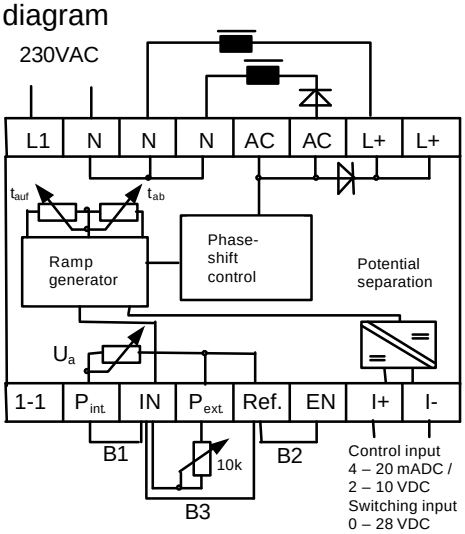
33 43304A00 Product Specification

33 43304A00

Phase-shift control device
for installation on mounting rails

This phase-shift control device is designed for ohmic/inductive loads supplied with variable operating voltage.
It is highly recommended for use in connection with Binder vibrators series 24 516..D.

Block diagram



Technical Data

Input voltage U_I :	200 – 245 VAC
Frequency:	40 – 60 Hz
Adjustable output voltage (at 50 Hz):	
U_{OAC} (terminal L+...L-):	0.2 – 0.95 x U_I
U_{ODC} (terminal 2-8...L-):	0.2 – 0.42 x U_I
Output voltage stability in the U_I range:	± 5%
Output current max.:	3 AAC/DC
Protection:	fine-wire fuse 5x20 M3.15E as per DIN 41571
External potentiometer:	10KΩ/1W
Current/voltage input potential-separated for use as control input:	4 – 20 mADC / 2 – 10 VDC
as switching input:	max. 28 VDC
Adjustable soft ramp up and ramp down time:	80 ms up to 1.2 s
Standard setting:	80 ms
Delay after supply of operating voltage:	2 s (additional)
Connection:	two 8-pole plug-in screw terminals
Cross-section:	2.5 mm² fine-wire
Installation:	on 35 mm mounting rail as per EN 50022
Temperature range:	0...50°C

This phase-shift control device is suitable for the control of loads with variable AC voltage or variable DC voltage by means of an integrated half-wave rectifier. The controlled output voltage can be adjusted either with the internal potentiometer (which can be controlled from the outside) or with an external potentiometer or by using a potential-separated 4-20 mA current input (PLC compatible) or 2-10 V voltage input. The potential-separated input allows the output voltage to be switched on at 24 V and off at < 2 V when operated with an internal or external potentiometer. The variation of the output voltage is subject to a ramp function (soft ramp up and ramp down) which is separately adjustable between 80 ms and 1.2 s.
These features ensure optimum operation especially when used in connection with Binder vibrators series 24 516..D. The various control functions allow the vibration amplitude of the vibrators to be changed during operation.
Binder phase-shift control devices are also suitable for electric units connected to 230 V (50/60Hz) AC mains voltage systems with reduced operating voltage and can be employed to adjust units with low operating voltage to these voltage systems.
Overload protection is provided by the fine-wire fuse integrated into the phase-shift control device.
The operating status is indicated by an LED.
The phase-shift control device is integrated into a compact plastic enclosure and thus suitable for installation on top hat rails in switch cabinets. Plug-in screw terminals ensure quick and easy installation.

CE

These devices meet the requirements of the EMC Directive 89/336/EEC.
Compliance with the following standards is confirmed:
EN 55011 (VDE 0875, Part 11, 1992) Group 1, Class A
Disturbance voltage
Group 1, Class B
Disturbance radiation
EN61000-4-3,1995
Test severity level 3
EN61000-4-4,1995
Test severity level 2
Test severity level 3:

Minor temporary voltage increases may occur without causing any malfunctions.
EN61000-4-5,1995
Test severity level 3

Protection:
as per EN 60 529: IP 00

Subject to design modifications.

Please observe ordering data!

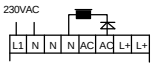
851/mu/Mai 99

33 43304A00

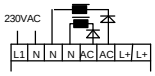
Connection example for Binder vibrators (vibration frequency = mains frequency)

Correct

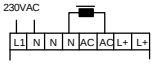
Device with integrated diode



Several devices in parallel

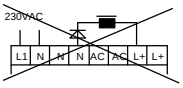


Device without diode

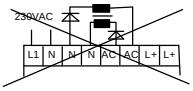


Wrong

Device does not vibrate

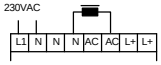


Phase shift between devices

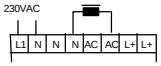


Connection example for other devices

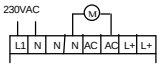
Device with permanent magnetic bias



Device for vibration frequency = double mains frequency

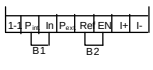


Universal motor or lighting

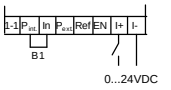


Connection example for setpoint inputs

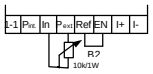
With internal potentiometer



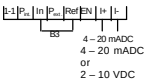
Potential separation ON-OFF



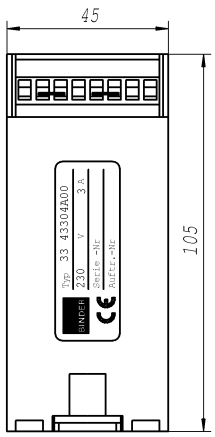
With external potentiometer

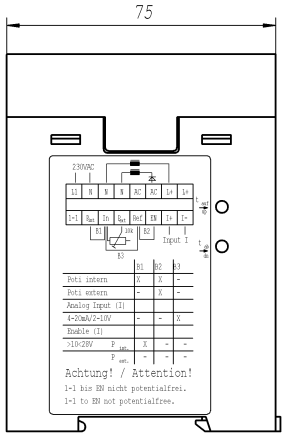


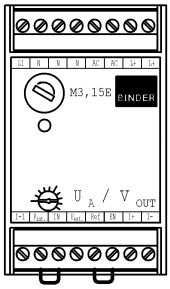
Control input potential-separated



Dimensions







Binder Magnete GmbH
Plant:
Mönchweilerstraße 1
D-78048 Villingen-Schwenningen
Mailing address:
Postfach 1220
D-78002 Villingen-Schwenningen
Phone +49 (0)7721 877-0
Fax +49 (0)7721 877-359

Order example Phase-shift control device
33 43304A00