

**Change-over Terminal Unit**






**TUA711-GS00**

**User manual**

**IM23H60-E**














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Symbol Definition	
	<b>WARNING:</b> Indicates information that a potentially hazardous situation which, if not avoided, could result in serious injury or death.
	<b>RISK OF ELECTRICAL SHOCK:</b> Indicates information that Potential shock hazard where HAZARDOUS LIVE voltages greater than 30V RMS, 42.4V peak, or 60V DC may be accessible.
	<b>ESD HAZARD:</b> Indicates information that Danger of an electro-static discharge to which equipment may be sensitive. Observe precautions for handling electrostatic sensitive devices
	<b>ATTENTION:</b> Identifies information that requires special consideration.
	<b>TIP:</b> Identifies advice or hints for the user.

## Security& Caution Symbols

The following table lists Security& Caution symbols used on equipments.

No.	Symbol	Description
1		Direct current (DC)
2		Alternating current (AC)
3		Ground (Earth) terminal
4		Protective earth (ground) terminal
5		Reference ground (Earth) terminal
6		Frame or chassis
7		Equipotentiality
8		On (power)
9		Off (power)
10		Caution, risk of electric shock
11		Caution, hot surface
12		Caution, risk of danger
13		Electrostatic sensitive devices (ESD)

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# Change-over Terminal Unit TUA711-GS00

## Section 1 Overview

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TUA711-GS00 is an I/O general change-over terminal unit, and applied when the system cabinet and terminal cabinet are required to be separated in the field. When working with the base MB745-S11, TUA711-GS00 can connect a non-redundant I/O module. When working with the base MB746-S11, it can connect a pair of redundant I/O modules. This terminal unit applies DIN rail installation and supports inlet wire of single side.

## Section 2 Specifications

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**Table 2-1 Specifications**

Parameter		Instruction
Model		TUA711-GS00
Type		I/O General Change-over Terminal Unit
Temperature	Work	(-20~70)°C
	Storage	(-40~85)°C
Humidity	Work	(10%~90%)RH, No Condensation
	Storage	(5%~95%)RH, No Condensation
Power Supply		24V DC $\pm$ 10%
Insulation Strength (Terminal)		500VAC, 50Hz, 60s, Leakage Current <10mA
Insulation Resistance (Terminal)		Voltage 500VDC, Insulation Resistance >100M $\Omega$
Dimension (L $\times$ W $\times$ H)		120mm $\times$ 45mm $\times$ 55mm

## Section 3 Usage

### 3.1 Appearance

The appearance of TUA711-GS00 is shown in Figure 3-1.

In TUA711-GS00, DB01 is the interface of the wire DB37, and J01 corresponds to the terminal of module connecting DB01. TUA711-GS00 can connect the system module via DB37, and connect the field device via the terminal J01.

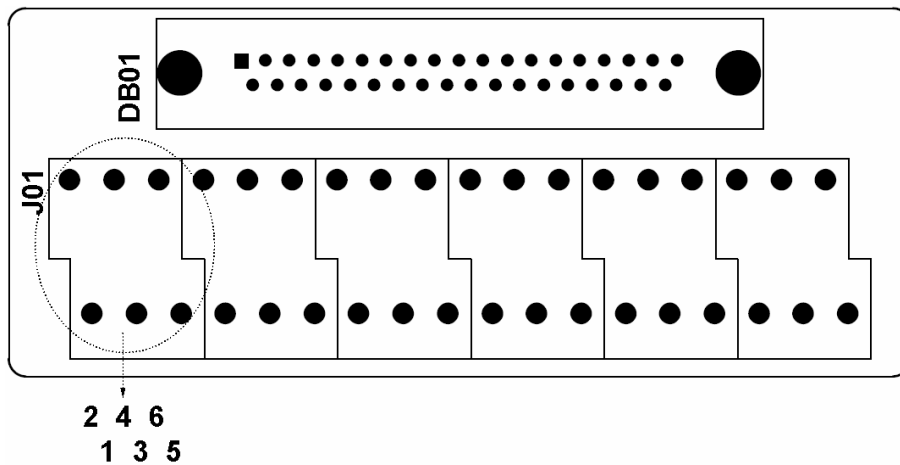


Figure 3-1 Appearance

### 3.2 Connectors

Table 3-1 Connectors

Sign	Instruction
DB01	DB37 Interface of Module
J01	Field Terminal Corresponding to Module

### 3.3 Wiring

The maximum section of wire allowed to connect the terminal in TUA711-GS00 is  $2.5\text{mm}^2$ . The wires with sections of  $1\text{mm}^2$  or  $1.5\text{mm}^2$ , the wire stripping length of 8mm and the tightening torque of (0.5~0.6)Nm are recommended.

### 3.4 Terminal Definition and Wiring

As the general change-over terminal unit, when using TUA711-GS00, the terminal number of J01 corresponds to that of the I/O module base connecting the DB01. Please refer to the wiring of specific I/O module in its user manual.

### 3.5 I/O Module Selection

I/O modules matching the terminal unit base are in the table below. Select the base by the I/O module and connect via DB37.

**Table 3-2 Matching I/O modules**

I/O Module	Instruction	Change-over Base
AI711-S11	Analog Input Module of 8-Channel	MB745-S11 MB746-S11
AI711-H11	Analog Input Module (with HART function) of 8-Channel	
AI713-S11	Current Signal Input Module of 16-Channel	
AI713-H11	Current Signal Input Module (with HART function) of 16-Channel	
AI722-S11	Thermocouple Signal Input Module of 8-Channel	
AI731-S11	RTD Signal Input Module of 8-Channel	
AO711-S11	Current Signal Output Module of 8-Channel	
AO711-H11	Current Signal Output Module (with HART function) of 8-Channel	
AO713-S11	Current Signal Output Module of 16-Channel	
AO713-H11	Current Signal Output Module (with HART function) of 16-Channel	
DI711-S11	Digital Signal Input Module of 16-Channel	MB745-S11
DI713-S11	Digital Signal Input Module of 16-Channel (SOE, 24V DC)	
DI716-S11	Digital Signal Input Module of 16-Channel	MB745-S11 MB746-S11
DI717-S11	Digital Signal Input Module of 8-Channel (NAMUR)	MB745-S11
DI718-S11	Digital Signal Input Module of 16-Channel (SOE, 48V DC)	MB745-S11
DO711-S11	Digital Signal Output Module of 16-Channel	MB745-S11 MB746-S11
DO712-S11	Digital Signal Output Module of 16-Channel	MB745-S11 MB746-S11
PI711-S11	Pulse Input Module of 6-Channel	MB745-S11



## Section 4 Revision

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*Table 4-1 Retrofit list of the version*

Document Version	Applicable Product Version	Remarks
V1.0(20131014)	TUA711-GS00 V10.00.00 and later versions	The first version.
V1.1(20161116)	TUA711-GS00 V10.00.00 and later versions	Add code
V1.2(20210609)	TUA711-GS00 V10.00.00 and later versions	Add DI717-S11 and DO711-S11 in the table 3-2