

# EU-Type Examination Certificate

## 2051-RED-204402

In compliance with Directive (EU) No 2014/53 of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment (RED), this certificate applies to the product(s)

### Dynamometric wrench

**ModelS: QSHIELD 30-C, QSHIELD 150-C, QSHIELD 200-C, QSHIELD 350-C,  
QSHIELD 400-C, QSHIELD 500-C, QSHIELD 800-C, QSHIELD 900-C**

Placed on the market under the name or trade mark of

**Ets Georges Renault  
38 rue Bobby Sands  
44818 - Saint Herblain, France**

This certificate attests that all provisions concerning the assessment and verification of performance described in the standard(s)

- Art 3.1a:** Assessment for conformity to Art.3.1a (safety)  
EN 62311:2008
- Art 3.1b:** ETSI EN 301 489-1 V2.2.3:2019 ; ETSI EN 301 489-3 V2.1.1:2019  
ETSI EN 301 489-17 V3.2.2:2019
- Art 3.2:** ETSI EN 300 328 V2.2.2:2019 ; ETSI EN 301 893 V2.1.1:2017  
ETSI EN 300 330 V2.1.1:2017

as per Annex III (Module B) for the performance set out in this certificate, are applied.

Certificate issued October 27, 2020

*Certificate was first issued May 26, 2020 (n. 2051-RED-202102)*

Certificate Revision: 0

**Nemko S.p.A.**  
Authorized signatory: Marco De Angelis

# NB 2051


This certificate has been granted by Nemko Spa a Socio Unico, Via del Carroccio 4, 20853 Biassono (MB), Italy

This certificate remains valid for ten years from the issue date, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Nemko. Should the specified regulations or standards be amended, the products are to be re-approved prior to being placed on the market. Nemko S.p.A. is designated by the Italian Notifying Authority "Ministry of Economic Development".

Any person not a party to the contract pursuant to which this document is delivered may not assert a claim against Nemko for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel in the establishment or issuance of this document, and in connection with any activities for which it may provide.

## ANNEX 1 – PRODUCT SPECIFICATIONS

### PRODUCT DESCRIPTION

Equipment identification:	Dynamometric wrench
Model/type:	QSHIELD 30-C, QSHIELD 150-C, QSHIELD 200-C, QSHIELD 350-C, QSHIELD 400-C, QSHIELD 500-C, QSHIELD 800-C, QSHIELD 900-C
Variants:	QSHIELD 30-S, QSHIELD 150-S, QSHIELD 200-S, QSHIELD 350-S, QSHIELD 400-S, QSHIELD 500-S, QSHIELD 800-S, QSHIELD 900-S
Brand/trade name:	
Supply voltage:	Rechargeable Li-ion battery 3.6 Vdc
Rated power/current:	13 W, 3.5 Ah

### TECHNICAL CHARACTERISTICS

Type of radio interface:	WiFi 2.4 GHz / 5 GHz and NFC / RFID tag
Intended purpose:	Dynamometric wrench with torque and angle-controlled tightening
Class of equipment:	Class I, Sub-classes 24 (Non- specific short range devices), 42 (Inductive applications), 54 (Wireless Access Systems including Radio Local Area Networks (WAS/RLANs)) and Class II (5150-5350 MHz indoor use only) of Commission Decision 2000/299/EC
Frequency range:	WiFi 2.4 GHz: 2412 ÷ 2462 MHz (ass. band 2400 ÷ 2483.5 MHz) WiFi 5 GHz: 5150 ÷ 5350 MHz / 5470 ÷ 5725 MHz RFID: 125 kHz (ass. band 119 ÷ 135 kHz) NFC: 13.56 MHz (ass. band 13.553 ÷ 13.567 MHz)
Transmit power:	WiFi: 15 dBm max RFID: -45.17 dBμA/m @ 10m, measured NFC: 42 dBμA/m @ 10m (max)
Modulation type:	WiFi: OFDM RFID / NFC: ASK
Antenna type:	WiFi: integral RFID / NFC: integral (loop antenna)
Maximum antenna gain:	WiFi: 3dBi
Firmware:	WiFi (RF module): v3.0a RFID / NFC: Not applicable

Certificate Revision: 0

**Nemko S.p.A.**  
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# NB 2051

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## MANUFACTURER

Name: Ets Georges Renault  
Address: 38 rue Bobby Sands - 44818 - Saint Herblain, France

## ADDITIONAL INFORMATION

None.

Certificate Revision: 0

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## ANNEX 2 - SCHEDULE OF APPROVAL

### SCOPE OF EXAMINATION

- |  |          |
|--|----------|
| <input checked="" type="checkbox"/> Protection of Health and Safety, according to Article 3(1)(a).     | COMPLIES |
| <input checked="" type="checkbox"/> Electromagnetic Compatibility (EMC), according to Article 3(1)(b). | COMPLIES |
| <input checked="" type="checkbox"/> Radio Spectrum Use, according to Article 3(2).                     | COMPLIES |
| <input type="checkbox"/> Special Radio Features, according to Article 3(3)(a)-(i).                     | N/A      |

### APPLICATIONS/LIMITATIONS

Nil.

### MARKING OF PRODUCT

The Manufacturer and Type Designation shall be applied to the product in a visible location.  
The equipment shall carry the CE marking of the European Union.

### TYPE EXAMINATION DOCUMENTATION

#### Test report(s)

- Health test report by Nemko SpA (id: 390638-1TRFEMF, dated: 2020-04-09)
- EMC test report by Nemko SpA (id: 390638-2TRFEMC, dated: 2020-04-09)
- Radio test report by Nemko SpA (id: 390638-3TRFWL, dated: 2020-04-09)
- Radio test report by Nemko SpA (id: 390638-4TRFWL, dated: 2020-04-09)
- Radio test report by Nemko SpA (id: 390638-5TRFWL, dated: 2020-04-09)

#### Additional documentation

- RED technical file by Ets Georges Renault (id: Q-shield TCF, Rev.1, dated 2020-10-15)
- RED Conformity Assessment Report for Safety by Ets Georges Renault (dated 2020-02-20)
- EU-Type Examination Certificate by PHOENIX TESTLAB (id: 17-110577, dated 2017-08-28): this document has been assessed by Nemko S.p.A. and is available to Authorities at the original manufacturer of the radio module.

### ADDITIONAL INFORMATION

None.

<< End of certificate >>

Certificate Revision: 0

### Nemko S.p.A.

Authorized signatory: Marco De Angelis

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#### Nemko Italy

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