## **Technical Data**

Original Instructions



## **IEC Contactor Specifications**

Bulletin Numbers 100/104-K, 100/104-C, 100/104S-C, 100/104-E, 100S-E

Topic	Page
Summary of Changes	2
Product Line Overview	3
IEC Contactors	3
Safety Contactors	4
100-K/104-K Miniature Contactors	5
Product Selection	5
Accessories	8
Specifications	11
Life-Load Curves	15
Approximate Dimensions	16
100-C/104-C, 100S-C/104S-C Contactors	17
Product Selection—100-C/104-C Contactors	17
Product Selection—100S-C/104S-C Safety Contactors	23
Accessories	31
Renewal Parts	36
Specifications	38
Life-Load Curves	49
Approximate Dimensions	56
100-E/104-E, 100S-E/104S-E Contactors	58
Product Selection—100-E/104-E Contactors	58
Product Selection—100S-E Safety Contactors	61
Accessories	65
Renewal Parts	72
Specifications	74
Life-Load Curves	94
Approximate Dimensions	101
Additional Resources	113



## **Accessories**

## **Auxiliary Contact Blocks**

Auxiliary Contact Blocks for Front Mounting  2- and 4-pole  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 5mA  Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)  Models with equal function with several terminal numbering choices  1L = Late break N.C. / early make N.O.  Bifurcated version for switching down to 5V, 3 mA also available	S1   61   11   21   53   61	N.O.  0  1  2  1L  0  1	N.C.  2  1  0  1L  4  3	100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 C09⊗10C23⊗10 100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00	Standard Auxiliary Contact <sup>(2)</sup> 100-FA02 100-FB02 100-FA11 100-FB11 100-FC11 100-FA20 100-FA20 100-FAL11 100-FBL11 100-FA04	Bifurcated Auxiliary Contact 100-FAB02 100-FAB11 100-FBB11 100-FCB11 100-FAB20 100-FBB20
<ul> <li>2- and 4-pole</li> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	-HOUZ -FN11    13   21   23   31   53   63      14   22   24   32   64   64    -FB11 -FC11 -FA20    13   23                          14   24                          15                          16                          17                          18                          19                          10                        10                        11	1 2 1L 0	1 0 1L 4	C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 C09⊗10C23⊗10 100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 100-C all	100-FB02 100-FA11 100-FB11 100-FC11 100-FA20 100-FB20 100-FAL11 100-FBL11	100-FBB02 100-FAB11 100-FBB11 100-FCB11 100-FAB20 100-FBB20
<ul> <li>2- and 4-pole</li> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	-HOUZ -FN11    13   21   23   31   53   63      14   22   24   32   64   64    -FB11 -FC11 -FA20    13   23                          14   24                          15                          16                          17                          18                          19                          10                        10                        11	1 2 1L 0	1 0 1L 4	100-C all C30⊗00C97⊗00 C09⊗10C23⊗10 100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 100-C all	100-FA11 100-FB11 100-FC11 100-FA20 100-FB20 100-FAL11 100-FBL11	100-FAB11 100-FBB11 100-FCB11 100-FAB20 100-FBB20 —
<ul> <li>2- and 4-pole</li> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	-HOUZ -FN11    13   21   23   31   53   63      14   22   24   32   64   64    -FB11 -FC11 -FA20    13   23                          14   24                          15                          16                          17                          18                          19                          10                        10                        11	2 1L 0	1L 4	C30⊗00C97⊗00 C09⊗10C23⊗10 100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 100-C all	100-FB11 100-FC11 100-FA20 100-FB20 100-FAL11 100-FBL11	100-FBB11 100-FCB11 100-FAB20 100-FBB20 —
