



Service Documents

***Confidential, for authorized service technicians only!
Do not disclose this information to or share these documents
with third parties.***

***Vertraulich! Nur für autorisierte Servicetechniker!
Nicht zur Weitergabe an Dritte freigegeben!***

Note!

The components used in this product - particularly parts affecting safety as well as speakers and transformers - were developed and manufactured to certain specifications. Please use original spare parts only to ensure the product remains fully functional and safe.

Achtung!

Die in diesem Produkt verwendeten Komponenten, insbesondere sicherheitsrelevante Teile, Lautsprecher und Transformatoren wurden nach spezifischen Vorgaben entwickelt und gefertigt. Bitte benutzen Sie ausschließlich Original-Ersatzteile – nur so ist die volle Funktionalität und Sicherheit gewährleistet.



TECHNICAL SERVICE:

***Stamer Musikanlagen GmbH • Magdeburger Str. 8 • 66606 St.Wendel • Germany
Music & Sales P.E. GmbH • Leipziger Str. 3 • 66606 St.Wendel • Germany***



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Edition Blue

60-R

CONGRATULATIONS AND THANK YOU FOR CHOOSING THE HUGHES & KETTNER EDITION BLUE 60-R AMP!

A team of guitarists and technicians developed the EDITION BLUE 60-R amps with a single purpose in mind: To provide you with sophisticated guitar sounds and practical features in an easy-to-handle package.

The EDITION BLUE 60-R is the ideal workhorse for discerning players who want happening tone in a compact amp. The EDITION BLUE 60-R's high-performance Current Feedback power amp delivers not only 60 watts of punch, but also the sought-after tone of a classic tube amp.

One component playing a major role in the overall tone of the amp is the RockDriver Junior speaker. Custom-made for Hughes & Kettner to our specifications, this speaker not only perfectly captures the essence of vintage sound, but also is extremely efficient. This makes your EDITION BLUE 60-R substantially louder than other amplifiers having the same output power rating.

As very special treat, the EDITION BLUE 60-R offers the option of connecting a CD player or tape deck. This handy add-on feature allows you to play along with CDs or playback tracks of your own making for rehearsals, jamming, or even one-man/woman gigs.

The EDITION BLUE 60-R has the versatility, sound, and features that inspires you to perform your best in smaller venues, rehearsal rooms and studios.

Its logical control layout gives you immediate access to the EDITION BLUE 60-R's world of sound. This manual introduces you to its many features and application options.

WE WISH YOU A LOT OF FUN AND SUCCESS WITH YOUR NEW EDITION BLUE 60-R!

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BEFORE POWERING UP...

- Check that the local current and the amp's AC power rating are identical before you plug the power cord into an AC outlet.
- Ensure that air can circulate freely around your amp's ventilation ducts.
- Place the amp on a stable platform where it is not exposed to mechanical shocks and temperature extremes which may damage the amp or endanger the safety of bystanders.
- Hughes & Kettner is not liable for damages due to improper use.

1.0 CHANNELS

The EDITION BLUE 60-R features a newly developed pre-amp that not only produces authentic harmonic overdrive but also responds dynamically to your picking style. Based on semiconductors, this innovative circuitry simulates the sound-shaping elements of tube amps and delivers sound quality unparalleled in this price range. It also provides the dynamics demanding guitarists require for musical expression.

CLEAN:

Depending on the preamp control settings, the EDITION BLUE 60-R delivers a variety of contemporary and Vintage clean tones. At higher VOLUME settings, the "SoftClick" circuitry delivers that slight edge you would expect from a Vintage tube amp. If desired, the CLEAN channel can put out plenty of crunch.

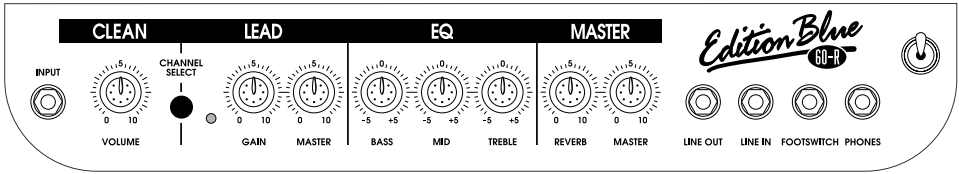
LEAD:

This channel delivers direct, in-your-face classic rock sounds with a very British feel. The MID control is a very effective sound-shaping tool; it lets you dial in many different lead sounds. If you drastically taper off the mids, the EDITION BLUE 60-R will produce the unmistakable sound of modern tube amps - ideal for tapping and heavy-duty power chord riffing.

REVERB:

In the signal chain, the EDITION BLUE 60-R reverb section is located after the FX loop so you can use it for external effects and still achieve a clean reverb sound. Additionally, the reverb level automatically adjusts its own level when you switch between channels, more for clean, less for lead.

2.0 JACKS AND CONTROL FEATURES



2.1. FRONT PANEL:

INPUT: Input sensitivity is broad enough to handle guitars equipped with humbuckers, active pickups, or single coils.

CLEAN VOL: Determines the CLEAN channel's volume. Depending on the type of pickups in your instrument, the amp will begin to clip somewhere around the 12 o'clock setting (SoftClick).

CHANNEL SELECT: This channel selector switch activates either the CLEAN or LEAD channel. The LEAD channel is active when the button is pressed.

RED LEAD LED: The red LED illuminates when the LEAD channel is active.

LEAD GAIN: Controls the amount of distortion in the LEAD channel.

LEAD MASTER: Determines the LEAD channel volume level in relation to the CLEAN channel volume level.

EQ SECTION: Common BASS, MID and TREBLE controls for the both channels. MID and TREBLE controls influence each other, as is standard in tube amps: if you boost the treble, the mids are cut and vice versa. This sound-shaping feature allows you to dial in a wide variety of subtle tonal variations.

REVERB: Controls how much integrated reverb is added to the signal. Reverb is automatically adjusted for each channel when you switch channels.

MASTER: Controls the amp's master volume level. The LINE OUT signal is unaffected by the MASTER control.

LINE OUT: Use this jack to feed the signal to the input of an FX processor. You can also route the signal to a second power amp or through a RED BOX to a mixing console.

LINE IN: If you are sending the LINE OUT signal to an FX processor, connect the output from that processor to this jack.

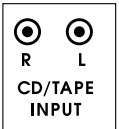
FOOTSWITCH: This jack is for a standard footswitch (e.g. Hughes & Kettner FS-1) and it allows you to switch back and forth between the CLEAN and LEAD channels. When using a footswitch, ensure the CHANNEL SELECT switch on the amp's front panel is set to CLEAN.

PHONES: Headphone jack. The speaker is automatically switched off when a plug is inserted into this jack.

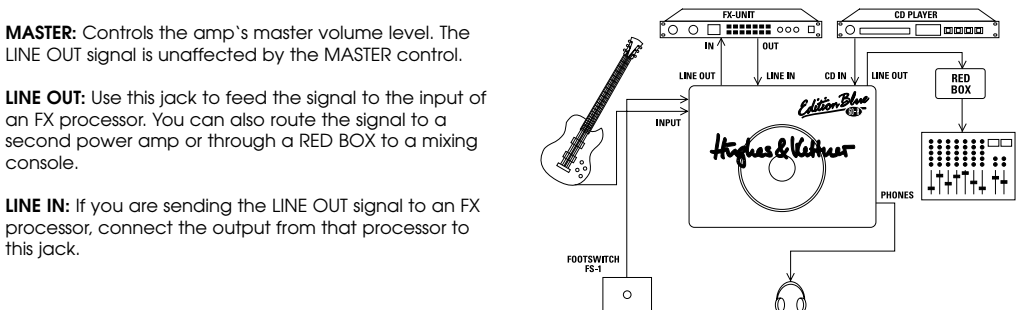
2.2 REAR PANEL:

MAINS: Connect the included Euro-norm mains cord to this socket. Ensure the amp's voltage rating matches your local AC voltage rating before you plug the cord into the wall socket.

CD INPUT: Jack for connecting CD players (tape decks).



3.0 STANDARD SETUP/ CABLE CONNECTIONS



4.0 OPERATING THE EDITION BLUE 60-R

4.1 SELECTING CHANNELS

Use the CHANNEL SELECT switch or an external foot-switch to change channels.

NOTE: Before using a footswitch, set the CHANNEL SELECT switch on front panel of the amp itself to the CLEAN position.

4.2 THE EDITION BLUE 60-R AND CD PLAYERS

The EDITION BLUE 60-R is equipped with a CD INPUT located on the rear panel for the connection of a CD player or another audio source (tape deck, DAT recorder). The circuit is controlled directly by the MASTER circuit of the EDITION BLUE 60-R, which means that you can use the MASTER knob to adjust the input signal's volume. To dial in the desired balance of levels for the playback and guitar signals, the connected playback device has to be equipped with some type of variable output control.

