Definitions

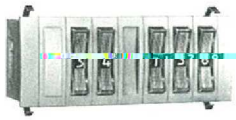
1 - Switch module: allows data to be entered in coded forms.

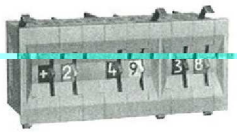
2 - End caps : form the end pieces of a bank of switch modules and hold the bank in place in a panel.

3 - Separator module : allows 2 banks of switch modules to be combined into a single block.

4 - Spacer : non-working module which may have to be inserted in a bank of modules in certain cases.

5 - Coded blank module : allows two separate circuits to be switched simultaneously from a single actuator. It is actuated from the adjoining module via coupling shaft.





Colours of modules and wheels

Grey modules
Black wheels numbered in white.

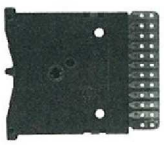
Lockout stops

These fix a range of numbers available for setting to, between two range-end numbers to be specified when ordering.
If required, the range-fixing operation can be carried out by the user.

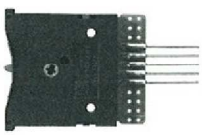
Connections

S for soldering wires straight to switch
or plugging connector onto switch
X2 By wire-wrap tags
X3 By solder tags to printed circuit

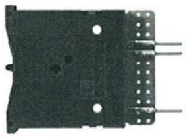
S



X2

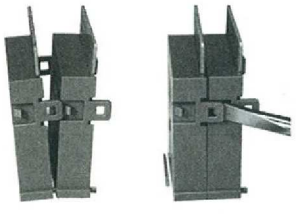


X3



Connecting modules (to form banks)

84 210 - 211 - 212



84 214

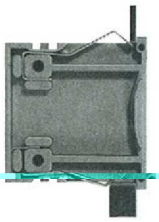


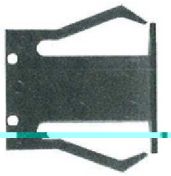
Mounting in panels

Mounted from front :

84 210 - 211 - 212
By spring clips (supplied in pairs) which have to be fitted to end caps or separator modules.
Clips can be fitted in either of two positions to suit thickness of panel.

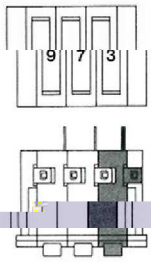
84 214
By clips built into caps.





Switch output

Standard model: output on right



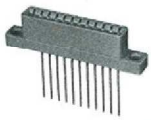
Connectors for 84 210 - 211 - 212

W2 Solder tags to printed circuit
X2 Wire-wrap tags
X3 Solder tags to printed circuit

W2



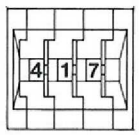
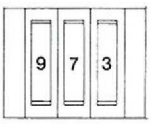
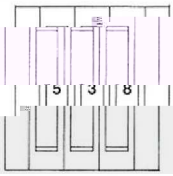
X2



X3

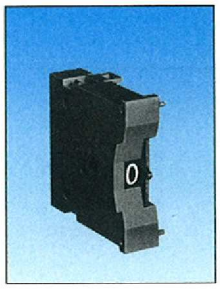


3

Presentation	Type	Pitch (mm)	Overall height (mm)	Digit dimensions (mm)	Method of setting	Mounted from front	Codes									
							Decimal	BCD	BCD + complement	Change over	BCD complement	BCD excess 6 + complement	Special two pole plus/minus	Kelvin Varley	Hexadecimal BCD + complement	Hexadecimal BCD
	84 210	8	33	4,5 x 2,8	Starwheel	•	•	•	•	•	•	•	•	•	•	•
	84 211	10	33	4,5 x 2,8	Rocker	•	•	•	•	•	•	•	•	•		
	84 212	12,5	59	6 x 3,75	Rocker	•	•	•	•	•	•	•	•	•		
	84 214	7,62	24	4 x 2,5	Rocker	•	•	•	•	•	•					

Standard products
non stocked

Thumbwheel switches



Electrical characteristics

Operating voltage	0,1 → 50 V⎓
	0,1 → 50 V⎓
Nominal load current	0,1 → 100 mA
Max. non-switchable current	1 A
Max. internal resistance	120 m Ω
Min. insulation resistance	10^5 M Ω
– between tracks	600 V~
– between tracks	2500 V~

Mechanical characteristics

Life (operations) 10^6
Vibration resistance under NFC 20616 2000/10

Environmental characteristics

Operating temperature - 25 + 70°C
Storage temperature - 40 + 85°C

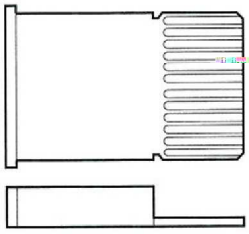
Standard codes

Type of tracks		MO1 C	0	1	2	3	4	5	6	7	8	9
A	M01*	1	11	10	9	8	7	6	5	4	3	2
	M01	12	11	10	9	8	7	6	5	4	3	2
B	0	●	●									
	1	●		●								
	2	●			●							
	3	●				●						
	4	●					●					
	5	●						●				
	6	●							●			
	7	●								●		
	8	●									●	
	9	●										●

Type of tracks		MO2 C	1	2	4	8
A	MO2 *	1	9	7	5	3
		9	8	7	6	5
B	0	●				
	1	●	●			
	2	●		●		
	3	●	●	●		
	4	●			●	
	5	●	●		●	
	6	●		●	●	
	7	●	●	●	●	
	8	●				●
	9	●	●			●

Output layout

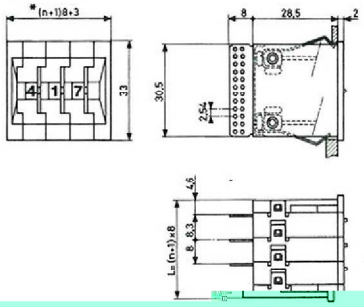
A - Position on printed circuit
B - Dial setting
* For 84 214 only



