

1. Building system technology electrical engineering, sanitation, heating, air conditioning

1.1 House and building automation

- 1.1.1 House automations
- 1.1.1.1 In-house and external operating and observation facilities
- 1.1.1.2 Automatic facilities for heating engineering
- 1.1.1.3 Automatic facilities for ventilation, air-conditioning and refrigeration engineering
- 1.1.1.4 Automatic facilities for plumbing
- 1.1.1.5 Automatic facilities for safety technology
- 1.1.1.6 Automatic facilities for lighting/shading engineering
- 1.1.1.7 Automatic facilities outdoor installations (e.g. garage doors)
- 1.1.1.8 Automatic facilities for in-house communication and telecommunication
- 1.1.1.9 Automatic facilities for further applications
- 1.1.2 Building automation
- 1.1.2.1 Centralised/decentralised management systems
- 1.1.2.2 System components for data communication
- 1.1.2.3 Automation systems for heating engineering
- 1.1.2.4 Automation systems for ventilation/air-conditioning/refrigeration engineering
- 1.1.2.5 Automation systems for plumbing
- 1.1.2.6 Automation systems for fire alarm technology
- 1.1.2.7 Automation systems for safety technology
- 1.1.2.8 Automation systems for lighting engineering
- 1.1.2.9 Automation systems for electrical distribution
- 1.1.2.10 Automation systems for shadowing technology
- 1.1.2.11 Automaton systems for lift engineering
- 1.1.2.12 Automation systems for outdoor installations (e.g. gate systems)
- 1.1.2.13 Automation systems for further applications
- 1.1.3 Building systems technology
- 1.1.3.1 Systems technology
- 1.1.3.2 Bus compatible installation systems
- 1.1.3.3 Modular wiring systems
- 1.1.3.4 Radio bus
- 1.1.4 Energy efficiency
- 1.1.4.1 Smart home
- 1.1.4.2 Smart metering
- 1.1.5 Lift installations
- 1.1.6 Staircase lifts

1.2 Measurement and process control engineering

- 1.2.1 Measurement engineering
- 1.2.1.1 Flush-type measuring instruments
- 1.2.1.2 Recording measuring instruments
- 1.2.1.3 Transducers
- 1.2.1.4 Sensors
- 1.2.1.5 Optical and acoustic signalling instruments, displays
- 1.2.1.6 Network analysers
- 1.2.1.7 Current and energy consumption analysers
- 1.2.1.8 Measuring instruments and equipment for ...
- 1.2.1.8.1 ... quantity, filling level, flow rate of liquids and gases
- 1.2.1.8.2 ... pressure
- 1.2.1.8.3 ... temperature
- 1.2.1.9 Amount of heat
- 1.2.1.9.1 Calorimetric counters (electronic)
- 1.2.1.9.2 Heating costs distributors
- 1.2.1.10 Moisture
- 1.2.1.11 Room climate
- 1.2.1.12 Smoke spot number
- 1.2.1.13 CO
- 1.2.1.14 CO₂
- 1.2.1.15 Sound, structure-borne noise
- 1.2.1.16 Air speed
- 1.2.1.17 Smoke gas analysis 22
- 1.2.1.18 kW value
- 1.2.2 Control engineering
- 1.2.2.1 Programmable logic controllers
- 1.2.2.2 Control units (e.g. heating, air conditioning and lighting)
- 1.2.2.3 Control, adapter and power electronics
- 1.2.3 Control engineering
- 1.2.3.1 Controllers
- 1.2.3.2 Maximum monitors
- 1.2.3.3 Network monitoring systems
- 1.2.3.4 Control drives
- 1.2.3.5 Reactive power compensation
- 1.2.3.6 Light barriers
- 1.2.3.7 Flush-type systems, governor casings
- 1.2.3.8 Remote control systems
- 1.2.3.9 House instrumentation and control systems (I & C systems)
- 1.2.3.10 Single room automatic controllers
- 1.2.4 Pneumatic control systems
- 1.2.5 Hydraulic control systems
- 1.2.6 Bus systems for measurement and process control engineering
- 1.2.7 Firing automatons
- 1.2.7.1 Oil firing automatons
- 1.2.7.2 Gas firing automatons

- 1.2.8 Heating, air-conditioning, ventilation controls and building automatons
- 1.2.8.1 Electrical/electronic I & C installations for central heating control
- 1.2.8.1.1 Central controllers in basic design
- 1.2.8.1.2 Central controllers with optimisation function
- 1.2.8.1.3 Central controllers with communication interface
- 1.2.8.1.4 Central regulating and control instruments for single room temperature control
- 1.2.8.1.5 Probes (e.g. for indoor and outdoor temperatures)
- 1.2.8.1.6 Remote control and display equipment
- 1.2.8.1.7 Pressure regulators, thermostats, clocks
- 1.2.8.1.8 Control drives, mixers, valves, throttle valves
- 1.2.8.1.9 Switchboards
- 1.2.8.2 Electrical/electronic I & C installations for decentralised heating control
- 1.2.8.2.1 Single room temperature and zone regulators with communication interface
- 1.2.8.2.2 Room temperature probes
- 1.2.8.2.3 Remote control and display equipment
- 1.2.8.2.4 Clock thermostats
- 1.2.8.2.5 Thermostats
- 1.2.8.3 Electrical/electronic/pneumatic I & C installations for central ventilation and air-conditioning control
- 1.2.8.3.1 Controllers, converters, amplifiers
- 1.2.8.3.2 Controllers, converters, amplifiers with communication interface
- 1.2.8.3.3 Probes, transducers (e.g. for temperature, pressure, moisture)
- 1.2.8.3.4 Transducers for CO₂ and air quality
- 1.2.8.3.5 Remote control and display equipment
- 1.2.8.3.6 Pressure regulators, controlled humidity cabinets, clocks
- 1.2.8.3.7 Control drives, valves, throttle valves
- 1.2.8.3.8 Switchboards
- 1.2.8.4 Electrical/electronic/pneumatic I & C installations for decentralised ventilation and air-conditioning control
- 1.2.8.4.1 Controllers for post-processing instruments (e.g. induction instruments, expansion valves, stirrers, flow regulators)
- 1.2.8.4.2 Controllers for post-processing instruments (e.g. induction instruments, expansion valves, stirrers, flow regulators)
- 1.2.8.4.3 Probes (e.g. for temperature, pressure, moisture, air speed)

- 1.2.8.4.4 Transducers for CO₂ and air quality
- 1.2.8.4.5 Presence sensing elements
- 1.2.8.4.6 Remote control and display equipment
- 1.2.8.4.7 Controlled humidity cabinets, thermostats, clocks
- 1.2.8.4.8 Control drives, valves, throttle valves
- 1.2.8.5 Building instrumentation and control
- 1.2.8.5.1 Master computer
- 1.2.8.5.2 Operating and observation units (alphanumerical)
- 1.2.8.5.3 Operating and observation units (can be graphically presented)
- 1.2.8.5.4 Data logging equipment
- 1.2.8.5.5 Insular centres/sub-centres
- 1.2.8.5.6 Open communication between master computer and insular centres/sub-centres
- 1.2.8.5.7 Telecommunication for public switched telephone network
- 1.2.8.5.8 Maintenance management systems
- 1.2.8.5.9 Energy management systems
- 1.2.8.6 Direct digital controls (DDC)
- 1.2.8.6.1 Digital programmable stations for measurement and process control tasks in engineering operation and maintenance installations (e.g. HVAC systems)
- 1.2.8.6.2 Digital programmable stations for systems integrated in technical building equipment (e.g. fire alarm devices, access control, time-operator acquisition)
- 1.2.8.6.3 Operating and observation units (alphanumerical)
- 1.2.8.6.4 Operating and observation units (can be graphically presented)
- 1.2.8.6.5 Data logging equipment
- 1.2.8.6.6 Telecommunication for public switched telephone network
- 1.2.8.6.7 Field devices
- 1.2.9 Other instruments and accessories
- 1.2.9.1 Operating hours meters

1.3 Management and visualisation systems

- 1.3.1 Production management systems
- 1.3.2 Remote control management systems
- 1.3.3 Visualisation systems
- 1.3.4 Other management systems

1.4 Information and communication installations

- 1.4.1 Telecommunication equipment and systems
- 1.4.1.1 Private branch exchanges



