| Symbol | Typ | Titel |
|---|---|---|
| **G** | **Sektion** | **PHYSICS** |
| **G05** | **Klasse** | **CONTROLLING; REGULATING** |
| **G05F** | **Unterklasse** | **SYSTEMS FOR REGULATING ELECTRIC OR MAGNETIC VARIABLES (regulating the timing or recurrence frequency of pulses in radar or radio navigation systems G01S; regulation of current or voltage, specially adapted for use in electronic time-pieces G04G 19/02; closed-loop systems for regulating non-electric variables by electric means G05D; regulating power supply of digital computers G06F 1/26; for obtaining desired operating characteristics of electromagnets with armatures H01F 7/18; regulating electric power distribution networks H02J; regulating the charging of batteries H02J 7/00; regulating of the output of static converters, e.g. switching regulators, H02M; regulation of the output of electric generators H02N , H02P 9/00; controlling transformers, reactors or choke coils H02P 13/00; regulating frequency response, gain, maximum output, amplitude or bandwidth of amplifiers H03G; regulating tuning of resonant circuits H03J; controlling generators of electronic oscillations or pulses H03L; regulating characteristics of transmission lines H04B; controlling electric light sources H05B 37/02 , H05B 39/04 , H05B 41/36; electric control of X-ray apparatus H05G 1/30) [4, 5]** |
| **G05F 1/00** | **Hauptgruppe** | **Automatic systems in which deviations of an electric quantity from one or more predetermined values are detected at the output of the system and fed back to a device within the system to restore the detected quantity to its predetermined value or values, i.e. retroactive systems** |
| G05F 1/02 | 1-Punkt Untergruppe | . Regulating electric characteristics of arcs (arrangements for feeding or moving of electrodes for spot or seam welding or cutting B23K 9/12; arrangements for feeding electrodes for electric heating or electric lighting H05B 7/109 , H05B 31/18; automatic control of power for heating by discharge H05B 7/148) [2] |
| G05F 1/04 | 2-Punkt Untergruppe | . . by means of saturable magnetic devices |
| G05F 1/06 | 2-Punkt Untergruppe | . . by means of discharge tubes |
| G05F 1/08 | 2-Punkt Untergruppe | . . by means of semiconductor devices |
| G05F 1/10 | 1-Punkt Untergruppe | . Regulating voltage or current (G05F 1/02 takes precedence; for electric railways B60M 3/02) |
| G05F 1/12 | 2-Punkt Untergruppe | . . wherein the variable is actually regulated by the final control device is ac (G05F 1/625 takes precedence) [4] |
| G05F 1/13 | 3-Punkt Untergruppe | . . . using ferroresonant transformers as final control devices [4] |
| G05F 1/14 | 3-Punkt Untergruppe | . . . using tap transformers or tap changing inductors as final control devices [4] |
| G05F 1/147 | 4-Punkt Untergruppe | . . . . with motor driven tap switch [4] |
| G05F 1/153 | 5-Punkt Untergruppe | . . . . . controlled by discharge tubes or semiconductor devices [4] |
| G05F 1/16 | 4-Punkt Untergruppe | . . . . combined with discharge tubes or semiconductor devices |
| G05F 1/20 | 5-Punkt Untergruppe | . . . . . semiconductor devices only |
| G05F 1/22 | 4-Punkt Untergruppe | . . . . combined with separate magnetic control devices having a controllable degree of saturation |
| G05F 1/24 | 3-Punkt Untergruppe | . . . using bucking or boosting transformers as final control devices |
| G05F 1/247 | 4-Punkt Untergruppe | . . . . with motor in control circuit [4] |
| G05F 1/253 | 4-Punkt Untergruppe | . . . . the transformers including plural windings in series between source and load (G05F 1/247 takes precedence) [4] |
| G05F 1/26 | 4-Punkt Untergruppe | . . . . combined with discharge tubes or semiconductor devices |

