

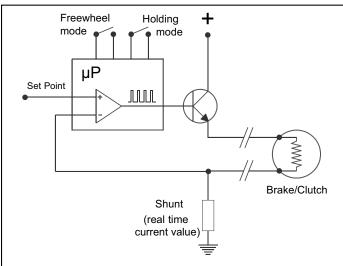


## Supplies and Regulates Current to EMAG Brakes and Clutches

# Current Regulator PowerBlock2



# Schematic diagram:



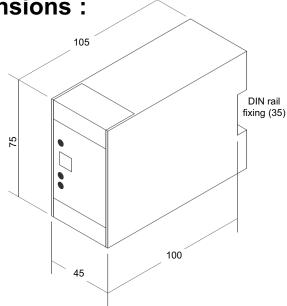
**Freewheel mode:** Load is electrically decoupled and allowed to move freely

**Holding Mode:** Load is restrained from movement to the full capability of the unit, as defined by the Max Current Adjustment (switches \$1, \$2 and \$3)

### **Technical features:**

Input voltage	[٧]	24 AC / DC
Max output current	[A]	2
Output load (resistance)	[ ohm ]	4 - 20
Max power consumption	[ VA ]	70
Remote voltage control	[٧]	0 - 10 DC
Ambient temperature	[°F]	+10 +40
Weight	oz.	6

# **Dimensions:**



### Benefits:

- Regulated current power supply based on microcontroller technology
  - Accurate current output control
  - → High level of protection against transients (short-circuit & circuit opening)
- Remote control via potentiometer or analog 0 to 10V input
- Freewheel and Holding modes selected from external contacts or analog voltages
- Selected mode status shown by front face LED's
- Real time Current equivalent voltage output available
- Plug-in connectors
- Compact enclosure with integrated DIN rail mount
- CE CEM compatible



PowerBlock2 MO-13829

### **Electrical Information:**

#### Connections

C1 / C2 Brake/Clutch

Com 0 V

Amp Real time current equivalent voltage

(1.00 A → 1.00 V)

Test Internal fuse test points (When OFF, measure of 10K  $\Omega$ 

between the two (2) points (\*) means that the fuse is OK

Com Equipotential supply point (when grounding the

transformer secondary)

24 V Input Power : 24 V AC or 24 V DC
SetP Set point input (0 → 10 V DC)

10 Set point potentiometer supply (10 k  $\Omega$ )

V+ Logic inputs voltage

Free Logic input "Freewheel" mode
Stop Logic input "Holding" mode

#### Front face LED's

L1 Power ON

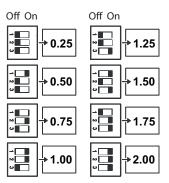
L2 Freewheel mode active L3 Holding mode active

#### **Switches**

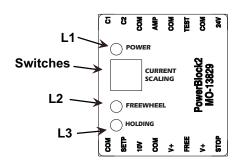
S1 S2 S3 Max current adjustment

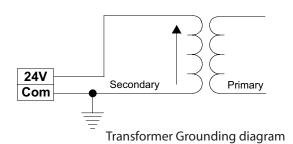
(from 0.25 to 2.00 A, for set point input = 10 V)

# Max. Output current adjustment



#### Brake/ Clutch Fuse . 0 V +24 V AC / DC Amp Com Com Test 24V $C_{2}$ ပ SetP ≥ 10 k $\Omega$ 0 - 10 V 0 V +24 V +24 V





#### Note:

- The equipotential point is available on terminal "Com" of the supply terminals
- When grounding the secondary of the transformer, refer to the Transformer Grounding diagram above