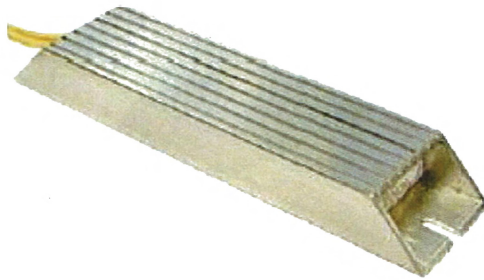




I55

P2 & E3 IP55 BRAKE RESISTOR USER GUIDE

Part # T-BR050-IN-I55



User Guide

All rights reserved. No part of this User Guide may be reproduced or transmitted in any form or by any means, electrical or mechanical including photocopying, recording or by any information storage or retrieval system without permission in writing from the publisher.

Copyright Bardac Corporation © 2025

The manufacturer accepts no liability for any consequences resulting from inappropriate, negligent or incorrect installation.

The contents of this User Guide are believed to be correct at the time of printing. In the interests of a commitment to a policy of continuous improvement, the manufacturer reserves the right to change the specification of the product or its performance or the contents of the User Guide without notice.

SAFETY

This option is specifically designed to be used with the drive variable speed drive product and is intended for professional incorporation into complete equipment or systems. If installed incorrectly it may present a safety hazard. The drive uses high voltages and currents, carries a high level of stored electrical energy, and is used to control mechanical plant that may cause injury. Close attention is required to system design and electrical installation to avoid hazards in either normal operation or in the event of equipment malfunction.

System design, installation, commissioning and maintenance must be carried out only by personnel who have the necessary training and experience. They must read carefully this safety information and the instructions in this Guide and follow all information regarding transport, storage, installation and use of the Option module, including the specified environmental limitations.

Please read the IMPORTANT SAFETY INFORMATION below, and all Warning and Caution boxes elsewhere.

SAFETY NOTICES

WARNING is given where there is a hazard that could lead to injury or death of personnel.

CAUTION is given where there is a hazard that could lead to damage to equipment.

It is the responsibility of the installer to ensure that the equipment or system into which the product is incorporated complies with the EMC legislation of the country of use. Within the European Union, equipment into which this product is incorporated must comply with 89/336/EEC, Electromagnetic Compatibility.

WARNING

Within the European Union, all machinery in which this product is used must comply with the Directive 89/392/EEC, Safety of Machinery. In particular, the equipment should comply with EN60204-1.

WARRANTY

Complete Warranty Terms and Conditions are available upon request from your IDL Authorised Distributor.

CAUTION

- Store the Option in its box until required. It should be stored in a clean and dry environment. Temperature range -40°C to $+60^{\circ}\text{C}$.

- Install the Option onto the drive by inserting the row of 11 pins into the terminal connector of the drive, ensuring that the terminals are tightened.

- If the Option is being used with Size#1 drive, care should be taken to support the Option when the terminal screws of the Option are being tightened or loosened.

WARNING

- Bardac drives and the Options should be installed only by qualified electrical persons and in accordance with local and national regulations and codes of practice.

- **Electric shock hazard!** Disconnect and **ISOLATE** the drive before attempting any work on it. High voltages are present at the terminals and within the drive for up to 10 minutes after disconnection of the electrical supply.

- Where the electrical supply to the drive is through a plug and socket connector, do not disconnect until 10 minutes have elapsed after turning off the supply.

STANDARDS CONFORMITY

A drive fitted with this Option complies with the following standards:

- CE-marked for Low Voltage Directive.
- IEC 664-1 Insulation Coordination within Low Voltage Systems.
- UL 840 Insulation Coordination for electrical equipment.
- EN50081-2 EMC Generic Emissions Standard, Industrial Level.
- EN50082-2 EMC Generic Immunity Standard, Industrial Level.
- Enclosure ingress protection, EN60529 IP00, NEMA 250.
- Flammability rating according to UL 94.

Bardac Drives

40 Log Canoe Circle
Stevensville, MD 21666
USA

Tel: +1 (410) 604-3400
Fax: +1 (410) 604-3500

email: sales@bardac.com
Internet: www.bardac.com



82-BRI55-IN_V1.01

Part No. T-BR050-IN-IP55
Iss 1.01

BRAKE RESISTOR

Dynamic braking resistors

IP55 Size 2 & 3 — Part # T-BR050-IN-I55

The IP55 dynamic braking resistors are designed specifically for use with high inertia loads which need to be stopped rapidly. Dynamic braking resistors assist the drive and manage the electrical energy returned from the motor during braking, by converting it into heat energy.

Key Benefits

- Drive software protects the brake from overload, hence no need for expensive overload relays are required.
- Internal fusible element ensures fail safe operation.
- Serial parallel arrangements for more demanding applications.

Key Physical Features

- IP55, robust assembly
- Wirewound
- Metal clad housing

SPECIFICATIONS

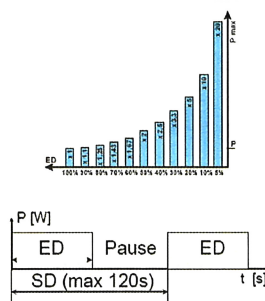
Belastungsdiagramm
Load diagram
Diagramme de charge

$$P_{max} = \frac{P \cdot 100}{ED[\%]}$$

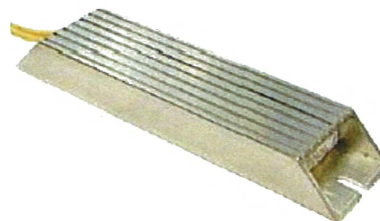
SD = Zykluszeit max 120 Sek.
Cycle time max 120 sec.
Temp de cycle max 120 sec.

$$ED[\%] = \frac{ED[s]}{SD[s]} \cdot 100$$

ED = Einschaltdauer
Duty cycle
Durée de mise en circuit



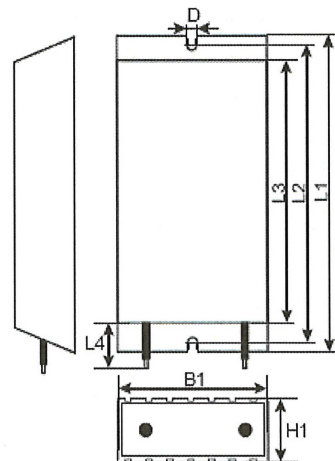
Brake Resistor, size 2 & 3
50 Ohm, 200 Watt
Occasional duty cycle



EASY START UP

- Connect to the + and BR terminals on the IP55 drive, orientation is not important.
- For use with E3 drives - To enable the brake to work Parameter P-34 of the drive needs setting to 1 or 3 (**NOT to 2 or 4 as this would disable software overload protection of the resistor**). Note to access P-34 the value of P14 may need to be set to 101, refer to the drive manual for further information.
- For use with P2Drives – To enable the brake resistor to work set Parameter P1-05 to 2
You Must also set P6-19=50 Ohms and P6-20=0.20kW

Dimensions



Part No.	L1 mm in	L2 mm in	L3 mm in	L4 mm in	B1 mm in	H1 mm in	D mm in
T-BR050-IN-I55	250 9.84	235 9.25	220 8.66	250 9.84	40 1.57	21 0.83	5.5 0.22

