

## Switch-disconnector, 4p, 800 A, fixed

Powering Business Worldwide™

INX40N4-08F Part no. Article no. 150101 Catalog No. RES8084BSW0NMNN2MN1X

**Delivery programme** 

7 1 - 3			
Product range			Air circuit-breakers/switch-disconnectors
Product range			Open switch-disconnectors
Current Range			Up to 4000 A
Installation type			Fixed
Construction size			INX40
Release system			without releases
Standard/Approval			IEC
Number of poles			4 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	$\boldsymbol{I}_n = \boldsymbol{I}_u$	Α	800
Making capacity Icm to 440 V 50/60 Hz	I <sub>cm</sub>	kA	187
t = 1 s	I <sub>cw</sub>	kA	85
t = 3 s	I <sub>cw</sub>	kA	53

Standards Ambient temperature  Storage Ambient temperature  ### Ambient	Technical data General			
Ambient temperature  Mounting position  Multization category  Degree of Protection  Direction of incoming supply  Main reducting paths  Materian Francisco (Line)  Materian Francisco (	Standards			IEC/EN 60947
Ambient temperature  Mounting position  Multization category  Degree of Protection  Direction of incoming supply  Main reducting paths  Materian Francisco (Line)  Materian Francisco (	Ambient temperature			
Mounting position    Continue of Protection   Protection		9	°C	-40 - +70
Utilization category  Degree of Protection  Direction of incoming supply  Main conducting paths  Rated uninterrupted current at 50 °C  Rated uninterrupted current at 60 °C  Rated uninterrupted current at 60 °C  Rated uninterrupted current at 60 °C  Rated uninterrupted current at 70 °C  Rated short-time withstand voltage  Ue  VAC  See  See  VaC  See  See  VaC  See  VaC  See  VaC  See  See	Ambient temperature		°C	-25 - +70
Degree of Protection    P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective cover, IP41 door sealing frame as required   P20, IP55 with protective current   P20, IP55 with protective curren	Mounting position			30° 30° 30°
Breeding of incoming supply  Main conducting paths  Rated current = rated uninterrupted current  Rated uninterrupted current at 50 °C  Rated uninterrupted current at 60 °C  Rated uninterrupted current at 70 °C  Rated uninterrupted current at 70 °C  Rated impulse withstand voltage  Rated operational voltage  Ruper voltage category/pollution degree  Rated insulation voltage  Vi  Vi  Vol  Vol  Vol  Vol  Vol  Vol	Utilization category			В
Main conducting paths           Rated current = rated uninterrupted current         In = Iu A 800           Rated uninterrupted current at 50 °C         Iu A 800           Rated uninterrupted current at 60 °C         Iu A 800           Rated uninterrupted current at 70 °C         Iu A 800           Rated impulse withstand voltage         Iu A 800           Rated operational voltage         Iu A 800           Rated sort-sircuit making capacity         Iu A 900           V AC 9000         1000           Switching capacity         Ic B 187           I up to 440 V 50/60 Hz         Iu B 187           I up to 690 V 50/60 Hz         Iu B 187           I come 1 kA 187         166           Rated short-time withstand current 50/60 Hz         Iu KA 166           Rated short-time withstand current (t=1s)         Iu KA 166           I come 1 kA 2 s         166           I come 1 kA 2 s         166           I come 1 kA 2 s         166           I come 1 kA 3 s         166           I come 1 kA 3 s         166           I come 1 kA 3 s	Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
Rated current = rated uninterrupted current         In = Iu         A         800           Rated uninterrupted current at 50 °C         Iu         A         800           Rated uninterrupted current at 60 °C         Iu         A         800           Rated ininterrupted current at 70 °C         Iu         A         800           Rated inpulse withstand voltage         Ump         V AC         12000           Rated operational voltage         Ump         V AC         690           Overvoltage category/pollution degree         Important of the company	Direction of incoming supply			as required
Rated uninterrupted current at 50 °C lu lu A 800 Rated uninterrupted current at 60 °C lu lu A 800 Rated uninterrupted current at 70 °C lu lu A 800 Rated impulse withstand voltage Ulimp VAC 12000 Rated operational voltage Ue VAC 690 Overvoltage category/pollution degree lu lu Vi VAC 1000 Switching capacity Rated short-circuit making capacity lup to 440 V 50/60 Hz lup to 690 V 50/60 Hz lup to 690 V 50/60 Hz lup to 690 V 50/60 Hz Rated short-time withstand current 50/60 Hz Rated short-time withstand current 50/60 Hz Rated short-time withstand current (t=1s) lcw kA 66  1 cw kA 53 Operating times Closing delay via spring release Is ms	Main conducting paths			
Rated uninterrupted current at 70 °C Rated impulse withstand voltage Rated operational voltage  Vervoltage category/pollution degree Rated insulation voltage  Vi v v v v v v v v v v v v v v v v v v v	Rated current = rated uninterrupted current	$I_n = I_u$	Α	800
Rated uninterrupted current at 70 °C Rated impulse withstand voltage  Ue VAC 890  Overvoltage category/pollution degree  Rated insulation voltage  Ui VO Rated short-circuit making capacity  Up to 440 V 50/60 Hz Up to 690 V 50/60 Hz Up to 690 V 50/60 Hz Rated short-time withstand current (t=1s) Rober Subject Sub	Rated uninterrupted current at 50 °C	Iu	Α	800
