Symbol	Typ	Titel
H	**Sektion**	**ELECTRICITY**
H02	**Klasse**	**GENERATION, CONVERSION, OR DISTRIBUTION OF ELECTRIC POWER**
H02P	**Unterklasse**	**CONTROL OR REGULATION OF ELECTRIC MOTORS, GENERATORS, OR DYNAMO-ELECTRIC CONVERTERS; CONTROLLING TRANSFORMERS, REACTORS OR CHOKE COILS (structure of the starter, brake, or other control devices, see the relevant subclasses, e.g. mechanical brake F16D , mechanical speed regulator G05D , variable resistor H01C , starter switch H01H; systems for regulating electric or magnetic variables using transformers, reactors or choke coils G05F; arrangements structurally associated with motors, generators, dynamo-electric converters, transformers, reactors or choke coils, see the relevant subclasses, e.g. H01F , H02K; connection or control of one generator, transformer, reactor, choke coil, or dynamo-electric converter with regard to conjoint operation with similar or other source of supply H02J; control or regulation of static converters H02M) [4]**
H02P 1/00	**Hauptgruppe**	**Arrangements for starting electric motors or dynamo-electric converters (H02P 6/00 takes precedence) [4]**
H02P 1/02	1-Punkt Untergruppe	. Details
H02P 1/04	2-Punkt Untergruppe	. . Means for controlling progress of starting sequence in dependence upon time or upon current, speed, or other motor parameter
H02P 1/06	3-Punkt Untergruppe	. . . Manually-operated multi-position starters
H02P 1/08	3-Punkt Untergruppe	. . . Manually-operated on/off switch controlling power-operated multi-position switch or impedances for starting a motor
H02P 1/10	3-Punkt Untergruppe	. . . Manually-operated on/off switch controlling relays or contactors operating sequentially for starting a motor (sequence determined by power-operated multi-position switch H02P 1/08)
H02P 1/12	3-Punkt Untergruppe	. . . Switching devices centrifugally operated by the motor
H02P 1/14	3-Punkt Untergruppe	. . . Pressure-sensitive resistors centrifugally operated by the motor
H02P 1/16	1-Punkt Untergruppe	. for starting dynamo-electric motors or dynamo-electric converters
H02P 1/18	2-Punkt Untergruppe	. . for starting an individual dc motor
H02P 1/20	3-Punkt Untergruppe	. . . by progressive reduction of resistance in series with armature winding
H02P 1/22	3-Punkt Untergruppe	. . . in either direction of rotation
H02P 1/24	2-Punkt Untergruppe	. . for starting an individual ac commutator motor (starting of ac/dc commutator motors H02P 1/18)
H02P 1/26	2-Punkt Untergruppe	. . for starting an individual polyphase induction motor
H02P 1/28	3-Punkt Untergruppe	. . . by progressive increase of voltage applied to primary circuit of motor
H02P 1/30	3-Punkt Untergruppe	. . . by progressive increase of frequency of supply to primary circuit of motor
H02P 1/32	3-Punkt Untergruppe	. . . by star/delta switching
H02P 1/34	3-Punkt Untergruppe	. . . by progressive reduction of impedance in secondary circuit
H02P 1/36	4-Punkt Untergruppe	. . . . the impedance being a liquid resistance
H02P 1/38	3-Punkt Untergruppe	. . . by pole-changing
H02P 1/40	3-Punkt Untergruppe	. . . in either direction of rotation

Symbol	Typ	Titel
H02P 1/42	2-Punkt Untergruppe	. . for starting an individual single-phase induction motor
H02P 1/44	3-Punkt Untergruppe	. . . by phase-splitting with a capacitor
H02P 1/46	2-Punkt Untergruppe	. . for starting an individual synchronous motor
H02P 1/48	3-Punkt Untergruppe	. . . by pole-changing
H02P 1/50	3-Punkt Untergruppe	. . . by changing over from asynchronous to synchronous operation (H02P 1/48 takes precedence)
H02P 1/52	3-Punkt Untergruppe	. . . by progressive increase of frequency of supply to motor
H02P 1/54	2-Punkt Untergruppe	. . for starting two or more dynamo-electric motors
H02P 1/56	3-Punkt Untergruppe	. . . simultaneously
H02P 1/58	3-Punkt Untergruppe	. . . sequentially
