



Marine & Offshore  
Division

Certificate number: 11606/D0 BV

File number: ACE 10/030/01

Product code: 2650H

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

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**SCHNEIDER ELECTRIC LIMITED**

STONE - UNITED KINGDOM

*for the type of product*

**MULTIFUNCTION PROTECTION RELAYS**

Voltage / frequency protection relay: Micom P920 series.

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.  
IEC 60255, IEC 60068, IEC 61000.

*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: 11 Oct 2021**

For BUREAU VERITAS,  
At BV LONDON, on 11 Oct 2016,  
Spencer Yule



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 & Offshore Division available on the internet site 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 electronic version is available at: <http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=gqwtutuody>  
BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

- Product model or type designation :

**Micom P92x**

- Product description:

The Micom P92x relays provide protection for use numerous applications requiring voltage and frequency based protection elements, following models are available:

- **P921**: Voltage protection, 2 logic inputs, 4 outputs with fail safe option for 2 relays.
- **P922**: Voltage and frequency protection event and fault records, disturbance recorder, 5 logic inputs and 8 output contacts with Fail Safe option for 2 relays.
- **P923**: Voltage and frequency protection (plus the rate of change of frequency element  $df/dt$  and  $\Delta U/\Delta T$ , event and fault records, disturbance recorder, 5 logic inputs, 8 output contacts with Fail Safe option for 2 relays.

<b>PROTECTION FUNCTIONS OVERVIEW</b>		<b>P921</b>	<b>P922</b>	<b>P923</b>
	Configuration depending on the number and type of voltage transformers	•	•	•
	Phase-to-neutral or phase-to-phase voltage protection	•	•	•
27	Phase under voltage (AND/OR logic)	•	•	•
59	Phase over voltage (AND/OR logic)	•	•	•
	Settable hysteresis	•	•	•
59N	Zero-sequence over voltage	•	•	•
47	Negative sequence over voltage	-	•	•
27D	Positive sequence under voltage	-	•	•
81U/81O	Under/over sequency	-	•	•
81R	Rate Of Change of sequency	-	-	•
	$\Delta U/\Delta T$ function	-	-	•
	Fail Safe option	•	•	•
	Inhibition of voltage & frequency protection functions	-	-	-
	Inhibition of timers (instantaneous forcing)	-	-	-
	Blocking logic	•	•	•
	Under voltage blocking (settable for P923)	-	•	•
	Digital inputs	2	5	5
	Output relays	4	8	8
	Remote communication (RS485 port)	•	•	•
	Local communication (RS232 port)	•	•	•

### 2. DOCUMENTS AND DRAWINGS:

Drawings recorded under the reference ACE 10/030/01.

### 3. TEST REPORTS:

Test reports recorded under the reference ACE 10/030/01.

### 4. APPLICATION / LIMITATION:

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.

4.2 - Approval is valid for ships to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - The associated circuit breaker is to be type approved.



**5. PRODUCTION SURVEY REQUIREMENTS:**

5.1 - The above products are to be supplied by **SCHNEIDER ELECTRIC LIMITED** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **SCHNEIDER ELECTRIC LIMITED** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - **SCHNEIDER ELECTRIC LIMITED** has declared to Bureau Veritas the following production site(s):

**SCHNEIDER ELECTRIC  
SET  
839 chemin des Batterses  
01700 Beynost  
France**

**6. MARKING OF PRODUCT:**

- Maker's name or trade mark.
- Serial number of the units.
- Equipment type number or model identification under which it was type-tested
- Alternatively, the marking may be presented on a display at equipment start-up.

**7. OTHERS:**

7.1 - It is **SCHNEIDER ELECTRIC LIMITED** - UK's responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No. 11606/C1 BV issued on 16 Oct 2013 by the Society.

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