IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx INE 12.0028U

Issue No: 2

Certificate history:
Issue No. 2 (2017-09-11)
Issue No. 1 (2015-12-18)
Issue No. 0 (2012-07-23)

Status: **Current**

Date of Issue: **2017-09-11**

Applicant: **SCHNEIDER ELECTRIC**
Site Horizon, 8ème rue
ZI Carros
F-06516 Carros Cedex
France

Equipment: **Programmable Logic Controller type QUANTUM 140...**

Optional accessory:

Type of Protection: **Ex nA nC**

Marking:
Ex nA nC IIC Gc

Approved for issue on behalf of the IECEx Certification Body: Thierry HOUEIX

Position: Ex Certification Officer

Signature:
(for printed version)

ATMOSPHÈRES EXPLOSIVES certifié IECEx INERIS IECEx certified EXPLOSIVE ATMOSPHERES

Date: 2017-09-11

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

INERIS
Institut National de l'Environnement Industriel
et des Risques, BP n2
Parc Technologique ALATA
France

INERIS

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Manufacturer: **SCHNEIDER ELECTRIC**
Site Horizon, 8ème rue
ZI Carros
F-06516 Carros Cedex
France

Additional Manufacturing location(s):

WUXI Pro-face Electronics Co., Ltd
No.20 Hangjiang Road
National Hi-tech Industrial Development District
214028 Wuxi
China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

FR/INE/ExTR12.0026/00 FR/INE/ExTR12.0026/01 FR/INE/ExTR12.0026/02

Quality Assessment Report:

FR/INE/QAR10.0006/06 FR/INE/QAR12.0002/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Programmable Logic Controller (PLC) type QUANTUM 140...* are electronic modules which are used to control and command machines and industrial processes. The front panel of each programmable logic controller have terminals blocks and/or connectors. The modules have to be supplied by a maximum rated voltage of 24VDC.
The maximum increased temperature of QUANTUM modules components is less than 40K.

Use in zone 2 for Gas application:

The modules are composed of printed circuit boards and are protected by the protections type Ex nA for non-sparking components and Ex nC for sparking components.

For a use in zone 2, the modules shall be placed in an enclosure EPL Gc insuring a minimal ingress protection IP54.

Use in zone 22 for Dust Application:

For a use in zone 22, the modules shall be placed in an enclosure EPL Dc insuring a minimal ingress protection IP6X.

SCHEDULE OF LIMITATIONS:

- The operating temperature range of PLC type QUANTUM140...* is from 0°C to +60°C (* See table of equipments description).

- The PLC type QUANTUM 140...* shall be mounted in an EPL Gc enclosure insuring a minimal ingress protection IP54 and used in an environment of not more than Pollution Degree 2 as defined in IEC60664-1 (* See table of equipments description).

- USB connectors, RJ45 connectors, SUB-D connectors, optical fiber connectors and PCMCIA memory expansion cards must not be connected or disconnected when energized.

- Batteries and fuses shall not be changed in presence of explosive atmospheres.

The other conditions of use are stipulated in the instructions guide

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

For Issue 01:
- Adding of a new PLC type Ethernet communication module.
- Application of IEC 60079-31 : 2013.

For Issue 02:
- Adding of a new communication module 140CRA31908C.
- Removal of Dust Marking.
- Manufacturer's name modification : SCHNEIDER ELECTRIC.
- Update of manufacturer's documentation

Annex:

IECEx INE 12.0028U-02_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

The different modules have to be supplied with a maximum voltage Un = 24 V

MARKING

Marking has to be readable and indelible; it has to include the following indications:

- SCHNEIDER ELECTRIC
- F-06516 Carros
- QUANTUM 140...* (* see table of model description below)
- IECEx INE 12.0028U
- (Serial number)
- Ex nA nC IIC Gc

- WARNING - « DO NOT DISCONNECT WHILE CIRCUIT IS LIVE »

The Ex component has also to carry the marking normally stipulated by its construction standards.

