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	Part no.	INX40N3-32W-1
	Article no.	184070

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			IP31 with door seals, IP55 with protective cover
			optionally fittable by user with comprehensive accessories
Rated current = rated uninterrupted current	$I_n = I_u$	А	3200
Bemessungskurzschlusseinschaltvermögen bis 440V/690V 42/42	I _{cm}	kA	187
Bemessungskurzzeitstromfestigkeit t = 1 s	I _{cw}	kA	85
Bemessungskurzzeitstromfestigkeit t = 3 s	I _{cw}	kA	66

Technical data

General			
Standards			IEC/EN 60947
Ambient temperature			
Storage	9	°C	-40 - +70
Ambient temperature		°C	-25 - +70
Mounting position			30° 30° 30° 30°
Utilization category			В
Degree of Protection			IP31 with door seals, IP55 with protective cover
Direction of incoming supply			as required
Main conducting paths			
Rated current = rated uninterrupted current	$I_n = I_u$	А	3200
Rated uninterrupted current at 50 °C	l _u	А	3200
Rated uninterrupted current at 60 °C	l _u	А	3200
Rated uninterrupted current at 70 °C	l _u	А	3200
Rated impulse withstand voltage	U _{imp}	V AC	12000
Rated operational voltage	Ue	V AC	690
Overvoltage category/pollution degree			111/3
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	187

t = 3 s

up to 690 V 50/60 Hz

Rated short-time withstand current 50/60 Hz Rated short-time withstand current (t=1s) kA

kA

kA

 $I_{\rm cm}$

 I_{CW}

 \mathbf{I}_{CW}

166

85

66

Operating times			
Closing delay via spring release		ms	30
Total opening delay via shunt release		ms	35
Total opening delay via undervoltage release		ms	40
Lifespan		S	
Lifespan, mechanical	Switching cycles (ON/ OFF)		10000
Lifespan, mechanical with maintenance	Switching cycles (ON/ OFF)		20000.
Lifespan, electrical	Switching cycles (ON/ OFF)		5000
Lifespan, electrical with maintenance	Switching cycles (ON/ OFF)		10000.
Maximum operating frequency		Ops./h	
Maximum operating frequency	Operations/h		60
Heat dissipation at rated current In			
Withdrawable units (switch with cassette)		W	560
Weight			
Withdrawable			
3-pole		kg	66
Cassette			
3 pole		kg	29
Terminal capacities			
Copper bar			
Withdrawable units			
Black		mm	3 x 80 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	А	3200
Equipment heat dissipation, current-dependent	P _{vid}	W	560
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.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 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 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 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 [AKF060010])

