

Analyses of supply voltage quality, power consumption and losses affected by shunt capacitors for power factor correction

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut; Kütt, Lauri PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 53-60 : ill

Analysis of microgrid configuration effects on energy efficiency

Peterson, Kristjan; Ahmadihangar, Roya; Shabbir, Noman; Vinnal, Toomas 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p. : ill <https://doi.org/>

Analysis of power consumption and losses in relation to supply voltage levels

Vinnal, Toomas; Kütt, Lauri; Kalda, Heljut 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 23-28 : ill

Analysis of power consumption and losses in relation to supply voltage quality [Electronic resource]

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut EPE 2009 : 13th European Conference on Power Electronics and Applications : 8-10 September 2009, Barcelona, Spain 2009 / [9] p. : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/5278764>

Analysis of traditional and alternative methods for solving voltage problems in low voltage grids : an Estonian case study

Rosin, Argo; Drovtar, Imre; Mölder, Heigo; Haabel, Kaija; Astapov, Victor; Vinnal, Toomas; Korõtko, Tarmo Energies 2022 / art. 1104 <https://doi.org/10.3390/en15031104> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis on AC motor losses due to harmonic levels increase caused by switched capacitor passive power factor correction

Mölder, Heigo; Vinnal, Toomas; Beldjajev, Viktor 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 42-46 : ill

Application of self-adjusting features of resonant converters

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 9th European Conference on Power Electronics and Applications : 27-29 August 2001, Graz, Austria 2001 / p. L6a-1 : ill

Application of self-adjusting features of resonant converters [Electronic resource]

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas EPE 2001 : 9th European Conference on Power Electronics and Applications : 27-29 August 2001, Graz 2001 / [9] p.: ill. [CD-ROM]

Case study of non-linear PV inverter devices attached to the LV distribution network

Vinnal, Toomas; Puusepp, Hardi; Shabbir, Noman; Kütt, Lauri; Iqbal, Muhammad Naveed Agronomy research 2020 / p. 2639-2652 : ill <https://doi.org/10.15159/AR.20.233> <https://dspace.emu.ee/xmlui/handle/10492/5955> [Journal metrics at Scopus](#) [Article at Scopus](#)

Charging of high power pulse capacitors from resonant converter of alternating parallel and series resonance

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas Elektroenergetika 2000 : mezinárodní vědecká konference : sborník přednášek 2000 / p. 93-97 : ill

Circuit diagrams of AC-DC line-frequency resonant converters with alternation of parallel and series resonant mode

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 5th International Conference : Electrical Power Quality and Utilisation : September 15-17, 1999, Cracow, Poland : EPQU'99 : proceedings 1999 / p. 479-484 : ill

Commutation processes in the diode bridge of resonant converter with alternating parallel and series resonance

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 205-208 : ill

Determination of reactive components parameters for converter with alternating of parallel and series resonance

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas PEDC 2001 : Power Electronics Devices Compatibility : 2nd Conference : 3-5 September 2001, Zielona Gora, Poland 2001 / p. 88-96 : ill

Eesti ettevõtete elektritarbimise uurimine ja soovitude väljatöötamine tarbimise optimeerimiseks = Study of electric power consumption in Estonian companies and recommendations for optimization of consumption

Vinnal, Toomas 2011

Effects of PV microgeneration on rural LV network voltage quality - harmonics and unbalance

Hürmeýdan, Semih; Rosin, Argo; Vinnal, Toomas PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 97-100 : ill <https://doi.org/10.1109/PQ.2016.7724096>

Effects of PV microgeneration on rural LV network voltage quality [Online resource]

Hürmeydan, Semih; Rosin, Argo; Vinnal, Toomas; Jagomägi, Andri 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [4] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763083>

Electric Power Quality and Supply Reliability : June 9-12, 1999, Sagadi, Estonia : conference proceedings

Järvik, Jaan; Vinnal, Toomas 1999 https://www.ester.ee/record=b1817525*est

Elektrienergia säästlik kasutamine hoonetes : õppematerjal

Teemets, Raivo; Vinnal, Toomas 2013 http://www.ester.ee/record=b3033912*est

Elektrivarustuse tulevikuvisionid

Lehtla, Tõnu; Vinnal, Toomas 2015 http://www.ester.ee/record=b4511325*est

Elektrivarustuse tulevikuvisionid : [kõrgkooliõpik]

Lehtla, Tõnu; Vinnal, Toomas 2016 http://www.ester.ee/record=b4571559*est

Harmonic currents and voltages in industrial LV networks - case studies

Vinnal, Toomas; Kütt, Lauri; Jarkovoi, Marek 2018 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM 2018) : Amalfi, Italy, 20-22 June 2018 2018 / p. 177-182 : ill <https://doi.org/10.1109/SPEEDAM.2018.8445234>