1.4.1.2	Installation systems and resources	1.5.2.4	Automatic controller systems	2.1.1.3.9	Industrial water pipelines	2.1.1.6.3.4	... Aluminium
1.4.1.3	Terminal equipment	1.5.2.5	Lift shaft smoke extraction	2.1.1.3.10	Long-distance oil pipelines	2.1.1.6.3.5	... Ceramics
1.4.1.4	Cordless terminal equipment and systems	1.5.3	<u>Monitoring systems</u>	2.1.1.3.11	Accessories for long distance pipelines	2.1.1.6.4	Chimneys and accessories
1.4.1.5	Message systems	1.5.3.1	Video monitoring systems	2.1.1.3.12	Protective piping	2.1.1.6.4.1	Chimneys
1.4.1.6	Test and measuring instruments	1.5.3.2	Access control systems	2.1.1.3.13	Pipe retrofitting	2.1.1.6.4.2	Chimney bonnets
1.4.2	<u>Intercom and two-way radio installations</u>	1.5.3.3	Anti-theft alarm systems	2.1.1.3.14	Chemical engineering cleaning	2.1.1.6.4.3	Chimney framing
1.4.3	<u>In-house communication</u>	1.5.3.4	Clock and service time installations	2.1.1.4	Fittings, pipe connectors and closures ...	2.1.1.6.4.4	Stainless steel chimneys
1.4.4	<u>Door interphones</u>	1.5.3.5	Movement detecting systems	2.1.1.4.1	... made of fibre cement	2.1.1.7	Tubes and bellows
1.4.5	<u>Bell-ringing installations</u>	1.5.4	<u>Fire door holders</u>	2.1.1.4.2	... cast iron	2.1.1.7.1	Plastic tubes
1.4.6	<u>Light-signal call and person search installations</u>	1.6	Data systems and network technology	2.1.1.4.3	... plastic	2.1.1.7.2	Metal tubes
1.4.7	<u>Electro-acoustic installations</u>	1.6.1	<u>Passive components</u>	2.1.1.4.4	... steel/stainless steel/aluminium	2.1.1.7.3	Rubber tubes
1.4.8	<u>Mobile communication</u>	1.6.2	<u>Active components</u>	2.1.1.4.5	... cast steel	2.1.1.7.4	Hose connections
1.4.8.1	Radio telephones	1.7	Energy generation	2.1.1.4.6	... malleable cast iron	2.1.1.7.5	Metal bellows
1.4.8.2	Radio calls	1.6.1	<u>Power generating aggregates, small generators</u>	2.1.1.4.7	... copper, brass, red brass	2.1.1.7.6	Plastic bellows
1.4.8.3	Operating radio	1.6.2	<u>Power generating aggregates, small generators</u>	2.1.1.4.8	Joining technology	2.1.1.7.7	Bellows made of other materials
1.4.8.4	Data radio	1.8	Energy supply	2.1.1.4.8.1	Thread connections	2.1.1.8	Sealants
1.4.8.5	Satellite communication	1.8.1	<u>Current supply systems up to 1,000 volts</u>	2.1.1.4.8.2	Adhesive bonding	2.1.1.8.1	Sealing strips
1.4.9	<u>Multimedia applications</u>	1.8.2	<u>Uninterruptible power systems (UPS)</u>	2.1.1.4.8.3	Soldering	2.1.1.8.2	Luting
1.4.9.1	Hardware	1.8.3	<u>Transformers</u>	2.1.1.4.8.4	Welding	2.1.1.8.3	Sealing and packing rings
1.4.9.2	Software	1.9	Power conversion	2.1.1.4.8.5	Pipe couplings	2.1.1.8.4	Filling compounds
1.4.9.3	Digital television	1.9.1	<u>Conversion</u>	2.1.1.4.8.6	Compression fittings	2.1.1.8.5	Rolling rings
1.4.9.4	Video conferences	1.9.1.1	Current-voltage converters	2.1.1.4.8.7	Connectors	2.1.1.8.6	Joint sealing compounds
1.4.9.5	Consumer electronics	1.9.1.2	Frequency converters	2.1.1.4.8.8	Clamps	2.1.1.9	Heat and noise insulation, corrosion and fire protection
1.4.10	<u>Aerial masts</u>	1.9.1.3	Inverters	2.1.1.4.8.9	Thread dry-seal material	2.1.1.9.1	Corrosion protection and insulating wrapping
1.4.10.1	Standpipes	1.9.1.4	Rectifiers	2.1.1.4.9	Expansion joints, compensators	2.1.1.9.2	Insulating material for pipes and containers
1.4.10.2	Mounting systems	1.10	Energy storage	2.1.1.5	Discharge pipes and adapting pieces	2.1.1.9.3	Protective paint coatings
1.4.11	<u>Aerials</u>	1.10.1	<u>Storage</u>	2.1.1.5.1	Discharge pipes and adapting pieces for building, site and road drainage	2.1.1.9.4	Vibration dampers and spring elements
1.4.11.1	Terrestrial receiving stations	1.10.1.1	Batteries	2.1.1.5.2	Fibre cement discharge pipes and adapting pieces	2.1.1.9.5	Fire protection for piping (water, wastewater)
1.4.11.2	Satellite receiving aerials	1.10.1.2	Accumulators	2.1.1.5.3	Glass discharge pipes and adapting pieces	2.1.1.9.6	Sound-proofing for piping (water, wastewater)
1.4.12	<u>Distribution systems</u>	1.10.1.3	Chargers	2.1.1.5.4	Cast-iron discharge pipes and adapting pieces	2.1.1.9.7	Plastic plates and sheets
1.4.12.1	Amplifiers	1.11	E-mobility	2.1.1.5.5	Plastic discharge pipes and adapting pieces, also sound-insulated	2.1.1.10	Pipe penetrations
1.4.12.2	Distributors	1.11.1	<u>E-vehicles</u>	2.1.1.5.6	Steel/stainless steel discharge pipes and adapting pieces	2.1.2	<u>Drainage technology</u>
1.4.12.3	Branching	1.11.2	<u>Charging infrastructure</u>	2.1.1.5.7	Vitrified clay discharge pipes and adapting pieces	2.1.2.1	Site drainage objects
1.4.12.4	Channel preparation	1.11.2.1	Charging stations	2.1.1.6	Exhaust gas pipes, vents, chimneys and accessories	2.1.2.2	Cellar drainage and backwater shut-offs
1.4.12.5	Receivers	1.11.2.2	Wallboxes	2.1.1.6.1	Exhaust gas pipes and accessories	2.1.2.3	Soil drainage and bath drainage
1.4.12.6	Installation materials	1.11.3	<u>Energy service providers</u>	2.1.1.6.1.1	Exhaust gas pipes	2.1.2.4	Yard drainage and inlet top
1.5	Alarm, safety and monitoring systems	2. Electrical and sanitary technology		2.1.1.6.1.2	Flue gas dampers	2.1.2.5	Manhole covers
1.5.1	<u>Alarm systems</u>	2.1	Installation technology and systems	2.1.1.6.1.3	Furnace flues	2.1.2.6	Balcony drainage
1.5.1.1	Burglar alarm systems	2.1.1	<u>Pipes and accessories</u>	2.1.1.6.2	Chimney flues and accessories	2.1.2.7	Roof drainage
1.5.1.2	Deliberately operated alarms	2.1.1.1	Pipes for radiant panel heating	2.1.1.6.2.1	Chimney flues	2.1.2.8	Odour traps for sewers
1.5.1.3	Fire alarm systems	2.1.1.2	Pipes for hot water heating	2.1.1.6.2.2	Flue-gas ventilators	2.1.2.9	Petrol separators
1.5.1.4	Escape route guidance, dynamic	2.1.1.3	Pipes for drinking water and long-distance transmission lines	2.1.1.6.2.3	Explosion shutters	2.1.2.10	Grease separators
1.5.2	<u>Safety systems</u>	2.1.1.3.1	Fibre cement pipes	2.1.1.6.2.4	Chimney flue silencers	2.1.2.11	Fuel oil separators
1.5.2.1	Gas alarm installations	2.1.1.3.2	Cast-iron pipes	2.1.1.6.3	Exhaust pipes for condensing equipment and low-temperature boilers made of ...	2.1.2.12	Starch separators
1.5.2.2	Smoke and heat extracting installations	2.1.1.3.3	Plastic pipes	2.1.1.6.3.1	... Plastic	2.1.2.13	Sewage treatment works
1.5.2.2.1	Natural smoke and heat extracting systems which meet DIN EN	2.1.1.3.4	Copper or aluminium pipes, also factory insulated	2.1.1.6.3.2	... Stainless steel	2.1.2.14	Wastewater treatment plants
1.5.2.2.2	Lift shaft smoke extraction	2.1.1.3.5	Steel/stainless steel pipes, also factory insulated	2.1.1.6.3.3	... Glass	2.1.2.15	Rainwater percolation technology
1.5.2.2.3	Control units for smoke and heat extracting systems	2.1.1.3.6	Flexible pipes			2.1.2.16	Trenchless pipe systems
1.5.2.2.4	Smoke extraction activation button	2.1.1.3.7	Rebated pipes			2.1.3	<u>Rainwater utilisation</u>
1.5.2.2.5	Motors	2.1.1.3.8	Utility supplied heating pipes			2.1.3.1	Containers/pumps/fittings
1.5.2.2.6	Detectors					2.1.4	<u>Water treatment/ water purification</u>
1.5.2.2.7	Alarm devices					2.1.4.1	Dosing plants
1.5.2.3	Closing and opening systems					2.1.4.2	Filters and filter plants
						2.1.4.3	Chemical additives