H02P 3/00	**Hauptgruppe**	**Arrangements for stopping or slowing electric motors, generators, or dynamo-electric converters (H02P 6/00 takes precedence) [2, 4]**
H02P 3/02	1-Punkt Untergruppe	. Details
H02P 3/04	2-Punkt Untergruppe	. . Means for stopping or slowing by a separate brake, e.g. friction brake, eddy-current brake (brakes F16D , H02K 49/00) [2]
H02P 3/06	1-Punkt Untergruppe	. for stopping or slowing an individual dynamo-electric motor or dynamo-electric converter [2]
H02P 3/08	2-Punkt Untergruppe	. . for stopping or slowing a dc motor [2]
H02P 3/10	3-Punkt Untergruppe	. . . by reversal of supply connections
H02P 3/12	3-Punkt Untergruppe	. . . by short-circuit or resistive braking
H02P 3/14	3-Punkt Untergruppe	. . . by regenerative braking
H02P 3/16	3-Punkt Untergruppe	. . . by combined electrical and mechanical braking
H02P 3/18	2-Punkt Untergruppe	. . for stopping or slowing an ac motor [2]
H02P 3/20	3-Punkt Untergruppe	. . . by reversal of phase sequence of connections to the motor
H02P 3/22	3-Punkt Untergruppe	. . . by short-circuit or resistive braking
H02P 3/24	3-Punkt Untergruppe	. . . by applying dc to the motor
H02P 3/26	3-Punkt Untergruppe	. . . by combined electrical and mechanical braking
H02P 5/00	**Hauptgruppe**	**Arrangements for speed regulation of electric motors wherein the motor speed is measured and compared with a given physical value so as to adjust the motor speed**
H02P 5/04	1-Punkt Untergruppe	. for speed regulation of an individual motor by means of a separate brake
H02P 5/05	1-Punkt Untergruppe	. characterised by the use of reluctance motors [6]
H02P 5/06	1-Punkt Untergruppe	. for speed regulation of an individual dc dynamo-electric motor by varying field or armature current
H02P 5/08	2-Punkt Untergruppe	. . using centrifugal devices, e.g. switch, resistor
H02P 5/10	2-Punkt Untergruppe	. . using a periodic interrupter, e.g. Tirrill regulator (H02P 5/08 , H02P 5/12 to H02P 5/18 take precedence) [4]
H02P 5/12	2-Punkt Untergruppe	. . using discharge tubes or semiconductor devices (H02P 5/08 takes precedence) [4]
H02P 5/14	3-Punkt Untergruppe	. . . using discharge tubes

Symbol	Typ	Titel
H02P 5/16	3-Punkt Untergruppe	. . . using semiconductor devices
H02P 5/162	4-Punkt Untergruppe	. . . . controlling field supply only [4]
H02P 5/165	4-Punkt Untergruppe	. . . . controlling armature supply only [4]
H02P 5/168	5-Punkt Untergruppe	. . . . . using variable impedance [4]
H02P 5/17	5-Punkt Untergruppe	. . . . . using pulse modulation [4]
H02P 5/172	5-Punkt Untergruppe	. . . . . using static converters, e.g. ac to dc [4]
H02P 5/175	6-Punkt Untergruppe	. . . . . of the kind having one thyristor or the like in series with the power supply and the motor [4]
H02P 5/178	4-Punkt Untergruppe	. . . . controlling armature and field supply [4]
H02P 5/18	2-Punkt Untergruppe	. . using magnetic devices with controllable degree of saturation, i.e. transductors
H02P 5/20	2-Punkt Untergruppe	. . using armature-reaction-excited machines, e.g. metadyne, amplidyne, rototrol
H02P 5/22	2-Punkt Untergruppe	. . using Ward-Leonard set
H02P 5/24	3-Punkt Untergruppe	. . . in which only the generator field is controlled
H02P 5/26	3-Punkt Untergruppe	. . . in which both generator and motor fields are controlled
H02P 5/28	1-Punkt Untergruppe	. for speed regulation of an individual ac motor by varying stator or rotor current
H02P 5/30	2-Punkt Untergruppe	. . using centrifugal devices, e.g. switch, resistor
H02P 5/32	2-Punkt Untergruppe	. . using a periodic interrupter (H02P 5/30 takes precedence)
H02P 5/34	2-Punkt Untergruppe	. . by varying frequency of supply to rotor or stator
H02P 5/36	2-Punkt Untergruppe	. . using discharge tubes or semiconductor devices
H02P 5/38	3-Punkt Untergruppe	. . . using discharge tubes
H02P 5/40	3-Punkt Untergruppe	. . . using semiconductor devices (vector- or field-oriented control H02P 21/00) [6]
