IEC 61439 defines which points the manufacturer and the user of a switchgear and controlgear assembly have to define. The switchgear and controlgear assembly is viewed as a so-called "black box", whose interfaces to the environment are defined in the following 4 areas:

**Setup and ambient conditions**
- Existing power system (TN-C, TN-C-S, TN-S, TT, IT)
- Pollution degree
- Interior and/or outdoor installation
- Stationary or mobile switchgear and controlgear assembly
- Degree of protection (IP)
- Electromagnetic compatibility (EMC)
- Special operating conditions (e.g. extreme thermal, atmospheric and climatic influences, etc.)
- Exterior type of construction (open/closed type of construction, panel type, cabinet type, etc.)
- Protection against mechanical influences (IK code)
- Type of structure (inserts or removable parts)
- Total mass and, if necessary, component masses (transport)
- Dimensions and condition of installation (freestanding, wall-mounted, placed in a row, etc.)

**Power supply**
- Rated voltage of the switchgear and controlgear assembly \(U_n\)
- Rated frequency \(f_n\)
- Rated operating voltage \(U_e\)
- Measure for protection against electric shock (class of protection)
- Rated current of the switchgear and controlgear assembly \(I_{NA}\)
- Rated impulse withstand voltage \(U_{imp}\)
- Rated peak withstand current \(I_{pk}\)
- Rated short-time withstand current \(I_{cw}\)
- Conditional rated short-circuit current \(I_{cc}\)
- Number and kind of incoming cables (single- or multiple-conductor cable, cross-section, conductor material, connection type)

**Circuit and loads**
- Rated insulation voltage \(U_i\)
- Rated current of the circuit \(I_{NC}\)
- Rated design load factor RDF

**Operation and maintenance**
- Intended operating personnel (skilled personnel, laypersons)
- Device operation (e.g. behind the door, from the outside, etc.)
- Door locking (toggle, handle, with or without lock, etc.)

Implementation of the defined interfaces is the manufacturer’s responsibility.