

Excellence in High Voltage
MS0.2MZZ065 MODULE
SIX INDEPENDENT -200V TO +200V
OUTPUTS

Applications

Beam steering
Focus & bias supplies
Deflector plates
Electron guns & ion beams



This power supply provides six outputs each separately programmable from -200V to +200V. It is intended for steering, focusing & biasing of electron & ion beam applications. Please consult the factory for special variants of this supply including high speed versions.

Electrical Specification

Input voltage:	+24V d.c. $\pm 0.5V$ at 0.5A, +15V d.c. $\pm 0.5V$ at 0.05A, & -15V d.c. $\pm 0.5V$ at 0.05A.
Output Voltage: (each channel)	-200V to +200V controlled by -10V to +10V analogue signal.
Output current:	100uA per channel.
Control:	-10V gives -200V $\pm 2\%$, +10V gives +200V $\pm 2\%$.
Speed:	To be defined.
Ripple:	Less than 25mV peak to peak, ripple frequency 50 kHz.
Load regulation:	Less than 100ppm.
Line regulation:	Less than 100ppm.
Temperature co-efficient:	25ppm per °C.
Output monitor:	-8V to +8V represents -200V to +200V $\pm 5\%$ on the corresponding output.
Operating temperature:	0 °C to +45 °C.

Mechanical Specification

Size:	210 x 114 x 47mm, 4 stud fixing.
Input connector:	40 way IDC header, 0.05" pitch, straight latching, bump/clip polarised (Thomas & Betts 636-4034ES). Mating connector supplied.
Output connector:	QM 12 way socket, right angle pcb mounting, Burndy SMS12GE5.

MS0.2MZZ065 input pin connections 40way IDC:

Harting type 0918-540-6813

Pin 1	Supply 1 I/P prog. Hi	Pin 21	Supply 6 I/P prog. Hi
Pin 2	Supply 1 I/P prog. Lo	Pin 22	Supply 6 I/P prog. Lo
Pin 3	Supply 1 O/P monitor Hi	Pin 23	Supply 6 O/P monitor Hi
Pin 4	Supply 1 O/P monitor Lo	Pin 24	Supply 6 O/P monitor Lo
Pin 5	Supply 2 I/P prog. Hi	Pin 25	Linked to pin 27
Pin 6	Supply 2 I/P prog. Lo	Pin 26	Linked to pin 28
Pin 7	Supply 2 O/P monitor Hi	Pin 27	Linked to pin 25
Pin 8	Supply 2 O/P monitor Lo	Pin 28	Linked to pin 26
Pin 9	Supply 3 I/P prog. Hi	Pin 29	Linked to pin 31
Pin 10	Supply 3 I/P prog. Lo	Pin 30	Linked to pin 32
Pin 11	Supply 3 O/P monitor Hi	Pin 31	Linked to pin 29
Pin 12	Supply 3 O/P monitor Lo	Pin 32	Linked to pin 30
Pin 13	Supply 4 I/P prog. Hi	Pin 33	
Pin 14	Supply 4 I/P prog. Lo	Pin 34	+15V input
Pin 15	Supply 4 O/P monitor Hi	Pin 35	0V (+15V)
Pin 16	Supply 4 O/P monitor Lo	Pin 36	-15V input
Pin 17	Supply 5 I/P prog. Hi	Pin 37	V (+24V)
Pin 18	Supply 5 I/P prog. Lo	Pin 38	V (+24V)
Pin 19	Supply 5 O/P monitor Hi	Pin 39	24V input
Pin 20	Supply 5 O/P monitor Lo	Pin 40	24V input

Note:- Programme Lo and monitor Lo are all connected to pin 35, 0V (+15V). Separate signal 0V (+15V) and power 0V (+24V) grounds are provided, these are held to within +0.5V by back to back diodes or may optionally be connected by an on board link.

MS0.2MZZ065 output pin connections

Pin 1	output 1
Pin 2	output 2
Pin 3	output 3
Pin 4	output 4
Pin 5	output 5
Pin 6	output 6
Pin 7	
Pin 8	
Pin 9	
Pin 10	
Pin 11	0 volt (load return)
Pin 12	0 volt (load return)

Order Code:

There are no variants of this unit, so the order code is
MS0.2MZZ065

Please note this corresponds to the unit formerly called K1/65. Only the part number and the case colour have changed, the electrical characteristics remain the same.