TRUTH TABLES

Table 1. Code: BCD (Binary coded decimal)

Readout Symbol	Common C Connected to Terminals: 1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

Table 2. Code: Decimal

Readout Symbol	0	1	2	3	4	5	6	7	8	9
0	●									
1		●								
2			●							
3				●						
4					●					
5						●				
6							●			
7								●		
8									●	
9										●

Table 3. Code: Double Pole Decimal

Common C Connected to Terminals = ● / Common C Connected to Terminals = ○

Readout Symbol	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	●										○									
1		●										○								
2			●										○							
3				●										○						
4					●										○					
5						●										○				
6							●										○			
7								●										○		
8									●										○	
9										●										○

Table 4. Code: Single Pole Repeating

Readout Symbol	Common C Connected to Terminals = ● 1	2
+ − 0 0	●	
− + 1 5		●
+ − 0 0	●	
− + 1 5		●
+ − 0 0	●	
− + 1 5		●
+ − 0 0	●	
− + 1 5		●
+ − 0 0	●	
− + 1 5		●

Table 5. Code: Hexidecimal

Readout Symbol	Common C Connected to Terminals = ● 1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
10(A)		●		●
11(B)	●	●		●
12(C)			●	●
13(D)	●		●	●
14(E)		●	●	●
15(F)	●	●	●	●

Table 6. Code: Hexidecimal + complement with separate commons

Common C Connected to Terminals = ● / Common C Connected to Terminals = ○

Readout Symbol	1	2	4	8	1	2	4	8
0					○	○	○	○
1	●					○	○	○
2		●			○		○	○
3	●	●					○	○
4			●		○	○		○
5	●		●			○		○
6		●	●		○			○
7	●	●	●					○
8				●	○	○	○	
9	●			●		○	○	
10(A)		●		●	○		○	
11(B)	●	●		●			○	
12(C)			●	●	○	○		
13(D)	●		●	●		○		
14(E)		●	●	●	○			
15(F)	●	●	●	●				

Table 7. Code: Binary Coded Octal

Readout Symbol	Common C Connected to Terminals = ● 1	2	4
0			
1	●		
2		●	
3	●	●	
4			●
5	●		●
6		●	●
7	●	●	●

Table 8. Code: BCD plus complement one common

Readout Symbol	1	2	4	8	1̄	2̄	4̄	8̄
0					●	●	●	●
1	●					●	●	●
2		●			●		●	●
3	●	●					●	●
4			●		●	●		●
5	●		●			●		●
6		●	●		●			●
7	●	●	●					●
8				●	●	●	●	
9	●			●		●	●	

Table 9. Code: Hexidecimal + complement one common

Readout Symbol	1	2	4	8	1̄	2̄	4̄	8̄
0					●	●	●	●
1	●					●	●	●
2		●			●		●	●
3	●	●					●	●
4			●		●	●		●
5	●		●			●		●
6		●	●		●			●
7	●	●	●					●
8				●	●	●	●	
9	●			●		●	●	
10(A)		●		●	●		●	
11(B)	●	●		●			●	
12(C)			●	●	●	●		
13(D)	●		●	●		●		
14(E)		●	●	●	●			
15(F)	●	●	●	●				

Table 10. Code: BCD plus even party

Readout Symbol	Common C Connected to Terminals = ● 1	2	4	8	P
0					
1	●				●
2		●			●
3	●	●			
4			●		●
5	●		●		
6		●	●		
7	●	●	●		●
8				●	●
9	●			●	

Table 11. Code: BCD complement only

Readout Symbol	1̄	2̄	4̄	8̄
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	

Table 12. Code: BCD plus odd party

Readout Symbol	Common C Connected to Terminals = ● 1	2	4	8	P
0					●
1	●				
2		●			
3	●	●			●
4			●		
5	●		●		●
6		●	●		●
7	●	●	●		
8				●	
9	●			●	●

Table 13. Code: BCO with separate common to not true bits

Com. X Connected to Term = ● / Com. Y Connected to Term = ○

Readout Symbol	1	2	4	8
0	○	○	○	○
1	●	○	○	○
2	○	●	○	○
3	●	●	○	○
4	○	○	●	○
5	●	○	●	○
6	○	●	●	○
7	●	●	●	○

