22–08. Where a scheme of colouring is used to distinguish conductors on a switchboard the live conductors shall be coloured red, yellow, and/or blue, and the neutral, earthed conductor, or middle wire shall be coloured black.

22–09. Conductors on every switchboard shall be so placed and so arranged that the course of every conductor may be easily traced.

MAIN AND DISTRIBUTION SWITCHGEAR.

22–21. Every switchboard shall (except as provided by Regulations 22–23 and 22–24 hereof), be fitted, as a minimum, with such of the switchgear specified in Regulation 22–25 hereof as is appropriate to the particular system of wiring.

22–22. Every main switch shall be—

(*a*) Capable of breaking the maximum load of the installation as defined in Regulation 43–13 hereof; and

(*b*) In no case smaller than 10 amperes rating.

22–23. Where—

(*a*) The supply is from an external source; and

(*b*) A service cut-out is installed; and

(*c*) Such service cut-out is used solely for the installation of one consumer, then such service cut-out may be deemed to take the place of the respective cut-out referred to in Regulation 22–25 hereof for the control of the incoming main supply.

22–24. The circuit-breakers or switches prescribed by Regulation 22–25 hereof may be omitted on any submain or subcircuit if the normal working current per conductor does not exceed—

(*a*) 10 amperes in the case of a circuit which includes an aerial conductor; or

(*b*) 50 amperes in any other case.

22–25. The switchgear to be provided on every switchboard shall be in accordance with the following tables and shall comply with the following requirements:—

(*a*) Except as provided in Regulation 42–27 hereof a circuit-breaker shall be used in every case where the full-load current exceeds 100 amperes per conductor, save that where the circuit will not be opened under load and the full-load current does not exceed 200 amperes per conductor isolating-switches and cut-outs may be used. The full-load current of an installation shall be assessed as the maximum demand in accordance with Regulation 43–13 hereof.

(*b*) Where a separate cut-out or fuse-link and switch are specified a fuse-switch may be used.

(*c*) Lighting, heating, or power, or any combination of these, may be controlled by separate main switches.

(*d*) No switch or circuit-breaker shall be included in any neutral conductor or earthed conductor in such a manner as will permit such conductor to be opened before or closed after the corresponding live conductors, but this requirement shall not prohibit the provision of an isolating-link for testing purposes. This paragraph does not apply to a switch mounted on a portable appliance unless otherwise specified in these regulations.

(*e*) Where a conductor is earthed at the source of supply without a circuit-breaker or added resistance—

(i) No fuse-link shall be included in such conductor:

(ii) The overload trip-coil for such conductor may be omitted:

(iii) Circuit-breakers or switches need not control such conductor.

(*f*) No fuse-link shall be included in any neutral conductor or earthed conductor except where specified in the following tables.

(*g*) Where an installation consists of only one subcircuit, or one submain supplying a distribution board, the main switchgear may also be used to control and protect such subcircuit or submain.

MAIN SWITCHGEAR FOR GENERATORS.

Type of Generator.	System of Supply.	Switchgear.	
		Circuit-breaker or Switch.*†	Overload Trip-coils or Fuse-links.*†
1.	2.	3.	4.
A.C. three-phase four-wire	Any ..	Triple-pole ..	Each phase conductor.
A.C. three-phase three-wire	Any ..	Triple-pole ..	Each conductor or overload trip-coils in two conductors and earth leakage protection in the other conductor.
A.C. single-phase two-wire	M.E.N. ..	Single-pole ..	Unearthed conductor.
	All others	Double-pole‖ ..	Each conductor.‖
D.C. two-wire‡ ..	Any ..	Double-pole‖ ..	Each conductor.‖
A.C. single-phase three-wire	M.E.N. ..	Double-pole ..	Each phase conductor.
	All others	Triple-pole‖ ..	
D.C. three-wire‡ ..	Any ..	Triple-pole§‖ ..	Each outer conductor.

* See Regulation 22–25.

† When the generators are arranged to run in parallel only circuit-breakers with trip-coils shall be used.

‡ When compound-wound generators are arranged to run in parallel an equalizer switch must be provided.

§ Where the generators are arranged to run in parallel the circuit-breaker shall be double-pole.

‖ See Regulation 22–25 (*e*).

MAIN AND DISTRIBUTION SWITCHGEAR TO CONTROL CONSUMER'S WIRING.

Nature of Consumer's Wiring and of the Supply.			Switchgear.	
System of Supply.	Incoming Main Supply and Outgoing Submains or Subcircuits.	Earth Connection of Supply System.	Circuit-breaker or Switch.*†	Overload Trip-coils or Fuse-links.*‡
1.	2.	3.	4.	5.
A.C. three-phase four-wire	Four-wire and three-wire (three-phase)	Any	Triple-pole ..	Each phase conductor.
	Three-wire (two-phase and neutral)	M.E.N. ..	Double-pole	Each phase conductor.
		All others ..	Triple-pole§	
	Two-wire (phase and neutral)	M.E.N. ..	Single-pole ..	Unearthed conductor.
		All others ..	Double-pole§	Each conductor.§
A.C. three-phase three-wire	Three-wire	Any or none ..	Triple-pole ..	Each conductor or overload trip-coils in two conductors and earth leakage in other conductor
A.C. single-phase two-wire D.C. two-wire	Two-wire	Any or none ..	Double-pole	Each conductor.
		M.E.N. ..	Single-pole ..	Unearthed conductor.
		All others or none	Double-pole§	Each conductor.§
A.C. single-phase three-wire D.C. three-wire	Three-wire	M.E.N. ..	Double-pole	Each outer conductor.
		All others ..	Triple-pole§	
	Two-wire (outer and neutral)	M.E.N. ..	Single-pole...	Unearthed conductor.
		All others ..	Double-pole§	Each conductor.§
	Two-wire (outer to outer)	Any ..	Double-pole	Each conductor.

* See Regulation 22–25. † See Regulation 22–24. ‡ See Regulation 22–23. § See Regulation 22–25 (e).

NOTE.—The earthing of new supply systems is governed by the Electrical Supply Regulations, but provision has been made in this table for any existing systems which may not comply with the present Electrical Supply Regulations.