H02P 5/402	4-Punkt Untergruppe	. . . . controlling supply voltage (H02P 5/418 takes precedence) [4]
H02P 5/405	4-Punkt Untergruppe	. . . . controlling secondary impedance [4]
H02P 5/408	4-Punkt Untergruppe	. . . . controlling supply frequency (H02P 5/418 takes precedence) [4]
H02P 5/41	5-Punkt Untergruppe	. . . . . using dc to ac converters [4]
H02P 5/412	5-Punkt Untergruppe	. . . . . using ac to ac converters without intermediate conversion to dc [4]
H02P 5/415	4-Punkt Untergruppe	. . . . controlling slip energy [4]
H02P 5/418	4-Punkt Untergruppe	. . . . for regulating commutator motors [4]
H02P 5/42	2-Punkt Untergruppe	. . using magnetic devices with controllable degree of saturation, i.e. transductors
H02P 5/44	2-Punkt Untergruppe	. . using brush shifting arrangements
H02P 5/46	1-Punkt Untergruppe	. for speed regulation of two or more dynamo-electric motors in relation to one another
H02P 5/48	2-Punkt Untergruppe	. . by comparing mechanical values representing the speeds
H02P 5/50	2-Punkt Untergruppe	. . by comparing electrical values representing the speeds

Symbol	Typ	Titel
H02P 5/52	2-Punkt Untergruppe	. . additionally providing control of relative angular displacement
H02P 6/00	**Hauptgruppe**	**Arrangements for controlling synchronous motors or other dynamo-electric motors with electronic commutators in dependence on the rotor position; Electronic commutators therefor (H02P 8/00 takes precedence; vector- or field-oriented control H02P 21/00) [3, 4, 6]**
H02P 6/04	1-Punkt Untergruppe	. Arrangements for controlling or regulating speed or torque of more than one motor [6]
H02P 6/06	1-Punkt Untergruppe	. Arrangements for speed regulation of a single motor wherein the motor speed is measured and compared with a given physical value so as to adjust the motor speed [6]
H02P 6/08	1-Punkt Untergruppe	. Arrangements for controlling the speed or torque of a single motor [6]
H02P 6/10	2-Punkt Untergruppe	. . providing reduced torque ripple; controlling torque ripple [6]
H02P 6/12	1-Punkt Untergruppe	. Monitoring commutation; Providing indication of commutation failure [6]
H02P 6/14	1-Punkt Untergruppe	. Electronic commutators [6]
H02P 6/16	2-Punkt Untergruppe	. . Circuit arrangements for detecting position (structural arrangement of position sensors H02K 29/06) [6]
H02P 6/18	3-Punkt Untergruppe	. . . without separate position detecting element, e.g. using back-emf in windings [6]
H02P 6/20	1-Punkt Untergruppe	. Arrangements for starting (H02P 6/08 , H02P 6/22 take precedence) [6]
H02P 6/22	1-Punkt Untergruppe	. Arrangements for starting in a selected direction of rotation [6]
H02P 6/24	1-Punkt Untergruppe	. Arrangements for stopping [6]
H02P 7/00	**Hauptgruppe**	**Arrangements for controlling the speed or torque of electric motors (H02P 1/00 to H02P 6/00 , H02P 8/00 take precedence; speed control in general G05D 13/62) [2]**
H02P 7/01	1-Punkt Untergruppe	. adapted to be connected to two or more voltage or current supplies [5]
H02P 7/04	1-Punkt Untergruppe	. for controlling an individual motor by means of a separate brake
H02P 7/05	1-Punkt Untergruppe	. characterised by the use of reluctance motors [6]
H02P 7/06	1-Punkt Untergruppe	. for controlling an individual dc dynamo-electric motor by varying field or armature current
H02P 7/08	2-Punkt Untergruppe	. . by manual control without auxiliary power
H02P 7/10	3-Punkt Untergruppe	. . . of motor field only
H02P 7/12	4-Punkt Untergruppe	. . . . Switching field from series to shunt excitation or vice versa
H02P 7/14	3-Punkt Untergruppe	. . . of voltage applied to the armature with or without control of field
H02P 7/18	2-Punkt Untergruppe	. . by master control with auxiliary power
H02P 7/20	3-Punkt Untergruppe	. . . using multi-position switch, e.g. drum, controlling motor circuit by means of relays
