## **DATASHEET - P3-63/I4-SI/HI11**



Safety switch, P3, 63 A, 3 pole, 1 N/O, 1 N/C, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in position 0 with cover interlock, with warning label "safety switch"



Part no. P3-63/I4-SI/HI11 Catalog No. 207363

Delivery program			
Product range			safety switch
Part group reference			P3
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Information about equipment supplied			Auxiliary contact or neutral conductor fitted by user.
Notes			with warning label "safety switch"
Number of poles			3 pole
Auxiliary contacts			
Auxiliary contacts		N/0	1
		IN/U	'
7		N/C	1
Locking facility			Lockable in position 0 with cover interlock
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Function			OFF O
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	30
Rated uninterrupted current	l <sub>u</sub>	Α	63
Note on rated uninterrupted current $!_{u}$			Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.

# Technical data

delleral	
Standards	IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature	

Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Contacts			
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/0	1
		N/C	1
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	I <sub>u</sub>	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I <sub>e</sub>	2
AB 40 % DF		x I <sub>e</sub>	1.6
AB 60 % DF		x I <sub>e</sub>	1.3
Short-circuit rating			
Fuse		A gG/gL	80
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	1260
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	4
Switching capacity	ч		
cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	640
400/415 V		Α	600
500 V		Α	590
690 V		Α	340
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I <sub>e</sub>		W	4.5
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	0.2
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.1
Maximum operating frequency	Operations/h	X 10	1200
AC	oporationo,		
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	P	kW	15
400 V 415 V	P	kW	30
500 V	P	kW	30
690 V	P	kW	30
Rated operational current motor load switch			**
230 V	l <sub>e</sub>	A	51
400V 415 V	l <sub>e</sub>	A	55
500 V		A	44
	l <sub>e</sub>		
690 V	l <sub>e</sub>	Α	22.1
AC-23A	D	1344	
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	18.5
400 V 415 V	P	kW	30
500 V	Р	kW	45

690 V	P	kW	55
Rated operational current motor load switch			
230 V	I <sub>e</sub>	Α	63
400 V 415 V	I <sub>e</sub>	Α	63
500 V	I <sub>e</sub>	Α	63
690 V	I <sub>e</sub>	Α	63
OC .			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I <sub>e</sub>	Α	63
Voltage per contact pair in series		٧	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I <sub>e</sub>	Α	50
Contacts		Quantity	1
48 V			
Rated operational current	I <sub>e</sub>	Α	50
Contacts		Quantity	2
60 V			
Rated operational current	I <sub>e</sub>	Α	50
Contacts		Quantity	2
120 V			
Rated operational current	I <sub>e</sub>	Α	25
Contacts		Quantity	3
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H <sub>F</sub>	< 10 <sup>-5</sup> ,< 1 failure in 100,000 switching operations
erminal capacities			
Solid or stranded		mm <sup>2</sup>	1 x (2,5 - 35) 2 x (2,5 - 10)
Elexible with ferrules to DIN 46228		mm <sup>2</sup>	1 x (1.5 - 25) 2 x (1.5 - 6)
erminal screw			M5
ightening torque for terminal screw		Nm	3
echnical safety parameters:			
Notes			B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
lating data for approved types			
Ferminal capacity			
Terminal screw			M5
Tightening torque		lb-in	26.49

Terminal capacity		
Terminal screw		M5
Tightening torque	lb-in	26.49

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	4.5
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $ \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left($			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			UV resistance only in connection with protective shield.

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 Insulation properties	
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.

### **Technical data ETIM 7.0**

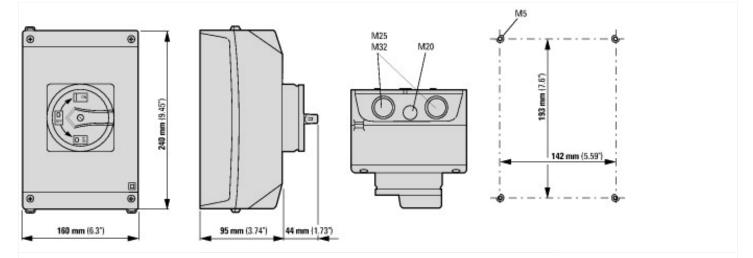
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

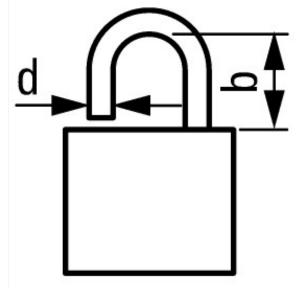
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch			No
Version as maintenance-/service switch			No
Version as safety switch			Yes
Version as emergency stop installation			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC	٧	/	690
Rated operating voltage	٧	/	690 - 690
Rated permanent current lu	A	A	63
Rated permanent current at AC-23, 400 V	A	A	63
Rated permanent current at AC-21, 400 V	A	A	63
Rated operation power at AC-3, 400 V	k	κW	30
Rated short-time withstand current lcw	k	κA	1.26
Rated operation power at AC-23, 400 V	k	¢W	30
Switching power at 400 V	k	άW	30
Conditioned rated short-circuit current Iq	k	κA	4
Number of poles			3
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			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			No
Suitable for intermediate mounting			No
Colour control element			Red
Type of control element			Toggle

Interlockable	No
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP65
Degree of protection (NEMA)	Other

#### **Dimensions**





d = 4 - 8 mm  $b + d \le 47 \text{ mm}$  d = 0.16 - 0.31 d = 0.85