

207314 P1-32/l2/SVB						
Overview	Specifications	Resources				
Delivery program	$\Box$	DELIVERY PROGRAM				
Technical data		Product range Main switch maintenance switch Repair switch				
Design verification as per IEC/EN 61439		Part group reference P1				
Technical data ETIM7.0		Stop Function Emergency switching off function				
Approvals		With red rotary handle and yellow locking ring				
Dimensions		Information about equipment supplied Auxiliary contact or neutral conductor fitted by user.				
		Number of poles 3 pole				
		Auxiliary contacts				
		\ 0 NO				
		Х ONC				
		Locking facility Lockable in the 0 (Off) position				

Degree of Protection

### IP65

totally insulated

Design surface mounting



Contact sequence  $\begin{array}{c}
\text{L1} \quad \text{L2} \quad \text{L3} \\
\begin{array}{c}
\text{L1} \quad \text{L3} \quad \text{L5} \\
\begin{array}{c}
\text{L1} \quad \text{L3} \ \text{L5} \ \text{L5} \\
\end{array}{L1} \ \text{L5} \ \text{$ T3

Switching angle 90 °

Function

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

400 V [P] 15 kW

Rated uninterrupted current [lu] 32 A

Note on rated uninterrupted current  $!_u$ Rated uninterrupted current  $I_{\!\scriptscriptstyle U}$  is specified for max. crosssection.

# **TECHNICAL DATA**

### General

Standards IEC/EN 60947, VDE 0660, 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 Enclosed -25 - +40 °C

Overvoltage category/pollution degree 2/12

### ₩3

Rated impulse withstand voltage  $[\rm U_{\rm mp}]$  6000 V AC

Mechanical shock resistance 15 g

Mounting position As required

#### Contacts

Mechanical variables Number of poles 3 pole

Mechanical variables Auxiliary contacts 7 0 N/C

Electrical characteristics Rated operational voltage [U<sub>a</sub>] 690 V AC

Electrical characteristics Rated uninterrupted current  $\left[I_{\rm u}\right]$  32 A

Electrical characteristics Note on rated uninterrupted current  $l_{\rm u}$  Rated uninterrupted current  $l_{\rm u}$  is specified for max. cross-section.

Load rating with intermittent operation, class 12 AB 25 % DF 2 x  $I_{\rm B}$ 

Load rating with intermittent operation, class 12 AB 40 % DF 1.6 x  $l_{\rm e}$ 

Load rating with intermittent operation, class 12 AB 60 % DF 1.3 x  $l_{\rm e}$ 

Short-circuit rating Fuse 50 A gG/gL

Rated short-time withstand current (1 s current) [I\_{\rm cw}] 640 \,A\_{\rm rms}

Note on rated short-time withstand current lcw Ourrent for a time of 1 second

Rated conditional short-circuit current  $\left[l_q\right]$  80 kA

### Switching capacity

 $\cos\phi$  rated making capacity as per IEC 60947-3 320 A

Rated breaking capacity cos  $\varphi$  to IEC 60947-3 230 V 260 A

Rated breaking capacity cos  $\varphi$  to IEC 60947-3 400/415 V 300 A

Rated breaking capacity cos  $\varphi$  to IEC 60947-3 500 V 290 A

Rated breaking capacity cos  $\phi$  to IEC 60947-3 690 V 250 A

Safe isolation to EN 61140 between the contacts 440 V AC

Safe isolation to EN 61140 Ourrent heat loss per contact at  $\rm I_{e}$  1.8 W

Lifespan, mechanical [Operations]  $> 0.3 \times 10^6$ 

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] 13 kW

AC AC-3 Rating, motor load switch [P] 500 V [P] 18.5 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 [l<sub>e</sub>] 26.4 A

