

**199173****PKZM0-12-T-PI**[Overview](#)[Specifications](#)[Resources](#)[Delivery program](#)[Technical data](#)[Design verification as
per IEC/EN 61439](#)[Technical data ETIM8.0](#)[Dimensions](#)

DELIVERY PROGRAM

Product range
PKZM0...T transformer-protective circuit-breakers
up to 25 A

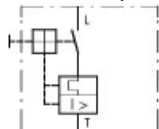
Basic function
Transformer protection



Notes
Also suitable for motors with efficiency class IE3.

Connection technique
Push in terminals

Contact sequence



Rated uninterrupted current [I_u]
12 A

Setting range

Overload releases  [I_r]
8 - 12 A

short-circuit release  [I_{rm}]
max. [I_{rm}]
224 A

Phase-failure sensitivity
IEC/EN 60947-4-1, VDE 0660 Part 102

Notes

For the protection of transformers with a high inrush current.
Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.

TECHNICAL DATA

General

Standards
IEC/EN 60947, VDE 0660

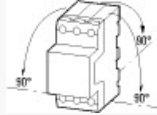
Climatic proofing
Damp heat, constant, to IEC 60068-2-78
Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature
Storage
- 40 - 80 °C

Ambient temperature
Open
-25 - +55 °C

Ambient temperature
Enclosed
- 25 - 40 °C

Mounting position



Direction of incoming supply
as required

Degree of protection
Device
IP20

Degree of protection
Terminations
IP20

Protection against direct contact when actuated
from front (EN 50274)
Finger and back-of-hand proof

Mechanical shock resistance half-sinusoidal shock
10 ms to IEC 60068-2-27
25 g

Altitude
Max. 2000 m

Terminal capacity main cable
Push-in terminals
Solid
1 x (1 - 6)
2 x (1 - 6) mm²

Terminal capacity main cable
Push-in terminals
flexible
1 x (1 - 6)
2 x (1 - 6) mm²

Terminal capacity main cable
Push-in terminals
flexible with ferrules
1 x (1 - 6)
2 x (1 - 4) mm²

Terminal capacity main cable
Push-in terminals

flexible with ultrasonic welded busbar end
1 x (1 - 10)
2 x (1 - 6) mm²

Terminal capacity main cable
Push-in terminals
flexible with uninsulated wire end ferrule
1 x (1 - 10)
2 x (1 - 6) mm²

Terminal capacity main cable
Push-in terminals
Solid or stranded
18 - 8 AWG

Terminal capacity main cable
Push-in terminals
Stripping length
12 mm

Terminal capacity main cable
Push-in terminals
Standard screw driver
3.0 x 0.5

Main conducting paths

Rated impulse withstand voltage [U_{imp}]
6000 V AC

Overvoltage category/pollution degree
III/3

Rated operational voltage [U_e]
690 V AC

Rated uninterrupted current = rated operational
current [$I_u = I_e$]
12 A

Rated frequency [f]
40 - 60 Hz

Current heat loss (3 pole at operating temperature)
6.37 W

Lifespan, mechanical [Operations]

0.1 x 10⁶

Lifespan, electrical (AC-3 at 400 V)
Lifespan, electrical [Operations]
0.1 x 10⁶

Max. operating frequency
40 Ops/h

Short-circuit rating
DC
Short-circuit rating
60 kA

Motor switching capacity
AC-3 (up to 690V)
12 A

Trip blocks

Temperature compensation
to IEC/EN 60947, VDE 0660
- 5...40 °C

Temperature compensation
Operating range
- 25...55 °C

Temperature compensation residual error for T >
40 °C
☐ 0.25 %/K

Setting range of overload releases
0.6 - 1 x I_N

short-circuit release
Basic device, fixed: 20 x I_N

Short-circuit release tolerance
± 20%

Phase-failure sensitivity
IEC/EN 60947-4-1, VDE 0660 Part 102

DESIGN VERIFICATION AS PER IEC/EN 61439

Operating ambient temperature min.
-25 °C

Operating ambient temperature max.
+55 °C

TECHNICAL DATA ETIM 8.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])

Rated permanent current I_u
12 A

Rated voltage
690 - 690 V

Rated short-circuit breaking capacity I_{cu} at 400 V,
50 Hz
50 kA

Overload release current setting
12 - 12 A

Adjustment range short-term delayed short-circuit
release
0 - 0 A

Adjustment range undelayed short-circuit release
224 - 224 A

Integrated earth fault protection
No

Type of electrical connection of main circuit
Spring clamp connection

Device construction
Other

Suitable for DIN rail (top hat rail) mounting
Yes

DIN rail (top hat rail) mounting optional
Yes

Number of auxiliary contacts as normally closed
contact
0

Number of auxiliary contacts as normally open
contact
0

Number of auxiliary contacts as change-over
contact
0

With switched-off indicator
Yes

Number of poles
3

Position of connection for main current circuit
Other

Type of control element
Turn button

Complete device with protection unit
Yes

Mbtor drive integrated
No

Mbtor drive optional
No

Degree of protection (IP)
IP20

DIMENSIONS

