199956
P1-40/V/SVB/N/HI11

Delivery program

Technical data

Design verification as per IEC/EN 61439

Technical data ETIM 8.0

DELIVERY PROGRAM

Product range
Main switch
maintenance switch

Part group reference
P1

Stop Function
Emergency switching off function

With red rotary handle and yellow locking ring

Number of poles
3 pole + N

Auxiliary contacts

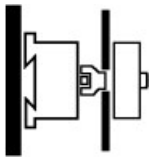
1 N/O

1 N/C

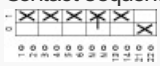
Locking facility
Lockable in the 0 (Off) position

Degree of Protection
Front IP65

Design
rear mounting

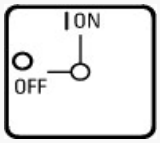


Contact sequence



Switching angle
90 °

Function



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

400 V [P]
22 kW

Rated uninterrupted current [I_u]
40 A

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

TECHNICAL DATA

General

Standards
IEC/EN 60947, IEC/EN 60204
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
Open
-25 - +50 °C

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
3 pole + N

Mechanical variables
Auxiliary contacts

1 N/O

Mechanical variables
Auxiliary contacts


1 N/C

Electrical characteristics
Rated operational voltage [U_e]
690 V AC

Electrical characteristics
Rated uninterrupted current [I_u]
40 A

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

Short-circuit rating
Fuse
50 A gG/gL

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

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

Switching capacity

Safe isolation to EN 61140
between the contacts
440 V AC

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

Lifespan, mechanical [Operations]
> 0.3 x 10^6

Maximum operating frequency [Operations/h]
1200

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

7.5 kW

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

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

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

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

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

AC
AC-21A
Rated operational current switch
400 V 415 V [I_e]
40 A

AC
AC-21A
Rated operational current switch
500 V [I_e]
40 A

AC
AC-21A
Rated operational current switch
690 V [I_e]
40 A

AC
AC-22A

Rated operational current switch
400 V 415 V [I_e]
40 A

AC
AC-22A
Rated operational current switch
500 V [I_e]
40 A

AC
AC-22A
Rated operational current switch
690 V [I_e]
40 A

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

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

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

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

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

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

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

Terminal capacities

Solid or stranded
1 x (1,5 - 10)
2 x (1,5 - 10) mm^2

Flexible with ferrules to DIN 46228
1 x (1 - 4)
2 x (1 - 4) mm^2

Terminal screw
M4

Tightening torque for terminal screw
1.6 Nm

Rating data for approved types

Terminal capacity
Solid or flexible conductor with ferrule
14 - 8 AWG

Terminal capacity
Terminal screw
M4

Terminal capacity
Tightening torque
14.1 lb-in

DESIGN VERIFICATION AS PER IEC/EN 61439

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

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

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
Yes

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
40 A

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

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

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

Rated short-time withstand current Icw
0.64 kA

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

Switching power at 400 V
22 kW

Conditioned rated short-circuit current Iq
80 kA

Number of poles
4

Number of auxiliary contacts as normally closed contact
1

Number of auxiliary contacts as normally open contact
1

Number of auxiliary contacts as change-over contact
0

Motor drive optional
No

Motor drive integrated
No

Voltage release optional
No

Device construction
Built-in device fixed built-in technique

Suitable for floor mounting
No

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
Red

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
IP65

Degree of protection (NEMA)