

# SRGT2CU

Type 2 Single Phase Surge Arrester Ideal for domestic consumer unit applications

The Lewden range of circuit protection devices are designed and tested for use with Lewden branded distribution boards.

SRGT2CU is a single phase surge arrester suitable for use in TN-C-S (PME) / TN-S / TT network systems. It is designed for universal application, for the protection of electrical appliances against impulse surge effects when connected to LV supply systems.

The device is suitable for installation at the boundaries of both lightning protection zones LPZ 1-2

Simple to install; One surge arrester provides protection for all circuits on the distribution board, and offers installation compliance to the relevant chapters of BS7671: 2018

These devices are earth leakage free and may be connected before or after RCCB / RCBO circuit protection.

Technical Data	
Reference standard	IEC/ EN61643-11
Test class according to EN61643-11	Type 2
Earthing system	TN/TT
Nominal Voltage (Un)	230-240V ac
Max continuous operating voltage (Uc)	275V ac
Nominal discharge current (In) (8/20μS)	20kA (L/N, L/PE) 40kA (N/PE)
Voltage protection level at Uoc (Up)	<1.5kV (L/N) <1.5kV (L/PE) <1.5kV (N/PE)
Temporary overvoltage (TOV)	335V/5S 1200V+Uo/ 0.2S
Response time	<20nS
Admissible short circuit current (Isccr)	10000A
Maximum backup fuse rating	125A gL/gG
* Permitted backup MCB	Single pole 40A or 50A B or C 6kA
Min-Max conductor size	1.5-10mm² (L/N) 2.5-25mm² (PE)
Cable connecting length (maximum)	500mm total or less
Terminal tightening torque	1.2-1.5Nm L/N 2.0-2.5Nm PE
Mounting	35mm din rail
Operating temperature range	-40°C to +85°C
Ingress protection rating	IP20
Dimension	W18xH90xD67 mm

\*Valid for sub-distribution installations with an impulse current In  $\leq$ 5kA to achieve a combined protection level Up  $\leq$ 1.5kV

THIS GUIDE MUST BE LEFT WITH THE UNIT FOR FUTURE REFERENCE







The device must be installed by a qualified electrician in accordance with the latest edition of the IET wiring regulations for electrical installations BS7671

#### Insulation resistance testing: Important

When conducting insulation resistance tests on the installation, remove either the plug in cartridge, or the earth cable to the device.

Failure to do so will obscure IR test results and may cause irreparable damage to the surge arrester.

#### **Connection: Important**

The total cable length for connection of the surge arrester, i.e. the distance between the live busbar and earth bar (via the surge arrester) must be kept to the shortest possible length, using the most direct route.

(Total cable length = 500mm or less). Pigtails in the cable MUST be avoided. Refer to of BS7671:2018 section 534

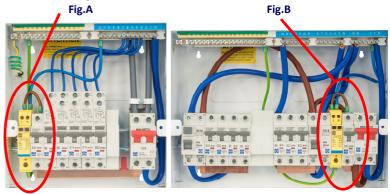
### Installation within consumer units

For consumer unit installation, use in conjunction with Lewden MCB type B40 1P or B50 1P (Part numbers G06-1B40 or G06-1B50).

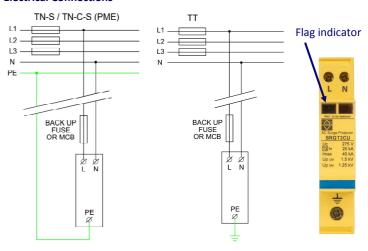
(Fig.A) RCBO board: Install MCB to the left hand end of the RCBO set. Connect line side of all MCB/RCBOs to the main switch using a single length of comb bus bar (supplied with the consumer unit).

(Fig. B) Dual RCCB board: Install MCB adjacent to the main switch and connect the MCB to the main switch using the high integrity comb bus bar (supplied with the consumer unit).

For both (Fig.A) and (Fig.B), the surge device is connected to the MCB and N/E bars utilising  $6 \text{mm}^2$  conductors.



# **Electrical Connections**



## **Status Indicator**

A coloured flag indicator is provided on the front of the device to display its condition. The indicator must be checked periodically.

A black flag indicates that the device is healthy and operational.

A red flag indicates that the surge protector has reached end of life and no longer offers protection. The item is non-serviceable and must be replaced.

Flag Indicator	
BLACK	Healthy (ok)
RED	Failure (replace)

