Power supply VEW NG8903 RED

Redesign

The VEW NG 89 03 RED generates two stabilized DC voltages, +5V (UD) and +24V (UB), while also providing the through connection for two voltages, +24V (US) und -24V (UV).
The redesign is a fully plug-and-play compatible device to replace the 89 NG 03 devices from ABB.

The VEW NG 89 03 RED runs on input DC voltage of 19...33V.
The feed comes via the plug X1 on the front plate.
The feed comes via contact 1: 24V (USE) and 2: 0V (Z) for the output voltage US against Z and contact 4: 24V (USE) and 5: 0V (Z) the potential-free and regulated voltages UD and UB.
Contact 3 carries the UV voltage to the outlet, has no internal fuse and is not operated.
Contact 6 is connected to the housing.
The feed branch contact 4 contains a Schottky diode (V1) connected in series to protect against wrong polarity of the supply voltage.
The downstream electrolyte capacitors act as buffers.
The UD, UB and US output voltages are monitored, regulated and controlled.
The front plate has two LEDs.
The UB/UD LED is activated if the voltages UD and UB are connected; the LED US is activated if the output voltage exceeds 18…20V.
The voltage rise in the UD output voltage should not exceed a period of 15ms.
If the time of the voltage rise from 0.65V to 4.6V is longer than 15ms, the DC-DC converter will be switched off.
If the output voltage falls below UD 0.65V, the module will restart.
If the output voltage falls below 4.5V while in operation, the UD, UB and US output voltages will be switched off and a transistor will switch the RST input on contact c2 of plug X3 (back of device) to counter ZD.
If the output voltage UD falls below 0.6V the device will restart.
If the UD output voltage exceeds 6.25V it will be short circuited with a thyristor and the output voltages UD, UB and US will disconnect.
The connection and disconnection of the supply voltage or the brief connection of the ZD potential to the c32 switch inlet of the X3 plug (back of device) will restart the device.

VEW NG8903 RED
with recycled front plate

A recycled original front plate can be mounted on the redesign (picture).

Technical data:

Size	: L 261mm; B 102mm; H 262mm			
Frontplate	: A: Original frontplate from customer B: Redesign frontplate ,,look like"			
Outputs	: UD+	UB+	US	UV
Reference to	: ZD	ZD	Z	Z
Rated voltage	: +5V	+24V	+24V	-24V
Tolerance range	: 4,95...5,05V	23,5...24,2V	same like input voltage	
Max. Output current	: 20A	4A	4A	4A
Power rating	: 100 W	96W	96W	96W

DIE ENTWICKLER

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