



PROCESS  
INDUSTRY  
PRACTICES

TECHNICAL REVISION  
*September 2021*

***Electrical***

**PIP ELSGL01**  
**Electrical Construction Specification**

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## PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by the Practice.

This Practice is subject to revision at any time.

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### **PRINTING HISTORY**

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# PIP ELSGL01 Electrical Construction Specification

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## Table of Contents

<b>1. Scope .....</b>	<b>2</b>		
<b>2. References .....</b>	<b>2</b>		
2.1 Process Industry Practices .....	2		
2.2 Industry Codes and Standards .....	2		
<b>3. Definitions .....</b>	<b>2</b>		
<b>4. Requirements .....</b>	<b>3</b>		
4.1 General .....	3		
4.2 Materials of Construction .....	4		
4.3 Storage, Handling, and Preservation of Materials and Equipment .....	5		
4.4 Equipment and Power Systems .....	6		
4.5 Raceway, Cable Tray Systems, and Electrical Enclosures .....	7		
		4.6 Breathers and Drains .....	19
		4.7 Wire and Cable .....	19
		4.8 Grounding .....	23
		4.9 Heat Tracing .....	24
		4.10 Lighting and Receptacles .....	25
		4.11 Supports .....	25
		4.12 Identification Labels and Warning Signs .....	26
		4.13 Component Testing .....	26

## Data Form

ELSG01-D – Data Sheet for Electrical  
Construction

## 1. Scope

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This Practice provides the minimum requirements for construction and installation of electrical power and control systems material and equipment.

## 2. References

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Applicable parts of the following Practices and industry codes and standards shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles will be used herein where appropriate.

### 2.1 Process Industry Practices (PIP)

- CVS02100 - *Site Preparation, Excavation, and Backfill Specification*
- ELCGL01 - *Electrical Design Criteria*
- ELCWC08 - *Electrical Manhole/Cable Vault Design Criteria*
- ELEHA01 - *Engineering Guide for Determining Electrical Area Classification*
- ELIGD000 - *Grounding Installation Details*
- ELILS000 - *Lighting and Receptacle Installation Details for Class I Division 2, Class II Division 2, and Unclassified Areas*
- ELIMTD00 - *Motor Installation Details for Class I, Division 1 Areas*
- ELIMTG00 - *Motor Installation Details for Class I, Division 2; Class II, Division 2; and Unclassified Areas*
- ELTFT01 - *New Electrical Equipment and Systems Field Inspection and Testing*
- STS03001 - *Plain and Reinforced Concrete Specification*

### 2.2 Industry Codes and Standards

- Institute of Electrical and Electronics Engineers (IEEE)
  - C2 - *National Electrical Safety Code (NESC)*
  - IEEE 80 - *Guide for Safety in AC Substation Grounding*
- National Electrical Manufacturers Association (NEMA)
  - NEMA VE 2 - *Cable Tray Installation Guidelines*
- National Fire Protection Association (NFPA)
  - NFPA 70 - *National Electrical Code (NEC)*
  - NFPA 70E - *Standard for Electrical Safety in the Workplace*
- Occupational Safety and Health Administration
  - OSHA 1910.269 - *Electric Power Generation, Transmission, and Distribution.*
  - OSHA 1926 - *Safety and Health Regulations for Construction*

## 3. Definitions

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*company*: The party who awards the contract to the electrical contractor. The company may be the owner or the owner's authorized agent