



## **INSTALLATION MANUAL KKL CABLE CONNECTORS**

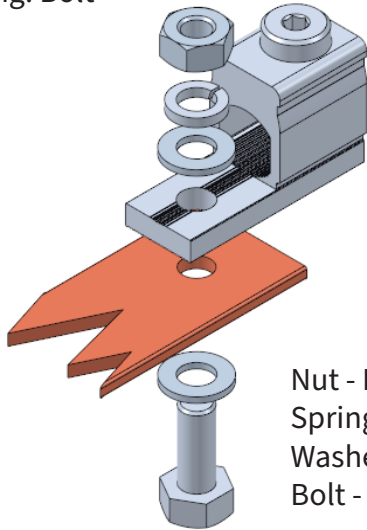
Table 1

Product Datasheet:											
Type	Un (V)	In (Al) (A)	In (Cu) (A)	Al mm <sup>2</sup>	Cu mm <sup>2</sup>	Torque Al/Cu (Nm) T	Stripping length L mm	Allen key size	Mounting	EAN code 6419410...	Weight kg
KKL 1X16	690	63	63	1,5-16	1,5-16	2,2 (1,5-16mm <sup>2</sup> )	15	Hex 3	Direct	...378496	0,01
KKL 1X50T1	690	125	125	16-50	2,5-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Direct	...378717	0,019
KKL 1X50T2	690	125	125	16-50	2,5-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Direct	...378502	0,019
KKL 1X50T3	690	125	125	16-50	2,5-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Direct	...378724	0,019
KKL 1X50M	690	125	125	16-50	2,5-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Direct	...378519	0,017
KKL 1X50N	690	125	125	16-50	2,5-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Direct	...378670	0,014
KKL 1X50	690	160	160	16-50	2,5-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Bolt	...378571	0,011
KKL 2X50	690	200	320	16-50	16-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Bolt M8	...378588	0,023
KKL 2X50M	690	200	320	16-50	16-50	5 (2,5-16mm <sup>2</sup> ) / 10 (25-50mm <sup>2</sup> )	19	Hex 5	Bolt M8	...378663	0,023
KKL 1X95	690	200	245	25-95	25-95	12 (16-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> )	22	Hex 6	Bolt M8	...378595	0,03
KKL1X95M	690	200	245	25-95	25-95	12 (16-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> )	22	Hex 6	Bolt M8	...378953	0,03
KKL 2X95	690	400	490	25-95	25-95	12 (16-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> )	22	Hex 6	Bolt M10	...378601	0,061
KKL 1X120T1	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Direct	...378526	0,037
KKL 1X120T2	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Direct	...378533	0,037
KKL 1X120T3	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Direct	...378540	0,037
KKL 1X120T	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Direct	...378700	0,037
KKL 1X120TM	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Direct	...378557	0,037
KKL 1X120RS	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Bolt M8	...378687	0,044
KKL 1X120RSY	690	200	245	16-120	16-120	12 (16-50 mm <sup>2</sup> ) / 22 (70-120 mm <sup>2</sup> )	22	Hex 6	Bolt M8	...378694	0,044
KKL 1X150	690	250	320	25-150	25-150	12 (25-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> ) / 38 (120-150 mm <sup>2</sup> )	29	Hex 6	Bolt M10	...378618	0,073
KKL1X150T2	690	250	320	25-150	25-150	12 (25-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> ) / 38 (120-150 mm <sup>2</sup> )	29	Hex 6	Bolt M10	...378748	0,073
KKL 2X150	690	500	640	25-150	25-150	12 (25-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> ) / 38 (120-150 mm <sup>2</sup> )	29	Hex 6	Bolt M12	...378625	0,15
KKL2X150LR	690	500	640	25-150	25-150	12 (25-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> ) / 38 (120-150 mm <sup>2</sup> )	29	Hex 6	Bolt M12	...300459	0,15
KKL 1X240	690	315	425	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 55 (150-240 mm <sup>2</sup> )	35	Hex 8	Bolt M12	...378632	0,113
KKL 2X240	690	630	850	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 55 (150-240 mm <sup>2</sup> )	35	Hex 8	Bolt M12	...378649	0,245
KKL 1X240TM	690	400	425	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 40 (150-240 mm <sup>2</sup> )	30	Hex 8	Bolt M8	...378656	0,113
KKL 1X240TE	690	400	400	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 40 (150-240 mm <sup>2</sup> )	30	Hex 8	Bolt M8	...378731	0,113
KKL2X240LR	690	630	850	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 55 (150-240 mm <sup>2</sup> )	35	Hex 8	Bolt M12	...378755	0,245
KKL1X300	690	400	520	95-300	95-300	45 (95-120 mm <sup>2</sup> ) / 75 (150-300 mm <sup>2</sup> )	42	Hex 12	Bolt M12	...484289	0,262
KKL2X300	690	800	1040	95-300	95-300	45 (95-120 mm <sup>2</sup> ) / 75 (150-300 mm <sup>2</sup> )	42	Hex 12	Bolt M12	...484296	0,501
KKL2X150VB	690	500	640	25-150	25-150	12 (25-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> ) / 38 (120-150 mm <sup>2</sup> )	31/62	Hex 6	Bolt M12	...484319	0,18
KKL2X150VM	690	500	640	25-150	25-150	12 (25-50 mm <sup>2</sup> ) / 22 (70-95 mm <sup>2</sup> ) / 38 (120-150 mm <sup>2</sup> )	31/62	Hex 6	Bolt M12	...484302	0,18
KKL2X240VB	690	630	850	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 40 (150-240 mm <sup>2</sup> )	37/75	Hex 8	Bolt M12	...484333	0,339
KKL2X240VM	690	630	850	35-240	35-240	25 (35-120 mm <sup>2</sup> ) / 40 (150-240 mm <sup>2</sup> )	37/75	Hex 8	Bolt M12	...484326	0,339
KKL2X300VB	690	800	1040	95-300	95-300	45 (95-120 mm <sup>2</sup> ) / 75 (150-300 mm <sup>2</sup> )	42/82	Hex 12	Bolt M12	...484357	0,572
KKL2X300VM	690	800	1040	95-300	95-300	45 (95-120 mm <sup>2</sup> ) / 75 (150-300 mm <sup>2</sup> )	42/82	Hex 12	Bolt M12	...484340	0,572

