EEZ PSU H24005 wire harness

- Ethernet cable
- Cooling fan cable
- AUX temperature sensor cable
- AC switch patch cables
- Cable set #1
- Cable set #2
- Pre-assembled cables
- BOM

1. Ethernet cable

Total length	260 (± 5) mm		
Type	4 pairs Ethernet, *stranded* wire		
TME	HELUKAT100-FTP-FP or e.g. cut CA00600.00C01 to size		
Farnell	1602385 or e.g. cut 1734894 to size		

Connectors

Side A	X8	Side B	X18
Housing type	Receptacle, 0.1"	Housing type	See side A
TME	NSR-08	TME	See side A
Farnell	865667	Farnell	See side A
Pin:	Female	Pin	See side A
Pin quantity	8	Pin quantity	7
TME	NDR-T	TME	See side A
Farnell	1022219	Farnell	See side A

Wiring

Name	Position	Color / description	Position	Color / description
LED link	1	Brown-white	1	Brown-white
LED act	2	Brown	2	Brown
Shield	3	Blue-white	3	**NOT CONNECTED**
RX+	4	Orange-white	4	Orange-white
RX-	5	Orange	5	Orange
TX+	6	Green-white	6	Green-white
TX-	7	Green	7	Green
+3.3V	8	Blue	8	Blue

Picture

2.   *Cooling fan cable*

Total length	100 (± 5) mm
Type	3 wire, already mounted on the cooling fan
Fan:	TME: MB60251V1-G99

Connectors

| Side A	X6	Side B	N/A
Housing type	Receptacle, 0.1"	Housing type	N/A
TME	MX-6471-031	TME	N/A
Farnell	143127	Farnell	N/A
Pin	Female	Pin	N/A
Pin quantity	3	Pin quantity	0
TME	MX-0850-0114	TME	N/A
Farnell	2063734	Farnell	N/A

Additional info

Fan is already equipped with cable that has to be cut to size and terminated with connector

Wiring

Name	Position	Color / description
12 Vdc	1	Red
GND	2	Black
Sense	3	Yellow

Picture
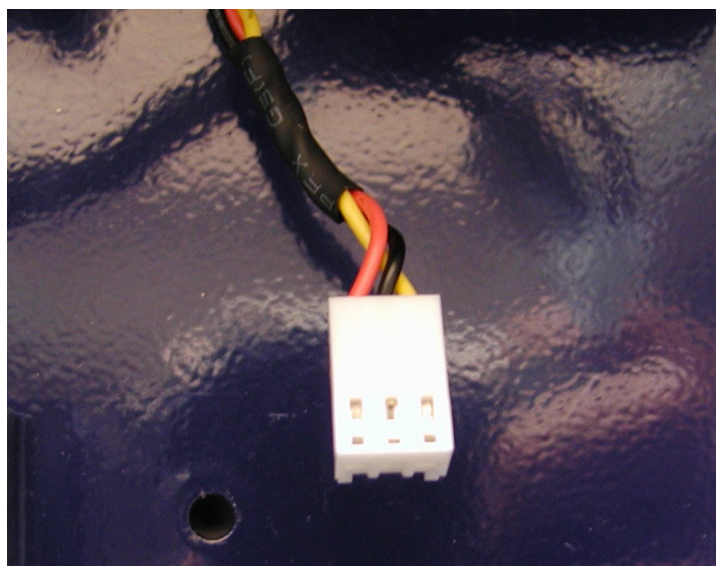
3.   *AUX temperature sensor cable*

Total length	120 (± 5) mm
Type	Max. 0.35 mm^2 singe wire, stranded
TME	E.g. brown: LGY0.35/25-BR (or any other color)
Farnell	E.g. brown: 2425402 (0.22 mm^2)

NTC	TME: NTCLE100E3103JB0, Farnell: 1187031		
Wire	TME: LGY0.35/25-BR, Farnell:		

Connectors

| Side A	X17	Side B	N/A
Housing type	Receptacle 0.1"	Housing type	N/A
TME	MX-6471-021	TME	N/A
Farnell	143126	Farnell	N/A
Pin	Female	Pin	N/A
Pin quantity	2	Pin quantity	0
TME	MX-0850-0114	TME	N/A
Farnell	2063734	Farnell	N/A

Additional info

The temperature sensor is already equipped with cable that has to be terminated with connector

