.

Product is designed to meet the performance requirements according to test conditions specified at point 4.3.

##### 4.1 Tests Requirements and Procedures Summary

Test Description	Requirement	Procedure
1) Examination of product	Meets requirements of product drawing	Visual, dimensional and functional check.
2) Contact extraction force	- (a) 60 N min. <u>without</u> sec. lock. - (b) 80 N min. <u>with</u> sec. lock.	Apply an axial load to .250" FF Tab contacts (individually) at a rate of 25.4 mm/min. as shown in Fig 1(a) and Fig 2 (b)
3) Contact Pull Out	- no visual damages - sec. lock. still working	Apply an axial load of 30 N max for 30 sec. to .250" FF Tab contacts (individually) as shown in Fig 3
4) Housing "cutout panel" extraction force	- 80 N min.	Apply a load at a rate of 25.4 mm/min. as shown in Fig 4 (cutout panel dims according to TE-AMP Dwg)
5) Housing "cutout panel" retention force	- 80 N (no visual damages)	Apply an axial load for 30 sec. at a rate of 25.4 mm/min. as shown in Fig 5 (cutout panel dims according to TE-AMP Dwg)
6) Housing "casting cap" retention force  <i>N.B.: For 7 pos. conn.s only</i>	- 80 N (no visual damages)	Apply an axial load for 30 sec. at a rate of 25.4 mm/min. as shown in Fig 6 (casting cap dims according to TE-AMP Dwg)
7) Connector mating / unmating force	Value according to Prod. Spec. of counterpart female connector	Mating – unmating cycles according to Prod. Spec. of counterpart female connector
8) Glow Wire Test  <i>N.B.: Not applicable for UL94-V0 versions</i>	750 °C GW no flame	The tip of the glow-wire is applied to the part of the surface of the specimen for 30+/- 1 sec. (Fig 7 – point A, B, C, D)
9) Dielectric strength	Voltage proof 1750 V (there shall be no breakdown or flashover)	Apply the specified impulse withstand voltage for 1 min
10) CTI	250 V (Specimen must not burn and must not give a leakage current greater than 0.5 A for more than 2 sec.)	100 drops ( <i>solution A – 1 drop every 30 sec.</i> ) between electrodes at specified voltage value (Fig 8)

*Following pictures show P/N 293014-1 for ref only*

Contact extraction force (Tab contacts fully and correctly inserted in cavities)

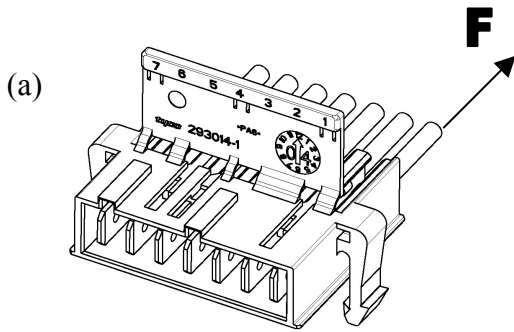


Fig. 1

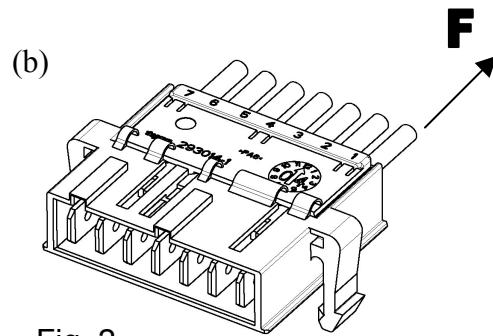


Fig. 2

Contact Pull Out (to verify Sec. Locking performance only)

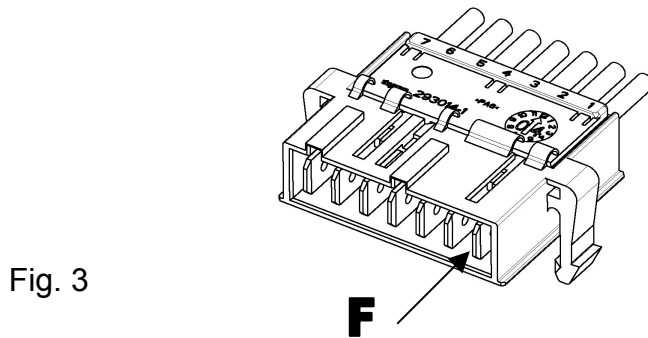
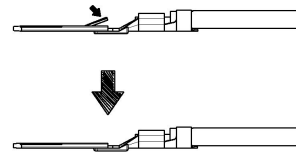


Fig. 3

Before insertion in cavity, Tab contact lance must be bended as shown:



Housing cutout panel extraction force

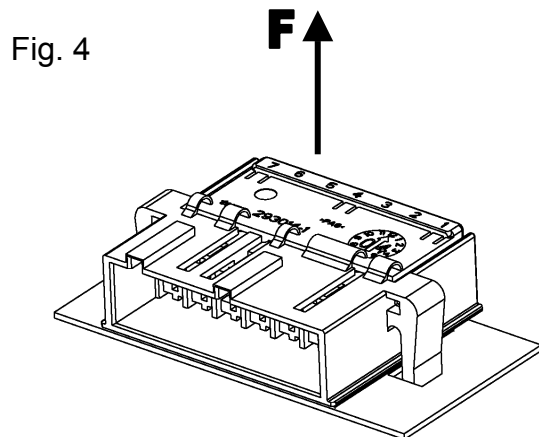


Fig. 4

Housing cutout panel retention force

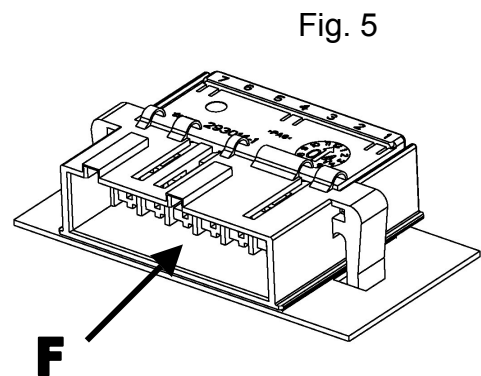
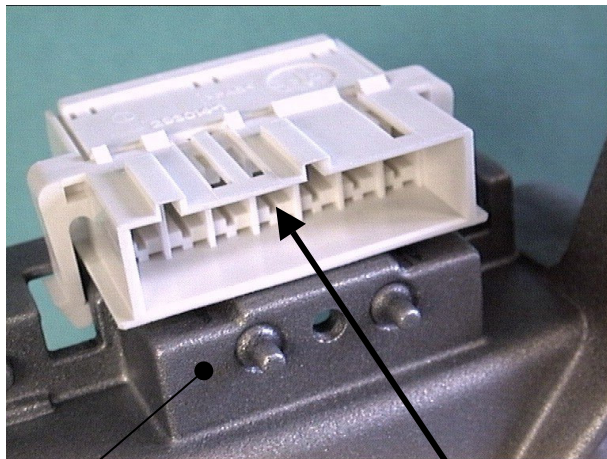


Fig. 5

Housing casting cap retention force (for 7 pos. conn.s only)



Casting cap Fig. 6 **F**

Glow Wire Test

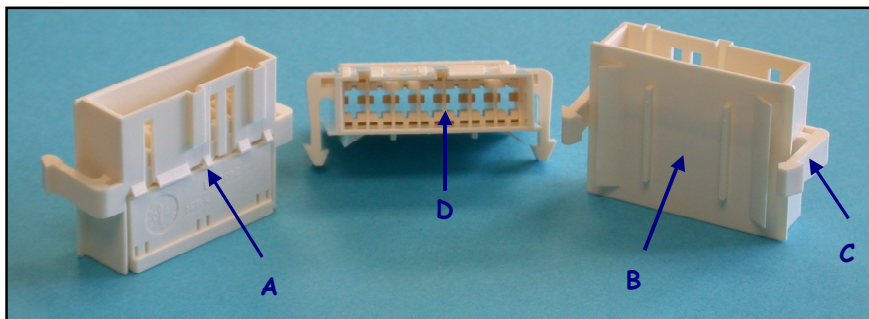


Fig. 7

CTI

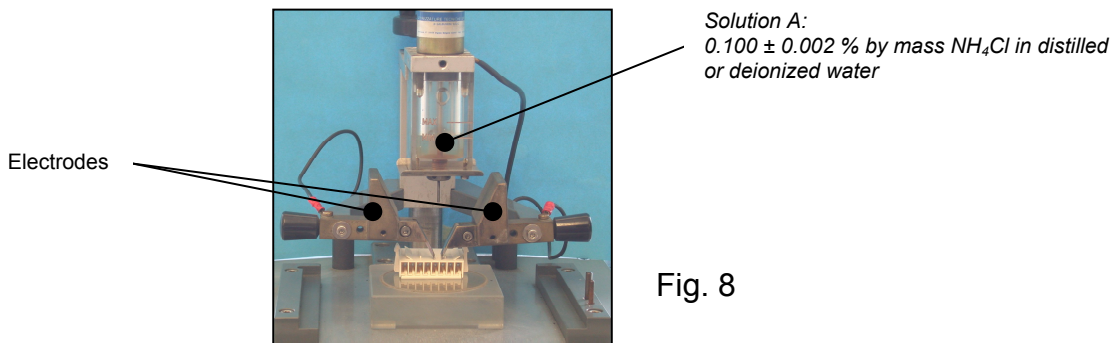


Fig. 8

#### 4.2 Samples selection

Samples for testing must be selected at random from current production and in accordance with relevant Product Inspection Drawings.

#### 4.3 Environmental Test Condition (Laboratory).

Unless otherwise specified, all tests shall be conducted at:

- Temperature 25°C ±5°
- Relative humidity 45 ÷ 70 %
- Atmospheric pressure 860 ÷ 1060 mBar

#### 4.4 Suggested Samples for Test Group Composition.

Unless otherwise specified each group to be tested shall be composed at least by 3 housings min.

TEST DESCRIPTION	I	II	III	IV	V	VI	VII	VIII	IX
Examination of product	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Contact extraction force	2								
Contact Pull Out		2							
Housing cutout panel extraction force			2						
Housing cutout panel retention force				2					
Housing casting cap retention force					2				
Connector mating / unmating force						2			
Glow Wire Test							2		
Dielectric Strength								2	
CTI									2