Tip: Most audio playback devices feature a variable headphones out. Using a corresponding adapter, you can connect it to the CD INPUT.

Note: Before you switch on the audio playback device, turn the MASTER knob all the way down. Then turn up the MASTER knob a tad and dial in the desired balance levels. Once you're satisfied with these levels, gradually turn up the knob to the the desired overall level.

4.3 THE EDITION BLUE 60-R AND SIGNAL PROCESSORS

The effects loop on the EDITION BLUE 60-R is a serial effects loop, meaning that the entire preamp signal is routed to the FX device and processed there.

To connect a signal processor:

- Connect the processor's INPUT to the EDITION BLUE 60-R LINE OUT jack and the processor's OUTPUT to the EDITION BLUE 60-R LINE IN jack.
- To avoid noise, signal degradation, and interrupted signals, only use high-quality patch cables.
- Make sure the processor is not distorting the signal. Check the processor's gain LEDs (if it is equipped with this type of display) and use the input and output controls to dial in a suitable level.
- Distortion devices are not designed for use in an FX loop. As a rule of thumb, any kind of device that compresses the signal should be connected first in the signal chain. Depending on the type of effect you want to achieve, you may want to connect your compressor directly between the instrument and the amp's input.

- If you are using several processors or stomp boxes, ensure you connect them in the proper order.

4.4 THE EDITION BLUE 60-R AND MIXING CONSOLES

If you want to feed the EDITION BLUE 60-R's signal to a mixing console, we recommend you route it through a Hughes & Kettner RED BOXTM. Patch the signal from the LINE OUT jack, as this signal path's level is not influenced by the MASTER setting. The RED BOXTM balances the signal and simulates a speaker cabinet.

5.0 SERVICE AND PREVENTIVE MAINTENANCE

The EDITION BLUE 60-R does not require service of any type. However, there are a few precautions you should heed to ensure your amp lasts for many years.

- Ensure all peripheral devices, cords and cables are in a state of good repair. Defective speaker cables are the most common cause of power amp failure. Poor-quality cables will cause hum and undesirable noise.
- Make certain your amp's ventilation ducts are not blocked or covered. Proper cooling will prolong the life of your amp.
- Avoid mechanical shocks and exposure to extreme heat, dust and especially moisture.
- When connecting peripheral devices, always pay close attention to their specifications. Never connect devices with high output signal levels (e.g. power amps) to your amp's input.
- Ensure you have the correct AC power rating available before you plug in the amp. If in doubt, ask the venue's sound technician or the custodian of the building you are rehearsing in.
- Refrain from do-it-yourself repairs! Have a qualified service technician replace internal fuses.

With the unit off and unplugged, use a soft damp cloth to clean the exterior surface of the EDITION BLUE 60-R.

6.0 TROUBLESHOOTING

1) The EDITION BLUE 60-R will not switch on:

- The amp is not getting any AC power. Check the mains cable to see if it is connected properly.
- The mains fuse is defective. Replace the fuse with another identical fuse. If this fuse also trips, consult your Hughes & Kettner dealer.

2) The EDITION BLUE 60-R is connected properly, but no sound is audible.

- One or several GAIN and MASTER controls may be turned all the way down. Dial in a higher setting.
- A short circuit in the speaker signal chain may have tripped an internal fuse. Make sure none of the connections are shorted out and have a qualified service technician replace the fuse (identical specifications are a must).

3) The footswitch does not switch channels:

- The front panel selector switch may be in the LEAD position. Set it to CLEAN (in this case, CLEAN = off).
- The footswitch is not connected to the EDITION BLUE 60-R. Plug it into the appropriate jack.

4) When accessed, the LINE OUT/LINE IN jacks cause annoying hum.

- An electrical or magnetic field is causing interference. Use higher-quality cables or re-arrange the cables you are using to reduce interference to a minimum. If this still doesn't improve the situation, use a DI box.
- The grounding of the connected devices may be causing a ground loop. DO NOT SEVER THE GROUND OF THE CONNECTED DEVICES UNDER ANY CIRCUMSTANCES! Try plugging all devices into the same socket via an AC power distributor/power strip. If this doesn't eliminate the noise, you must ensure the connection is galvanically separated by routing the signal through a DI box.

5) You have connected an FX processor to the LINE OUT jack and the signal is totally distorted, even when you have dialed in a clean sound.

- The LINE OUT signal is overloading the input of the FX processor. Reduce the processor's input sensitivity ("INPUT" or "GAIN").

6) You have connected an FX processor to the LINE OUT jack of the EDITION BLUE 60-R and the signal's volume level is way too low.

- The FX processor's output level is set incorrectly. Turn it up.

7.0 TECHNICAL DATA

PREAMP SECTION

CLEAN + LEAD solid state channels

INPUT: -10 dBV/ 1 M ohm
 LINE IN: -6dBV/ 50 k ohms
 LINE OUT: 0 dBV/ 1k ohm

POWER AMP SECTION:

'CURRENT FEEDBACK' solid state power amp

Output Power: 60 watts rms into 8 ohms

Frequency response:
 20 Hz - 30 kHz (into 8 ohms)

Speaker: RockDriver Junior, 12", 8 ohms

GENERAL FEATURES:

Voltage: 230 V~ (European model)
 117 V~ (North American model)
 100 V~ (Japanese model)

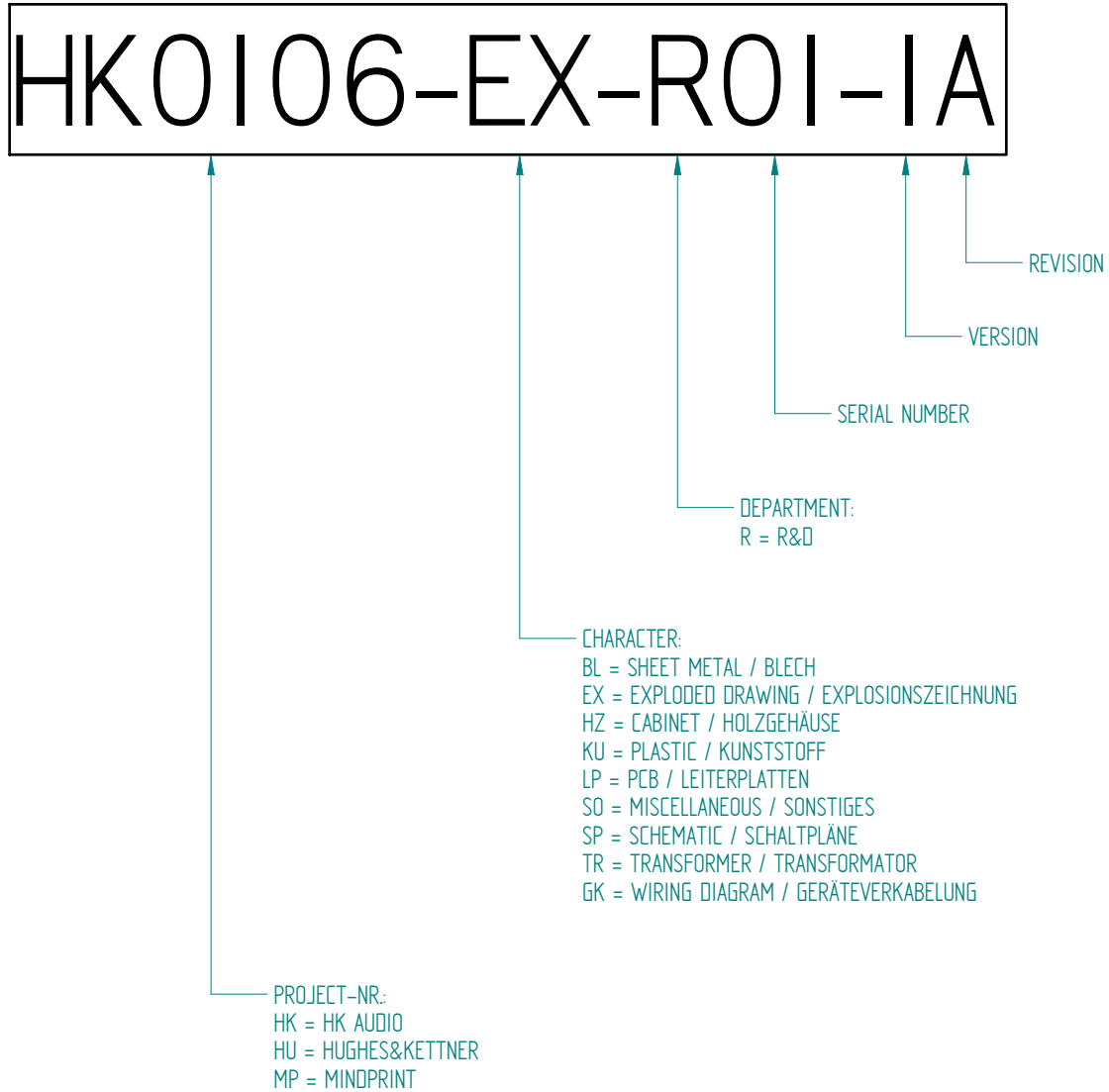
Max. power consumption: 70 VA

Mains Fuse: T 250 mA (230 V model)
 T 500 mA (117 V model)
 T 630 mA (100 V model)

