8500 Rocker Switches - Miniature *10A 250Vac Single & Double Pole*

10(6)A 250Vac T125 (non lit types)
6(4)A 250Vac T125 5E4 (50,000 Operations) (non lit types)
10(6)A 250Vac T100 (lit types)

UL CSA 15A Non Ind 250Vac, 14A Ind 250Vac, 10A 277Vac
UL CSA 250Vac 1/2hp, 125Vac 1/4hp
UL 105°C, file E45221, CSA file LR10990

In house test **Inrush 85A to EN61058-1 & 10A 28Vdc**

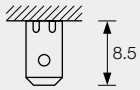
3mm contact gap
Technical data on pages 4 & 5 (switches), 66 (indicators)

H 8550 V B ---

TERMINAL FUNCTION ROCKER BODY PRINT, COLOUR, VOLTAGE ETC

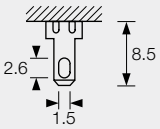
TERMINAL

H



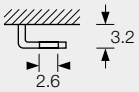
4.8 x 0.8

K



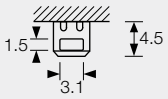
2.8 x 0.8

L



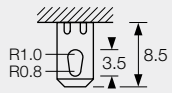
2.8 x 0.8
Right angle version of K terminal available on 8500 only

R



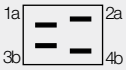
4.8 x 0.8

T



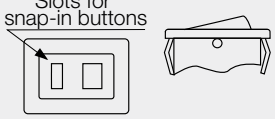
Solder

FUNCTION

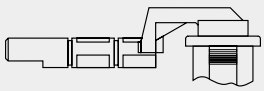
Approvals & ratings vary with function	 On Off Switches are ON when pressed over terminal 1
8500 ♦	 ON - OFF Single pole (Uses terminals 1a & 2a)
8503 ♦	 ON - OFF - Lit Single pole
8550 ♦	 ON - OFF Double pole
8553 ♦	 ON - OFF - Lit Double pole
8580 Available with H terminals only	 Indicator

ROCKER

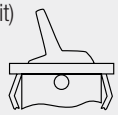
H Slotted for custom adaptors
Slots for snap-in buttons



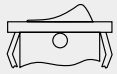
R Semi-rotary



D Paddle lever (8500 only) (not lit)

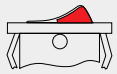


V Curved (not lit)

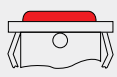


V Curved (lit)

X Two colour (not lit)



A Softline lens



H8500VB ---
T8500VB ---

H8550VB ---
T8550VB ---

H8550XB ---
T8550XB ---

H8550RB Semi-rotary
A splash proofing option

H8553VB ---
T8553VB ---

H8580AB ---

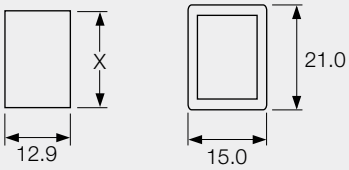
BODY

Panel cut-outs Flange

Cut-outs must be punched in the direction of insertion

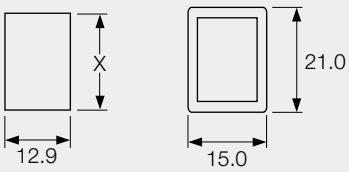
B

Standard body with terminal barrier



BC

Body without terminal barrier



Dimensions for snap-in fixing

Panel thickness	Dim X
0.75-1.25	19.1/19.2
1.25-2.00	19.3/19.4
2.00-3.00	19.7/19.8

OPTIONS

Finish
Matt finish only

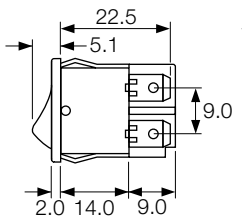
Colour
Call factory for custom colours
A full range is available for large orders