2.1.4.4	Softening plants	2.1.5.2.4	Showers	2.1.5.4.8	Fittings for pressure regulation of household installations	2.1.5.5.5	Gas equipment flush fittings
2.1.4.5	Water degermination equipment	2.1.5.2.4.1	Hand showers			2.1.5.5.5.1	Gas filters
2.1.4.6	Physical water treatment	2.1.5.2.4.2	Head showers	2.1.5.4.8.1	Differential pressure control systems	2.1.5.5.6	Liquefied gas fittings
2.1.4.7	Deionisation plants	2.1.5.2.4.3	Side showers			2.1.5.5.6.1	Pressure regulators
2.1.5	<u>Fittings</u>	2.1.5.2.5	Flushing fittings	2.1.5.4.8.2	Line regulating valves	2.1.5.5.6.2	Cylinder valves
2.1.5.1	Pipe fittings for water supplies to buildings/sites (excluding sanitary)	2.1.5.2.5.1	Pressure flusher/cistern fittings	2.1.5.4.9	Over-current valves	2.1.5.6	Fire extinguisher and similar fittings
		2.1.5.2.5.2	Urinal flushes	2.1.5.4.9.1	Safety valves		
2.1.5.1.1	Shut-off and run-off fittings	2.1.5.2.5.3	Flushing heads for urinal installations	2.1.5.4.9.2	Safety valves for drinking water treatment	2.1.5.6.1	Fittings for fire brigade equipment and hydrants
2.1.5.1.1.1	Shut-off valves, straight and inclined seat types	2.1.5.2.5.4	Jet regulators, air bubblers			2.1.5.6.2	Fittings for small fire extinguishers and sprinkler systems
2.1.5.1.1.2	Shut-off valves, corner type	2.1.5.2.5.5	Flow restrictors	2.1.5.4.9.3	Weight and spring loaded safety valves	2.1.6	<u>Curtain wall installations</u>
2.1.5.1.1.3	Shut-off gates/cocks	2.1.5.3	Fittings for related appliances	2.1.5.4.9.4	Safety valves with pilot control	2.1.6.1	Prefabricated installations, sanitary cores
2.1.5.1.2	Safety fittings	2.1.5.3.1	Laboratory fittings	2.1.5.4.10	Other safety fittings	2.1.6.1.1	Installation frames, walls and blocks
2.1.5.1.2.1	Backflow preventers	2.1.5.3.2	Safety showers	2.1.5.4.10.1	Rupture discs, blow-out fuses etc.	2.1.6.1.2	Prefabricated wash, bath and shower units
2.1.5.1.2.2	Pipe separators, interrupters, ventilators	2.1.5.3.3	Fittings for medical equipment	2.1.5.4.10.2	Pipe burst safeguards	2.1.6.1.3	Accessories for prefabrications
2.1.5.1.3	Pressure reducers	2.1.5.3.4	Fittings for fountains and drinking fountains	2.1.5.4.10.3	Overflow safeguards	2.1.6.1.4	Equipment and systems for curtain wall installations
2.1.5.1.3.1	Household water pressure reducers	2.1.5.4	Fittings for heating and drinking water heating installations	2.1.5.4.10.4	Explosion safeguards and flame traps	2.1.6.1.5	Supporting structures for sanitary objects
2.1.5.1.3.2	Pressure reducer combinations for household water installations	2.1.5.4.1	Metal shut-off fittings	2.1.5.4.11	Fittings for radiator regulation	2.1.7	<u>Cables/conductors</u>
2.1.5.1.4	Connecting fittings	2.1.5.4.1.1	Slides	2.1.5.4.11.1	Radiator thermostat valves	2.1.7.1	Insulated leads
2.1.5.1.4.1	Metal clamping screw joints for plastic pipes	2.1.5.4.1.2	Flaps	2.1.5.4.11.2	Control drives for radiator thermostats	2.1.7.2	Cables
2.1.5.1.4.2	Quick-release couplings and screw joins	2.1.5.4.1.3	Valves	2.1.5.4.11.3	Zone valves	2.1.7.3	Wires
2.1.5.2	Sanitary fittings	2.1.5.4.1.4	Taps	2.1.5.4.11.4	Radiator manual control valves	2.1.7.4	Power rails
2.1.5.2.1	Mixer fittings	2.1.5.4.2	Non-ferrous metal shut-off fittings	2.1.5.4.11.5	Special valve versions e.g. for one-pipe heating etc.	2.1.7.5	Fibre-optic light guides
2.1.5.2.1.1	Dual-grip mixer fittings	2.1.5.4.2.1	Slides	2.1.5.4.12	Other radiator fittings	2.1.8	<u>Connecting material, small parts, accessories</u>
2.1.5.2.1.2	Single-grip mixer fittings	2.1.5.4.2.2	Flaps	2.1.5.4.12.1	Radiator screw joints	2.1.8.1	Clamps
2.1.5.2.1.3	Thermostatically controlled fittings	2.1.5.4.2.3	Valves	2.1.5.4.12.2	Radiator vents	2.1.8.2	Cable sleeves, cable accessories
2.1.5.2.1.4	Contactless controlled fittings	2.1.5.4.2.4	Taps	2.1.5.4.13	Heating loop distributors	2.1.8.3	Bushes
2.1.5.2.1.5	Safety mixer fittings	2.1.5.4.3	Backflow preventers	2.1.5.4.13.1	Distributors for under-floor heating, one and two tube systems	2.1.8.4	Compression connectors
2.1.5.2.1.6	Hairdresser fittings	2.1.5.4.3.1	Flap valves	2.1.5.4.13.2	Boiler distributors/collectors	2.1.8.5	Insulating material
2.1.5.2.1.7	Doctor's and hospital fittings	2.1.5.4.3.2	Check valves	2.1.5.4.13.3	Hydraulic switches	2.1.8.6	Cable relief
2.1.5.2.1.8	Series and circular wash-basin installation fittings	2.1.5.4.3.3	Gravity brakes	2.1.5.4.14	Oil burning system fittings	2.1.8.7	Fixing and mounting material
2.1.5.2.1.9	Shower fittings combinations	2.1.5.4.4	Arrester, separator, drain fittings	2.1.5.4.14.1	Shut-off, connecting and distribution fittings for fuel oil central heating incl. oil storage container	2.1.8.8	Fork terminals
2.1.5.2.2	Shut-off and run-off fittings	2.1.5.4.4.1	Boiler filling and emptying taps	2.1.5.4.14.2	Shut-off and connecting fittings for central fuel oil supply	2.1.8.9	Fixing material
2.1.5.2.2.1	Flush-type shut-off valves and gates with sanitary upper part	2.1.5.4.4.2	Quick exhausters, air separators	2.1.5.4.14.3	Fuel oil pressure reducer	2.1.8.9.1	Dowels
2.1.5.2.2.2	Pre-shut-off valves	2.1.5.4.4.3	Condensate separators	2.1.5.4.14.4	Fuel oil filter	2.1.8.9.2	Pipe tape
2.1.5.2.2.3	Corner valves, sanitary versions	2.1.5.4.4.4	Separators for solid, liquid and gaseous substances	2.1.5.4.14.5	Run-off fittings for fuel oil barrels	2.1.8.9.3	Mounting rails
2.1.5.2.2.4	Shut-off and run-off fittings for pressure-tight hot water heaters (pressure type)	2.1.5.4.4.5	Testing equipment	2.1.5.4.14.6	Oil taps that can be lubricated	2.1.8.9.4	Fixing systems
2.1.5.2.2.5	Shut-off and run-off fittings for open hot water heaters (low-pressure type)	2.1.5.4.5	Monitoring fittings	2.1.5.4.14.7	Oil ball valves (cannot be lubricated)	2.1.8.9.5	Pipe hooks
2.1.5.2.2.6	Run-off valves	2.1.5.4.5.1	Acoustic monitoring fittings	2.1.5.4.14.8	Solenoid valves/control valves for oil	2.1.8.9.6	Pipe clamps
2.1.5.2.2.7	Appliance connecting fittings	2.1.5.4.5.2	Sight glasses	2.1.5.4.14.9	Oil distributors	2.1.8.9.7	Screws and rivets
2.1.5.2.2.8	Self-closing fittings (also for appliances)	2.1.5.4.5.3	Flow monitors	2.1.5.5	Gas fittings	2.1.9	<u>Electrical installation systems</u>
2.1.5.2.2.9	Distributor fittings	2.1.5.4.5.4	Water-level indicators	2.1.5.5.1	Gas fittings for household installations	2.1.9.1	Channel systems
2.1.5.2.2.10	Distributors for cold/hot water and circulation	2.1.5.4.5.5	Flush-type and shut-off devices, status display and measuring instruments	2.1.5.5.2	Ball valves (cannot be lubricated)	2.1.9.2	Cable channels, cable-ways, cable racks, troughs
2.1.5.2.2.11	Electronic fittings	2.1.5.4.6	Regulating fittings	2.1.5.5.3	Solenoid valves/control valves	2.1.9.3	Pipes, tubes
2.1.5.2.3	Drain and overflow fittings	2.1.5.4.6.1	Pressure regulators	2.1.5.5.4	Taps (can be lubricated)	2.1.9.4	Under-floor installation systems
2.1.5.2.3.1	Drain valves	2.1.5.4.6.2	Temperature controllers			2.1.9.5	Vertically installed post systems
2.1.5.2.3.2	Drain and overflow fitting incl. odour traps	2.1.5.4.6.3	Level controllers			2.1.9.6	Flush-type units for installation systems
		2.1.5.4.6.4	Diaphragm and piston steered regulating fittings			2.1.9.7	Connectors, branches, switches, sockets and boxes
		2.1.5.4.7	Mixer fittings			2.1.9.8	Leads/cable, bushings, bulkheads
		2.1.5.4.7.1	Heater mixers				
		2.1.5.4.7.2	Straight-way, multi-way valves				
		2.1.5.4.7.3	Drinking water mixers				



