

Value propositions



Essailec® test blocks allow to safely and easily perform test operations such as current and voltage measurement, monitoring, injection, repair or replacement of meters and protective relays installed in secondary circuits of current and voltage transformers or sensors.



Continuous operation

Easy plug & play solution

Essailec® allows a simultaneous test of 1 to 4 circuits thanks to the combination of a plug and a socket.

Fast test operation

Thanks to make before break principle, the current transformers short circuiting is automatically performed (no cursor or switch element to operate manually). Current testing without cutting the energy supply.



Safety and protection

Operator's safety

IP20 protection for the socket and IP40 with the cover. Sealing option available to prevent unauthorized access.

Error free systems

Coding system on plugs & sockets prevent from risks of mixing between various circuits.

Protection against reverse plug insertion.

Unitary traceability

Engraved on insulating body.



Easy to install

Multiple choice of mounting

5 possibilities to install Essailec® on front, within the panel or on a plate.

Various choice of wiring technologies

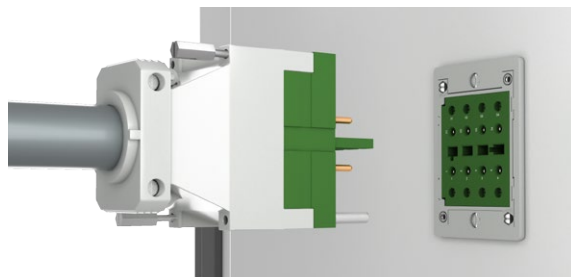
Essailec® offers several connection types: ring tongue, screw clamp, quick-connect and RJ45, to allow different wire terminations and connections up to 10 mm².

Features and benefits

Essailec® is especially designed to fit the electricity utilities requirements for safe and reliable testing. The test operations can be made without any circuit break and without opening the panel door.

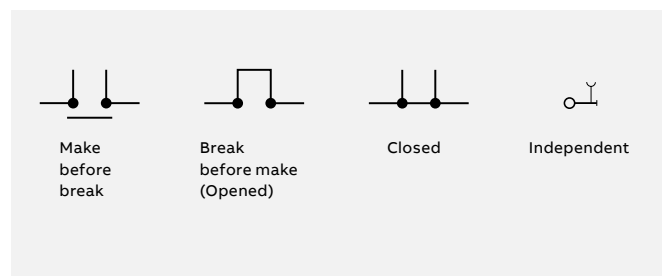
Essailec® is approved by major utilities and successfully implemented for years in worldwide electricity production, transport and distribution networks.

Essailec® operation principle



Essailec® is based on a plug & play operation solution. It is composed of a socket and a test plug. The socket is installed in the circuit and wired to the device to be tested during its installation or servicing (protection relay in switchboard or meters). The plug is connected to the test set and allows measurement or signal injection.

Socket design



The sockets are available in the following designs:

- Socket with "Make before break" contact design, available in the current, voltage, and RJ45 ranges
- Socket with "Break before make" (opened) contact design, available in voltage application
- Socket with "Closed" contact design, available in voltage application
- Socket with "4 independent circuits" for voltage application.

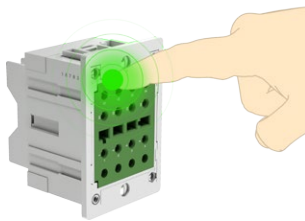
Safety & protection



Color coding

Prevent from risks of mixing between various circuits.

Color coding: green for current applications, grey / orange / blue for voltage applications.



IP20



IP40



Seal

Operator's safety

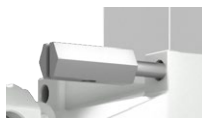
Front protection IP20 for the socket and IP40 with the protective lid.

The protective lid is equipped with a sealing option to prevent unauthorized access.

