

NORSOK STANDARD

COMMON REQUIREMENTS
**INSTALLATION OF ELECTRICAL, INSTRUMENT &
TELECOMMUNICATION**

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Please note that whilst every effort has been made to ensure the accuracy of the NORSOK standards neither OLF nor TBL or any of their members will assume liability for any use thereof.

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1 FOREWORD

NORSOK (The competitive standing of the Norwegian offshore sector) is the industry initiative to add value, reduce cost and lead time and remove unnecessary activities in offshore field developments and operations.

The NORSOK standards are developed by the Norwegian petroleum industry as a part of the NORSOK initiative and are jointly issued by OLF (The Norwegian Oil Industry Association) and TBL (The Federation of Norwegian Engineering Industries). NORSOK standards are administered by NTS (Norwegian Technology Standards Institution).

The purpose of this industry standard is to replace the individual oil company specifications for use in existing and future petroleum industry developments, subject to the individual company's review and application.

The NORSOK standards make extensive references to international standards. Where relevant, the contents of this standard will be used to provide input to the international standardisation process. Subject to implementation into international standards, this NORSOK standard will be withdrawn.

The annex is informative.

2 SCOPE

This standard covers functional and technical requirements related to installation of electrical, instrumentation and telecommunication equipment.

In addition the standard establish basis for engineering of typical areas like cable segregation, cable requirements, Ex-philosophies, equipment enclosures etc.

3 NORMATIVE REFERENCES

Applicable international standards from CENELEC/IEC to be applied to the relevant part of this standard.

EN 50081-2	Electromagnetic compatibility generic emission standard.
EN 50082-2	Electromagnetic compatibility generic immunity standard.
ET	Retningslinjer for jording i maritime anlegg.
IFEA	Industrielle varmekabelanlegg.
NEK 606	Cable for offshore installation
NORSOK S-DP-001	Technical safety

Systems of units

The SI system of units shall be applied.

4 DEFINITIONS AND ABBREVIATIONS

4.1 Definitions

All terms and phrases within the scope of this standard shall be regarded as defined in the regulations and international codes and standards referred to in this document.

Normative references	Shall mean normative in the application of NORSOK standards.
Informative references	Shall mean informative in the application of NORSOK standards.
Shall	Shall is an absolute requirement which shall be followed strictly in order to conform with the standard.
Should	Should is a recommendation. Alternative solutions having the same functionality and quality are acceptable.
May	May indicates a course of action that is permissible within the limits of the standard (a permission).
Can	Can-requirements are conditional and indicates a possibility open to the user of the standard.

4.2 Abbreviations

AISI	American Iron Steel Institute
APS	Abandon Platform Shutdown
CAS	Communal Aerial System
CCR	Central Control Room
CCTV	Closed Circuit Television
ESD	Emergency shutdown
ET	Elektrisitetsstilsynet
IE	Instrument Earth
IFEA	Industriens Forening for Elektroteknikk og Automatisering. (The Association for Electrotechnics and Automation in Industry)
IP	Ingress Protection
IS	Intrinsically Safe
LER	Local Equipment Room
MCT	Multi cable Transit
NEK	Norsk Elektroteknisk Komite
NORSOK	Norsk Søkkel Konkurransesepisjon
PA	Public Address and Alarm System
PABX	Telephone System
PE	Protective Earth

5 FUNCTIONAL REQUIREMENTS

5.1 General

Ex-certified equipment shall be selected in accordance with the following requirements:

- Ex i and Ex e should be used.
- Ex n may be used in zone 2.
- Ex d and Ex p should be avoided.
However, if Ex d equipment is used, it should be provided with an Ex e indirect entry.
- Motors rated above 3.0 kV in zone 1 and 2, shall be Ex p or Ex d.