2.1.9.9	Adhesives technology	2.2.1.2	Whirlpools	2.3	Kitchen, domestic rooms	3.1.1.1.1	Cast-iron or steel boilers
2.1.9.10	Identification and labelling materials	2.2.1.3	Bath supports	2.3.1	<u>Sanitary equipment</u>	3.1.1.1.2	Boilers made of other materials
2.1.10	<u>Fire technology</u>	2.2.1.4	Bath inserts	2.3.1.1	Extended and flush-type kitchens, kitchen furniture	3.1.1.1.3	Boiler-burner units
2.1.10.1	Coatings	2.2.1.5	Washstands, hand-basins, washbasins (bidets)	2.3.1.2	Washing-up tables and sinks, kitchen sinks	3.1.1.2	Condensing equipment
2.1.10.2	Coverings	2.2.1.6	Washing, series washing installations, washing rows, washing wells	2.3.1.3	Washing-up table under-part	3.1.1.2.1	Condensing equipment with gas, with or without hot water preparation
2.1.10.3	Fire walls	2.2.1.7	Shower cabinets, facilities, systems	2.3.1.4	Washing-up table accessories	3.1.1.2.2	Condensing boiler for gas
2.1.10.4	Fire doors	2.2.1.8	Shower-W.C.	2.3.1.5	Kitchen ventilation and venting equipment	3.1.1.2.3	Condensing boiler for oil
2.1.11	<u>Energy distribution</u>	2.2.1.9	Drinking fountains	2.3.1.5.1	Fume hoods for large commercial kitchens	3.1.1.3	Gas special boilers
2.1.11.1	Service boxes	2.2.1.10	Flushing systems, cisterns, pressure flushing	2.3.1.6	Washing and drying equipment	3.1.1.3.1	Gas special boilers with/without drinking water heating
2.1.11.2	Meter cabinets, boards	2.2.1.11	W.C. and urinal accessories	2.3.2	<u>Electrical equipment</u>	3.1.1.4	Gas circulating water heaters/combined gas water heaters
2.1.11.3	Distribution cabinets, small-scale distributors	2.2.1.11.1	Flush pipes	2.3.2.1	Electric ovens	3.1.1.4.1	Gas wall heaters, combined water heaters
2.1.11.4	Building current, mobile distributors	2.2.1.11.2	W.C. and urinal supports	2.3.2.2	Refrigerators	3.1.1.5	Solid fuel boilers
2.1.11.5	Switch cabinets	2.2.1.11.3	W.C., connector and screw connections	2.3.2.3	Freezing cabinets	3.1.1.5.1	Solid fuel boilers
2.1.11.6	Mains stations	2.2.1.11.4	W.C. seats and lids	2.3.2.4	Dish washing machines	3.1.1.5.2	Reversing and alternating fired boiler/two chamber boilers
2.1.11.7	Low-voltage switching installations	2.2.1.11.5	W.C. and W.C. seat fixing	2.3.2.5	Washing machines	3.1.1.6	Drinking water heaters (storage)
2.1.11.8	Medium-high voltage switching installations	2.2.1.11.6	W.C. ventilation installations	2.3.2.6	Washing driers	3.1.1.6.1	Directly heated gas drinking water storage
2.1.12	<u>Switching devices, protectors, plugs and sockets</u>	2.2.1.11.7	W.C. cleaning agents	2.3.2.7	Ironing appliances	3.1.1.6.2	Directly heated electrical drinking water storage
2.1.12.1	Installation switches	2.2.1.11.8	W.C. conveying systems	2.3.2.8	Other electrical equipment for kitchens and domestic applications	3.1.1.6.3	Directly heated oil drinking water storage
2.1.12.2	Current impulse switches	2.2.1.11.9	Sound insulating systems against structure-borne noise	2.4	Barrier-free and elderly accessible	3.1.1.6.4	Indirectly heated drinking water storage, internally and externally heated
2.1.12.3	Time switches	2.2.1.12	Outfitting objects for bathroom and W.C.	2.4.1	<u>Safety equipment</u>	3.1.1.6.5	Directly heated gas condensers for hot water
2.1.12.4	Push buttons	2.2.1.12.1	Bathroom furniture, mirrored bathroom cabinets, mirrors	2.4.2	Bath and shower aids	3.1.1.7	Drinking water heaters (instant)
2.1.12.5	Contactors, relays (also explosion-proof)	2.2.1.12.2	Sliding and folding doors, sidewalls, shower curtains	2.4.3	<u>Toilet aids</u>	3.1.1.7.1	Gas instant water heaters
2.1.12.6	Power switches	2.2.1.12.3	Bathroom and shower grids, seats, footrests, stools for bathroom showers	2.4.4	<u>Wash basin systems & accessories</u>	3.1.1.7.2	Electrical instant water heaters
2.1.12.7	Main switches	2.2.1.12.4	Textile accessories, bath inserts, mats and rugs	2.4.5	<u>Electrical emergency systems</u>	3.1.1.8	Drinking water heat pumps
2.1.12.8	On-load switches	2.2.1.12.5	Towels, bath towels, tooth mugs and toilet paper holders, bathroom hooks, shelves, bath grips	2.4.6	<u>Electrical monitoring systems for stoves/gas</u>	3.1.1.9	Heat exchangers
2.1.12.9	Separating devices	2.2.1.12.6	Soap and towel dispensers, hair and hand driers	2.4.7	<u>Lighting systems</u>	3.1.1.9.1	Heat exchangers for steam
2.1.12.10	Mains shunt switches	2.2.1.12.7	Bath aprons (also heated)	2.4.8	<u>Opening/access systems</u>	3.1.1.9.2	Heat exchangers for warm and hot water
2.1.12.11	Emergency-off switches	2.2.2	<u>Electrical equipment</u>	2.5	Wellness	3.1.1.9.3	Exhaust gas heat exchangers
2.1.12.12	Protective switches for motors	2.2.2.1	Special design-oriented switching devices, plug installations	2.5.1	<u>Swimming pools</u>	3.1.1.9.4	Degassers
2.1.12.13	Limit switches	2.2.2.1.1	Installation switches	2.5.1.1	Swimming baths	3.1.1.9.5	Pressure hold equipment
2.1.12.14	Fuses	2.2.2.1.2	Radio switches	2.5.1.2	Swimming pool water filters	3.1.1.10	Hot water preparation
2.1.12.15	Line circuit protectors	2.2.2.1.3	Sockets	2.5.1.3	Swimming pool water heating systems	3.1.1.10.1	Hot water storage
2.1.12.16	Fault current protectors	2.2.2.1.4	Combinations	2.5.1.4	Swimming pool pumps	3.1.1.10.2	Instant water heaters
2.1.12.17	Insulation monitoring systems	2.2.2.2	Special protective devices	2.5.1.5	Swimming pool water disinfection systems	3.1.2	<u>Oil burners and accessories</u>
2.1.12.18	Plugs	2.2.2.2.1	Emergency-off switches	2.5.1.6	Swimming pool water disinfectants	3.1.2.1	Oil burners
2.1.12.19	Couplings	2.2.2.2.2	Fault current protective switches	2.5.1.7	Swimming pool accessories	3.1.2.2	Injection atomising burners (air/steam atomising burner)
2.1.12.20	Sockets	2.2.2.3	Special design-oriented lamps	2.5.1.8	Whirlpools	3.1.2.3	Pressure atomising burners
2.1.12.21	Combinations	2.2.2.3.1	Key lights	2.5.2	<u>Sauna, solarium, fitness</u>	3.1.2.4	Rotating atomising burners (combined burners)
2.1.12.22	Radio switches	2.2.2.3.2	Low-voltage lighting systems	2.5.2.1	Sauna cabins and houses	3.1.2.5	Vaporising burners for oil boilers
2.1.12.23	Dimmer switches	2.2.2.3.3	Light controls	2.5.2.2	Sauna ovens	3.1.2.6	Oil boiler accessories
2.1.13	<u>Earthing, potential balance</u>	2.2.2.4	Special audio-systems for bathrooms	2.5.2.3	Sauna accessories	3.1.3	<u>Gas burners and accessories</u>
2.1.13.1	Earthing material			2.5.2.4	Solarium	3.1.3.1	Gas burners
2.1.13.2	Materials for potential balance			2.5.2.5	Steam baths	3.1.3.2	Gas burners with fan
2.1.14	<u>Interior lightning protection, over-voltage protection</u>			2.5.2.6	Light therapy installations	3.1.3.3	Gas burners without fan (atmospheric)
2.1.14.1	Interior lightning protection						
2.1.14.2	Network limiters						
2.1.14.3	Equipment protection						
2.1.14.4	Screening						
2.1.14.5	Material and equipment against electrostatic charging						
2.2	Showers, baths, W.C.						
2.2.1	<u>Sanitary equipment for bathrooms, washrooms, W.C.</u>						
2.2.1.1	Baths and shower trays						
				3. Heating technology			
				3.1	Heat generator(s), heat distribution, heat emission, components		
				3.1.1	<u>Boilers, drinking water heaters and accessories</u>		
				3.1.1.1	Oil/gas boilers for forced draught burners with and without hot water preparation		



