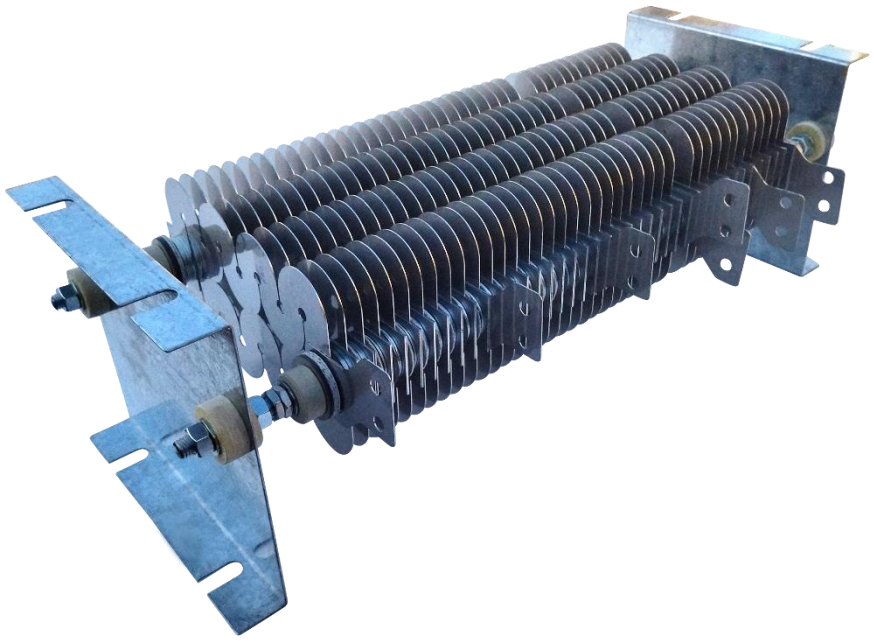
PENBRO KELNICK

MILL-BANK RESISTORS

SINGLE PHASE

TYPE PEN6237 SINGLE PHASE



REV	DATE	DESCRIPTION	
1	2023-01-11	Mill-Bank Resistors	W. M

MILL-BANK RESISTORS TYPE PEN6237

DESCRIPTION: Type PEN6237 Single Phase Mill-Banks

Often required as a replacement mill-bank, the Penbro version of the mill-bank is well suited with its rugged construction.

Our mill-banks are manufactured locally which helps to significantly reduce the time of a breakdown.

Penbro has designed their own form of resistor elements which in general dissipate a higher power than other brands.

The standard double-insulated construction applies.

APPLICATIONS

- The PEN6237 Single Phase range of mill-banks are best suited for high temperature and corrosive environments.
- Typical uses:
  - Dynamic braking of small locomotives used at mines.
  - Dynamic braking of electric motors driven by a Variable Speed Drive (VSD).
  - Dynamic braking of dragline excavators often used at coal mines.
  - Neutral grounding.

ACTIVE MATERIAL

- High grade stainless steel resistive alloy.
- Resistor type: Grid/plate resistors.

MECHANICAL CHARACTERISTICS

- Side-plate material: Galvanized metal, standard.
- Rigid insulation bushings.
- Rigid construction.
- Ingress Protection: IP00.
- Upon request, Penbro will offer a suitable enclosure to your specifications.
- Dimensions are standard except for the height which is 160mm instead of 150mm. Refer to model drawing L6237-001-001

TERMINAL CONNECTIONS

- Two terminals are offered as a standard. Although a mill-bank is fitted with multiple terminals/taps, they are often un-necessary and adds to the cost of the mill-bank.
- Additional terminals/taps can be fitted upon request.
- 10mm hole on terminals.