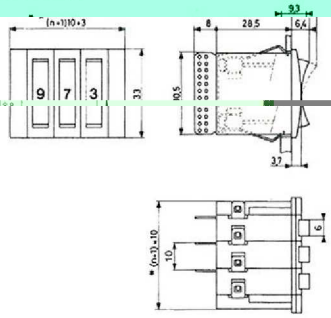
Features		Miniature, starwheel
Compatible with display module		—
Front mounting		●
Types		
Standard 10-position module		84 210 0
Standard codes		
Decimal	M 01	●
B.C.D.	M 02	●
Circuits		
Short	C	●
Case	**Wheels**	
Grey G	Black N	●
Connections		
For soldering or for connector	S	●
Mounting accessories		
Pair of end caps (with clips) Grey	JE/G	79 211 709
Spacer Grey	MI/G	79 211 738
Separator module (with clips) Grey	MS/G	79 211 752
Connectors		
Solder terminals	W2	25 625 493
Wire-wrap terminals without lugs	X2	25 625 494
For soldering to printed circuit	X3	25 625 495
Mechanical characteristics		
Operating force	N	3
Digit dimensions (H x L)	mm	4,5 x 2,8
Weight	g	5,5

Dimensions

84 210 0

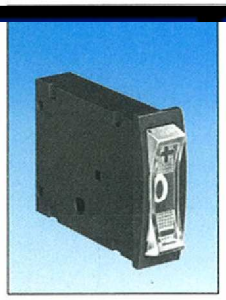


84 211 0

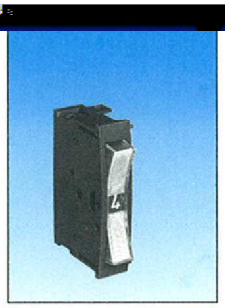


Other information

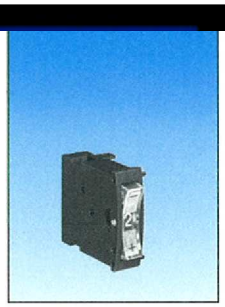
Other version, codes, colors, case, wheels : please enquire.



Miniature rocker



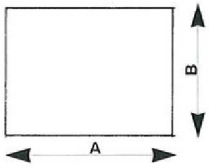
Large rocker



Subminiature rocker

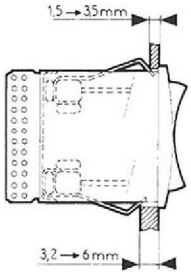
1	84 217	—	—
	•	•	•
2	**84 211 0**	**84 212 0**	**84 214 0**
	•	•	•
	•	•	•
	•	•	•
	•	•	•
3	•	•	•
4			
	79 211 823 **79 211 814**	**79 211 923** **79 211 914**	**79 214 282** **79 214 219**
	79 211 824	**79 211 924**	
5			
	25 625 493 **25 625 494** **25 625 492** **25 625 495**	**25 625 493** **25 625 494** **25 625 492** **25 625 495**	
	5 4,5 x 2,8 7,5	4 6 x 3,75 14	5 4 x 2,5 3,5 → 4

Panel cut-out

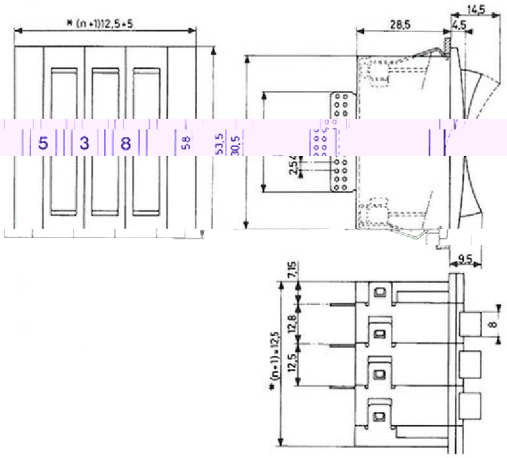


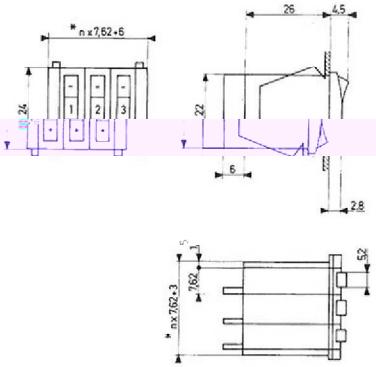
	A	B
84 210	(n+1) 8 + J	31
84 211	(n+1) 10 + J	31
84 212	(n+1) 12,5 + J	54
84 214	(nx7,62) + 35	22,5

Panel thickness



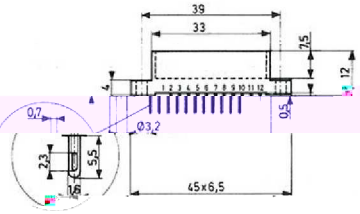
Connector dimensions



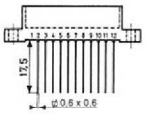


Output
Pitch 2 for decimal
Pitch 5 for BCD

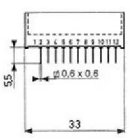
25 625 493



25 625 492
25 625 494



25 625 495



* n = number of modules
J = Clearance : 1 mm for 1 ≤ n ≤ 10
15 m for 11 ≤ n ≤ 20

To order, specify :

Standard products non stocked

1 Type 2 Code
3 Connections 4 Accessories 5 Connectors

Example : Selector switch 84 210 0 M 01 C G N S - accessories 79 211 709 - connector 25 625 494

Crouzet

3