



PROCESS
INDUSTRY
PRACTICES

TECHNICAL REVISION
September 2020

Electrical

PIP ELSSG11
Electrical Power Center Specification

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.

© Process Industry Practices (PIP), Construction Industry Institute, The University of Texas at Austin, 3925 West Braker Lane (R4500), Austin, Texas 78759. PIP Member Companies and Subscribers may copy this Practice for their internal use. Changes or modifications of any kind are not permitted within any PIP Practice without the express written authorization of PIP. Authorized Users may attach addenda or overlays to clearly indicate modifications or exceptions to specific sections of PIP Practices. Authorized Users may provide their clients, suppliers and contractors with copies of the Practice solely for Authorized Users' purposes. These purposes include but are not limited to the procurement process (e.g., as attachments to requests for quotation/ purchase orders or requests for proposals/contracts) and preparation and issue of design engineering deliverables for use on a specific project by Authorized User's client. PIP's copyright notices must be clearly indicated and unequivocally incorporated in documents where an Authorized User desires to provide any third party with copies of the Practice.

PUBLISHING HISTORY

<i>April 1997</i>	<i>Issued</i>	<i>August 2017</i>	<i>Complete Revision</i>
<i>June 2005</i>	<i>Complete Revision</i>	<i>September 2020</i>	<i>Technical Revision</i>
<i>January 2011</i>	<i>Complete Revision</i>		

Not printed with State funds



PIP ELSSG11 Electrical Power Center Specification

Table of Contents

1. Scope	2
2. References	2
2.1 Process Industry Practices	2
2.2 Industry Codes and Standards	2
2.3 Government Regulations	3
3. Definitions	3
4. Requirements	3
4.1 Design and Fabrication	3
4.2 Inspection and Testing	15
4.3 Shipping	16
4.4 Documentation	16

Data Form

ELSSG11-D – Data Sheet for Electrical Power
Center

1. Scope

This Practice describes the requirements for the design, materials fabrication, inspection, testing, and shipping of power centers for housing electrical equipment.

2. References

Applicable parts of the following Practices, industry codes and standards, and references 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 are used herein where appropriate.

2.1 Process Industry Practices (PIP)

- PIP ELSSG11-D - *Data Sheet for Electrical Power Center*
- PIP STC01015 - *Structural Design Criteria*
- PIP STC01018 - *Blast Resistant Building Design Criteria*

2.2 Industry Codes and Standards

- American Society of Civil Engineers (ASCE)
 - ASCE/SEI 7 - *Minimum Design Loads for Building and Other Structures*
- American Society for Testing Materials (ASTM)
 - ASTM A36/A36M - *Standard Specification for Carbon Structural Steel*
 - ASTM A90/A90M - *Standard Test Method for Weight (Mass) of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings*
 - ASTM A653/A653M - *Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process*
 - ASTM B117 - *Standard Practice for Operating Salt Spray (Fog) Apparatus*
 - ASTM D714 - *Standard Test Method for Evaluating Degree of Blistering of Paints*
 - ASTM D1654 - *Standard Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments*
 - ASTM D2244 - *Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates*
 - ASTM E84 - *Standard Test Method for Surface Burning Characteristics of Building Materials*
- Institute of Electrical and Electronics Engineers (IEEE)
 - IEEE C37.100.1 - *IEEE Standard of Common Requirements for High Voltage Power Switchgear Rated Above 1000V*
- National Fire Protection Association (NFPA)
 - NFPA 1 - *Fire Code*
 - NFPA 70 - *National Electrical Code (NEC)*
 - NFPA 101 - *Life Safety Code*
 - NFPA 220 - *Standard on Type of Building Construction*
 - NFPA 255 - *Standard Method of Test of Surface Burning Characteristics of Building Materials*