

Switch-disconnector, 3p, 1000 A, withdrawable

Powering Business Worldwide[™]

1/3

INX40B3-10W Part no. Article no. 150070

Catalog No. **RES6103WSW0NMNN2MNDX**

Delivery program

Product range			Air circuit-breakers/switch-disconnectors
Product range			Open switch-disconnectors
Current Range			Up to 4000 A
Protective function			without protection
Installation type			Withdrawable
			Cassette must be separately ordered.
Construction size			INX40
Release system			without releases
Standard/Approval			IEC
Number of poles			3 pole
Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
			optionally fittable by user with comprehensive accessories
Rated current = rated uninterrupted current	$I_n = I_u$	Α	1000
Bemessungskurzschlusseinschaltvermögen bis 440V/690V 42/42	I _{cm}	kA	145
Bemessungskurzzeitstromfestigkeit t = 1 s	I _{cw}	kA	66
Bemessungskurzzeitstromfestigkeit t = 3 s	I _{cw}	kA	66

Technical data

Operating times

General					
Standards			IEC/EN 60947		
Ambient temperature					
Storage	θ	°C	-40 - +70		
Ambient temperature		°C	-25 - +70		
Mounting position			30° 30° 30° 30°		
Utilization category			В		
Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame		
Direction of incoming supply			as required		
Main conducting paths					
Rated current = rated uninterrupted current	$I_n = I_u$	Α	1000		
Rated uninterrupted current at 50 °C	l _u	Α	1000		
Rated uninterrupted current at 60 °C	I _u	Α	1000		
Rated uninterrupted current at 70 °C	Iu	Α	1000		
Rated impulse withstand voltage	U_{imp}	V AC	12000		
Rated operational voltage	U _e	V AC	690		
Overvoltage category/pollution degree			III/3		
Rated insulation voltage	Ui	V	1000		
Switching capacity					
Rated short-circuit making capacity	I _{cm}				
up to 440 V 50/60 Hz	I _{cm}	kA	145		
up to 690 V 50/60 Hz	I _{cm}	kA	145		
Rated short-time withstand current 50/60 Hz					
Rated short-time withstand current (t=1s)	I _{cw}	kA	85		
t = 3 s	I _{cw}	kA	66		

Closing delay via spring release		ms	35
Total opening delay via shunt release		ms	22
Total opening delay via undervoltage release		ms	37
Maximum operating frequency		Ops./h	
Maximum operating frequency	Operations/h		60
Heat dissipation at rated current I _n			
Withdrawable units (switch with cassette)		W	100
Weight			
Withdrawable			
3-pole		kg	70
4-pole		kg	86
Cassette			
3 pole		kg	27
4 pole		kg	35
Terminal capacities			
Copper bar			
Withdrawable units			
Black		mm	1 x 60 x 10
			These are values used in separate switchgear. The actual values will depend on the temperature around the circuit-breaker, which is influenced by the ambient temperature, the degree of protection (IP), the mounting height, the partitions, and any external ventilation. Depending on the specific switchgear design, this may result in derating, which can then be compensated for by increasing the cross-sectional area. Temperature rise tests in the specific switchgear can provide specific and detailed information.

Design verification as per IEC/EN 61439				
Technical data for design verification				
Rated operational current for specified heat dissipation	In	Α	1000	
Equipment heat dissipation, current-dependent	P _{vid}	W	100	
Operating ambient temperature min.		°C	-25	
Operating ambient temperature max.		°C	70	
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.	
10.2.3.3Verification of resistanceofinsulatingmaterialstoabnormalheatandfireduetointernalelectriceffects			Meets the product standard's requirements.	
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.	
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 switch gear must be observed. $\label{eq:constraint}$	
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$	

