199535
PV-20A-2P-AC-I1/SVB-SW

Overview | Specifications | Resources

DELIVERY PROGRAM

Product range
Main switch
maintenance switch

Part group reference
T0

Stop Function
STOP function

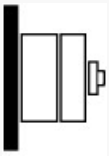
With black rotary handle and locking ring

Number of poles
2 pole

Locking facility
Lockable in the 0 (Off) position

Degree of Protection
IP20

Design
surface mounting



Switching angle
90 °

Design number
102

Motor rating AC-23A, 50 - 60 Hz [P]

400 V [P]
55 kW

Rated uninterrupted current [I_u]
20 A

Note on rated uninterrupted current I_u
Rated uninterrupted current I_u is specified for max. cross-section.

Number of contact units
1 contact unit(s)

TECHNICAL DATA

General

Standards
IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL
Switch-disconnector according to IEC/EN 60947-3

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

Ambient temperature
Enclosed
-25 - +40 °C

Overvoltage category/pollution degree
III/3

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

Mechanical shock resistance
15 g

Mounting position
As required

Contacts

Mechanical variables
Number of poles
2 pole

Electrical characteristics
Rated operational voltage [U_e]
690 V AC

Electrical characteristics
Rated uninterrupted current [I_u]
20 A

Electrical characteristics
Note on rated uninterrupted current I_u
Rated uninterrupted current I_u is specified for max. cross-section.

Load rating with intermittent operation, class 12
AB 25 % DF
2 x I_e

Load rating with intermittent operation, class 12
AB 40 % DF
1.6 x I_e

Load rating with intermittent operation, class 12
AB 60 % DF
1.3 x I_e

Short-circuit rating
Fuse
20 A gG/gL

Rated short-time withstand current (1 s current) [I_{cw}]
320 A_{rms}

Note on rated short-time withstand current Icw
Current for a time of 1 second

Rated conditional short-circuit current [I_q]
6 kA

Switching capacity

cos ϕ rated making capacity as per IEC 60947-3
130 A

Rated breaking capacity cos ϕ to IEC 60947-3
230 V
100 A

Rated breaking capacity cos ϕ to IEC 60947-3
400/415 V
110 A

Rated breaking capacity cos ϕ to IEC 60947-3
500 V
80 A

Rated breaking capacity cos ϕ to IEC 60947-3
690 V
60 A

Safe isolation to EN 61140
between the contacts
440 V AC

Safe isolation to EN 61140
Current heat loss per contact at I_e
0.6 W

Safe isolation to EN 61140
Current heat loss per auxiliary circuit at I_e (AC-

15/230 V)
0.6 CO

Lifespan, mechanical [Operations]
> 0.4 x 10^6

Maximum operating frequency [Operations/h]
1200

AC
AC-3
Rating, motor load switch [P]
220 V 230 V [P]
3 kW

AC
AC-3
Rating, motor load switch [P]
230 V Star-delta [P]
5.5 kW

AC
AC-3
Rating, motor load switch [P]
400 V 415 V [P]
5.5 kW

AC
AC-3
Rating, motor load switch [P]
400 V Star-delta [P]
7.5 kW

AC
AC-3
Rating, motor load switch [P]
500 V [P]
5.5 kW

AC
AC-3
Rating, motor load switch [P]
500 V Star-delta [P]
7.5 kW

AC
AC-3
Rating, motor load switch [P]
690 V [P]
4 kW

AC
AC-3
Rating, motor load switch [P]
690 V Star-delta [P]
5.5 kW

AC
AC-3
Rated operational current motor load switch
230 V [I_e]
11.5 A

AC
AC-3
Rated operational current motor load switch
230 V star-delta [I_e]
20 A

AC
AC-3
Rated operational current motor load switch
400V 415 V [I_e]
11.5 A

AC
AC-3
Rated operational current motor load switch
400 V star-delta [I_e]
20 A

AC
AC-3
Rated operational current motor load switch
500 V [I_e]
9 A

AC
AC-3
Rated operational current motor load switch
500 V star-delta [I_e]
15.6 A

