

# CONTROL STATIONS

## Components

### Description

A wide variety of standardised control units can be selected for use in the control stations. Each unit is provided with a number of options for greater flexibility and provide safe and reliable service for a number of years.

### Control Element

Both mechanically & electrically, these elements are very robust in design and can be used in control and auxiliary circuits.

Mechanical Life	: 10 x 10 <sup>6</sup> operations
Continuous Current	: 10A
Rated Voltage	: 500V AC, 50 Hz
Category of duty	: AC11
Contact configuration	: 1NO, 1NC, 1NO + 1NC

As a standard 1NO for Start and 1NC for Stop is provided.

Note : 2 No + 2 NC possible in 52300 & 52500

### Actuator

The basic actuator is spring loaded with an IP 65 degree of protection. All the operating systems are in stainless steel with high quality springs to provide a high degree of reliability under most conditions. Specially designed neoprene gaskets ensure complete protection from rain & dust.

Actuators are available in 4 standard types.

- a. Push button  
A Spring return actuator with a flush mounting head and options for using a red, green, yellow or black coloured knobs.
- b. Mushroom button  
A Spring return actuator with a red coloured mushroom head as standard. Padlocking facility is provided as option.
- c. Mushroom Button  
A push to lock and twist to unlock type of actuator which is spring loaded. It is provided with a padlocking facility in the locked position.
- d. Key operated Button  
A spring return actuator operable only with the key inserted. The lock is removable only in the normal position.

### Indicating Lamp :

A toughened sealed glass with a coloured filter forms part of the compact explosion proof metallic housing which is screwed into the cover of the Control Station enclosure. Pilot lamps are of the BA9s bayonet cap type and provide a clear and strong indication.

Options available are

- Basic lampholder
- Basic lampholder with built - in voltage reducer
- 6V/12V/24V/130V/230V/240V/AC/DC
- 2W lamp upto 24V and 2.5W, for 130V lamp
- Red, Green, Blue, Amber, Yellow, White & Clear Colour Filters.

### Control Switches :

These extremely compact, manually operated, rotary switches are ideal for control and auxiliary circuit applications.

Complying with IS-6875 and IS-4064, These switches are built from modular switching packets with 2 sets of contacts each. The contacts are of double break design.

These switches are available in 30°, 45° or 90° switching angles and a variety of contact arrangements making them extremely versatile for use in a large number of applications like ON-OFF, AUTO OFF MANUAL, LOCAL/REMOTE

Rated Operating Voltage	: 415V 50 Hz 440V DC
Continuous Current	: 10A
Mechanical Life	: 3 x 10 <sup>6</sup>
Electrical Life	: 3 x 10 <sup>6</sup>
Switching Frequency	: 500 operations/hour
Ambient Temperature	: - 20°C to +55°C
Conductor Size	: upto 2.5 sq.mm solid
Switching Capacity AC 11	: 60A at 415V AC 70A at 240V AC

### Ammeter :

Standard instrument is a moving iron type and 72mm square in size. The ammeter is protected by a separate cover with a sealed toughened clear glass.

Specifications	: IS: 1248/BS 89
Type	: Moving Iron
Standard Size	: 72mm square, 65mm round as option
Accuracy class	: 2.5 over loaded
Rated operational Voltage	: 500V, AC, 50 Hz
Rated Insulation	: 20 Mega Ohms
C/T Ratio	: 1 or 5