Table 14. Code: BCD with separate common to not true bits

Com. X Connected to Term = ● / Com. Y Connected to Term = ○

Readout Symbol	1	2	4	8
0	○	○	○	○
1	●	○	○	○
2	○	●	○	○
3	●	●	○	○
4	○	○	●	○
5	●	○	●	○
6	○	●	●	○
7	●	●	●	○
8	○	○	○	●
9	●	○	○	●

Table 15. Code: BCO complement only

Readout Symbol	Common C Connected to Terminals = ● 1̄	2̄	4̄
0	●	●	●
1		●	●
2	●		●
3			●
4	●	●	
5		●	
6	●		
7			

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Table 16. Code: 1 of 8

Readout Symbol	Common C Connected to Terminals = ●							
	0	1	2	3	4	5	6	7
0	●							
1		●						
2			●					
3				●				
4					●			
5						●		
6							●	
7								●

Table 17. Code: 1 of 12

Readout Symbol	Common C Connected to Terminals = ●											
	0	1	2	3	4	5	6	7	8	9	10	11
0	●											
1		●										
2			●									
3				●								
4					●							
5						●						
6							●					
7								●				
8									●			
9										●		
10											●	
11												●

Table 18. Code: Two out of five (1 - 2 - 4 - 7 with even bit parity)

Readout Symbol	Common C Connected to Terminals = ●				
	0	1	2	4	7
0				●	●
1	●	●			
2	●		●		
3		●	●		
4	●			●	
5		●		●	
6			●	●	
7	●				●
8		●			●
9			●		●

Table 19. Code: Complement of 9's complement

Readout Symbol	Common C Connected to Terminals = ●			
	1̄	2̄	4̄	8̄
0		●	●	
1	●	●		
2				●
3	●			●
4		●		●
5	●	●		●
6			●	●
7	●		●	●
8		●	●	●
9	●	●	●	●

Table 20. Code: 9's complement of BCD plus complement

Readout Symbol	Common C Connected to Terminals = ●							
	1	2	4	8	1̄	2̄	4̄	8̄
0	●			●		●	●	
1				●	●	●	●	
2	●	●	●					●
3		●	●		●			●
4	●		●			●		●
5			●		●	●		●
6	●	●					●	●
7		●			●		●	●
8	●					●	●	●
9					●	●	●	●

Table 21. Code: BCD + complement with separate commons

Readout Symbol	Common C to Terminals = ●				Common C to Terminals = ○			
	1	2	4	8	1̄	2̄	4̄	8̄
0					○	○	○	○
1	●					○	○	○
2		●			○		○	○
3	●	●					○	○
4			●		○	○		○
5	●		●			○		○
6		●	●		○			○
7	●	●	●					○
8				●	○	○	○	
9	●			●		○	○	

Table 22. Code: 1 - 2 - 2 - 2 - 2 resistive decade — Switch Circuit

Readout Symbol	B	F	E	D	C	A
0	●					●
1	●∿	●			∿	●
2	●				∿	●
3	●∿	●			∿	●
4	●			∿	∿	●
5	●∿	●		∿	∿	●
6	●		∿	∿	∿	●
7	●∿	●	∿	∿	∿	●
8	●	∿	∿	∿	∿	●
9	●∿	∿	∿	∿	∿	●

Table 23. Code: Kelvin Varley voltage divider

Readout Symbol	Common A = ● / Common B = ○											
	0	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
0	●		○									
1		●		○								
2			●		○							
3				●		○						
4					●		○					
5						●		○				
6							●		○			
7								●		○		
8									●		○	
9										●		○

Table 24. Code: Aiken 1 - 2 - 4 - 2′

Readout Symbol	Common C Connected to Terminals = ●			
	1	2	4	2′
0				
1	●			
2		●		
3	●	●		
4			●	
5	●	●		●
6			●	●
7	●		●	●
8		●	●	●
9	●	●	●	●

Table 25. Code: Aiken modern 1 - 2 - 4 - 2′

Readout Symbol	Common C Connected to Terminals = ●			
	1	2	4	2′
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8		●	●	●
9	●	●	●	●

Table 26. Code: Excess 3 grey code positive

Readout Symbol	Common X Connected to Terminals = ●			
	A	B	C	D
0		●		
1		●	●	
2		●	●	●
3		●		●
4		●		
5	●	●		
6	●	●		●
7	●	●	●	●
8	●	●	●	
9	●		●	

