#### DATASHEET - INX40B4-25F-1



Switch-disconnector, 4 pole, 2500A, without protection, IEC, Fixed



INX40B4-25F-1 184077





# **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			Fixed
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	2500
Rated short-circuit making capacity up to 440V/690V 42/42	I <sub>cm</sub>	kA	145
Rated short-time withstand current t =1 s	I <sub>cw</sub>	kA	66
Rated short-time withstand current 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	$I_n = I_u$	A	2500
Rated uninterrupted current at 50 °C	lu	А	2500
Rated uninterrupted current at 60 °C	lu	Α	2500
Rated uninterrupted current at 70 °C	l <sub>u</sub>	А	2500
Rated impulse withstand voltage	U <sub>imp</sub>	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 <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
Operating times			
Closing delay via spring release		ms	30

	ms	27
	1113	35
	ms	40
	S	
Switching cycles (ON/ OFF)		10000
Switching cycles (ON/ OFF)		2000.
Switching cycles (ON/ OFF)		5000
Switching cycles (ON/ OFF)		10000.
	Ops./h	
Operations/h		60
	W	345
	kg	50
	mm	2 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.
	cycles (ON/ OFF) Switching cycles (ON/ OFF) Switching cycles (ON/ OFF) Switching cycles (ON/ OFF)	Switching cycles (ON/ OFF)SSwitching cycles (ON/ OFF)-Switching cycles (ON/ OFF)-Switching cycles (ON/ OFF)-Operations/hOps./hOperations/hwImage: Small state stat

### Design verification as per IEC/EN 61439

Design vernication as per illo/liv 01455			
Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	А	2500
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	345
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 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])