<ul> <li>2- and 4-pole</li> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	-HOUZ -FN11    13   21   23   31   53   63      14   22   24   32   64   64    -FB11 -FC11 -FA20    13   23                          14   24                          15                          16                          17                          18                          19                          10                        10                        11	2 1L 0	1L 4	C09⊗10C23⊗10 100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 100-C all	100-FC11 100-FA20 100-FB20 100-FAL11 100-FBL11	100-FCB11 100-FAB20 100-FBB20 —
<ul> <li>2- and 4-pole</li> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	FB11 -FC11 -FA20    13   23   57   65   17   25     14   24     36   66   18   26     -FB20 -FAL11 -FBL11    51   61   71   81   53   61   71   81     52   62   72   82   54   62   72   82     -FA04 -FA13    53   61   77   83   13   21   31   43     -FA22 -FB22    21   31   43   83   53   61   73   83     -FF321   75   75   75     -FB22   13   14   15   15   15     -FB23   15   17   18     -FB24   17   18     -FB25   17   18     -FB25   17   18     -FB26   17   18     -FB27   17   18     -FB27   17   18     -FB28   17   18     -FB28   17   18     -FB29	1L 0	1L 4	100-C all C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 100-C all	100-FA20 100-FB20 100-FAL11 100-FBL11	100-FAB20 100-FBB20 —
<ul> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	FB11 -FC11 -FA20    13   23   57   65   17   25     14   24     36   66   18   26     -FB20 -FAL11 -FBL11    51   61   71   81   53   61   71   81     52   62   72   82   54   62   72   82     -FA04 -FA13    53   61   77   83   13   21   31   43     -FA22 -FB22    21   31   43   83   53   61   73   83     -FF321   75   75   75     -FB22   13   14   15   15   15     -FB23   15   17   18     -FB24   17   18     -FB25   17   18     -FB25   17   18     -FB26   17   18     -FB27   17   18     -FB27   17   18     -FB28   17   18     -FB28   17   18     -FB29	1L 0	1L 4	C30⊗00C97⊗00 100-C all C30⊗00C97⊗00 100-C all	100-FB20 100-FAL11 100-FBL11	100-FBB20 — —
<ul> <li>Electronic-compatible contacts down to 17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	FB20 =FAL11 =FBL11	1L 0	1L 4	100-C all C30⊗00C97⊗00 100-C all	100-FAL11 100-FBL11	-
<ul> <li>17V, 5mA</li> <li>Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</li> <li>Models with equal function with several terminal numbering choices</li> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	FB20 =FAL11 =FBL11	0	4	C30⊗00C97⊗00 100-C all	100-FBL11	-
N.O. and N.C. poles and to the main contactor poles (except for L types)  Models with equal function with several terminal numbering choices  L = Late break N.C. / early make N.O.  Bifurcated version for switching down to	-FA04 -FA13 [53 ]61 ]71 [83 ]13 ]21 [31 ]43  54 [62]  72 ]64   114 [22] \$20 44 -FA22 -FB22 [21 ]31 [43 ]53  53 ]61 [73 ]83	0	4	100-C all		-
contactor poles (except for L types)  Models with equal function with several terminal numbering choices  L = Late break N.C. / early make N.O.  Bifurcated version for switching down to	-FA04 -FA13 [53 ]61 ]71 [83 ]13 ]21 [31 ]43  54 [62]  72 ]64   114 [22] \$20 44 -FA22 -FB22 [21 ]31 [43 ]53  53 ]61 [73 ]83				100-FA04	
terminal numbering choices  1L = Late break N.C. / early make N.O.  Bifurcated version for switching down to	-FA22 -FB22  21  31  43  53    53  61  73  83	1	3			100-FAB04
<ul> <li>1L = Late break N.C. / early make N.O.</li> <li>Bifurcated version for switching down to</li> </ul>	-FA22 -FB22  21  31  43  53    53  61  73  83		U	100-C all	100-FA13	100-FAB13
<ul> <li>Bifurcated version for switching down to</li> </ul>	21   31   43   53   53   61   73   83   22   32   44   54   54   62   74   84	2	2	100-C all	100-FA22	100-FAB22
5V, 3 mA also available	22 32 44 54 54 62 74 84			C30⊗00C97⊗00	100-FB22	100-FBB22
	122   132   144   154   154   162   174   184   FC22			C09⊗10C23⊗10	100-FC22	100-FCB22
***	23 31 43 53 53 63 73 83 53 61 75 87	3	1	100-C all	100-FA31	100-FAB31
				C09⊗10C23⊗10	100-FC31	100-FCB31
						100-FAB40
						_
	<del>-1</del>   <del>-3</del>					_
Auxiliary Contact Blocks for Side Mounting	<del>/</del> \.  _2					_
