

# Eaton 072727

Catalog Number: 072727

Eaton Moeller® series PKM0 Short-circuit protective breaker, Iu 4 A, Irm 62 A, Screw terminals, Also suitable for motors with efficiency class IE3.



## General specifications

Product Name	Catalog Number
Eaton Moeller® series PKM0 Short-circuit protective breaker	072727
	EAN
	4015080727279
Product Length/Depth	Product Height
76 mm	93 mm
Product Width	Product Weight
45 mm	0.287 kg
Compliances	Certifications
CCC Marked	UL Listed
	VDE 0660
	IEC/EN 60947

## Features & Functions

### Actuator type

Turn button

### Number of poles

Three-pole

## General

### Connection

Screw terminals

### Lifespan, electrical

100,000 operations

### Lifespan, mechanical

100,000 Operations

### Mounting position

Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.

### Operating frequency

40 Operations/h

### Overvoltage category

III

### Pollution degree

3

### Product category

Motor protective circuit breaker

### Protection

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

### Rated impulse withstand voltage (Uimp)

6000 V AC

### Shock resistance

25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms

### Suitable for

Also motors with efficiency class IE3

### Temperature compensation

-5 - 40 °C to IEC/EN 60947, VDE 0660

-25 - 55 °C, Operating range

$\leq 0.25\text{ \%}/\text{K}$ , residual error for  $T > 40^\circ$

### Type

Short-circuit protective device only

## Climatic environmental conditions

## Terminal capacities

#### Altitude

Max. 2000 m

#### Ambient operating temperature - min

-25 °C

#### Ambient operating temperature - max

55 °C

#### Ambient operating temperature (enclosed) - min

-25 °C

#### Ambient operating temperature (enclosed) - max

40 °C

#### Ambient storage temperature - min

-40 °C

#### Ambient storage temperature - max

80 °C

#### Climatic proofing

Damp heat, cyclic, to IEC 60068-2-30

Damp heat, constant, to IEC 60068-2-78

#### Terminal capacity (flexible with ferrule)

1 x (1 - 6) mm<sup>2</sup>, ferrule to DIN 46228

2 x (1 - 6) mm<sup>2</sup>, ferrule to DIN 46228

#### Terminal capacity (solid)

2 x (1 - 6) mm<sup>2</sup>

1 x (1 - 6) mm<sup>2</sup>

#### Terminal capacity (solid/stranded AWG)

18 - 10

#### Stripping length (main cable)

10 mm

#### Tightening torque

1.7 Nm, Screw terminals, Main cable

1 Nm, Screw terminals, Control circuit cables

### Electrical rating

#### Rated frequency - min

50 Hz

#### Rated frequency - max

60 Hz

#### Rated operational current (I<sub>e</sub>)

4 A

#### Rated operational power at AC-3, 220/230 V, 50 Hz

0.75 kW

#### Rated operational power at AC-3, 380/400 V, 50 Hz

1.5 kW

#### Rated operational voltage (U<sub>e</sub>) - min

690 V

#### Rated operational voltage (U<sub>e</sub>) - max

690 V

#### Rated uninterrupted current (I<sub>u</sub>)

4 A

### Short-circuit rating

#### Short-circuit release

62 A, I<sub>rm</sub>, Setting range max.

± 20% tolerance, Trip blocks

Basic device fixed 15.5 x I<sub>u</sub>, Trip Blocks

### Trip blocks

#### Overload release current setting - min

0 A

#### Overload release current setting - max

0 A

Rated short-circuit breaking capacity  $I_{cs}$  at 400 V AC  
150 kA

Rated short-circuit breaking capacity  $I_{cu}$  at 400 V AC  
150 kA

Rated short-circuit breaking capacity  $I_{cu}$  at 440 V AC  
150 kA

Rated short-circuit breaking capacity  $I_{cs}$  at 440 V AC  
150 kA

Rated short-circuit breaking capacity  $I_{cu}$  at 500 V AC  
150 kA

Rated short-circuit breaking capacity  $I_{cs}$  at 500 V AC  
150 kA

Rated short-circuit breaking capacity  $I_{cu}$  at 690 V AC  
3 kA

Rated short-circuit breaking capacity  $I_{cs}$  at 690 V AC  
3 kA

## Design verification

Equipment heat dissipation, current-dependent  $P_{vid}$   
5.33 W

Heat dissipation capacity  $P_{diss}$   
0 W

Heat dissipation per pole, current-dependent  $P_{vid}$   
1.78 W

Rated operational current for specified heat dissipation ( $I_n$ )  
4 A

Static heat dissipation, non-current-dependent  $P_{vs}$   
0 W

### 10.2.2 Corrosion resistance

Meets the product standard's requirements.

#### 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

#### 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

#### 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects

Meets the product standard's requirements.

### 10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

### 10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

### 10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

### 10.2.7 Inscriptions

Meets the product standard's requirements.

## 10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

## 10.4 Clearances and creepage distances

Meets the product standard's requirements.

## 10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be

evaluated.

#### 10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

#### 10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

#### 10.8 Connections for external conductors

Is the panel builder's responsibility.

#### 10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

#### 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

#### 10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

#### 10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

#### 10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

#### 10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

#### 10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## Resources

### Brochures

[eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf](#)

### Catalogs

[Product Range Catalog Switching and protecting motors](#)

[eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf](#)

[Switching and protecting motors - catalog](#)

### Characteristic curve

[eaton-contactors-short-time-loading-dilm-characteristic-curve.eps](#)

[eaton-manual-motor-starters-characteristic-characteristic-curve-009.eps](#)

[eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps](#)

### Declarations of conformity

[DA-DC-00004920.pdf](#)

[DA-DC-00004891.pdf](#)

### Drawings

[eaton-manual-motor-starters-pkz-dimensions-002.eps](#)

[eaton-manual-motor-starters-pkz-dimensions-003.eps](#)

[eaton-manual-motor-starters-pkz-dimensions.eps](#)

[eaton-manual-motor-starters-mounting-3d-drawing-002.eps](#)

[eaton-general-ie-ready-dilm-contactor-standards.eps](#)

[eaton-manual-motor-starters-pkzm0-3d-drawing-008.eps](#)

### eCAD model

[ETN.072727.edz](#)

### Installation instructions

[IL03407011Z.pdf](#)

[IL03402034Z](#)

### Installation videos

[WIN-WIN with push-in technology](#)

### mCAD model

[DA-CD-pkzm0](#)

[DA-CS-pkzm0](#)

### Sales notes

[eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf](#)

### Wiring diagrams

[eaton-motor-protective-switch-starter-pkm0-wiring-diagram.eps](#)

[eaton-manual-motor-starters-diagram-pkm0-wiring-diagram.eps](#)



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