

Title (en)

SYSTEM AND METHOD FOR SUPPLYING DECENTRALIZED FUNCTIONAL UNITS WITH ELECTRICAL ENERGY

Title (de)

SYSTEM UND VERFAHREN ZUM VERSORGEN VON DEZENTRALEN FUNKTIONSEINHEITEN MIT ELEKTRISCHER ENERGIE

Title (fr)

SYSTÈME ET PROCÉDÉ D'ALIMENTATION ÉLECTRIQUE D'UNITÉS FONCTIONNELLES DÉCENTRALISÉES

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Application

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Abstract (en)

[origin: WO2016206842A1] The invention relates to a system and to a method for supplying decentralized functional units (E) arranged in an industrial installation with electrical energy, wherein: a) a superordinate control system (STW) is provided, which exchanges information with the decentralized functional units (E) by means of data telegrams via a data bus (CB, NB1, NB2), b) network node units (SND) are arranged sequentially between two feed points (PS1, PS2) of an energy bus (EB) having a ring-like structure, which network node units provide the decentralized functional units (E) with the access to the energy bus (EB) and optionally to the data bus (CB), c) the network node units (SND) have a controllable switching module (S), which comprises a first switch (S1) and a second switch (S2), wherein each switch (S1, S2) can be used to switch access to one of the two feed points (PS1, PS2), d) the first switch (S1) and/or the second switch (S2) is selectively opened and a voltage dropping across the inputs of the energy bus into the network node unit can be measured; and e) an evaluating module (CPU, SL) is provided, which evaluates the measured voltage within a network node unit (SND) and/or among adjacent network node units (SND) for an interruption of the energy bus (EB) and/or a faulty switching module (S).

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