Varial namination whether whet	[AKI 000015])		
Varian as aftery subtif     Image of subtification     Image of subtification       Varian as arregency stop installation     No       Varian is storesting switch     No       Number of subtification     No       Namber of subtification     Storesting switch       Number of subtification     Storesting       Nata rated perment current dAC-20, 400 V     Storesting       Rated perment current dAC-21, 400 V     Mo       Natch short-circuit current lq     Mo       Rated perment current dAC-21, 400 V     Mo       Number of auxilary contacts as normally closed contact     Mo       Number of auxilary contacts as normally closed contact     Mo       Number of auxilary contacts as normally closed contact     Mo       Number of auxilary contacts as normally closed contact     Mo       Number of auxilary contacts as normally closed contact     Mo       Number of auxilary contacts as normaly closed conta	Version as main switch		Yes
Version as enversing switch     Image: Provide structures     Non-       Number of switches     Provide structures     Non-       Nax, rand operation voltage UAC     See     See       Rated operation voltage UAC     See     See       Number of auxiliary contacts as normally color otherat     See     See       Number of auxiliary contacts as normally color otherat     See     See     See       Number of auxiliary contacts as normally color otherat     See     See     See     See       Number of auxiliary contacts as normally color otherat     See     See     See     See       Number of auxiliary contacts as normally color otherat     See     See     See       Number of auxiliary contacts as	Version as maintenance-/service switch		No
Version as eversing worthImage: Set of the set of th	Version as safety switch		No
Number of witching     Image: space of the spac	Version as emergency stop installation		No
Nax. rate operation voltage UPAC     Y     90       Rated operation voltage     V     800 680       Rated operation voltage     V     800 680       Rated operation voltage     V     800 680       Rated operation voltage UPAC     V     800 0000000000000000000000000000000000	Version as reversing switch		No
Rete operangent current lu 60 - 60   Rete operangent current lu 200   Rete operangent current at AC-23, 400 V 6   State short-ine withstand current lew 6   State operangent current at AC-23, 400 V 7   State operangent current at AC-23, 400 V 6   Number of auxiliary contracts as mornally closed contact 7   Number of auxiliary contacts as normally closed contact 6   Number of auxiliary contacts as normally closed contact 7   Number of auxiliary contacts as normally closed contact 7   State of orgen domining 7 8   State of orgen domining 8 8	Number of switches		
Reted permanent current la S00   Reted permanent current la AC-23, 400 V A   Reted permanent current la AC-23, 400 V G   Reted permanent current la G   Statist derstrain durrent la G   Number of auxiliary contacts as normally closed contact G   Number of auxiliary contacts as change-over contact G   Statist for fort mounting 4-Dia G   Statist for fort moun	Max. rated operation voltage Ue AC	V	690
Rade permanent current at AC-21, 400 V     A     Constrained permanent current at AC-21, 400 V       Rated operation power at AC-34, 400 V     FW     0       Rated short-time withstand current low     FW     6       Rated short-time withstand current low     FW     0       Switching power at AC-23, 400 V     FW     0       Switching power at 400 V     FW     0       Switching power at 400 V     FW     0       Conditioned rated short-tircu turrent lq     FW     0       Number of poles     FW     0       Number of auxiliary contacts as nomally closed contact     FW     0       Number of auxiliary contacts as nomally closed contact     FW     0       Number of auxiliary contacts as nomally closed contact     FW     0       Number of auxiliary contacts as nomally closed contact     FW     0       Number of auxiliary contacts as nomally closed contact     FW     0       Number of auxiliary contacts as nomally closed contact     FW     FW       Number of auxiliary contacts as nomally closed contact     FW     FW       Number of auxiliary contacts as nomally closed contact     FW     FW	Rated operating voltage	۷	690 - 690
Act     A     0       Rated operation power at AC-31, 400 V     W     0       Rated operation power at AC-32, 400 V     EA     68       Switch in power at AC-32, 400 V     C     W     0       Switch in power at AC-32, 400 V     C     Rated operation power at AC-32, 400 V     C     C     Rated operation power at AC-32, 400 V     C     C     Rated operation power at AC-32, 400 V     C	Rated permanent current lu	А	2500
Are operation power at AC-3, 400 V     Image: Area operation power at AC-23, 400 V     Image: Area operation power power at AC-23, 400 V     Image: Area operation power power power at AC-23, 400 V     Image: Area operation power power power power power power powe	Rated permanent current at AC-23, 400 V	А	
Rete short-time withstand current low     Image: Rete operation power at AC-23, 400 V     Image: Rete operation power at A00 V     Image: Rete operation power at 400 V     Image: Rete operation power p	Rated permanent current at AC-21, 400 V	А	0
Ret depration power at AC-23, 400 V   IMV   0     Switching power at 400 V   IMV   0     Conditioned reted short-circuit current lq   IA   IA4     Number of poles   IA   IA     Number of auxiliary contacts as normally closed contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Number of auxiliary contacts as change-over contact   IA   IA     Suitable for fort mounti	Rated operation power at AC-3, 400 V	kW	0
Notiching power at 400 VImage: A stand of the	Rated short-time withstand current lcw	kA	66
Condition rated short-circuit current IqImage: A constant of	Rated operation power at AC-23, 400 V	kW	0
Number of pais   Image: Section of Sectin of Section of Section of Sectin of Section of	Switching power at 400 V	kW	0
Number of auxiliary contacts as normally closed contact     Imper of auxiliary contacts as normally open contact	Conditioned rated short-circuit current Iq	kA	144
Number of auxiliary contacts as normally open contact   Image: Section of the sect	Number of poles		4
Number of auxiliary contacts as change-over contact   Image: Section of the sectio	Number 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 centre   No     Suitable for front mounting centre   Yes     Suitable for intermediate mounting   Yes     Suitable for inter	Number of auxiliary contacts as normally open contact		0
Motor dive integrated     Model     Model     Model       Motor dive integrated     Ves     Second     Suit-in device fixed built-in technique       Device construction     Suitable for ground mounting     Suitable for front mounting 4-hole     Suitable for front mounting centre     No       Suitable for front mounting centre     Suitable for distribution board installation     Second     No       Suitable for intermediate mounting     Second     No     Second     Second       Suitable for intermediate mounting     Second     No     Second	Number of auxiliary contacts as change-over contact		2
Voltage release optionalYesDevice constructionBuilt-in device fixed built-in techniqueSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationYesSuitable for intermediate mountingYesColour control elementYesType of control elementYesType of electrical connection of main circuitYesDegree of protection (IP), front sideYesSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediate mountingYesSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediateYes <t< td=""><td>Motor drive optional</td><td></td><td>Yes</td></t<>	Motor drive optional		Yes
Device constructionBillDevice constructionBill-in device fixed built-in techniqueSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for fixer mounting centreYesSuitable for distribution board installationYesSuitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementNoType of control elementYesInterlockableYesType of electrical connection of main circuitYesDegree of protection (IP), front sideYesInterlockableFail connectionInterlockableFail connectionType of electrical connection (IP), front sideInterlockableInterlockableInterlockableInterlockableFail connectionInterlockableFail co	Motor drive integrated		No
Suitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationYesSuitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementSereenType of control elementYesInterlockableYesType of electrical connection of main circuitSereenPagree of protection (IP), front sideInterlockableInterlockableInterlockableInterlockableSereenType of electrical connection of main circuitInterlockable <td>Voltage release optional</td> <td></td> <td>Yes</td>	Voltage release optional		Yes
Suitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementGreenType of control elementYesInterlockableYesType of electrical connection of main circuitSectionPagree of protection (IP), front sideSectionNoSectionSuitable for intermediateYesSuitable for intermediateYesSuitable for intermediateSectionSuitable for intermediateSectionSuitable for intermediateSectionSuitable for intermediateYesSuitable for intermediateSectionSuitable for intermediate </td <td>Device construction</td> <td></td> <td>Built-in device fixed built-in technique</td>	Device construction		Built-in device fixed built-in technique
Suitable for front mounting centreNoSuitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementGreenType of control elementYesInterlockableYesType of electrical connection of main circuitYesDegree of protection (IP), front sideSol and an and an and and and and and and a	Suitable for ground mounting		Yes
Suitable for distribution board installationYesSuitable for intermediate mountingNoColour control elementGreenType of control elementPush buttonInterlockableYesType of electrical connection of main circuitGreenDegree of protection (IP), front sideGreen	Suitable for front mounting 4-hole		No
Suitable for intermediate mountingNoColour control elementGreenType of control elementPush buttonInterlockableYesType of electrical connection of main circuitMoDegree of protection (IP), front sideMo	Suitable for front mounting centre		No
Colour control element Green   Type of control element Push button   Interlockable Yes   Type of electrical connection of main circuit Rail connection   Degree of protection (IP), front side Image: State	Suitable for distribution board installation		Yes
Type of control element Push button   Interlockable Yes   Type of electrical connection of main circuit Mail connection   Degree of protection (IP), front side Mail connection	Suitable for intermediate mounting		No
Interlockable Yes   Type of electrical connection of main circuit Mail connection   Degree of protection (IP), front side Image: Additional content in the section of th	Colour control element		Green
Type of electrical connection of main circuit Rail connection   Degree of protection (IP), front side IP31	Type of control element		Push button
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Rail connection
Degree of protection (NEMA)	Degree of protection (IP), front side		IP31
	Degree of protection (NEMA)		



