110 AMPLIVAR TERMINALS

1. INTRODUCTION

This specification covers Tyco Electronics AMPLIVAR Receptacle Terminals 1494211-1/-2/-3/-4; apply for motor stator coil wires applications. Other applicable specific data please refer to Tyco Electronics customer drawing.

2. STATOR ASSEMBLY

The terminals are assembled into the stator housing with requirements as shown in Figure 1 and 2. Assembled housing dimensions ware shown in Figure 3.

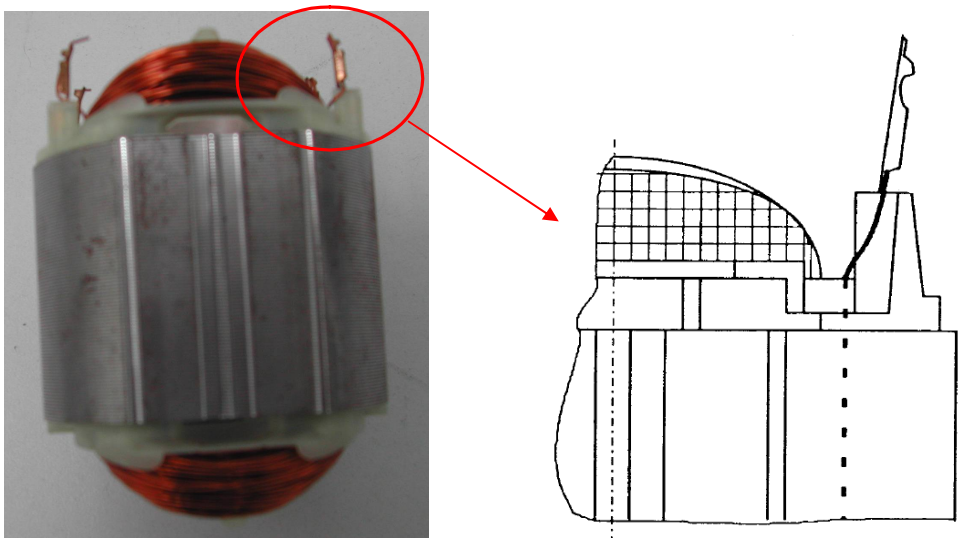

Figure 1

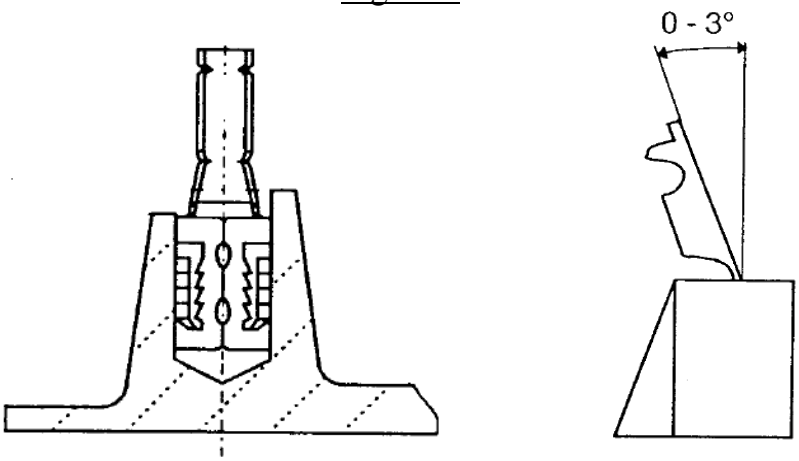

Figure 2

DR	DATE	APVD	DATE
Stanley Lu	2-Oct-2007	Boris Wong	3-Oct-2007

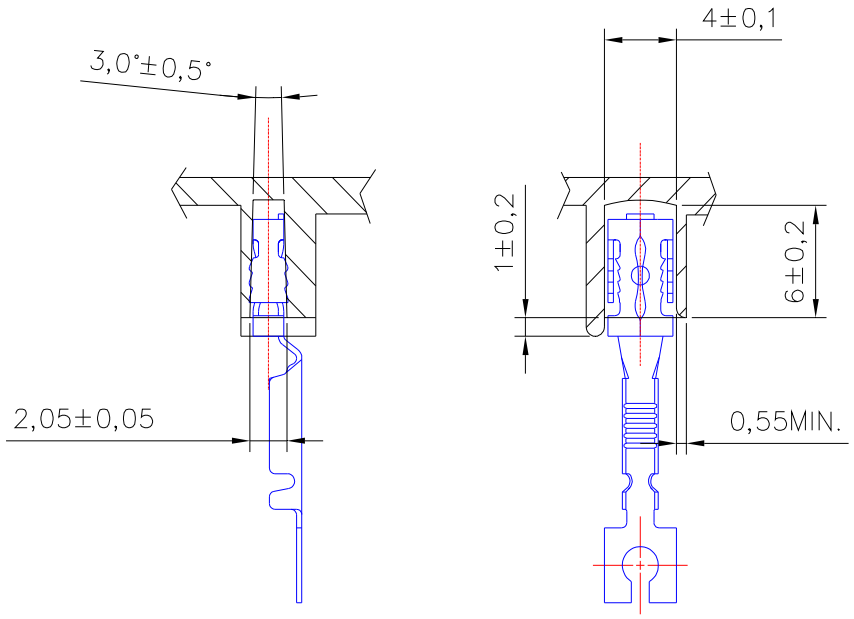

Figure 3

3. NOMENCLATURE

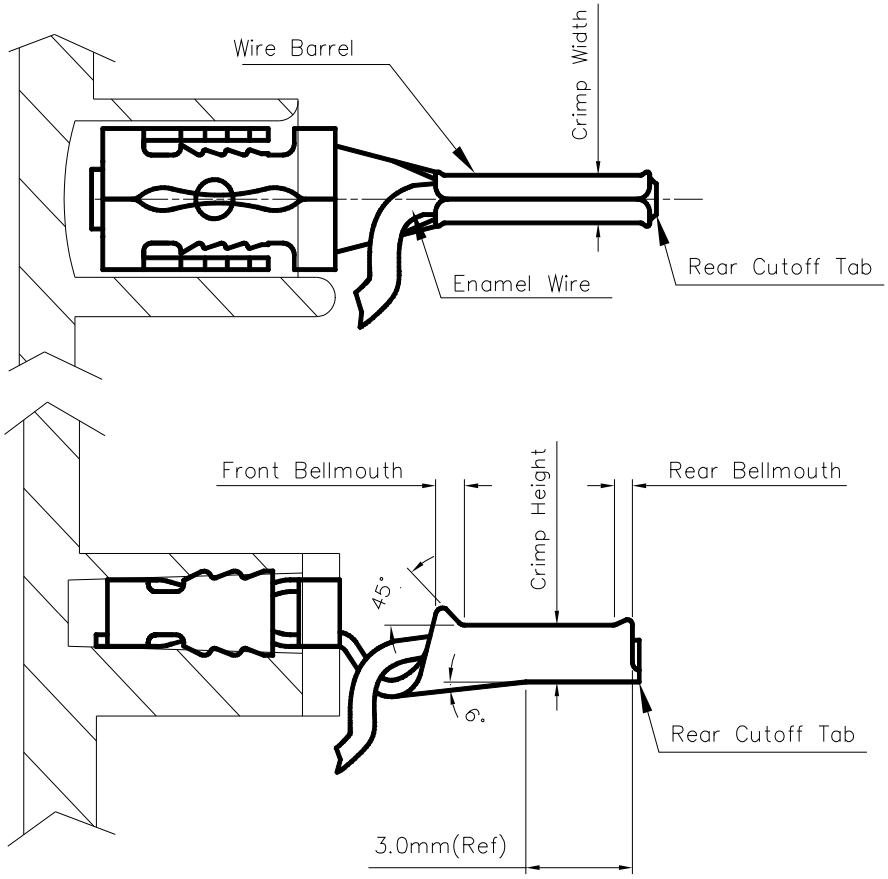

Figure 4

4. CRIMP AND DIMENSIONAL REQUIREMENTS

4.1 Wire Preparation

A. Applicable Wire

The applicable wires mentioned are Enamel Wires. The applicable wire diameters are listed in table 1.

B. Workmanship

The enamel wire does not require pre-stripping of the insulation film or other special pre-treatment. Wire end for termination must be straight and without deformations. For multiple wire applications, all enamel wires must lay side by side in the bottom of the wire barrel.

4.2 Rear Cutoff Tab