Technical data ETIM 6.0

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@ss8.1-27-37-14-03

Version as maintenance / service switch No Version as safety switch No Version as semegrency stop installation No Version as roversing switch No Max. rated operation voltage Ue AC V 690-690 Rated operating voltage A 1000 Rated permanent current at Current Lu A 1000 Rated operation power at AC-3,400 V RM 0 Rated short-time withstand current Low KA 66 Rated short-time withstand current Low KA 66 Rated short-time vithstand current Low KA 60 Rated short-time vithstand current Low KA 66 Rated operation power at AC-3,400 V KW 0 Conditioned rated short-circuit current Iq KA 144 Number of auxiliary contacts as normally closed contact P 0 Number of auxiliary contacts as change-over contact P 2 Motor drive integrated No No Vottage release optional P Yes Device construction P No	[AKF060010])			
Vorsion as safety switch No Version as emergency stop installation No Version as reversing switch No Max. rated operation voltage Us AC Vo 880 - 890 Rated operation voltage V 890 - 890 Rated permanent current tal A 1000 Rated permanent current at AC21,400 V A 0 Rated operation power at AC23,400 V KW 0 Rated short-incurrent tall KW 0 Rated short-incurrent tall KW 0 Rated short-incurrent tructurent tall KW 0 Conditioned rated short-incurrent current tall KW 0 Conditioned rated short-incurrent current tall KW 0 Number of poles Y 3 3 Number of auxiliary contacts as normally closed contact Y 0 Number of auxiliary contacts as change-over contact Y 2 Motor drive integrated Y Y Voltage release optional Y Y Device construction Y Y	Version as main switch			Yes
Version as energency stop installation No Version as reversing switch V 600 Max. rated operation voltage Ue AC V 600 Rated operating voltage A 0 Rated operating voltage A 0 Rated operation power at AC-21, 400 V A 0 Rated operation power at AC-23, 400 V AW 0 Rated operation power at AC-23, 400 V AW 0 Rated operation power at AC-23, 400 V AW 0 Conditioned rated Short-circuit current lew AW 0 Conditioned rated Short-circuit current leg A 14 Number of poles 9 0 Number of auxiliary contacts as normally closed contact 9 0 Number of auxiliary contacts as change-over contact 9 8 Motor drive integrated 9 No Motor drive integrated 9 9	Version as maintenance-/service switch			No
Version as reversing switch No Max. rated operation voltage Ue AC V 690 Rated operation voltage Ue AC V 690 - 690 Rated operation youtage V 690 - 690 Rated operation gover at AC-34,400 V A 1000 Rated operation power at AC-3,400 V WW 0 Rated operation power at AC-23,400 V WW 0 Rated operation power at AC-23,400 V WW 0 Switching power at 400 V WW 0 Conditioned rated short-circuit current Iq WW 0 Number of poles WW 0 Number of auxiliary contacts as normally closed contact W 0 Number of auxiliary contacts as change-over contact W 2 Motor drive optional W 2 2 Motor drive integrated W No 2 Voltage relaase optional W Se 3 Suitable for ground mounting W Se 3 Suitable for front mounting 4-hole No No Suitable for	Version as safety switch			No
Max. rated operation voltage Ue AC V 690 - 690 Rated operating voltage V 690 - 690 Rated permanent current Iu D 1000 Rated permanent current at AC-21,400 V A 0 Rated operation power at AC-3,400 V KW 0 Rated operation power at AC-23,400 V KW 0 Switching power at 400 V KW 0 Conditioned rated short-circuit current Iq KW 0 Number of poles KW 3 Number of poles KW 0 Number of auxiliary contacts as normally closed contact CW 2 Number of auxiliary contacts as change-over contact CW 2 Motor drive optional KW 2 Motor drive integrated CW Yes Voltage release optional WW Yes Suitable for ground mounting Yes William device side-in technique (withdrawable) Suitable for front mounting 4-hole W Yes Suitable for intermulation conting in intermulation W Yes Suitable for i	Version as emergency stop installation			No
Rated operating voltage V 690 - 690 Rated permanent current lu A 1000 Rated permanent current at AC-21, 400 V A 0 Rated operation power at AC-3, 400 V kW 0 Rated operation power at AC-3, 400 V kW 0 Switching power at 400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current lq kA 144 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 4 9 Number of auxiliary contacts as normally open contact 6 9 Number of auxiliary contacts as normally open contact 9 9 Motor drive integrated 9 9 Worder drive integrated 9 9 Votage release optional 9 9 Built-in device slide-in technique (withdrawable) 9 Suitable for front mounting 4-hole 9 9 Suitable for front mounting 4-hole 9 9 Suitable for front mounting center 9	Version as reversing switch			No
Rated permanent current 1u A 1000 Rated permanent current at AC-21, 400 V A 0 Rated operation power at AC-3, 400 V kW 0 Rated operation power at AC-23, 400 V kW 0 Rated operation power at AC-23, 400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current Iq kA 144 Number of poles 3 3 Number of auxiliary contacts as normally closed contact C 0 Number of auxiliary contacts as normally open contact Yes Yes Motor drive optional Yes Yes Motor drive optional Yes Yes Ovitage release optional Yes Yes Suitable for ground mounting Yes Yes Suitable for front mounting 4-hole Yes No Suitable for fortiribution board installation Yes Yes Suitable for firstribution board installation Yes Yes Suitable for intermediate mounting Yes Yes Colur control	Max. rated operation voltage Ue AC	,	V	690
Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Rowliching power at 400 V Conditioned rated short-circuit current lq Rowline of poles Rumber of auxiliary contacts as normally closed contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as change-over contact Rumber of auxiliary contacts as change-over contact Rumber of suxiliary contacts as change-over co	Rated operating voltage	,	V	690 - 690
