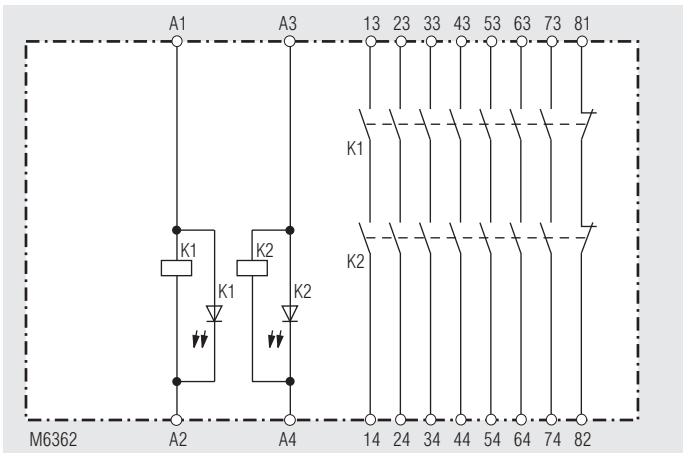




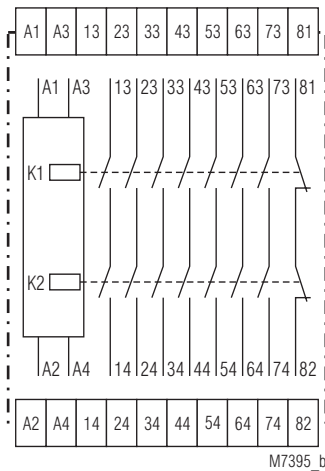
022 1558

- According to EC Directive for machines 98/37/EG
- According to IEC/EN 60204-1
- Safety category 4 according to EN 954-1
- Redundant and positively-driven contacts
- Output: 7 NO contacts, 1 NC contact for feed back circuit
- 1- or 2-channel connection
- LED displays for channels 1,2
- Removable terminal strips
- Width 100 mm

Block diagram



Circuit diagram



M7395_b

Approvals and marking



* pending

Applications

Contact multiplication of emergency-stop modules and safety door monitors.

Indication

LED K1: on when supply on relay K1
LED K2: on when supply on relay K2

Notes

The safety category to be realized according to EN 954-1 is depending on the category of the connected control unit and cannot be higher for the extension module. The redundant design of the DOLD safety modules ensures that all safety modules switch off reliably if a fault occurs in one of the devices.

Technical data

Input

Nominal voltage U_N :

AC 110, 230 V; AC/DC 24 V
For extension modules where the nominal voltage is the mains voltage EN 60204 part 9.1.1 must be fulfilled

Voltage range:

at 10% residual ripple: AC 0,8 ... 1,1 U_N
at 48% residual ripple: DC 0,8 ... 1,1 U_N

Nominal consumption:

5,5 VA; 2,8 W

Nominal frequency:

50 / 60 Hz

Control current:

approx. 12 mA for K1 and K2 at AC 230 V
approx. 55 mA for K1 and K2 at DC 24 V

Output

Contacts

BN 3081.63:

7 NO contacts, 1 NC contact for feed back circuit
The NO contacts are safety contacts.
ATTENTION! The NC contacts 81-82 can only be used for monitoring.

Response / release time of

K1 and K2:

35 ms / 35 ms

Contact type:

Relay, positively-driven

Nominal output voltage:

AC 400 V / DC 230 V

Thermal current I_{th} :

see Limit curve for arc-free operation

(max. 10 A in one contact path)

Technical data

Switching capacity

to AC 15
NO contact: 5 A / AC 230 V

Electrical life

to AC 15 at 2 A, AC 230 V: 10⁵ switching cycles IEC/EN 60 947-5-1

Permissible operating frequency:

6000 switching cycles / h

Short circuit strength

max. fuse rating: 10 A gL IEC/EN 60 947-5-1

Mechanical life: 10 x 10⁶ switching cycles

General data

Operating mode: Continuous operation
Temperature range: - 15 ... + 55 °C
at max. 90 % humidity