3.1.3.4	Two-fuel burners (gas/oil)	3.1.6.6	Oil catch basins	3.1.8.5.4	Tepidarium	3.2.1.7	Direct ceiling heating
3.1.3.5	Gas infrared emitters	3.1.6.7	Oil tank covers and ducts	3.1.8.6	Accessories for tiled stove construction	3.2.2	<u>Other heaters</u>
3.1.3.6	Gas burner accessories	3.1.6.8	Tank content displays	3.1.8.6.1	Post-heating areas of cast-iron/steel plate, bends, double bends	3.2.2.1	Open air space heating
3.1.4	<u>Radiators, radiant panel heating systems and accessories</u>	3.1.6.9	Tank interior protection (incl. appropriate service)	3.1.8.6.2	Exhaust gas piping and accessories	3.2.2.2	Pipe accompanying heating
3.1.4.1	Aluminium radiators	3.1.6.10	Tank testing instruments	3.1.8.6.3	Pipe connections for ceramic flues	3.2.2.3	Roof gutter heating
3.1.4.1.1	Cast-iron radiators	3.1.6.11	Overfilling safeguards	3.1.8.6.4	Cleaning openings, capsules	3.2.3	<u>Electric heating elements</u>
3.1.4.1.2	Steel radiators	3.1.6.12	Tank cleaning	3.1.8.6.5	Supporting materials for heating chambers (insulation and metal sheets)	3.2.3.1	Heating pads
3.1.4.2	Convectors and baseboard heaters	3.1.6.12.1	Tank cleaning agents	3.1.8.6.6	Pre-doors, pipe doors, heating pipes, air grids	3.2.3.2	Heating loops
3.1.4.3	Panel heaters, radiant panel heaters, towel driers	3.1.6.12.2	Tank cleaning installations	3.1.8.6.7	Tiled stove doors (fire gates for basic tiled stoves)	3.2.3.3	Immersion tube heaters, heating inserts
3.1.4.3.1	Flat radiators	3.1.7	<u>Corrosion protection, scaling protection</u>	3.1.9	<u>Combined heat and power plants</u>	3.3	Hybrid heating systems
3.1.4.3.2	Heated towel rails	3.1.7.1	Corrosion protection installations	3.1.9.1	Combined heat and power plants, CHP modules	3.3.1	Heat pump with gas/oil condensing boiler
3.1.4.3.3	Panel radiator	3.1.7.1.1	Cathodic corrosion protection	3.1.9.1.1	Combined heat and power plants, CHP modules	3.3.2	Gas/oil condensing devices with thermal solar system and/or solid biomass (single-unit heat-producing appliance with water vessel)
3.1.4.3.4	Accessories for panel and flat radiators	3.1.7.1.2	Chemical corrosion protection	3.1.9.1.2	Combined heat and power plants, CHP modules	3.3.3	Domestic co-generation with thermal solar system and/or solid biomass (incl. fuel cell)
3.1.4.4	Ribbed tube radiators	3.1.7.2	Scaling protection, anti-scaling and de-scaling agents, de-scaling installations	3.1.9.1.3	Utility supplied heating compact installations	3.3.4	Gas heat pump with/without thermal solar system
3.1.4.5	Tubular radiators	3.1.8	<u>Tiled stoves – open fireplaces</u>	3.1.10	<u>Near and utility supplied heating technology</u>	3.3.5	Fuel cell
3.1.4.6	Bathroom radiators	3.1.8.1	Heating inserts for tiled stoves	3.1.10.1	Remote and local supplied heating combined generation systems	3.3.6	Domestic co-generation (mini, micro, large)
3.1.4.7	Radiator mounts	3.1.8.1.1	Heating inserts for oil	3.1.10.1.1	Small combined heat and power plants (gas, steam)		
3.1.4.8	Radiator casings	3.1.8.1.2	Heating inserts for gas	3.1.10.1.2	Large combustion plant technology		
3.1.4.8.1	Rolling grids, convector ducts	3.1.8.1.3	Heating inserts for solid fuel	3.1.10.1.3	Combined heat and power plants (CHP)		
3.1.4.8.2	Plinths for covering radiator pipes	3.1.8.1.4	Heating inserts with water heat exchanger	3.1.10.1.4	Heat storage tanks		
3.1.4.8.3	Radiator linking systems	3.1.8.1.5	Electric heaters	3.1.10.1.5	Pressure-hold systems		
3.1.4.9	Radiant panel heaters	3.1.8.1.6	Hot air tiled stoves	3.1.10.1.6	Automating systems		
3.1.4.9.1	Ceiling-mounted radiant heating	3.1.8.1.7	Basic tiled stoves	3.1.10.1.7	Energy management systems		
3.1.4.9.2	Floor heating systems	3.1.8.2	Chimney inserts, chimney cassettes, stoves with chimney	3.1.10.1.8	Building connecting and invoicing technology		
3.1.4.9.3	Wall-mounted heating systems	3.1.8.2.1	Chimney inserts with and without various doors	3.1.10.1.9	Transfer stations		
3.1.5	<u>Other heaters</u>	3.1.8.2.2	Cast-iron/steel plate prefabricated furnaces	3.1.10.1.10	Automation technology		
3.1.5.1	Gas-fired heaters	3.1.8.2.3	Fire-brick prefabricated furnaces	3.1.10.1.11	Energy registration and invoicing systems		
3.1.5.1.1	Gas-fuel firing automatons, gas radiators (with exhaust gas connector)	3.1.8.2.4	Chimney cassettes	3.1.10.1.12	Energy advice, delivery, invoicing		
3.1.5.1.2	Gas radiators	3.1.8.2.5	Smoke collectors	3.1.10.2	Utility supplied heat transfer stations		
3.1.5.1.3	Gas infra-red radiators	3.1.8.2.6	Stoves with chimney	3.1.10.2.1	Utility supplied heat house stations		
3.1.5.1.4	Heaters without vent	3.1.8.3	Ovens, stoves	3.1.10.2.2	Mobile heating unit		
3.1.5.1.5	Outside wall heaters	3.1.8.3.1	Heating stoves				
3.1.5.1.6	Garage heating automatons	3.1.8.3.2	Stoves for fuel oil, natural gas, liquid gas, solid fuels	3.2	Heating engineering, electrical systems		
3.1.5.1.7	Caravan heating	3.1.8.3.3	Tiled stoves	3.2.1	<u>Electric heaters</u>		
3.1.5.2	Antifreeze equipment	3.1.8.3.4	Continuous fire ovens for solid fuels	3.2.1.1	Electric radiators		
3.1.5.3	Systems for heat recovery	3.1.8.3.5	Oil ovens	3.2.1.2	Electric irradiators and electric infra-red irradiators		
3.1.6	<u>Containers, oil tanks and accessories</u>	3.1.8.3.6	Tiled ovens	3.2.1.3	Electric storage heaters		
3.1.6.1	Expansion tanks	3.1.8.4	Component sets for tiled ovens and open fireplaces ...	3.2.1.4	Electric convectors		
3.1.6.2	Domestic water heaters	3.1.8.4.1	... using solid fuels	3.2.1.5	Direct heaters		
3.1.6.3	Pressure tanks	3.1.8.4.2	... using gaseous fuels	3.2.1.6	Floor storage, direct floor heating		
3.1.6.3.1	Storage tanks	3.1.8.4.3	Finished tiled stoves				
3.1.6.4	Fuel oil storage tanks and accessories	3.1.8.4.4	Basic stove component sets				
3.1.6.4.1	Cylindrical above and below ground storage tanks	3.1.8.4.5	Finished fireplaces				
3.1.6.4.2	Battery containers and spherical tanks	3.1.8.4.6	Complete fireplaces				
3.1.6.4.3	Cellar welded tanks	3.1.8.4.7	Fireplace cassettes				
3.1.6.4.4	Wall elements for cellar welded tanks	3.1.8.5	Stove tiles				
3.1.6.4.5	Plastic fuel oil storage tanks	3.1.8.5.1	Stove tiles				
3.1.6.4.6	Fuel oil piping and accessories	3.1.8.5.2	Tiled stoves				
3.1.6.4.7	Safety pipes for oil	3.1.8.5.3	Ceramics for radiating areas				
3.1.6.5	Leak displays and alarm systems, leak-proofing equipment						