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Rated operation power at AC-23, 400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current Iq kA 144 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 2 0 Mumber of auxiliary contacts as change-over contact 2 Yes Motor drive optional Yes No Voltage release optional Yes No Suitable for ground mounting Yes Yes Suitable for front mounting 4-hole No No Suitable for front mounting 4-hole No No Suitable for intermediate mounting Yes No Suitable for intermediate mounting Yes No Suitable for intermediate mounting Yes No Colour control element Yes Yes Type of control element Yes Yes Interlockable Yes Auxiliary contacts as change-over contact Yes	Rated operation power at AC-3, 400 V	1	kW	0
Switching power at 400 V kW 0 Conditioned rated short-circuit current Iq kA 144 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 2 2 Motor drive optional Yes Yes Motor drive integrated Yes No Voltage release optional Yes Built-in device slide-in technique (withdrawable) Suitable for ground mounting Yes Yes Suitable for front mounting 4-hole No No Suitable for distribution board installation Yes No Suitable for distribution board installation Yes Yes Suitable for intermediate mounting Yes No Colour control element Yes Yes Type of control element Yes Push button Interlockable Yes Push button Type of control element in circuit Yes Push button	Rated short-time withstand current lcw		kA	66
Conditioned rated short-circuit current Iq kA 144 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 2 0 Number of auxiliary contacts as change-over contact 2 2 Motor drive optional Yes No Motor drive integrated Yes Yes Voltage release optional Yes Yes Device construction Yes Yes Suitable for ground mounting Yes Yes Suitable for front mounting 4-hole Yes No Suitable for front mounting enter No Yes Suitable for distribution board installation Yes Yes Suitable for intermediate mounting Yes Yes Colour control element Yes Yes Type of control element Yes Yes Type of electrical connection of main circuit Yes Yes	Rated operation power at AC-23, 400 V	I	kW	0
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Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for front mounting center Suitable for intermediate mounting No Suitable for intermediate mounting No Suitable for intermediate mounting Suitable for intermediate mounting No Suitable for intermediate mounting Suitable for intermediate mounting No Suitab	Number of auxiliary contacts as normally closed contact			0
Motor drive optional Motor drive integrated Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Type of electrical connection of main circuit Type of electrical connection of main circuit Type of entermediate mounting center Type of electrical connection of main circuit Type of electrical connection of main circuit Type of electrical connection of main circuit Type of entermediate contents and connection of contents and connection o	Number of auxiliary contacts as normally open contact			0
Motor drive integrated No Yes Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for front mounting center Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit No No No Rol Suitable Suitable for intermediate mounting Suitable for front mounting center Suitable fo	Number of auxiliary contacts as change-over contact			2
Voltage release optionalYesDevice constructionBuilt-in device slide-in technique (withdrawable)Suitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centerNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementGreenType of control elementPush buttonInterlockableYesType of electrical connection of main circuitRail connection	Motor drive optional			Yes
Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Suitable for main circuit Built-in device slide-in technique (withdrawable) Yes No Ro Green Fyes Rail connection Rail connection	Motor drive integrated			No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Yes Yes Yes Yes No Rail connection Rail connection	Voltage release optional			Yes
Suitable for front mounting 4-hole Suitable for front mounting center No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit No Roace Roace Roal Connection Roal Connection Roace	Device construction			Built-in device slide-in technique (withdrawable)
Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit No No Green Push button Rail connection Rail connection	Suitable for ground mounting			Yes
Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Yes Yes Yes Rail connection	Suitable for front mounting 4-hole			No
Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit No Green Push button Yes Type of electrical connection of main circuit Rail connection	Suitable for front mounting center			No
Colour control element Type of control element Interlockable Type of electrical connection of main circuit Green Push button Yes Rail connection	Suitable for distribution board installation			Yes
Type of control element Interlockable Type of electrical connection of main circuit Push button Yes Rail connection	Suitable for intermediate mounting			No
Interlockable Yes Type of electrical connection of main circuit Rail connection	Colour control element			Green
Type of electrical connection of main circuit Rail connection	Type of control element			Push button
	Interlockable			Yes
Degree of protection (IP), front side IP20	Type of electrical connection of main circuit			Rail connection
	Degree of protection (IP), front side			IP20