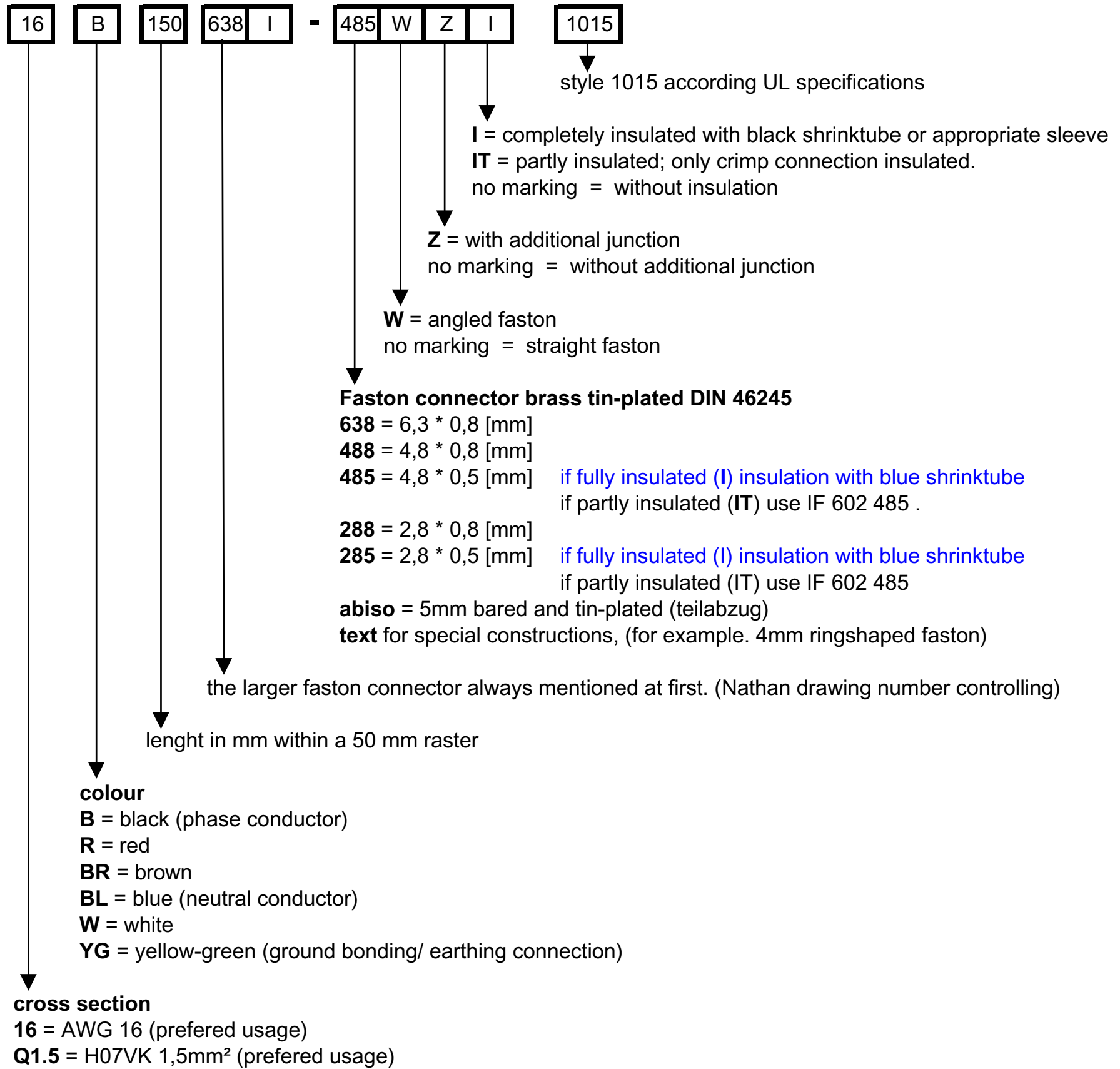
Dimensions: (W x H x D)
 480 x 490 x 275 mm
 19" x 19.25" x 11"

Weight: approx. 29 Lbs./approx.13 kgs

DRAWING-NUMBERS EXAMPLE



Standard for single wire confection.



wire designation:

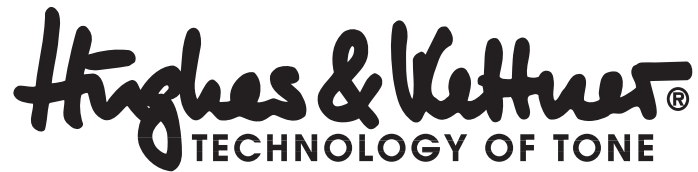
P + lfd Nr. = AWG single wire black, red, blue, brown or white

E + lfd Nr. = AWG single wire green- yellow

L + lfd Nr. = twisted AWG double wire, length specification always in twisted condition

FQL + lfd Nr. = crossover wiring H07VK

Regarding special wirings like wiring harness or similar, drawings will be prepared and appropriate drawing numbers will be stored in the article archive.