H02P 7/22	3-Punkt Untergruppe	. . . using multi-position switch, e.g. drum, controlling motor circuit by means of pilot-motor-operated multi-position switch or pilot-motor-operated variable resistance
H02P 7/24	3-Punkt Untergruppe	. . . using discharge tubes or semiconductor devices
H02P 7/26	4-Punkt Untergruppe	. . . . using discharge tubes
H02P 7/28	4-Punkt Untergruppe	. . . . using semiconductor devices
H02P 7/282	5-Punkt Untergruppe	. . . . . controlling field supply only [4]
H02P 7/285	5-Punkt Untergruppe	. . . . . controlling armature supply only [4]

Symbol	Typ	Titel
H02P 7/288	6-Punkt Untergruppe	. . . . . using variable impedance [4]
H02P 7/29	6-Punkt Untergruppe	. . . . . using pulse modulation [4]
H02P 7/292	6-Punkt Untergruppe	. . . . . using static converters, e.g. ac to dc [4]
H02P 7/295	7-Punkt Untergruppe	. . . . . of the kind having one thyristor or the like in series with the power supply and the motor [4]
H02P 7/298	5-Punkt Untergruppe	. . . . . controlling armature and field supply [4]
H02P 7/30	3-Punkt Untergruppe	. . . using magnetic devices with controllable degree of saturation, i.e. transductors
H02P 7/32	3-Punkt Untergruppe	. . . using armature-reaction-excited machines, e.g. metadyne, amplidyne, rototrol
H02P 7/34	3-Punkt Untergruppe	. . . using Ward-Leonard arrangements
H02P 7/36	1-Punkt Untergruppe	. for controlling an individual ac dynamo-electric motor by varying stator or rotor current
H02P 7/38	2-Punkt Untergruppe	. . by manual control without auxiliary power
H02P 7/40	3-Punkt Untergruppe	. . . using variable impedance in stator or rotor circuit
H02P 7/42	3-Punkt Untergruppe	. . . using variable-frequency supply
H02P 7/44	4-Punkt Untergruppe	. . . . wherein only rotor or only stator circuit is supplied with ac
H02P 7/46	4-Punkt Untergruppe	. . . . wherein both rotor and stator circuits are supplied with ac, the frequency of supply to one circuit being variable
H02P 7/48	3-Punkt Untergruppe	. . . by pole-changing
H02P 7/50	3-Punkt Untergruppe	. . . by shifting the brushes of a commutator motor
H02P 7/52	2-Punkt Untergruppe	. . by master control with auxiliary power
H02P 7/54	3-Punkt Untergruppe	. . . using multi-position switch, e.g. drum, controlling motor circuit by means of relays
H02P 7/56	3-Punkt Untergruppe	. . . using multi-position switch, e.g. drum, controlling motor circuit by means of pilot-motor-operated multi-position switch or pilot-motor-operated variable resistance
H02P 7/58	3-Punkt Untergruppe	. . . using discharge tubes or semiconductor devices
H02P 7/60	4-Punkt Untergruppe	. . . . using discharge tubes
H02P 7/62	4-Punkt Untergruppe	. . . . using semiconductor devices (vector- or field-oriented control H02P 21/00) [6]
H02P 7/622	5-Punkt Untergruppe	. . . . . controlling supply voltage (H02P 7/638 takes precedence) [4]
H02P 7/625	5-Punkt Untergruppe	. . . . . controlling secondary impedance [4]
H02P 7/628	5-Punkt Untergruppe	. . . . . controlling supply frequency (H02P 7/638 takes precedence) [4]
H02P 7/63	6-Punkt Untergruppe	. . . . . using dc to ac converters [4]
H02P 7/632	6-Punkt Untergruppe	. . . . . using ac to ac converters without intermediate conversion to dc [4]
H02P 7/635	5-Punkt Untergruppe	. . . . . controlling slip energy [4]
H02P 7/638	5-Punkt Untergruppe	. . . . . for controlling commutator motors [4]
H02P 7/64	3-Punkt Untergruppe	. . . using magnetic devices with controllable degree of saturation, i.e. transductors

Symbol	Typ	Titel
H02P 7/66	3-Punkt Untergruppe	. . . using an ac generator to supply the motor, the motor being controlled by a control effected upon the generator
H02P 7/67	1-Punkt Untergruppe	. for controlling two or more dynamo-electric motors [4]
H02P 7/68	2-Punkt Untergruppe	. . for controlling two or more dc dynamo-electric motors
H02P 7/685	3-Punkt Untergruppe	. . . electrically connected in series, i.e. carrying the same current [3]
H02P 7/69	3-Punkt Untergruppe	. . . mechanically coupled by gearing [3]