1- and 2-nole						-
<ul> <li>Two-way numbering for right or left</li> </ul>	5, 1, 5					-
<ul> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 10 mA</li> <li>Mirror contact performance to the main contactor poles</li> <li>1L = Late break N.C. / early make N.O.</li> </ul>	$ S^{-}  =  S^{$	1L	1L	100-C all	100-SAL11	-
Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  • 1- and 2-pole • Two-way numbering for right or left	21 13	0	1	100-C	100-SB01	-
		1	0	100-C <sup>(3)</sup>	100-SB10	-
		0	2	100-C <sup>(3)</sup>	100-SB02	-
		1	1	100-C <sup>(3)</sup>	100-SB11	_
mounting on the contactor		2	0	100-C <sup>(3)</sup>	100-SB20	_
<ul> <li>Iwo-way numbering for right or left mounting on the contactor</li> <li>Quick and easy mounting without tools</li> <li>Electronic-compatible contacts down to 17V, 10 mA</li> <li>Mirror contact performance to the main contactor poles</li> <li>1L = Late break N.C. / early make N.O.</li> </ul>	12   22   14   22   EF   16   EF	1L	1L	100-C <sup>(3)</sup>	100-SBL11	-
	without Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1L = Late break N.C. / early make N.O.  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1- and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles	without Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1L = Late break N.C. / early make N.O.  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  Mirror contact performance to the main contactor poles  Mirror contact performance to the main contactor poles  Mirror contact performance to the main contactor poles	without Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 L = Late break N.C. / early make N.O.  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 L = Late break N.C. / early make N.O.  Mirror contact performance to the main contactor poles  1 L = Late break N.C. / early make N.O.	Auxiliary Contact Blocks for Side Mounting without Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1L = Late break N.C. / early make N.O.  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1L = Late break N.C. / early make N.O.	Auxiliary Contact Blocks for Side Mounting without Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 L = Late break N.C. / early make N.O.  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1 - and 2-pole  Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 - and 2-pole  Two-way numbering for right or left mounting on the contactor  Quick and easy mounting without tools  Electronic-compatible contacts down to 17V, 10 mA  Mirror contact performance to the main contactor poles  1 - and 2-pole  2 - and 2-pole  1 - and 2-pole  2 - and 2-pole  1 - and 2-pole  2 - and 2-pole  2 - and 2-pole  3 - and 2-pole  4 - and 2-pole  5 - and 2-pole  5 - and 2-pole  6 - and 1 - and 2-pole  1 - and 2-pole  1 - and 2-pole  1 - and 2-pole  2 - and 2-pole  1 - and 2-pole  2 - and 2-pole  3 - and 2-pole  4 - and 2-pole  5 - and 2-pole  5 - and 2-pole  6 - and 1 - and 2-pole  1 - and 2-pole  1 - and 2-pole  2 - and 2-pole  1 - and 2-pole  2 - and 2-pole  3 - and 2-pole  4 - and 2-pole  5 - and 2-po	Auxiliary Contact Blocks for Side Mounting without Sequence Terminal Designations  1 - and 2-pole  2 - and 2-pole  3 - and 2-pole  4 - and 2-pole  5 - and 2-pole  5 - and 2-pole  1 - and 2-pole  2 - and 2-pole  2 - and 2-pole  3 - and 2-pole  4 - and 2-pole  5 - and 2-p

<sup>(1)</sup> Max. number of auxiliary contacts that may be mounted:
AC and 24V DC electronic coil contactors—max. 4 N.0 contacts on the front of the contactor, 2 N.0. contacts on the side, 4 N.C. front or side, 6 total. DC Coil contactors—max. 4 N.0. contacts on the front of the contactor or max. 2 N.0. contacts on the side, 4 N.C. front or side, 4 total.
(2) For screwless terminals (front mount only), insert "CR" after the "100-" in the catalog number. Example: Cat. No. 100-FA02 becomes Cat. No. 100-CRFA02.
(3) Double numbering—Left-side mounting only is recommended for Cat. No. 100-C09...100-C23 due to double numbering.