BKP	
Product	Description
• 140XBP01600C	16 slots backplane
• 140XBP01000C	10 slots backplane
• 140XBP00600C	6 slots backplane
• 140XBP00400C	4 slots backplane

CPS	
Product	Description
• 140CPS22400C	Power supply d.c., redundant
• 140CPS21400C	Power supply d.c., summable

CPU	
Product	Description
• 140CPU65160C	Control processor unit, 2 slots
• 140CPU65160S	Control processor unit for safety, 2 slots
• 140CPU65260C	Control processor unit, 2 slots
• 140CPU67160C	Control processor unit, 2 slots
• 140CPU67160S	Control processor unit for safety, 2 slots
• 140CPU67260C	Control processor unit, 2 slots
• 140CPU67261C	Control processor unit, 2 slots
• 140CPU65150C	Control processor unit, 2 slots
• 140CPU31110C	Control processor unit, 1 slot
• 140CPU43412UC	Control processor unit, 1 slot
• 140CPU53414BC	Control processor unit, 1 slot

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Certificate No.: IECEx INE 12.00028U

Issue No.: 2

Annex: IECEx INE 12.00028U-02_Annex.pdf

I/O	
Product	Description
• 140DDI35300C	32 * 24 Vdc input channels
• 140DDI35310C	32 * 24 Vdc input channels
• 140DDI15310C	32 * 5 Vdc input channels
• 140SDI95300S	16 * 24 Vdc safety input channels
• 140DDO35300C	32 * 24 Vdc output channels
• 140DDO35301C	32 * 24 Vdc output channels
• 140SDO95300S	16 * 24 Vdc safety output channels
• 140DDM39000C	16 * 24 Vdc input channels + 8 * 24 Vdc output channels
• 140DRA84000C	16 * relay output channels
• 140AVI03000C	8 * voltage/current analog input channels
• 140ACI03000C	8 * voltage/current analog input channels
• 140ACI04000C	8 * current analog input channels
• 140SAI94000S	8 * current analog safety input channels
• 140AVO02000C	4 * voltage analog output channels
• 140ACO13000C	8 * current analog output channels
• 140ACO02000C	4 * current analog output channels
• 140AMM09000C	4 * voltage/current analog input channels + 2 * current analog output channels

COM	
Product	Description
140CRP31200C	• Remote I/Os - head-end drop
140CRP93200C	• Remote I/Os - head-end drop
140CRP93100C	• Remote I/Os - head-end drop
140CRA31200C	• Remote I/Os - Drop adapter
140CRA31908C	**Adaptateur S908 / S908 adapter**
140CRA93200C	• Remote I/Os - Drop adapter
140CRA93100C	• Remote I/Os - Drop adapter
140NRP95400C	• Remote I/Os - repeater
140NRP95401C	• Remote I/Os - repeater
140CRA21220C	• Distributed I/Os - Drop interface
140CRA21120C	• Distributed I/Os - Drop interface
• 140NOE77101C	Communication module with Ethernet port
• 140NOE77111C	Communication module with Ethernet port
• 140NOM25200C	Communication module with Modbus
• 140NOM21200C	Communication module with Modbus
• 140CHS11000C	Hot Standby S911
• 140CHS21000C	Kit Hot Standby S911
• 140NOC78000C	Communication module with Ethernet
• 140NOC78100C	Communication module with Ethernet
• 140NOP85000C	Communication module with Ethernet

Accessories	
Product	Description
• TSXMRPxxx	PCMCIA memory expansion SRAM
• TSXMFPxxx	PCMCIA memory expansion EPROM
• TSXMCPxxx	PCMCIA memory expansion SRAM + EPROM
• 140XTS00100	Field wiring terminal block 40 points (IP20)
• 140XTS00200	Field wiring terminal block 40 points
• 140XCP50000	Empty module

Accessories are part of the present certification but they don't have to carry the marking due to their small size.

ROUTINE EXAMINATIONS AND TESTS

None