



INSTALLATION MANUAL KKL CABLE CONNECTORS

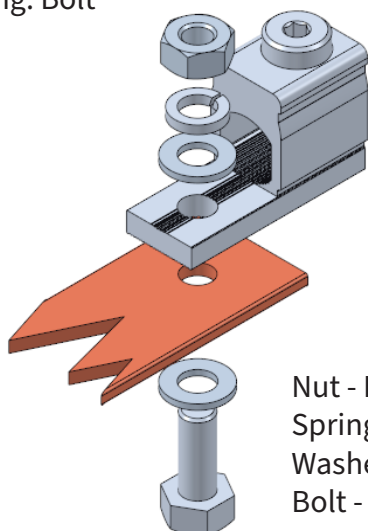
Table 1

Product Datasheet:											
Type	Un (V)	In (Al) (A)	In (Cu) (A)	Al mm ²	Cu mm ²	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 ²)	15	Hex 3	Direct	...378496	0,01
KKL 1X50T1	690	125	125	16-50	2,5-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Direct	...378717	0,019
KKL 1X50T2	690	125	125	16-50	2,5-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Direct	...378502	0,019
KKL 1X50T3	690	125	125	16-50	2,5-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Direct	...378724	0,019
KKL 1X50M	690	125	125	16-50	2,5-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Direct	...378519	0,017
KKL 1X50N	690	125	125	16-50	2,5-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Direct	...378670	0,014
KKL 1X50	690	160	160	16-50	2,5-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Bolt	...378571	0,011
KKL 2X50	690	200	320	16-50	16-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Bolt M8	...378588	0,023
KKL 2X50M	690	200	320	16-50	16-50	5 (2,5-16mm ²) / 10 (25-50mm ²)	19	Hex 5	Bolt M8	...378663	0,023
KKL 1X95	690	200	245	25-95	25-95	12 (16-50 mm ²) / 22 (70-95 mm2)	22	Hex 6	Bolt M8	...378595	0,03
KKL1X95M	690	200	245	25-95	25-95	12 (16-50 mm ²) / 22 (70-95 mm2)	22	Hex 6	Bolt M8	...378953	0,03
KKL 2X95	690	400	490	25-95	25-95	12 (16-50 mm ²) / 22 (70-95 mm2)	22	Hex 6	Bolt M10	...378601	0,061
KKL 1X120T1	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Direct	...378526	0,037
KKL 1X120T2	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Direct	...378533	0,037
KKL 1X120T3	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Direct	...378540	0,037
KKL 1X120T	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Direct	...378700	0,037
KKL 1X120TM	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Direct	...378557	0,037
KKL 1X120RS	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Bolt M8	...378687	0,044
KKL 1X120RSY	690	200	245	16-120	16-120	12 (16-50 mm ²) / 22 (70-120 mm2)	22	Hex 6	Bolt M8	...378694	0,044
KKL 1X150	690	250	320	25-150	25-150	12 (25-50 mm ²) / 22 (70-95 mm2) / 38 (120-150 mm2)	29	Hex 6	Bolt M10	...378618	0,073
KKL1X150T2	690	250	320	25-150	25-150	12 (25-50 mm2) / 22 (70-95 mm2) / 38 (120-150 mm2)	29	Hex 6	Bolt M10	...378748	0,073
KKL 2X150	690	500	640	25-150	25-150	12 (25-50 mm ²) / 22 (70-95 mm2) / 38 (120-150 mm2)	29	Hex 6	Bolt M12	...378625	0,15
KKL2X150LR	690	500	640	25-150	25-150	12 (25-50 mm ²) / 22 (70-95 mm2) / 38 (120-150 mm2)	29	Hex 6	Bolt M12	...300459	0,15
KKL 1X240	690	315	425	35-240	35-240	25 (35-120 mm ²) / 55 (150-240 mm2)	35	Hex 8	Bolt M12	...378632	0,113
KKL 2X240	690	630	850	35-240	35-240	25 (35-120 mm ²) / 55 (150-240 mm2)	35	Hex 8	Bolt M12	...378649	0,245
KKL 1X240TM	690	400	425	35-240	35-240	25 (35-120 mm ²) / 40 (150-240 mm2)	30	Hex 8	Bolt M8	...378656	0,113
KKL 1X240TE	690	400	400	35-240	35-240	25 (35-120 mm ²) / 40 (150-240 mm2)	30	Hex 8	Bolt M8	...378731	0,113
KKL2X240LR	690	630	850	35-240	35-240	25 (35-120 mm ²) / 55 (150-240 mm2)	35	Hex 8	Bolt M12	...378755	0,245
KKL1X300	690	400	520	95-300	95-300	45 (95-120 mm2) / 75 (150-300 mm2)	42	Hex 12	Bolt M12	...484289	0,262
KKL2X300	690	800	1040	95-300	95-300	45 (95-120 mm2) / 75 (150-300 mm2)	42	Hex 12	Bolt M12	...484296	0,501
KKL2X150VB	690	500	640	25-150	25-150	12 (25-50 mm2) / 22 (70-95 mm2) / 38 (120-150 mm2)	31/62	Hex 6	Bolt M12	...484319	0,18
KKL2X150VM	690	500	640	25-150	25-150	12 (25-50 mm ²) / 22 (70-95 mm2) / 38 (120-150 mm2)	31/62	Hex 6	Bolt M12	...484302	0,18
KKL2X240VB	690	630	850	35-240	35-240	25 (35-120 mm2) / 40 (150-240 mm2)	37/75	Hex 8	Bolt M12	...484333	0,339
KKL2X240VM	690	630	850	35-240	35-240	25 (35-120 mm ²) / 40 (150-240 mm2)	37/75	Hex 8	Bolt M12	...484326	0,339
KKL2X300VB	690	800	1040	95-300	95-300	45 (95-120 mm2) / 75 (150-300 mm2)	42/82	Hex 12	Bolt M12	...484357	0,572
KKL2X300VM	690	800	1040	95-300	95-300	45 (95-120 mm2) / 75 (150-300 mm2)	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.

