1. Record Nr. UNINA9910135753903321 ANSI/IEEE Std 142-1982: IEEE Recommended Practice for Grounding of **Titolo** Industrial and Commercial Power Systems (IEEE Green Book) / / IEEE Pubbl/distr/stampa New York:,: IEEE, , 1982 **ISBN** 0-7381-4149-6 Descrizione fisica 1 online resource (135 pages) 621.381044 Disciplina Electric currents - Grounding - Standards Soggetti Electric power systems - Protection - Standards Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The problems of system grounding, that is, connection to ground of neutral, of the corner of the delta, or of the midtap of one phase, are covered. The advantages and disadvantages of grounded versus ungrounded systems are discussed. Information is given on how to ground the system, where the system should be grounded, and how to select equipment for the grounding of the neutral circuits. Connecting the frames and enclosures of electric apparatus, such as motors. switchgear, transformers, buses, cables conduits, building frames, and portable equipment, to a ground system is addressed. The fundamentals of making the interconnection or ground-conductor system between electric equipment and the ground rods, water pipes, etc. are outlined. The problems of static electricity-how it is generated, what processes may produce it, how it is measured, and what should be done to prevent its generation or to drain the static charges to earth to prevent sparking-are treated. Methods of protecting structures against the effects of lightning are also covered. Obtaining a lowresistance connection to the earth, use of ground rods, connections to

water pipes, etc. is discussed. A separate chapter on sensitive

electronic equipment is included.