Wiring

Name	Position	Color / description
MCU_VCC	1	Any color
NTC	2	Any color

Picture
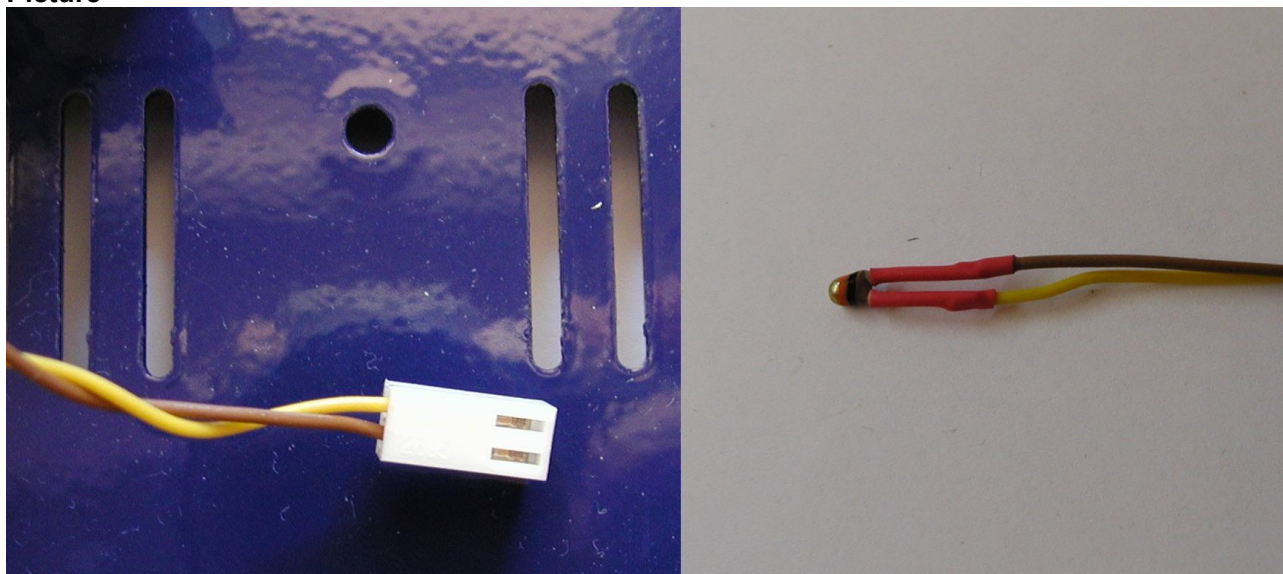
4. AC switch patch cables

Total length	45 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	Brown: LGY0.75/25-BR, Blue: LGY0.75/25-BL
Farnell	Brown: 2528103, Blue: 2528092

Connectors

Side A	AC output	Side B	AC Switch input
Pin	Female quick disconnect	Pin	See side A

Pin quantity	2		Pin quantity	See side A
TME	BM01148		TME	See side A
Farnell	3625424		Farnell	See side A

Additional info

Required for Schurter 4304.6090 IEC inlet (C14, 6765, 10A)

Wiring1

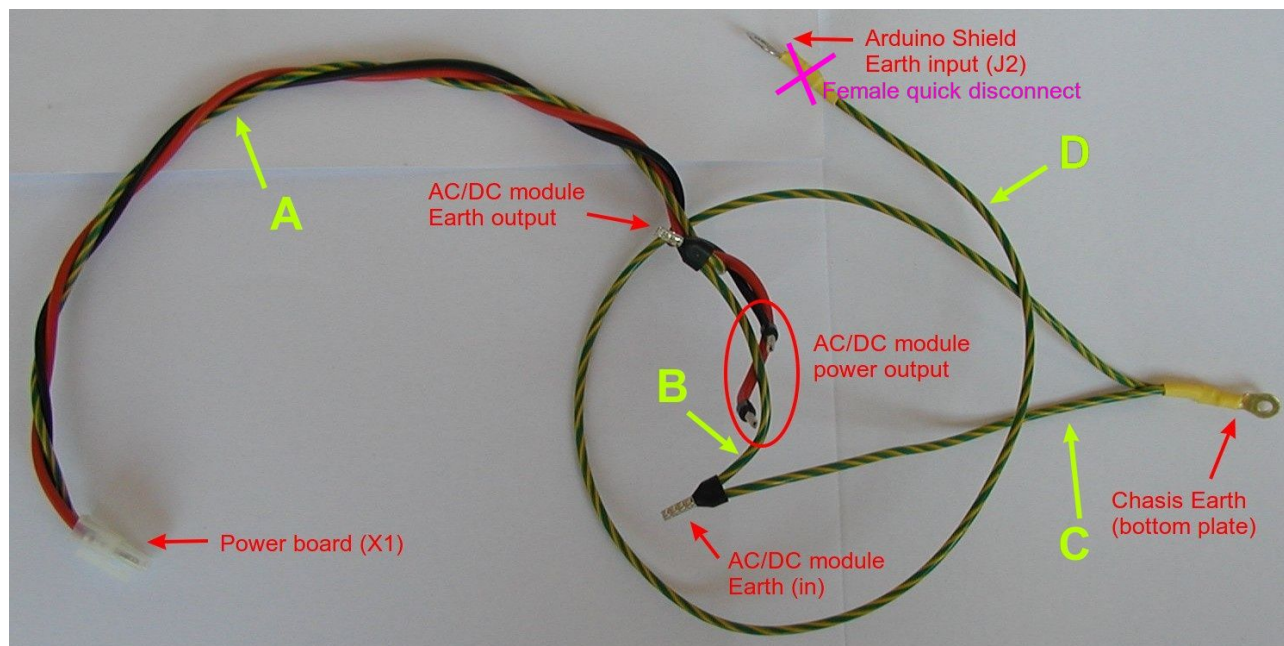| Name	Position	Color / description	Position	Color / description
Line	1	Brown	1	Brown

