

Ref: IS0920 - Revision 7 – March 02

**Product Group 92 Shunts**

| CODE  | CONFIGURATION  |
|-------|--|
| -92L  | Shunt with metric threads and metric dimensions, accuracy Class 0.2  |
| -92M  | Shunt with metric threads and metric dimensions, accuracy Class 0.5  |
| -92N  | Shunt with metric threads and metric dimensions, accuracy Class 1.0  |
| -92U  | Shunt with metric threads and metric dimensions, accuracy Class 0.25 |
| -92*B | BS89   |
| -92*D | DEF140   |
| -92*U | U.S.A. Standard  |

**A. 880 Series – Switchboard Shunts**

| MODEL | DESCRIPTION                   |
|-------|-------------------------------|
| 881   | 1A to 30A Base Mounted        |
| 882   | 10A to 150A                   |
| 883   | 150A to 500A                  |
| 884   | 600A to 1000A                 |
| 885   | 1200A to 2000A                |
| 886   | (1/4" Busbar )2500 to 12,000A |
| 887   | (3/8" Busbar)                 |

The 800 Series of Shunts can be supplied in a variety of formats and configurations conforming with the standards and/or practice of most countries and several specific specifying authorities.

**1. Standard**

These are supplied with metric dimensions and are available with the 60, 75, 100 and 150mV potential drop, meeting the requirements of the U.K. and all European countries and other countries with standards/practices based on them. Standard class index 0.5 to IEC51, BSEN60051 (BS 89) current ratings in preferred series as shown on price lists. Drawings can be provided to customer's order.

**2. North American Market**

Series 880 Shunts are made with inch dimensions and unified threads with 50mV and 100mV potential drops (-92UU format) to meet the requirements of the North American market. Standard accuracy is Class 0.25%.

**3. DEF 66-13**

Series 880 Shunts in -92MD format comply with, and we have approval to, the Ministry of Defence detachable solder termination as required by the MOD (N). They have 75mV potential drop. Each standard current rating has an approved NATO stock No. as shown in our price list. Dimensions and specifications are to DEF 66-13 standard current ratings 20-2000A.

\* Non standard

**B Base Mounted Shunt Model 829**

These shunts are mounted on a black phenolic base with integral panel fixing holes and current connection is made via integral studs in the end blocks. Standard accuracy is Class 0.5. They are available with current ratings from 1-100A and standard potential drops of 50/60/75/100/150mV in "Metric" configuration and 50/100mV in "Imperial" configuration.

**C 870 Series – MIL Specification Lightweight Shunts**

These Shunts are made to comply with MIL specification MILS61B. They are mounted on a black phenolic moulded base with integral fixing holes. Current connection is via thread studs/bolts. They are made as standard with unified threads and imperial dimensions with 50mV potential drop. There are three sizes MSA-Model 871:1A-150A, MSB-Model 872: 170-600A and MSC-Model 873:800-1200A. Each standard current rating has an appropriate MIL specification part number.



**D Model 828 “Domino” Lightweight Shunt**

This commercial quality lightweight shunt has a resistance element mounted on a small black phenolic moulded base with integral fixing holes. Current and potential connections are solder tag. Standard current ratings available up to 10A. Standard accuracy Class 1.0 with 75mV potential drop. Intermediate current ratings and mV drops are available.

**E Special Shunt Designs**

Various styles and ratings of shunts are still made to customer's drawings and/or specifications. These are dealt with on a specific customer order basis.

**F Shunt Leads**

Shunt leads are supplied with an ammeter indicator when the relevant shunt is also supplied. Customers who buy only the ammeter indicator or only the shunt will, if they require it, need to specify the shunt leads separately.

Shunt leads for North America (To ANSI C.39.1) are supplied at a nominal length of 5ft as standard with a resistance of 0.065 + 0.01 ohms and ammeter indicators are calibrated for this resistance unless otherwise specified.

Shunts for the UK, Europe and markets other than North America are supplied one meter long as standard with a resistance of 0.025 ohms and ammeter indicators are calibrated for this resistance.

**G Non-Standard Ratings – Series 880 (Metric) and Model 829 (Metric) ONLY**

Customers who require shunts that are not covered by the above authorised ranges will, subject to authorisation, generally pay a price-delivery premium. Standard ranges and ratings of these shunts are normally economically batch produced and the price/delivery reflects the need to engage in special manufacture for a one off order. Most required variations are for:-

- i) Non-standard current ratings  
Customers who require a non-standard current ratings and cannot accept one of the comprehensive preferred ratings, can have their requirements met subject to the design being identical in all other respects to the standard version and rating required being covered by the span of ranges shown. For outline drawings see our catalogue. In this case the list price is calculated by taking the list price of the next highest authorised rating and increasing it by 10% or by £4.00 whichever is largest. Dimensional drawing/design requirements are catered for in the specification and also the existing works outline drawing.
- ii) Non-standard mV drops  
Non-standard mV drop requirements and hence variation in shunt length are in general more difficult to comply with, due to the cost of the design/drafting effort necessary. If it is necessary to produce a non-standard mV drop version of a standard type, the following price basis will be used.  
Where a mV drop other than those authorised, the 75mV list price is multiplied pro-rata by the number of 75mV increments or part therefore, subject to:-
  - a) A minimum increase of 100% and this to apply to values below 75mV.
  - b) Where a mV drop/rating combination necessitates the incorporation of a model 829 integral base not fitted to the series 880 75mV version of the rating, the price will be increased by 10%.
 Dimensional drawings for non-standard mV shunts are only normally supplied as marked up prints of existing authorised shunt drawings. A purpose produced drawing will be charged for as an extra.
- iii) Non-standard accuracies  
Those shunts which normally have a standard accuracy class of 0.5 can be supplied with a class index of 0.2 for an additional 100% on list price.
- iv) Supply of DEF 66-13 version of series 880 shunts in ratings and versions other than those authorised can involve a lengthy and expensive process of acquiring new NATO stock numbers etc. When it is necessary, orders for non-standard current ratings and mV drops will be dealt with as in i), ii) and iii) above. The customer is responsible for obtaining a MOD (N) or NATO part number and/or approval, if required. The non-standard documentation charge will apply in all cases.

The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions, which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. Crompton is a trade mark.



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