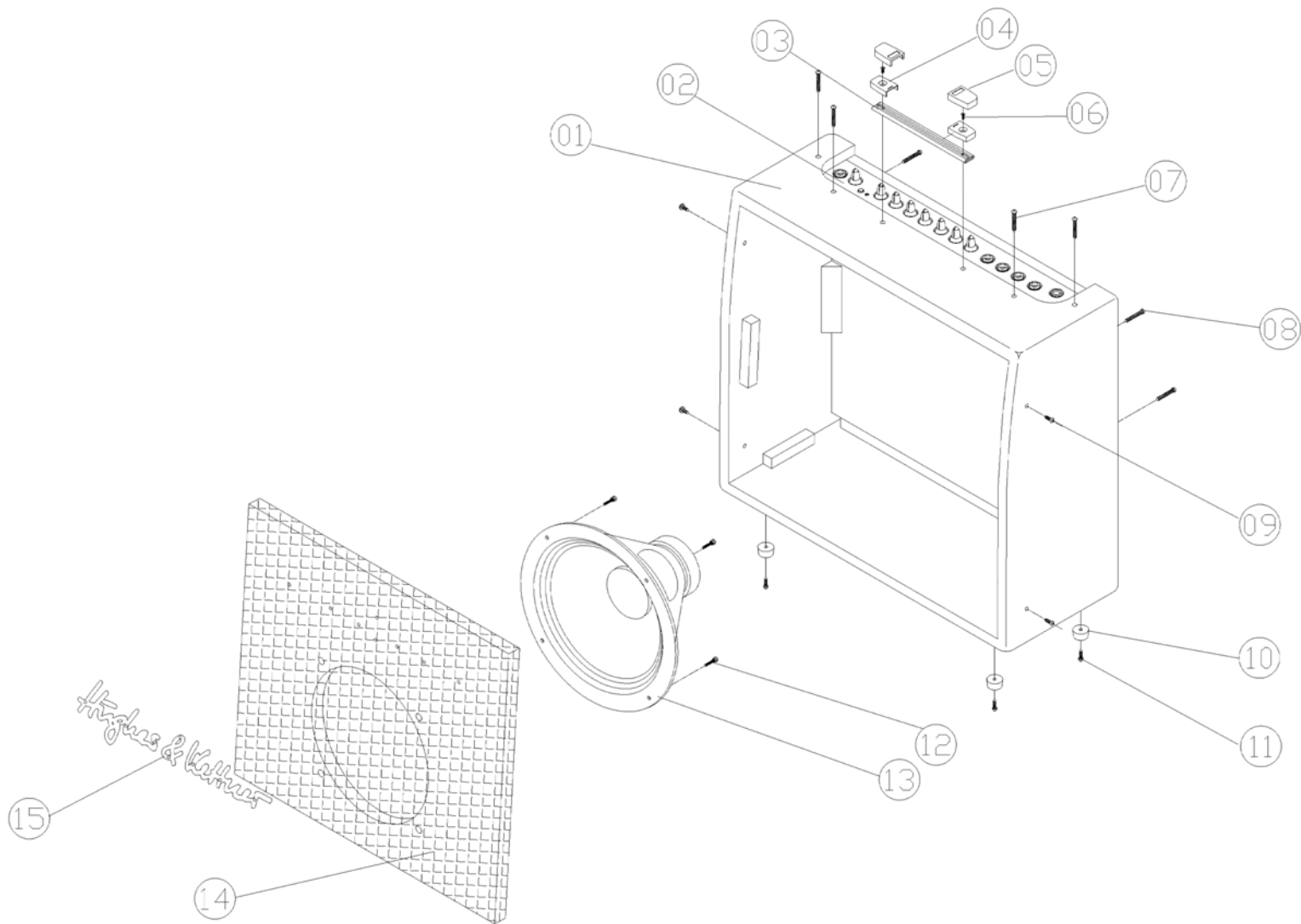
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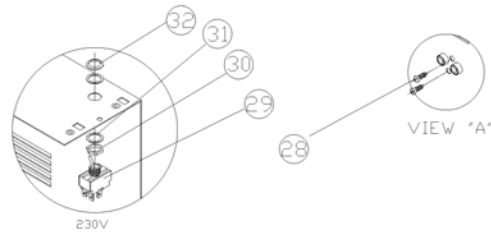
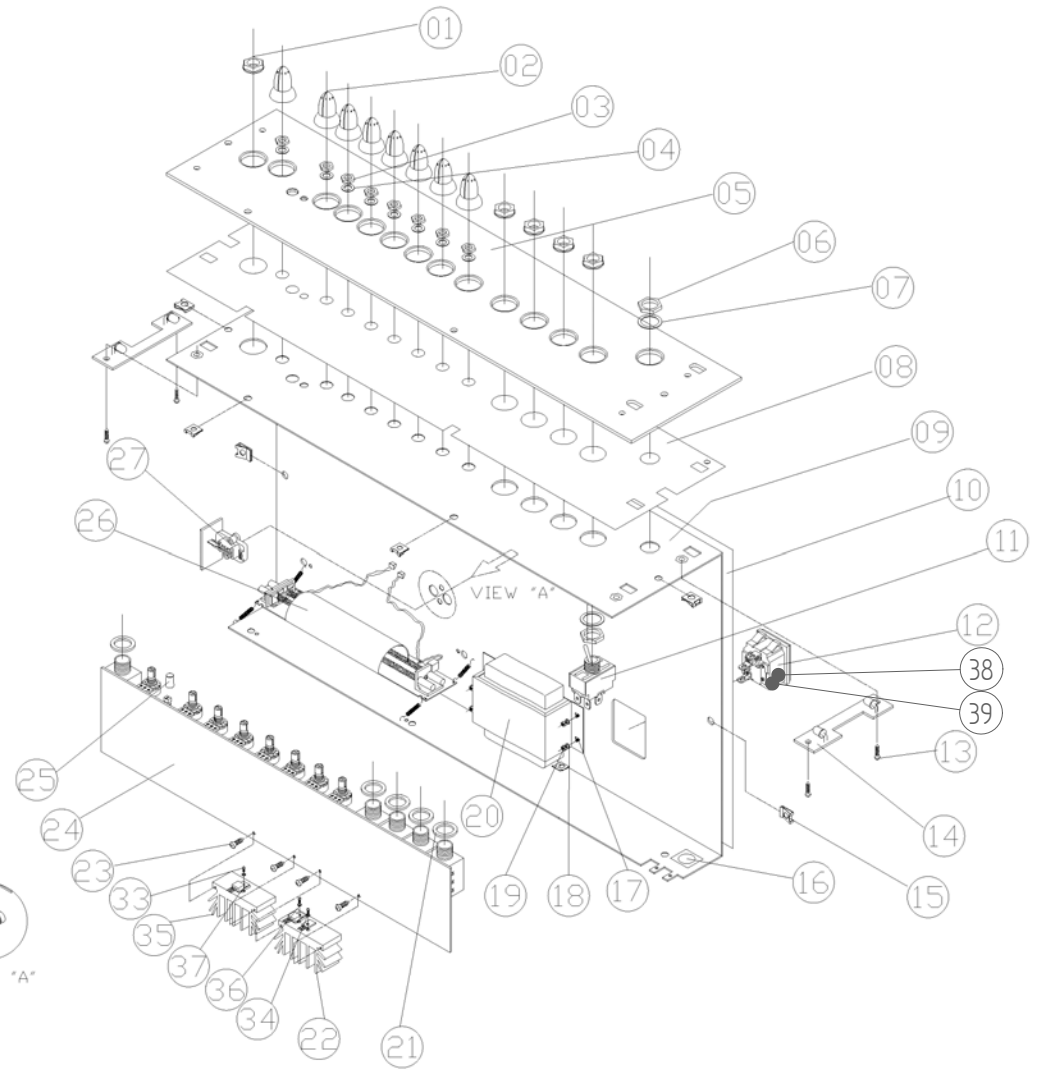
Pos.	Artikel-Nr 1	Artikel-Nr 2	Artikel-Nr 3	Description	Bezeichnung	Menge
1	E90024			complete ED BLUE 60R wooden cabinet	komplettes Holzgehäuse Edition Blue 60R	1
2	E90033			ED BLUE 60R sheet metal chassis	Chassis Edition Blue	1
3	E90025			ED BLUE H&K strap handle	Edition Blue H&K Griff	1
4	E90025			ED BLUE H&K strap handle	Edition Blue H&K Griff	2
5	E90025			ED BLUE H&K strap handle	Edition Blue H&K Griff	2
6	E90012			cross recessed countersunk screw, M4x30mm	Senkkopfschraube 4x30mm vz	2
7	E90012			cross recessed panhead tapping screw, 4x35mm black	Blechschrabe 4x35mm sw	4
8	E90012			cross recessed panhead tapping screw, 4x30mm black	Blechschrabe 4x30mm sw	4
9	E90012			cross recessed panhead tapping screw, 4x50mm black	Blechschrabe 4x50mm sw	4
10	E90027			ED BLUE rubber foot 30/25/16mm	Fuß, konisch 30/25/16mm	4
11	E90012			panhead-Z-ABC-spax, 35x18mm black	Spaxschraube 35x18mm	4
12	E90012			cross recessed panhead screw, M5x23mm	Linienkopfschraube M5x23mm	4
13	E90032			12" celestion rockdriver junior speaker	12" Celestion rockdriver junior Speaker	1
14	E90031			ED BLUE 60R acoustic baffle	Edition Blue 60R Schallwand	1
15	E90029			ED BLUE H&K Logo	H&K Logo	1

Item-nr. E90012 is a screw set with all fittings used in HU0403-Edition Blue 60R

INDEX	ÄNDERUNG	ZEICHNER

		TITEL:	
		HU0403 Ex-Zeichnung Edition Blue 60R	
66606 St. Wendel / Germany			
ZEICHNUNGS-NR.	HU0403-EX-R01-1A	VERSION	1
ERSTELLT VON	Martin Drumm	AM	09.06.2006
SEPRÜFT/ FREIGEgeben VON		AM	
WERKSTOFF:		OBERFLÄCHE:	
DATEINAME:		HU0403-EX-R01-1A-GESAMT	
		REVISION	A
		BLATT:	1
			7 BLÄTTER

Pos.	Artikel-Nr 1	Artikel-Nr 2	Artikel-Nr 3	Description	Bezeichnung	Menge
1	C90146			jack nut	Gegenmutter Klinkenbuchse	5
2	C90107			ED BLUE poti-knob	Potiknopf	8
3	C90147			volume nut	Poti Mutter M7	8
4	C90148			volume washer	Kunststoffring Poti	8
5	C90034			ED BLUE 60R plexiglas	Plexiglas	1
6	C90149			nut M12 mainswitch ring	Mutter Edition Blue Netzschalter	2
7	C90150			washer d=12mm	Kunststoffring d=12mm	2
9	C90033			ED BLUE 60R sheet metal chassis	Chassis Edition Blue	1
11	C90106			mainswitch	Netzschalter	1
12	C90037			powerinlet	Netzbuchse	1
13	C90012			cross recessed panhead screw, M3x8mm	Linse schraube M3x8mm vz	4
14	C90041			ED BLUE LED board	LED Platine	2
15	C90035			sheet metal nut, 39mm brass	Blechmuttern 39mm ms	8
17	C90012			cross recessed panhead screw, M4x10mm black	Linse schraube M4x10mm sw	4
18	C90012			spring washer	Federring d=4mm	4
19	C90012			nut M4	M4 Mutter	4
20	C90038 (230V)	C90095 (117V)	C90094 (100V)	ED BLUE 60R mains transformer	Transformator	1
21	C90145			jack washer	Kunststoffring Klinkenbuchse	5
22	C90120			heat sink (black anodize) 50x28x40mm (2hole)	Kühlkörper, sw 50x28x40mm (inkl. 2 Bohrungen)	1
23	C90012			cross recessed panhead screw, 3x8mm black	Blechschrabe 3x8mm sw	4
24	C90036			ED BLUE 60R preamp board	Vorstufe Edition Blue 60R	1
25	C90023			PUSH SWITCH	Tast-Schalter	1
26	C90040			spring reverb unit	Federhalteinheit	1
27	C90022			RCA JACK	Chinch Buchse	1
28	C90012			cross recessed panhead screw, 3x8mm black	Blechschrabe 3x8mm sw	2
29	C90106			mainswitch	Netzschalter	1
30	C90151			nut M12	Mutter M12	1