KKL connectors are suitable for both Al and Cu conductors. When connecting Al conductors, it is recommended to brush the conductor and to use joint lubricant (for example Penetrox A-13) in order to prevent oxidization.

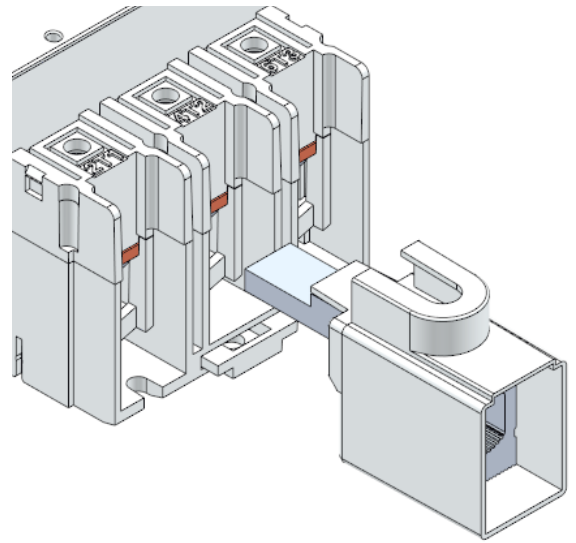
**Installation:**

Mounting: Bolt

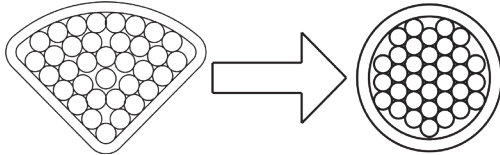


Nut - DIN 934  
 Spring washer - DIN 127  
 Washer - DIN 125  
 Bolt - DIN 933

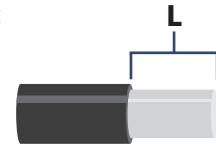
Mounting: Direct



Conductor:

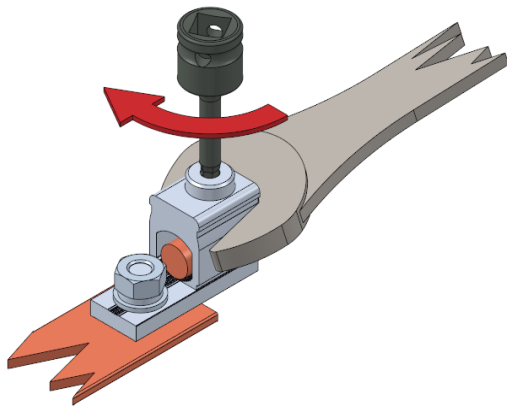


Stripping length L:



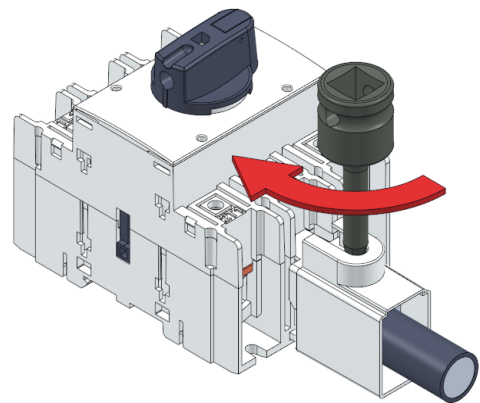
**Connection:**

Mounting: Bolt



Torque T

Mounting: Direct



Ref. Table 2

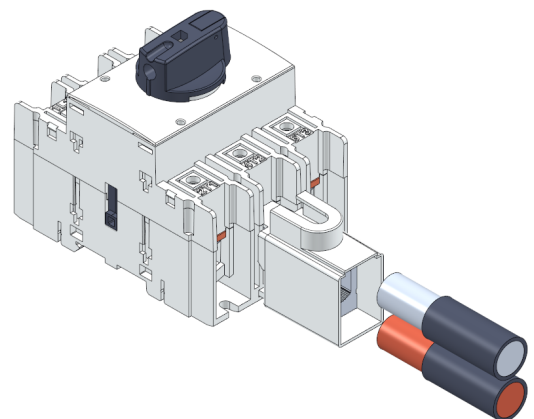
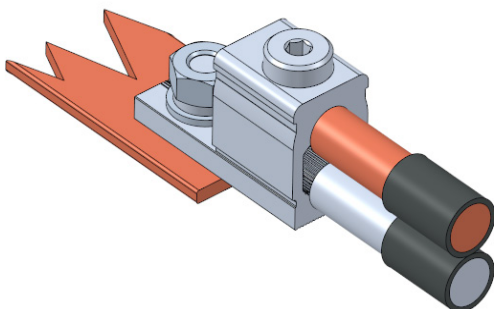


