Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S675

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

TCA Model TC-LC18 Load Cell Protection Device

submitted by Transient Controls Australia
Unit1, 67 Windsor Street
Wangara WA 6065

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval becomes subject to review on 1/06/20, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	5/05/15

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S675' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S675' in addition to the approval number of the instrument, and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

The values of the performance criteria (maximum number of scale intervals, etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0B.

Special

The approval of these devices does not in any way indicate approval by NMI of any claims regarding the ability of these devices to protect load cells (or indicators) from damage. The approval means that the devices, when installed according to the manufacturer's specifications and within the limits of this approval, have not been found to detrimentally affect the performance of the weighing instrument.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Dr A Rawlinson

TECHNICAL SCHEDULE No S675

1. Description of Pattern **approved on 5/05/15**

A TCA model TC-LC18 load cell/weighing system protection device (Figure1) one or two of which may be inserted in the cabling of load cells which are approved for use with up to 5000 verification scale intervals and with a maximum excitation voltage of 12 V AC or DC.

NOTE: The devices are intended to protect load cells from damage caused by lightning, however this approval does not in any way imply that such protection will result from the use of these devices.

1.1 Method of Mounting

Installation is to be in accordance with the manufacturer's instructions and may include a surge reduction filter in the mains supply to the digital indicator.

Figure 2 show a typical wiring arrangement.

NOTE: Where the load cell is wired in a 4 wire system and it is necessary for the cable supplied with the cell to be cut in order to insert the load cell protection device(s), the cable cut-off should not be discarded but should be used to continue the load cell wiring.

1.2 Markings

The following is the minimum data required to be marked on the load cell protection device:

Manufacturer's mark, or name written in full	tca
Model designation	TC-LC.....
Serial number	.....
Pattern approval mark	NMI S675

2. Description of Variant 1 **approved on 5/05/15**

TCA model TC-LC32 which is similar to the pattern but is designed for systems with maximum excitation voltage of 24 V AC or DC.

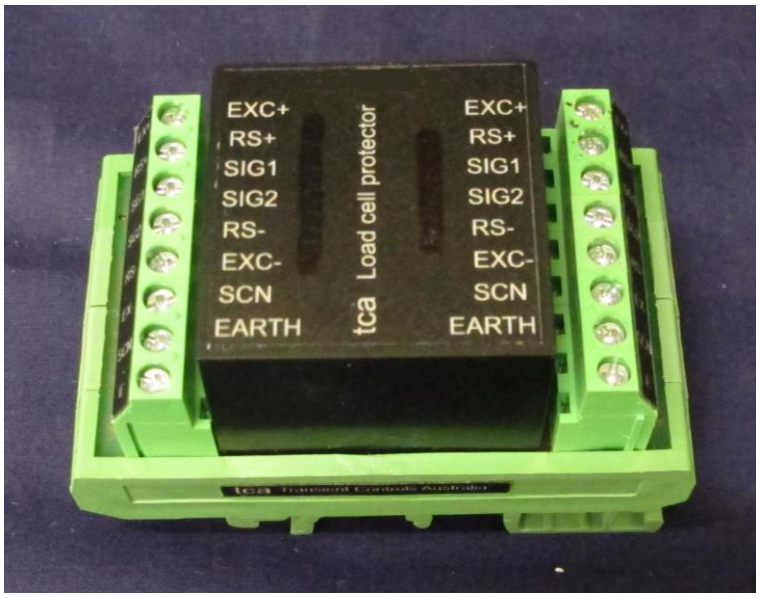
3. Description of Variant 2 **approved on 5/05/15**

TCA model TC-LC18D which is similar to the pattern but is a 4 wire system with maximum excitation voltage of 12 V AC or DC.

4. Description of Variant 3 **approved on 5/05/15**

TCA model TC-LC32D which is similar to the pattern but is a 4 wire system with maximum excitation voltage of 24 V AC or DC.