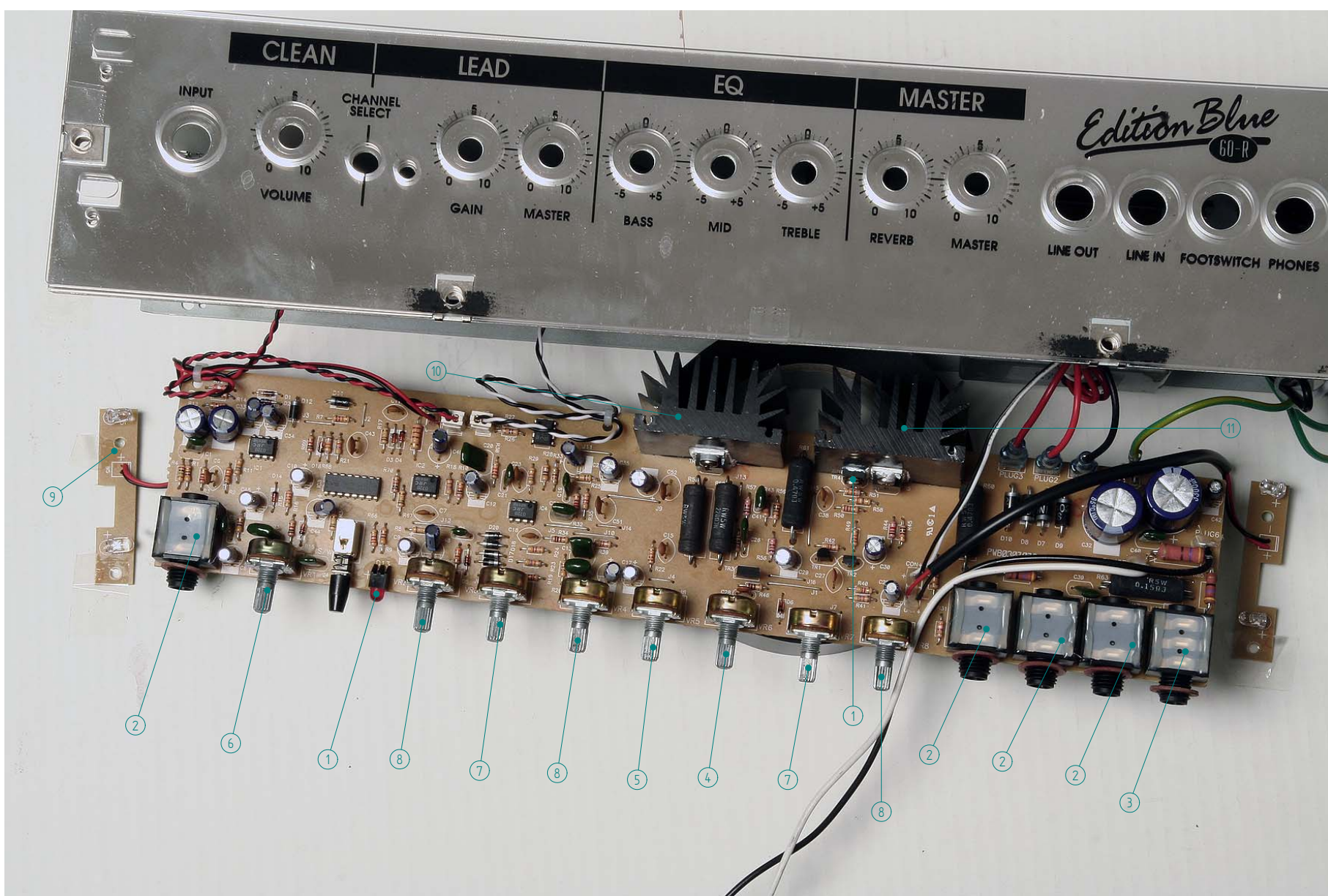


Pos.	Artikel-Nr 1	Artikel-Nr 2	Artikel-Nr 3	Description	Bezeichnung	Menge
31	C90150			washer d=12mm	Kunststoffring d=12mm	2
32	C90151			nut M12	Mutter M12	1
33	C90012			cross recessed panhead screw, M3x8mm	Linse schraube M3x8mm vz	3
34	C90012			spring washer	Federring d=3mm	1
35	C90119			heat sink (black anodize) 50x28x40mm	Kühlkörper, sw 50x28x40mm	1
36	C90152			insulated bushing d=3mm	Isolationsring d=3mm	2
37	C90153			insulated spacer T0220, Mica	Isolationscheibe	2
38	C90121			fuse case	Sicherungseinsatz	1
39	C90122			fuse T250mA L250V	Feinsicherung T250mA L250V	1

Item-nr: C90012 is a screw set with all fittings used in HU0403-Edition Blue 60R

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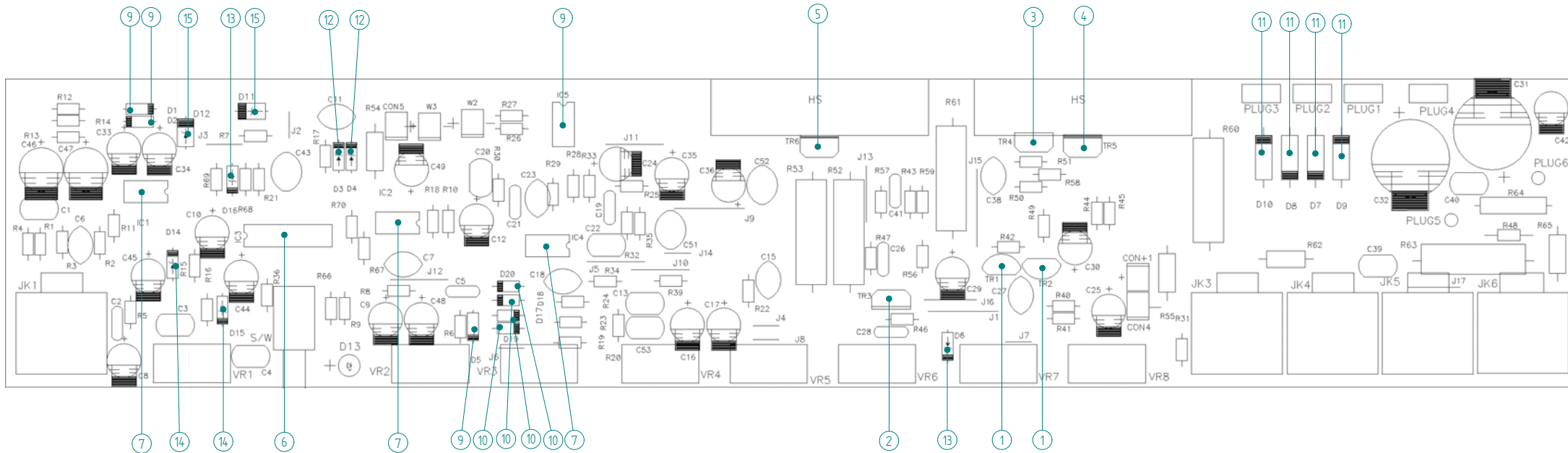
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Edition Blue 60R		1		A	
66606 St. Wendel / Germany		HU0403-EX-R01-1A		AM 09.06.2006	
ZEICHNUNGS-NR.		AM		BLATT: 3	
ERSTELLT VON: Martin Drumm		AM		7 BLÄTTER	
SEPRÜFT/ FREIGEgeben VON:		AM		7 BLÄTTER	
WERKSTOFF:		OBERFLÄCHE:			
DATEINAME:		HU0403-EX-R01-1A-GESAMT			



Pos.	Artikel-Nr 1	Artikel-Nr 2	Artikel-Nr 3	Description	Bezeichnung	Menge
1	C90014			LED 5mm, color red	LED 5mm, Farbe rot	1
2	C90015			mono jack	Mono Klinenbuchse	4
3	C90016			stereo jack	Stereo Klinenbuchse	1
4	C90017			POTENTIOMETER RV160-20 15SP B50K (IP6)	Poti RV160-20 15SP B50K	1
5	C90018			POTENTIOMETER RV160-20 15SP B5K (IP5)	Poti RV160-20 15SP B5K	1
6	C90019			POTENTIOMETER RV160-20 15SP A10K (IP1)	Poti RV160-20 15SP A10K	1
7	C90020			POTENTIOMETER RV160-20 15SP B10K (IP3, P7)	Poti RV160-20 15SP B10K	2
8	C90021			POTENTIOMETER RV160-20 15SP A50K (IP2, P4, P8)	Poti RV160-20 15SP A50K	3