Wiring2

Name	Position	Color / description	Position	Color / description
Neutral	1	Blue	1	Blue

Picture

5. Cable set #1

5.1. Section A: Power board X1 cable

Length	400 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	Red: LGY0.75/25-RD, Black: LGY0.75/25-BK Green-Yellow: LGY0.75/25-YL/GR
Farnell	Red: 2528175, Black: 2528082, Green-Yellow: 2528140

Connectors

Side A	Power board X1 (Ch2)	Side B	AC/DC module power output
Housing type	Male, Mini-Fit Jr.	Housing type	Ferrule, single wire
TME	MX-5557-03R2	TME	H0.75/14D/GY
Farnell	9963480	Farnell	841195
Pin	Female	Quantity	2
Pin quantity	3	Housing type	Ferrule, twin entry
TME	MX-5556-T3L	TME	H0.75/15D2/GY
Farnell	9732675	Farnell	1121751
		Quantity	1

Wiring

Name	Position	Color / description	Position	Color / description
Vin+	1	Red	N/A	Ferrule
Vin-	2	Black	N/A	Ferrule
Earth	3	Green-Yellow	N/A	Ferrule, twin entry

5.2. Section B: AC/DC module Earth

Length	70 (± 1) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC

TME	[LGY0.75/25-YL/GR](#)
Farnell	[2528140](#)

Connectors

Side A	AC/DC module Earth output	**Side B**	AC/DC module Earth (in)
Housing type	Use twin entry ferrule, See B side, *Section A*	Housing type	Ferrule, twin entry
		TME	[H0.75/15D2/GY](#)
		Farnell	[1121751](#)
		Quantity	1

5.3.   Section C: Chassis Earth

Length:	170 (± 5) mm
Type:	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	[LGY0.75/25-YL/GR](#)
Farnell	[2528140](#)

Connectors

Side A	AC/DC module Earth (in)	**Side B**	Chassis Earth (bottom plate)
Housing type	Use twin entry ferrule, See B side, *Section B*	Housing type	Non-insulated, Ring terminal, 3 mm
		TME	[BM 91103](#)
		Farnell	[7356528](#)
		Quantity	1

5.4.   Section D: Arduino Shield Earth

Length:	500 (± 5) mm
Type:	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	[LGY0.75/25-YL/GR](#)
Farnell	[2528140](#)

Connectors

Side A	Chassis Earth (bottom plate)	**Side B**	Arduino Shield Earth input (J2)
Housing type	Use ring terminal, See B side, *Section C*	Housing type	Female quick disconnect
		TME	1
		Farnell	[BM01148](#)
		Quantity	[3625424](#)