Harmonic currents and voltages in LV networks of Estonia : measurement results, case studies

Vinnal, Toomas; Jarkovoi, Marek; Kütt, Lauri 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 7 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659875>

Harmonic load of residential distribution network - case study monitoring results

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Mölder, Heigo; Vinnal, Toomas PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 93-98 : ill

Harmonic losses in induction motors caused by voltage waveform distortions

Mölder, Heigo; Vinnal, Toomas; Beldjajev, Viktor PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 143-148 : ill

Harmonic voltages and currents in LV industrial power systems, shunt capacitors and additional power losses

Vinnal, Toomas; Kalda, Heljut; Mölder, Heigo 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 47-52 : ill

High power factor AC-DC line-frequency resonant converter for deeply varying loads

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 5 Congresso Brasileiro de Eletronica de Potencia = The 5th Brazilian Power Electronics Conference : COBEP99 : Foz do Iguagu, Parana, Brasil, 19 a 23 de setembro de 1999. Vol. 1 1999 / p. 423-428

Higher harmonics in AC-DC line-frequency resonant converter for deeply varying loads

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas Electric Power Quality and Supply Reliability : June 9-12, 1999, Sagadi, Estonia : conference proceedings 1999 / p. 96-101: ill

Higher harmonics in load-adapting mains Frequency resonant converter

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 8th International Conference on Harmonics and Quality of Power, October 14-16, 1998, Athens, Greece : proceedings. Vol. 2 1998 / p. 859-864: ill

Hoonete energiakulu on võimalik vähendada

Vinnal, Toomas Nädaline 1999 / 11. märts, lk. 6

Improvement of environmental and health issues in educational institutions

Tint, Piia; Kask, Ülo; Kõiv, Teet-Andrus; Vinnal, Toomas; Reinhold, Karin Safety and Reliability for Managing Risk : proceedings of the European Safety and Reliability Conference 2006 (ESREL 2006) : Estoril, Portugal, 18-22 September. Volume 1 2006 / p. 835-840 : ill

Installed capacities of reactive components and transformer in line frequency resonant converters

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas EPQU'01 : Electrical Power Quality and Utilisation : 6th International Conference : September 19-21, 2001, Cracow, Poland : proceedings 2001 / p. 445-449 : ill

Inverter mode in converter with alternating of parallel and series resonance

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni; Vinnal, Toomas EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 1 of 7, Power electronic converters and control 2004 / p. 1-227 - 1-232 : ill

Load adapting resonant converter as a transformer with smoothly variable ratio

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 43. Internationales Wissenschaftliches Kolloquium, 21.-24.09.1998. Band 4, Elektroenergiesysteme und elektrische Geräte, Diagnostik, Hochspannungstechnik und elektrische Isoliertechnik, Energiewandlung : Vortragsreihen 1998 / S. 657-662: III

Load adapting resonant converter for supplying deeply varying load

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 227-230: ill

Measurements and analyses of supply voltage magnitude and voltage variations in Estonian industrial companies

Vinnal, Toomas; Kalda, Heljut; Mölder, Heigo 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 2011 / p. 46-51 : ill

14-15. aprillil 2011 : Energia- ja geotehnika doktorikooli II intensiivkursus "Elektri allikad, tarbijad, muundurid ja salvestid ning nende mõju elektrikvaliteedile" : [käsikiri]

Järvik, Jaan; Vinnal, Toomas 2011

New theoretical approach to input current shaping in ac-dc power converters [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Vinnal, Toomas; Järvik, Jaan Proceedings of 5th International Conference 2007 : Compatibility in Power Electronics : 29 May - 1 June 2007, Gdynia, Poland 2007 / [8] p. : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4296517>

New trends in the development of power supplies for arc furnaces

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas PEDC'99 : International Workshop on Power Electronics Equipment for Power Quality Improvement : Slubice, 1999 1999 / p. 26-37

Operation of PSA converter in inverter mode

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni; Vinnal, Toomas The 4th International Conference Electric Power Quality and Supply Reliability : August 29...31, 2004, Pedase, Estonia : proceedings 2004 / p. 81-86 : ill

Power losses in induction motors in relation to supply voltage quality

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut PCIM 2010 Power Electronics, Intelligent Motion, Power Quality : Nuremberg, Germany, 4-6 May 2010 2010 / p. 636-642

Power quality problems in low voltage networks of Estonia

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut; Sakkos, Tiiu CIRED 2013 : 22nd international conference & exhibition on electricity distribution : 10-13 june 2013 Kistamässan, Kista, Stockholm, Sweden : electricity distribution systems for a sustainable future : special reports 2013 / p. 1-4 : ill

Resonances in LV industrial networks when using shunt capacitors for power factor correction

