



Part no.	INX40B
Article no.	184094

84-32W-1

#### **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			4 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 <sub>cm</sub>	kA	145
Bemessungskurzzeitstromfestigkeit t = 1 s	I <sub>cw</sub>	kA	66
Bemessungskurzzeitstromfestigkeit t = 3 s	I <sub>cw</sub>	kA	53

### **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 <sub>u</sub>	А	3200
Rated uninterrupted current at 60 °C	l <sub>u</sub>	А	3200
Rated uninterrupted current at 70 °C	l <sub>u</sub>	A	3200
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	12000
Rated operational voltage	U <sub>e</sub>	V AC	690
Overvoltage category/pollution degree			111/3
Rated insulation voltage	Ui	V	1000
Switching capacity			
Rated short-circuit making capacity	I <sub>cm</sub>		
up to 440 V 50/60 Hz	I <sub>cm</sub>	kA	145
up to 690 V 50/60 Hz	I <sub>cm</sub>	kA	145
Rated short-time withstand current 50/60 Hz			
Rated short-time withstand current (t=1s)	I <sub>cw</sub>	kA	66
t = 3 s	I <sub>cw</sub>	kA	53

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			
4-pole		kg	82
Cassette			
4 pole		kg	35
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 <sub>vid</sub>	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])

Arraion as maintenance-/sarvice switch         Image: space spac	[		
Persion as aftery witch         No.           Wersion as overving switch         No.           Max. rated operation voltage LAC.         V           Max. rated operation voltage LAC.         V           Rated operation power at AC-31,400 V         V           Rated operation power at AC-32,400 V         V           Number of poles         V           Number of auxiliary contacts as normally cost contact         V           Number of auxiliary contacts as normally cost contact         V           Number of auxiliary contacts as normally cost contact         V           Number of auxiliary contacts as normally cost contact         V           Number of auxiliary contacts as normally cost contact         V           Number of auxiliary contacts as normally cost contact         V </td <td>Version as main switch</td> <td></td> <td>Yes</td>	Version as main switch		Yes
Arrian as emergency scip installation         Image: Science S	Version as maintenance-/service switch		No
Non-strated operation voltage Uo AC         No           Max. rated operation voltage Uo AC         V         690           Rated operation voltage Uo AC         V         0           Rated operation your at AC-21,400 V         V         0           Rated operation your at AC-23,400 V         VW         0           Switching your at 400 V         VW         0           Switching your at 400 V         VW         0           Switching your at 400 V         VW         0           Number of suiliary contacts as normally closed contact         VW         0           Number of suiliary contacts as change-over contact         V         0           Number of suiliary contacts as change-over contact         V         90           Suitable for fort mounting 4-hole         V         90           Suitable for fort mounting 4-hole         V         90           Suitable for fort mounting 4-hole         V <td< td=""><td>Version as safety switch</td><td></td><td>No</td></td<>	Version as safety switch		No
Max rated operation voltage Us AC         V         690           Rated operation voltage         V         690         690           Rated operation voltage         X         690         690           Rated operation voltage         X         690         690           Rated operation voltage         X         0         0           Rated operation power at AC-21, 400 V         X         6         6           Rated operation power at AC-23, 400 V         X         0         0           Rated operation power at AC-23, 400 V         X         0         0           Switching power at AC-23, 400 V         X         0         0           Switching power at AC-23, 400 V         X         0         0           Switching power at AC-23, 400 V         X         0         0           Switching power at AC-23, 400 V         X         0         0           Number of swilliary contacts are normally closed contact         X         0         0           Number of swilliary contacts are normally copen contact         Y         9         0           Number of swilliary contacts are normally copen contact         Y         9         0           Switch for fort mounting 4-hole         Y         9         9 <td>Version as emergency stop installation</td> <td></td> <td>No</td>	Version as emergency stop installation		No
Rated operation yokage         V         600 - 690           Rated permanent current lu         A         200           Rated operation power at AC-21, 400 V         A         0           Rated operation power at AC-23, 400 V         KW         0           Rated operation power at AC-23, 400 V         KM         6           Rated operation power at AC-23, 400 V         KM         0           Switching power at AC-32, 400 V         KM         0           Switching power at AC-32, 400 V         KM         0           Switching power at AC-32, 400 V         KM         0	Version as reversing switch		No
