



Porsche 911 RSR (Type 991)
Model Year 2015 – Vehicle Description
FIA WEC Specification

Concept:

- Single-seat production based race car
- Base: 911 C4 type 991

Engine:

- Naturally aspirated engine with intake above rear side panel
- Water cooled four valve flat six cylinder engine
- 3,996 cc; stroke 80.4 mm; bore 102.7 mm
- Required fuel quality: 98 octane, unleaded
- Dry sump lubrication
- Sequential multi-point fuel injection
- Returnless fuel system
- Modular light weight race exhaust system
- Muffler with twin, centrally aligned tail pipes
- Additional oil tank
- Quick oil refill system via front deck lid

Transmission:

- Newly developed Porsche six-speed racing gearbox with pneumatic paddle shift system
- Gear Ratios:
 - CW & P Gear 14/22 $i = 1.571$
 - Final drive 17/41 $i = 2.412$
 - 1st – 6th gear according customer request
- Internal pressure-oil lubrication with active oil cooling
- Mechanical limited slip differential with viscous unit
- Single-mass flywheel
- Triple-disc-carbon racing clutch with forged housing
- Hydraulic operated central clutch operator
- Oil-water heat exchanger



Bodywork:

- Lightweight bodywork with smart aluminum-steel composite construction based on 911 C4 type 991 with add-on carbon parts
- Removable roof section to apply KED
- Rescue bar analogue DTM system
- Carbon add-on parts:
 - Front end cover with front lip
 - Air intake and outlet for center cooler
 - Front deck lid with louvers
 - Fender and wheel house protectors
 - Sill covers
 - Doors with side-screen frame and plastic mirrors
 - Rear wheel arch extensions with side intake air duct
 - Rear wheel arch cover
 - Rear deck lid with adjustable rear wing
 - Rear end cover with wheel house air de-ventilation
- Quick demount couplings for front and rear end cover
- Closed flat bottom with rear diffuser
- Pedal box
- Built-in air jack system (four legs) with safety pressure valve
- Race bucket seat (driver side only) with fire retardant upholstered cover
- Six-point safety harness modified for use with HANS
- Electrically activated fire extinguisher system
- Approx. 94l FT3 safety fuel cell
- Heated glass windscreen
- Modified 911 cockpit:
 - Magnesium sub-frame in light weight design
 - Ergonomic driver-oriented center console
 - Switch mask with fluorescent lettering
 - Multi-function steering wheel with quick release coupling, control panel and shift paddles

Suspension:

Front axle:

- Double wishbone type front axle
- Four-way Multimatic shock absorbers
- Twin coil spring setup (main and helper spring) with adjustable platform
- Adjustable anti roll bar via both side blades
- Electro-hydraulic servo assisted steering

Rear axle:

- Multi-link rear axle
- Four-way Multimatic shock absorbers
- Twin coil spring setup (main and helper spring) with adjustable platform
- Adjustable anti roll bar via both side blades
- Tripod type driveshafts

Brake system:

Two independent brake circuits for front and rear axle, adjustable by the driver via brake balance system

Front axle:

- Aluminum six-piston racing calipers with quick release coupling in single-piece design
- Ventilated steel brake discs, D = 380 mm
- Race brake pads
- Optimised brake cooling ducts

Rear axle:

- Aluminum four-piston racing calipers with quick release coupling in single-piece design
- Ventilated steel brake discs, D = 355 mm
- Race brake pads
- Optimised brake cooling ducts

Rims/ Tires:

Front axle:

- Forged single piece aluminum rims (BBS) 12.5J x 18 offset 25 with center-lock nut
- Michelin transportation tires 30/68-18

Rear axle:

- Forged single piece aluminum rims (BBS) 14J x 18 offset 50 with center-lock nut
- Michelin transportation tires 31/71-18



Electrics:

- COSWORTH ICD color display with integrated data acquisition
- COSWORTH IPS – programmable multi-function system control unit
- COSWORTH telemetry
- Bosch MS 5.0 – Engine control unit
- Electric throttle
- Shifttec – Paddleshift system
- Electrically adjustable mirrors with memory function
- Rear view camera
- Bosch data recorder C50 without WinDarab licence
- Oil level indication via telemetry and level sensor in the oil tank
- Battery: 12 V 18 AH lithium ion
- 140 A Alternator
- Damper travel sensors
- Tire pressure monitoring system
- Brake disc temperature sensors
- Driver drink system
- Light-weight car wiring loom (with ACO logging - connection)
- Lighting system:
 - Xenon main and additional (4x) headlights
 - LED rear lighting system and rain light
 - Leader Light System
- Air conditioning system:
 - Air conditioning lines including quick release couplings
 - Compressor in gearbox area
 - Condenser in vehicle front
 - Fabric cockpit separation panel
 - Temperature sensor



**Weight/Dimensions:**

- Weight approx. 1,220 kg (ACO)
- Total length: 4,537 mm
- Total width: 1,962 mm (FA), 2,002 mm (RA)
- Wheel base: 2,465 mm

Colours:

- Body: grey light weight color
- Exterior: Carbon
- Interior: White primer without clear lacquer

Options:

1. Bosch WinDarab Software licence
2. Tire temperature sensors
3. Ride height sensors
4. Thermostat
5. Data logger ACO