

Table B.1 – 6-Bit binary Fields represented by Valid IEC 61162-1 ASCII Character Codes

ASCII HEX = binary	Valid Character	Binary Field represented	ASCII HEX = binary	Valid Character	Binary Field represented
30 = 00110000	0	000000	50 = 01010000	P	100000
31 = 00110001	1	000001	51 = 01010001	Q	100001
32 = 00110010	2	000010	52 = 01010010	R	100010
33 = 00110011	3	000011	53 = 01010011	S	100011
34 = 00110100	4	000100	54 = 01010100	T	100100
35 = 00110101	5	000101	55 = 01010101	U	100101
36 = 00110110	6	000110	56 = 01010110	V	100110
37 = 00110111	7	000111	57 = 01010111	W	100111
38 = 00111000	8	001000	60 = 01100000	'	101000
39 = 00111001	9	001001	61 = 01100001	a	101001
3A = 00111010	:	001010	62 = 01100010	b	101010
3B = 00111011	;	001011	63 = 01100011	c	101011
3C = 00111100	<	001100	64 = 01100100	d	101100
3D = 00111101	=	001101	65 = 01100101	e	101101
3E = 00111110	>	001110	66 = 01100110	f	101110
3F = 00111111	?	001111	67 = 01100111	g	101111
40 = 01000000	@	010000	68 = 01101000	h	110000
41 = 01000001	A	010001	69 = 01101001	i	110001
42 = 01000010	B	010010	6A = 01101010	j	110010
43 = 01000011	C	010011	6B = 01101011	k	110011
44 = 01000100	D	010100	6C = 01101100	l	110100
45 = 01000101	E	010101	6D = 01101101	m	110101
46 = 01000110	F	010110	6E = 01101110	n	110110
47 = 01000111	G	010111	6F = 01101111	o	110111
48 = 01001000	H	011000	70 = 01110000	p	111000
49 = 01001001	I	011001	71 = 01110001	q	111001
4A = 01001010	J	011010	72 = 01110010	r	111010
4B = 01001011	K	011011	73 = 01110011	s	111011
4C = 01001100	L	011100	74 = 01110100	t	111100
4D = 01001101	M	011101	75 = 01110101	u	111101
4E = 01001110	N	011110	76 = 01110110	v	111110
4F = 01001111	O	011111	77 = 01110111	w	111111

A similar calculation can be done using a 6-bit binary field that is greater than 101000. For example, calculate the ASCII-code for 111101. This value is greater than the binary number 101000, so, the process follows the "NO" track in Figure B.3. The ASCII-code for 111101 becomes the sum of 111101 + 00111000 = 01110101. A check of Table B.1 will confirm that this is the ASCII-code for {u}.

Finally, a calculation can be done for the test value. That is, what is the ASCII-code for the 6-bit binary field 101000? This value is not less than the binary number 101000, so, the process follows the "NO" track in Figure B.3. The ASCII-code for 101000 becomes the sum of 101000 + 00111000 = 01100000. A check of Table B.1 will confirm that this is the ASCII-code for {'}.