Table 27. Code: Excess 3 grey code negative

Readout Symbol	Common X Connected to Terminals = ●			
	A	B	C	D
0	●	●		●
1	●			●
2	●			
3	●		●	
4	●		●	●
5			●	●
6			●	
7				
8				●
9		●		●

Table 28. Code: Repeating Double Pole

Readout Symbol			Com. A Conn. to Term. = ● / Com. B Conn. to Term. = ○			
			1	2	3	4
+ −	0 0		●			○
− +	1 5			●	○	
+ −	0 0		●			○
− +	1 5			●	○	
+ −	0 0		●			○
− +	1 5			●	○	
+ −	0 0		●			○
− +	1 5			●	○	
+ −	0 0		●			○
− +	1 5			●	○	

Table 29. Code: 9's complement of BCD

Readout Symbol	Common C Connected to Terminals = ●			
	1	2	4	8
0	●			●
1				●
2	●	●	●	
3		●	●	
4	●		●	
5			●	
6	●	●		
7		●		
8	●			
9				

Table 30. Code: 4 Bit Binary

Readout Symbol	Common C Connected to Terminals = ●			
	1	2	4	8
0	●			
1		●		
2	●	●		
3				
4	●		●	
5			●	
6	●	●	●	
7		●	●	
8	●			●
9				●
10	●	●		●
11		●		●

Table 31. Code: 1 of 16

Readout Symbol	Common C Connected to Terminals = ●															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	●															
1		●														
2			●													
3				●												
4					●											
5						●										
6							●									
7								●								
8									●							
9										●						
10(A)											●					
11(B)												●				
12(C)													●			
13(D)														●		
14(E)															●	
15(F)																●

Table 32. Code: Complement of 7 segment indicator

Readout Symbol	Common X Connected to Terminals = ●						
	A	B	C	D	E	F	G
0							●
1	●			●	●	●	
2			●			●	
3					●		
4	●			●	●		
5		●			●		
6	●	●					
7				●	●	●	●
8							
9				●	●	●	

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Table 33. Code: Repeating Double Pole

Readout Symbol	Common A Connected to Terminal = ● Common B Connented to Terminal = ○			
	1	2	3	4
+ − 0 0	●			○
− + 1 5		●	○	
+ − 0 0	●			○
− + 1 5		●	○	
+ − 0 0	●			○
− + 1 5		●	○	
+ − 0 0	●			○
− + 1 5		●	○	
+ − 0 0	●			○
− + 1 5		●	○	

Table 34. Code: Berkeley 1 - 2 - 3' - 4

Readout Symbol	Common C Connected to Terminals = ●			
	1	2	2'	4
0				
1	●			
2		●		
3	●	●		
4		●	●	
5	●	●	●	
6			●	●
7	●		●	●
8		●	●	●
9	●	●	●	●

Table 35. Code: Hexidecimal with Separate Common to Not True Bits

Readout Symbol	Common X Connected to Terminal = ● Common Y Connented to Terminal = ○			
	1	2	4	8
0	○	○	○	○
1	●	○	○	○
2	○	●	○	○
3	●	●	○	○
4	○	○	●	○
5	●	○	●	○
6	○	●	●	○
7	●	●	●	○
8	○	○	○	●
9	●	○	○	●
10(A)	○	●	○	●
11(B)	●	●	○	●
12(C)	○	○	●	●
13(D)	●	○	●	●
14(E)	○	●	●	●
15(F)	●	●	●	●

Table 36. Code: grey 16 position

Readout Symbol	Common C Connected to Terminal = ●			
	1	2	4	8
0				
1	●			
2	●	●		
3		●		
4		●	●	
5	●	●	●	
6	●		●	
7			●	
8			●	●
9	●		●	●
10(A)	●	●	●	●
11(B)		●	●	●
12(C)		●		●
13(D)	●	●		●
14(E)	●			●
15(F)				●

Table 37. Code: 4 Bit Binary plus odd parity

Readout Symbol	Common C Connected to Terminals = ●				
	1	2	4	8	P
0					●
1	●				
2		●			
3	●	●			●
4			●		
5	●		●		●
6		●	●		●
7	●	●	●		
8				●	
9	●			●	●
10(A)		●		●	●
11(B)	●	●		●	

Need a special code for your special application? Use this blank chart as a worksheet. Then, photocopy and send to Datex. We'll call you immediately to discuss details of your need.