-Rear cutoff tab shall not exceed 0.15mm. The tab shall be centered at the crimp width as shown in figure 4.

-Cutoff burrs shall not exceed 0.1mm.

4.3 Wire Barrel Crimp

A. Crimp dimensions

Crimp height and width shall be according to Table 1 for machine applications.

Crimp Height/Width for 1494211-1/-2/-3/-4		
Wire Size (Nominal) ∅ mm***	Crimp Height +/- 0.05 mm	Nominal Crimp Width (mm)
0.45~0.48	0.82	1.575
0.49~0.57	0.86	
0.58~0.68	0.91	
0.69~0.75	0.95	

*** Note: The diameter values listed include insulation film thickness.

Table 1

B. Measured area for crimping height

The measured area for crimping height as shown on Figure 5

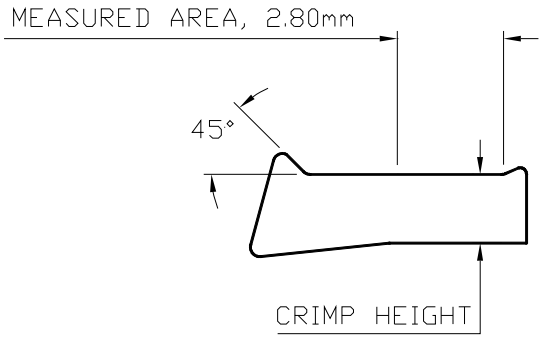

Figure 5

C. Wire Barrel flash

Wire barrel flash shall not exceed 0.15 mm.

D. Wire Barrel Seam

Wire barrel seam shall be completely enclosed and there shall be no evidence of loose wire or exposures visible in the seam.

E. Bellmouth

(1) Front bellmouth length shall be 0.30 to 0.50 mm

(2) Rear bellmouth length shall not exceed 0.30 mm.

F. Tensile strength of crimping

Crimp tensile strength shall be 70% of the wire tensile strength.

4.4 Alignment

A. Twist or Roll

Twist or roll of the crimped contact shall not exceed the limits specified in Figure 6.

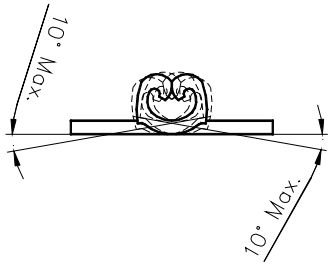

Figure 6