




CRU.4R
CRDI SOLUTIONS

**Diesel Injection
Systems**

Innovative, compact and professional
solutions for every workshop to test
& service Diesel Injection Systems



1 CRDi Solutions

Common Rail Revolutionary testing solutions
for BOSCH, DELPHI, DENSO and VDO

Heavy Duty and Light Duty applications

All types Piezo, Solenoid & Dual-Solenoid actuators.

CRU.4R





CRU.4R

Test Bench for 4 CRDi's

Up to 2500Bar HP with 6.5 bar air supply

Injector Coding for Delphi C2i/C3i,
Bosch IMA/ISA, Denso QR and VDO IIC

Dynamic Electronic Mass Measurement (BK)
Acc: 0.2%FS, repeatability: 0.05%

Under 25min testing phase

Fully Automatic Operation

Diesel Specialist level of Diagnosis

10" Touchscreen HMI

Capable of EUI/EUP and HEUI

Testing with optional Attachment units

VDO/Bosch/Denso Piezo
Stack Regeneration function

CGL: VDO Automatic
Valve Lift Gap Measurement

Blue Limits Diagnosis



Tests Performed

R2LC

Electrical actuator test for $k\Omega/\mu F$, $\Omega/\mu H$

CFL

Check For Leaks test (injector internal or external)

NLT

Nozzle Leakage Test

LKT

Static Back Leak Test

aNOP

Automatic Nozzle Opening Pressure test

iVM (FL, PL, EM, LL, PI)

Injector Volume Measuring test
(full-load, part-load, emissions, low-load,
pre/post-injection tests and more...)

iVM-DFI

Injector Volume Measuring test (multiple
test-points slope per Pressure)

RSP

Injector nozzle Response-time test

SPR

Dynamic Spray test performed in all testing
conditions

Features

iPSC

Illuminated Pressurized spray chamber

View of injection pattern up to 2500Bar

Visually diagnose NOP, incorrect spraying, leaky / seized
injectors

RSP

Sensor adaptable to all nozzles

Precise measurement of nozzle reaction time

Easily diagnose a slow acting injector, a retarded injection
event, poor engine performance and emissions issues.

AZO Software

Advanced Android based HMI/PC

Wi-Fi printing, sharing, syncing, software/hardware
& database updating, via USB or WiFi

Real-time Oscilloscope and CSV data export

TeamViewer Support and more...

Reports

Easy fail-track color report for each injector.

Single-page Quick report or Multi-page
Analytic reporting

Specifications

All Makes OE Manufacturer
& User Database

Developer and OE customizing

Piezo & Solenoid programmable
actuation profiles

(HV: 0-300 Volts / 0-35A)

Injector & PCB protection circuit
(StG, StB, SC, OC, IC)

Multiple Injections capability

User friendly, ergonomic, dynamic
& robust design

Spill-free hose quick connectors

aMACC – Automatic chemical
treatment and flushing of the injector
before testing*

Complementary set of CRi adapters,
fittings and connectors for all makes
& types





CARBON ZAPP

INNOVATION DRIVEN

— **Production Plant**

364 Varis-Koropiou Ave. Koropi
194 42 Athens, Greece

— **Headquarters**

A.I.S. GmbH
75438 Knittlingen, Germany

— **email** contact@carbonzapp.com

tel +30 210 9856110

fax +30 210 9928655

carbonzapp.com