H02P 7/695	4-Punkt Untergruppe	. . . . Differential gearing [3]
H02P 7/74	2-Punkt Untergruppe	. . for controlling two or more ac dynamo-electric motors
H02P 7/747	3-Punkt Untergruppe	. . . mechanically coupled by gearing [3]
H02P 7/753	4-Punkt Untergruppe	. . . . Differential gearing [3]
H02P 7/80	2-Punkt Untergruppe	. . for controlling combinations of dc and ac dynamo-electric motors
H02P 8/00	**Hauptgruppe**	**Arrangements for controlling dynamo-electric motors rotating step by step [2, 6]**
H02P 8/02	1-Punkt Untergruppe	. specially adapted for single-phase or bi-pole stepper motors, e.g. watch-motors, clock-motors [6]
H02P 8/04	1-Punkt Untergruppe	. Arrangements for starting [6]
H02P 8/06	2-Punkt Untergruppe	. . in selected direction of rotation [6]
H02P 8/08	2-Punkt Untergruppe	. . Determining position before starting [6]
H02P 8/10	2-Punkt Untergruppe	. . Shaping pulses for starting; Boosting current during starting [6]
H02P 8/12	1-Punkt Untergruppe	. Control or stabilisation of current [6]
H02P 8/14	1-Punkt Untergruppe	. Arrangements for controlling speed or speed and torque (H02P 8/12 , H02P 8/22 take precedence) [6]
H02P 8/16	2-Punkt Untergruppe	. . Reducing energy dissipated or supplied [6]
H02P 8/18	2-Punkt Untergruppe	. . Shaping of pulses, e.g. to reduce torque ripple [6]
H02P 8/20	2-Punkt Untergruppe	. . characterised by bidirectional operation [6]
H02P 8/22	1-Punkt Untergruppe	. Control of step size; Intermediate stepping, e.g. micro-stepping [6]
H02P 8/24	1-Punkt Untergruppe	. Arrangements for stopping (H02P 8/32 take precedence) [6]
H02P 8/26	2-Punkt Untergruppe	. . Memorising final pulse when stopping [6]
H02P 8/28	2-Punkt Untergruppe	. . Disconnecting power source when stopping [6]
H02P 8/30	2-Punkt Untergruppe	. . Holding position when stopped [6]
H02P 8/32	1-Punkt Untergruppe	. Reducing overshoot or oscillation, e.g. damping [6]
H02P 8/34	1-Punkt Untergruppe	. Monitoring operation (H02P 8/36 takes precedence) [6]
H02P 8/36	1-Punkt Untergruppe	. Protection against faults, e.g. against overheating, step-out; Indicating faults (emergency protective arrangements with automatic interruption of supply H02H 7/08) [6]
H02P 8/38	2-Punkt Untergruppe	. . the fault being step-out [6]
H02P 8/40	1-Punkt Untergruppe	. Special adaptations for controlling two or more stepping motors [6]

Symbol	Typ	Titel
H02P 8/42	1-Punkt Untergruppe	. characterised by non-stepper motors being operated step by step [6]
H02P 9/00	**Hauptgruppe**	**Arrangements for controlling electric generators for the purpose of obtaining a desired output (Ward-Leonard arrangements H02P 7/34; feeding a network by two or more generators H02J; for charging batteries H02J 7/14)**
H02P 9/02	1-Punkt Untergruppe	. Details
H02P 9/04	1-Punkt Untergruppe	. Control effected upon non-electric prime mover and dependent upon electric output value of the generator (effecting control of the prime mover in general, see the relevant class for such prime mover) [2]
H02P 9/06	1-Punkt Untergruppe	. Control effected upon clutch or other mechanical power transmission means and dependent upon electric output value of the generator (effecting control of the power transmission means, see the relevant class for such means) [2]
H02P 9/08	1-Punkt Untergruppe	. Control of generator circuit during starting or stopping of driving means, e.g. for initiating excitation [2]
H02P 9/10	1-Punkt Untergruppe	. Control effected upon generator excitation circuit to reduce harmful effects of overloads or transients, e.g. sudden application of load, sudden removal of load, sudden change of load [2]
H02P 9/12	2-Punkt Untergruppe	. . for demagnetising; for reducing effects of remanence; for preventing pole reversal [2]
H02P 9/14	1-Punkt Untergruppe	. by variation of field (H02P 9/08 , H02P 9/10 take precedence) [2]
