

INDIRECT MEASURING ENERGY METER TEST BLOCK UNITS

TERMINAL BLOCKS



FOREWORD

A topmost requirement by Utilities is that calibrating or replacing kwh meters should be carried out without cutting the electrical energy supply, but also under full safety both for operators and equipment.

A unit, linked between the current transformers and the energy meters, is therefore required, which will enable the operator to thoroughly and easily check the condition of the connections, namely that they are tight and reliable after a long frequent use, but mainly that they keep safe against the risk of electric shock.

Unibloc Test Block Units care very specially for all above and their main technical data and design details are emphasized below, so that maximum safety and reliability are obtained with them.

TECHNICAL CHARACTERISTICS

- Rated test voltage: 400 V
- Rated current: 5 A
- Insulating material: V-0 polyamide as per UL94
- Transparent cover: UV-resistant and self-extinguishing V-0 polycarbonate as per UL94
- Conductor parts: Electrolytic copper, 99.9 % purity
- Test sockets: Copper, 58 % minimum
- Parts under tension are given a 3 micron galvanic tin plated finish
- Tightening parts: made of anti-corrosion gold chromate hardened steel

GENERAL FEATURES

- Thickness of terminal block unit 12 mm., that makes easier the operator's job and enables insertion of all the test plugs standardised by the Utilities.
- Disconnect operation by means of slide link fitted with single unloseable screw. This solution greatly increases safety of operation as against existing systems that require two tools for operating the link.
- Dual marking system, one for identification of wiring (at connection point) and another that helps identifying the kind of connection (voltages and currents at their respective phases).
- New enclosure-like full cover fitted with two unloseable seal caps.
- The circuit opening and jumpering operation is carried out by means of the test plugs usually housed at the outer side of the closing end walls. These plugs should be inserted in the bottom sockets at the transformer side of each set of c.t. terminal blocks. Contact between different potentials will thus be avoided.
- The test block assembly yields entire protection against accidental hand contact.
- Energy Meter Test Blocks are supplied fully assembled, in order to meet the 100% quality requirement of the Quality Control Standard Specification. Supply of loose components could not be considered as under cover of such standard specification because this latter contains the proper prescriptions for a correct assembly.

APPROVED MODELS

Reference: 7E 4I 3T
Code: 549000



Reference: 10E 6I 4T
Code: 549201



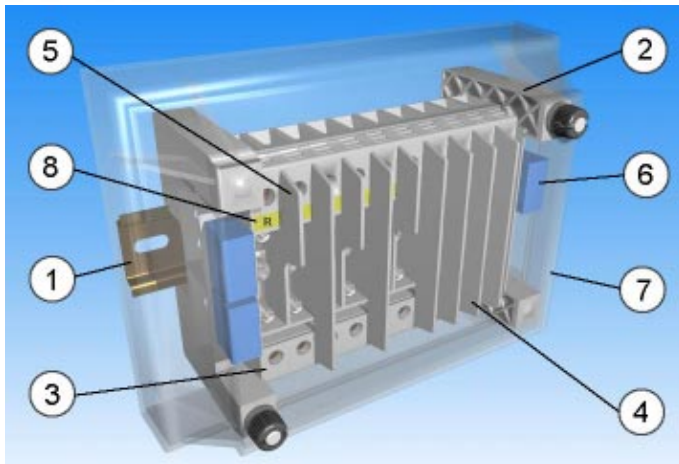
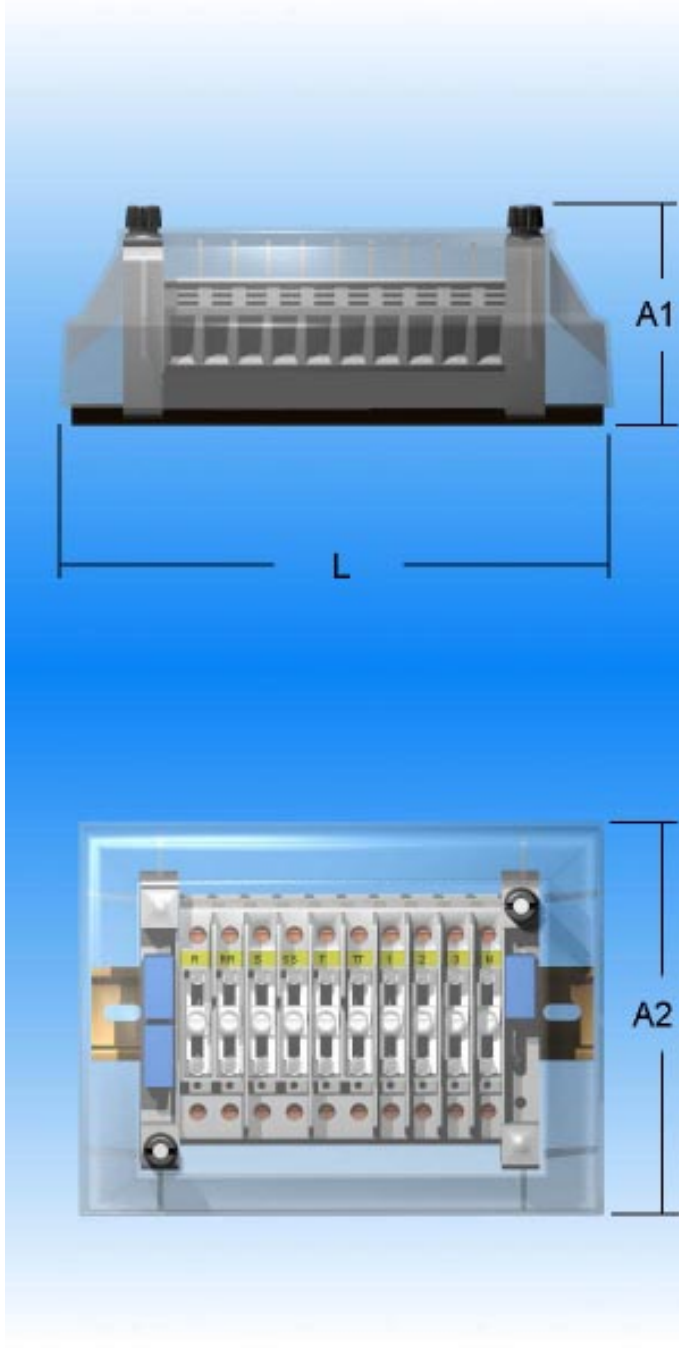
TESTS CARRIED OUT