Table 2

				Cross section (mm <sup>2</sup> ) / number of conductors simultaneously connectable to the terminal															
Type	In [A]	Torque [Nm]		1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
1X16	63	2,2Nm (1,5-16mm <sup>2</sup> )	Al	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
			Cu	3	3	3	2	1**	1	-	-	-	-	-	-	-	-	-	-
1X50	160	5Nm (2,5-16mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
		10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
1X50N	125	5Nm (2,5-16mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
		10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
1X50M	125	5Nm (2,5-16mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
		10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
1X50T1	125	5Nm (2,5-16mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
		10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
1X50T2	125	5Nm (2,5-16mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
		10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
1X50T3	125	5Nm (2,5-16mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
		10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
2X50	200	5Nm (2,5-16mm <sup>2</sup> )	Al	-	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-
	320	10Nm (25-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
2X50M	200	5Nm (2,5-10mm <sup>2</sup> )	Al	-	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-
	320	10Nm (16-50mm <sup>2</sup> )	Cu	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
1X95	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	-	-	-	-	-
	245	22Nm (70-95mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	-	-	-	-	-
1X95M	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	-	-	-	-	-
	245	22Nm (70-95mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	-	-	-	-	-
2X95	400	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	-	-	-	-	-
	490	22Nm (70-95mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	-	-	-	-	-
1X120	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120RS	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120RSY	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120T	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120T1	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120T2	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120T3	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X120TM	200	12Nm (16-50mm <sup>2</sup> )	Al	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
	245	22Nm (70-120mm <sup>2</sup> )	Cu	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
1X150	250	12Nm (25-50mm <sup>2</sup> )	Al	-	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-
	320	22Nm (70-95mm <sup>2</sup> )	Cu	-	-	-	-	-	-	3	3	2	1	1	1**	1	-	-	-
		38Nm (120-150mm <sup>2</sup> )																	
2X150	500	12Nm (25-50mm <sup>2</sup> )	Al	-	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-
	640	22Nm (70-95mm <sup>2</sup> )	Cu	-	-	-	-	-	-	3	3	2	1	1	1**	1	-	-	-
		38Nm (120-150mm <sup>2</sup> )																	
2X150VB	500	12 Nm (25-50 mm <sup>2</sup> )	Al	-	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-
	640	22 Nm (70-95 mm <sup>2</sup> )	Cu	-	-	-	-	-	-	3	3	2	1	1	1**	1	-	-	-
		38 Nm (120-150 mm <sup>2</sup> )																	
2X150VM	500	12 Nm (25-50 mm <sup>2</sup> )	Al	-	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-
	640	22 Nm (70-95 mm <sup>2</sup> )	Cu	-	-	-	-	-	-	3	3	2	1	1	1**	1	-	-	-
		38 Nm (120-150 mm <sup>2</sup> )																	
1X240	315	25Nm (35-120mm <sup>2</sup> )	Al	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1
	425	55Nm (150-240mm <sup>2</sup> )	Cu	-	-	-	-	-	-	-	3	3	2	1	1	1	1**	1	-
2X240	630	25Nm (35-120mm <sup>2</sup> )	Al	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1
	850	55Nm (150-240mm <sup>2</sup> )	Cu	-	-	-	-	-	-	-	3	3	2	1	1	1	1**	1	-
2X240VB	630	25Nm (35-120mm <sup>2</sup> )	Al	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1
	850	55Nm (150-240mm <sup>2</sup> )	Cu	-	-	-	-	-	-	-	3	3	2	1	1	1	1**	1	-
2X240VM	630	25Nm (35-120mm <sup>2</sup> )	Al	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1
	850	55Nm (150-240mm <sup>2</sup> )	Cu	-	-	-	-	-	-	-	3	3	2	1	1	1	1**	1	-
1X300	400	45 Nm (95-120 mm2)	Al	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
	520	75 Nm (150-300 mm2)	Cu	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	1
2X300	800	45 Nm (95-120 mm2)	Al	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
	1040	75 Nm (150-300 mm2)	Cu	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	1
2X300VB	800	45 Nm (95-120 mm2)	Al	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
	1040	75 Nm (150-300 mm2)	Cu	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	1
2X300VM	800	45 Nm (95-120 mm2)	Al	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
	1040	75 Nm (150-300 mm2)	Cu	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	1

\*\* Biggest fine-strand conductors

Cu conductors may be solid, multi-strand or fine-strand conductors. With fine strand conductors use of cable end sleeve is recommended but not required.