Rated impulse withstand voltage  Rated operational voltage  Ue VAC 690  Overvoltage category/pollution degree  Rated insulation voltage  Ui V O 000  Switching capacity  Rated short-circuit making capacity  Rated short-time withstand current (t=1s) Rated short-time withstand current (t=1s) Closing delay via spring release  Uinp VAC 690  III/3  100  100  100  100  100  100  100  1	Rated uninterrupted current at 60 °C	I <sub>u</sub>	Α	800
Rated operational voltage Overvoltage category/pollution degree Qi VAC 690  Notervoltage category/pollution degree Qi VAC 1000  Switching capacity Rated short-circuit making capacity Qi VAC 1000  Notervoltage Category/pollution degree Qi VAC 1000  Switching capacity Qi VAC 1000  Notervoltage Category/pollution degree Qi VAC 690  Notervoltage Category/pollution degree Qi VAC 690  Notervoltage Category/pollution degree Notervoltage Category/pollution Category Notervoltage Catego	Rated uninterrupted current at 70 °C	I <sub>u</sub>	Α	800
Overvoltage category/pollution degree  Rated insulation voltage  Vi  Vo  1000  Switching capacity  Rated short-circuit making capacity  up to 440 V 50/60 Hz  up to 690 V 50/60 Hz  Rated short-time withstand current 50/60 Hz  Rated short-time withstand current (t=1s)  t = 3 s  Operating times  Closing delay via spring release  III/3  III/I  III	Rated impulse withstand voltage	U <sub>imp</sub>	V AC	12000
Rated insulation voltage  Switching capacity  Rated short-circuit making capacity  up to 440 V 50/60 Hz  up to 690 V 50/60 Hz  Rated short-time withstand current 50/60 Hz  Rated short-time withstand current (t=1s)  t = 3 s  Operating times  Closing delay via spring release  Ui V 1000  t = 0000	Rated operational voltage	U <sub>e</sub>	V AC	690
Rated short-circuit making capacity  up to 440 V 50/60 Hz  up to 690 V 50/60 Hz  Rated short-time withstand current 50/60 Hz  Rated short-time withstand current (t=1s)  t = 3 s  Operating times  Closing delay via spring release  Icm  Icm  KA  187  166  166  KA  166  4 66  4 53  53  53  53  54	Overvoltage category/pollution degree			111/3
Rated short-circuit making capacity  up to 440 V 50/60 Hz  up to 690 V 50/60 Hz  Rated short-time withstand current 50/60 Hz  Rated short-time withstand current (t=1s)  t = 3 s  Operating times  Closing delay via spring release  Icm  kA  ight ide  ight ide	Rated insulation voltage	Ui	V	1000
up to 440 V 50/60 Hz up to 690 V 50/60 Hz lcm Rated short-time withstand current 50/60 Hz Rated short-time withstand current (t=1s) lcw kA 66 t = 3 s Operating times Closing delay via spring release  kA 187 166 166  kA 166  kA 53 53 53 53 53 53 53 53 53 53 53 53 53	Switching capacity			
up to 690 V 50/60 Hz  Rated short-time withstand current 50/60 Hz  Rated short-time withstand current (t=1s)  t = 3 s  Operating times  Closing delay via spring release  Rated short-time withstand current (t=1s)  Icw  KA  66  AB  53  Tow  MB  35	Rated short-circuit making capacity	I <sub>cm</sub>		
Rated short-time withstand current 50/60 Hz  Rated short-time withstand current (t=1s)  I cw  kA  66  t = 3 s  Operating times  Closing delay via spring release  ms  35	up to 440 V 50/60 Hz	I <sub>cm</sub>	kA	187
Rated short-time withstand current (t=1s)  t = 3 s  Operating times  Closing delay via spring release  Icw  kA  53  Tow  ms  35	up to 690 V 50/60 Hz	I <sub>cm</sub>	kA	166
t = 3 s	Rated short-time withstand current 50/60 Hz			
Operating times  Closing delay via spring release ms 35	Rated short-time withstand current (t=1s)	I <sub>cw</sub>	kA	66
Closing delay via spring release ms 35	t = 3 s	I <sub>cw</sub>	kA	53
	Operating times			
Total opening delay via shunt release ms 22	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 $I_n$			
Fixed mounting		W	25
Weight			
Fixed mounting			
3-pole		kg	43
4-pole		kg	56
Terminal capacities			
Copper bar			
Fixed mounting			
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

Fechnical data for design verification  Rated operational current for specified heat dissipation  Equipment heat dissipation, current-dependent  Operating ambient temperature min.	I <sub>n</sub>	А	800
Equipment heat dissipation, current-dependent		Α	800
	Pvid		
Operating ambient temperature min.	Viu	W	25
- Fr		°C	-25
Operating ambient temperature max.		°C	70
EC/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 her and fire due to internal electric effects	at		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)

Florest control of the control of th	4hl/0"   1	
Electric engineering, automation, process control engineering / Low-voltage switch [AKF060010])	technology / Uff-load s	witch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03
Version as main switch		Yes
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	800
Rated permanent current at AC-21, 400 V	Α	0
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 Iq	kA	187
Number of poles		4
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		2
Motor drive optional		Yes
Motor drive integrated		No
/oltage release optional		Yes
Device construction		Built-in device fixed built-in technique
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		Green
Type of control element		Push button
nterlockable		Yes
Type of electrical connection of main circuit		Rail connection
Degree of protection (IP), front side		IP20