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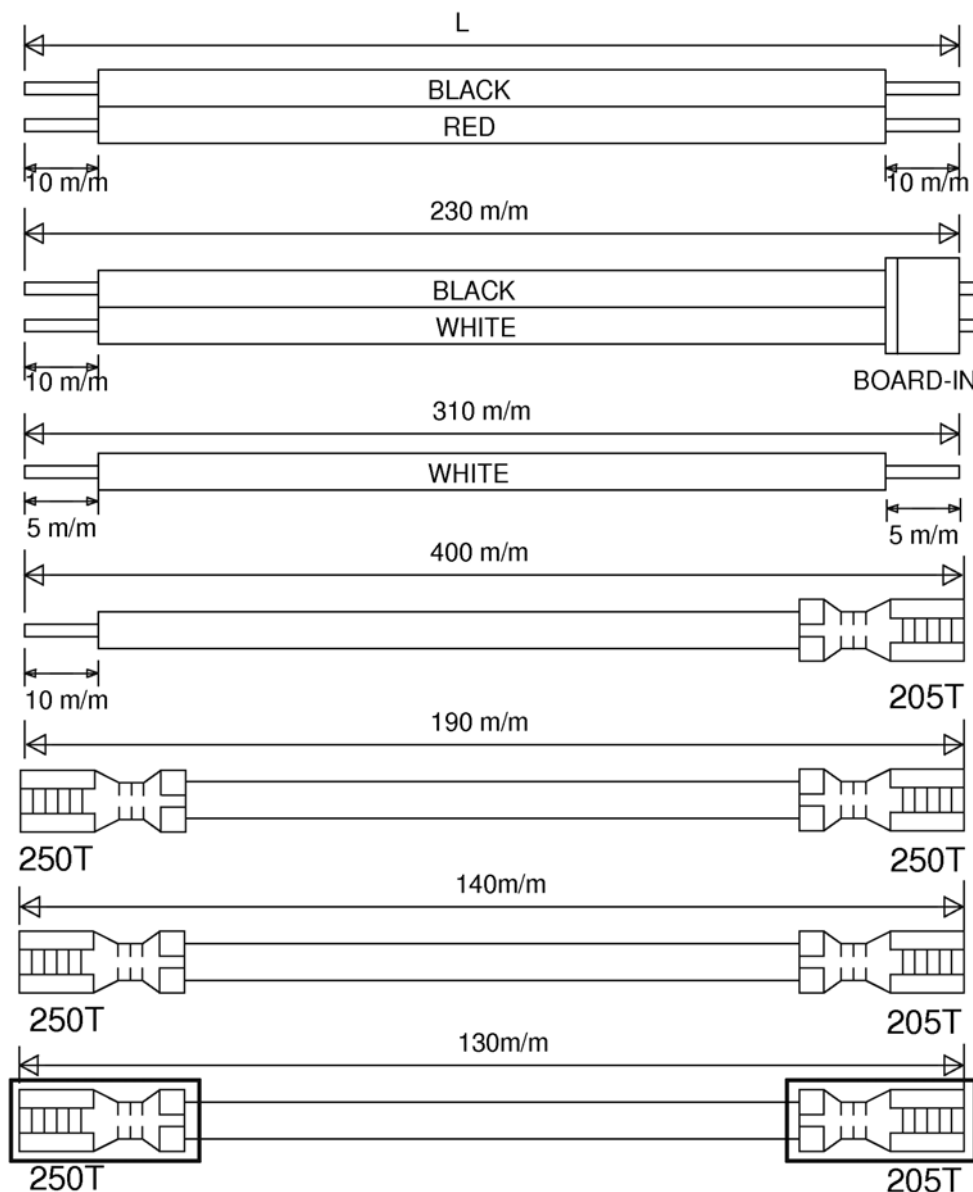
TITEL:	
HiGain & Kettner	
HU0403 Ex-Zeichnung Edition Blue 60R	
66606 St. Wendel / Germany	
ZEICHNUNGS-NR.	HU0403-EX-R01-1A
VERSION	1
REVISION	A
ERSTELLT VON	Martin Drumm
AM	09.06.2006
BLATT	4
GEPRÜFT / FREIGEgeben VON	AM
WERKSTOFF:	7 BLÄTTER
OBERFLÄCHE:	
DATEINAME: HU0403-EX-R01-1A-GESAMT	



Pos.	Artikel-Nr 1	Artikel-Nr 2	Artikel-Nr 3	Description	Bezeichnung	Menge
1	938009			NPN transistor BC 546B (TR1, TR2)	NPN Transistor BC 546B	2
2	938022			PNP transistor BD 238 (TR3)	PNP Transistor BD 238	1
3	930108			NPN transistor BD 679A or DB 681 (molding type) (TR4)	NPN Transistor BD 679A oder DB 681(formgepresst)	1
4	938034			NPN transistor BDX 53C (or Tip132) (TR5)	NPN Transistor BDX 53C oder Tip132	1
5	938035			PNP transistor BDX 54C (or Tip137) (TR6)	PNP Transistor BDX 54C oder Tip137	1
6	930109			switching IC HCF4053BEY (IC3)	Schalt IC HCF4053BEY	1
7	930110			dual of amp IC NJM072D (IC1, IC2, IC4)	Amp IC NJM072D	3
8	930111			dual of amp IC NJM4558DD (IC5)	Amp IC NJM4558DD (IC5)	1
9	930112			silicon switching diode 1N4148, T (D1, D2, D5)	Siliziumdiode 1N4148, T (D1, D2, D5)	3
10	930113			silicon rectifier diode 1N4002, T (D17, D18, D19, D20)	Siliziumgleichrichterdiode 1N4002, T	4
11	930114			silicon rectifier diode 1N5402, T (D7, D8, D9, D10)	Siliziumgleichrichterdiode 1N5402, T	4
12	930115			zener diode 1N5228B(3,9V/0,5W),T (D3, D4)	Zenerdiode 1N5228B(3,9V/0,5W),T	2
13	930116			zener diode 1N5235B (6,8V/0,5W), T (D6, D16)	Zenerdiode 1N5235B (6,8V/0,5W), T	2
14	930117			zener diode 1N5236B (7,5V/0,5W) T (D14, D15)	Zenerdiode 1N5236B (7,5V/0,5W) T	2
15	930118			zener diode ZPY15 (15V/13W) (D11, D12)	Zenerdiode ZPY15 (15V/13W)	2

INDEX	ÄNDERUNG	ZEICHNER

		TITEL:	
		HU0403 Ex-Zeichnung Edition Blue 60R	
66606 St. Wendel / Germany		ZEICHNUNGS-NR.	VERSION
HU0403-EX-R01-1A		1	REVISION A
ERSTELLT VON		AM	BLATT
Martin Drumm		09.06.2006	5
SEPRÜFT/FREIGEgeben VON		AM	7 BLÄTTER
WERKSTOFF:		OBERFLÄCHE:	
DATEI-NR.		HU0403-EX-R01-1A-GESAMT	



