121723
PKE-XTU-1,2

DELIVERY PROGRAM

Product range
Accessories

Accessories
Trip blocks

Basic function
Motor protection
Motor protection for heavy starting duty

IE3

Notes
Also suitable for motors with efficiency class IE3.

Setting range

Overload releases [I$_r$]
Setting range of overload releases [I$_r$]
0.3 - 1.2 A

Overload releases [I_r]
Overload release, min. [I_r]
0.3 A

Overload releases [I_r]
Overload release, max. [I_r]
1.2 A

Function
With overload release

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

Motor rating [P]

AC-3
220 V 230 V [P]
0.18 kW

AC-3
380 V 400 V [P]
0.37 kW

AC-3
440 V [P]
0.37 kW

AC-3
500 V [P]
0.37 kW

AC-3
660 V 690 V [P]
0.75 kW

For use with
PKE12 basic device

Connection to SmartWire-DT
no

Motor output/rated motor current

Motor rating	Rated motor current					
	AC-3					
		220 V 230 V 240 V	380 V 400 V 415 V	440 V	500 V	660 V 690 V
P	I	I	I	I	I	
kW	A	A	A	A	A	
0.06	0.37	-	-	-	-	
0.09	0.54	0.31	-	-	-	
0.12	0.72	0.41	0.37	0.33	-	
0.18	1.04	0.6	0.54	0.48	0.35	
0.25	-	0.8	0.76	0.7	0.5	
0.37	-	1.1	1.02	0.9	0.7	
0.55	-	-	-	-	0.9	
0.75	-	-	-	-	1.1	

TECHNICAL DATA

General

Standards
IEC/EN 60947, VDE 0660, UL, CSA

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

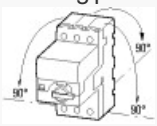
Ambient temperature
Storage
- 40 - 80 °C

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
IP00

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

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 [$I_u = I_e$]
1.2 A

Rated frequency [f]
40 - 60 Hz

Max. operating frequency
60 Ops/h

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

AC-4 cycle operation
Minimum current flow times
500 (Class 5)
700 (Class 10)
900 (Class 15)
1000 (Class 20) ms

AC-4 cycle operation
Minimum cut-out periods
500 ms

AC-4 cycle operation
Note
In AC-4 cycle operation, going below the minimum current flow time can cause overheating of the load (motor).
For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods. ms

Trip blocks

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

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

Setting range of overload releases
0.25 - 1 x I_u

short-circuit release
Trip block, fixed: 15.5 x I_r
delayed approx. 60 ms

Short-circuit release tolerance
± 20%

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

DESIGN VERIFICATION AS PER IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_n]
1.2 A

Heat dissipation per pole, current-dependent [P_{vid}]
0.1 W

Equipment heat dissipation, current-dependent [P_{vid}]
0.3 W

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

Heat dissipation capacity [P_{diss}]
0 W

Operating ambient temperature min.
-25 °C

Operating ambient temperature max.
+55 °C

IEC/EN 61439 design verification

10.2 Strength of materials and parts
10.2.2 Corrosion resistance
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.1 Verification of thermal stability of

enclosures
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts
10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts
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 Insulation properties
10.9.2 Power-frequency electric strength
Is the panel builder's responsibility.

10.9 Insulation properties
10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties
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.

TECHNICAL DATA ETIM 7.0

Low-voltage industrial components (EG000017) / Tripping bloc for power circuit-breaker (EC000617)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Releasing block for circuit breakers (ecl@ss10.0.1-27-37-04-10 [AKF008013])

Overload release current setting
0.3 - 1.2 A

Initial value of the undelayed short-circuit release - setting range
4.65 A

End value adjustment range undelayed short-circuit release
18.6 A

Rated permanent current Iu
1.2 A

Voltage type for actuating
Self powered

Rated control supply voltage Us at AC 50HZ
0 - 0 V

Rated control supply voltage Us at AC 60HZ
0 - 0 V

Rated control supply voltage Us at DC
0 - 0 V

Number of poles
3

Short-circuit release function
Delayed

With ground fault protection function
No

Type of motor protection
Electronic release

APPROVALS

Product Standards
UL 508; CSA-C22.2 No. 14-10; IEC60947-4-1; CE

marking

UL File No.
E36332

UL Category Control No.
NLRV

CSA File No.
165628

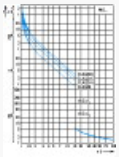
CSA Class No.
3211-05

North America Certification
UL listed, CSA certified

Specially designed for North America
No

CHARACTERISTICS

Characteristic curve



Tripping characteristics