Tel: +27 (0) 12 719 9065 | email: info@penbro.co.za
| web: www.penbro.co.za

ELECTRICAL SPECIFICATIONS					
Type	**Equivalent**	**Resistance @ 20°C**	**Current Continuous**	**Power**	**Terminal Quantity***
PEN6237-001	MG12	0.9Ω	85A	6.5kW	2
PEN6237-002	Custom	1.12Ω	95A	10.1kW	7
PEN6237-003	MG8	0.54Ω	109A	6.4kW	2
PEN6237-004	Custom	1.12Ω	95A	10.1kW	7
PEN6237-005 Dual Bank	Custom	0.56Ω	190A	20.2kW	7
PEN6237-006	Custom	0.56Ω	100A	5.6kW	7
PEN6237-007	MG5	0.25Ω	147A	5.4kW	*
PEN6237-008	MG6X2	0.09Ω	250A	5.6kW	*
PEN6237-009	MG6	0.325Ω	136A	6.0kW	*
PEN6237-010	MG4	0.216Ω	162A	5.7kW	*
PEN6237-011	MG3	0.15Ω	185A	5.1kW	*
PEN6237-012	MG10	0.72Ω	96A	6.6kW	*
PEN6237-013	MG16	0.96Ω	80A	6.1kW	*
PEN6237-014	MG20	1.52Ω	66A	6.6kW	*
PEN6237-015	MG25	2.1Ω	58A	7.0kW	*
Resistance Tolerance	-/+ 10%	**Insulation Voltage** *Ui*	1.5kV	**Reference Drawing**	L6237-001-001
***Terminals**	Quantity upon request although limited for some units.				

Tel: +27 (0) 12 719 9065 | email: info@penbro.co.za
| web: www.penbro.co.za

Mounting:
The resistor should be mounted approximately 60mm above the mounting surface to allow for adequate natural cooling.

Image 1 Illustrates a clearance of 5mm between the active resistor grid and the mounting surface with standard 160mm side-plates. Additional spacers are required to raise the resistor.

Image 2 Illustrates the preferred mounting of the active resistor grid raised 60mm above the mounting surface by means of side-plate type EMP9403-049-003 which are available upon request.

Image 1

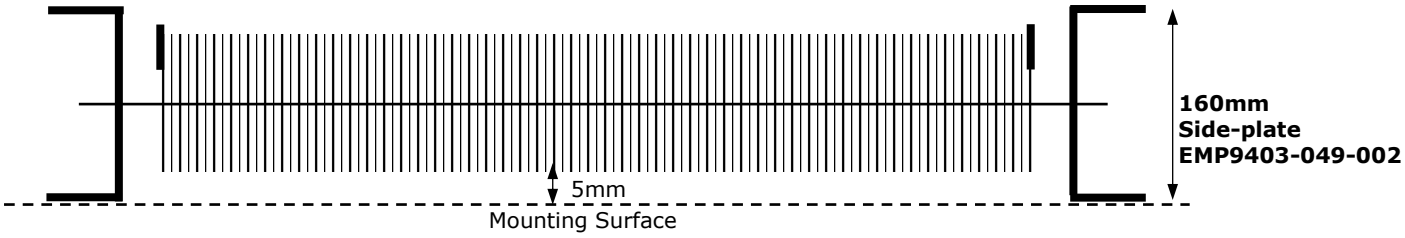
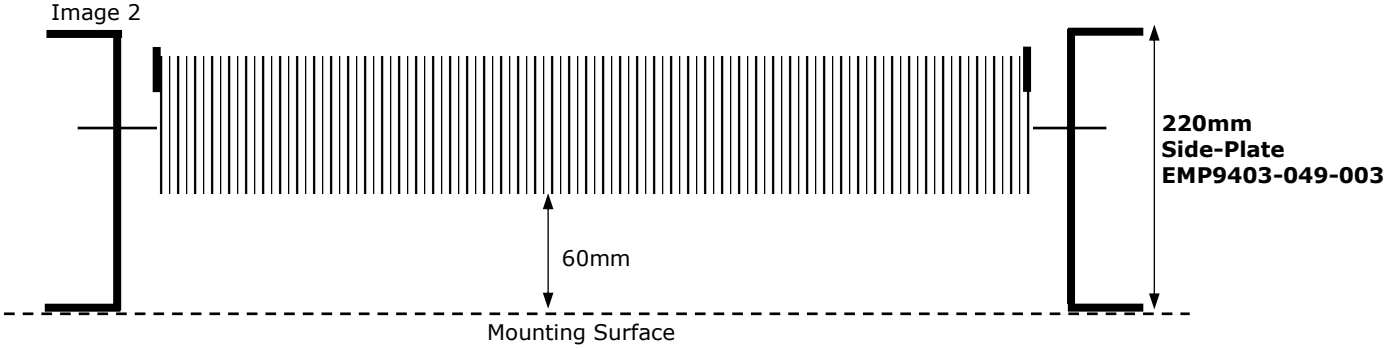