AC
AC-3
Rated operational current motor load switch
690 V [I_e]
4.9 A

AC
AC-3
Rated operational current motor load switch
690 V star-delta [I_e]
8.5 A

AC
AC-23A
Motor rating AC-23A, 50 - 60 Hz [P]
230 V [P]
3 kW

AC
AC-23A
Motor rating AC-23A, 50 - 60 Hz [P]
400 V 415 V [P]
5.5 kW

AC
AC-23A
Motor rating AC-23A, 50 - 60 Hz [P]
500 V [P]
7.5 kW

AC
AC-23A
Motor rating AC-23A, 50 - 60 Hz [P]
690 V [P]
5.5 kW

AC
AC-23A
Rated operational current motor load switch
230 V [I_e]
13.3 A

AC
AC-23A
Rated operational current motor load switch
400 V 415 V [I_e]
13.3 A

AC
AC-23A
Rated operational current motor load switch
500 V [I_e]
13.3 A

AC
AC-23A
Rated operational current motor load switch
690 V [I_e]
7.6 A

DC
DC-1, Load-break switches L/R = 1 ms

Rated operational current [I_e]
10 A

DC
DC-1, Load-break switches L/R = 1 ms
Voltage per contact pair in series
60 V

DC
DC-21A [I_e]
Rated operational current [I_e]
1 A

DC
DC-21A [I_e]
Contacts
1 Quantity

DC
DC-23A, motor load switch L/R = 15 ms
24 V
Rated operational current [I_e]
10 A

DC
DC-23A, motor load switch L/R = 15 ms
24 V
Contacts
1 Quantity

DC
DC-23A, motor load switch L/R = 15 ms
48 V
Rated operational current [I_e]
10 A

DC
DC-23A, motor load switch L/R = 15 ms
48 V
Contacts
2 Quantity

DC
DC-23A, motor load switch L/R = 15 ms
60 V
Rated operational current [I_e]
10 A

DC
DC-23A, motor load switch L/R = 15 ms
60 V
Contacts

3 Quantity

DC
DC-23A, motor load switch L/R = 15 ms
120 V
Rated operational current [I_e]
5 A

DC
DC-23A, motor load switch L/R = 15 ms
120 V
Contacts
3 Quantity

DC
DC-23A, motor load switch L/R = 15 ms
240 V
Rated operational current [I_e]
5 A

DC
DC-23A, motor load switch L/R = 15 ms
240 V
Contacts
5 Quantity

DC
DC-13, Control switches L/R = 50 ms
Rated operational current [I_e]
10 A

DC
DC-13, Control switches L/R = 50 ms
Voltage per contact pair in series
32 V

Control circuit reliability at 24 V DC, 10 mA [Fault probability]
< 10^{-5},< 1 failure in 100,000 switching operations
H

Terminal capacities

Solid or stranded
1 x (1 - 2,5)
2 x (1 - 2,5) mm^2

Flexible with ferrules to DIN 46228
1 x (0.75 - 2.5)
2 x (0.75 - 2.5) mm^2

Terminal screw
M3.5

Tightening torque for terminal screw
1 Nm

Technical safety parameters:

Notes
$B10_d$ values as per EN ISO 13849-1, table C1

Rating data for approved types

Terminal capacity
Terminal screw
M3.5

Terminal capacity
Tightening torque
8.83 lb-in

TECHNICAL DATA ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch
Yes

Version as maintenance-/service switch
Yes

Version as safety switch
No

Version as emergency stop installation
No

Version as reversing switch
No

Number of switches
1

Max. rated operation voltage Ue AC
690 V

Rated operating voltage
690 - 690 V

Rated permanent current Iu
20 A

Rated permanent current at AC-23, 400 V
13.3 A

Rated permanent current at AC-21, 400 V
20 A

Rated operation power at AC-3, 400 V
5.5 kW

Rated short-time withstand current Icw
0.32 kA

Rated operation power at AC-23, 400 V
5.5 kW

Switching power at 400 V
5.5 kW

Conditioned rated short-circuit current Iq
6 kA

Number of poles
2

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

Motor drive optional
No

Motor drive integrated
No

Voltage release optional
No

Device construction
Complete device in housing

Suitable for floor mounting
Yes

Suitable for front mounting 4-hole
No

Suitable for front mounting centre
No

Suitable for distribution board installation
No

Suitable for intermediate mounting
No

Colour control element
Black

Type of control element
Door coupling rotary drive

Interlockable
Yes

Type of electrical connection of main circuit
Screw connection

Degree of protection (IP), front side
IP20

Degree of protection (NEMA)
Other

DIMENSIONS