# AC

AC-3 Rated operational current motor load switch 400V 415 V [le] 26.4 A

#### AC AC-3

Rated operational current motor load switch 500 V [l<sub>e</sub>] 23.4 A

### AC

AC-3 Reted operational current motor load switch 690 V [le] 14.7 A

# AC

AC-21A Rated operational current switch 440 V [le] 32 A

### AC

AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 230 V [P] 7.5 kW

### AC

AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 400 V 415 V [P] 15 kW

### AC

AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 500 V [P] 18.5 kW

### AC

AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 690 V [P] 15 kW

### AC

AC-23A Rated operational current motor load switch 230 V [l\_] 32 A AC AC-23A Rated operational current motor load switch 400 V 415 V [le] 32 A

AC

AC-23A Rated operational current motor load switch 500 V [l<sub>e</sub>] 30 A

AC

AC AC-23A Rated operational current motor load switch 690 V [la] 19.8 A

DC DC-1, Load-break switches L/R=1 ms Rated operational current [le] 32 A

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

DC DC-23A, motor load switch L/R = 15 ms 24 V Rated operational current [le] 25 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 [le] 25 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 [Ie] 25 A

DC DC-23A, motor load switch L/R = 15 ms 60 V Contacts 2 Quantity DC DC-23A, motor load switch L/R = 15 ms 120 V Rated operational current [l<sub>e</sub>] 12 A

DC

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

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 (1,5 - 6) 2 x (1,5 - 6) mm<sup>2</sup>

Hexible with ferrules to DIN 46228 1 x (1 - 4)  $2 x (1 - 4) mn^2$ 

Terminal screw M4

Tightening torque for terminal screw 1.6  $\ensuremath{\mathsf{Nm}}$ 

#### Technical safety parameters:

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

### Rating data for approved types

Terminal capacity Terminal screw M4

Terminal capacity Tightening torque 14.128 lb-in

# **DESIGN VERIFICATION AS PER IEC/EN 61439**

### Technical data for design verification

Rated operational current for specified heat dissipation  $\left[I_{n}\right]$  32 A

Heat dissipation per pole, current-dependent  $[\mathrm{P}_{itd}]$  1.8 W

Equipment heat dissipation, current-dependent  $\left[ \mathsf{P}_{\text{id}} \right]$  0 W

Static heat dissipation, non-current-dependent  $[\mathsf{P}_{vs}]$  0 W

Heat dissipation capacity  $[P_{diss}] \\ 0 \ W$ 

Operating ambient temperature min. -25 °C

Operating ambient temperature max. +40  $^{\circ}\mathrm{C}$ 

### 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 parts10.2.3.1 Verification of thermal stability of enclosuresMeets the product standard's requirements.

10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heatMeets 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 parts10.2.4 Resistance to ultra-violet (UV) radiationUV resistance only in connection with protective shield.

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 parts10.2.6 Mechanical impactDoes not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.7 InscriptionsMeets the product standard's requirements.

10.3 Degree of protection of ASSEVBLIES Does not apply, since the entire switchgear needs to be 8/12

#### 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 Pow er-frequency electric strength Is the panel builder's responsibility.

10.9 Insulation properties10.9.3 Impulse withstand voltageIs the panel builder's responsibility.

10.9 Insulation properties10.9.4 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) / Switch disconnector (EC000216)

Bectric 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 Yes

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 lu 32 A

Rated permanent current at AC-23, 400 V 32 A

Rated permanent current at AC-21, 400 V 32 A

Rated operation pow er at AC-3, 400 V 13 kW

Rated short-time withstand current lcw  $0.64\ \mbox{kA}$ 

Rated operation power at AC-23, 400 V 15 kW

Switching power at 400 V 15 kW

Conditioned rated short-circuit current lq 80 kA

Number of poles 3

Number of auxiliary contacts as normally closed contact  $\ensuremath{\mathsf{0}}$ 

Number of auxiliary contacts as normally open contact 0

Number of auxiliary contacts as change-over contact  $\ensuremath{\mathbf{0}}$ 

Motor drive optional No

Motor drive integrated No

Voltage release optional No

Device construction Complete device in housing

Suitable for ground mounting Yes

Suitable for front mounting 4-hole No

Suitable for front mounting centre No

Suitable for distribution board installation Nb

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 (NEVA) Other

### **APPROVALS**

North America Certification For UL/CSA certification order article number 255891

# DIMENSIONS

□ 3 padlocks			







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