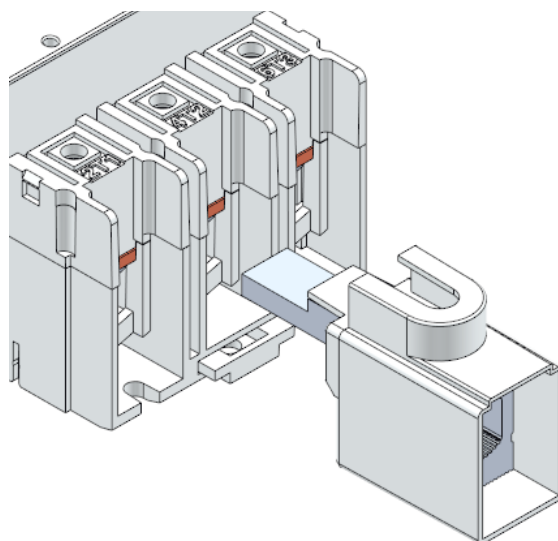
Installation:

Mounting: Bolt

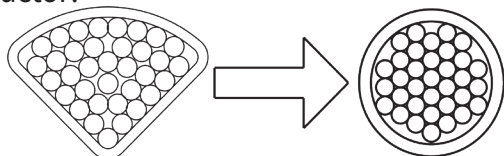


Nut - DIN 934
Spring washer - DIN 127
Washer - DIN 125
Bolt - DIN 933

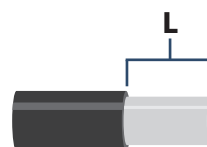
Mounting: Direct



Conductor:

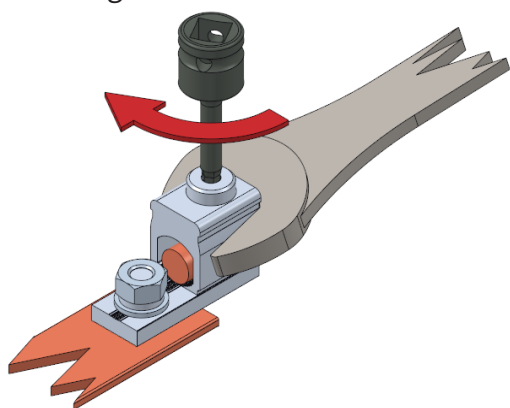


Stripping length L:



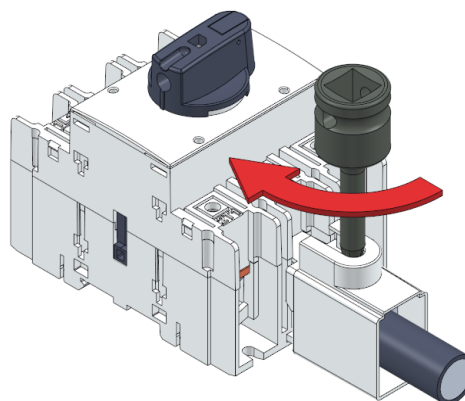
Connection:

Mounting: Bolt



Torque T

Mounting: Direct



Ref. Table 2

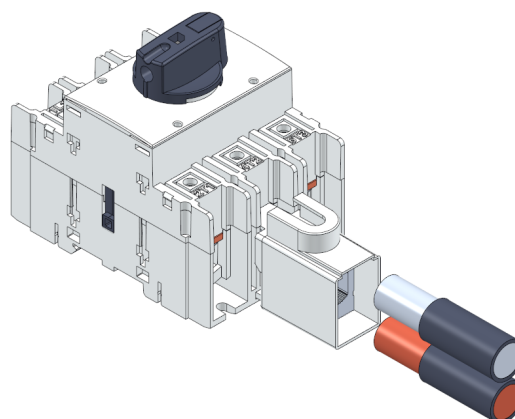
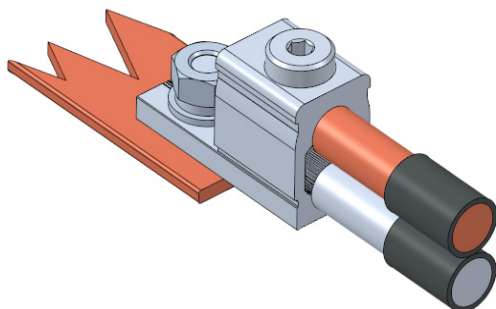


Table 2

Cross section (mm ²)/ number of conductors simultaneously connectable to the terminal																				
	Type	Torque [Nm]	Cable	In [A]	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
KKL	1X16 / 3X1X16T	2,2Nm (1,5-16mm ²)	Al	63	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
			Cu	63	3	3	3	2	1**	1	-	-	-	-	-	-	-	-	-	-
	1X50 / 1X50N / 1X50M / 1X50T1 / 1X50T2 / 1X50T3	5Nm (2,5-16mm ²) / 10Nm (25-50mm ²)	Al	160	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-
			Cu	160	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
	2X50 / 2X50M	5Nm (2,5-16mm ²) / 10Nm (25-50mm ²)	Al	200	-	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-
			Cu	320	-	3	3	3	3	2	1	1**	1	-	-	-	-	-	-	-
	1X95 / 1X95M	12Nm (16-50mm ²) / 22Nm (70-95mm ²)	Al	200	-	-	-	-	-	1	1	1	1	1	1	-	-	-	-	-
			Cu	245	-	-	-	-	-	3	2	2	1	1**	1	-	-	-	-	-
	2X95 / 2X95LR	12Nm (16-50mm ²) / 22Nm (70-95mm ²)	Al	400	-	-	-	-	-	1	1	1	1	1	1	-	-	-	-	-
			Cu	490	-	-	-	-	-	3	2	2	1	1**	1	-	-	-	-	-
	1X120 / 1X120RS / 1X120RSY / 1X120T / 1X120T1 / 1X120T2 / 1X120T3 / 1X120TM	12Nm (16-50mm ²) / 22Nm (70-120mm ²)	Al	200	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-	-
			Cu	245	-	-	-	-	-	3	2	2	1	1**	1	1	-	-	-	-
	1X150 / 1X150T2	12Nm (25-50mm ²) / 22Nm (70-95mm ²) / 38Nm (120-150mm ²)	Al	250	-	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-
			Cu	320	-	-	-	-	-	-	3	3	2	1	1	1**	1	-	-	-
	2X150 / 2X150VB / 2X150VM / 2X150LR	12 Nm (25-50 mm ²) / 22 Nm (70-95 mm ²) / 38 Nm (120-150 mm ²)	Al	500	-	-	-	-	-	-	1	1	1	1	1	1	1	-	-	-
			Cu	640	-	-	-	-	-	-	3	3	2	1	1	1**	1	-	-	-
	1X240 / 1X240TM / 1X240TE	25Nm (35-120mm ²) / 55Nm (150-240mm ²)	Al	315	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	-
			Cu	425	-	-	-	-	-	-	-	3	3	2	1	1	1	1**	1	-
	2X240 / 2X240M8 / 2X240VB / 2X240VM / 2X240LR	25Nm (35-120mm ²) / 55Nm (150-240mm ²)	Al	630	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	-
			Cu	850	-	-	-	-	-	-	-	3	3	2	1	1	1	1**	1	-
	1X300	45 Nm (95-120 mm2) / 75 Nm (150-300 mm2)	Al	400	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
			Cu	520	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1**	1
	2X300 / 2X300VB / 2X300VM	45 Nm (95-120 mm2) / 75 Nm (150-300 mm2)	Al	800	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1
			Cu	1040	-	-	-	-	-	-	-	-	-	-	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.