4. Renewable energy

4.1	<u>Biogas plants</u>
4.2	<u>Fuel cell technology</u>
4.3	<u>Flat collectors</u>
4.4	<u>Wood chip boilers</u>
4.5	<u>Wood gasification boilers</u>
4.6	<u>Refrigerants</u>
4.7	<u>Refrigerating compressors/compressors</u>
4.8	<u>Collectors (thermal), solar collectors and absorbers</u>
4.9	<u>Combined storage</u>
4.10	<u>Complete systems (thermal)</u>
4.11	<u>CHP from biomass</u>
4.12	<u>I & C technology for solar installations</u>
4.13	<u>Wood piece pellets combi-boiler</u>
4.14	<u>Pellet feed machines (screw-drive, suction systems)</u>
4.15	<u>Pellet boilers</u>
4.16	<u>Pellet storage (tanks, silos)</u>
4.17	<u>Pellet ovens</u>
4.18	<u>Pellet ovens with water cup</u>
4.19	<u>Storage tanks</u>
4.20	<u>Photovoltaic systems</u>
4.20.1	Photovoltaic solar cells and modules
4.20.1.1	Solar cells
4.20.1.2	Modules
4.20.1.3	Thin-film technology
4.20.2	Photovoltaic system technology
4.20.2.1	Inverters
4.20.2.2	Measurement and control technologies
4.20.2.3	Charging devices and rechargeable batteries
4.20.3	Photovoltaic parts, tracking systems, installation systems



4.20.3.1	Cables, connectors and junction boxes	5.2.7	<u>Explosion-proof lighting fittings</u>	6.1.1.2	Air humidifying and de-humidifying equipment	6.2.1.2	Refrigerated water sets
4.20.3.2	Tracking systems	5.2.8	<u>Workplace lighting fittings</u>	6.1.1.3	Air degermination equipment	6.2.1.3	Refrigerating plants and accessories
4.20.3.3	Installation systems	5.2.9	<u>Key lighting fittings</u>	6.1.1.4	Air heating equipment	6.2.1.4	Refrigerants
4.20.3.4	Installation aids	5.2.10	<u>Outdoor lighting fittings</u>	6.1.1.5	Fan convectors for heating	6.2.1.5	Cooling ceilings
4.20.4	Photovoltaic applications	5.2.11	<u>Technical indoor lighting fittings for industry and trade</u>	6.1.1.6	Air heaters	6.2.1.6	Power/heat/cold coupling
4.20.4.1	Power stations	5.2.12	<u>Technical indoor lighting fittings for special applications</u>	6.1.1.7	Hot air generators for liquid fuels	6.2.1.7	Cooling towers
4.20.4.2	Energy storage	5.2.13	<u>Domestic space and representative lighting fittings</u>	6.1.1.8	Hot air generators for gaseous fuels	6.2.1.8	Compressor drive motors
4.20.4.3	Off-grid systems	5.2.14	<u>Accessories for electrical lighting fittings</u>	6.1.1.9	Room air conditioners Class 1 (consisting of fan and installations for warming and moistening the air)	6.2.1.9	Refrigeration fittings
4.20.4.4	Building-integrated photovoltaic (BIPV)	5.2.15	<u>Illumination systems, accessories</u>	6.1.1.9.1	Room air conditioners Class 1 for warming (moistening) indrawn air	6.2.1.9.1	Fittings for commercial refrigeration
4.20.4.5	Solar-powered household devices (solar lamps, solar toys)	5.2.16	<u>Low-voltage illumination systems</u>	6.1.1.10	Room air conditioners Class 2 (consisting of fan and installation for cooling (de-humidifying) indrawn air)	6.2.1.9.2	Fittings for cryogenic technology
4.21	<u>Wood piece boilers</u>	5.2.17	<u>LED</u>	6.1.1.10.1	Room air conditioners Class 2 (with and without integrated cooling or evaporating units)	6.2.1.9.3	Cold furniture fittings
4.22	<u>Solar roofs</u>	5.2.17.1	LED lighting	6.1.1.10.2	Room air conditioners Class 2 with integrated climate chilling unit	6.3	Ventilation engineering
4.23	<u>Solar cooling</u>	5.2.17.2	LED modules	6.1.1.10.3	Fan convectors for cooling	6.3.1	<u>Components for technical room air duct systems</u>
4.24	<u>Solar storage</u>	5.2.17.3	OLED	6.1.1.11	Room air conditioners Class 3 with and without climate chilling unit (consisting of fan and facilities for warming and cooling (de-humidifying) indrawn air)	6.3.1.1	Air technology ducts, pipes, air channels and adaptors
4.25	<u>Drinking water solar storage</u>	5.2.17.4	LED converters	6.1.1.11.1	Room air conditioners Class 3 with and without chilling unit or evaporating unit	6.3.1.1.1	Holding materials
4.26	<u>Vacuum collectors</u>	5.2.17.5	LED bulb holders	6.1.1.11.2	Climate convectors with and without integrated climate chilling unit	6.3.1.1.2	Sealing materials for air technology ducts
4.27	<u>Heat recovery/exhaust gas heat exchangers</u>	5.2.17.6	Interior LED lighting	6.1.1.12	Room air conditioners Class 4 (consisting of fan and facilities for warming, cooling (de-humidifying and moistening indrawn air)	6.3.1.1.3	Air distribution ducts in safety rooms
4.28	<u>Heat exchangers (condensers, evaporators)</u>	5.2.17.7	Outdoor LED lighting	6.1.1.12.1	Room air conditioners Class 4 with and without integrated chilling or evaporating unit	6.3.1.2	Air passages, air inlets, air outlets
4.29	<u>Heat transfer media</u>	5.2.17.8	LED advertising signs	6.1.2	<u>Room ventilation</u>	6.3.1.3	Induction equipment
4.30	<u>Wind energy technology and accessories</u>	5.3	Operational apparatus	6.1.2.1	Systems	6.3.1.4	Ventilation flaps
4.31	<u>HP air-air</u>	5.3.1	<u>Ballast for fluorescent lamps</u>	6.1.2.2	Warm air generators (gas, oil, electricity)	6.3.1.5	Fire protection flaps
4.32	<u>HP air-water</u>	5.3.2	<u>Electronic ballast for fluorescent lamps</u>	6.1.2.3	Components	6.3.1.6	Mixing boxes, expansion boxes
4.33	<u>HP brine-water</u>	5.3.3	<u>Ballast for other gas discharge lamps</u>	6.1.2.3.1	Central units	6.3.1.7	Sound deadeners
4.34	<u>HP water-water</u>	5.3.4	<u>Transformers for halogen lamps</u>	6.1.2.3.2	Decentral units	6.3.2	<u>Components for room air technology equipment or plants</u>
4.35	<u>Downhole heat exchangers</u>	5.3.5	<u>Sockets for electronic lamps and lighting fittings</u>	6.1.2.3.3	Heat recovery	6.3.2.1	Fans
4.36	<u>Brine circuit manifolds</u>	5.3.6	<u>Holding systems for lighting fittings</u>	6.1.2.3.4	Heat pumps	6.3.2.1.1	Axial fans
4.37	<u>Distributor shafts</u>	5.3.7	<u>Installation material for lighting fittings</u>	6.1.2.3.5	Air filters	6.3.2.1.2	Radial fans
4.38	<u>Accessories for shallow ground geothermal systems</u>	5.3.8	<u>Lighting control equipment</u>	6.1.2.3.6	Fans	6.3.2.1.3	Cross flow fans
4.39	<u>Accessories for solar technology</u>	5.3.9	<u>Other accessories for lighting fittings</u>	6.1.2.3.7	Sound deadeners	6.3.2.1.4	Fan wheels, fan blades
4.40	<u>Accessories for heat pump technology</u>	5.4	Illuminated advertising installations	6.1.2.3.8	Air ducts and accessories	6.3.2.1.5	Plastic fans
4.41	<u>Accessories for pellet heating</u>	5.4.1	<u>Illuminated transparencies</u>	6.1.2.3.9	Air passages	6.3.2.1.6	Roof fans
4.42	<u>Accessories for wood, wood-gas and solid-fuel boilers</u>	5.4.2	<u>Illuminated transparency systems</u>	6.1.2.3.10	Room air conditioners	6.3.2.1.7	Wall ring fans
4.43	<u>Pipe systems</u>	5.4.3	<u>Neon tubes</u>	6.1.3	<u>Used air ceilings for moist and grease-laden workrooms</u>	6.3.2.1.8	Fire gas fans
4.43.1	Flexible pipes	5.4.4	<u>Lamps and illuminants</u>	6.2	Refrigerating engineering	6.3.2.2	Air treatment facilities
4.43.2	Metallic pipes	5.5	Lighting control, lighting management	6.2.1	Refrigerating installations and accessories	6.3.2.2.1	Heat exchangers
4.43.3	Multilayer pipes	5.5.1	<u>Light and colour measuring instruments</u>	6.2.1.1	Refrigerating compressors	6.3.2.2.1.1	Air heaters, air coolers
5.5. Lighting technology			5.5.2	<u>Lighting control installations</u>		6.3.2.2.2	Components for heat recovery (recuperative, regenerative)
5.1	Lamps	5.5.3	<u>Service performances, contracting</u>	6. Air conditioning, refrigeration, ventilation			
5.1.1	<u>Lamps</u>						
5.1.1.1	Incandescent lamps	6.1	Air-conditioning technology				
5.1.1.2	Gas discharge lamps	6.1.1	<u>Room air, technical installations and equipment</u>				
5.1.1.3	Starters for gas discharge lamps	6.1.1.1	Central systems for indrawn and exhaust air				
5.2	Lighting fittings						
5.2.1	<u>Technical lighting fittings</u>						
5.2.2	<u>Lighting fixtures with higher protection class</u>						
5.2.3	<u>Light emitters</u>						
5.2.4	<u>Emergency/safety illumination</u>						
5.2.5	<u>Battery supported safety illumination</u>						
5.2.6	<u>Portable special lighting fittings</u>						