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| G05F 1/30 | 5-Punkt Untergruppe | . . . . . semiconductor devices only |
| G05F 1/32 | 3-Punkt Untergruppe | . . . using magnetic devices having a controllable degree of saturation as final control devices |
| G05F 1/325 | 4-Punkt Untergruppe | . . . . with specific core structure, e.g. gap, aperture, slot, permanent magnet [4] |
| G05F 1/33 | 4-Punkt Untergruppe | . . . . with plural windings through which current to be controlled is conducted [4] |
| G05F 1/335 | 5-Punkt Untergruppe | . . . . . on different cores [4] |
| G05F 1/34 | 4-Punkt Untergruppe | . . . . combined with discharge tubes or semiconductor devices |
| G05F 1/38 | 5-Punkt Untergruppe | . . . . . semiconductor devices only |
| G05F 1/40 | 3-Punkt Untergruppe | . . . using discharge tubes or semiconductor devices as final control devices |
| G05F 1/42 | 4-Punkt Untergruppe | . . . . discharge tubes only |
| G05F 1/44 | 4-Punkt Untergruppe | . . . . semiconductor devices only |
| G05F 1/445 | 5-Punkt Untergruppe | . . . . . being transistors in series with the load [3] |
| G05F 1/45 | 5-Punkt Untergruppe | . . . . . being controlled rectifiers in series with the load [3] |
| G05F 1/455 | 6-Punkt Untergruppe | . . . . . with phase control [3] |
| G05F 1/46 | 2-Punkt Untergruppe | . . wherein the variable actually regulated by the final control device is dc (G05F 1/625 takes precedence) [4] |
| G05F 1/52 | 3-Punkt Untergruppe | . . . using discharge tubes in series with the load as final control devices |
| G05F 1/54 | 4-Punkt Untergruppe | . . . . additionally controlled by the unregulated supply |
| G05F 1/56 | 3-Punkt Untergruppe | . . . using semiconductor devices in series with the load as final control devices |
| G05F 1/563 | 4-Punkt Untergruppe | . . . . including two stages of regulation, at least one of which is output level responsive, e.g. coarse and fine regulation [4] |
| G05F 1/565 | 4-Punkt Untergruppe | . . . . sensing a condition of the system or its load in addition to means responsive to deviations in the output of the system, e.g. current, voltage, power factor (G05F 1/563 takes precedence) [4] |
| G05F 1/567 | 5-Punkt Untergruppe | . . . . . for temperature compensation [4] |
| G05F 1/569 | 5-Punkt Untergruppe | . . . . . for protection [4] |
| G05F 1/571 | 6-Punkt Untergruppe | . . . . . with overvoltage detector [4] |
| G05F 1/573 | 6-Punkt Untergruppe | . . . . . with overcurrent detector [4] |
| G05F 1/575 | 4-Punkt Untergruppe | . . . . characterised by the feedback circuit [4] |
| G05F 1/577 | 4-Punkt Untergruppe | . . . . for plural loads [4] |
| G05F 1/585 | 5-Punkt Untergruppe | . . . . . providing voltages of opposite polarities [4] |
| G05F 1/59 | 4-Punkt Untergruppe | . . . . including plural semiconductor devices as final control devices for a single load [4] |
| G05F 1/595 | 5-Punkt Untergruppe | . . . . . semiconductor devices connected in series [4] |
| G05F 1/607 | 3-Punkt Untergruppe | . . . using discharge tubes in parallel with the load as final control devices [3] |
| G05F 1/61 | 4-Punkt Untergruppe | . . . . including two stages of regulation, at least one of which is output level responsive [4] |
| G05F 1/613 | 3-Punkt Untergruppe | . . . using semiconductor devices in parallel with the load as final control devices [3] |

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| G05F 1/614 | 4-Punkt Untergruppe | . . . . including two stages of regulation, at least one of which is output level responsive [4] |
| G05F 1/618 | 3-Punkt Untergruppe | . . . using semiconductor devices in series and in parallel with the load as final control devices [4] |