CON5: FLAT WIRE UL1007 AWG26 L=200 m/m : W5
 CON4: FLAT WIRE UL1007 AWG26 L=200 m/m : W4

CON+1: FLAT WIRE UL1007 AWG26 230 m/m :CON6

LEAD WIRE UL1015 AWG22 WHITE

PLUG5(+):205/TER LEAD WIRE 1015 AWG22 WHT
 PLUG6(-):205/TER LEAD WIRE 1015 AWG22 BLK

PLUG4: 250/TER WIRE UL1015 AWG18 YEL/GRN

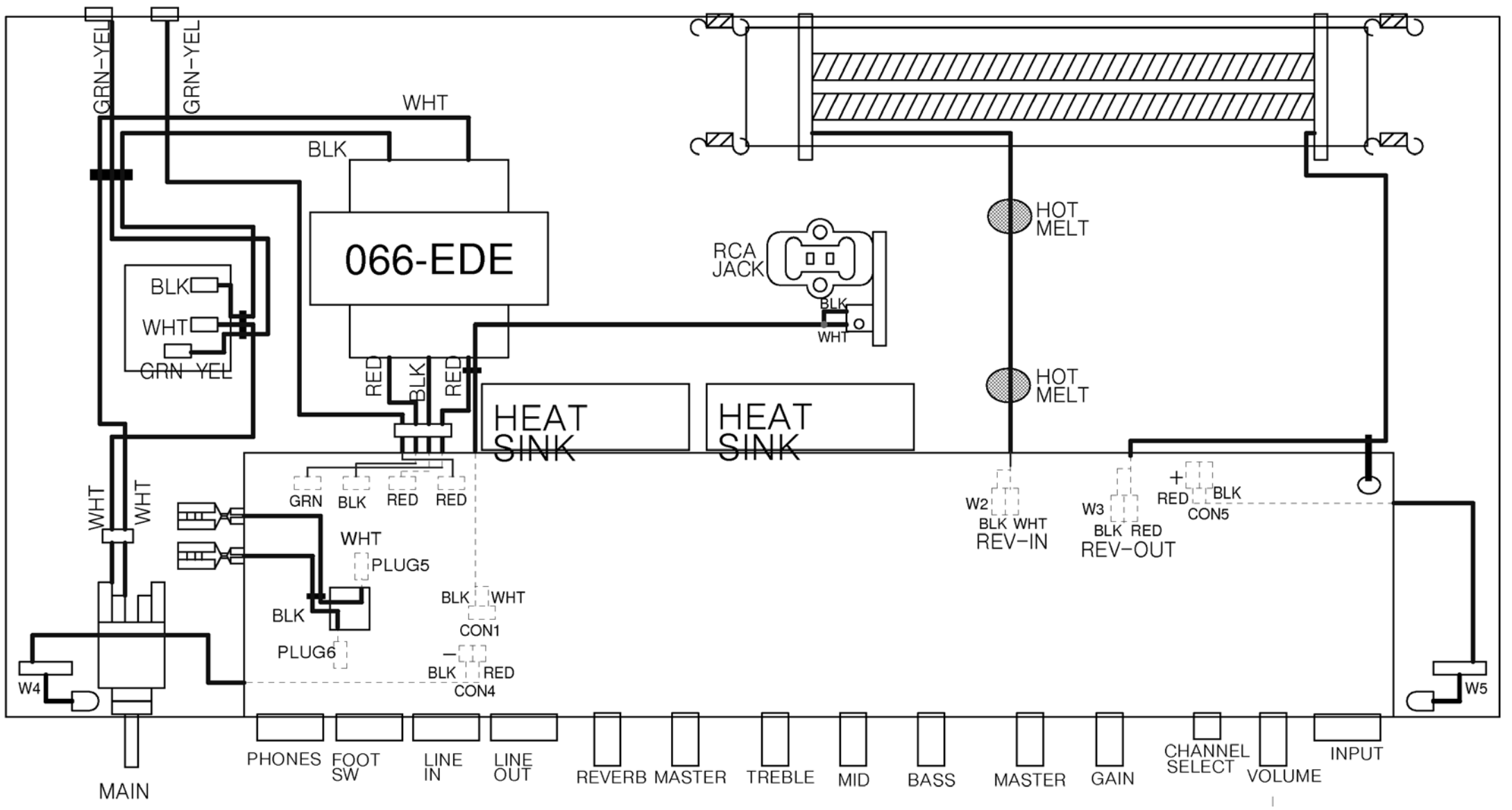
: LEAD WIRE UL1015 AWG18 YEL/GRN L=140 m/m

: (205/250 SLEEVE)LEAD WIRE UL1617 AWG22 WHITE
 L=130 m/m

INDEX	ÄNDERUNG	ZEICHNER

Pos.	Artikel-Nr 1	Artikel-Nr 2	Artikel-Nr 3	Description	Bezeichnung	Menge
1	E90138			CON5: FLAT WIRE UL1007 AWG26 L=200m/m: W5	Litze sw	1
2	E90139			CON4: FLAT WIRE UL1007 AWG26 L=200m/m: W4	Litze rot	1
3	E90140			CON+1 FLAT WIRE UL 1007 AWG26 230m/m CON6	Litze sw/weiß	1
4	E90141			LEAD WIRE UL1015 AWG22 WHITE	Litze weiß	1
5	E90142			PLUG5(+):205/TER LEAD WIRE 1015 AWG22 WHT	Litze weiß	1
6	E90143			PLUG6(-):205/TER LEAD WIRE 1015 AWG22 WHT	Litze sw	1
7	E90144			PLUG4: 250/TER WIRE UL1015 AWG18 YEL/GRN	Litze grün/gelb	1
8	E90157			LEAD WIRE UL1015 AWG18 YEL/GRN	Litze grün/gelb	1
9	E90158			LEAD WIRE UL1617 AWG22 WHITE L=130m/m	Litze weiß	1

ZEICHNUNGS-NR.		VERSION	REVISION
HU0403-EX-R01-1A		1	A
ERSTELLT VON		AM	BLATT
Martin Drumm		09.06.2006	6
SEPRÜFT/ FREIGEgeben VON		AM	BLÄTTER
			7
WERKSTOFF:		OBERFLÄCHE:	
DATENNAME:			
HU0403-EX-R01-1A-GESAMT			



INDEX	ÄNDERUNG	ZEICHNER

		TITEL:	
66606 St. Wendel / Germany		HU0403 Ex-Zeichnung Edition Blue 60R	
ZEICHNUNGS-NR.	HU0403-EX-R01-1A	VERSION	1
ERSTELLT VON	Martin Drumm	AM	09.06.2006
GEPRÜFT/ FREIGEgeben VON		AM	7
WERKSTOFF:		OBERFLÄCHE:	
DATEINAME:	HU0403-EX-R01-1A-GESAMT		
REVISION	A	BLATT:	7
			7 BLÄTTER

HU0403-EX-R01-1A-COMplete (PAGE 1, 2)

part-no. 1 (230V)	part-no. 2 (117V)	part-no. 3 (100V)	Description	Bezeichnung	Quantity
C90024			complete ED BLUE 60R wooden cabinet	komplettes Holzgehäuse Edition Blue 60R	1
C90025			ED BLUE H&K strap handle	Edition Blue H&K Griff	2
C90026			corner	Ecke	8
C90027			ED BLUE rubber foot 30/25/16mm	Fuß, konisch 30/25/16mm	4
C90029			ED BLUE H&K logo	H&K Logo	1
C90030			Edition Blue 60R Clothing	Edition Blue 60R Bespannstoff	1
C90031			ED BLUE 60R acoustic baffle	Edition Blue 60R Schallwand	1
C90032			12" celestion rockdriver junior speaker	12" Celestion rockdriver junior Speaker	1
C90033			ED BLUE 60R sheet metal chassis	Chassis Edition Blue	1

HU0403-EX-R01-1A-CHASSIS (PAGE 3)

part-no. 1 (230V)	part-no. 2 (117V)	part-no. 3 (100V)	Description	Bezeichnung	Quantity
C90022			RCA JACK	Chinch Buchse	1
C90023			PUSH SWITCH	Tast-Schalter	1
C90033			ED BLUE 60R sheet metal chassis	Chassis Edition Blue	1
C90034			ED BLUE 60R plexiglas	Plexiglas	1
C90035			sheet metal nut, 3,9mm brass	Blechmuttern 3,9mm ms	8
C90036			ED BLUE 60R preamp board	Vorstufe Edition Blue 60R	1
C90037			powerinlet	Netzbuchse	1
C90038	C90095	C90094	ED BLUE 60R mains transformer	Transformator	1
C90040			spring reverb unit	Federhallenheit	1
C90041			ED BLUE LED board	LED Platine	2
C90106			mainswitch	Netzschalter	1
C90106			mainswitch	Netzschalter	1
C90107			ED BLUE poti-knob	Potiknopf	8
C90119			heat sink (black anodize) 50x28x40mm	Kühlkörper, sw 50x28x40mm	1
C90120			heat sink (black anodize) 50x28x40mm (2hole)	Kühlkörper, sw 50x28x40mm (inkl. 2 Bohrungen)	1
C90121			fuse case	Sicherungseinsatz	1
C90122			fuse T250mA L250V	Feinsicherung T250mA L250V	1
C90145			jack washer	Kunststoffring Klinenbuchse	5
C90146			jack nut	Gegenmutter Klinenbuchse	5
C90147			volume nut	Poti Mutter M7	8
C90148			volume washer	Kunststoffring Poti	8
C90149			nut M12 mainswitch ring	Mutter Edition Blue Netzschalter	2
C90150			washer d=12mm	Kunststoffring d=12mm	2
C90150			washer d=12mm	Kunststoffring d=12mm	2
C90151			nut M12	Mutter M12	1
C90151			nut M12	Mutter M12	1
C90152			insulated bushing d=3mm	Isolationsring d=3mm	2
C90153			insulated spacer TD220, Mica	Isolations-scheibe	2

HU0403-EX-R01-1A-ELECTRONICS (PAGE 4, 5)

part-no. 1 (230V)	part-no. 2 (117V)	Ref.Destricption	Description	Bezeichnung	Quantity
938009		TR1, TR2	NPN transistor BC 546B	NPN Transistor BC 546B	2
938022		TR3	PNP transistor BD 238	PNP Transistor BD 238	1
938034		TR5	NPN transistor BDX 53C (or Tip132)	NPN Transistor BDX 53C oder Tip132	1
938035		TR6	PNP transistor BDX 54C (or Tip137)	PNP Transistor BDX 54C oder Tip137	1
C90108		TR4	NPN transistor BD 679A or DB 681 (molding type)	NPN Transistor BD 679A oder DB 681(formgepresst)	1
C90109		IC3	switching IC HCF4053BEY	Schalt IC HCF4053BEY	1