FIGURE S675 – 1

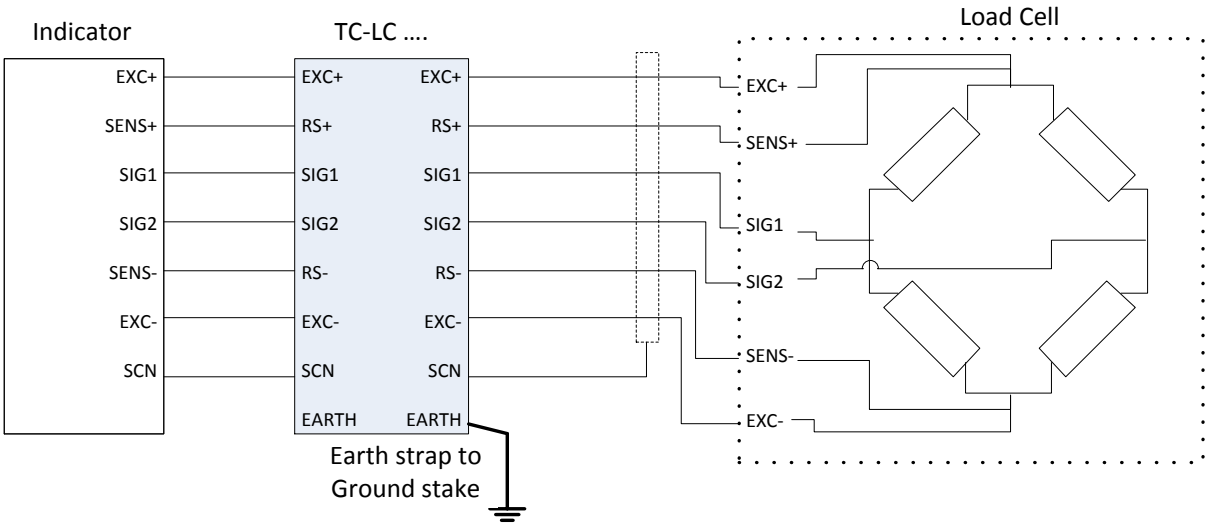


(a) top view

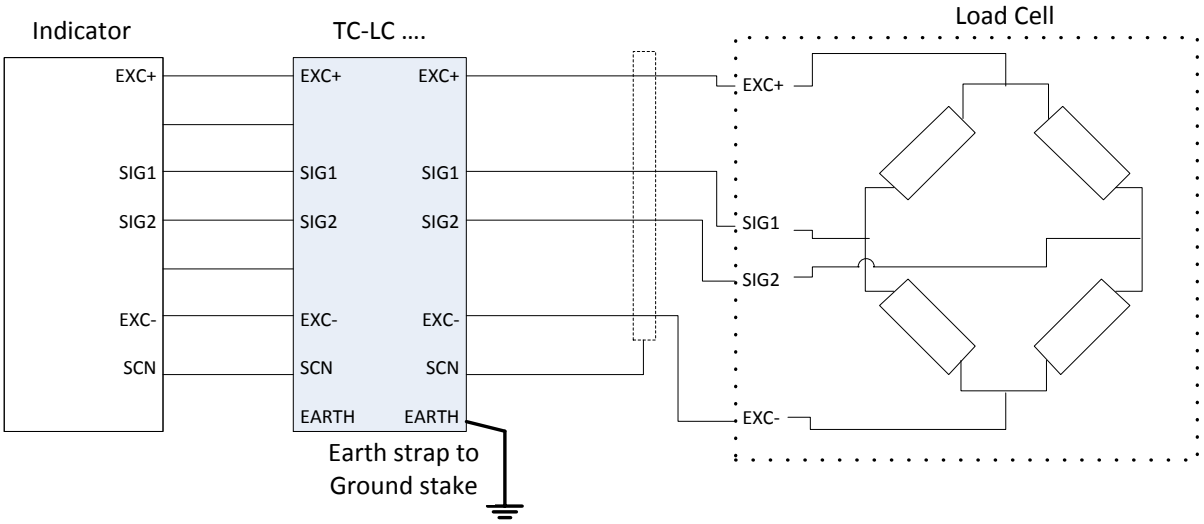
(b) showing nameplate

TCA Model TC-LC Load Cell Protection Device

FIGURE S675 – 2



(a) Typical Wiring Arrangement (6 wire)



(b) Typical Wiring Arrangement (4 wire)

(see note in clause **1.1 Method of Mounting**)

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