- 6.3.3.6.1 Exhaust arms, point exhausts
- 6.3.3.6.2 Workplace exhausts
- 6.3.3.7 Central vacuum cleaners, central vacuum cleaning plants
- 6.3.3.8 Systems for domestic space ventilation with heat recovery
- 6.3.4 Natural ventilation
- 6.3.4.1 Mechatronic products for natural ventilation

7. Pumps and drive-technology

7.1 Electric motors and controls

- 7.1.1 Direct current motors
- 7.1.2 Three-phase a.c. motors
- 7.1.3 Servo and stepper motors
- 7.1.4 Control motors
- 7.1.5 Linear motors
- 7.1.6 Motor controls
- 7.1.7 Shutter controls

7.2 Mechanical drive elements

- 7.2.1 Rack-and-pinion drives
- 7.2.2 Chain drives
- 7.2.3 Motors for locks
- 7.2.4 Motors for blinds
- 7.2.5 Motors for windows
- 7.2.6 Motors for doors
- 7.2.7 Electromechanical driving elements
- 7.2.8 Motors for shutters

7.3 Pumps

- 7.3.1 Mechanically driven pumps
- 7.3.1.1 Wastewater pumps
- 7.3.1.2 Thick-stock and faeces pumps
- 7.3.1.3 Booster pumps
- 7.3.1.4 Drum pumps
- 7.3.1.5 Garden pumps
- 7.3.1.6 Household water supply pumps
- 7.3.1.7 Wastewater lifting plants
- 7.3.1.8 Cellar drainage pumps
- 7.3.1.9 Boiler feed-water pumps
- 7.3.1.10 Piston pumps
- 7.3.1.11 Condensate pumps
- 7.3.1.12 Impeller pumps, also self-priming
- 7.3.1.13 Diaphragm pumps
- 7.3.1.14 Oil burner pumps
- 7.3.1.15 Oil pumps
- 7.3.1.16 Rotating displacement pumps
- 7.3.1.17 Fountain pumps
- 7.3.1.18 Sewage pumps
- 7.3.1.19 Stator pumps
- 7.3.1.20 Submersible motor pumps
- 7.3.1.21 Drainage pumps
- 7.3.1.22 High-pressure cleaning pumps
- 7.3.1.23 Submersible pumps, swimming pool pumps
- 7.3.2 Circulation pumps
- 7.3.2.1 Hot water circulation pumps

- 7.3.2.2 Service water circulation pumps
- 7.3.2.3 Circulation pumps
- 7.3.2.4 Solar circulation pumps
- 7.3.2.5 Circulation pumps for air conditioning
- 7.3.3 Hand pumps
- 7.3.4 Special pumps
- 7.3.4.1 Metering pumps
- 7.3.4.2 Pressure test pumps
- 7.3.4.3 Scale removal pumps
- 7.3.4.4 Acid pumps
- 7.3.4.5 Water jet pumps
- 7.3.4.6 Pumps with cutting system
- 7.3.4.7 Pump installations (also with containers)
- 7.3.4.8 Pump stations
- 7.3.5 Accessories for pumps
- 7.3.5.1 Switchover installations
- 7.3.5.2 Pump controls
- 7.3.5.3 Other pump accessories

8. Plumbing engineering

8.1 Metal roof and façade casings ...

- 8.1.1 ... in tin-smith technology
- 8.1.2 ... in system technology
- 8.1.3 Shingle technology

8.2 Metal intermediate products

- 8.2.1 Aluminium
- 8.2.1.1 Aluminium strips
- 8.2.1.2 Aluminium sheets
- 8.2.1.3 Aluminium tubes
- 8.2.1.4 Aluminium rods
- 8.2.2 Lead
- 8.2.2.1 Lead strips
- 8.2.2.2 Lead sheets
- 8.2.3 Copper
- 8.2.3.1 Copper strips
- 8.2.3.2 Copper sheets
- 8.2.3.3 Copper rods
- 8.2.3.4 Copper tubes
- 8.2.4 Brass
- 8.2.4.1 Brass strips
- 8.2.4.2 Brass sheets
- 8.2.4.3 Brass rods
- 8.2.4.4 Brass tubes
- 8.2.5 Zinc
- 8.2.5.1 Zinc strips
- 8.2.5.2 Zinc sheets
- 8.2.6 Galvanised steel
- 8.2.6.1 Galvanised steel strips
- 8.2.6.2 Galvanised steel sheets
- 8.2.6.3 Galvanised steel rods
- 8.2.6.4 Special grids and sheets
- 8.2.7 Stainless steel
- 8.2.7.1 Stainless steel strips
- 8.2.7.2 Stainless steel sheets
- 8.2.8 Professional lengths/ metal boards
- 8.2.9 Plastic roof lengths
- 8.2.9.1 Roof length systems made of PVC

- 8.2.9.2 Roof length systems made of EPDM

8.3 Roof gutters, stack pipes and accessories

- 8.3.1 Roof gutters and stack pipes
- 8.3.1.1 Fibre cement
- 8.3.1.2 Plastic
- 8.3.1.3 Copper
- 8.3.1.4 Galvanised steel plate
- 8.3.1.5 Zinc plate
- 8.3.1.6 Galvanised steel plate, plastic coated
- 8.3.1.7 Stainless steel
- 8.3.1.8 Aluminium
- 8.3.1.9 Standpipes of galvanised steel
- 8.3.1.10 Standpipes of copper
- 8.3.2 Flat roof drainage
- 8.3.2.1 Pressure roof drainage systems
- 8.3.3 Accessories
- 8.3.3.1 Lightning protection accessories
- 8.3.3.2 Roof windows
- 8.3.3.3 Roof gutter heating
- 8.3.3.4 Exhaust pipe hoods
- 8.3.3.5 Gutter holdings and guttering accessories
- 8.3.3.6 Snow catchers
- 8.3.3.7 Expansion compensating bodies for flat roofs and roof guttering
- 8.3.3.8 Wall installation profiles
- 8.4 **Metal working machines/ plumbing tools**
- 8.4.1 Edging machines
- 8.4.2 Flanging presses
- 8.4.3 Turn-up machines
- 8.4.4 Structural shape machines
- 8.4.5 Sheet metal rollers
- 8.4.6 Beading machines
- 8.4.7 Stamping and cutting machines
- 8.4.8 Guillotine shears and band shears
- 8.4.9 Other machines
- 8.5 **Heat and sound insulation**
- 8.5.1 Heat insulation
- 8.5.2 Sound insulation
- 8.6 **External lightning protection**
- 8.6.1 Profiles
- 8.6.2 Accessories