Legend printing
Select from the examples or call the factory for custom legends

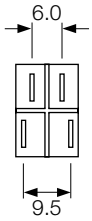
Lamp voltage
Call factory for details of other available voltages

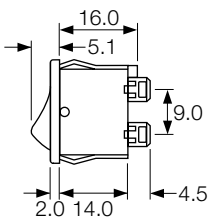
Protective cover L167
(designed to IP65)
Snaps on to bodies with V or X style rockers and A style lens but reduces panel thickness by 0.8mm

DIMENSIONS (mm)



"B" body with barrier for H, T and K terminals





"BC" body w/o barrier primarily for L or R terminals (can be used for all terminals)

Terminal spacing between 1a & 3b - 6.0, between 2a & 4b - 9.5

Examples of printing

CL076

CL080

Technical Information - Switches and Fuseholders

Most major technical information is shown on each specific product page, other details are grouped here for easy reference. Details shown here apply to most switches and fuseholders.

Snap-action switches (pages 42, 45 and 48-51), indicators (pages 66-78) and connectors (pages 79-81) have product specific information within the section.

MATERIALS	MOST PRODUCTS	EXCEPTIONS
Body and actuator (opaque)	Nylon 6.6	8300V, 1900V, 0916V & 0911V bezels & actuators are stainless steel 0600 and 3900 actuators are plated brass
Actuator (transparent)	Polycarbonate	
Current carrying parts	Copper Alloy	
Contact points	Silver Alloy	N/A for 0055/56, 0600/2, 0916-0920, 0017, 2000 & 3005/3006. Gold plated for 1100.

PROPERTIES		
Electrical		
Class II compliant	Confirmed	IEC Sockets
Electrical life (Operations)	>10k, many >50k	See relevant page for details
Contact resistance (switches) new condition	<100mΩ (at 12Vdc,1A)	For 1100 & 2000 call factory
Contact resistance (fuseholders) new condition	5mΩ (average)	
Insulation resistance	>20mΩ	
Dielectric strength:		
across open contacts	>1kV	
between poles	>3kV	
between live parts and accessible metal	>4kV	
Comparative Tracking Index (CTI)	>250	
Temperature rise (terminals) at end of rated life	max 30˚K (UL 1054), max 55˚K (EN 61058-1)	

PROPERTIES		
Physical		
Humidity resistance at 91-95% relative humidity (to subsequently comply with requirements of the Dielectric strength test)	48hrs	
Impact resistance	>0.5Nm	
Storage temp. (1 year period)	<125˚C	Some discolouration of terminals may occur
Flame retardancy	UL94V2	
Solderability to BS 2011 pt.2.1T - (with an iron)	6 secs at 350°C	
Angular movement ± 4° overall (where applicable)	38°	1250, 6000, 8500, 8550, 8600, 8650, 8800 - 26°
Force to operate	2.0N - 20.0N	Call factory for specific values
Fixing nut torque (where applicable)	1.0Nm (8.91 lb/in) nom.	Call factory for specific values

GENERAL INFORMATION

ALL SWITCHES

Heat and Fire resistance Category D.
Ingress Protection without cover is IP40.
Higher ratings where available will be shown on the relevant catalogue page.

ALL PRODUCTS

Solder terminals should not be fitted with “Push on”, “QD” or “Fast on” type cable connectors.

Panel holes must be punched in the direction of insertion.

Items marked ♦ on the following pages are assembled automatically. This ensures the highest attainable quality at a competitive price.

All products should be applied, installed and maintained by the customer using competent persons in accordance with good electrical practice. Products should be tested by the customer in the application to ensure suitability. Special care should be taken not to expose switches to water, dust, corrosive chemicals, silicone, excessive solder flux, cyanoacrylate adhesives, severe impact, extremes of temperature, electrical supply voltage or load current in excess of the specified limits.

Transparent lenses on indicator lights and lit switches are moulded in polycarbonate, a material which is attacked by organic chemicals and animal or vegetable fats.
Please contact the factory for advice on these products.