Clearance and creepage distances

overvoltage category /
contamination level: 4 kV / 2 IEC 60 664-1

EMC

Electrostatic discharge: 8 kV (air) IEC/EN 61 000-4-2

HF irradiation: 10 V / m IEC/EN 61 000-4-3

Fast transients: 2 kV IEC/EN 61 000-4-4

Surge voltages

between wires for power supply: 2 kV IEC/EN 61 000-4-5

between wire and ground: 4 kV IEC/EN 61 000-4-5

Interference suppression: Limit value class B EN 55 011

Degree of protection: Housing: IP 40 IEC/EN 60 529

Housing: IP 20 IEC/EN 60 529

Housing: Thermoplastic with V0 behaviour

according to UL subject 94

Vibration resistance: Amplitude 0,35 mm IEC/EN 60 068-2-6

frequency 10 ... 55 Hz

Climate resistance: 15 / 055 / 04 IEC/EN 60 068-1

Terminal designation: EN 50 005

Wire connection: 2 x 2,5 mm² solid or

2 x 1,5 mm² stranded ferruled

DIN 46 228-1/-2/-3/-4

Wire fixing: Flat terminals with self-lifting

clamping piece IEC/EN 60 999-1

Terminal strip removable

Mounting: DIN rail DIN/EN 60 715

Weight: 510 g

Dimensions

Width x height x depth: 100 x 74 x 121 mm

Standard type

BN 3081.63 AC/DC 24 V

Article number: 0044207 stock item

• Output: 7 NO contacts, 1 NC contact for feed

back circuit

• Nominal voltage U_N: AC/DC 24 V

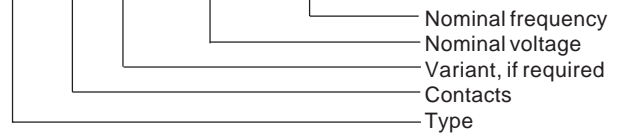
• Width: 100 mm

Variant

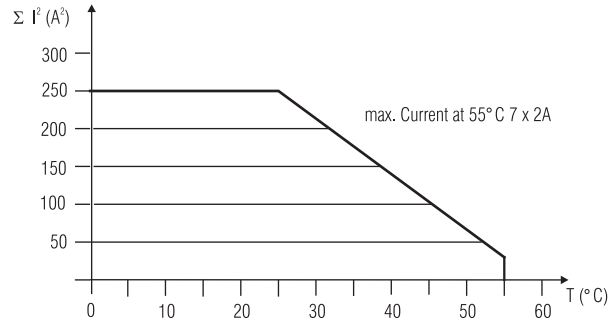
BN 3081.63/61: with UL-approval

Ordering example for Variant

BN 3081.63 / - - AC 230 V 50/60 Hz

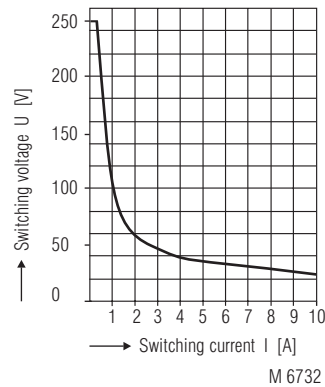


Characteristics



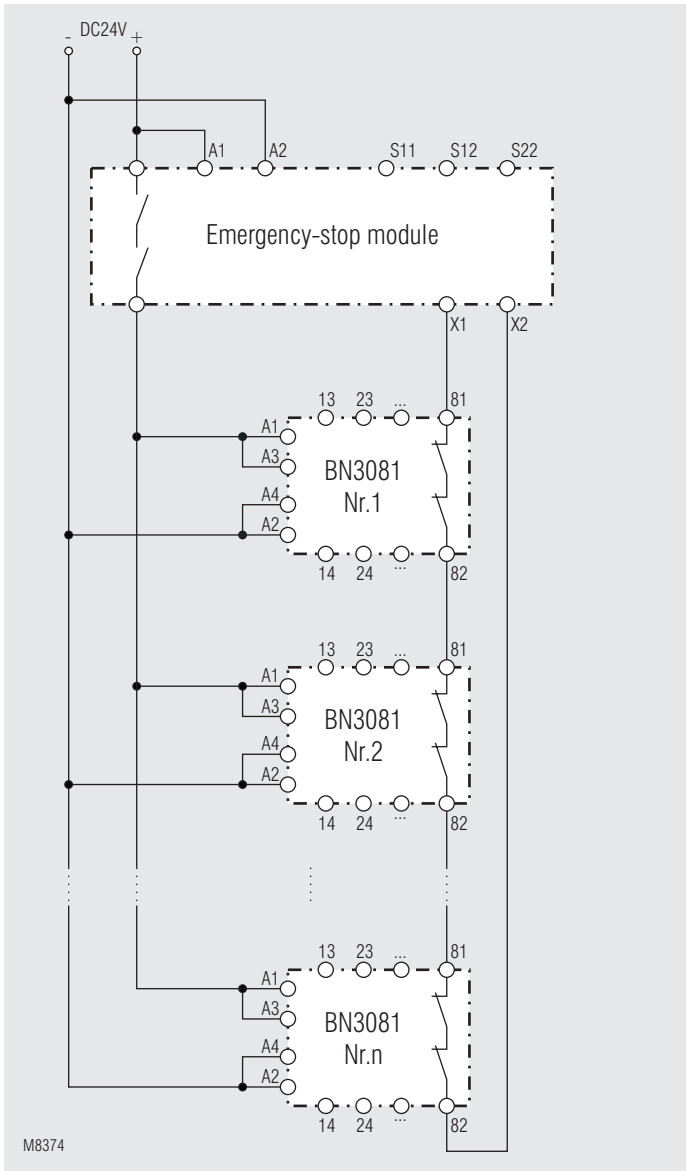
Quadratic total current limit curve

M7255

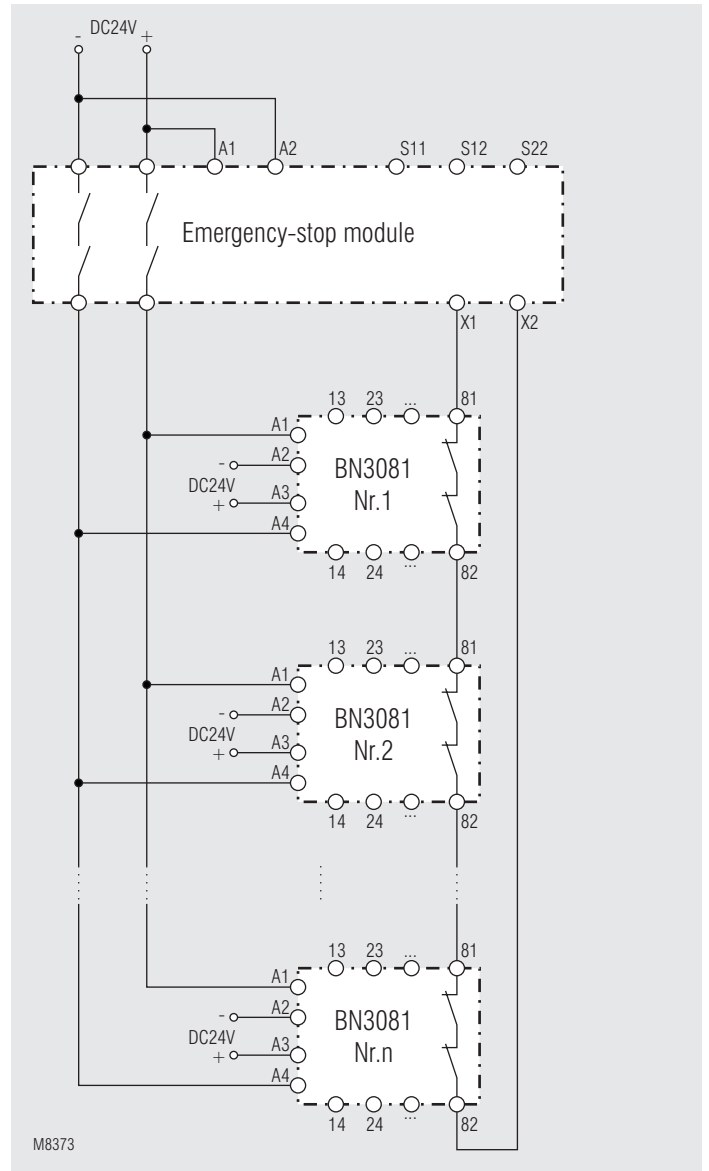


Limit curve for arc-free operation for resistive load

Application example



Contact multiplication with several extension moduls 1-channel



Contact multiplication with several extension moduls 2-channel with cross fault monitoring