

Digital Diagnostic Interfaces for SDC



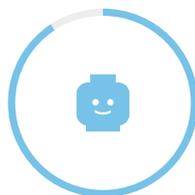
The Digital Diagnostic Interfaces are Transducers able to acquire and process analogue signals, typically voltage and/or current alternate or continuous (current with external shunt resistor). They are connected to the device that has to be checked. By means of specific algorithms, it is possible to determine their conditions or to prevent an eventual breakdown. The Interfaces guarantee a high level of reliability required within the Railway Signalling environments (sentry station, station) taking into account different sources of environmental stresses (vibration, temperature range, over voltages, etc.) according to the IS 402 Railway Regulation (Installation environment A5). The interfaces are approved according to the RFI TCSSTB SF IS 18 755 A Italian Railway Specification.

- 1. Fixed Current Track Circuits:** it measures Indoor (Locale) and Outdoor (Campagna) Voltages of one track circuit, from which the relative phase displacement and the torque applied to the Disk Relay (Relé Disco) are determined. (Cat/prog 805/108)
- 2. Coded Current Track Circuits:** it measures Voltage and Current of one track circuit from which the Period and the Duty Cycle of the code are determined. It generates an alarm when the measured data exceed the set threshold. (Cat/prog 805/102)
- 3. Railroad switch:** it measures the Current and Voltage Curves of the Manoeuvre and compares the measured data to those of a reference mask. (Cat/prog 805/104)
- 4. Electromagnet (not trailerable):** it measures the Current and Voltage Curves of the Manoeuvre and compares the measured data to those of a reference mask. (Cat/prog 805/110)
- 5. Block Inversion:** it diagnoses the point where the request for the Block Inversion ceases by measuring the Voltages of relation of the block inversion. (Cat/prg 805/106)



NON INTRUSIVENESS

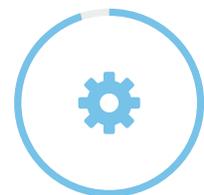
They are equipped with analogue measurement channels insulated up to 3000V. They are not intrusive against the device to be analyzed, (even in case of internal breakdown of the transducer).



EASY OF INSTALLATION

They are typically connected to a 12 pole green/black terminal block by means of appropriate plugs that guarantee the continuity of connection, even during the substitution/maintenance phase.

Wirings are reduced to a minimum level (sentry station and/or relay room). They do not require any modification to the Signalling System schemes.



CONFIGURABILITY

For any measured value (voltage or current) and for each transducer or family of transducers, they are able to set different parameters such as: hysteresis, filter and measurement validation period.