Official tests favourably carried out at the laboratory of the public institution "Laboratorio General de la Generalitat de Catalunya", Barcelona.

The following tests have been successfully conducted at several laboratories :

- Voltage drop under 5 A current
- Heating test under 50 A current
- Dielectric strength at 6000 V between potentials and 10000 V to earth
- Short term current, 600 A at 1 second.
- Insulating strength. $30 \times 10^3 M\Omega$
- Heating of jumper plugs (25 A)
- Hot wire test at 960° C (all plastic parts)
- Tapered finger or hot mandrel test (all plastic parts)
- Composition of the conductor materials
- Resistance to vibrations
- Corrosion strength in salty environment
- Strength of markings.

TECHNICAL DETAILS



SIZE OF TEST BLOCK UNIT	7E	10E
Total length mm (L)	150	192
Total height mm (A1)	76	76
Width mm (A2)	147	147
Weight g	539	740

SIZES RB10 TERMINAL BLOCK

Pitch + allowance mm	12±0.2
Width mm	92
Stripping length mm	17
Tightening torque Nm	1.5
Sockets for test mm	4

SECTION OF WIRES

Single core	1.5 a 16
Stranded	1.5 a 16
Flexible	0.5 a 10
Equal to AWG Nos.	16...6

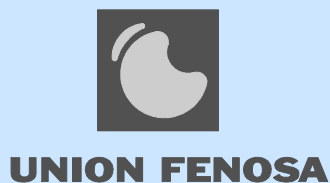
TECHNICAL DATA

Rated voltage 400V
 Pollution degree 3
 Rated current 57A
 Rated cross-section 10 mm²
 AWG cross-section 16..6
 Insulating housing Polyamide V0
 Conductor bar: electrolytic copper
 Finish of live parts : Electrolytic tin plating.
 Brass machined parts : > 58 % Cu contents.
 Material of test sockets : Cu.
 Clamping units : Yellow chromate passivated hardened steel.
 Disconnect device designed to carry out electrical insulation function.
 Transparent cover : UL std. V-0 grade self-extinguishing UV resistant polycarbonate.

COMPONENTS

N°	DESCRIPTION	quantity
1	GFS 35 din rail	1
2	BFRV10/D side fixing wall	2
3	RB-10 terminal block	1
4	RB-TE terminal block	6
5	RB-TM terminal block	3
6	CP2X12N jumper plug	2/3
7	ERB enclosure cover	1
8	RMD Marking tags	7/10

UNIBLOC Test Blocks have been approved by the following Utilities:



PROMOTORA DE MERCADOS ELECTRICOS, S.A.

Apartado de correos 284. Pol. Ind. Polizur, zona A, nave 30.
C/ Can Mitjans, 50. 08290 Cerdanyola del Vallés, Barcelona (Spain)
Tel. Dpto. Comercial: 935 807 186 Tel. Administración: 935 807 819
Fax Dpto. Comercial: 935 807 061 Fax Administración: 935 922 185
E-mail: mail.box@unibloc.com