



MARINE DIVISION

Certificate number: 19914/B1 BV

File number: ACE 11/322/01

Product code: 4161D

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

www.veristar.com

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**ISKRA SISTEMI d.d.**  
LJUBLJANA - SLOVENIA

*for the type of product*

### MISCELLANEOUS SWITCHBOARD INSTRUMENTS

Type: EQ 0207L, EQ 2207L, YQ 0207L, YQ 2207L, BQ 0x07L, BQ 2x07L, WQ0207L, WQ2207L, CQ 2x07L, CQ 3207L and CQ 0x07L.

**Requirements:**

BUREAU VERITAS Rules for the Classification of Steel Ships.

SIST EN 61326:1998 ; SIST EN 60051-1:2000 ; SIST EN 60051-2:1995 ; SIST EN 60051-3:1995 ; SIST EN 60051-9:1995 ; SIST EN 61010-1:2002.

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 22 May 2018**

**For BUREAU VERITAS,**

At BV RIJEKA, on 02 Jul 2014,

Slaven Celic



This certificate remains valid until the date stated above, 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 BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS 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 of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

Active or Reactive Power Meters, Power Factor Meters, Meters for DC and AC Voltage / Current comprising the following models:

Type	Description
EQ 0207L	Active or Reactive Power Meter (Scale 90°)
EQ 2207L	Active or Reactive Power Meter (Scale 240°)
YQ 0207L	Power Factor Meter (Scale 90°)
YQ 2207L	Power Factor Meter (Scale 240°)
BQ 0x07L*	Meter for DC Voltage or Current with a moving coil (Scale 90°)
BQ 2x07L*	Meter for DC Voltage or Current with a moving coil (Scale 240°)
WQ0207L	Energy meter with analog pointer (Scale -90°)
WQ2207L	Energy meter with analog pointer (Scale -240°)
CQ2x07L*	Meter for AC current and voltage with a moving coil and a rectifier (Scale 240°)
CQ3207L	Meter for AC three phases system current with a moving coil, rectifier and switch selector
CQ0x07L*	Meter for AC current and voltage with a moving coil and a rectifier

\* Note: x = 1,2,3 or 4.

### 2. DOCUMENTS AND DRAWINGS:

**Iskra Sistemi:** Characteristics of Products from Web site.

### 3. TEST REPORTS:

#### **SIQ:**

Environmental Test Reports No. T223-0295/06 and T223-0297/06 dated 2006-11-23.  
EMC / EMI Test Reports T251-0374/06 and T251-0375/06 dated 2007-01-23.

#### **Iskra:**

Type test report N°14/2012, dated 10.12.2012, witnessed by BV' Surveyor.  
Type test report N°6/2013, dated 06.05.2013, witnessed by BV' Surveyor.  
Type test report N°6/2014, dated 15.05.2014, witnessed by BV' Surveyor.

### 4. APPLICATION / LIMITATION:

- 4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - BUREAU VERITAS Environmental Category, **EC Code: 31.**
- 4.4 - The equipment fulfils the EMC requirements for installation in General power Distribution Zones.

### 5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The meters are to be supplied by **ISKRA Sistemi, d.d.** in accordance with the type described in this certificate.
- 5.2 - This type of product is within the category DBV of Bureau Veritas Rule Note NR320.

### 6. MARKING OF PRODUCT:

- 6.1 - Trade name.
- 6.2 - Date of manufacture and serial number.
- 6.3 - Equipment type or model identification under which it was type-tested

### 7. OTHERS:

7.1 - This approval is given with the understanding that the Society reserves the right to require check tests to be carried out on the above mentioned equipment in Clause I at any time, and that **ISKRA Sistemi, d.d.** with accept the responsibility for informing shipbuilders, ship-owners or their sub-contractors of the proper methods of use and general maintenance of the equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 19914/B0 BV issued on 22.05.2013. by the Society.

\*\*\* END OF CERTIFICATE \*\*\*