6. Cable set #2
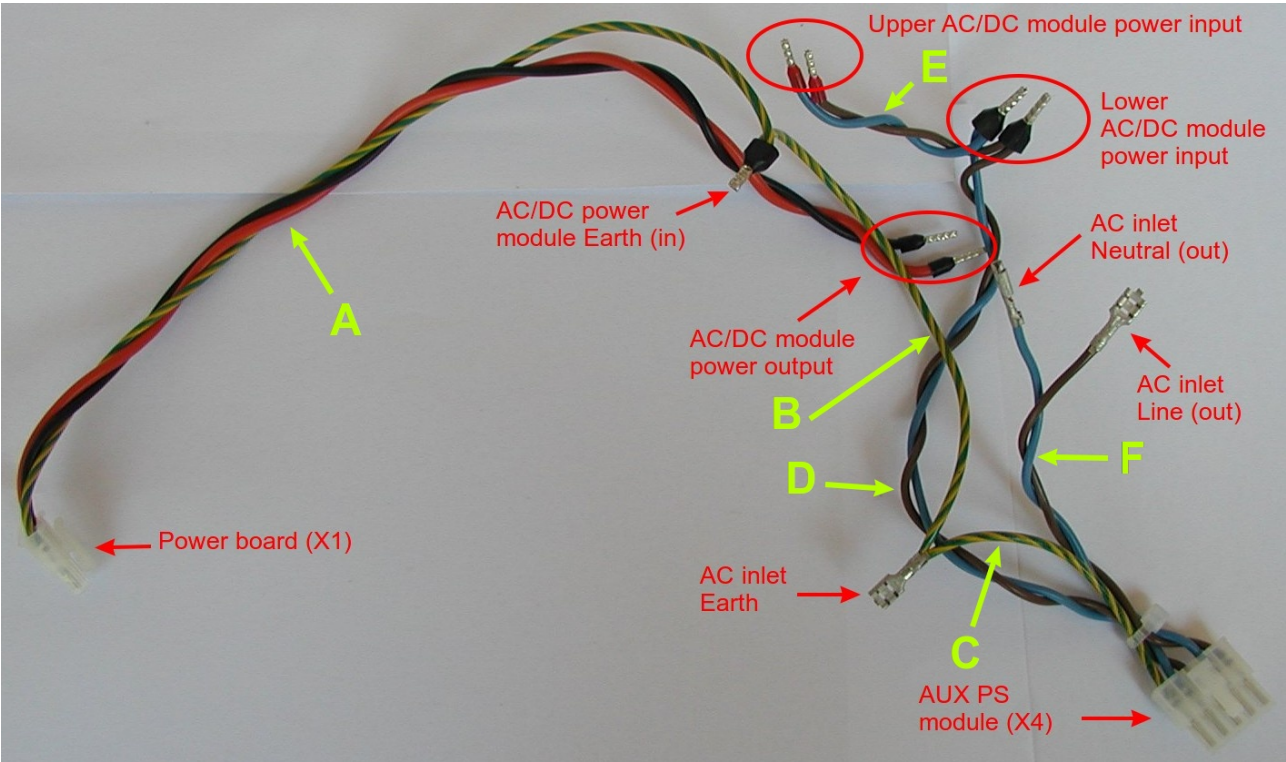
6.1. Section A: Power board X1 cable

Length	330 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	Red: LGY0.75/25-RD, Black: LGY0.75/25-BK Green-Yellow: LGY0.75/25-YL/GR
Farnell	Red: 2528175, Black: 2528082, Green-Yellow: 2528140

Connectors

Side A	Power board X1 (Ch1)	Side B	AC/DC module power output
Housing type	Male, Mini-Fit Jr.	Housing type	Ferrule, single wire
TME	MX-5557-03R2	TME	H0.75/14D/GY
Farnell	9963480	Farnell	841195
Pin	Female	Quantity	2
Pin quantity	3	Housing type	Ferrule, twin entry
TME	MX-5556-T3L	TME	H0.75/15D2/GY
Farnell	9732675	Farnell	1121751
		Quantity	1

Wiring:

Name	Position	Color / description	Position	Color / description
Vin+	1	Red	N/A	Ferrule
Vin-	2	Black	N/A	Ferrule
Earth	3	Green-Yellow	N/A	Ferrule, twin entry

6.2. Section B: AC/DC module Earth

Length	150 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	LGY0.75/25-YL/GR
Farnell	2528140

Connectors

Side A	AC/DC power module Earth (in)	Side B	AC inlet Earth
Housing type	Use twin entry ferrule, See B side from *Section A*	Housing type	Female quick disconnect
		Quantity	1
		TME	BM01148
		Farnell	3625424

6.3. Section C: AUX PS module Earth

Length	150 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	LGY0.75/25-YL/GR
Farnell	2528140

Connectors

Side A	AC inlet Earth	Side B	AUX PS module (X4)
Housing type	Use Female quick disconnect terminal, See B side, *Section B*	Housing type	Male, Mini-Fit Jr.
		TME	MX-5557-05R2
		Farnell	9963502
		Pin	Female
		Pin quantity	1
		TME	MX-5556-T3L
		Farnell	9732675