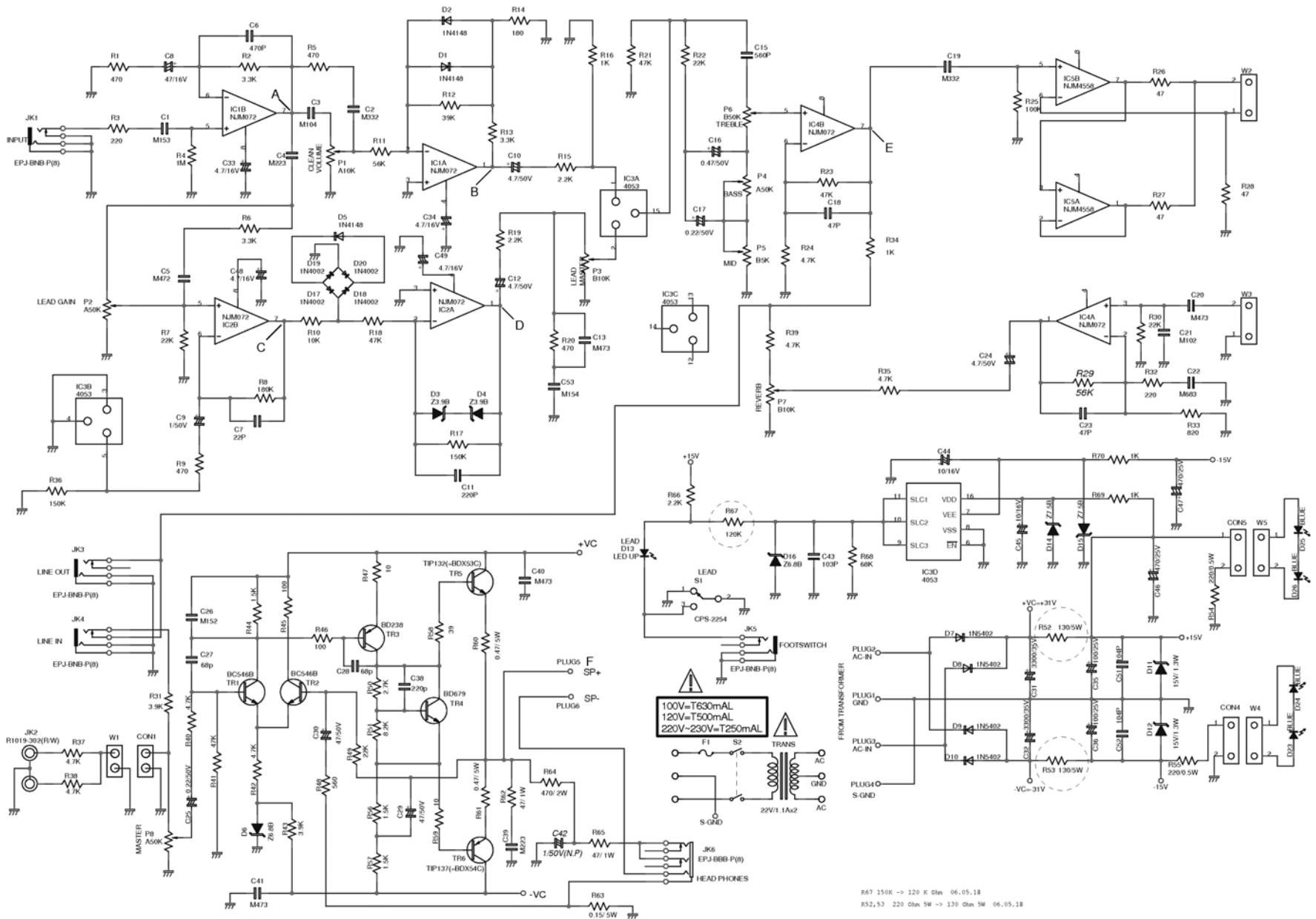
C90110	IC1, IC2, IC4	dual of amp IC NJM072D	Amp IC NJM072D	3
C90111	IC5	dual of amp IC NJM4558DD	Amp IC NJM4558DD (IC5)	1
C90112	D1, D2, D5	silicon switching diode 1N4148, T	Silliziumdiode 1N4148, T (D1, D2, D5)	3
C90113	D17, D18, D19, D20	silicon rectifier diode 1N4002, T	Silliziumgleichrichterdiode 1N4002, T	4
C90114	D7, D8, D9, D10	silicon rectifier diode 1N5402, T	Silliziumgleichrichterdiode 1N5402, T	4
C90115	D3, D4	zener diode 1N5228B(3,9V/0,5W),T	Zenerdiode 1N5228B(3,9V/0,5W),T	2
C90116	D6, D16	zener diode 1N5235B (6,8V/0,5W), T	Zenerdiode 1N5235B (6,8V/0,5W), T	2
C90117	D14, D15	zener diode 1N5236B (7,5V/0,5W) T	Zenerdiode 1N5236B (7,5V/0,5W) T	2
C90118	D11, D12	zener diode ZPY15 (15V/1,3W)	Zenerdiode ZPY15 (15V/1,3W)	2
C90119		heat sink (black anodize) 50x28x40mm	Kühlkörper, sw 50x28x40mm	1
C90121		fuse case	Sicherungseinsatz	1
C90122		fuse T250mA L250V	Feinsicherung T250mA L250V	1
C90150		washer d=12mm	Kunststoffring d=12mm	2
C90151		nut M12	Mutter M12	1
C90152		insulated bushing d=3mm	Isolationsring d=3mm	2
C90153		insulated spacer T0220, Mica	Isolations Scheibe	2

HU0403-EX-R01-1A-CABLING (PAGE 6, 7)

part-no. 1 (230V)	part-no. 2 (117V)	part-no. 3 (100V)	Description	Bezeichnung	Quantity
C90138			CON5: FLAT WIRE UL1007 AWG26 L=200m/m: W5	Litze sw	1
C90139			CON4: FLAT WIRE UL1007 AWG26 L=200m/m: W4	Litze rot	1
C90140			CON+1: FLAT WIRE UL 1007 AWG26 230m/m :CON6	Litze sw/weiß	1
C90141			LEAD WIRE UL1015 AWG22 WHITE	Litze weiß	1
C90142			PLUG5(+):205/TER LEAD WIRE 1015 AWG22 WHT	Litze weiß	1
C90143			PLUG6(-):205/TER LEAD WIRE 1015 AWG22 WHT	Litze sw	1
C90144			PLUG4: 250/TER WIRE UL1015 AWG18 YEL/GRN	Litze grün/gelb	1
C90157			LEAD WIRE UL1015 AWG18 YEL/GRN	Litze grün/gelb	1
C90158			LEAD WIRE UL1617 AWG22 WHITE L=130m/m	Litze weiß	1

HU0403-EDITION BLUE 60R SCREW SET

part-no. 1 (230V)	part-no. 2 (117V)	part-no. 3 (100V)	Description	Bezeichnung	Quantity
C90012			cross recessed countersunk screw, M4x30mm	Senkkopfschraube 4x30mm vz	2
C90012			cross recessed panhead screw, M3x8mm	Linsenschraube M3x8mm vz	7
C90012			cross recessed panhead screw, M4x10mm black	Linsenschraube M4x10mm sw	4
C90012			cross recessed panhead screw, 3x8mm black	Blechschrabe 3x8mm sw	6
C90012			cross recessed panhead screw, M5x23mm	Linsenkopfschraube M5x23mm	4
C90012			cross recessed panhead tapping screw, 4x30mm black	Blechschrabe 4x30mm sw	4
C90012			cross recessed panhead tapping screw, 4x35mm black	Blechschrabe 4x35mm sw	4
C90012			cross recessed panhead tapping screw, 4x50mm black	Blechschrabe 4x50mm sw	4
C90012			nut M4	M4 Mutter	4
C90012			panhead-Z-ABC-spax, 3,5x13mm black	Spaxschraube 3,5*13mm sw	16
C90012			panhead-Z-ABC-spax, 3,5x18mm black	Spaxschraube 3,5x18mm	4
C90012			spring washer	Federring d=4mm	4
C90012			spring washer	Federring d=3mm	1



R67 150K -> 120 K Ohm 06.05.18
 R52,53 220 Ohm 5W -> 130 Ohm 5W 06.05.18

INDEX	CHANGES	RESP.

TITLE HU0403-Schaltplan Edition Blue 60R	
66606 St. Wendel / Germany	
DRAWING-NO.	VERSION 1 REVISION A
DRAWN BY: Martin Drumm	DATE: 20.07.2006 PAGE: 1
CHECKED BY:	DATE: 1 PAGES
MATERIAL:	FINISH:
FILENAME: Schematic_ED60R	