Locking mechanism

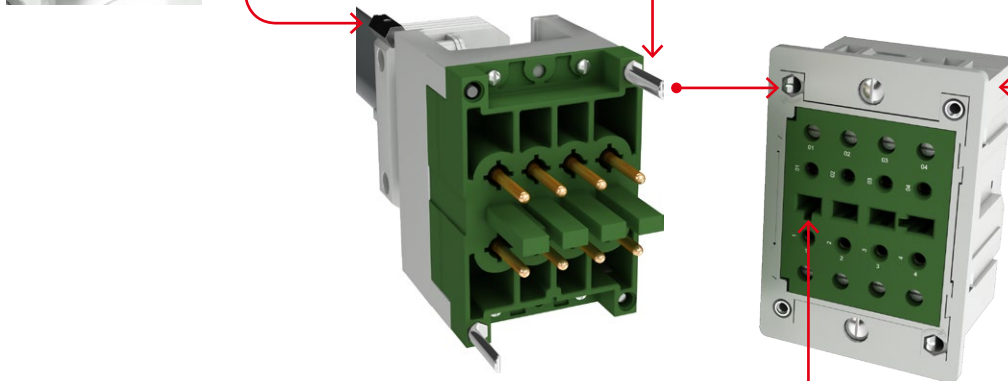
Secure the plug on the socket.

No risk of unplugging during test operations.



Error free systems thanks to coding pins

Up to 6 possible combinations to allocate test plug with its appropriate socket for circuit differentiation.



Unitary traceability

The socket integrates a permanent tracking number engraved on insulating body.



Protection against reverse plug insertion

Socket and plug integrate a special plastic shape preventing the circuit polarities reversal.

Features and benefits

Easy to install

Multiple choices of socket mounting

Mounting on panel: front or base mounting

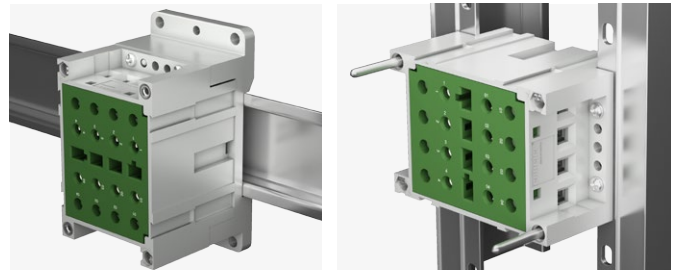


Flush mounting

Half-base mounting

Base mounting

Mounting within the panel.



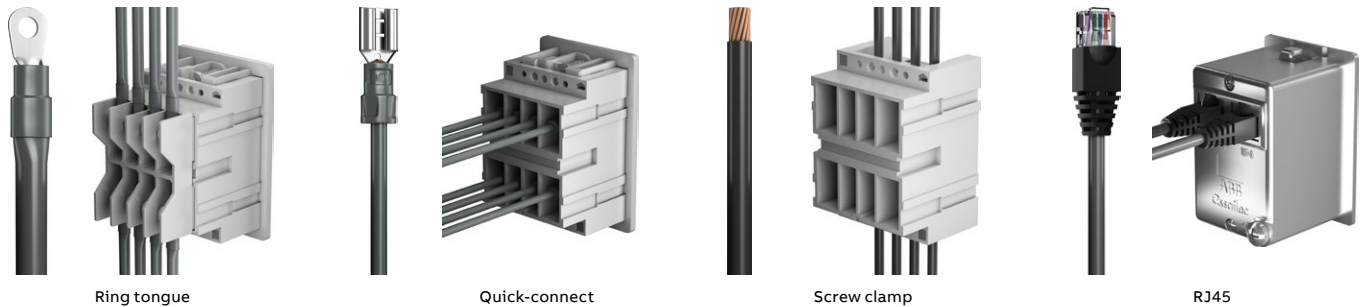
TH35 rail mounting

Rack mounting

Various choices of wiring technologies

Essailec® offers several connection types (according to the mounting selected): ring tongue, screw clamp, quick-connect and RJ45, to allow different wire terminations and connections up to 10 mm².

Refer to sockets panorama page for more details.

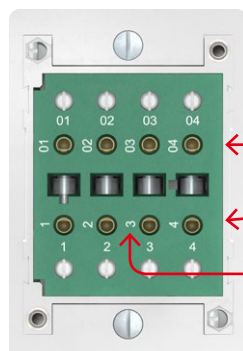


Ring tongue

Quick-connect

Screw clamp

RJ45



Easy circuit identification

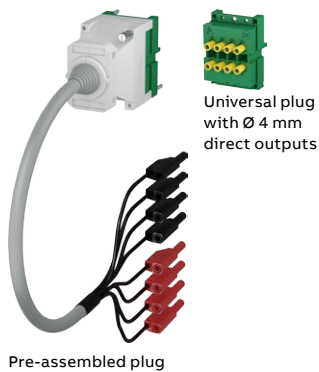
01, 02, 03, 04: equipment side.