Rated permanent current lu         Image: Current at AC-21,400 V         A         900           Rated operation power at AC-3,400 V         FM         0         0         Mode         Mo	Max. rated operation voltage Ue AC	V	690
Atted operation power at AC-3, 400 V         A         0           Rated operation power at AC-3, 400 V         KMV         0           Rated operation power at AC-3, 400 V         KMV         0           Rated operation power at AC-3, 400 V         KMV         0           Switching power at 400 V         KMV         0           Switching power at 400 V         KMV         0           Conditioned rated short-circuit current lq         KMV         0           Number of poles         KMV         0           Number of auxiliary contacts as normally closed contact         KMV         0           Mothor drive pitional         KMV         0           Mothor drive pitional         KMV         0           Motor drive pitional         KMV         0           Motor drive pitional         KMV         0           Motor drive pitional         KMV         0           Sutable for from mounting centers         KMV         0           Sutable for from mounting enters         KMV         No           Sutable for first mounting enters         KMV         No           Sutable for first mounting enters         KMV         No           Sutable for first mounting enters         KMV         No      S	Rated operating voltage	V	690 - 690
Atted operation power at AC-3, 400 V         Image: Atted operation power at AC-23, 400 V <td>Rated permanent current lu</td> <td>А</td> <td>3200</td>	Rated permanent current lu	А	3200
Art de short-time withstand current low         Image: short de short-circuit current low         Image: short de short de short-circuit current low         Image: short de shor	Rated permanent current at AC-21, 400 V	А	0
Rated operation power at AC-23, 400 V       INV       0         Switching power at 400 V       INV       0         Conditioned rated short-circuit current Iq       INV       IA         Number of poles       IA       IA         Number of auxiliary contacts as normally closed contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Number of auxiliary contacts as change-over contact       INV       I         Suitable for fort mounting center       INV       I       I         Suitable for intermedia	Rated operation power at AC-3, 400 V	kW	0
Switching power at 400 V         IV         I           Conditioned rated short-circuit current Iq         IA         IA           Number of poles         I         I           Number of auxiliary contacts as normally closed contact         I         I           Number of auxiliary contacts as change-over contact         I         I           Motor drive optional         I         I         I           Motor drive integrated         I         I         I           Number of auxiliary contacts as change-over contact         I         I         I           Motor drive optional         I         I         I         I           Motor drive integrated         I         I         I         I         I           Suitable for ground mounting         I	Rated short-time withstand current lcw	kA	66
Conditioned rated short-circuit current Iq       IA         Number of poles       I         Number of auxiliary contacts as normally closed contact       I         Number of auxiliary contacts as normally open contact       I         Motor drauxiliary contacts as normally open contact       I         Motor drauxiliary contacts as change-over contact       I         Motor drive optional       I         Motor drive integrated       I         Nortage release optional       I         Suitable for ground mounting       I         Suitable for front mounting 4-hole       I         Suitable for intermediate mounting       I         Suitable for intermediate mounting       I         Suitable for intermediatemounting       I         Suitable for intermediatemo	Rated operation power at AC-23, 400 V	kW	0
Number of poles4Number of auxiliary contacts as normally closed contact0Number of auxiliary contacts as normally open contact0Notact set as normally open contact0Notact set as normally open contact0Suitate for ground mouting0Suitable for first mounting center0Suitable for intermediate mounting0Suitable for intermediate mounting0Colour control element0Ipp of control element0Ipp of control element0Ipp of control element0Ipp of control for min circuit0Ipp of contaction of min circuit0Ipp of contaction of min circuit0Ipp of contaction of min c	Switching power at 400 V	kW	0