Vinnal, Toomas; Sakkos, Tiiu; Janson, Kuno; Jarkovoi, Marek 23rd International Conference on Electricity Distribution : Lyon, 15-18 June 2015 2015 / Paper 0135, p. 1-4 : ill

Resonances in LV industrial networks when using shunt capacitors for power factor correction

Vinnal, Toomas; Sakkos, Tiiu; Janson, Kuno; Jarkovoi, Marek 23rd International Conference and Exhibition on Electricity Distribution : Lyon (France), 15-18 June 2015 : special reports 2015 / p. 12/33 : ill

Simple and compatible resonant converter for supplying electric arc

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas Power Electronics Conference : PCIM 2002, March 12-15, 2002, Shanghai, China : official proceedings of the international conference 2002 / p. 232-237 : ill

Study methods of AC-DC line-frequency resonant converters with alternation of parallel and series resonant mode

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 5th International Conference : Electrical Power Quality and Utilisation : September 15-17, 1999, Cracow, Poland : EPQU'99 : proceedings 1999 / p. 475-478 : ill

Supply voltage level optimisation in low voltage networks using shunt capacitors

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut; Kütt, Lauri Electrical and control technologies : proceedings of the the 7th international conference on electrical and control technologies ECT-2012 2012 / p. 206-211 : ill

Supply voltage level optimization in industrial low voltage networks

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut; Sakkos, Tiiu PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 149-154 : ill
<https://ieeexplore.ieee.org/document/6256219>

Supply voltage quality in low voltage industrial networks of Estonia

Vinnal, Toomas; Janson, Kuno; Järvik, Jaan; Kalda, Heljut; Sakkos, Tiiu Estonian journal of engineering 2012 / p. 102-126 : ill

Sõidukid ja maksud

Vinnal, Toomas Eesti Päevaleht 1996 / 4. nov., lk. 2

Taani tänane energeetika

Vinnal, Toomas Eesti Energia AS Teataja : [infoleht]? 1999 / 15. jaan., nr. 2(33), lk. 4

Termovisioon elektriseadmete seisundi jälgimisel

Vinnal, Toomas Pinger 1997 / 19. dets., lk. 3

Voltage dips and swells in low voltage networks of Estonia

Vinnal, Toomas; Jarkovoi, Marek; Kütt, Lauri 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill
<https://doi.org/10.1109/RTUCON.2018.8659899>

Ühistransport - vajalik või mitte?

Vinnal, Toomas Eesti Päevaleht 1996 / 9. dets., lk. 2

Ühisveondus. Vajalik või mitte?

Vinnal, Toomas Õhtuleht 1996 / 16. dets., lk. 2

Патент N 2032262 на изобретение (Российская Федерация) : Индукционный аппарат "UVAR" со ступенчатым переключением витков обмотки под нагрузкой : зарегистрировано в Государственном реестре изобретений 27 марта 1995 г. RU 2032262 C1

Vinnal, Toomas; Tellinen, Juhan; Janson, Kuno; Järvik, Jaan 1995

Патент N 2033682 на изобретение (Российская Федерация) : Преобразователь переменного напряжения в переменное со ступенчатым регулированием : зарегистрировано в Государственном реестре изобретений 20 апреля 1995 г. RU 2033682 C1

Vinnal, Toomas; Janson, Kuno; Järvik, Jaan 1995

Разработка и исследование устройств переключения ответвлений трансформатора под нагрузкой : работа на соиск. степ. магистра = [Koormatud trafo väljavõtete ümberlülitite väljatöötamine ja uurimine]

Vinnal, Toomas 1992 https://www.ester.ee/record=b2630871*est

Технико-экономические показатели насыщающегося реактора 3300 кВА, 10 кВ

Vladislavlev, Mihhail; Pool, Ain-Matt; Vinnal, Toomas; Järvik, Jaan; Tellinen, Juhan Симпозиум "Эффективность применения управляемых реакторов в энергосистемах", 14-16 нояб. 1989 г. : тезисы докладов 1989 / с. 32-33

Трансформатор РПН с обслуживающим тиристорным переключателем ответвлений

Vinnal, Toomas; Tõnuri, I.; Järvik, Jaan Исследование электрических машин и электромагнитных устройств специального назначения 1983 / с. 49-58

Трансформатор РПН с тиристорным переключением ответвлений

Vinnal, Toomas; Tõnuri, I.; Järvik, Jaan Новая техника в электроснабжении промышленных предприятий : материалы конференции 1983 / с. 44-48

Электромеханика

Võrk, Rein; Kalda, Heljut; Mežburd, Volf; Tellinen, Juhan; Pool, Ain-Matt; Järvik, Jaan; Varik, Lembit-Heino; Roninson, Aleksander; Vinnal, Toomas; Tõnuri, I.; Risthein, Endel; Janson, Kuno 1983 https://www.ester.ee/record=b1271915*est