Wiring:

Name	Position	Color / description	Position	Color / description
-	-	Female quick disconnect	5	Earth

6.4. Section D: Lower AC/DC module power input

Length	200 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	Brown: LGY0.75/25-BR, Blue: LGY0.75/25-BL
Farnell	Brown: 2528103, Blue: 2528092

Connectors

Side A	AUX PS module (X4)	Side B	Lower AC/DC module power input
Housing type	See Side B, *Section C*	Housing type	Ferrule, twin entry
TME	-	TME	H0.75/15D2/GY
Farnell	-	Farnell	1121751

Pin	Female	Quantity	2
Pin quantity	2		
TME	MX-5556-T3L		
Farnell	9732675		

Wiring:

Name	Position	Color / description	Position	Color / description
Line	1	Brown	N/A	Ferrule, twin entry
Neutral	2	Blue	N/A	Ferrule, twin entry

6.5. Section E: Upper AC/DC module power input

Length	70 (± 1) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	Brown: LGY0.75/25-BR, Blue: LGY0.75/25-BL
Farnell	Brown: 2528103, Blue: 2528092

<div align="center">Connectors</div>

Side A	Lower AC/DC module power input	**Side B**	Upper AC/DC module power input
Housing type	Use twin entry ferrule, See B side, *Section D*	Housing type	Ferrule, single wire
		TME	H0.75/14D/GY
		Farnell	1121751
		Quantity	2

6.6. Section F: AUX PS module power input

Length	110 (± 5) mm
Type	0.75 mm^2 singe wire, stranded, min. 250 VAC
TME	Brown: LGY0.75/25-BR, Blue: LGY0.75/25-BL
Farnell	Brown: 2528103, Blue: 2528092

<div align="center">Connectors</div>

Side A	AUX PS module (X4)	**Side B**	Lower AC/DC module power input
Housing type	See Side B, *Section C*	Housing type	Female quick disconnect
TME	-	TME	BM01148
Farnell	-	Farnell	3625424
Pin	Female	Quantity	2
Pin quantity	2		
TME	MX-5556-T3L		
Farnell	9732675		

Wiring:

Name	Position	Color / description	Position	Color / description
Line	3	Brown	N/A	Female quick disconnect
Neutral	4	Blue	N/A	Female quick disconnect

7. Pre-assembled cables

7.1. Arduino shield power cable

Length	300 mm
Type	Ribbon cable with IDC connectors; 10x28AWG
TME	FC10300-0
Farnell	N/A

Picture

7.2.   Arduino USB cable

Length	300 or 500 mm
Type	USB Micro to 5-pin receptacle cable
TME	N/A
Farnell	N/A
AliExpress	e.g. *High Quality 50CM micro usb 5pin male to 1x 5Pin Female 0.1" USB header PCB motherboard cable*

8.   BOM

Type		Part (Farnell)	Part (TME)	Total

Receptacle	865667	NSR-08	2
Receptacle	143127	MX-6471-031	1
Receptacle	143126	MX-6471-021	1
Receptacle Mini-Fit Jr.	9963480	MX-5557-03R2	2
Receptacle Mini-Fit Jr.	9963502	MX-5557-05R2	1
Pin	1022219	NDR-T	15
Pin	2063734	MX-0850-0114	5
Pin	9732675	MX-5556-T3L	11
Female quick disconnect	3625424	BM01148	6
Ferrule	841195	H0.75/14D/GY	6
Ferrule, twin entry	1121751	H0.75/15D2/GY	5
Ring terminal	7356528	BM 91103	1
Cat5e cable	1602385	HELUKAT100-FTP-FP	0.26 m
0.75 cm^2 cable (Brown)	2528103	LGY0.75/25-BR	0.47 m
0.75 cm^2 cable (Blue)	2528092	LGY0.75/25-BL	0.47 m
0.75 cm^2 cable (Red)	2528175	LGY0.75/25-RD	0.73 m
0.75 cm^2 cable (Black)	2528082	LGY0.75/25-BK	0.73 m
0.75 cm^2 cable (Yellow-Green)	2528140	LGY0.75/25-YL/GR	1.77 m
0.35 cm^2 cable	2425402	LGY0.35/25-BR	0.24 m
12 Vdc cooling fan	–	MB60251V1-G99	1
NTC	1187031	NTCLE100E3103JB0	1
IDC ribbon cable	–	FC10300-0	0.3 m
USB Micro cable	Search Aliexpress		0.5 m