For performance in accord with the stated ratings, switch actuators should be fully depressed and fully released during operation.

WEIGHTS OF OUR MOST FREQUENTLY SUPPLIED PRODUCTS, not including packaging.

Product	gms
0055, 0056	5.7/6.8
0305	32.9
0333	4.5
0345	8.9
0340 sw only	7.12
0340K/P	25.0
0430	5.5
0589	3.5
0711-1S	16.6
0712-S	27.8
0717-1S	22.4
0900S/L	2.6/2.9

Product	gms
1048	2.8
1091FH	12.6
1091FL	52.8
1100	2.0
1250SP	5.9
1250DP	7.0
1300	5.7
1350	11.2
1500	5.7
1520	6.6
1550	11.2
1553	11.8

Product	gms
1570	12.7
1584-1589	11.1
1700H	8.4
1750H	13.2
1750O	25.6
2000 2pos C SP	3.8
2000 2pos C DP	4.5
2000 5pos A SP	6.3
2000 5pos A DP	7.3
T2225B	5.0
2950	5.3
3111	11.8

Product	gms
5500	7.1
5503	7.8
5567	14.3
6050	13.58
6053	14.15
7000	10.4
7050	12.3
7053	12.9
8250	4.9
8300	4.0
8350	5.0
8350RP	34.0

Product	gms
8353	5.9
8500	3.8
8550	4.8
8553	5.2
8600	3.5
8620	4.3
8650	6.3
8670	8.5
8800	2.9
9100	20.0

Technical Information - Indicators

The majority of Arcolectric indicator lights can be supplied with alternative light sources:
Neon, Fluorescent, Filament lamp or LED.

NEON and FLUORESCENT LAMPS

Colours
Red, Amber and Clear neon, Green fluorescent.

Maximum striking voltages
Standard brightness types 65Vac 90Vdc,
High brightness types 85Vac 135Vdc.
High brightness types are usually fitted.

Life
Typically 25,000 hours (Green fluorescent lamps 20,000 hours). (Measured to a point when the light output of the lamp is half its original level.)
The end of life for a neon lamp is not usually a sudden failure.

False signals due to long wiring
It is possible for neon or fluorescent tubes to glow when they should be off. The false signal is caused by the capacitance effect of fairly long wiring to the indicator being adjacent to other live cables.

This effect can be prevented in most cases by fitting a 100K resistor across the supply wires close to the indicator assembly.

MATERIALS

Moulded bodies and bases	Nylon 6.6
Metal bodies and bezels	Chrome plated brass (except #)
Lenses	Polycarbonate
Terminals (most types)	Brass (electro-tin plated)
Terminals (exceptions)	Brass (flash silver* or nickel** plated)
Threaded metal nuts	Brass (nickel plated on 0275/7)
Other fixings	Call factory for details

* R9, 0061, 0062, 0430, 0480, 1090, 1091, 6030, 7030, 8630, 8580
** # 3130, 3160, 3161, 3221 have nickel plated terminals with steel screws and plated polyamide bezel trims

TEMPERATURE RATING

Authority	with Terminals	with Wire leads	
		PVC	SILICONE
European	T125°C	T105°C	T125°C
UL	T65/75°C	T65/75°C	

SYMBOLS

Terminals C 6.3, H 4.8, K 2.8 | Wire leads 200mm long Standard | Solid wires LED only | Panel hole size | Panel thickness | Temperature rating

FILAMENT LAMPS

Colours
Red, Amber, Green, (Clear and Blue - check availability)

LEDS

Colours
Red, Yellow and Green.

Voltage
Basic voltage 2.0/2.2V. Some items are available with integral resistors for 12V use. For details of resistors required for higher voltages, please call the factory.

Current
Maximum continuous forward current 35mA.

Life
>100,000hrs

Polarity
LED flat side is - negative, round side + positive.