| G05F 1/62 | 3-Punkt Untergruppe | . . . using bucking or boosting dc sources |
| G05F 1/625 | 2-Punkt Untergruppe | . . wherein it is irrelevant whether the variable actually regulated is ac or dc [4] |
| G05F 1/63 | 3-Punkt Untergruppe | . . . using variable impedances in series with the load as final control devices [4] |
| G05F 1/635 | 4-Punkt Untergruppe | . . . . being Hall effect devices, magnetoresistors or thermistors [4] |
| G05F 1/644 | 4-Punkt Untergruppe | . . . . being pressure-sensitive resistors [4] |
| G05F 1/648 | 4-Punkt Untergruppe | . . . . being plural resistors among which a selection is made [4] |
| G05F 1/652 | 3-Punkt Untergruppe | . . . using variable impedances in parallel with the load as final control devices [4] |
| G05F 1/656 | 3-Punkt Untergruppe | . . . using variable impedances in series and in parallel with the load as final control devices [4] |
| G05F 1/66 | 1-Punkt Untergruppe | . Regulating electric power |
| G05F 1/67 | 2-Punkt Untergruppe | . . to the maximum power available from a generator, e.g. from solar cell [4] |
| G05F 1/70 | 1-Punkt Untergruppe | . Regulating power factor; Regulating reactive current or power [3] |
| **G05F 3/00** | **Hauptgruppe** | **Non-retroactive systems for regulating electric variables by using an uncontrolled element, or an uncontrolled combination of elements, such element or such combination having self-regulating properties** |
| G05F 3/02 | 1-Punkt Untergruppe | . Regulating voltage or current |
| G05F 3/04 | 2-Punkt Untergruppe | . . wherein the variable is ac |
| G05F 3/06 | 3-Punkt Untergruppe | . . . using combinations of saturated and unsaturated inductive devices, e g. combined with resonant circuit |
| G05F 3/08 | 2-Punkt Untergruppe | . . wherein the variable is dc |
| G05F 3/10 | 3-Punkt Untergruppe | . . . using uncontrolled devices with non-linear characteristics [4] |
| G05F 3/12 | 4-Punkt Untergruppe | . . . . being glow discharge tubes |
| G05F 3/16 | 4-Punkt Untergruppe | . . . . being semiconductor devices [3] |
| G05F 3/18 | 5-Punkt Untergruppe | . . . . . using Zener diodes [3] |
| G05F 3/20 | 5-Punkt Untergruppe | . . . . . using diode-transistor combinations (G05F 3/18 takes precedence) [3] |
| G05F 3/22 | 6-Punkt Untergruppe | . . . . . wherein the transistors are of the bipolar type only (G05F 3/26 , G05F 3/30 take precedence) [4] |
| G05F 3/24 | 6-Punkt Untergruppe | . . . . . wherein the transistors are of the field-effect type only (G05F 3/26 , G05F 3/30 take precedence) [4] |
| G05F 3/26 | 6-Punkt Untergruppe | . . . . . Current mirrors [4] |
| G05F 3/28 | 7-Punkt Untergruppe | . . . . . combined with a non-linear current amplifier [4] |
| G05F 3/30 | 6-Punkt Untergruppe | . . . . . Regulators using the difference between the base-emitter voltages of two bipolar transistors operating at different current densities (G05F 3/26 takes precedence) [4] |
| **G05F 5/00** | **Hauptgruppe** | **Systems for regulating electric variables by detecting deviations in the electric input to the system and thereby controlling a device within the system to obtain a regulated output** |
| G05F 5/02 | 1-Punkt Untergruppe | . Phase controlled switching using electronic tubes or three or more terminal semiconductive devices [4] |
| G05F 5/04 | 1-Punkt Untergruppe | . using a transformer or inductor as the final control device [4] |

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| G05F 5/06 | 2-Punkt Untergruppe | . . saturable [4] |
| G05F 5/08 | 1-Punkt Untergruppe | . using a linearly acting final control device [4] |
| **G05F 7/00** | **Hauptgruppe** | **Regulating magnetic variables (details of apparatus for measuring magnetic variables involving magnetic resonance G01R 33/28) [5]** |