Version as main switch Image: Section of the sectio			
Version as asfery switchNoVersion as reversing switchNoNameNoMax. rated operation voltage Ue ACNoRated operating voltageNoRated operating nover at AC-31, 400 VNoRated operating nover at AC-32, 400 VNoNumber of auxiliary contacts as normally closed contactNoNumber of auxiliary contacts as normally closed contactNoNumber of auxiliary contacts as normally closed contactNoNumber of auxiliary contacts as change-over contactNoSuitable for front mounting enterNoSuitable for fron	ersion as main switch		Yes
Version as emergency stop installation Image: Stop installation No Version as reversing switch Stop installation No Max. rated operation voltage Ue AC Stop installation Stop installation Rated operating voltage Stop installation Stop installation Stop installation Rated operation voltage Ue AC A Stop installation Stop installation Rated operation voltage Ue AC A Stop installation Stop installation Rated operation power at AC-21, 400 V A O Stop installation Rated operation power at AC-3, 400 V KW O Stop installation Switching power at AC-23, 400 V KW O Stop installation Switching power at AC-23, 400 V KW O Stop installation Switching power at AC-23, 400 V KW O Stop installation Stop installation Switching power at 400 V Conditioned rated short-circuit current lq KW O Stop installation Number of auxiliary contacts as normally closed contact KW O Stop installation Stop installation Stop installation </td <td>ersion as maintenance-/service switch</td> <td></td> <td>No</td>	ersion as maintenance-/service switch		No
Version as reversing switch No Max. rated operation voltage Ue AC 690 Rated operating voltage V 690 Rated operating voltage V 690 Rated operating voltage V 690 Rated operation voltage Ue AC A 3200 Rated operation power at AC-21, 400 V A 0 Rated operation power at AC-3, 400 V KA 85 Rated operation power at AC-23, 400 V KA 85 Switching power at 400 V KA 85 Conditioned rated short-circuit current lq KW 0 Number of poles KA 187 Number of auxiliary contacts as normally closed contact KA 187 Number of auxiliary contacts as normally closed contact KA 187 Number of auxiliary contacts as normally closed contact KA 187 Number of auxiliary contacts as change-over contact KA 187 Notor drive integrated KA 180 180 Notor drive integrated KA 180 180 Suitable for ground	ersion as safety switch		No
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Rated permanent current at AC-21, 400 V IM IM <t< td=""><td>ated operating voltage</td><td>V</td><td>690 - 690</td></t<>	ated operating voltage	V	690 - 690
Rated operation power at AC-3, 400 V kW 0 Rated short-time withstand current lcw kA 85 Rated operation power at AC-23, 400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current lq kW 0 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact 10 10 Number of auxiliary contacts as normally closed contact 10 10 Number of auxiliary contacts as normally closed contact 10 10 Number of auxiliary contacts as normally closed contact 10 10 Not contact 10 10 10 Notat dive integrated 10	ated permanent current lu	А	3200
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Conditioned rated short-circuit current Iq KA 187 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact Ves 0 Motor drive optional Yes 0 0 Notor drive integrated No 0 0 0 Voltage release optional Yes 0 <td< td=""><td>ated operation power at AC-23, 400 V</td><td>kW</td><td>0</td></td<>	ated operation power at AC-23, 400 V	kW	0
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Number of auxiliary contacts as change-over contact 2 Motor drive optional Yes Motor drive integrated No Voltage release optional Yes Device construction Suitable for ground mounting Suitable for front mounting 4-hole Yes Suitable for front mounting center No Suitable for intermediate mounting Yes Type of control element Yes Interlockable Yes Type of electrical connection of main circuit Wes	umber of auxiliary contacts as normally closed contact		0
Motor drive optional Yes Motor drive integrated No Voltage release optional Yes Device construction Suitable for ground mounting Suitable for ground mounting 4-hole Yes Suitable for front mounting center No Suitable for distribution board installation Yes Suitable for intermediate mounting Yes Type of control element Yes Interlockable Yes Type of electrical connection of main circuit Motor	umber of auxiliary contacts as normally open contact		0
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Voltage release optionalYesDevice constructionSuitable for ground mountingBuilt- in device slide- in technique (without Suitable for ground mounting 4-holeYesSuitable for front mounting 4-holeNoNoSuitable for front mounting centerNoYesSuitable for distribution board installationYesNoSuitable for intermediate mountingYesYesSuitable for intermediate mountingSuitable for intermediate mountingYesSuitable for intermediate mountingSuitable for intermediate mountingYesSuitable for intermediate mountingYesYesSuitable for intermediate mountingYesY	otor drive optional		Yes
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Suitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centerNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementSuitable for control elementType of control elementYesInterlockableYesType of electrical connection of main circuitSuitable for main circuit	oltage release optional		Yes
Suitable for front mounting 4-holeNoSuitable for front mounting centerNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementGreenType of control elementYesInterlockableYesType of electrical connection of main circuitSuitable for intermediate connection of main circuit	evice construction		Built-in device slide-in technique (withdrawable)
Suitable for front mounting centerNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementGreenType of control elementPush buttonInterlockableYesType of electrical connection of main circuitInterlockable	uitable for ground mounting		Yes
Suitable for distribution board installation Yes Suitable for intermediate mounting No Colour control element Green Type of control element Push button Interlockable Yes Type of electrical connection of main circuit Interlockable	uitable for front mounting 4-hole		No
Suitable for intermediate mounting Mo Colour control element Green Type of control element Push button Interlockable Yes Type of electrical connection of main circuit Rail connection	uitable for front mounting center		No
Colour control element Green Type of control element Push button Interlockable Yes Type of electrical connection of main circuit Rail connection	uitable for distribution board installation		Yes
Type of control element Push button Interlockable Yes Type of electrical connection of main circuit All of the sector of the sec	uitable for intermediate mounting		No
Interlockable Yes Rail connection	plour control element		Green
Type of electrical connection of main circuit Rail connection	pe of control element		Push button
	terlockable		Yes
Degree of protection (IP), front side IP31	pe of electrical connection of main circuit		Rail connection
	egree of protection (IP), front side		IP31

Dimensions



