



# PRODUCT SPECIFICATION

## PRODUCT SPECIFICATION FOR .084/(2.13) DIAMETER SERIES MLX GLOW WIRE COMPATIBLE

### WTW CONNECTOR SYSTEM

(HOT TIN PLATED TERMINALS ONLY)

#### 1.0 SCOPE

This specification covers the 0.250 inch (6.35mm) centerline tin plated connector series terminated to 14 to 20 AWG wire using crimp technology.

#### 2.0 PRODUCT DESCRIPTION

**2.1 PRODUCT NAME: GLOW WIRE COMPATIBLE WIRE TO WIRE (WTW) CONNECTOR SYSTEM**

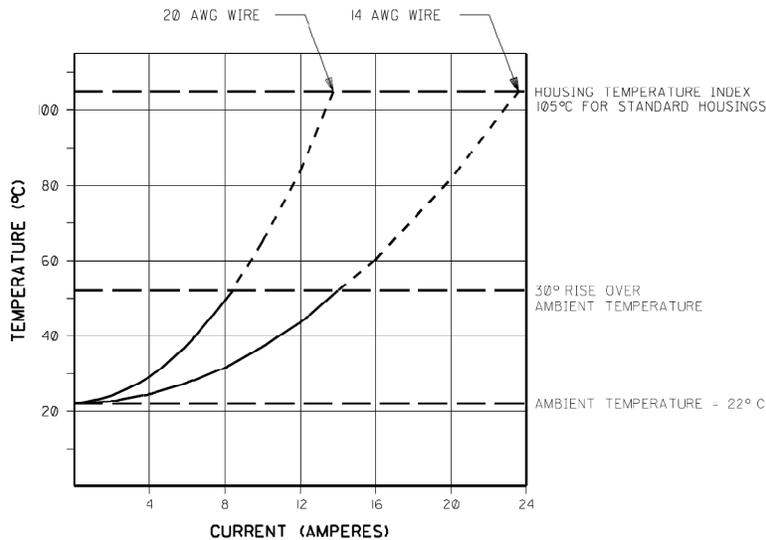
**SERIES NUMBER: 36644, 36643**

**2.2 DIMENSIONS, MATERIALS AND MARKINGS: REFER SD-36644-001, SD-36643-001.**

**3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS: SEE THE SALES DRAWINGS AND OTHER SECTIONS OF THIS SPECIFICATION.**

#### 3.1 AGENCY APPROVALS:

UL file number: E29179



TEMPERATURE VERSUS CURRENT  
FOR BRASS TERMINALS IN FIVE CIRCUIT HOUSINGS  
ALL FIVE CIRCUITS CARRY THE INDICATED CURRENT  
(VALUES ABOVE THE 30°C RISE ARE EXTRAPOLATED)

REVISION: <b>3</b>	ECR/ECN INFORMATION: EC No: I2013-0093 DATE: 03/OCT/2012	TITLE: <b>Product Specification for .084/(2.13) Diameter Series MLX Glow Wire Compatible WTW Connector System</b>	SHEET No. <b>1 of 3</b>
DOCUMENT NUMBER: <b>PS-36644-001</b>	CREATED / REVISED BY: <b>Bharath</b>	CHECKED BY: <b>VUttarkar</b>	APPROVED BY: <b>KPrasad</b>



# PRODUCT SPECIFICATION

## 4.0 RATINGS:

### 4.1 VOLTAGE: 600 VOLTS

### 4.2 CURRENT AND APPLICABLE WIRES:

#### ITEM TEST CONDITION REQUIREMENT

Temperature Rise	Mate the connectors and measure the contact temperature at the rated current load	Maximum Temperature of the terminal over ambient of 30°C (see sheet 1) (IEC STD. 512-3)
------------------	---	---

- See sheet 1 for typical temperature versus current curves
- 14 to 20 AWG wire – Outside Insulation Diameter 0.130 inch (3.30mm) Maximum

### 4.3 TEMPERATURE

Operating: - 55°C to + 105°C

## 5.0 PERFORMANCE SPECIFICATIONS:

### 5.1 ELECTRICAL PERFORMANCE:

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance [Low Level]	Mate connectors with a maximum voltage of 20mV and a current of 100mA (MIL-STD-1344A, METHOD 3004.1)	3.5 milliohms MAXIMUM (initial)
2	Insulation Resistance	Mate connectors with a voltage of 500 VDC between adjacent terminals (MIL-STD-1344A, METHOD 3003.1)	1000 Megaohms MINIMUM
3	Dielectric Strength	Mate connectors with a voltage of 2200V AC for 1 minute between adjacent terminals (MIL-STD-1344A, METHOD 3001.1)	No breakdown

### 5.2 MECHANICAL PERFORMANCE:

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Wire Pull out Force (Axial)	Apply an axial pullout force on the wire at a rate of 1±1/4 inch per minute (25±6 mm per minute) (MIL-STD-1344A METHOD 2003.1)	AWG Pullout Force 14 50lbf 20 14lbf

REVISION: <b>3</b>	ECR/ECN INFORMATION: EC No: I2013-0093 DATE: 03/OCT/2012	TITLE: <b>Product Specification for .084/(2.13) Diameter Series MLX Glow Wire Compatible WTW Connector System</b>	SHEET No. <b>2 of 3</b>
DOCUMENT NUMBER: <b>PS-36644-001</b>	CREATED / REVISED BY: <b>Bharath</b>	CHECKED BY: <b>VUttarkar</b>	APPROVED BY: <b>KPrasad</b>



# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL PERFORMANCE:

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Thermal Shock	Mate connectors exposed for 25 cycles of: Temperature                      Duration -55 +0/-3 °C                      30 minutes 85 +3/0 °C                         30 minutes (MIL-STD-1344A METHOD 1003.1) (TEST CONDITION A-1)	Appearance: No Damage Contact Resistance: 5.0 milliohm Maximum Dielectric strength: 2200V AC for 1 minute

## 5.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage

## 6.0 SHELF LIFE

Tin plated Terminals will have shelf life of 18 months from the date of manufactured

REVISION: <b>3</b>	ECR/ECN INFORMATION: EC No: I2013-0093 DATE: 03/OCT/2012	TITLE: <b>Product Specification for .084/(2.13) Diameter Series MLX Glow Wire Compatible WTW Connector System</b>	SHEET No. <b>3 of 3</b>
DOCUMENT NUMBER: <b>PS-36644-001</b>	CREATED / REVISED BY: <b>Bharath</b>	CHECKED BY: <b>VUttarkar</b>	APPROVED BY: <b>KPrasad</b>