H02P 9/16	2-Punkt Untergruppe	. . due to variation of ohmic resistance in field circuit, using resistances switched in or out of circuit step by step
H02P 9/18	3-Punkt Untergruppe	. . . the switching being caused by a servomotor, measuring instrument, or relay
H02P 9/20	2-Punkt Untergruppe	. . due to variation of continuously-variable ohmic resistance
H02P 9/22	3-Punkt Untergruppe	. . . comprising carbon pile resistance
H02P 9/24	2-Punkt Untergruppe	. . due to variation of make-to-break ratio of intermittently-operating contacts, e.g. using Tirrill regulator
H02P 9/26	2-Punkt Untergruppe	. . using discharge tubes or semiconductor devices (H02P 9/34 takes precedence) [2]
H02P 9/28	3-Punkt Untergruppe	. . . using discharge tubes
H02P 9/30	3-Punkt Untergruppe	. . . using semiconductor devices
H02P 9/32	2-Punkt Untergruppe	. . using magnetic devices with controllable degree of saturation (H02P 9/34 takes precedence) [2]
H02P 9/34	2-Punkt Untergruppe	. . using magnetic devices with controllable degree of saturation in combination with controlled discharge tube or controlled semiconductor device
H02P 9/36	2-Punkt Untergruppe	. . using armature-reaction-excited machines
H02P 9/38	2-Punkt Untergruppe	. . Self-excitation by current derived from rectification of both output voltage and output current of generator
H02P 9/40	1-Punkt Untergruppe	. by variation of reluctance of magnetic circuit of generator
H02P 9/42	1-Punkt Untergruppe	. to obtain desired frequency without varying speed of the generator
H02P 9/44	1-Punkt Untergruppe	. Control of frequency and voltage in predetermined relation, e.g. constant ratio
H02P 9/46	1-Punkt Untergruppe	. Control of asynchronous generator by variation of capacitor
H02P 9/48	1-Punkt Untergruppe	. Arrangements for obtaining a constant output value at varying speed of the generator, e.g. on vehicle (H02P 9/04 to H02P 9/46 take precedence) [3]
H02P 11/00	**Hauptgruppe**	**Arrangements for controlling dynamo-electric converters (starting H02P 1/00; stopping or slowing H02P 3/00; feeding a network in conjunction with a generator or another converter H02J) [4]**
H02P 11/04	1-Punkt Untergruppe	. for controlling dynamo-electric converters having a dc output

Symbol	Typ	Titel
H02P 11/06	1-Punkt Untergruppe	. for controlling dynamo-electric converters having an ac output
H02P 13/00	**Hauptgruppe**	**Arrangements for controlling transformers, reactors or choke coils, for the purpose of obtaining a desired output (regulation systems using transformers, reactors or choke coils G05F; transformers H01F; feeding a network in conjunction with a generator or a converter H02J; control or regulation of converters H02M) [4]**
H02P 13/06	1-Punkt Untergruppe	. by tap-changing; by rearranging interconnections of windings
H02P 13/08	1-Punkt Untergruppe	. by sliding current collector along winding
H02P 13/10	1-Punkt Untergruppe	. by moving core, coil winding, or shield, e.g. by induction regulator
H02P 13/12	1-Punkt Untergruppe	. by varying magnetic bias
H02P 15/00	**Hauptgruppe**	**Arrangements for controlling dynamo-electric brakes or clutches (controlling speed of dynamo-electric motors by means of a separate brake H02P 5/00 , H02P 7/00)**
H02P 15/02	1-Punkt Untergruppe	. Conjoint control of brakes and clutches [3]
H02P 17/00	**Hauptgruppe**	**Arrangements for controlling dynamo-electric gears [3]**
H02P 19/00	**Hauptgruppe**	**Arrangements according to more than one of groups H02P 1/00 , H02P 3/00 , H02P 5/00 or H02P 7/00 [5]**
H02P 19/02	1-Punkt Untergruppe	. Providing protection against overload without automatic interruption of supply (emergency protective circuit arrangements with automatic interruption of supply H02H 7/08 , without disconnection, in general H02H 9/02) [6]
H02P 21/00	**Hauptgruppe**	**Arrangements for control or regulation of electric motors by control of field orientation; Vector control [6]**