

The C13145-01 is a high voltage power supply module capable of handling simultaneous 8-channel outputs. The output voltage of each channel can be separately adjusted. Inputting +24 V to the C13145-01 generates negative high voltages. This module is designed to be mounted in equipment, and features low ripple noise and fast response.



### FEATURES

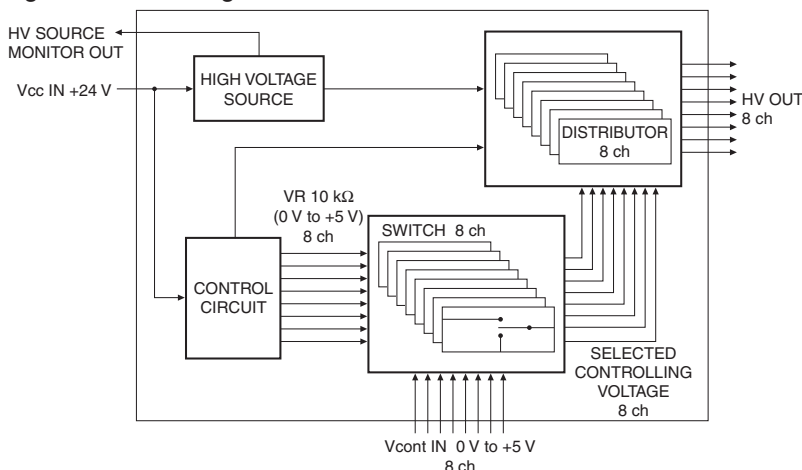
- Simultaneous 8-channel outputs
- Low ripple/noise
- High stability
- Fast response

### SPECIFICATIONS

Parameter		Value / Description	Unit
Input voltage		+24 ± 1.2	V
Input current <sup>(A)</sup>	with no load	Typ. 170	mA
	with full load	Typ. 580	mA
No. of channel		8	—
Variable output voltage range		0 to -1000	V
Specification guaranteed output voltage range		-300 to -900	V
Output current		Max. 1 (per channel)	mA
Line regulation against ±1.2 V input change <sup>(A)(B)</sup>		Typ. ±0.01	%
Load regulation against 0 % to 100 % load change <sup>(A)</sup>		Typ. ±0.01	%
Ripple / Noise (p-p) <sup>(A)(B)</sup>		Typ. 20 (Potentiometer control)	mV
Output voltage control		By external controlling voltage (0 V to +5 V) or potentiometer (10 kΩ)	
Controlling voltage input impedance		Typ. 10	kΩ
Output voltage setting (Absolute value)		Typ. Controlling voltage × 200	V
Output voltage rise time (0 % → 99 %) <sup>(A)(B)</sup>		Typ. 5 (Controlling voltage control)	ms
Temperature coefficient <sup>(A)(B)</sup>		Typ. ±0.03	%/°C
Operating ambient temperature <sup>(A)(B)</sup>		0 to +50	°C
Operating ambient humidity <sup>(C)</sup>		Below 80	%
Storage temperature		-20 to +60	°C
Storage humidity <sup>(C)</sup>		Below 80	%
Weight		Typ. 516	g
Protective functions		Protected against excessive controlling voltage input / over current	

NOTE: <sup>(A)</sup>At maximum output voltage <sup>(B)</sup>At maximum output current <sup>(C)</sup>No condensation

