

FieldHub, Power Cable

The cable is required to connect two Kepco power supplies (KLN80-9.5E) to the FieldHubs backplane.

usage	manufacturer / type	view	Gauge / mm2	Qty	remark
Up to +/-80V DC power, at the back side of the crate	TE 1-917807-3			1	pin usage: B1 : +60V A1: PE B2 : 0V A2: Shield B3 : -60V A3: not used
Crimp pins for 1-917807-3	TE 179956-2		12-10 AWG	5	Use crimp tool TE 234171-1 
Connect to power bars of Kepco KLN80-9.5E	TE 2-35110-1 MULTICOMP PRO RNYD5-6		12-10 AWG	5	Inner hole diameter = 6.7mm Outer ring diameter = 13.5mm Use tool Klauke K 82T or similar
Connect to earth-ground of Kepco KLN80-9.5E	Klauke 6303 MULTICOMP PRO RNYD2-3.2		1,5-2,5 mm2	2	Inner hole diameter = 3.2mm Outer ring diameter = 6mm Use tool Klauke K 82T or similar
earth ground wire connection	Klauke 790 MOLEX 19164-0056		4-6 mm2	1	Connect to earth-ground of the ALPHA WIRE cable to two 2,5mm2 wires
Cable, main cable, shielded	ALPHA WIRE 80159		12 AWG / 4mm2	3m max.	4 x 12AWG plus outer shield D= 10.5mm
Cable, establish mid level "0V" power connection	H07Z-K 1x6,0mm ²		10 AWG / 6 mm2	0,35m	Black, halogen-free
Cable, protecting earth ground	H07Z-K 1x2,5mm ²		14 AWG / 2,5mm2	2x 0,25m	Yellow / green

usage	Manufacturer, type	view	Gauge / mm ²	Qty	remark
Heat Shrink Tube	HTAT-16/4-0-STK			0,15m	Black, 4:1, Dual Wall Tubing, Shrinks To .158 in [4 mm], Irradiated Modified Polyolefin,
	PRO POWER, CGFC-9/3-2		D=9mm	20mm	3:1
	PRO POWER, CGFC-9/3-6		D=9mm	20mm	3:1

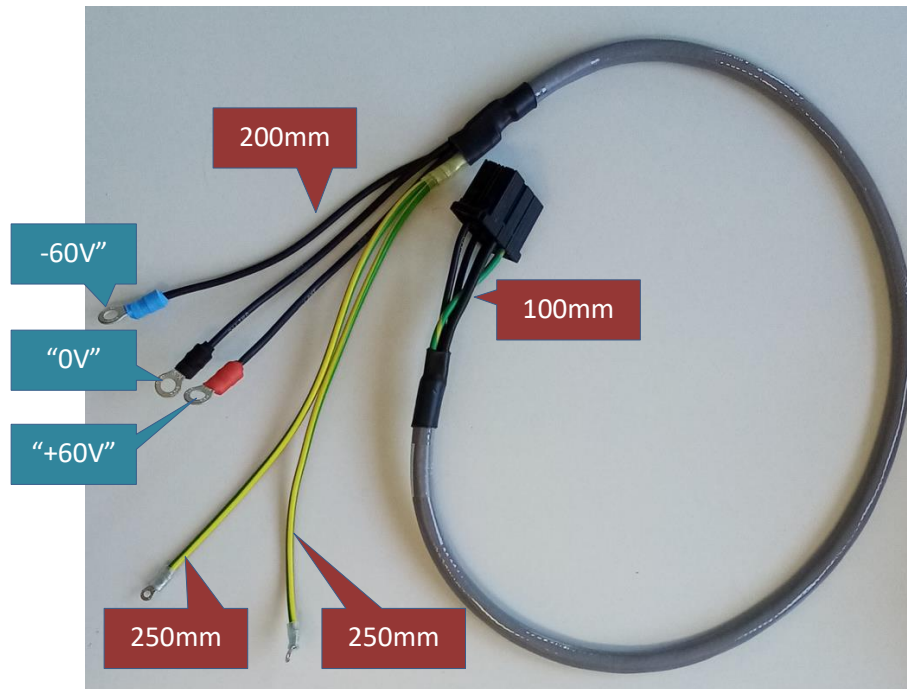
Connection Table, Main Cable

Conn. TE 1-917807-3 with crimp pins TE 179956-2 Pin-Nr.	ALPHA WIRE 80159 Internal wire-Nr. / type	Other end, terminal type	Remark
A1	Yellow/green earth ground	MOLEX 19164-0056 + 2x MULTICOMP PRO RNYD2-3.2	Connect to two 2.5mm ² yellow-green stranded wires, 0.25m with MULTICOMP PRO RNYD2-3.2 at the ends
A2	Shield braid	-	Twist the shield braid and cover with shrinking tube
A3	-	-	
B1	1	MULTICOMP PRO RNYD5-6	+60V, red shrinking tube at ring terminal
B2	2	MULTICOMP PRO RNYD5-6	0V, black shrinking tube at ring terminal
B3	3	MULTICOMP PRO RNYD5-6	-60V, blue shrinking tube at ring terminal

Connection Table, 0V Cable

Connector left	Cable	Connector right	Remark
MULTICOMP PRO RNYD5-6	H07Z-K 1x6,0mm ² black	MULTICOMP PRO RNYD5-6	350 mm length

Example



Cable Assembly

Cable type	Length in cm	Remark
Main cable ALPHA WIRE 80159 9x	230	Add Length value as marker on both cable ends
	240	
	250	
	260	
	270	
	280	
	290	
	290	
	290	
0V cable H07Z-K 1x6,0mm ² 9x	35	