Number of auxiliary contacts as normally closed contact         0           Number of auxiliary contacts as normally open contact         0           Number of auxiliary contacts as normally open contact         2           Motor drive optional         Ves           Motor drive optional         No           Voltage release optional         Yes           Device construction         Suit-in device slide-in technique (withdrawable)           Suitable for ground mounting 4-hole         Yes           Suitable for front mounting 0-enter         No           Suitable for intermediate mounting         Yes           Suitable for intermediate mounting         No           Suitable for intermediate mounting         Yes           Suitable for intermediate mounting	Conditioned rated short-circuit current Iq	kA	144
Number of auxiliary contacts as normally open contact         O           Number of auxiliary contacts as normally open contact         2           Mutor drive optional         Ves           Motor drive integrated         No           Voltage release optional         Sei           Device construction         Suitable for ground mounting           Suitable for ground mounting 4-hole         No           Suitable for front mounting center         No           Suitable for intermediate mounting         Ves           Suitable for intermediate mounting         No           Suitable for fort mounting center         No           Suitable for intermediate mounting         Ves           Suitable for intermediate mounting         No           Suitable for intermediate mounting         Ves           Suitable for intermediate mounting         Ves           Suitable for intermediate mounting         No           Suitable for intermediate mounting         Ves           Suitable for intermediate mounting         Ves <t< td=""><td>Number of poles</td><td></td><td>4</td></t<>	Number of poles		4
Number of auxiliary contacts as change-over contact         Image: Controp of the second	Number of auxiliary contacts as normally closed contact		0
And the region of the	Number of auxiliary contacts as normally open contact		0
Motor drive integrated         No           Voltage release optional         Ves           Device construction         Built- in device slide- in technique (withdrawable)           Suitable for ground mounting         Yes           Suitable for front mounting 4-hole         No           Suitable for front mounting center         No           Suitable for front mounting center         No           Suitable for intermediate mounting         Yes           Suitable for intermediate mounting         No           Colour control element         Sectee           Type of control element         Yes           Interlockable         Sectee	Number of auxiliary contacts as change-over contact		2
Voltage release optional         Yes           Device construction         Built- in device slide-in technique (withdrawable)           Suitable for ground mounting         Yes           Suitable for front mounting 4-hole         Yes           Suitable for front mounting center         No           Suitable for intermediate mounting         Yes	Motor drive optional		Yes
Device construction       Built-in device slide-in technique (withdrawable)         Suitable for ground mounting       Yes         Suitable for front mounting center       No         Suitable for distribution board installation       Yes         Suitable for intermediate mounting       No         Colour control element       Yes         Type of control element       Yes         Interlockable       Yes	Motor drive integrated		No
Suitable for ground mounting       Yes         Suitable for front mounting 4-hole       No         Suitable for front mounting center       No         Suitable for distribution board installation       Yes         Suitable for intermediate mounting       No         Colour control element       Soutable for control element         Type of control element       Yes         Interlockable       Yes         Type of electrical connection of main circuit       Soutable for intermediate mounting	Voltage release optional		Yes
Suitable for front mounting 4-hole No Suitable for front mounting center No Suitable for distribution board installation Yes Suitable for intermediate mounting Officiation Section Se	Device construction		Built-in device slide-in technique (withdrawable)
Suitable for front mounting center Suitable for distribution board installation 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 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     Image: State Stat	Suitable 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     Image: State Stat	Suitable 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	Suitable for distribution board installation		Yes
Type of control element     Push button       Interlockable     Yes       Type of electrical connection of main circuit     Image: Section of main circuit	Suitable for intermediate mounting		No
Interlockable Yes Yes 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	Type of electrical connection of main circuit		Rail connection
	Degree of protection (IP), front side		IP31

# Dimensions