Figure 1: Block diagram



TACCC0180EA

# 8-CHANNEL OUTPUTS HIGH VOLTAGE POWER SUPPLY C13145-01

Figure 2: Output voltage controlling characteristics

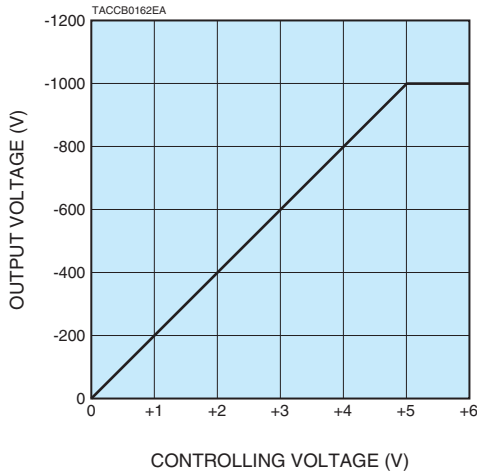


Figure 3: Overload characteristics

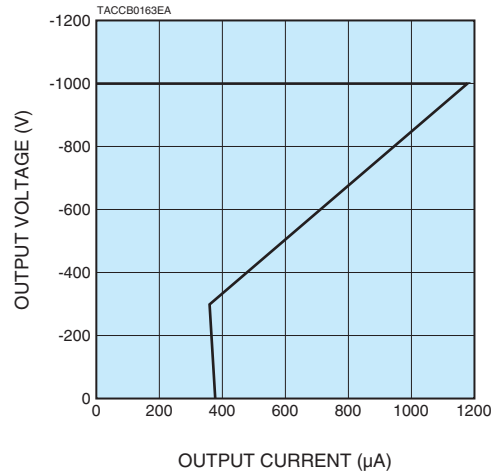


Figure 4: Ripple / noise

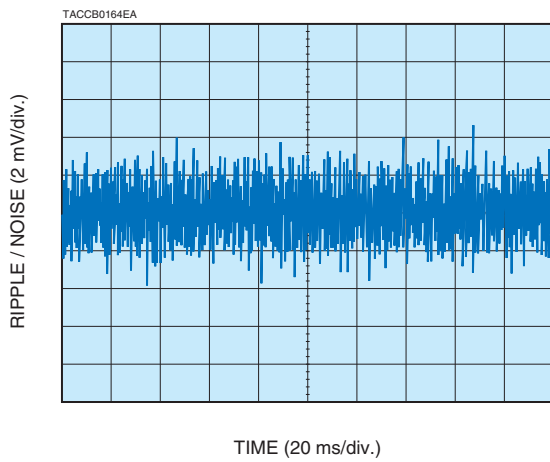


Figure 5: Time response characteristics

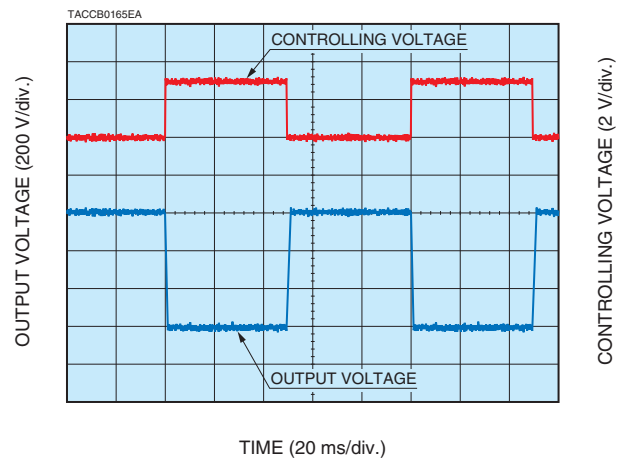
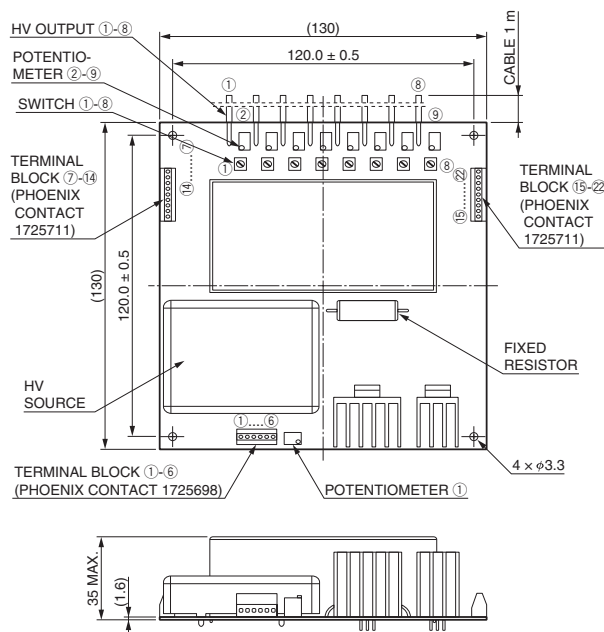


Figure 6: Dimensional outline (Unit: mm)



Terminal block ①	Input voltage +24 V
Terminal block ②	Input voltage GND
Terminal block ③	High voltage source current monitor output (+0.5 V/mA)
Terminal block ④	High voltage source current monitor GND
Terminal block ⑤	High voltage source voltage monitor output (-0.005 V/V)
Terminal block ⑥	High voltage source voltage monitor GND
Terminal block ⑦-⑳	External voltage input for high voltage adjustment Odd numbers: controlling voltage 0 to +5 V Even numbers: controlling voltage GND
Potentiometer ①	High voltage source adjustment (12-turn potentiometer)
Potentiometer ②-⑨	Interval VR for high voltage adjustment (12-turn potentiometer)
Switch ①-⑧	Selecting switch for high voltage adjustment method
HV Output ①-⑧	AWG24 shield cable (1 m) *
Fixed resistor	Warning for high voltage
HV source	High voltage source

\* Available with connector.

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