1, 2, 3, 4: transformers side.

Premarked block in two directions to allow convenient reading whatever the mounting sense.

Plug

The plug is connected to the test equipment by means of test plugs. Plugs are supplied in various configurations, either prewired or ready to be customized.



2x4 poles plugs (8 contact pins)

Allow testing of 4 current or voltage circuits. Available in different colors (green, grey, orange, blue).



4 poles plugs (4 contact pins)

Allow testing of 4 voltage circuits. Available in different colors (grey, orange, blue).



1 pole plugs (2 contacts pins)

Allow testing of 1 current or voltage circuit. Available in different colors (red for current applications or grey for voltage applications).

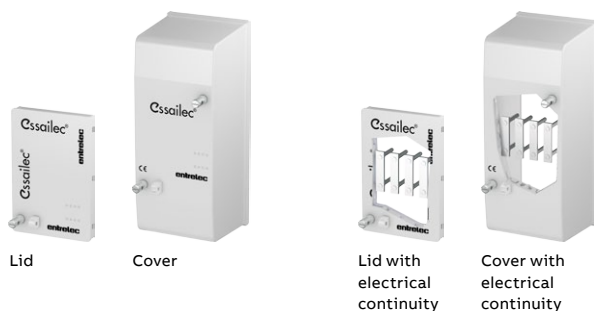


Plugs for customization

In order to provide more flexibility to the end-users Essailec® plugs can be customized according to the targeted application (see customized plugs catalog page).

Protection

Lid or Cover provide dust protection (IP40) and prevent unauthorized access thanks to their embedded sealing option. Lid and cover with electrical continuity, are necessary compatible with opened contacts sockets (Break before make). Thanks to their inner pins and linking bars they ensure the circuits continuity.



Sockets panorama

Contact type	Mounting	Connection	For current and voltage sensors	For current transformers	For voltage transformers		
					Grey coding (standard)	Blue coding (polarity)	Orange coding (trip)







Make before break 	Flush	Ring-tongue	–	CC-E-VA	TC-E-VA	PC-E-VA	–
			–	CC-E-VA-6.6	TC-E-VA-2.2	PC-E-VA-8.8	–
			–	CC-E-VA-R2-6.6	TC-E-VA-R2-2.2	–	–
		RJ45	TC-E-RJ45-INF	–	–	–	–
		Quick connect	–	–	TC-E-C5A-2.2	–	–
	Half-base	Ring-tongue	–	CC-D-VA	TC-D-VA	PC-D-VA	–
	Base/Half-base	Screw clamp	–	–	TC-DS-VL	PC-DS-VL	–
	Base	Screw clamp	–	CC-S-INF-VL-6.6	TC-S-INF-VL-2.2	–	–
	TH35	Screw clamp	–	CC-TH35-VL-6.6	TC-TH35-VL	–	–
Break before make Opened contact 	Flush	Ring-tongue	–	–	TO-E-VA	PO-E-VA	DEO-E-VA
			–	–	TO-E-VA-12.12	–	–
	Half-base	Ring-tongue	–	–	TO-D-VA	PO-D-VA	DEO-D-VA
	Base/Half-base	Screw clamp	–	–	TO-DS-VL	PO-DS-VL	–
	Base	Screw clamp	–	–	TO-S-INF-VL-12.12	–	–
Closed contact 	Reverse	Ring-tongue	–	–	TO-I-VA-2	–	–
	Flush	Ring-tongue	–	–	TF-E-VA	PF-E-VA	–
	Half-base	Ring-tongue	–	–	TF-D-VA	PF-D-VA	DEF-D-VA
Independent circuits 	Base	Screw clamp	–	–	TT4-S-VL-INF	–	–
	Base/Half-base	Screw clamp	–	–	TF-DS-VL	PF-DS-VL	–

Socket designation