9. Tools and factory equipment

9.1 Measuring and testing instruments and systems

- 9.1.1 Test instruments and installations for: ...
- 9.1.1.1 ... Calorific value, flash point
- 9.1.1.2 ... Leak display and warning, leak proofing

- 9.1.1.3 ... Leak testing procedures and equipment
- 9.1.1.4 ... Gas leak detectors
- 9.1.1.5 ... Tank testing
- 9.1.1.6 ... Condensed water testing
- 9.1.1.7 ... Other testing instruments and installations
- 9.1.2 Electro-technical measuring and testing instruments
- 9.1.2.1 Measuring instruments
- 9.1.2.1.1 Multi-meters
- 9.1.2.1.2 Measuring instruments for electrical and magnetic dimensions
- 9.1.2.1.3 Aerial measuring instruments
- 9.1.2.1.4 Oscilloscopes
- 9.1.2.1.5 Measuring instruments for non-electrical dimensions
- 9.1.2.1.6 Measured data acquisition, transmission, processing
- 9.1.2.2 Test instruments
- 9.1.2.2.1 Test boards
- 9.1.2.2.2 Measuring and testing instruments acc. to DIN VDE 0701/0702
- 9.1.2.2.3 Measuring and testing instruments acc. to DIN VDE 0100
- 9.1.2.2.4 Measuring and testing instruments acc. to BGV A3
- 9.1.2.2.5 Phase-sequence displays
- 9.1.2.2.6 Voltage testers
- 9.1.2.2.7 Continuity testers
- 9.1.2.2.8 Cable and circuit detectors
- 9.1.2.2.9 High-voltage test instruments
- 9.1.2.2.10 Test instruments for medical instruments
- 9.1.2.2.11 Network testers
- 9.1.2.2.12 Interferometers
- 9.2 **Operation, storage and assembly systems**
- 9.2.1 Construction and organisation protective outfitting
- 9.2.1.1 Scaffolding
- 9.2.1.2 Ladders and steps
- 9.2.1.3 Safety cages
- 9.2.1.4 Earthing and short-circuiting devices
- 9.2.1.5 Warning signs and boards
- 9.2.1.6 Working platforms
- 9.2.2 Storage and transfer systems
- 9.2.2.1 Tool containers and storage systems
- 9.2.2.2 Storage systems
- 9.2.2.3 Means of transport and transport systems
- 9.2.3 Office, information and communication technology, office furnishing
- 9.2.3.1 Office furnishing
- 9.2.3.2 Office organisation
- 9.2.3.2.1 Telephone and radio/ radio-telephone equipment
- 9.2.3.2.2 Organisation furniture



9.2.3.2.3	Drawing tables, layout tables	9.4.2.2	Vocational clothing/ protective clothing	9.4.4.1.1	Transporting vehicles	10.4	Institutions, authorities, organisations, associations
9.2.3.2.4	Copy-maker – accounts department	9.4.2.3	Fire extinguishers	9.4.4.2	Vehicles outfitting	10.4.1	Ministries and authorities
9.2.3.2.5	Printed business forms, forms	9.4.2.4	Lifting equipment/lifting platforms	9.4.4.2.1	Transporters outfitting	10.4.1.1	Ministry
9.2.3.2.6	Other office and drawing machines as well as instruments	9.4.2.5	Plumbing pre-production	9.4.4.2.2	Workshop vehicles outfitting	10.4.1.2	Urban development and environment agency
9.2.4	Shop fittings	9.4.2.6	Ladders	9.4.4.2.3	Vehicle superstructure and consolidation	10.4.1.3	National trade offices
9.2.4.1	Shop fittings	9.4.2.7	Shelves	9.3.4.2.4	Trailers for hand workers and trade	10.4.1.4	National environmental protection offices
9.2.4.2	Self-service complete programmes	9.4.2.8	Cupboards	9.3.4.2.5	Vehicle lettering	10.4.1.5	Trade supervisory boards
9.2.4.3	Other	9.4.2.9	Workbenches			10.4.1.6	Regulating authorities for post and telecommunications
9.3	Fastening technology	9.4.2.10	Scaffolding			10.4.2	Insurance companies
9.4	Tools and workshop outfitting	9.4.2.11	Other			10.4.2.1	Trade associations
9.4.1	Tools	9.4.2.12	Pipe-laying machines and tools	10. Service providers		10.4.2.2	Associations of expert witnesses, umbrella association of German insurance companies
9.4.1.1	Hand tools	9.4.2.12.1	Thread parting nodules	10.1	Facility management, contracting	10.4.2.3	Property insurance
9.4.1.2	Electric tools	9.4.2.12.2	Thread parting machines	10.1.1	Planning, engineering	10.4.2.4	Third party insurance
9.4.1.3	Pressing tools	9.4.2.12.3	Thread parting materials	10.1.2	Project management	10.4.2.5	Health insurance
9.4.1.4	Workshop outfitting	9.4.2.12.4	Plastic pipe welding apparatus	10.1.3	Installation/assembly	10.4.3	Service providers
9.4.1.5	Thawing instruments	9.4.2.12.5	Test instruments for piping	10.1.4	Commissioning	10.4.3.1	Products and systems certifiers
9.4.1.6	Mounting tools and elements	9.4.2.12.6	Pipe cutters	10.1.5	Documentation	10.4.3.2	Test and calibration services
9.4.1.7	Pneumatic drills	9.4.2.12.7	Pipe bending machines	10.1.6	Maintenance (inspection, maintenance, repair)	10.4.3.3	EMC consultants
9.4.1.8	Drills, power drills	9.4.2.12.8	Pipe cleaning equipment and materials	10.1.7	Technical house and building management	10.4.3.4	Energy consultants
9.4.1.9	Stud drivers	9.4.2.12.9	Pipe saws, machines	10.1.8	Business house and building management	10.4.3.5	Technology transfer
9.4.1.10	Pneumatic tools	9.4.2.12.10	Pipe parting machines	10.1.9	Infrastructure house and building management	10.4.3.6	Management consultants, consulting
9.4.1.11	Electric hammers	9.4.2.12.11	Multi-grip pliers	10.1.10	FM software	10.4.3.7	Waste industry, disposal
9.4.1.12	Plastic processing tools	9.4.2.12.12	Tools for fittings	10.1.11	Facility and supply contracting	10.4.4	Associations
9.4.1.13	Soldering equipment and accessories	9.4.2.12.13	Pipe burring reamers	10.1.12	Performance contracting	10.4.4.1	National guilds
9.4.1.14	Measuring tools	9.4.2.13	Personal protective clothing	10.1.13	Projecting	10.4.4.2	Regional wholesaler associations
9.4.1.15	Assembly equipment	9.4.2.13.1	Safety plug-in grip for NH-fuse switches	10.2	Training and continued training	10.5	Power supply companies
9.4.1.16	Wall cutters	9.4.2.13.2	Safety glasses, breath guards, hearing protection	10.2.1	Responsible educational bodies	10.6	Technical publishers
9.4.1.17	Striking tools	9.4.2.13.3	Safety shoes	10.2.2	Technical training systems	10.6.1	Technical literature
9.4.1.18	Cutting tools	9.4.2.13.4	Protective clothing	10.2.3	Training	10.6.2	Technical books
9.4.1.19	Welding and cutting equipment	9.4.2.13.5	Safety harnesses	10.3	EDP solutions	10.6.3	Trade journals
9.4.1.20	Pipe freezing equipment	9.4.2.13.6	First-aid kits	10.3.1	Branch software	10.7	Miscellaneous
9.4.1.21	Electric tinmen's shears	9.4.2.14	Office outfitting	10.3.2	Organisation software	10.7.1	Service performances for branches/wholesalers
9.4.1.22	Repair kits (ceramic, enamel etc.)	9.4.2.14.1	Office furniture, office computers	10.3.3	Technical software	10.7.2	Wholesale
9.4.1.23	Flushing equipment (flushing tap water piping)	9.4.2.14.2	Drawing materials	10.3.4	CAD/CAE software	10.8	Technical planning office
9.4.1.24	Camera systems for sewer pipes	9.4.2.14.3	Office machines, copiers	10.3.5	EDP hardware	10.8.1	Building services
9.4.1.25	Sealing systems to check sewer pipe pressure	9.4.2.14.4	Office communication	10.3.6	EDP system software		
9.4.1.26	Flushing and milling systems for sewer pipes	9.4.3	Cleaning equipment and installations	10.3.7	Office machines		
9.4.2	Workshop outfitting	9.4.3.1	Vacuum cleaners	10.3.8	Software for building I & C applications		
9.4.2.1	Workshop outfitting	9.4.3.2	Vacuum cleaning, central installation	10.3.9	Software for business/commercial applications		
		9.4.3.3	Other equipment and installations	10.3.10	Software for heating, plumbing, ventilation, and air-conditioning technologies as well as CAD		
		9.4.4	Utility vehicles and facilities				
		9.4.4.1	Service and assembly vehicles				