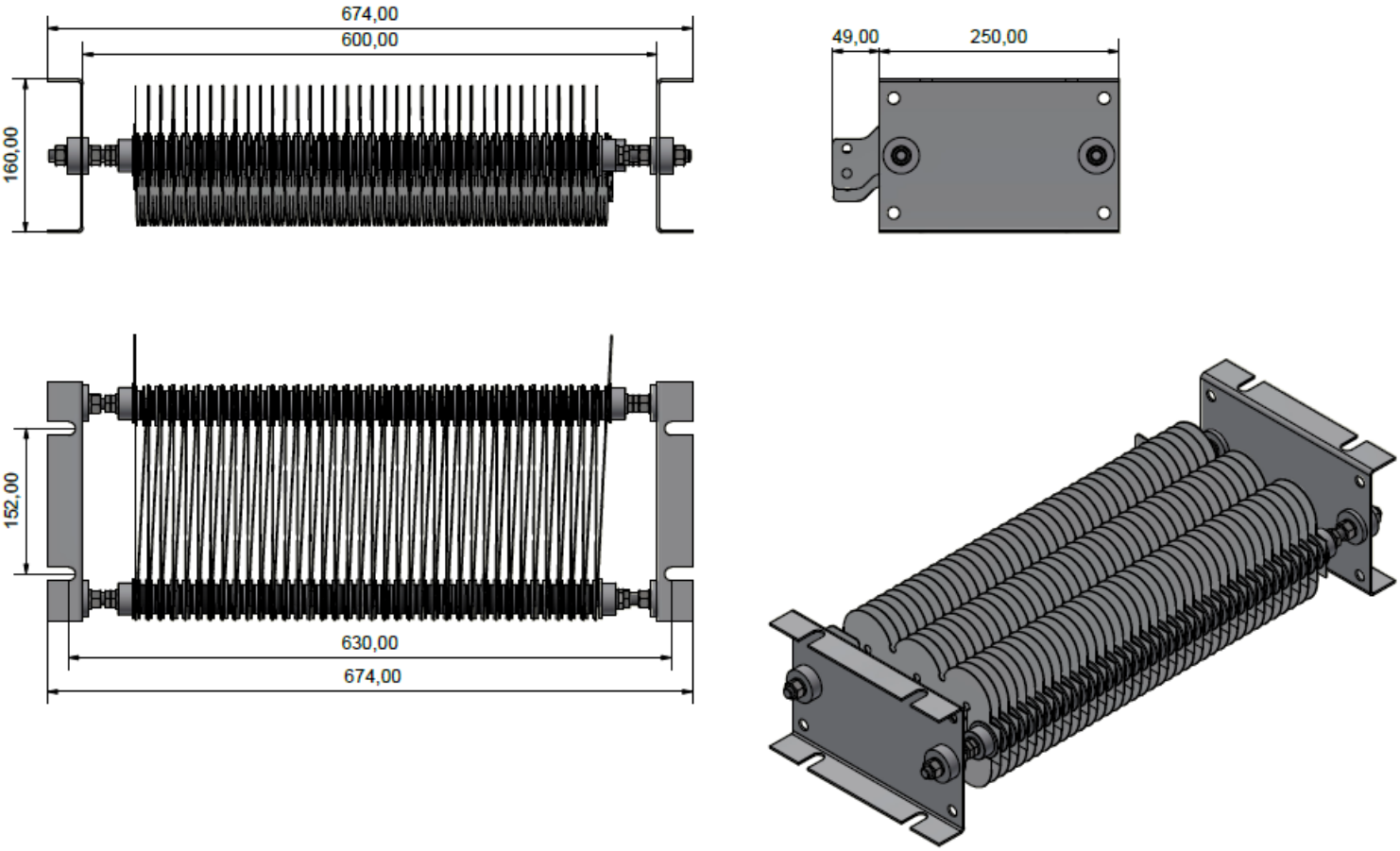
Image 2



Tel: +27 (0) 12 719 9065 | email: info@penbro.co.za
| web: www.penbro.co.za

MILL-BANK DIMENSIONS

DRAWING: L6237-001-001



Tel: +27 (0) 12 719 9065 | email: info@penbro.co.za
| web: www.penbro.co.za